# AFAYETTE . 

OUR 43rd YE

CATALOC NO. 640


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SEE PAGE 5
OTHER DEPARTMENTS -
515 walnut tysu

## Separate Microphone and Speaker for Better Modulation \& Increased Range

- Advanced Walkie-Talkie Design
- 12-Transistors, Diode, and Thermistor
- Crystal-Controlled Transmit and Receive
- Superhet Receiver has AVC, Squeich, Push-Pull Audio Output
- Optional Plug-in 117 Volt Power Pack


ANOTHER GREAT LAFAYETTE ACHIEVEMENT IN PORT. ABLE CITIZENS BAND COMMUNICATION. THE MODEL HE-100 REPRESENTS A GIGANTIC STEP FORWARD IN THE DESIGN AND PERFORMANCE OF 100-MW POWER WALKIE-TALKIES.
The use of a separate microphone facilitates proper input impedance match. This results in excellent modulation with greatly improved transmitting range. No more compromises due to use of the speaker for input as well as output! Separate speaker and microphone assure maximum effective signal intellgibility even under difficult noisy conditions. Superhet recelver has variable squelch to reduce background noise. 12 transistor advanced design circuit is crystal controlled for both recelve and transmit functions. Sensitivity is better than 1 microvolt for 10 db signal-to-noise ratlo. Easy-touse, lightweight . . carry it anywhere for sports or business. Housed in a rugged hi-impact plastic case. Handy contrals include push-to-talk switch. volume and variable squelch. Power is supolied by 8 miniature penilght batteries. To conserve battery power, a 117 V AC power pack is available as an optional plug-in accessory. Complete with leather case, earphone, for private monitoring. $44^{\prime \prime}$ telescoping antenna, batteries and crystals for
channet 10 . Slze: $3 \mathrm{~W} \times 9 \mathrm{H} \times 23 / 4^{\prime \prime} \mathrm{D}$. channel 10. Size: $3 \mathrm{~W} \times 9 \mathrm{H} \times 234^{\prime \prime}$ D. Shpg. wt., 2 lbs . Imported.
$\mathrm{HE}-100 \mathrm{~L}$ HE-100L

Net 39.95 HE-86L Same as HE-100 but specify channel (2-23)

CRYSTALS FOR HE-100

## 2 for 78.88 <br> 2.95

 Complete Wit LeatherAC POWER
PACK

2 for 78.88
Matched crystals for above. Specify Frequency
AC POWER PACK FOR HE-100

## NEW! LAFAYETTE he-75 1-WATT 13-TRANSISTOR CITIZENS BAND "WALKIE TALKIE"

## Commercial Quality All-Transistor 2-Way Portable

- 10 Times More Powerful Than 100MW Units-With Far Greater Range - Uses Powerful Silicon Transistors In Output Stage - Crystal-Controlled Receive and Transmit - Auto matic Noise Limiter, Squelch, AVC - Push-Pull Audio Output - Plug-in Battery Case for Both Penlight and Optional Rechargeable Nickel Cadmium Batteries - Meets FCC Requirements for Licensed Operation Part 19

Another Lafayette engineering triumph! A full 1-watt RF Input Crystal Controlled 2-way radio with 13 translstors, 3 diodes and a thermistor. with 13 translstors, 3 diodes and a thermistor,
that is compact enough to fit in your hand. 10 times more powerful than conventional 100 mw units with far greater range. A powerful 2 -stage transmitter with new silicon output transistors delivers a clean signal even at extreme ranges. Superhet receiver features a push-pull audio section for utmost intelligibility and quality voice reproduction. Superior automatic noise limiter effectively reduces ignition and other background noise while a variable squelch sitences reception between calls and prolongs battery ife. Local/Distance switch and AVC stop distortion at close range-aids in pulling in weak distance signals. Other features include: heavyduty printed circuit board, rugged high-impact case, push-ta-talk switch, and interchangeable
battery compartment-for either penlight cells or rechargeable nickel cadmium battery. Re chargeable unit can be easily removed for 115 volt AC charging in a wall outlet. Also includes plated telescoping whip antenna, plug-in earphone, leather carrying case, 8 penlight batteries and crystals for channet 13 . Size: $3 \times 8 \times 2^{\prime \prime} D$ Imported
HE-75L Shpg. wt., 2 lbs.
Net 66.50
2 for 129.00
Rechargeable nickel cadmium battery in sealed compartment HE-92

CRYSTALS FOR HE-75
Matched Crystals For Above. Specify frequency. HE-892C


OTHER CHANNELS MRE AVAILABLE If desired with any chanrel other than channel 13 order HE-88L and specify channel. (1-23)


## You Get More From Our MAIL ORDER DIVISION

Our modern Mail Order Headquarters, covering over 8 acres of land, includes the latest type of automatic systems to give you more and faster service in '64-6 times faster.


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PNEUMATIC TUBES speed your order on its way.


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NO MONEY DOWN-Lafayette's Easy-Pay Credit Plan makes it easier for you to buy now. NO MONEY DOWN, UP TO 24 MONTHS TO PAY. Choose the plan that suits you best-Regular, Extended or Alternate 60-Day. Full details on page 412.

## Choose Your HI-FI System at A Special Lafayette Price

Select the components to form a hl-fi music system and we will give you a special money-saving price. (A music system consists of an amplifier, speaker and music source - record changer. turntable, tuner or tape deck). SPECIAL FREE BONUS-With the purchase of your hi-fi system, you get FREE an
automatic 45 RPM spindle for your record changer, record cleaning kit, stylus pressure gauge, all cables and connectors, and $20-\mathrm{ft}$. of hook-up cable.
NO CHARGE OR OBLIGATION-Write to our Audio Division for the special Lafayette price. Be sure to specify the models and components you want.

ALL PRICES AND SPECIFICATIONS in this catalog are subject to change without notice. All shipping weights are approximate.

## YOU GET MORE From Our Retail Store Division

## 10 CONVENIENT LOCATIONS

SYOSSET, L.I., N. Y.

111 Jericho Turnplike
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Open Mon., Thurs., \& Fri. 'til 9:30 P.M 914 GReenleaf 2-2700

212 FOrdham 7-8813-0pen Thurs. 'til 8:45 P.M.

201 Market 2.1661-Open Wed. 'tll 8:45 P.M

Visit the Lafayette store nearest you and see a wide assortment of merchandise from the catalog available for your inspection. Trained sales personnel will assist you, and are available to answer your questions. You may buy on time with Lafayette's Easy-Pay Credit Plan (see page 412). And, of course, your satisfaction is guaranteed or money refunded (see page 414).

201 PLainfield 6-5100. Open Thurs. 'til 8:45 P.M.
 201 Colfax 1-8800--Open Mon., Wed., \& Fri. 'til 8:45 P.M.
 617 NUbbard 2.7850-Open Mon. \& Wed. "til 8:45 P.M
 Phone: 617969.6100 -Open Wed., Thurs., \& Frl. 'til 9:30 P.M.

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0 Lafayette's Ham Shack features the latest in ham gear, Including Lafayette's own top-quality components.

C. Repar Department


## YOU GET MORE From Our International Division

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More and more people throughout the world rely upon Lafayette's International Electronics Division where an expert knowledge of packing, crating, shipping and routing assure them of the finest and quickest service. This division specializes in export shipments, not only for quantity industrial and dealer orders but for gifts and single items as well.

WRITE: Lafayette International Electronics Division P.O. Box P, Syosset, L.I., N.Y, U.S.A.

516 WAlnut 1.7700

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## YOU GET MORE From Our Industrial Electronics Divison

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NEW JERSEY
24 Central Ave., Newark 2, N. J.
201 Mitchell 3-6868

# LAFAYETTE LA-226C AMAZING 40-WATT COMPLETE AM/FM STEREO RECEIVER 

> A Matched AM-FM Tuner plus Builtin Multiplex plus A 40-Watt Stereo Amplifier (20 Watts Each Channel)


The Lafayette LA-226C is a self-contained instrument designed for the control and reproduction of all stereophonic and monophonic sources. Features a "pilot monitor" stereo indicator which tells you instantly whether or not an FM station is broadcasting in stereo multiplex. The receiver section consists of an AM/FM tuner with built-in multiplex which provides more than 30 db separation @ 400 cycles. A sensitivity of $2 \mu \nu$ for 20 db of quieting is achieved by the FM circuit with AFC defeat assuring reception of even the weakest signals. FM noise \& filter slide switch cuts out unwanted station noise. The AM section features a superheterodyne circuit with AVC, and built-in ferrite loop antenna. The 40 -watt amplifier section features large power transformers and a frequency response of $20-20.000 \mathrm{CPS} \pm 2 \mathrm{db}$. Less than $1.5 \%$ harmonic distortion on all modes. Complete stereo preamp facilities provide dual concentric front panel controls for bass and treble. Volume control balance, blend for variable channel separation from 5 -position selection switch stereo to mono, (AM, FM, Stereo, phono, AUX) 4-Position Amplifier mode switch (A, B, AB, REV), rumble filter slide switch, loudness slide switch, and on-off power switch. Rear controls include: Speaker phase switch, 8-16 ohm impedance selector switch. dimension control adjustment, speaker on/off switch. jack for stereo headphones, AC outlet, fuse and stereo tape outputs. Complete with a handsome enclosure in contrasting brown and brass-overall size: $171 / 2 \mathrm{~W} \times 150 \times 51 / 4{ }^{4} \mathrm{H}$. Imported.
LA-226CWX
Shpg. wt., 45 lbs.
Net 189.95

- 20 Tubes - 7 Diodes
- Pilot Monitor Stereo Indicator
- Front Panel Stereo Headphones Jack
- Complete Stereo Preamp Facilities
- 15 Front Panel Controls
- Just add Speakers for a Complete Stereo System
- Handsome Style Leader


## SPHCIFICATIOINS

TUNER: HARMONIC DISTORTION:
$7 \%$ on FM for $100 \%$ modulation.
FM Freq. response:
$20-20,000 \mathrm{CPS} \pm 1 / 2 \mathrm{db}$
FM Sensitivity:
$2 \mu \vee$ for 20 db quieting.
MPX Separation:
30 db @ 400 CPS.
Hum level:
-60 db .
Image rejection:
FM- 50 db .
AMPLIFIER: Hum and noise
65 db below full output for low level-
75 db for high level.

## Power Output:

20 watts per channel.
Sensitivity:
mag phono 2 mv at full output, crystal input 30 mv at full output. Tone Control:
$\pm 12 \mathrm{db}$ @ 50 CPS (bass), $\pm 9 \mathrm{db}$ @ 10 KC (treble)
Output Impedances:
8 \& 16 ohms, switch selected.
Input Impedance:
47 K (phono); 22 meg (high level)
Rumble Filter:
-8db @ 50 CPS
Phono Equalization: RIAA.
Hearphones Jack: on front panel

Interior View Shows Solid Construction

# LAFAYETTE 40-WATT Matched Stereo Systems with Model LA-226C AM-FW Stereo Tuner-Amplifier 



## Lafayente SYSTEM PRICE <br> NO MONEY DOWN

Paced by Lafayette's sensational Model LA.226C COMPLETE AM.FM STEREO RECEIVER (matched AM.FM Tuner, plus Built-In Multiplex, plus a 20 .watt Der channel stereo amplifier), this stéreophonic Hi-Fi phono system is truly a gem for quality of performance as well as for unbelievably low price. The Model LA ${ }_{226 C}$ is a handsome style leader that features among many outstanding charac teristics. 20 tubes plus 7 diodes; two $\mathbf{3}$-gang tuning condensers with added tuned RF stage for exceptional sensitivity and selectivity; new Pilot Monitor Stereo Indicator; complete stereo preamp facilities; front panel stereo headphone jack; 15 front panel controls and amazingly fine specifications.
The outstanding Garrard AT6/Mark 11 automatic 4 -speed changer is offered with your choice of fine stereo cartridges for exceptional reproduction of stereo or monaural records. The changer is suppilied with an elegant base with finish of your choice.
Two Lafayette famous SK-58-12" Coaxlal Speakers with free-edse cone and $3^{\prime \prime}$ cone tweeter provide superb wide-range reproduction without coloration or distortion.
40-WATT MATCHED STEREO SYSTEMS WITH LA-226C

- Be Sure to specify your choice of Pickering U38/AT, Shure M3D, or Empire 880 diamond needle cartridge.

| System | TunerAmplifies | Garrars Changer | ge Base | Speaker | Speakep Cabinet | Shpg | . Net |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LS-215CWXM | La-226C | AT6/Mark |  | 2 SK-58 |  |  | lbs. 279.50 |
| LS-214CWXM | LA-226C | A/Mark II |  | 2 SK-58 |  | 86 | lbs. 299.50 |
| LS-216CWXM | LA-226C | AT6/Mark II |  | 2 SK-58 | 2 Eliptoflex | 127 | lbs. 339.00 |
| LS-221CWXM | LA-226C | A/Mark 11 |  | 2 SK. 58 | 2 Eliptoilex | 135 | lds. 35900 |
| LS-213CWXM | LA-226C | AT6/Mark II |  | 2 SK-300 | Decor-ette V********) | 105 | lbs. 282.50 |
| LS-220CWXM | La-226C | A/Mark 11 |  | 2 SK-300 | Decor-ette | 112 | lbs. 302.50 |
| 15-200 CWXM | LA-226C | AT6/Mark 11 |  | 2 SK-270 | Decor-ette | 05 | 342.00 |
| LS-201cwXM | - | A Mark 11 |  | 2 SK-270 | Decor-ette 11** |  | 362.00 |
|  | FOR STEREO BROAOCAST RECEPTION ONLY |  |  |  |  |  |  |
| $\begin{aligned} & \text { LS-202CWXM } \\ & \text { LS-203CWXM } \end{aligned}$ | $\begin{aligned} & \text { LA-226C } \\ & \text { LA-226C } \end{aligned}$ |  |  | $\begin{aligned} & 2 \text { SK- } 300 \\ & 2 \text { SK- } 270 \end{aligned}$ | Decor-ette $\mathrm{V}^{\prime}$ 。 <br> Decor-ette II** $^{*}$ |  | $\begin{aligned} & \text { Ibs. } 224.00 \\ & \text { lbs. } 283.00 \end{aligned}$ |



2 SK-300 DECOR-ETTE V

MODEL A/
MARK II



## FULL STEREO CONTROLS



3-Position Selector Switch
4.Position mode Switch

Mono Left, Mono Right,
Stereo, Reverse
3 Dual Concentric
Treble Control
(4) Dual Concentric

Bass Centrol
5
Dual Concentric
Volume/Balance Control


Pilot Light Indicator
7 Rumble filter Switch Phase Reverse Switch

Speaker-Headphone Solector Switch

10 Meadphone Jack


## SPECIFICATIONS

Power Output: 12 watts per channel stereo. 24 -watts monaural operation, Frequency Response: $20-25,000 \mathrm{CPS} \pm 1 \mathrm{db}$ at 1 watt, 50 $50,000 \mathrm{CPS} \pm 2 \mathrm{db}$ at 12 watts. Hum and Noise: Mag Phono - 56 db below rated output. Tuner $-73 d \mathrm{~b}$ below rated out out. Distortion: less than 1\% total harmonic distortion at 12 watts (IKC). less than $\mathbf{2 5 \%}$ total harmonic distortion at 1 watt (IKC) Sensitivity: Low Level (Mag Input) 5 mv at full output, High Level. 6 v at full output. Outputs: Dual 8 and 16 -ahm impedance speaker outputs. Dual Tape outputs, Tube Complement: Total of $8,3-12 A X 7,4-6 \mathrm{GW8}, 1$-5AR4.

## CHECK THESE QUALITY FEATURES

## $\vee$ <br> Stereo Headphone Jack

Independent Concentric Bass \& Treble Controls For Each Channel
$\checkmark$ Concentric Volume/Balance Control
$\checkmark$ Frequency Response: $\mathbf{2 0 - 2 5 , 0 0 0}$ CPS $\pm 1 \mathrm{db}$ at 1 Watt
$\vee$ Hum \& Noise - 73 db Below Rated Output
$\checkmark$ High Sensitivity Allows Use With All Stereo Cartridges

FIRST RATE - make no mistake, don't be misled by Lafayette's low price. This is a Brilliant Stereo Performer . . . an amplifier with wide-range frequency response, low distortion, low hum and noise characteristics you can expect of a quality hi-fi amplifier designed for placement anywhere in your home. A full range of control facilities have been provided to assure complete Stereo capability and flexiblity. Two dual concentric Bass and Treble controls provide separate and individual tone controls for each channel. A dual concentric volume Control acts as an independent level control for each channel and allows precise channel balancing. Fast, easy operation between Stereo, Reverse Stereo, Monophonic Left channel and Monophonic Right channel is furnished by a Mode switch. A selector Switch furnishes switching from Aux, Tuner or Phono music sources. In addition slide switches are included for: Rumble Filter (off-on) Phase (normal-reverse) and to take full advantage of the front panel Headphone jack a switch is provided for speaker or phone operatlon. Paired inputs located on the rear panel accommodate any of the ordinary stereo sound sources-inputs are included for magnetic, crystal or ceramic cartridges; Tuner, tape or auxiliary (high output) plus Tape Out jacks for recording through your tape recorder. Beautifully styled in a low silhouette enclosure, color keyed to do justice to any decor. Ivory and gold front panel is contrasted by gold metal knobs and enclosure. Complete with cage and legs.


## LAFAYEITE 24WAIT MATOIITD SILNTO STSI A



ALTERNATES


Garrard AT6/Mark II


SK-236 SIenderette II

## LAFAYETTE 24-WATT EXPERTLY MATCHED STEREO HI-FI SYSTEMS

## - COMPLETE SYSTEM MATCHEO COMPONENTS Lafayette LA-224 24-Watt Stereo Amplifier Garrard Autoslim/Mark II 4-Speed Record Changer Base for Changer (Specify finish) <br> Pickering U38/AT Diamond Needle Cartridge <br> 2 Lafayette SK-124 UItra-Compliance 2-way Speaker System (Specify Walnut or Mahogany) <br> LAFAYETTE SYSTEM PRICE 12950

UP TO 24 MONTHS TO PAY SEE PAGE 412

## NO MONEY OOWN

- The LA-224 consists of two 12 -watt amplifiers coupled with a versatlie stereo preamplifier. Provides all stereo controls including front panel headphone jack.
- The 4-speed Garrard Autosilm/Mark II Automatic/Manual changer introduces a new standard of styling, features and performance and is supplied with your cholce of stereo cartridges. Excellent stereo reproduction.
- Two Lafayette $S K-124$ 2-way speaker systems offer absolutely gigantic full size performance. Each occupies less than one cu . ft . of space while providing .outstanding purity of sound from $40 \cdot 16,000 \mathrm{cps}$.

| System |  | Garrard |  | Cha |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| 15-225CWXM | LA-224 | AT6/Mark IT |  |  |
| LS-226CWXM | La-224 | AT6/Mark II |  | Laft |
| LS-222CWKM | LA. 224 | Autoslim/Mark II |  | Laf |
| LS-223CWXM | LA. 224 | AT6/Marh II |  | Lat $\dagger$ |
| LS-228CWXM | LA. 224 | Autoslim'Mark II |  | La |
| LS-229CWXM | LA-224 | AT6/Mark II |  | Laft |
| LS-231 CWXM | LA.224 | Autosilm/ Mark II |  | Laft |
| LS. 232 CWXM | LA. 224 | AT6/Mark II |  | Laft |
| LS-234CWXM | LA-224 | Autoslim/ Mark II |  | Laft |
| LS.235CWXM | LA-224 | AT6/Mark III |  | Lait |
| LS.237CWXM | LA-224 | Autostim/ Mark 11 |  | Laf |
| LS-238CWXM | LA. 224 | AT6/Mark II |  | Laf |
| LS-240CWXM | LA.224 | Autoslim/Mark II |  | Lat |
| LS.241CWXM | LA-224 | AT6/Mark II |  |  |
| LS-243CWXM | LA-224 | Autos lim/ Mark II |  |  |
| LS.244CWKM | LA. 224 | AT6/Mark II |  |  |
| *Be sure to specify Pickering U38/AT, Shure M3D or Emplire 880 D |  |  |  |  |
| $\dagger$-Oiled Walnut, Mahogany, Blonde. |  |  |  |  |
| A A-Specify Walnut, Mahogany, Olled Walnut. |  |  |  |  |
| t-Specify Walnut. Mahogany, Oiled Walnut, Blonde |  |  |  |  |
| -Specify Wainut, or Mahogany. |  |  |  |  |
|  |  |  |  |  |
| For detailed descriptions of all components in the atove systems see pages $10,45.47,57,53.55,79$. |  |  |  |  |

## AFAYETTE 40- WATT STEREO AMPLIFIER LA-240

## Dual 20-Watt Power Amplifiers-Dual Stereo Preamplifiers

SEE PAGE 412
NO MONEY DOWN \$5 monthly


## COMPARE THESE FEATURES

Use of the most advanced engineering techniques and finest components have resulted In a powerful 40 .watt stereo amplifier Incorporating two 20-watt power channels and dual preamplifier. A level of flexiblity and perfermance have been achieved that can only be compared with the finest units.
Separation Control-Provides continuously variable channel separatien from full stereo to full monaural, thus insuring the correct degree of stereo separation for individual listening tastes and room acoustics.
Independent Tone Contrais-Concentrically mounted bass and treble controls for each channet. Volume-8alance control-Individual level controls for each channel.
Loudness Switth-Allows the volume controls to function as compensated loudness controls and provides the frequency response changes required by the ear at low distortion levels.
Rumble Filter-Reduces rumble from a noisy turntable with a minimum effect on program material.
Mode Switching-Ch A and Ch B slide switches provide for normal stereo, reverse channel, monophonic A or monophonic B.
Selector Switch-Instant selection of Aux. Tuner, Phono or Tape Head Inputs-non-shorting position permits recording and playback using a permanently connected tape recorder.
Hum Balance Controls-Individual hum balance controls for each channel located at the rear for fast, easy minimum hum adjustment
Full Range of Inputs \& Outputs-Inputs: ( 5 stereo pairs) Dual Aux-Dual Tuner-Dual Ceramic Phono-Dual Mag. Phono-Dual Tape Head; Outputs: Dual Tape Out-Dual 8 and 16 -ohm speaker terminals.
Superb Low Silhauette Styling makes the LA- 240 an amplifier you'll be proud to display. Gold finish cover is set off by an ivory and goid front panel with gold metal knobs. Complete with cage and legs. Overall Dimensions: $141 / 10 \mathrm{~W} \times 10 \mathrm{~V} / 2 \mathrm{Dx} 53 / \mathrm{H}$. For 115 V AC operation. Power consumption 185 watts. Shpg. wt., 25 lbs. Imported. La-240WX

Net 79.95

- Concentric Volume/Balance Control - Less Than $1 \%$ Harmonic Distortion at Rated Output - Hum Noise 80 db Below Rated Output Frequency Response: $12-100,000 \mathrm{cps} \pm 1 \mathrm{db}$ at 1 Watt - Variable Separation Control Efiminates Exageerated Channel Separation © Dual Concentric Bass \& Treble Controls. High Sensitivity Allaws Use With All Stereo Cartridges


## SPECIFICATIONS

Power Output and Distortion- 20 watts per channel at less than $1 \%$ total harmonic distortion at 1 Kc . Less than $0.25 \%$ total harmonic distortion at 14 watts; less than $0.12 \%$ at 1 watt. Intermodulation Distortion. $.075 \%$ at 1 watt; $34 \%$ at 10 watts. Frequency Response: 12 to $100,000 \mathrm{cps}$ $\pm 1 \mathrm{db}$ at 1 watt. 50 to $70,000 \mathrm{cps} \pm 1 \mathrm{db}$ at fuli output. Sensitivity: For full output: High Level inputs 0.75 v Mas. inputs 5.5 Mv at 1 Kc . Tone Control Range: Treble: 12 db boost or cut at 10 KC . Bass: 15 db boost or cut at 50 cps . Hum and Noise: Zero volume hum; 80 db below rated output. Maximum volume hum: High level inputs, 78 db below rated output; Mag. Phono Inputs, 50 db below rated output. Outputs: Dual 8 and 15 ohm Impedance speaker outputs, Dual Tape outputs. Tube Complement: $4-6805 / E L 84,2$ 6BL8/ECF80, 3-12AX7/ECC83, 1 -G234/5ARA.

## LAFAYETTE 40-WATT MATCHED STEREO SYSTEM


 ENCLOSURES


CHOICE OF STEREO CARTRIDGE


Shure M30
Empire 880
Pickering U38/AT

GARRARD AT G/MARK II On Base

"Eliptoflex ENCIOSURES


Stylus pressure gauge, 45 RPM spindie, record cleaning kit, $20^{\circ}$ speaker Inter-connecting cable, all necessary connectors, and interconnecting Instructions. with pur. chase of any system listed on this page.


## COMPONENTS

Lafayette LA-240 40. Watt Stereo Amplifier Garrard Autoslim/ Mark II 4 -Speed Record Changer Wood Base for Changer (Specify Diled Walnut. Mahogany or Blonde) Pickering U38/AT Diamond Needle Cartridge 2.Lafayette SK-128 8" Biaxial Speakers

## LAFAYETTE 4 NO MONEY <br> SYSTEM PRICE $44^{0}$ DOWN $\$ 8$ monthly

## LaFAYETTE 40-WATT MATCHED STEREO SYSTEMS

-Specify choice of Pickering U38/AT, Shure M3D, or Emplre 880 Diamond Needle Stereo Cartridge.

Garrara
System Amplifier Changer Cartridge* IBase Speakers Cabinet Ibs. Net LS-353CWXM LA- 240 Autoslim
LS.354CWXM LA.240/Mark II t 2 SK-128 .... 50145.50
/Mark II
2 SK. 128
53157.50

LS-355CWXM LA-240 Autoslim
/Mark II
2 SK-128 2 Mini-Duct**
95189.50

LS-356CWXM LA-240 AT6
/Mark II 2 SK-128 2 Minl-Duct * * $98 \quad 201.50$ LS.357CWXM LA. 240 Autoslim (S.358CwXM LA.240/Mark II /Mark | 2 SK-58 $58 \quad 165.50$ LS-359CWXM LA-240 Autoslim 2 SK-58 61177.50

LS-360CWXM LA-240 AT6

## LAFAYETTE 50-WATT STEREO AMPLIFIER MODEL LA-250A



DUAL PREAMPLIFIER SECTION - Inputs have been provided for every stereo-monoural function.

## SPECIFICATIONS:

POWER OUTPUT \& DISTORTION: 50 watts- 25 per channel $\pm 1$ db at less than $1 \%$ Total Harmonic Distortion at 1 Kc . Less than $0.25 \%$ Total Harmonic Distortion at 1 KC at normal listening level (1 watt); less than $0.5 \% 1 \mathrm{M}$ distortion at normal listening level.
FREQUENCY RESPONSE: $15-40,000 \mathrm{cps} \pm 0.5 \mathrm{db}$ at normal listening tevel.
HUM \& NOISE: 70 do below rated output at max. volume (high level inputs).
SENSITIVITY: For full output high level inputs 0.5 V ; Mag. Phono 3.5 MV at 1 KC .

CHANNEL SEPARATION: Greater than 55 db at 1 KC ; greater than 45 db from 20-20,000 cps. IMPEDANCE: 4,8 and 16 ohms per channel. POWER: 200 watts; $110-125 \mathrm{~V}$ AC $50-60$ cycles Attractive beige viny: laminated steel case. Handsomely designed three color brass etched front panel. Sienna brown molded legs and matching knobs with polished brass inserts. Dimensions with legs and knobs, $141 / 2 \mathrm{~W} \times 123 / 4 \mathrm{D} \times 54 / 2^{2} \mathrm{H}$. Shpg. wt., 28 lbs

Another Outstanding Lafayette VALUE!

## ENGINEERED

FOR SUPREMACY

## "Let Your Own Ears be the Judge!"

- 50 WATTS MONAURAL - 25 WATTS EACH STEREO CHANNEL
- RESPONSE 15-40,000 CPS $\pm .5$ DB (at normal listening level)
- UNIQUE "SEPARATION"CONTROL • PREMIUM OUTPUT TUBES
- SEPARATE BASS \& TREBLE CONTROLS • CLUTCH-TYPE VOLUME-BALANCE CONTROL • 3rd CHANNEL OUTPUT

breathtaking performance

The Stereo 250A ... a completely new stereo high fidelity amplifier with a high quality of reproduction, remarkable versatility and new distinctive styling-worthy of a place in the finest stereo hi-fi music system. A full range of controls enables you to enjoy the utmost in listening pleasure in any situation. A unique separation control provides continuously variable channel separation-from full monaural to full stereo-may be used to eliminate the exaggerated channel separation found in some stereo source material. Included is a clutch-type Volume Balance control for independent or simul. taneous control of both channels, concentric Bass and Treble controls which provide independent tonal control of each channel and a 4 -position switch which selects phono, tuner, auxillary or tape head stereo inputs. Simple slide switches pro-
vide channel reversat and phase reversal-or you can reproduce either channel through both amplifiers. A loudness switch permits the volume balance control to function as a compensated loudness control. The LA-250A also features a 3 rd channel output which may be used to feed a 3rd single channel amplifier and speaker to provide a wider sound spread, a Tape Output jack for recording purposes, plus dual terminations for 4 , 8 or 16 ohm speakers.
Advanced circuitry includes DC operated preamp and tone control tube filaments for hum-free operation, 6CW5/EL86 push-pull output tubes, individual bias and balance adjustments on each channel and a hum balance control.


Take the superb Lafayette LA-250A, surround it with starstudded performers that match in quality and performance, pre-pack the system so it can be offered at substantial savings over cost if bought individually, and you have the most popular Lafayette Stereo Phono System.
This outstanding system features Lafayette's own LA-250A50 -watt integrated stereo amplifier. The LA-250A offers features, versatility and advanced circuitry seldom found in amplifiers in its price range. A unique blend control allows continuously variable channel separation from full monaural to full stereo. This fine stereo preamplifier and amplifier provides the utmost in listening pleasure in any stereo situation. The LA-250A has been called the "Best amplifier in the market for its price."
Included in the system is the Garrard AT6/Mark 114 -speed record changer or the Garrard A/Mark II 4-speed record changer-both wired for stereo and monaural use. The changer is supplied with your choice of .7 Mil Diamond Stereo Cart-ridges-Pickering U38/AT, Shure M3D, or Empire 880. The Lafayette Wood Base, specially designed for the changer, is available in mahogany, oiled walnut, or blonde.
These outstanding components are coupled with the famous, free-edge Lafayette SK-58 $12^{\prime \prime}$ coaxial speakers with built-in, cross-over networks and brilliance level controls. System supplied with plugs, cables and easy-to-follow instructions. For complete description of components in this system, and optional equipment, see other pages in this catalog.

## FREE

Stylus Pressure Gauge, 45 RPM Spindle, Record Cleaning Kit, 20 ft . speaker connecting cable, necessary connectors and instructions with purchase of any Hi-fi stereophonic systems on this page.


## MATCHED COMPONENTS

Lafayette LA-250A 50. Watt Stereo Amplifier Garrard AT6/Mark II 4-Speed Record Changer Lafayette Wood Changer Base
Pickering U38/AT Diamond Needle Stereo Cartridge
2-Lafayette SK- 58 Famous Free-Edge $12^{\prime \prime}$ Coaxial Speakers

## Lafayette matched stereo systems



## NEW ! LAFAYETIE "CRITERION" ${ }^{(8)}$ STEREO HI-FI MATCHED CABINETRY <br> - DISTINCTIVE STYLING <br> - FINEST ACOUSTIC DESIGN FOR QUALITY HIGH FIDELITY PERFORMANCE

# LAFAYETTE MATCHED 50-WATT STEREOPHONIC SYSTEM WITH CRITERION ELIPTOFLEX SPEAKER CABINET 

Lafayette LA.250A 50-Watt Stereo Amplifier Garrard AT6/mark II 4-Speed Record Changer Wood Base For Record Changer
Pickering U38/AT Diamond Needle Stereo Cartridge 2 Lafayelte SK-58 Famous Free-Edge 12" Coaxial Soeakers
2 Criterion Eliptoflex Speaker Enclosures
(Specify Walnut, Diled Walnut, or Mahogany)
SYSTEM PRICE
1

## LA-250A MATCHED HI-FI STEREO SYSTEMS

| System | Amplifier | Garrard Changer | Chanzer Base | Cartridge | Speaker | Eliptoflex Cabinets* | Shpe. Wt. | Het |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LS-273CWXM | LA-250A | AT 6/Mark 11 |  |  | 2 ea. SK-58 | 2-Criterion-Eliptoflex | 120 | 319.50 |
| LS.320 CWXM | La-250A | A/ Mark II |  |  | 2 ea. SK-58 | 2-Criterion-Eliptoflex | 123 | 339.50 |
| LS-275 CWXM | LA.250A | AT 6/Mark II |  |  | 2 ea. SK-180 | 2-Criterion-Eliptoflex | 114 | 323.50 |
| LS.321 CWXM | LA-250A | A/Mark II |  |  | 2 ea. SK-180 | 2-Criterion-Ellptoflex | 117 | 343.50 |
| LS-277 CWXm | LA.250A | AT 6/Mark If |  |  | 2 ea. SK-210 | 2-Criterion-Eliptoflex | 120 | 349.50 |
| LS-322 CWXM | LA. 250 A | A/Mark II | $\dagger$ | - | 2 ea. SK-210 | 2-Criterion-Eliptoflex | 123 | 369.50 |

- Be sure to specily choice of Pickering U38/AT, Shure M3D, or Empire 880 Olamond Needle Cartridge. †Specify Olled Wainut, Mahogany or Blonde. * Specify Oiled Wainut, Walnut, or Mahogany.



## NEW! LAFAYETTE "CRITERION"® EQUIPMENT CABINET

"Component Engineered" By Lafayette's Audio Engineers To Provide Ample, Convenient, Well-Ventilated Accommodations for All of Your Components. Forms Perfectly Matched Furniture Ensemble with "Criterion" Eliptoflex Speaker Enclosure, as well as with Shelf-Type Eliptoflex listed in systems on preceding page. 1 1/4. lumber core woods throughout with finished veneers inside as well as out.
Smartly styled with tapered legs and tambour sliding doors.
Four compartments for housing turntable or changer, amplifier, tuner, etc. with room for record storage. Shps. wt., 70 lbs.
CAB-157WX Walnut
Net 89.50
CAB-158wX Diled Walnut CAB-159wX Mahogany Net 89.50 Net 89.50

## NEST SOUND-THE LOW, LOW PRICES-ALW AYS! T1V 10-WATT STEREO AMPLIFIER MODEL LA-214



This exc ting amplifier is an exceptional value offered by Lafayette. The model A-214 is a complete amplifier/preamplifier in a highly styled metal zabinet. It will faithfully reproduce such program sources as stereo ar monophonic record changers, tuners, and stereo tape player. Feature; concentric bass and treble controls, rumble filter and front panel ack for stereo headphones. Other controls include Power/on; volum\%, Mode selector (4 positions); 3 -position program selector and Speaker/Phone switch. On rear panel 8 or 16 ohm speaker impedances may be selected and there is a handy speaker phase switch. Also in-
cluded are a hum adjust and AC convenience sutlet. Rugged hand wired circuit is fused for maximum component protection. Power output: 5 watts music power each stereo channel or 10 watts if used monophonically. The amplifier is compact enough to fit in any convenient location such as a shelf, table or bookcase. For $105-125$ volts $50 / 60$ cycles AC only. Tube complement: 2-6BQ5, 12AX7, 6CA4. Imported. Size $12 \frac{1}{2} W \mathrm{WX}$ $5 \mathrm{H} \times 73 / 4^{\circ} \mathrm{D}$. (with legs). Shpg. wt., 15 Ibs.
LA-214W

## MATCHED 10-WATT STEREO PHONO SYSTEMS WITH LAFAYETTE LA-214 STEREO AMPLIFIER : budget priged quality systems listenimg

## MATCHED COMPONENTS

- Lafayette LA-214 10-watt Stereo Amplifier
- Lafayette-Webcor 4-Speed Record Changer with WideRange Ceramic Turnover Cartridge
- Equipped with Synthetic Sapphire Stylus and LP Diamond Stylus
- Wood Base For Changer
- Two Lafayette SK-181 "Minuette" Speaker Systems or Choice of Alternates
- All necessary Connecting Cables and Instructions



Lafayette offers this complete 10 -watt sterec phono system at a price anyone can afford. Specially selected stereo componen:s assure a high quality of musical reproduction with all the depth and dimeasion of thrilling stereophonic sound. The center of this fine, budget-priced music system is the Lafayette LA-214 10-watt stereo amplifier. Equipped with many featares found on higher-priced units, this beautifully styled amplifler provides impressive performance and has sufficient power for any home listening area. System includes:
PK. 770 Lafayette-Webcor 4-speed stereo record changer with wide-range ceramic turnover cartridge equipped wioh synthetic sapphire stylus, plus ip damond stylus; Wood Base tor changer $n$ choice of mahogany or walnut; Two Lafayette SK-181 "Minuette" Speaker Systems, specially designed to provide a full, rich tone from a compact enclosure and finished in walnut. All systems are supplied with necessary cables and interzonnecting instructions.
Alternate choices of speaker systems inclade the SK-251 "Minuefte" (olled wainut), SK. 124 Uitra-Compliance Two-way Speaker system in mahogany or walnut (also avail. able in olled walnut as SK-123), and SK-a36 "Slenderette If" in oiled wainut.

For detalled descriptions of ill components in the above systems, see pages 45, 47, 56 and 78.

| System | Amp. | Changer | Change- <br> Base | Speaker System | Shpg. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Wt. Ibs. |  |  |  |  |  | Net

Wainut finish t+ olled Walnut finis

## LAFAYETTE LT-80B FM TUNER



## LAFAYETTE COMBINATION PACKAGE 84.45

For Fine FM Multiplex Stereo Reception add Lafayette LT 220 FM Multiplex Adapter to LT-80B FM Tuner


HTA.18WXM Combination of LT-80B and
LT-220 FM Multiplex Adapter Net 84.85

## A BUDGET PRICED TUNER PACKED WITH FEATURES

- Armstrong Circuit Foster-Seeley Discriminator and Dual Tuned Limiters - AFC - AFC Defeat - Extremely Sensitive $-1.5 \mu v$ for 20 DB Quieting - 10 Tube Performance - 8 Tubes (2-Dual Purpose) - 20-20,000 Cycles $\pm 1 / 2$ DB - Superb Low Silhouette Styling - 3-Gang Tuning Condenser - Tuned Grounded Grid RF Stage


## WITH MULTIPLEX JACK FOR MULTIPLEX ADAPTER

Designed and constructed of the finest components, with jewel like precision (each unit is hand wired). Engineered to provide maximum FM versatility, the LT-80B is provided with a multiplex output, jack to accept a stereo FM multiplex adapter. Fly. wheel action tuning control. Tube complement consists of 2-6AA8, 2.68A6, 2.6AU6, 1 each 6AL5 and 6X4. Handsome low silhouette enclosure will do justice to any decor. Beautifully finished in gold and white with contrasting black dial face. Complete with cage and legs. Dimensions: $113 / 8 \mathrm{~W} \times 80 \times 41 / 8^{\prime \prime} \mathrm{H}$. Imported. LT-80B Stereo Tuner

## LAFAYETTE MULTIPLEX MODEL KT-220 ADAPTER KIT

- Stereo Separation - 30db @ 400 cps - Self-Powered
- Less Than $1 \%$ Distortion - Prealigned Coils - Noise Filter (switchable) - 3 Tubes - 2 Dual, 1 TriplePurpose Tube + Silicon Rectifier - Ideal for Lafayette Tuners Equipped with MPX Output Jacks


## Quality Stereo FM Multiplex At minimum cost

Enjoy thrilling FM Stereophonic sound from any recent Lafayette Tuner or any other quality wide-band FM or FM-AM tuner equipped with multiplex jacks. Hear the full range of audio frequencies in all the realism and magnificence of stereo sound by simply adding this low-cost Lafayette Multiplex adaptor kit. Engineered for anyone to build and operate, the KT-220 is easily connected to your tuners built-in multiplex output and special instructions are provided for connection to tuners without MPX output jacks. Coils are pre-aligned and only minimum adjustments are necessary. Self-powered, the unit may be hidden out of sight or installed remotely from your tuner.
The specifications speak for themselves: Separation - 30db at 400 CPS; Distortlon - below $1 \%$, noise filter controls: on-off with pilot light, Separation control. Tubes: 12AU7, 6BN8, 12AX7 plus a silicon rectifier.
The KT-220 Multiplex adaptor is supplied complete with shielded cable for input and output connections; metal case and all parts plus the famous Lafayette detailed kit instruction manual. Front panel is finished in beige and ivory trim with contrasting beige and brown cabinet. Size: $81 / 2 \mathrm{~W} \times 4 \mathrm{~K}_{6} H \times 43 / 8$ " D . For $110-125$ volts, 60 cycle AC. Shpg. wt., 4 lbs


UP TO 24 MONTHS TO PAY SEE PAGE 412


## LAFAYETTE MODEL LT-78C FM-AM STEREO TUNER with

## BUILT-IN MULTIPLEX and AUTOMATIC STEREO INDICATOR




STEREO MONITOR Gives positive indication of a stereo broadcast. You can't miss a stereo You can't miss a stereo
station. Permits accustation. Permits accu-
rate tuning of monaural rate tuning of
stations too!


DUPLEX 3.GANG TUNING CONDENSER Highly sensitive-Pulls In stations with true Hi-Fi Performance


VARIABLE AFC CONTROL Adós enaugh compensa. tion to counteract drift wlth minimum distortion

FM STEREO


NOISE FILTER
Reduces annoying high frequency naise

## DIMENSION (5)

STEREO DIMENSION CONTROL
Factory preset but easily adjustable (if necessary) to achieve optimum separation in your own home

- 20-Tube Performance-12 Tube plus Tuning Eye \& Rectifier, 9 Diodes \& Tuning Meter - Automatic Stereo Monitor - MPX Separation 30 db @ 400 CPS. Less than $1 \%$ Dlstortion - Armstrong Circuit with Dual Tuned Limiters and Ratio Dete ator - Automatic Frequency Control - Tuned Grounded Grid R.F. Stage on AM \& FM - Flywheel Tuning - Broadband I.F. for AM - Noise Filter Slide Switch - AM Level Control - Stereo Dimension Control

SIMPLICITY, FLEXIBILITY ANO SUPERB STYLING have been carefully integrated In this quality tuner. Offering unlimited versatility, the LT-78C features new Automatic Stereo Monitor which shows automatically when you are properly tuned to a stereo broadcast, also helps to tune monaural sta. lions accurately. Has superb AM, FM and FM MULTIPLEX reception. It's low slihouette enclosure can be placed proudly on an open bookshelf or custom installation anywhere in your home. Attractively finished in gold and white with contrasting black dial face $10^{\circ}$ added legibility as well as beauty. A complete set of controls provide for every tuner function On the front panel there is a mode selection switch with a choice of AM, FM or FM stereo; a power on/off slide switch; variable AFC which is adjustable for tuning in weak stations adjacent to strang stations; flywheel tuning for smooth rapld statlon selection; a precision tuning meter for pinpointing your statlon lo the strongest signal; a noise filter slide switch for weak stations. On tha rear panel there is an AM level control and a stereo dimension control to provide the right separailon for your systems. Plate follower output permits using the tuner up to 50 ft . from an amplifier. FM circuitry features an Armstrong grounded grid low noise front end and wide-band ratio deteztor; superheterodyne AM Circuit with 3 stages. AVC and Ferrite loopstick antenna. Imported. LT-7BCWX AM.FM Multiplex Tuner

Net 93.95

## SPECIFICATIONS:

FM: If Band Width: $200 \mathrm{KC}-6 \mathrm{db}$; Fre. quency Response: FM 20-20,000 CPS; Image Rejection-Better than $40 \cdot \mathrm{db}$; If Rejection- 70 db . Stereo Separation: 30 db @ 400 CPS. less than $1 \%$ distortion; Hum -60 dt : Variable AFC Control; AM Level Control Noise Filter; 300 ohm antenna input. FM: Sensitivity $2 \mu \mathrm{~V}$ and 20 DB S/N; Superheteradyne Circuit Bandwidth- 8 KC , $A V C$, Ferrite loopstick antenna; Image Re. jection- 50 db ; Harmonic dist.-less than $1 \%$ to $80 \%$ modulation. TUBES: $12 A X 7$. 12AL7. 6BE6, 6AVG, (3) 6AU6, (3) 6BA6, (2) 6AQ8. EM-84 tuning eye plus $6 \times 4$ rectifier and 9 diodes. Power: $105-125$ VAC $50 / 60$ CPS. Dimensions: $141 / 2 \mathrm{~W} \times 54 \times 91 / 2^{2} \mathrm{D}$. Legs add $3 / 4$ " to height. Shpg. wt., $161 / 2$ lbs.

Interior View Shows Solid Construction

## LAFAYETTE MODEL LT-81C FM STEREO TUNER with

## BUILT-IN MULTIPLEX and AUTOMATIC STEREO INDICATOR

## NEW!

> OUTSTANDING MULTIPLEX STEREO TUNER WITH 10 TUBES, PLUS RECTIFIER AND 8 DIODES. 3 GANG TUNING PROVIDES TUNED RF STAGE FOR EXCELLENT SENSITIVITY AND SELECTIVITY

## ONLY

EASY GUDGET PLAN
SEE PAGE 412

TRULY remarkable, quality performance and styling that will delight both your eye and your ear. Features Automatic Stereo Monitor tuning eye which automatically indicates an FM stereo broadcast and makes accurate tuning of mono stations easier too! Engineered to provide high quality FM and FM stereo multiplex reception, the LT-81 has an Armstrong circuit and a radio detector with dual tuned limiters. The multiplex circuit provides a stereo separation of 30 db at 400 cycles with less than $1 \%$ distortion. Controls consist of Power on/ selector switch for FM, Stereo MULTIPLEX, noise filter; AFC slide switch' with "off" position, Stereo dimension control to custom blend stereo reception (in-rear) and Flywheel action tuning control gives velvet smooth tuning action. Two stereo output jacks on rear panel. Tube Complement: (1) 12AU7, (1) 12AX7, (1) 6AV6, (3) 6AU6, (2) 6BA6, (2) 6AQ8, EM-84 tuning eye, plus 6X4 rectifier, and 8 -semiconductors. Handsome low silhouette enclosure looks good in any room setting. Beautifully finished in gold and white with a contrasting black illuminated dial face. Complete with cage and legs. Dimensions: $53 / 4 \mathrm{H} \times 131 / 2 \mathrm{~W} \times 91 / 8^{\prime D}$. $110-120 \mathrm{~V}, 60 \mathrm{cy}-$ cles AC. Shpg, wt., 12 Ibs. Imported. LT-81CWX

Net 83.95

- Automatic Stereo Monitor - Built-in Multiplex Circuit With 30 db Separation
@ $\$ 00$ CPS - Ratio Detector and Dual Tuned Limiters - AFC - AFC Off
- Extremely Sensitive-2.0 $\mu V$ for 20 db Quieting - 15-Tube Periormance
- Freq. Response $20-20,000$ CPS $\pm 2 \mathrm{db}$ - Low silhouette Styling



# LAFAYETTE 50-WATT STEREO AMPLIFIER KITThe Outstanding"Stereo250A" 



## ADVANCED AUDIO CIRCUITRY INCLUDES

 - DC applied to all preamplifier and tone control tube ieaters for humfree operation - RIAA equalization on phono inputs - NARTB tape equalization on tape head inputs - Individual bias and balance controls - Hum balance Controt - Excellent DC power supply regulation provided by silicon diodes - Total of 9 tubes, plus 3 silieon diodes-uses premium 6CW5/EL86 output tubes.The Lafayette KT-250A offers remarkable versatility, high quality of reproduction and new distinctive styling in one convenient low-cost unit. Designed and engineered for ease of assembly, the KT-250A is a fine stereo preamplifier and 50 watt stere 0 amplifier combined - with all the controls and features to enable you to enjoy the utmost in listening pleasure in any situation. Whether you use it as a stereo amplifier delivering 25 watts per channel or as a powerful 50 watt monophonic amplifier, you are assured of true hig f fidelity reproduction - free from hum, noise and distortion.

## DELUXE FEATURES

Unique Separation Control-A new stereo control which provides continuously variable channel sepa-ration-from full monophonic to full stereo. Lets you select the amount of separation you want. Clutch-Operated Volume Balance control-Gives you a cholce of independent or simultaneous control of both channels-you can use it as a master volume control without disturbing previously selected settings on each channel.
4 Independent Tone Controls-Independent Bass and Treble adjustment for each channel. Concentric mounting for convenience-inner knob controls one channel, outer the other channel.
Mode Switching-Two slide switches provide Normal Stereo-Reverse Channel-Mon A (Channel A reproduced through both channets)-Mon B (Channel 8 reproduced through both channeis).
Input selector- 4 -position switch lets you select instantly any one of your connected monophonic or stereo sources-special non-shorting arrangement on one position permits recording and playback using a permanently connected tape recorder.
Loudness Switch- Provides the frequency response MOOEL KT-250AWX
changes required by the ear at low listening levels and permits the Volume-Balance control to function as a compensated loudnes: control.
Phase Switch-Reverses the phase of one channel electrically-corrects for speakers connected out of phase or for reversed phase recordings some. times found commercially.
2 Pairs of High Level laputs-for connection of Tuner, and auxiliary equipment.
3 Pairs of Low Level Inputs-For connection of magnetic phono, crystal/ceramic phono, and tape head.
Main Speaker Outputs-Dal 4,8 and 16 ohm ter minals may be paralleled for' 4 or 8 ohm opera. tion at 50 watts.
Tape Output - Provides an output for Tape recording - unaffected by Volume and Tone Controls.
Bridged Output-A monophonic blend of both channels which can be fed to a third single channel power amplifier and speaker for a greater sound spread in stereo. May also be used for listening in another room.

Net 74.50

## SPECIFICATIONS

POWER OUTPUT: 50 watts ( 100 watts peak) 25 watts per channel $\pm 1 \mathrm{db}$. O1sTORTION: Total Harmonic Distortion $\pm$ 1 db at less than $1 \%$ at 1 KC at normal listening level ( 1 watt); 1.M. Distortion less than $0.5 \%$ at normal listening level. FREQUENCY RESPONSE: $15-40,000$ cps $\pm 0.5 \mathrm{do}$ at normal listening ievel, 25 $50,000 \mathrm{cPS} \pm 1 \mathrm{db}$ at rated output. HUM ANO NOISE: Zero volume hum 77 db below rated output; max volume hum high level inputs 70 do below rated out. put; Mag. phoro inputs 50 db below rated output. Sensitivity: For full output high level inouts 0.5 V ; Mag. phono 3.5 MV at IKC. CHANNEL SEPARATION:

Greater than 55 db at 1 Kc ; greater than 45 db from 20-20,000 cps. SPEAKER AUXILIARY OUTLET: 1 switched. TUBE COMPLEMENT: 4-6CW5/EL86, 2.7199, 3. 12AX7, 3 Silic on diodes. IMPEOANCE: 4. 8 and 16 ohms per channel. POWER: 200 watts; $110-125 \mathrm{~V}$ AC $50-60 \mathrm{cps}$
Size: $141 / 2 \mathrm{~W} \times 51 / 2 \mathrm{H} \times 121 / \mathrm{a}^{* D}$. Shpg wt.,
28 ibs. 28 lbs.
Designed for ease of construction, the KT-250A can be assembled in a minimum of time. Assembly manual contalins detailed step-by-step instructions
guldes you every step of the way. Large full-scale pictorials show you where every wire and component goes.

# LAFAYETTE 36-WATT INTEGRATED STEREO AMPLIFIER KIT- 

 The Popular "Stereo 236"
## MONEY-BACK GUARĀNTEE

Your Lafayette Kit when properly wired must meet our specifications or you may return It for FULL REFUND of the purchase price. See page 414 for full defalls.

## Deluxe Stereo Controls



Anyone can build these superb Lafayette stereo kits-no special skill is needed. Assembly manuals contain clearly-worded step-by-step instructions which guide you all the way. Large full-scale pictorials illustrate every stage of assembly-show you exactly where every part goes. Join the thousands who have already discovered this easy low-cost way of owning the finest audio equipment.

"This is one of the easlest kits to put together In fact the KT-236A manual is as near to foolproof as we've seen. Another thing we like is the spacious layout of the chassis. There's plenty of room to work in.
"A flexible unit, the KT-236A offers just about every control needed to cope with today's stereophonic reproduction.

Comments on the KT-236A


# DO-IT-YOURSELF and SAVE with these LAFAYETTE Hi-Fi STEREO KIT SYSTEMS BUILD THIS 36-WATT STEREO KIT SYSTEM 



COMPONENTS
LAFAYETTE KT-236A 36-Watt Stereo Amplifier Kit
GARRARD Autoslim 4-Speed Stereo Record Changer (less base) Base for Record Changer (Specify Finish) PICKERING U38/AT Diamond Needle Stereo Cartridge 2 LAFAYETTE SK-128 $8^{\circ \prime}$ Ultra-Linear Biaxial Speakers
LAFAYETTE SYSTEM PRICE
$139^{95}$ , wemonn momp only 57 monthly


## LAFAYETTE MATCHED 36-WATT STEREO KIT SYSTEMS

- Heart of this excellent system is" the easy-to-assemble $K^{-}-236 A$ integrated stereo amplifler-A complete stereo control center plus two 18 watt amplifiers in one com. pact unit. Advanced design features a complete array of controls and inputs.
- Lafayette SK-128 8" Biaxial Speakers provide multlple speaker performance with a full even coverage over the entire audible range
- The renowned Garrard Autoslim Mark II or Lesa CO2/21 7-Speed Record Changer supplled with the stereo cartridge of your choice.
- Be Sure to Specify Choice of Plickering U38/AT, Shure M3D or Empire 880 Dlamond Needle Cartridge.


## Deluxe 50-WATT DO-IT-YOURSELF STEREO KIT SYSTEMS

| System | Amplifier KIt | Garrand Changer | Cartridge* | Changer Base | Speakers | Speaker Cabinet | Shpg. Wt. Net |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

LSK-360CWXM KT-250A AT6/Mark II Choice of $\dagger$
LSK.367CWXM KT-250A A/Mark II LSK-367CWXM KT-250A A/Mark II Pickering LSK-362CWXM KT-250A AT6/Mark II U38/AT LSK.368CWXM KT-250A A/Mark II or LSK-364CWXM KT. 250 A AT6/Mark II Shure LSK-369CWXM KT-250A A/Mark II M30 or
LSK.366CWXM KT-250A ATG/Mark II Empire LSK-370CWXM KT-250A A/Mark II 880
†Specify Olled Walnut, Mahogany, or Blonde. ttUnfinished Walnut Veneer

- Be sure to specify choice of Pickering U38/AT, Shure M3D, or Emplre 880 Diamond Needle Cartridge.

For detailed description of all components in the above systems, see pages
$18,49,53$, and 79 . 16, 49, 53, and 79
FRE Automatic 45 RPM Spindle, Record Cleaner connecting cable, all necessary connectors, and Interconnecting Instructions with purchase of any Hi-Fi System listed on this page.


## MATCHED COMPONENTS

LAFAYETTE KT-250A 50-Watt Stereo Amplifier
GARRARD AT6/Mark II 4-Speed Record Changer (less base)
Base For Changer (Specify Finish) PICKERING U38/AT Diamond Needle Stereo Cartridge

## 2-LAFAYETTE SK-58 12" FREE-EDGE Coaxial Speakers

LAFAYETTE 18475 SYSTEM PRICE

NO MONEY DOWN
S10 monthly

## CHOICE OF STEREO CARTRIOGE

|  | Empire <br> 860 | Pickerint <br> U38/AT |
| :---: | :---: | :---: |



GARRARDA
Mark II on Base


## LaFAYETTE MATCHED 50-WATT STEREO XIT SYSTEMS

- The KT-250A represents the finest quality in its class-provides everything you could want in a stereo amplifier. Two 25 -watt amplifiers integrated with complete stereo control facilities. Provision to expand at a later date with stereo tape deck and/or stereo FM/AM tuner. Features include separate bass and treble controls for each channel and concentric clutch-operated controls for individual or simultaneous level adjustment of each channel.
- Two Famous Lafayette SK-58 12" Coaxial speakers with sheepskin free-edge cone and $3^{*}$ cone tweeter provide supert reproduction without coloration or distortion. - Garrard ATG/Mark II 4 -Speed Record Changer with i-s record of outstanding reliable performance, supplied with the stereo cartridge of sour choice.


## The KT-550 © Griterion "LABORATORY STANDARD" 100-WATT STEREO BASIC AMPLIFIER KIT <br> $133^{2} 184$ IN EASY TO WIRED and TESTED BUILD <br> A SSURANCE of COMPONENT QU <br> ONE YEAR PARTS GUARANTEE All Components in this well within their performengineered to operate well witce of this quality, ance capabilities. As assurance, including tubes, Lafayette will replace any parts, Latayette will replace any paris, inctue to defects of which fall to pertormship. material or workmans <br> COMPLETE with ATTRACTIVE <br> MADE IN U.S.A. <br> money back guarantee <br> Flawless Performance <br> - Conservatively Rated at 50. Watts Per Channel, 100-Watts for Monophonic Use. <br> - Frequency Response From $2-100,000 \mathrm{cps},+0$. -1 db at 1 .Watt. $14,45,000$ cps $+0-1 \mathrm{dt}$ <br> Brilliautly conceived, the KT-550 incorporates advanced engineering tech-

at 50 watts.

- Distortion Levels So Low They Are Unmeasurable - Hum and Noise Befter Than 90 dt Below 50-Watts
- Multiple Feedback Loop Design (over 50 db) Lowers Distortlon Without Sacrificing Stability
- Metered Calibration Control Panel with D.C. Blas and AC Galance Potentiometers
- Massive Grain Oriented Silicon Steel Trans. formers
- New High Power Sensitive 7027a Output Tubes
- Silicon Diode Power Supply
- Effortiessly orives Today's Low Efficiency Speakers


## READ THESE COMMENTS FROM THE CRITICS \& TECHNICAL PRESS

ELECTRONICS WORLD "One of the best hi-fl amplifiers on the market.
Hi-Fi/Stereo review "The square-wave response of the KT. 550 was practically perfect."
AUOIO "We would recommend this ampllfier to any audiofan.
HIGH-FIOELITY "United States Testing Company feels the ' 550 ' is one of the tinest amplifiters it has seen."

## TECHNICAL SPECIFICATIONS

Power Output: 50 -watts per channel continuous RMS from 20-20,000 cps; 100 -watts monophonic operation. Total Mar monic Distortion: Less than $.15 \%$ at 1,000 cycles at 50 watts each channel, $0.75 \%$ from $20-20,000$ cps at 50 watts each channel. Intermodulation Distortion: Less than $0.5 \%$ at 50 watts equivalent sine wave power, $60 \& 7,000 \mathrm{cps}, 4: 1$ ratio. $0.15 \%$ at 10 -watts equivalent sine wave. Frequency Response: $14-45,000 \mathrm{cps}, 0-1 \mathrm{db}$ at 50 -watts; $2 \cdot 100,000 \mathrm{cps}, 10-1 \mathrm{db}$ at 1 watt, Sensitivity: 1.0 volt RMS input for 50 -watts output. 0amping Factor: 15 at i he- 16 ohms. Feedback: Over 50 db in six multiple loops. Hum and Noise: Better than 90 db below 50 -watts. Output Impedance: 4,8 and 16 -ohms, Coin. venience Outiet: Single A.C. convenience outlet. Fuse: Externally accessible fuse. Controls: 4 Bias Controls. 2 AC Balance Controls. Meter Selector Switch and Power on off Balance Controls. Meter Selector Switch and Power on/Off 2-68R8A plus 5 Silicon Dlodes. Power Consumption: 350 -watts 2-68R8A plus 5 Silicon Diodes.Power Consumption: 350 -watts
niques along with new concepts in audio design to achieve an output of 50 -watts per channel for stereo operation, or 100 watts combined output in monaural application. Laboratory and listening studies have shown that the performance characteristics of an amplifier in the non-audible frequency ranges, have a direct effect on the quality of sound in the audible frequency range. Amplifiers limiting their frequency response to slightly above and below the limits of audibility have a tendency toward strident reproduction, a poorly defined low end and an inferior differentiation of instruments in the high overtones. The sound reproducing capabilities of the KT-550 are far in excess of the audible range $\ldots+0-1 \mathrm{do}$ from 2 to $100,000 \mathrm{cps}$ without evidence of ringing or instability.
The conventional approach in amplifier design for lowering distortion has been the use of "single loop" reedback. In contrast the KT-550 utilizes a "multiple loop" design to increase the degree of feedback and thus achieve phenomenally low distortion and high stability, with an absolute absence of listening fatigue. The ratio of these "multiple loops" are adjusted to the relative degree of distortion produced. If one stage has twice the distortion of another, twice as much feedback is applied to it. This technique results in a 20/1 to $30 / 1$ reduction in distortion as compared with a $10 / 1$ to $20 / 1$ reduction in conventionally designed units. Every component part of the KT-550 was carefully chosen to complement its overall excellence. Special output transformers were designed to entirely utilize the broad band circuitry-fully potted, massively designed and constructed with grain oriented silicon steel cores in 11 winding sections, as opposed to 5 or 7 sections in normal audio transformers. To meet exacting professional specifications and insure optimum performance the KT-550 employs a metered calibration control panel.
Eugineered for the kit builder, the KT-550 incorporates two printed circuit boards-virtually eliminates any possibility of error. Lafayette's famous step-bystep instruction manuals plus large pictorials provide ease of assembly even for the most technically inexperienced-assures performance equal to the original, custom-built laboratory model. Handsomely finished in contrasting brown and beige with control panel finished in brass. Complete with all components including attractive beige finish steel cover, with built-in handles. $17 \frac{1}{4} \mathrm{~W} \times 121 / 2 D \times 81 / 4$ "H. For 110-125V 50/60 cycle operation.
KT-550WX Shpg. wt., 60 lbs.
Net 134.50
Dual 50 -watt stereo amplifier as above, wired and tested
LA-550WX
Net 184.50

# Lafayette © Citerion KT-600A Stereo Pre-Amplifier Master Control Center 



All The Versatility Of A Broadcast Studio Control Console

- RESPONSE 5-40,000 CPS
- AMAZING BRIDGE CONTROL FOR VARIABLE 3rd CHANNEL OUTPUT
- HIGHLY PRECISE "NULL" BALANCING \& CALIBRATION
- TAPE HEAD PLAYBACK EQUALIZATION FOR NEW 4-TRACK STEREO


## - 4-AUXILIARY AC OUTLETS

The KT-600A represents a brilliant stereo achievement. This "no-compromise" stereo preamplifier and control unit offers unlimited versatility, includes every feature necessary for the finest reproduction. It has a total of 12 input jacks ( 6 stereo pairs) for program sources of any type and level-all of which may be selected by front panel control. Separate turnover and roll-off switches provide 24 positions of correct equalization-independent for each channel. Dual concentric stereo function selector for maximum flexibility in controlling selected program sources. A unique Bridge control provides continuously variable channel separation from full mono to full stereo, or it can optionally be used to regulate the 3rd channel output. A clutch-operated volume Balance Control provides independent or simultaneous level adjustment of channels. Low impedance Plate Follower outputs are used, and a host of many other professional type features.
KT. 600 awx Stereo Preamplifier Kit KT-600awx Stereo Preamplifier Kit. LA-600aWX Stereo Preamplifler, wired and tested

No Money Down Net 79.50

## SPECIFICATIONS

FREQUENCY RESPONSE: $5-40,000 \mathrm{cDS} \pm 1 \mathrm{db}$. DISTORTION: Less than $0.05 \%$ IM at 2 volts out; Less than $0.1 \%$ Harmonic, at 2 volts out. SENSITIVITY: Low Level 2.2 mv for 1 volt out; high level 94 mv for 1 volt out, Tape Head inputs 1.8 mv for 1 volts out. HUM AND NOISE: High' level inpuls better than 80 db below 2.0 volts; low inputs better than 62 db below 2.0 volts. INPUT IMPEDANCES: High level-250K ohms; Mag-96K ohms; Ceramic- 96 K ohms in series with 68 uuf; Tape Head - 470 K ohms. OUTPUT IMPEDANCES: Main Outputs- 1500 ohms; Tape Outputs2700 ohms; Bridged Output- 1100 ohms. TONE CONTROL RANGE: Bass $\pm 15 \mathrm{dO}$ at 30 CDS . Treble $\frac{15}{12} \mathrm{db}$ al 10 Kc . RUMBLE FILTER: 12 db/octave SIOpe, down 15 do at 30 cDS . SCRATCH FILTER: $12 \mathrm{db} /$ octave slope, down 15 db at 15 Kc . CROSSTALK: Greater than 55 db separation between channels. AUXILIARY AC OUTLETS: 4, 1 Unswitched. TUBES: 7.7025, 2 -Selenium Rectifiers. POWER REQUIREMENTS: 35 Watts, $105-125$ volts AC, $50 / 60$ cycles. SIZE: $14 \mathrm{Wx} 4^{1} \mathrm{~K}_{6} \mathrm{Hx} 111_{2}{ }^{\circ} \mathrm{D}$, not including projections. Shpg. wt., 16 lbs

## Comments from the CRITICS and TECHNICAL PRESS!



Mighest Quality Components-Costly deposited metal film resistors and $5 \%$ mica capacitors insure long life and peak performance.


Proof of Performance


## 1010

-This is A whillfully engineered unit incorisornting ulmost every mono and serpeo function of value that has yet "ppeared."

## high fidelity

"The thfigyette KT-600 is uncmeation. wbly one of the most flesible stereo pontrol units nvailable tontuy. Its Pexiformance comparitbe to manufuctured units aelling for far more than itw modest price. for ull prnetleal purluones miny be ronsidered a dixtortion.

"It ineorporates just nbout all the femtures ony could hope to find on a single chaksix."

MONEY BACK GUARANTEE Your Lafayette Kit when properly wired must meet our specifications or you may return it for FULL REFUND of the purchase price.

## LAFAYETTE BUILD-IT-YOURSELF PROFESSIONAL 100-W ATT STEREO SYSTEM



Take the Smart Approach Toward Stereo-Build your system the lafayette way-the Kit way. Nothing can compare to the feeling of personal pride and sense of achievement derived from "doing-lt-yourself." For many who have always wanted the finest High Fidelity equipment, but have found the cost of factory-wired units prohibitive, Lafayette Kits offer the ideal solution. Indeed the quality of your home stereo system need be no different from that of a professional studio. Specially selected and matched, this Lafayette Kit stereo system offers you professional pertormance at far less than factory-wired units

KT-550




MATCHED COMPONENTS

NO MONEY DOWN

## $414^{50}$

LAFAYETTE KIT SYSTEM PRICE


## LAFAYETTE 100-WATT EXPERTLY MATCHED DELUXE STEREO KIT SYSTEMS

-Be sure to speclify Pickering U38/AT, Shure M3D or Empire 880 Dlamond Needle Cartridge

| System | Amp. Kit | $\begin{aligned} & \text { Preamp } \\ & \text { Kit } \end{aligned}$ | Garrard Changer | Cartridge* | Changer Base | Speaker | Spoaker Cablnet Kit | Shpg. Wt., los. | Net |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LSK.559WXM | KT-550 | KT-600A | Model A/Mark II |  | Laf ${ }^{\text {+ }}$ | 2 SK-215 |  | 175 | 414.50 |
| ISK 560WXM | KT-550 | KT-600A | Model A/ Mark II | Choice of | Laf $\dagger$ | 2 SK-215 | 2 CK-10 | 283 | 469.50 |
| LSK.561WXM | KT-550 | KT-600A | Model A/Mark it | U38/AT, | Laf $\dagger$ | 2 SK-210 |  | 135 | 374.50 |
| LSK.562W XM | KT. 550 | KT-600A | Model A/Mark II | Shure | Laf $\dagger$ | 2 SK-210 | 2.CK. 34 | 183 | 419.50 |
| LSK-567WXM | KT. 550 | KT.600A | Model AT6/Mark II | M 30 | Laf $\dagger$ | 2 SK-215 | - | 168 | 394.50 |
| LSK-568WXM | KT-550 | KT-600A | Model ATG/Mark II | or |  | 2 SK-215 | $2 \mathrm{CK}-10$ | 276 | 452.50 |
| LSK.569WXM | KT-550 | KT-600A | Model AT6/Mark II | Empire | Laf $\dagger$ | 2 SK-210 |  | 128 | 354.50 |
| LSK.570w ${ }^{\text {PM }}$ | KT-550 | KT-600A | Model AT6/Mark II | 880 | Laf $\dagger$ | 2 SK-210 | 2 CK. 34 | 176 | 398.50 |

For detalied descriptions of all components in the above systems, see pages 27, 28, 48, 50, 73, 74 and 79.

FREE with purchase of any HI-FI Stereo Kit system above! Stylus Pressure Gauge, Record Cleaning Kit, Speaker Connecting Cable, Automatic 45 RPM spindie and clear interconnecting Instructions.


# LAFAYETTE \&riterion ${ }^{\text {²0 }}$ 120-WATT ALL-TRANSISTOR STEREO AMPLIFIER KIT KT-900 



120 Watts ( 60 Watts Per Channel) 8 ohms.<br>76 Watts ( 38 Watts Per Channel)16 ohms.<br>76 Watts (38 Watts Per Channel)4 ohms.<br>\section*{22 TRANSISTORS (11 Power Types) 10 SILICON DIODES plus 4 GERMANIUM DIODES}

## PRE-RIVETED MECHANICAL PARTS

 NEW HANDSOME STYIING OUTSTANDING PERFORMANCE . . . SUPERB FEATURES ...
## SPECIFICATIONS

Frequency Response: 5 to $25,000 \mathrm{cps} \pm 1$ db at rated power. Harmonic Distortion: $.5 \%$ at rated power. IM Distortion: Less than $1 \%$. IHFM Music Pewer Output: 60 watts per channel ( 8 ohms) 38 watts per channel ( 16 ohms \& 4 ohms). Hum \& Noise: -68 db Magnetic Phono, -75 db Tuner. Inputs: Magnet Phono, Ceramic Phono, Tape Head, Tuner, Auxiliary, Controls: Separate Concentric Bass, Treble, volume: Stereo Mode: R Channel, L Channel, Stereo, Stereo Reverse. Input Selector: Phono, Tape Head, Tuner, Auxiliary, Rumble, Filter Switch-Scratch Filter SwitchLoudness Control Switch-Power Switch-
Your Lafayette kit when properly wired must meet our specifications or you may return it for FULL REFUND of the purchase price, less only transportation charges

- Heat-Free All-Transistor Lifetime Circuitry
- Separate Concentric Base, Treble and Volume Controls
- Exceptionally Low Hum and Noise Characteristics
- Wide Selection of Stereo Inputs for Program Sources
- Easy to Wire Printed Circuit Boards


## 

## MONEY BACK GUARANTEE



A. Concentric Bass Control
B. Concentric Treble Control
C. Concentric Volume Control
D. Stereo Mode: R, L, Stereo, Stereo Reverse
E. Input Selector: Phono, Tape Head, Tuner, Aux.
F. Rumble Filter Switch
G. Loudness Control Switch
H. Scratch Filter Switch
I. Power Switch

Lafayette engineering research now brings to the high-fidelity kit builder an outstanding 120 -watt stereo amplifier with all the obvious advantages of its ingeniously designed transistor circuitry. This amazing circuitry features a music output power of 60 watts per channel into an 8 ohm speaker-a feat of distinction in transistor circuitry penformance for an integrated amplifier! 76 watts into 16 ohms, 38 watts per channel; 76 watts into 4 ohms, 38 watts per channel. Instantaneous, unsurpassed clean musical reproduction.
Full complement of controls: Separate Concentric Bass, Treble, Volume; Stereo Selection; R channel, L channel Stereo, Stereo Reverse. Input Selector: Phono, Tape Head, Tuner, Auxiliary. Rumble Filter Switch-Scratch Filter Switch-Loudness Control Switch-Power Switch-2 AC convenience Outiets (In rear). Concentric Bass, Treble and Volume Controls facilities custom channel blending of individual channels and once set, serve as master controls.
Heat-free operation, extremely low power consumption; practically no audible hum and noise; characteristic reliabliity, stability and longevity of transistor operation coupled with the neatness and ease of printed circuit board construction make this Lafayette amplifier a delight to build -one that any kit builder will be proud to own. All sockets, terminal strips, lugs etc. are preriveted to chassis for easy assembly. Attractive gold anodized extruded aluminum panel and gold anodized knobs. Complete with walnut vinyl covered metal case. For $105-120$ volt, 50.60 cycle AC.
 KT-900wX Net 129.50 Oual 60 -watt All-Transistor Stereo Ampllfier as above, wired and tested.
LA-900wX


##  <br> LaFAYETTE 15-WATT MONAURAL AUPLIFIER LA-55

 Fine Monaural Hi-Fi Amplifier

- Frequency Response: $15 \cdot 30,000$ CPS
- Power Output 15 Watts
- Sensitivity: 3 MV Mag. Phono
- Hum 65 Db Below Rated Dutput
- Harmonic Distortion Less Than .3\%
- 5 Input Channels
- Rumble filter
- EL84 Output Tubes In Push-Pull
- Beautlfully Styied

Outstanding Performance ant Engineering + Beautiful Styling + Low, Low Price-add up to make the Lafayette LA-55 truly one of the finest Hi-Fi monaural amplifier values today .. Beautifully styled in gold and white, the LA- 55 easily adapts to any room decor. Perfect for that music system in your living room, finished basement, store or office. Rug. gedly constructed, this fully integrated amplifier. preamplifier employs premium quality EL84 tubes in push-pull and advanced circu try for falthful reproduction of all monophonic sources ... perfect for use as a second amplifier for stereo or for starting out monophonically and adding stereo at a later date. Engineered to include every oractical feature - a worthwhile contribution to hi-fi reproduction.

[^0]
## LAFAYETTE 15-WATT MATCHED MONAURAL PHONO SYSTEM



| Empire |
| :---: |
| $8 \rightarrow 0$ |

(2) pickering U38/at

This economical high licelity system will delight you with its exceptional performance and majestic sound. Designed for longevity as well as beauty, these components will satisfy even the most critical music listener PLAY MONAURAL RECORDS NOW-ADD CJMPLETE STEREO LATER! COMPONENTS
Lafayerte la-55 15-Watt Complete Amplifier Garrard Autoslim/Mark II 4.Speed Record Changer Wood Base for Changer
Pickering U38/AT Diamond Needle Cartridge Lafayette SK-128 Full-Range B " $^{\prime \prime}$ Biaxiel Speaker

## LAFAYETTE COMPLETE SYSTEM PRICE $\begin{aligned} & \text { सITHFEREE } \\ & \text { ACCSORIES }\end{aligned}, 050$

LS.6ICWXM ...Shpg. wt., 39 ibs... Net 102.50 NO MONEY DOWN only 56 monthly

## ALTERNATE SYSTEMS

## 15-WATT MATCHED MONAURAL HI-FI SYSTEMS

|  |  |  |  |  | Shpg. wt. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Base S | Cablnet |  |  |
| Ls.62CWX |  | slim/Mark |  | SK-128 | Niniduct t+ |  |  |
| L5.63CWXM | LA. 55 | Autoslim/Mark 11 |  | SK. 58 |  |  | 112.50 |
| 15.64cwxm | LA-55 | Autos IIm/Mark II |  | SK-58 | Eliptoftex** |  | 144.50 |
| 5.65CWXM | LA-S5 | Autos 1 im/ Mark II |  | SK-236 | enderettelil |  |  |
| $\begin{aligned} & \text { Choice o } \\ & \text { +-Specify } \\ & \text { t-Specify } \end{aligned}$ | Oil | U U38 nut, Ma iut, Wa |  | or |  |  |  |

[^1]
## 5

# THE New LAFAYETTE 200-WATT ALL TRANSISTOR Eriterion STEREO POWER AMPLIFIER. 

 From the Lafayette High Fidelity Research Labs ONE OF THE WORLD'S MOST ADVANCED STEREO AMPLIFIERS!
## CHECK THESE SUPERB FEATURES!

- Rated at 100 Watts Music Power Each Stereo Chanmel
- 16 Power Transistors \& 14 Silicon Rectifiers.
- Unique Bootstrap Output Circuitry With 70 db of Feedback.
- Frequency Response: $\pm 0.1 \mathrm{db} 15 \mathrm{cps}$ to $20,000 \mathrm{cps} ;-3 \mathrm{db}$ at 80 Kc minimum.
- Hum \& Noise - 90 db .
- Instant Overload Recovery - 50 micro. seconds maximum.
- May Be Used With Either Transistor or Vacuum Tube Preamplifiers.


NO MONEY DOWN buy on time see page 412
A MILESTONE IN MUSIC REPRODUCTION Now from the Lafayette High Fidellty La-280 All Laboratories a major breant Power Amplifler, A basle stereo power ampllfier so revolutionary in concept, delivering a range of sound so flawless, performance so far advanced, as to set new standards of professional audio component design.

YEARS AHEAD IN PERFORMANCE \& DESIGN Using a total of 30 solid state devices ( 16 power transistors \& 14 silicon rectifiers), the LA-280 develops 100 watts each stereo channel into a 4.0 hm load. Its frequency response extends far in excess of the audible range, from $\pm 0.1 \mathrm{db} 15$ cps to $20,000 \mathrm{cDS}$; -3 db at 80 kc minimum. New circuitry techniques utilizing multiple feedback
 loops have achieved an unprecedented totat of 70 do of reedback. Output transformers have been ellminated in the LA-280-unlike vacuum tube amplifiers which suffer, fom high distortion in the
low frequency ranges due to non-linearity of the output transformers, $L A-280$ distortion levels are phenomenally low. Intermoduiation Distortion measurements (taken at 60 watts sine-wave power with a 15 cps signal) is less than $0.2 \%$; Harmonic Distortion under the same conditions is less than $0.1 \%$ developing 75 watts with a 100 cps signal, Harmonic Distortion is le is than $0.05 \%$. Heart of the LA-280 is its unique Class B operated Bootstrap output circuitry. Emp oys two transistors in each half of the output cliccuit (only one is used in conventional units), with $1 / 2$ of the circuit driving the other half and eliminating the need of driver transistors. Full feedback of the output signal to the input at DC is maintained. Overioad recovery is remarkable, over 100 times as fast as conventional tube amplifiers. Stability and square wave characteristics are of the highest order, far in excess of tube amplifiers. Stability and square wave characteristics are of the hithest order, far excess on
equivalent vacuum tube units. Construction of the LA-280 is in keeping with its excellence of design. equivalent vacuum tube units. Construction of the La-280 is in heeping with its excelience of areshand
Wiring and construction are engine ered to milltary standards. Specially designed transistors are hand selecled for maximum performance. Computer grade electrotytics and fuliy potted massive power supply transformer are'examples of the care and quality built into the LA-280.

A MAGNIFICENT MUSICAL INSTRUMENT More than inst an achievement in electronics, the LA. 280 must be considered as a magnificent musical instrument. The quality of perforim. ance is one of listening through the amplifier back to the original pertormance rather than to the amplifier itself.
The LA-280 is a proven instrument, the product of thousands of hours of testing and valuation. Its high power and revolutionary design enable it to effortlessly drive today's low efficiency speakers. Exceptiona temperature stability together with a special isolation network make it ideal for use with Exceptionaltemperature stantry
Electrostatic speakers. Controls include Power " "On-Off" and Gain (level for each channel). May be used with any good quality tube or transistor preamplifier. Screw type terminals for regular or electrostatic speahers, plus stereo head phone jacks and 4 AC outlets .4 total preamp. Inputs ( 2 per channel): Two low level, twó high level. Size: $18 \mathrm{~W} \times 8 \mathrm{H} \times 8 \mathrm{~B}^{\circ \mathrm{D}}$.
LA-280.
Shpe. wt 35 lbs.
Net 299.50

## LOOK AT THESE TECHNICAL

SPECIFICATIONS

POWER OUTPUT: 4 -ohm load: 100 watts per channel IHFM, 80 watts rms ; 8 -ohm load: 58 watts per channel IHFM, 50 watts rms ; $16: 0 \mathrm{hm}$ load: 33 watts per channel IHFM, 27 watts 1 ms . FREOUENCY RESPONSE: $\pm 0.1 \mathrm{db} 15 \mathrm{cps}$ to 20,000 $\cos -3 \mathrm{db}$ at 80,000 cps minimum. HARMONIC OISTORTION: $4-0 \mathrm{hm}$ load: $100 \mathrm{cps}, 75$ watts-Less than $0.05 \%$; 8 -ohm load: $100 \mathrm{cps}, 45$ watts-Less than $0.03 \%$; 16 ohm load: $100 \mathrm{cps}, 27$ wattsLess than $0.03 \%$. INTERMOOULATION DISTORTION: Less than $0.2 \%$ at 120 watts peak into 4 ohms ( 40 cps and 4 KC mixed 4:1). FEEDBACK: 70 db . OVERLOAD RECOVERY TIME: 50 microseconds maximum. NOISE: - 90 ob maximum. CHANNEL SEPA. RATION: 68 db minimum at $2 \mathrm{KC}, 54 \mathrm{db}$ minimum 15 cps to 20 KC . INPUT: Low Level: 0.2 volt rms 15 cps to 20 KC . INPUT: Low Level: 0.2 volt rms
$\pm 1 \mathrm{db}$ High Level: 1.5 volt $\mathrm{rms} \pm 3 \mathrm{db}$ for 20 volts rms output. PREAMPLIFIER POWER OUTPUT: +35 volts with 7 mv rms maximum ripple. -35 volts with 7 mv rms maximum ripple.

Page 28


The new 3408 combines all the features of the finest Scott separate components into a single compact unit. Incorporates handsome new styling and advanced electronic circults. SPECIFICATIONS: (TUNER) Sensitivity: $2.2 \mathrm{\mu v}$ (IHFM); Channel Separation: better than 30 db; Dis. tortion: $0.8 \%$; Frequency Response: 20 to $20,000 \mathrm{cps} ;$ Selectivlty; 35 db; Capture Ratio: 6.0 db. (AMPLIFIER) Power Output: 35 watts per channel (IHFM); Distortion: $0.8 \%$ Hum and Noise: - 80 db . Size: $16 \% / 5 \mathrm{Wx}$ $51 / 2 \mathrm{Hx} 133 / 4$ "D. Uses G-SIze Case. Shpg. wt., 36 lbs
21 a 6010wx Less Case
Net 399.95

## RENOWNED CUSTOM STEREO AMPLIFIERS AND TUNERS



## NEW MODEL 2220 48-WATT STEREO INTEGRATED AMPLIFIER

Has quality and dependability equal to Scott's best, but lower power at moderate price. Extra heavy-duty output transformers provide superb bass response with the majority of Inefficient speaker systems now so popular. Outstanding features and specifications include: Mode Selector for stereo balance, monophonic, stereo, reverse stereo and left or right channel; Tape Monitor Switch for Ilstening to tape or program while recording; Equalizer Switch for tape or RIAA; Siratch Filter; Separate Bass and Treble Tone Controls for each channel; Loudness/Volume Control; Speakers/ Earphones Jack and switch to turn off speakers for private listening; High and Low Magnefic Phono Inputs; Center Channel Power Output drives speaker directly; Derived Center Channel; Speaker Phase Switch. Uses 11 tubes including 4-7189 outputs plus rectiffers. Power output: 24 watts per channel (IHFM). Harmonic Distortion: $0.8 \%$. Hum and Noise: -80 db . Size: $15 \mathrm{~W} \times 4 \% \mathrm{H} \times 13 \mathrm{y}^{\prime \prime \prime} \mathrm{D}$. Uses C-Size Case. Shpg. wt. 26 lbs
21 A 6012wx Less Case
Net 179.95

## NEW MODEL 350C FM STEREO TUNER

Provides a combination of outstanding performance and good looks. Time proven features include: Heavily Silver Plated front End for maximum sensitivity; Full Size 3.Gang Tuning Condenser with Cascode RF Stage giving improved signal-to-noise ratio with excellent selectivity; Scott-Designed "Time-SwItching" Multiplex Circuit provides fult frequency response with extremely low distortion and stereo separa. tion; Precision Illuminated Tuning Meter; Exclusive and Positive "Sonic-Monitor" Stereo Indicator permits tuning for better separation; Copper Bonded Aluminum Chassis for effictent RF circuit operation. Front panel controls include switch for stereo sub-channel filter and tape recorder jack. Sensitivity: $1 \mu \mathrm{~V}$ for 20 do quleting, $2.2 \mu \mathrm{~V}$ IHFM usable; SIgnal-to-Noise Ratio: 60 db ; Drift: $0.02 \%$; Marmonic Distortions $0.8 \%$; Frequency Responses 30 to $15,000 \mathrm{cps}$; Capture Ratio: 6.0 db ; Selectlilty: 35 db ; AM Suppression: 55 db . Uses 9 tubes and 11 diodes plus rectifler. Size: $15 W \times 43 / 6 \mathrm{H} \times 131 / 4^{\mathrm{N}} \mathrm{D}$. Uses C-Size Case. Shpg. wt., 19 Ibs.
21 6013wx Less Case
Net 224.95

The 380 is identical to the 340 B with the addition of a high quality AM tuner section capable of recelving $A M$ broad. casts almost indlstinguishable from FM. In addition to all control features of the 3408 , the 380 has a front panel AM Bandwidth Selector Switch allowing best reception on distant as well as local stations. Size $165 / 6 \mathrm{~W} \times 51 / 2 \mathrm{H} \times 133 / 4^{\prime \prime} \mathrm{D}$. stations. Size: 165
Shpg. wt., 37 lbs.
${ }_{21}$ Shi. Gt.i1wx Less. G-Size Case
Net 459.95

FM St
an FM Stereo broadcast. An Indicator light signals reception of a stereo broadcast.
2 Unique Sub-Channel Noise Filter eliminates nolse on distant stereo stations without effecting frequency response.
3 Indicator Lights show exact mode of operation.
4 Rumble and Scratch Filter.
5 Tape Monitor Faclifities assure professional results.
6 Front Panel Headphones sack.
7 Speakers/Headphones Solector Switch permits prlvate use of headphones; completely shuts off speakers

- Powered Center Channel Output drives third loudspeaker without additional amplifl. cation.
- Ball Bearing Dial Dfive with stainless steel race assures smcoth, effortless operation.

10 Silver Plated Front End with 3-Gang Tuning Condenser assures highest sensitivity, maximum selectivity.
11 Massive Output Transformers deliver full power down to the lowest frequencies.
12 All-Aluminum Chassis disperses heat rapidly for longer component life, eliminates hum and prevents signal loss.
13 Scott-Ploneered, "Time Switching" Multiplex Circuit.

## NEW MODEL 380 70.WATT FM-AM STEREO TUNER/AMPLIFIER

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## TUNERS AND RECEIVERS

## 2 NEW CUSTOM DELUXE TRANSISTORIZED STEREO COMPONENTS

## MODEL 4270 60-WATT INTEGRATED TRANSISTORIZED STEREO AMPLIFIER.

Combines the unique features of other Scott amplifiers with all the advantages of transistors; longer component life, last warm-up and lower power consumption. Most important, it contains unique, foolproof protection devices that prevent damage to either the expensive output transistors, or the speaker systems. Complete flexibility is assured by a full complement of front panel controls and chassis mounted input tevel controls for tape, funer and extra inputs. Front panel teatures include: Five-Position Input Selector; Seven.Position Stereo Selector: Dual Concentric Fric. Five-Position Input Selector; Seven.Position Stereo Selector; Dual Concentric Fric.
tion Clutch Bass and Treble Controls; Derived Center Channel Level Control; Pickup tion Clutch Bass and Treble Controls; Derived Center Channel Level Control; Pickup
Selector; Rumble and Scratch Filters; Loudness Compensator, Switchable Front Panel Headphones Output. Power Output (IHFM): 30 watts per channel at all output Impedances; Power Band: 19 to $15,000 \mathrm{cps}$; Harmonic Distortion: $0.8 \%$; Hum: 70 db down; Damping Factor: 4 to 1 (all impedances). Uses 27 transistors, 9 diodes. Size: $165 / 4 \mathrm{~W} \times 52 / 2 \mathrm{H} \times 163 / 4^{\prime \prime} \mathrm{D}$. Uses G-Size Case. Shpg. wt., 32 Ibs
21 6021wx Less Case
Net 395.00

## MODEL 4312 TRANSISTORIZED AUTOMATIC FM STEREO TUNER

Utilizes advanced clicuitry and technlques made possible by components used in space exploration and communication. The silver plated Nuvistor front end provides extremely high sensitivity and low noise. A most significant feature is the Automatic Stereo Circult, which permits adjustment so that only stations with ifstenable Multiplex signals are received. The use of transistors throughout the if strip, plus selective zopper plating, further increases the effective sensitivity. Use of transis. tors in the detector stage allows bandwldth of three megacycles, the widest of any tuner. This wide bandwldth plus use of transistors in the Scott-Pioneered "TImeSwltching" Multiplex Circuit provides exceptional stereo separation. Individual level controls for each channel; inter station noise supression, plus a host of other features all add up to a truly outstanding advanced tuner. Sensitivity: $1.9 \mu \mathrm{~V}$ (IHFM); features all add
Channel Separation: better than 30 db ; Signal-to. Noise Ratio: 65 db ; Frequency
 35 db . Size: $165 / 8 \mathrm{~W} \times 5 \mathrm{i} / 2 \mathrm{H} \times 163 / 4$ "D. Uses $\mathrm{\theta}$-Size Case. Shpg. wt., 14 los .
21 6022wx Less Case
Net 385.00

## MODEL 4310 FM STEREO BROADCAST MONITOR TUNER

Specifically designed for the broadcasting and recording industry. An individuaily prepared performance report is supplied with each unit. Stereo diversity reception is provided. Relay operated interstation noise suppression insures completely quiet tuning. Indicator lights tell at a glance when the tuner has switched itself to stereo. Front Panel Functions: 4-Position Mode Selector Switch (Power Off, Normal, Sub-Channel Filter, Stereo Fliter); Diversity Reception Switch; Individual Level Controls; Mono-Stereo Swtich, Stereo Threshold Control; Dynaural Interstation Noise Squelch; AGC Switch; Master Level Control; Stereo Indicator Light; VU Meters for Each Channel; Sensitive Signal Strength Meter. Provision for 600 ohm output (in rear). Sensltivity: $1.9 \mu \mathrm{~V}$ IHFM usable; SIgnal-to-Nolse Ratlo 65 db below $100 \%$ modulation; Harmonic Distortion: $0.3 \%$; Drift: $0.02 \%$; Frequency Response: 30 to modulation; Harmonic Distortion: $0.3 \%$; drit: $0.02 \%$; Frequency Response: 15,000 cps $\pm 1 \mathrm{db}$; Capture Ratio: 2.2 db ; Serectivity: do db; Spurious Responses
Rejection: 85 db ; Audio Hum: 75 db below 1 volf output; AM Suppression: 60 db , Channel Separation: In excess of 30 db throughout entire broadcast range. Incorporates 20 tubes, 21 diodes pius rectifiers. Size $16 \% / 6 \mathrm{~W} \times 5^{1 / 2} \mathrm{H} \times 16^{3 / 4} \mathrm{D}$. Uses G -Size Case. Shpg. wt. 28 lbs.
21 a 602jwx Less Case
Net 475.00


## NEW MODEL 333B AM/FM STEREO TUNER

Combines advanced styling plus outstanding flexibllity and performance, You can recelve FM Multiplex Stereo, FM Mono; Regular AM, AM/FM Stereo or distribute two different monophonic programs thru separate audio channels. Features and specifications include: Silver Plated front End; 3-Sang Tuning Condenser with Cascode RF Stage; Scott-Designed "Time-Switching" Multiplex Circuit; Illuminated Tuning Meter; "Sonic-Monitor" stereo Indicator; All-Aluminum Chassis; 2-Position AM Bandwidth Switch. Sensitivily: $1 \mu \mathrm{v}$ for 20 db quieting, $2.2 \mu \mathrm{~V}$ IHFM usable; Signal-to-Nolse Ratio: 60 db ; Drift: $0.02 \%$; Harmonic Distortion: $0.08 \%$; Frequency Resense: 30 to 15,000 cus; Capture Ratlo: 6 db ; Selectivity: 35 db ; AM Suppression: 55 db . Uses 13 tubes, 13 diodes plus rectifler. Size: $15 \mathrm{~W} \times 43 / 4 \mathrm{H} \times 131 / 4^{\circ " D}$. Uses C-Size 55 db . Uses 13 tubes, 13 diodes plus rectifler. Size: $15 \mathrm{Wx43/g} \mathrm{Hx} 13 \mathrm{~V} 4^{\mathrm{N}} \mathrm{D}$. Uses C-size Case. Shpg wt., 20 lbs.

## 21 A 6016wX Less Case

Net 274.95

## ENCLOSURES FOR SCOTT HI-FI COMPONENTS

| Stock No. | Enclosure | For | Description | Shoz, | Net |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 21 6009W | C | $\begin{aligned} & 2008,2220, \\ & 2990,310 \mathrm{E}, \\ & 333 \mathrm{~B}, \\ & 350 \mathrm{C}, \\ & 370 \mathrm{~B} . \end{aligned}$ | Metal Case | 5 lbs. | 13.95 |
| 21 A 6024W | CWW.S | $\begin{array}{ll} \hline 200 \mathrm{~B}, & 2220, \\ 2990 & 310 \mathrm{E}, \\ 3338, & 350 \mathrm{C}, \\ 370 \mathrm{~A}, & 4312 \\ \hline \end{array}$ | Wooden Walnut Case | 6 lbs. | 24.56 |
| 21 A 6025w | , | $\begin{array}{ll} 3408, & 380 \\ 4270, & 4310 \end{array}$ | Mêtal Case | 7 lbs. | 17.95 |
| 21 . 6026W | GWW-S | $\begin{array}{ll} 340 \mathrm{~B}, & 380 . \\ 4270, & 4310,4312 \end{array}$ | Wooden Walnut Case | 8 lbs. | 29.95 |



New 2008 30-watt Amplifier. Brings true high fidelity performance within the range of the most modest Judget. Features massive output transformers; Front Panel Stereo Headphones Jack; Derived fenter Channel Output to drive power amplifier for extension speakers; High Gain inputs for all magnetic stereo cartridges; Balancing Control; Complete Tape Monitor Facilities; Switchable Scratch Filter; Practically Inaudible Hum and Nolse even at full output. Power Output: 15 watts per channel (IHFM) Frequency Response: 30 to $20,000 \mathrm{cps}$; Distortion. $0.8 \%$. Size: $15 \mathrm{Wx} 43 / 3 \mathrm{Hx} 131 / 2^{\circ} \mathrm{D}$. Uses C-Size Case. Shpg. Wt., 20 ibs.
21 a 6018WX Less Case
Net 139.95
370B FM Stereo Tuner. Incorporates "Time-Switching" Multiplex circuitry; Copper Clad Aluminum Chassis; "Sonic Monitor" Stereo Indicator; One Megacycle Wide Band Detector; Precision Illuminated Tuning Indicator and Cascode RF stage with 3-Gang Tuning Condenser. Uses 8 tubes and 5 diodes including Compactron multiple purpose tube and rectifier. Sensitivity: $1.5 \mu \mathrm{v}$ for 20 db quieting, $3.5 \mu \mathrm{v}$ IHFM usable; Signal-to-Nolse Ratio: 50 db ; Harmonic Distortion: under $1.0 \%$; Drift: $0.02 \%$; Frequency Response: 30 to 15,000 cps; Capture Ratio: 6.0 db ; Selectivity: 32 db ; Channel Separation: 28 db . Size: $15 \mathrm{~W} \times 43 / 8 \mathrm{H} \times 131 / 2^{\prime \prime} \mathrm{D}$. Uses C-Size Case. Shpg. wt., 16 tos.
${ }_{21}$ A G019wx Less Case
Net 159.95

# Fsisher <br> <br> SUPERB COMPONENT HIGH FIDELITY 

 <br> <br> SUPERB COMPONENT HIGH FIDELITY}

## 400-CX STEREOPHONIC MASTER AUOIO CONTROL

Famous Fisher Audio control center now with 28 controls, 18 inputs and exclusive new full range stereo dimension control. Professional type push-buttion program selector, with provisions for remote "control and "SpaceXpander". Has recordmonitor facilities, channel indicator lights and separate bass and treble controls for each channel. Also features equalization curve for $33 / 4$ lps tape dechs and additional outputs independent of center channel control. Has center channel for 3 channel stereo. Frequency response: $20-20,000 \mathrm{cps} \pm 0.5 \mathrm{db}$. Harmonic vistortlon: less than $0.04 \%$ at 400 cps for 2 volts output. Hum and noise: 80 db below rated output. Architectural brass front panel. Channel separation 60 db . 10 tubes.

21 A $3601 w x$ Less Cabinet
21 3609w MC-2 Metal Cabinet For 400 -CX. Shpg. wt., 9 lbs. ........ Net 199.50
SA-1000 150-WATT (IHFM) STEREOPHONIC POWER AMPLIFIER A new high-power, high-quallty Stereo Power Amplifier. Only the overyday controls, that must be used for operating the amplifier, remain exposed for instant use. Power Ratings (both channels driven): 150 watts (IHFM); 130 watts (RMS). Frequency Response: $20-20,000 \mathrm{cps} \pm 0.5 \mathrm{db}$. Harmonic Distortion (at IHFM and RMS rated output): $0.25 \%$. IM Distortion (by SMPTE Standards at rated output): $0.4 \%$. Sensitivity (for full rated RMS output): 0.7 volts. Hum and Noise: 90 do below rated RMS output, Input Impedance: 250 K ohms. Output Impedances: $4,8,16$ ohms. 9 tubes plus 4 diodes. For $105-120$ volts, 50.60 cps AC. Size: $151 / 2 \mathrm{~W} \times 73 \% \mathrm{H} \times 12^{\prime \prime} \mathrm{D}$. Shpg. wt., 72 lbs.
21 3611wx
Net 329.50

## X-202-B BO-WATT STEREO MASTER-CONTROL AMPLIFIER

Features exclusive Fisher tape monitor + playback with internal switching; 20 professional front panel controls; 16 Inputs and 10 ourputs ( 3 speaker outputs). Facilities for center channel speaker (no ampllfier required for 3rd channell "SpaceXpander", remote control and earphone connection. SPECIFICATIONS: Music power 80 watts' total; distortion $1 / 2 \%$ harmonic, $1 \%$ intermod, at 70 watts RMS: Response (at 1 watt) $20-20,000 \mathrm{cps} \pm 1 \mathrm{db}$; Hum \& noise -66 db (low level) -80 do (high level); damping factor 10,12 tubes plus 4 dlojes. Silicon main rectifier

21 a 3602 wX Less Cabinet. Shpg. wt., 30 los.
Net 249.50
21 A 3609 W MC-2 Metal Cabinet For X-202-B, wt., 9 lbs 21 A 3610W 10-UW Olled Walnut Wood Cabinet

For X-202-B, wt., 6 lbs.
Net 15.95
X-101-C 60-WATT STEREOPHONIC MASTER-CONTROL AMPLIFIER
Features the exclusive "New Look,", by Fisher, an elegantly styled functional operational panel. Only the Program Selector, Mode Selector and Volume control are in view. The other infrequently used controls are hidden behind a pull-down panel. offers 30 watts of music power output per channel, center channel output, 14 Offers 30 watts of music power output per channel, center channel output, 14
inputs ( 2 phonos), output selector swifch, front panel phene jack. loudness control, jack for "SpaceXpander." 10 tubes. 2 sllicon rectifiers. Response $20.20,000 \mathrm{cps}$ $\pm 1 \mathrm{db}$. Hum and nolse -63 db blstortion $0.5 \%$ harmonic. $1.0 \%$ intermod. @
rated power. Size $151 / 9 W \times 4{ }^{1} / \mathrm{K}_{1} H \times 121 / 2^{\prime \prime} \mathrm{D}$.
21 A 3603 XX Less Cabinet. Shpg. wt., $28 \mathrm{los}$.
Net 199.50
21 A 3609 w MC-2 Metal Cabinet for X-101-C, $\mathrm{X}-100-\mathrm{B}, \mathrm{wt}$., 9 ibs.
Net 15.95
21 A 3605wx Shpg. wt., 25 los.
Net 169.50

## STEREO FM MULTIPLEX TUNERS



## R-200 FM-AM STEREO MULTIPLEX TUNER

The Deluxe Model R-200 FM-AM Stereo Tuner features the exclusive Stereo Beacon which instantly indicates when Mono or Stereo is Droadcasting and automatically SWitches to the proper mode. FM sensitivity is $1.8 \mu v$ (IHFM) for 20 db quieting. FM circuit has 5 IF stages with 4 Limiters. Stereo separation is better than 35 dB at 1 KC . FM harmonic distortion is less than $0.4 \%$. AM sensitivity is $3.5 \mu \mathrm{~V}$. AM circuit has 1 tuned RF stage, 2 IF stages 10 KC whistle filter and three position bandwidth. Controls: Tuning, Stereo Filter, SElector, Muting, AM Bandwidth, FM Antenna, Stereo Beacon. AM-FM Indicator and Tuning Meter. 15 tubes, 15 diodes and 1 selenium bridge-type rectifier, Size: $151 / 8 W \times 41 / 3, H \times 121 / 4{ }^{\prime \prime} \mathrm{D}$. Shpg. wt. 20 lbs.
$21 / 3606 \mathrm{WX}$ Less Cabinet
 2143610 W 10-uW Oited Walnut Wood Cabinet For R-200, wt., 6 lbs. Net 24.95

## FM-100-B FM STEREO MULTIPLEX TUNER

An ultra-sensitive wide-band tuner with advanced Multiplex circultry. For recepthon of the weakest signals the FM-1008 employs a Golden Cascode RF, 5 IF's and 4 limiter stages. "Stereo-Beam" tuning indicator shows when Stereo Multiplex is being recelved. Specially flitered dual outputs are avallable for tape recording without heterodyne interference between multiplex carrize and tape bias. To minimize noise a sub-channel noise filter and an If muting circuit are provided. Localdistant switch prevent cross-modulation due to overload. Dual rear panel output level controls. SPECIFICATIONS: Sensitivity $0.6 \mu \mathrm{v}, 20 \mathrm{dD}$ quletling and $1.8 \mu \mathrm{v}$ IHFM standard; response $20-15,000 \mathrm{cps} \pm 1 \mathrm{db}$; IF bantwidth $190 \mathrm{Kc} @ \quad-6 \mathrm{db}$; ratio oetector 1 MC wide; sfignal/hum $\&$ noise -70 db . Spurious rejection 96 db ; Harmonic Distortion less than $0.5 \%$ ( $100 \%$ mod @ 400 cDs ) Alternate channei Selectivity 60 do; Capture Ratio 2.2 db Drift $0.02 \%$ 12 cps); Alternate Channel lum oridge rectifier. For $105-120$ vo 21 A 3607 wx Less cabinet 105 -120 214 3609w. MC.2 Metal Cabinet For FM.100.B, wt. 9 ibs. ...................... Net 249.50 21 A 3610w 10 -UW Olled Walnut Wood Cabinet For FM-100-8, wt., 6 los. Net 24.95

## FM-200-B FM STEREO MULTIPLEX TUNER

Typlcal Fisher quality is reflected in this excellent FM tuner. Now with FM Stereo Multiplex and famous Fisher Stereo Beacon. An automatizally operated AFC enables absolutely precise tuning. Six IF stages, sensitive Golden Cascode front end, flve wideband limiters provide a $20-20,000 \mathrm{cps}$ frequency response $\pm 1 / 2 \mathrm{db}$ with a 1.5 db capture ratio. 0.5 microvolt sensitivity. Electronic Switch muting effectiveiy provides interstation nolse suppression. il tubes, 5 diodes, an AFC Varicap diode and selenium rectifier, plus multiplex tubes. Size: $15 \% \%^{6} \times 4^{4} \%$ aH $\mathrm{H} \times 13^{\prime \prime} \mathrm{D}$. For diode and selenium rectiffe
$105-125 \mathrm{~V} .50 / 60$ cycles AC .
$105-125 \mathrm{~V} .50 / 60$ cycles AC.
21 a $360 \mathrm{w} X$ Less Cabinet. Shpg. wt., 22 its.
21 3608wX Less Cabinet. Shpg. wt., 22 Its. .................................. Net 299.50 21 A 3609W MC.2 Metal Cabliet For FM-200.B, wt., 9 lbs. .............. Net 15.95 21 a 3610W 10-UW Oiled Walnut Wood Cabinet for FM-200-8, Wt. 6 . bs

## WORLD FAMOUS STEREO RECEIVERS BY <br> NEW'MOOEL 400 60-WATT FM STEREO RECEIVER

Combines a highly sensitive FM stereo tuner and a 60 -watt power amplifier. Includes the "Stereo Beam" Indicator which instantly shows when Stereo Multiplex is being broadcast; also used as a tuning Indicator. Direct-Tape-Monitor system permits monitoring tapes while recording. The shielded front end employs three tuned circuits for greater selectivity. Has provisions for use of a tape deck and "Spacexpander." Controls: Separate Bass and Treble controls for each channel; 7 -Position Input Selector; Balance; Volume and AC On.Off; Tuning; Tape Monitor; High Filter; Loudness Contour; Earphones Jack with Speaker Sllencing Switch. SPECIFICATIONS: (FM) Sensilivity $1.8 \mu v$ IHFM usable; Signal-To-Noise Ratio 70 db ( $100 \%$ modulation): Harmonic Distortion $0.5 \%$ ( $100 \%$ modulation at 400 CDS): Drift $0.01 \%$. (AUDIO) Music Power 60 watts (IHFM); Frequency Response 25-25.000 $\operatorname{cps} \pm 1 \mathrm{db}$; Hum and Noise - 80 ob (at rated output); Input Sensitivity Phono cps $\pm 1 \mathrm{ob}$; Hum and Noise 4.4 Mv -Phono High 14 Mv -Tape Head 2.8 Mv -Aux 280 Mv (for 25 watts Low 4.4 MV -Phono High 14 MV- Tape Head 2.8 Mv AC. Size: $171 / 2 \mathrm{~W} \times 53 / 4 \mathrm{H} \times 13^{\circ} \mathrm{D}$. 21 A 3612 wx Less Cabinet Shpg. wt., 33 lbs

Net 329.50

## NEW MOOEL 500-C 75-WATT FM STEREO RECEIVER

A combination FM stereo tuner and dual 75 -watt amplifier featuring the exclusive "Stereo Beacon" which instantly signals the presence of an FM Multiplex broadcast. Has Golden Synchrode front end for greater sensitivity and image rejection. Four if stages and three Limiters are used. Direct. Tape. Monitor system allows simultaneous recording and monitoring. D'Arsonval tuning meter permits accurate tuning. Controls: 4-Position Speaker Selector; Separate Bass and Treble controls for each channel; Balance; 7-Position Input Selector; Loudness Contour; Volume and AC On-Off; Tuning; Earphones Jack. SPECIFICATIONS: (FM) Sensitivity $0.6 \mu \mathrm{y}$ for 20 db quieting, $1.8 \mu \mathrm{~V}$ IHFM usable; SIgnal-To-Noise Ratio 70 db ( $100 \%$ modulation); Harmonic Distortion $0.5 \%$ ( $100 \%$ modulation at 400 cps ); Capture modulation); Harmonic Distortion $0.5 \%$ ( $100 \%$ modulation at 400 cps); Capture 10 . 2.5 db ; Calibration Accuracy $0.2 \%$ Drit $0.01 \%$. (AUDIO) Music Power 75 Ratio 2.5 dD ; Calibration Accuracy $0.2 \%$ : Drift $0.01 \%$. (AUDIO) Music Power 75
watts (IHFM); Frequency Response $25-25.000 \mathrm{cps} \pm 1.5 \mathrm{db}$; Hum and Nolse - 80 db watts (IHFM); Frequency Response $25-25.000 \mathrm{cps} \pm 1.5 \mathrm{db}$; Hum and Noise - 80 db
(at rated output); Input Sensitivity Phono 3.3 Mv-Tape. Head 2.5 Mv Aux 230


NEW MOOEL 800-C 75.WATT AM-FM STEREO RECEIVER Features "Stereo Beacon" FM Multiplex indicator, separate AM and FM sections with individual shielded Golden Synchrode front ends and Direct. Tape-Monitor system. SPECIFICATIONS: (FM) Sensitivity $0.6 \mu \mathrm{v}$ for 20 db quieting, $1.8 \mu \mathrm{MV}$ IHFM usable; Signal-To-Noise Ratio $70 \mathrm{db}(100 \%$ modulation); Harmonic Olistortion $0.5 \%$ ( $\mathbf{1 0 0 \%}$; modulation at 400 cDS ); Orift $0.01 \%$. (AM) Sensitivity 5 uv (for 2 watts
 (IHFM); Frequency Response $25-25,000 \mathrm{cps} \pm 1.5 \mathrm{db}$; Hum and Noise -80 db (at rated output). For $105-120$ volts, $50 / 60 \mathrm{cps} A C$. Size: $171 / 2 \mathrm{~W} \times 51 / 4 \mathrm{Hx} 131 / 2^{\prime \prime} \mathrm{D}$. (at rated output) 21 A 3614 WK Less Cabinet Net 449.50 30-uW Custom Oiled Walnut Wood Cabinet for Fisher Models 400, 500-C, 800-C


Shpg. Wt: 6 lbs
Net 24.95

## OTHER FAMOUS FISHER HIGH FIDELITY COMPONENTS

## STUDIO STANDARD SERIES

## X-1000 STEREO MASTER-CONTROL AMPLIFIER

Features tape monitor enabling full use of controls during playback with record monitoring, third channel speaker output (eliminating the need for a third channel amplifier). Stereo dimension control, center channel tape recorder output, control and jack for "SpaceXpander." Amplifier uses 4 -EL34's to obtain a 110 -watt music power output rating with $0.5 \%$ harmonic distortion, $0.8 \%$ intermod. distortion at power output rating with $0.5 \%$ harmonic $20-20.000 \mathrm{cDS} \pm 1 / 2 \mathrm{db}$. Hum and noise 100 watts continuous power. Response. $20-20,00 \mathrm{cps} \pm 1 / 2 \mathrm{db}$. Hum and noise -90 db . Damping factor 16.5 . 14 tubes and 7 diod
 21 A 3622 W Oiled Walnut Cabinet for X. 1000 13622 W oiled Wainut Cabinet for X. 1000 ................................ 24.95 FM-1000-R Network Relay FM.Multiplex Tuner with "Stereo Beacon" Not illus 21 A 3625 WX Shpg. wt., 30 lbs.

## NEW MF-300 FM STEREO TUNER WITH REMOTE CONTROL

An amazing new FM tuner that is supplied with cable-type remote unit and 30 feet af remote control cable. An optional wireless remote unlt is avaliable (see below). of remote control cable. An optional Wreliss remote unit is avaliabenter-of-Channei detector for the ultimate in tuning accuracy; Sereo Beacon avomatically signals and switches to stereo or mono; Five IF stages; Two Nuvistors; Four-Gang tuning capacitor. Frequency Response: $20-15,000 \operatorname{cps} \pm 1 \mathrm{db}$. Sensitivity: $0.5 \mu \mathrm{v}$ for 20 do of quieting: $1.6 \mu \mathrm{~V}$ IHFM usable. Signal-to-Noise Ratio: 75 ob $1100 \%$ modulation). Harmonic Distortion: Less than $0.3 \%$ ( $100 \%$ modulation at 400 cos ). 16 tubes, 24 diodes, selenium bridge rectifier. Size: $15^{1 / 8 W} \times 4^{1} / X_{0} \mathrm{H} \times 13^{\prime \prime} \mathrm{D}$. Shpg. wt., 24 lbs.

Net 359.50
Net 24.95
21 A 3616 WX Less Cabinet
21 A 3610 W 10 -UW Oiled Walnut Wood Cabinet for MF-300, wt., 6 lbs. Net 26 RK-20 Wireless Remote Control Transmitter-Receiver. An optional accessory for
MF 300 tuner onfy. On-off, volume and tuning can be automatically controlled. 21 A 3617 WX Shpg. wt.. 8 to FM-50-B FM STEREO MULTIPLEX TUNER
"Stereo Beam" tuning Indicator instantly shows reception of Stereo Multiplex. A front-panel switch selects tuning indicator or "Stereo Beam" operation. Circult incorporates four If stages and three Limiters. Frequency Response: $20 \cdot 15.000 \mathrm{cps}$ $\pm 1 \mathrm{db}$. Sensitivity: $0.7 \mu \mathrm{v}$ for 20 db of quieting; $2.2 \mu \mathrm{v} \mathrm{HFM}$ usable. 10 tubes.
 $12 \mathrm{dodes}, \mathrm{selen} / \mathrm{mm}$. bridge rectiver.
 21 A 3619 WX Less Cabinet
21 A 3609 MC .2 Metal Cabinet for FM- $50-8$, wt., 9 ibs.

A 3609w MC- 2 Metal Cabinet for FM- $50-8$, wt., 9 ldS .
THE K-10 "SPACEXPANDER"
Add Concert Hall realism to your listening area. Supplies the reverberation normally heard in an acoustically perfect concert hall. May be used with any mono or stereo home music system using separate pre-amplifiers or tape monitoring facilities. Connects to any signal from 0.2 to 5.0 volts. Simple to operate and facilities. Connects to install. Tubes: 2.12AX7, 1-7247 plus a Selenium rectlifier. Slze 9\%, Lx easy 10 install. Tubes: 2.12 A
$11 \mathrm{~K} . \mathrm{W} \times 67 / \mathrm{s}^{\circ \mathrm{H}}$. Shipg. wt., 8 lbs.

Net 199.50 $\begin{array}{ll}\text { Net } \\ \text { Net } & 15.95\end{array}$
21

## Page 32

## Distinguished Hilfi Components by SHIFRWOOD



## NEW MODEL S-8000III 80-WATT FM STEREO RECEIVER

Comblnes the high performance capabillties of a separate Sherwood FM multiplex tuner and 80 -watt stereo amplifler in one handsome compact unit. The receiver features "Stereo-LIte" indicator that shows when you're tuned to a stereo broadcast, a new zereo-center tuning meter for precision FM tuning and AFC. Tunep has a sensitivity of $0.95 \mu \vee$ for 20 db quieting, wide-band gated-beam limiter 1 MC balanced ratio detector, interchannel hush, and wired in multiplex circultry. Two powerful ampilifers each provide 40 -watts of music power at less than $3 / 4 \%$ harmonic distortion. Dual low noise preamps for phono and tape. You only need to add speakers to have an outstanding FM stereo music system In your home. Other features include: Built-in indicator lights which tell you the program source you are using at a glance; frictlon-locked bass and treble controls, tape monitor swifch loudness control: phase-invert switch, stereo normal/reverse switch; scratch and rumble fliter switches. For $115-125$ V, 60 cycles AC. Size: $161 / 4 W \times 4 H \times 14^{\prime \prime} \mathrm{O}$. Less case, below. Shpg. wt., 38 lbs.
21 A' 6100 Wx .......................... No Money Down ............................................ 319.50

## SPECIFICATIONS

Power Output: 40 -watts IHFM music power each channel ( 80 -watts stereo). Response: $\pm 1 / 2 \mathrm{db}, 20$ to $20,000 \mathrm{cps}$. FM Sensitivity: $1.8 \mu \mathrm{~V}$ IHFM. Capture Ratio: 2.4 db . Mar. Hum $\&$ Nolse: -63 db betow rated output (phono). Distortion: FM 1/3\% @ $100 \%$ modulation; overall $1.5 \%$ at 40 watts. Tulfes: 20 plus 3 silicon rectiflers, 9 dlodes.


## NEW MODEL S-5500III 80-WATT STEREO INTERGRATED AMPLIFIER

A top-rated ampllfier which combines all the functions of a stereo preamplifier and stereo control center along with a husky 80 -watt stereo power amplifier. Fine fea. tures include stereo normal/reverse switch (with indicator Ilghts). a phase-invert switch; tape-monitor switch, frictlon locked bass \& treble controls and 12 $\mathrm{db} /$ octave scratch and rumble filters. 40 -watts music power per channel-enough for modern low efficiency speakers. Phono senslivity; 1.2 mv . Noise - 72 db (phono). Size: $14 \mathrm{~W} \times 4 \mathrm{H} \times 21 \mathrm{~m}^{*} \mathrm{D}$. Less case. For $115-125 \mathrm{~V}$, (phono). Size: $14 W \times 4 \mathrm{Hx2} 2 \mathrm{c}, \mathrm{D}$.
21 A 6103 WX .
No Money Down ........... Net 174.50



## NEW S-3000V FM STEREO TUNER

Newly designed tuner provides top quality FM and FM multiplex reception. Features zero-center tuning meter. stereo indlcator lifht which shows when you are tuned to a stereo broadcast. Inter-channel hush to quiet nolse between FM statinns and expanded slide-rule tuning scale. Wide-band 3-MC gated beam limiter and 1 MC balanced ratio detector combine to create a capture ratio of 2.4 db . Sensitivity, 1.8 ov for -30 db quieting (IHFM). Response $\pm 1 / 2$ db $20-20,000 \mathrm{cps}$. IM distortion: below $1 / 3 \%$ @ $100 \%$ mod. 11 tubes plus rectifier. Slze: $14 W \times 4 \mathrm{Hx} 104 \mathrm{~m}^{\prime \prime} \mathrm{D}$. Less case. For plus rertifier. Slese: $14 \mathrm{Wx4Hx1024}{ }^{2} \mathrm{D}$. Less case. For
$115-125 \mathrm{~V} 60$ cycles AC . Snpg. Wt.. 15 lbs.
21 A 6104 Wx

## MODEL S-1000III 40-WATT AMPLIFIER

A high quality monophonic control center and 40 -watt amplifier capable of driving any of todays low-efficiency speakers. Full complement of controls. Features a frequency response of $20-20,000 \mathrm{cps}$. at rated output. 70 V line output and low level mic channel with mixer control. 5 tubes plus 4 sllicon rectiflers. Sizes 14 Wx 4 Hx $101 / 2^{\prime 2}$. Less case. Shps. Wt., 24 lbs .
$101 / 2$. Less case. Shpg. Wt., 24 Dos.
21 A 6106 Wx ........ No Money Down
Net 114.50

## MODEL S-3000III FM MONO TUNER

A high quallty FM tuner which features sensitive circultry, Intemal plug. In space for the A3MX multiplex adapter to achieve brilliant stereo reception. Includes Inter-channel hush, switchable AFC tuning eye and $7^{\prime \prime}$ slide rule dial. Sensitivity $1.8 \mu \mathrm{~V}$ for 30 db quieting: Response $\pm 0.5 \mathrm{db} 20-20,000 \mathrm{cps}$. Size: $14 \mathrm{~W} \times 4 \mathrm{H} \times 104 \mathrm{~s}^{\prime \prime} \mathrm{O}$. Less Case. For $115-125 \mathrm{~V} 60$ cycles AC. Shpg. wt., 15 lbs 21 A 6107 wx ...... No Money Down ......... Net 110.50 A3MX Plug-In Multiplex Adapter For S-3000ㅍ̈. Net 110.50 A1 A 6151 .......... Shpg. wt., 5 lbs. 300 ....... Net $49.50 ~$


## NEW S-2100II AM/FM STEREO TUNER

A superb tuner design to provide you with the fullest enjoyment of FM. FM stereo and standard AM broadcasts. Features high FM sensitivity of $1.8 \mu \mathrm{v}$ for -30 db quleting (IHFM) and only $1 / 2 \%$ distortion @ $100 \%$ modulation. Also featured are a stereo indicator light FM inter-channel hush, tun ng eye, $812^{\prime \prime}$ expanded stide-rule tuning scale. and automatic frequency control. FM selectivity, 200KC © -3 db . AM has a wide ( 15 KC )-narrow ( 5 KC ) bandpass selectlon to achleve top reception on standard broadcasts. Size: $14 \mathrm{H} \times 4 \mathrm{H} \times 121 / 2^{\prime \prime} \mathrm{D}$. Less case. For $115-125 \mathrm{~V} 60$ cyeles AC. Shpg. wt., 25 Ibs. 21 A 6105 Wx .......... No Mone" Down ........... Nef 209.50

## ENCLOSURES FOR SHERWOOD COMPONENTS

## Standard Brown Flextone Cases For Models S-3000III

 S-3000V, S. 100011121 A 6108W Shpg. wt., 6 tbs.
Net 7.50
Standard Black Flextone Cases for Models $\$$-3000II S-3000V, S-1000III.
21 A 6109 W Shpg. wt., 6 lbs
Net 7.50
Brown Flextone Cases for vodels $\$ 5000, \mathrm{~s} .5500$ III \$-2100.II
${ }_{21} 146110 \mathrm{~W}$ Shpg. wt., 8 lbs.
Net 7.50
Black Flextone Cases for Models $\$$-5000, $\$-5500$ III S-2100 II
21 A 6111 w Shpg. wt., 8 tbs. ......................... Net 7.50 Brown Walnut leatherette cas for $\$-8000$ III $\$ .7700$ 21 A 6112 W Shpg. wt., $10 \mathrm{lbs} . . . . . . . . . . . . . . . . . . . . . . . . N e t ~ 9.50 ~$

## MODEL 746 60-WATT AM/FM STEREO RECEIVER




## MODEL 240 30-WATT INTEGRATED STEREO AMPLFIER

This rugged, versatlle integrated amplifler is one of the most popular instruments offered by Pllot. Has inputs to accommodate virtually every stereo program source and eleven front panel controls for complete versatlifty. In addition to 4, 8 and 16 ohm speaker outputs, the 240 atso has provision for connection of a center speaker. With 30 watts of power, the 240 offers a high level of performance coupled with handsome styling, mahing this an exceptional amplifier value. SPECIFICATIONS IHFM Music Power 30 watts. Frequency Response $10 \mathrm{cps}-40 \mathrm{KC} \pm 1 \mathrm{dt}$, Harmonlc Distortion $1 \%$. Size: $143 /$ W W $^{2} 51 / \mathrm{sH} \times 11^{\circ} \mathrm{D}$. Requires $105 \cdot 120 \mathrm{~V} 60 \mathrm{cps}$. AC. 2145405 Wx With enclosure. Shpg. wt., 23 its.

Net 134.50

## MODEL 780 DELUXE FM STEREO TUNER

This superb FM stereo tuner was designed to the most exacting standards. Its 4 If stages and sophisticated circuitry produce FM performance matched only by professional broadcast monitor tuners costing many hundreds of dollars more. Includes Automatic FM Stereo Indicator which automatically lights on any station broadcasting stereo. Unique signal-sampling multiplex circuit assures at least 30 do separation. Firwheel tuning control and accurate meter make tuning easy and do separation. FIywhee tuning control and accurate meter make fung ecifications: Sensitivity $1.8 \mu \mathrm{v}$. Response $20 \mathrm{cps}-20 \mathrm{KC} \pm 1 \mathrm{db}$,
 Harmonic Distortlon $.2 \%$, Caplure Ratlo 1 db , buil
Size: $151 / 4 \mathrm{~W} \times 61 / 4 \mathrm{H} \times 12^{3} / 4 \mathrm{D}$. For $105-120 \mathrm{~V} 60 \mathrm{cps} \mathrm{AC}$. Size: $151 / 4 \mathrm{~W} \times 61 / 4 \mathrm{H} \times 123 / 4{ }^{2} \mathrm{D}$. For $105-120 \mathrm{~V} 60 \mathrm{cps}$
$21 \AA 541 \mathrm{~W} \times$ Less enclosure. Shpg. wt., 15 lbs.

Net 199.50 ME- 1 Metal enclosure for Model 780. Shpg. Wt., 4 Ibs.

## MODEL 654MA 60-WATT FM STEREO RECEIVER

The perfect heart for your stereo system all on one compact chassis. Includes sensitive FM stereo tuner with unique signal-sampling eircuit for perfect stereo reception. Equipped with FM Stereo Indicator IIght which telis you when a station is transmitting stereo. Powerful 60 watt amplifier offers superb repro-duction-even has provision for third speaker. Full range of controls and inputs on preamplifier for any concelvable stereo sound source. TUNER SPECIFICATIONS: IHFM Sensitivity $3 \mu \mathrm{~V}$; Frequency Response $20 \mathrm{cps}-20 \mathrm{KC} \pm 1 \mathrm{db}$, Harmonic Distortion $1 \%$, Separation 30 db . AMPLIFIER SPECIFICATIONS: IHFM MUSIC POWER 60 watts, Frequency Response $10 \mathrm{cps}-40 \mathrm{KC} \pm 1 \mathrm{db}$, Harmonic Distortion $0.1 \%$, Speaker outputs 4,8 or 16 ohms and center speaker. Size: $14 \% \mathrm{~W} \times 5 \% / 4 \mathrm{H} \times 12^{\prime} \mathrm{K}_{4}{ }^{\prime D} \mathrm{D}$. Requires $105-120 \mathrm{~V} 60 \mathrm{cps}$. AC. 21 A 5401wx with enclosure. Shpg. wt., 38 los.

Net 329.50

## MODEL 602MA 30-WATT FM STEREO RECEIVER

The 602MA has every desirable feature-compactness, reliable construction, cool operation, and complete control versatillty. Preamplifier has inputs for every needed program source-record changer, turntable or tape transport and tape recorder. Amplifier dellvers 30 watts of power, has connections for 4,8 or 16 ohm speakers plus provision for a center speaker. FM stereo tuner uses unique signal-sampling multiplex clrcult for better than 30 db separation, and has exclusive Automatic FM Stereo Indicator light which tells you when you are tuned to a stereo station. FM TUNER SPECIFICATIONS; IHFM Sensitivity 3 $\mu \mathrm{v}$, Frequency Response $20 \mathrm{cps}-20 \mathrm{KC} \pm 1 \mathrm{db}$, Harmonic Distortion $1 \%$. AMPLIFIER SPECIFICATIONS: iHFM Music Power 30 watts, Frequency Response $10 \mathrm{cps}-40 \mathrm{KC} \pm 1 \mathrm{db}$, Harmonic Distortion $1 \%$, Hum level -80 db . Size: $145 / \mathrm{dW} \times 51 / 2 \mathrm{H} \times 111 /{ }^{\prime \prime}{ }^{\prime \prime} \mathrm{D}$. Requires $105-120 \mathrm{~V} 60 \mathrm{cps}$. AC. 21.5402 WX With enclosure. Shpg. wi., 25 Ibs.

Net 249.50

## MODEL 610 24-WATT FM STEREO RECEIVER

Maderately priced, this handsome receiver only requires the connection of two speaker systems to enjoy all the depth and dimension of music broadcast in FM Stereo. Unique signal-sampling FM multiplex circuit provides befter than 30 do separation... even has Pilot's exclusive Automatic FM Stereo Indicator that tells you when a station is broadcasting stereo. The recelver also has provision for inputs from record changer or tape recorder, and tape monitor for making instantaneous comparison between program being taped and tape itself. Tuner is equlpped with tuning eye for precise tuning and has built-In antenna for optional use. FM TUNER SPECIFICATIONS: IHFM Sensifivity $4 \mu \mathrm{v}$, Frequency Response $20 \mathrm{cps}-20 \mathrm{KC}$ $\pm 1 \mathrm{db}$. Harmonic Distortion $1 \%$, Stereo Separation better than 30 db. AMPLIFIER SPECIFICATIONS: IHFM Music Power 24 watts, Frequency Response $10 \mathrm{cps}-30 \mathrm{KC} \pm 1 \mathrm{db}$. Harmonic Distortion $1 \%$, Hum level -80 db . Size $145 / \mathrm{WW} \times \mathrm{H} \times 10^{3} / \mathrm{s}^{\prime \prime} \mathrm{D}$. Requires $105-120 \mathrm{~V} 60 \mathrm{cps}$. AC.
21 A 5404 WX with enclosure. Shps. Wt., 20 lbs.


## MODEL 230 24-WATT INTEGRATED STEREO AMPLIFIER

Designed for those who want top quality music reproduction at a budget price, thls 24.watt Integrated amplifier delivers performance to satisfy even the most critical buyer. Versathe preamplifier has inputs and controls for every important source of music. Handsomely styled in brushed gold and black, the amplifier provides 24 watts of power for clean, crisp music reproduction. Has 8,16 ohm speaker outputs. SPECIFICATIONS: IHFM Muslc power 24 watts, Frequency Response 10 cps - 30 KC $\pm 1 \mathrm{db}$. Harmonic Distortion $1 \%$. Hum -80 db . Size: $111 / 8 \mathrm{~W} \times 5 \mathrm{H} \times 9 \mathrm{l} / 4^{\prime \prime} \mathrm{D}$. For 105. $\pm 1 \mathrm{db}$. Harmoni
21 A 5408 WX With enclosure. Shpg. wt., 141 lbs
Net 89.50

## MODEL 280B FM STEREO TUNER

This instrument represents the greatest tuner value ever offered by Plot. Simple and effective circuitry provides the finest FM reception .... will amaze even the most critical audiophlie. The 2808 also incorporates the same unique signal-samping muttiplex circult featured in the most expensive Pilot tuners. The circuit assures better than 30 db separation for maximum depth and dimension during FM stereo reception. Handsomely styled in brushed gold and black, the 280 B offers brilifiant, distortion-free reproduction in elther the FM or FM stereo modes. SPECIFICATIONS: Sensifivity $4 \mu \mathrm{~V}$. Frequency Response $20 \mathrm{cps}-20 \mathrm{KC} \pm 1 \mathrm{db}$, Harmonic Distortion $1 \%$, Separation Detter than 30 db . Size: $111 / \mathrm{sWx} 5 \mathrm{H} \times 9 \mathrm{y} / 4$ " D . For $105-120 \mathrm{~V} 60 \mathrm{cps} \mathrm{AC}$ 21 á 5407wX With enclosure. Shpg. wt., 10 los.

## harman kardon FAMOUS AWARD SERIES

## 2 SUPERB NEW ADDITIONS to the AWARD LINE



## TA7000X 70-WATT AM-FM STEREO RECEIVER

A deluxe complete music center in one compact chassis. Includes a sensitive AM/FM and FM multiplex tuner, dual preamplifier with inputs for every stereo function, and powerful 70 -watt stereo amplifler capable of driving any home speaker system. Tuner automatically selects either stereo or mono reception. speaker system. Tuner automaticaly selects either stereo or mono reception,
Has stereo indicator light. FM section has tuned grounded grid RF amp, 3 if Has stereo indicator light. FM section has tuned grounded grid RF amp, 3 If
stages, gated beam limiter and tuning meter. Sensitivity: $0.9 \mu \mathrm{v}$ for 20 ob of stages, gated beam 10,3 ander and tuning meter. Sensitivity: $0.9 \mu \mathrm{~V}$ for 20 ob of
quieting. Response $10-35,000 \mathrm{cps} \pm 1 \mathrm{db}$. AM section has high gain RF pentode. quieting. Response $10-35.000 \mathrm{cps} / \pm 1 \mathrm{db}$. AM section has high gain RF pentode.
A.V.C., AFC and 10 KC bandwidth. Amplifier section provides 35 -watts per A.V.C., AFC and 10 KC bandwidth. Amplifier section provides 35 -watts per channel 70 watts mono; Response: $12.70 .000 \mathrm{cps} \pm 1 \mathrm{db}$ Hum, 85 db below rated output. Individual tone controls; separate nigh \& low cut filters and front panel stereo headphone jack. Brushed gold panel. For $100-120 \mathrm{v} 50 / 60$ cycles AC. Slize: $16 \mathrm{Wx} 61 / 4 \mathrm{Hx} 13 \mathrm{M} \mathrm{K}_{2}$ "O. (excludlag Knobs) less case. Shpg. wt. 40 lbs.
21 A 4227 WX

## A-700 70-WATT INTEGRATED STEREO AMPLIFIER

Engineered to deliver professlonal performance, the A700 features specially dedesigned massive output transformers to provide a frequency response of 10 40,000 cycles $\pm 1 / 2 \mathrm{db}$. Full complement of stereo controls include blend lights which indicate degree of stereo separation; Speaker selector swhtch offering a choice of operating two independant stereo systems; tape monitor switch; contour controls, separate bass and treble controls, MI and Lo-cut fllters and Dalance control. A convenient stereo headphone Jack is located on the front panel. 14 stereo Inputs, 2 tape outputs. Music Power output 35 -watts per channel, 70 watts Peak, Oistortiont less than $0.2 \%$ at 5 watts, less than $0.8 \%$ rated output; Hum: 85 db below rated output. Illuminated pushbutton on.off switch. Permits instrument to be turned on and off without upsetting volume control. Brushed gold panel. For $100-120$ y $50 / 60$ cycles AC. Size: $151 / 4 \mathrm{~W} 5 \% / 4 \mathrm{Hx}$ $12^{\prime \prime} 0$. (excluding knobs). Less Case. Shpg. wt., 32 lbs. 21 A 4228wx................... No Money Down

## TA-3000X 30-WATT AM-FM STEREO RECEIVER



A highly sensitive, distor-tion-free FM and FM stereo multiplex tuner; an AM tuner; a dual 15 watt stereo amplifier and a master control center-all on one compact chassis. TA-3000X features Include: built-In multiplex, wide band Foster-Seeley discriminator and gated beam limiter; illuminated push-button on/off switch; zero to infinity balance control; ganged bass and treble tone controls; stereo contour control and AFC switch to "lock-In" FM stations. Frequency response $15-70,000 \mathrm{cps}$. $\pm 1 \mathrm{db}$. Amp.: Hum level, 80 db below rated output. Excellent $8+$ regulation by silicon diode power supply. 8 stereo inputs; 2 stereo outputs. FM SECTION: Sensitivity 3.2 microvolts (IHFM) for 20 db of quieting. MPX frequency response: $15-15,000 \mathrm{cps} \pm 1 \mathrm{db}$. Hum level 60 db below $100 \%$ modulation. AM: selectivity 10 KC built-in ferrite loopstick antenna, Other, One switched AC receptacle. 17 tubes, 8 diodes. For

21 423iwx Less Enclosure.
Net 248.95


## FA3000X 30-WATT FM STEREO RECEIVER

Outstanding design plus quality and performance features make the FA3000X a popular unit. Ofiers a complete set of stereo controls. Multiplex section features a frequency response of $15 \cdot 15,000$ cycles $\pm 1 \mathrm{db}$ and 30 db of stereo separation. funer uses tetrode RF amplifier and wide-band ratio detector, Oistortion is less than $1 / 2 \%$ at $100 \%$ modulation. Sensitivity: $3.5 \mu \mathrm{~V} 1 \mathrm{HFM}$. Stereo Indicator light. Powerful 30 -watt amplifier features 15 watts music power per channel frequency response $\pm 1$ db $15-70,000 \mathrm{cps}$. Has 6 stereo inputs, 2 tape recorder outputs.
 effect; ganged bass and treble controls, Illuminated push-button on-off switch to permit turning unit on and off without upsetting controls. Distortion is less than $1 \%$. Handy switched AC outlet. 2: tube functions, 9 diodes. For 110-120v, $50 / 60$ cycles AC. Size: $151 / 4 W \times 5 \%$ attali $1 / 2^{2} 0$. Shpg. wt., 35 ibs. 21 A 4230 WX

## MODEL F-500X FM STEREO MULTIPLEX TUNER



Ready to recelve stereo braadcasts with the highest fidelity. Has bullt-in multiplex, high gain RF stage and wide band discriminator. Front panel stereo or mono indicator lights. Sensitivity $3 \mu \mathrm{~V}$ IHFM; Response: $+0.52,000 \mathrm{cps} \pm 1 \mathrm{db}$. Distortion less than $0.1 \%$ modulation. Features inter-channel muting, A.F.C. brushed gold panel. Sizer $15 \% / 4 \mathrm{~W} \times 5 \mathrm{~K}, \mathrm{H} \times 12^{\prime \prime} \mathrm{O}$. Less Case. For $110-120 \mathrm{v} 50 / 60$ cycles AC. Shpg. wt., 23 los. Case. For $110-120 \mathrm{v} 50 / 60$ cycles AC. Shpg. Wt. 23 lbs.
21 A 4229 XX ...... No Money Down ....... Net 179.95

## ENCLOSURES <br> for AW ARD SERIES

## MODEL T300X AM-FM STEREO MULTIPLEX TUNER



Offers high all-around performance on AM, FM and FM multiplex. Ideal for low cost systems. Advanced FM circuit includes stereo noise filter, wide-band discriminator: 3 IF stages and gated beam limiter. Sensitivity: $0.95 \mu \mathrm{v}$ for 20 db of quieting. $3.2 \mu \mathrm{~V}$ IHFM; Response $10-35,000 \mathrm{cps} \pm 1 \mathrm{db}$. Ahil section has wide-band IF, high sensItivity and seiectivity, ferrite loop antenna. Controls; Tuning. on-off; AfC; rite lioop antenna, Controls; Tuning; on-off; AFC; nolse filter. Switched AC outlet. Brushed pold finish. For $110-120 \mathrm{v} 50 / 60$ cycles AC. Size: $15 \% / 4 W \times 5 \% / 4 \mathrm{Hx}$ $111 / 2^{\prime \prime} 0$. Shpg. wt., 25 lbs.
21 A 42j3wx …... No Money Down ........ Net 149.95

## MODEL A300 30-WATT INTEGRATED STEREO AMPLIFIER



A beautifully styled amplifier with full stereo control facilities make It ideal for low budget systems. The A300 delivers 15 -watts music power per channel with less than $1 \%$ distortion. Features include balance control to balance speakers to your rooms acoustics: control to balance speakers to your rooms acoustics;
varlable blend control, loucness contour control, RIAA varlable blend control, loucness contour control, RIAA
Phono and NAB tape equalization controls; separate Phono and NAB tape equalization controls; separate
tone controls; 2 tape oulputs and Mluminated pushtone controls; 2 tape outputs and Illuminated push-
button on-off switch. Response: $15.70,000 \mathrm{cps} \pm 10 \mathrm{~b}$; Hum: 80 db below rated output. Brushed gold panel. Less case. For 110-120v, 50/60 cycles AC. Size: $154 / / \mathrm{W} \times 5 \mathrm{~K}, \mathrm{H} \times 111 / 2^{\prime \prime} \mathrm{O}$. Shpg, wt., 25 lbs . 21 A 4232 Wx ...... No Meney Down.

## Type

Oll Walnut Wood - wt., 5 lbs.
Metal - wt., $2 \frac{1}{2}$ Ibs.
Oil Wainut Wood - wt., 5 lbs .
Metal - wt., 4 lbs.
STOCK NO. H.K No 21 a 4220WX WW50A
A700, A300, T300X, F500X 21 A 4221W CX50 A700, A300, T300X, F500X 21 A 4223WX WW80A TA7000X, TA3000X. FA3000X 21 . 4222 C CX80 TA7000X, TA3000X. FA3000X

## DELUXE AUDIO COMPONENTS For The Perfectionist



## harman kardon PROFESSIONAL SOLID STATE AUDIO COMPONENTS

## MOOEL A-1000T 70-WATT SOLID-STATE INTEGRATED AMPLIFIER

Uses new silicon output transistors, high damping and output transformerless direct-coupled circuitry for exceptional music reproduction. Output can be shorted directly without damaging transistors or blowing fuses. Features separate bass and treble tone controls for each channel with defeat position on each control. All infrequently used front panel controls are concealed behind new hideaway door. Music Power Output: 35 watts per channel at all impedances. Frequency Response: $10-100,000 \mathrm{cps} \pm 1 / 2 \mathrm{db}$. Distortioni less than $0.5 \%$ at full rated output. 12 stereo inputs; 4 outputs (incl. stereo headphones). Utilizes 28 transistors, 6 diodes. For 110.120 volts, $50 / 60 \mathrm{cps} \mathrm{AC}$. Size: $14 \mathrm{~K}_{6} \mathrm{~W} \times 3 \% \mathrm{H} \times 10^{\circ} \mathrm{D}$ Shpg. Wt., 25 lbs.
21 423iwx Less Enclosure MODEL CW-10 Olled Wainut Enclosure for A-1000T 21 A 4238w Shpg. wt., 3 Dbs. tos.

Net .369 .95
Net 19.95

## MODEL F-1000T PROFESSIONAL SOLID-STATE FM STEREO TUNER

Features ultra wide-band destgn with four solid-state IF and limiter stages. Front end is quadra-tuned for optimum selectivity. Has special automatic stereo selector switching circult with stereo indicator light. D'Arsonval tuning meter permits precisely accurate station selection. Low-nolse zener diode muting circuit cancels out Interchannel hiss. New hideaway door conceals infrequently used front panel controis. Sensitivitys 2.0 microvolts IHFM. Frequency Response: $553,000 \mathrm{cps} \pm$ $3 / 4$ db. Distortion: less than $0.1 \%$ at $100 \%$ modulation. Signal-to-Nolse Ratlo: 60 db at $100 \%$ modulation. Outputss 2 FM; 2 tape recorder. Employs 18 transistors, 8 diodes. For $110-120$ volts, $50 / 60 \mathrm{cDS}$ AC. Size: $14 \mathrm{~K}, \mathrm{~W} \times 3 \% \mathrm{H} \times 8^{\circ} \mathrm{D}$. ShDg. wt. 20 lbs . 21 A 4239wx Less Enclosure
MODEL CW-10 Oiled Wainut Enclosure for F-1000T
21 A 4238 W Shpg. wt., 3 los.
Net 299.95


> ID ACOUSTECH SOLID STATE AUDIO IMSTRUMENTS


## ACOUSTECH II SOLID-STATE STEREO DECADE CONTROL AMPLIFIER

## ACOUSTECH I SOLID-STATE STEREO POWER AMPLIFIER

A deluxe professional stereo ampllfier in which all circults are assembled on glass-epoxy boards. Each output stage is fused and uses four silicon power transistors mounted on large.finned heat sinks. At 2.5 volts input, RMS Power Output per channel is 40 watts (both channels operating simultaneously). Frequency Response at normal listening level is $5-50,000 \mathrm{cDs} \pm 1 / 4 \mathrm{db}$. Distortion: Harmonic, less than $0.95 \%$ ( $20-20,000 \mathrm{cps}$ ): I.M., less than $0.95 \%$ (SMPTE). Hum and Noise: -85 db below 40 watts. IHFM Damping Factor: in excess of 25 . Input Impedance: 150 K ohms. Solid-State Complementi 6-1N1124, 4-1N1692, 2-1N536, 2-2N398A,
 2-ST1613, $2 . S$
21 A 7700 WX

Provides an amplification system of truly professional performance when combined with Acoustech I Power Amplifier. Feafures Include (1) Stepped decade level control for exact channel matching ( $\pm \dot{1} / 4 \mathrm{db}$ ) over entire range (2) Four separate stepped for exact channel matching $( \pm 1 / 4 \mathrm{db})$ over entire range (2) Four separate stepped
tone controls for precise equalization of highs and lows (3) Mutins switch for reduced sound level when changing stations, records or tapes (4) 3 -position high frequency filter (5) Balance switch permits balancing of entire system, not just amplifier and speakers. Other front panel controls: 3-position low frequency filter; Equalization Tape monitor; Calibrated loudness compensation; Separation; Push. button on-off switch; Stereo mode switch; input selector; Stereo headphones or tape output; Pllot light. Frequency Response: Flat $1-100,000 \mathrm{cps}$. Size: $153 / 4 \mathrm{Wx} 5 \mathrm{Hx}$ $12^{\circ} \mathrm{D}$. Shpg. wt., 12 lbs .
21 ค.7ク01wx
Net 348.00


## DELUXE PROFESSIONAL AUDIO COMPONENTS By mancamiz

## MOOEL TC STEREO CONSOLE PREAMPLIFIER

This new self-powered stereo preamplifier combines Marantz's remarkable quality construction with complete versatility and ease of operation. Front Panel Controls feature: 8-pos. Selector (MIc, Phono 1, Phono 2, Tapehead. FM-AM, FM Multiplex, TV, Auxiliary) 5-pos. Mode (Stereo, Stereo Reverse, Ch A, Ch B, Ch A+B), Volume, Balance 4.Independent Base and Treble Tone Controls, Record Equalizer. Tape Playback on Monitor, High Fliter, Rumble Filter and Power Switch. Rear Controls feature: Output Level-sets, 3 Pairs of Outputs, Tape-head Equalizer Adjustments, 9 Pairs of Inputs, 6 AC Convenience Outlets and System Grounding Point. Frequence Response: $y_{2} \mathrm{db} 20-20,000 \mathrm{cps}$. IM Distortion: $0.1 \%$. Total Noise: in $20-20,000 \mathrm{cps}$ Response: $1 / 2 \mathrm{db} 20-20,000 \mathrm{cps}$. IM Distortion: $0.1 \%$. Total Noise: In $20-20,000 \mathrm{cps}$
audlo range, 80 db below 10 my phono input with RIAA curve. Tubest $6-E C C 83 /$
 12AX7. Size: $153 /$ Wx53/4x81/2"D. For $105-125$ volts, $50 / 60 \mathrm{cps}$, AC. Shpg. Wt., 16 lbs.
21 A 5001 WX Marantz Model 7 C-Less Cabinet ................................ Net 264.00 WOOD CABINET FOR ABOVE: Olled Wainut. Shpg. wt., 4 lbs . 21 A 5002 W

MOOEL 8B DUAL 35-WATT STEREOPHONIC POWER AMPLIFIER Professional in every respect, the Model 8 B Stereo Amplifier furnishes performance and workmanship found in high quality Broadcast or Laboratory equipment. Bulit-in Bias Meter. Power Output is 35 Watts per channel ( 70 watts peak). Response: 0.1 Bias Meter. Power Output is 35 Watts per channel (70 watts peak). Response; 0.1
 and 16 ohms. Tubes: $2-6 B H 6,2.6 C G 7,4-E L 34 / 6 C A 7$. Overall Size: $131 / 2 W \times 71 / 4 \mathrm{Hx}$ $101 / 2^{\prime \prime D}$. For $105-125$ volts, $50 / 60 \mathrm{cps}$ AC. Shpg. wt., 57 ibs. 21 s003wx Marantz Model 88 Less Cabinet

Net 264.00 Model 86 Gold Finish Perforated Snap-On Grille For Above. 21 A 5004 W Shpg. wt., 1 lb.

Net 9.00 MODEL 9. Superb massive single channel 70-watt amplifier-exceptional stablity 8 Iow distortion. 2-6DJ8/ECC88, 1-6CG7, 4-6CA7/EL34, 1 Zener Dlode, 5 silicon rectiflers, $153 / 6 \mathrm{~W} \times 81 / 4 \mathrm{H} \times 101 / 2^{\prime \prime} \mathrm{D}$.
$214005 w x$ Not lllus. Shipg. wt., 63 lbs.
Net 384.00

## NEW! BELL IMPERIAL 1000 80-WATT SOLID-STATE FM STEREO RECEIVER




#### Abstract

A complete FM tuner and stereo amplifier on a single chassis featuring the latest solld-state design and engineering techniques including automatic stereo switching. Large, easy-to-read meter serves as both tuning and stereo indicator (switchable from front panel). Additional features lnclude (1) chrome-plated chassis (2) sliver-plated super cascode tuner (3) variable FM noise muting (4) FM stereo nolse filter (5) output stage overioad prostereo nolse finter (5) output stage overioad pro- tection. 16 front panel controls and switches plus ${ }_{2}$ tection. 16 front panel controis and switches plus 2 stereo headphones jacks provide outstanding flexibility of operation. FM SECTION: Sensilivity, 1.6 microvolts IHFM; Frequency Response, 20-15,:


## STEREO COMPONENTS BY

## BOGEN AP30 30 －WATT STEREO AMPLIFIER

Music power output of 30 watts（ 15 watts per channel）IHFM．Frequency response：$\pm 1 \mathrm{db}$ ．， $20-20.000 \mathrm{cps}$ ．Audio sensitivity： 4.5 mv （mag．\＆tape）， $0.5 v$（funer of aux．）Hum $\frac{1}{8}$ nolse： -55 db （low level），-70 db （high level）．Distortion： $0.6 \%$＠rated output．Controls： 4 pos．programming selector，volume，balance，bass，treble，brend，loudness，rumble fliter，stereo reverse，power， 9 tubes． $4,8,16$ ohms output impedances．Attracilve gold panel．Size $15 \mathrm{~W} \times 43 / 4 \mathrm{Hx} 115 / \mathrm{c}^{\circ} \mathrm{D}$ ．Shpg．wi．， $16^{\prime} \mathrm{lbs}$.
21 A 1702 WX Less Enclosure
Net 99.95

## BOGEN AP250 50－WATT STEREO AMPLIFIER

Delivers 25 watts music power per channel， 50 watts combined（IHFM）．Frequency response： $20-20.000$ cycles，$=1$ db．Distortion： $0.6 \%$ at rated output．Sensitivity：High level $4.5 \mu \mathrm{v}$ ；low level 0.5 v controls： 4 pos．prog．selector， 4 pos，mode，volume，balance， separate coax bass $\&$ treble，rumble filter，scratch filter，loudnass，lape mon．，blend， power．Has blend pos．indicator light． 10 tubes，plus 2 siticon $\& 1$ selenlum rect． $4,8,16$ ohms output impedances．Attractive gold panel．Size： $15 W \times 43 / 4 \mathrm{H} \times 11=/ \mathrm{D}$ ．Shpg．wt．， 20 lbs ． 21 a 1705wx Less Enclosure

## BOGEN TP250 FM STEREO TUNER

 （IHFM $2.5 \mu \mathrm{~V}$ ）；Distortion， $0.5 \%$ ；Hum \＆Noise， 60 db Bullt－in matrixing type multiplex network with＂Stereo－Minder＂indicator． 10 fubes plus 3 crystal diodes and 1 rectifier． Attractive gold panel．Size $12 \% / 6 \mathrm{~W} \times 43 / 4 \mathrm{Hx} 10 \times \mathrm{D}$ ．Shpg．wt．， 16 lbs ． 21 A 1706 WX Less Enclosure

Net 159.95

## BOGEN MODEL RP60 60－WATT AM－FM MULTIPLEX RECEIVER



##  31495

All－in－one music center－ $30 / 30$ watt stereo amplifier－preampliflef，AM receiver，FM re－ ceiver and built－in time division type multiplex network with－．＂Stereo－Minder＂indicator． Front panel controls： 6 pos．prog．selector， 4 pos，mode，volume，balance，separate co－ax bass \＆treble，rumble fitter，scratch filter，loudness，tape monitor，power，funing，AFC， stereo filter．SPECIFICATIONS：FM sensitivity $0.85 \mu \mathrm{~V}$ for 20 db quieting， $2.5 \mu \mathrm{~V}$ I IMFM usable；freq．resp．$\Rightarrow 1 \mathrm{db} 20-20,000 \mathrm{cps}$ distortion $0.6 \%$ at rated output． 20 tubes plus 8 crystal diodes and 7 rect．Size： $15^{1 / . W} \mathbf{W} \times 51 / 4 \mathrm{Hx} 15^{\prime \prime} \mathrm{D}$ ．Shpg．Wt．， 35 lbs ． 21 a $1703 W \mathrm{X}$ Less Enclosure
Model RPF60（not lllus．）same as above but FM only．Shpg．wt．， 34 lbs．
21 A 1704WX Less Enclosure
Net 279.95

## BOGEN RP230 AM－FM STEREO RECEIVER



Combines an AM－FM tuner with a $15 / 15$ watt stereo ampllfier－preamplifier on a single
chassis．Features the＂Stereo－Minder＂FM stereo indicator．Front panel controls： 6 ． chassis．Features the＂Stereo－Minder＂FM stereo indicator．Front panel controls： 6 pos． pros．selector， 4 pos．mode，volume，batance，separate coax bass \＆treble，rumble filter， scraich filter，loudness，power，tuning，AFC．SPECIFICATIONS：FM sensitivity $0.85 \mu \mathrm{v}$ for 20 db quleting， $3.0 \mu \mathrm{~V} \mathrm{ImFM}$ usable；freq．resp．$=1 \mathrm{db} 20.20,000 \mathrm{cps}$ ；disfortion $0.6 \%$ at rated output；output impedances 8 and 16 ohms；channel separation better than 25 ob to $10 \mathrm{KC}, 20 \mathrm{db}$ at $10 \mathrm{KC}, 17 \mathrm{db}$ at 15 KC ． 19 iubes plus 7 crystal diodes and 2 rectiflers．Aftr
21 a 1701 Wx

Net 249.95

|  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 21 \text { A } 1707 \mathrm{w} \\ & 21 \text { A } 1708 \mathrm{~W} \end{aligned}$ | EN－7 <br> EN－ 8 | Metal | Case for | for RPF60，RP60，RP230 | ${ }_{6} 6 \mathrm{lbs}$. | 12.95 |
| 21 A 1709W | EN－9 | Metal | Case f | for AP250，AP30 | ${ }^{6} \mathrm{l}$ libs． | 11.95 |
| 21 A 1710w | WE． 7 | Wal． | Case for | RP60，RPF60，RP230 | 7 lbs ． | 27.95 |
| 21 A 1711w | WE． 8 | wal． | case for | or TP250 | 7 lbs ． | 26.95 |
| 21 A 1712W | WE． 9 | Wal， | case for | or AP250，AP30 | 3 lbs | 26.95 |



## MODEL EIGHT FM RECEIVING SYSTEM

－Not A Radio，But a Complete FM Music System
－Attractive Solid WaInut Cabinets
An entirely new concept in QUALITY FM reception．The Model Eight is designed for the music lover who desires the finest in FM music The Model Eight con． sists of two separate but electronically integrated units housed in two solid walnut cablnets，each of which measures $103 / 2 W \times 53 / 4 \times 61 / 2^{\prime \prime} 0$ ．One of these encloses the FM Tuner－amplifier chassis．The other canstitutes a wide－range loudspeaker system in a sealed enclosure．They are connected by a $30^{\circ}$ cable which can be colled on the back of the speaker cabinet．Output jacks on the back of the tuner－amplifier chassis are provided for addition of a multiplex adapter，and for use of the funer section alone with a tape recorder or an external ampliffer and speaker．Additional terminals permit substitution of an external 300 ohm antenna for the bulit－in antenna．Tube complement：1－68S8， $1.6 \mathrm{UB}, 3-6 A U 6,2.68 \mathrm{M} 8$ plus $2 . g e r m a n l u m$ diodes and 1 －silicon power rectifier， Fully transformer operated；requires $110.120 \mathrm{~V}, 60 \mathrm{CD}: \mathrm{AC}$ ．Attractive satin walnut finish．Shpg．wt．， 15 lbs．

## 21 A 4401wx

Net 159.00
MODEL 8MA－Fully Transistorized Multiplex Adapter System including amplifier－amplifier and speaker．Shpg．wt．， 23 lbs ．
21 A 402 WX （not illus．）
Net 149.00

## (IIILIIfoshl) Professional Mifici Componenits



## NEW MXIIO STEREO FM TUNER PREAMPLIFIER

- Stereo Indicator Light
- Nuvistor RF, 4 IF Stages, and 2 Limiters
- New "Panioc" for Professional Built-in Installation
Engineered for the discriminating listener, the $m \times 110$ combines in one unit on FM Tuner with Multiplex and a Stereo Preamplifier. New "Panloc" system included permits a professional built-in installation, with ease of operation and maintenance. Features a complete stereo control center. choice of 6 different program sources. Has 16 tubes, EM 87 tuning indicator, 10 diodes and 4 selenium rectifjers. A front panel stereo indicator lights only when a stereo station is broadcasting and is insensitive to noise. Tuner bandwidth is 200 K and sensitivity is better than $2.5 \mu \mathrm{~V}$ at $100 \%$ modulation. Uses cascode Rf stage with 6DS4 nuvistor, 4 IF stages and 2 Imiters. Response: 20 to 20,000 cps $\pm 1 / 2 \mathrm{db}$; Distortion: less than $0.2 \%$ at rated output. Anodized gold and black panel. Size, $15 \% / 8 \mathrm{~W} / 5 \mathrm{5} / 4 \mathrm{H} \times 13^{\prime \prime} \mathrm{D}$. For $105-125 \mathrm{~V} 50 / 60$ cycles AC. Shpg. wh., 36 lbs
21 A 5106 wx M×110 Less Case
Net 399.00



## NEW MR67 STEREO FM TUNER

- Signal Strength/Mustipath Distortion Indicator
- Nuvistor RF, 4 IF Stages and 2 Limiters
- New "Panloc" For Professional Built-in Installation
For superb monophonic or stereo FM reception. Features new "Panloc" system for a professional built-in installation with ease of operation and maintenance. Highly sensitive circultry offers cascode (2 tube) RF amplifier with 6DSA nuvistor In first stage. 4 IF stages and 2 limiter stages with AGC used 10 insure limiting only in the limlter stages. High. $2.5 \mu v$ sensitivity reduces adjacent station interference. Switchable front panel indicator is used for both precise tuning control and indication of multipath distortion which may occur in some locations. The multiplex stereo light is only activated when a station is broadcasting stereo. 12 tubes, EMM801 tuning eye, 9 dlodes and 2 selenium rectifiers. For $105-125 \mathrm{~V} 50 / 60$ cycles $A C$. $16 \mathrm{~W} \times 5 \%$ K $\mathrm{H} \times 13^{\circ} \mathrm{D}$. Shpg. wt., 33 lbs.
21 5107wX MR67 Less Cablnet
Net 299.00
UP TO 24 MONTHS TO PAY SEE PAGE 412


## STEREO AND MONO POWER AMPLIFIERS



## CABINETS

For McIntosh EQUIPMENT

MC225 TWIN 25-WATT STEREO AMPLIFIER. Power Output: Stereo or Twin Amp-25 watts per channel; Mono- 50 wafts. Frequency Response: $+0,-0.1 \mathrm{db} 18-30,000$ cps @ rated power; $+0,-2 \mathrm{db} 14-100,000 \mathrm{cps}$ @ half power. Output 1 m pedances: Stereo or Twin Amp. 4, 8, 16, 150, 200, 600 ohms; Mono-2, 4, 8, 75, 100,300 ohms. Hum and Noise:- 90 db . Marmonic and 'im' Distortion: Less than $0.5 \%$ @ rated output, 20 $20,000 \mathrm{cps}$. Phase shift: Less than $\pm 15^{\circ}, 20-20,000 \mathrm{cps}$. Output Voltages: $25,70.7$ volts. Tubes: 1-12AX7, 2-12AU7, 2-12BH7, 4-7591. Finish: Black \& Chrome. For 117 volts, $50-60 \mathrm{cps}$ AC. Slze: $141 / 2 \mathrm{~W} \times 6^{1}$ K. $H \times 91 / \mathrm{K}^{\prime \prime} \mathrm{D}$.

## 39 lbs.

Net 198,00
21 as 103 wx Shpr. Wt.. 39 ibs
MC240 TWIN 40-WATT STEREO AMPLIFIER. Power Output: Stereo or Twin Amp. - 40 wafts per channel; Mono- 80 watts. Frequency, Response: $\pm 0.1 \mathrm{db} 20-20000 \mathrm{cps}$ @ full rated power. Output Impedances: Stereo or twin Amp.-2, 4, 8, 16 , 125, 600 ohms; Mono-2, $4,8,16,32,62,300$ ohms. Hum and Noise: - 90 db . Harmonic and im bistortiont Less than $5 \%$ @ rated-output, $20-20,000$ cps. Phase Shift: Less than $\pm 6^{\circ} 20-$ $20,000 \mathrm{cDs}$. Tubes: $3-12 A \times 7,2-12 A U 7,2-128 \mathrm{H} 7,4-6 L 6 G C$. Finish: Blach and Chrome. For $105-130$ volts, $50-60 \mathrm{cps}$ AC. Size: 161 h Wx $77 / 4 \times 1012^{\circ} \mathrm{D}$.

Net 288.00
21 A 5101wx Shpa, wt.. 56 lbs
MC275 TWIN 75-WATT STEREC AMPLIFIER. Power outputs Stereo or Twin Amp. 75 watts per channel; Mono- 150 watts. Frequency Response: $+0,-0.1 \mathrm{db} 16-40,000 \mathrm{cps}$ © rated out. put; $+0,-1$ db $10-100,000 \mathrm{cps}$ @ half power. Output limpedancese Stereo or Twin Amp.-4, 8, 16, 67, 150, 600 ohms; Mono-2 $48,16,32$ ohms. Hum and Nolse: 90 db . Harmonic and Im bistsotion: Less than $0.5 \%$ @ rated output, $20-20,000$ cps. Phase Shift: Less than $\pm 80,20-20,000$ cps. Output Voltages $25,70.7$ 115, 230 volts. Tubes: 1-12AX7, 2-12BH7, 2-12AT?, 4. KT88. Finish: Black ond Chrome. For $105-130$ volts, $50-60 \mathrm{cps}$ AC. Size, $121 / 4 W \times 8 H \times 171 / 4^{" D}$.
21 A 5105 wx Shpg. wt., 76 lbs. 444.00
MC75 75-WATT POWER AMPLIFIER. Rated at 75 watts contin. uous output with less than $0.5 \%$ Harmonic and IM distortion Frequency Response: $+0,-0.1$ ib $16-40,000 \mathrm{cDs}$. @ 75 watts Output Impedances: 4, 8, 16, 67, 150, 600 ohms. Output Vortazes $25,70.7,115,230$ volts. Tubes: 1-12AX7, 1-12AU7, 1-12BH7, 1-12AT7, 2-KT88. Finish: Black and Chrome. For 117.125 volts 50.60 cos AC. Size: $81 / / W^{W} 81 / 4 H \times 163 / /^{\circ D}$. Shos. Wt., 49 lbs . 21 5104wx (Not Illus.) ........................................... Net 229.50 MC40 POWER AMPLIFIER. Similar to MC75 except rated at 40 watts output. Size: $81 / 6 \mathrm{~W} \times 77 / \mathrm{BH} \times 133 / 4^{\prime \prime} \mathrm{D}$. Shpg. wt., 35 lbs. 21 A 5102 Wx (Not lllus.)

Net 159.00
Cabinets for McIntosh Instruments with PANLOC-Models C22, MX110, MR67
21 A 5110 W Model Llow Walnut Wi. 8 lbs. Net 25.00 21 A 5111w Model Llowo oll walnut Wt.. 8 lbs. Net 25.00 Cabinets for older model McIntosh units without PANLOC 21 A 5113W Model L-66W Walnut wt. 8 lbs. ............ Net 25.00


## NEW C-22 STEREO PREAMPLIFIER

A superlative contral center for the finest home high fidelity music systems. The C-22 stereo preamplifier provides complete stereo control facilities 10 match room acoustics and as a bonus, features the excluslve Mcintosh PANLOC Installation system at no extra cost. This permits professional custom built-in in. stallation into a cabinet or wall with a minimum of effort and allows simple removal of unit any time if may be desired. Frequency Response, 20 to 20,000 cps. $\pm 0.50 \mathrm{db}$; Typical distortion; less tharf $.02 \%$ at $3^{\circ}$ volts ourput; Noise: -85 db ; Main output 2.5 v with rated input; Controls: Input Selector (AUX., Tape, tuner 1, tuner 2. phono 1, phono 2, mic., tape head); tuner 1, tuner 2; phono 1, phono 2, mic., tape head);
mode selector. 7 positions ( $L$ to $L$ and $R, R$ to $L$ and
 $R$, Stereo Rev. Stereo, Mono (L plus R), $L+R$ to $L$,
and $L+R$ to ); Volume; Balance; left and right Bass and Treble (11 positions); Compensator switch. (RIAA or LP); tape switch, (normal or monitor); Power on/ off; Tape lack switch for record or playback of external tape recorder; $L$ and $R$ Level controls: Low Frequency Trim control, $L$ and $R$ Tape equalization controls; phase switch; Pilot Lamp Intensity switch. 5 AC convenience outlets, ( 4 switched ). Size: 16 Wx 5 haHz13"D. Front panel finished in gold and black. Shanx13"D. Front panel finished in gold and
For $117 \mathrm{~V} 50 / 60 \mathrm{cps}$ AC. Shps. wt. 25 lbs. 21 a S108wx ............less cabinet

Net 279.00

## IIIIInTOSh "PANLOC"

## SYSTEM INSTALLATION

The new McIntosh models C22, MR67, and $M \times 110$ will be shipped with the new McIntosh "PANLOC" system installation. The "Panloc" professional installation technique gives you absolute ease of installation, operation, and maintenance. By means a special metal shelf supplied with the MK110, MR67. C22 you wlll be able to easily mount your instrument norizontally or vertically. Your Mcintosh instrument with "Panloc" locks a unlocks to this shelf enabling you to slide your instrument in and out at your convenlence

# FHISHER STEREOPHONIC HI-FIDELITY SYSTEMS FISHER 500C 75-WATT FM STEREO PHONO SYSTEM 



One of the finest stereo systems we have ever offered featiring the world famous Fisher 500 C 75 -watt FM Stereo Receiver. All components have been carefully selected and perfectly matched by Lafayette Audio Specialists.
Fisher 500C 75-watt FM Stereo Receiver (less case)
Garrard A/Mark II 4 speed Automatic Record Changer
Wood Base for Garrard A/Mark II
Pickering U38/AT Stereo Cartridge* with
. 7 Mil Diamond
2 Deluxe Lafayette SK-210 12" 3 way Speakers with $21 / 4 \mathrm{lb}$. Magnets

## LAFAYETTE SYSTEM PRICE WITH FFEE ACCESSORIES

 $459^{95}$ 21 A 9851CWXM Shpg. wt., 99 lbs. ALTERNATE SYSTEMSFisher chang.
System No. Recelver er base Cart. Speakar Components Shpg. Wh. Met
 21.9853 CWXM 500C A $+\quad$ Ellptoflex Encl.t $\quad 2$ SK-215 $15^{\prime \prime} 3$-way Spkrs. 149 bbs .59 .95 21 A9854WXM 500C A $+\quad \begin{aligned} & 2 \text { SK-215 } \\ & 2 \text { SK-215 } 2 \text { Highboy } \\ & \text { Enclosurest }\end{aligned}$ 21 . 8856 CWXM 500 C A 1 Enclosures 2 Decorette Spkr. Systems \#

160 lbs 485.85

- Specify Choice of Pickering U38/AT, shure M3D, or Empire 880 stereo Cartildge. $\uparrow$ Specity oil walnut, mahogany, or blonde finish.
tf Specify walnut or mahogany finlsh.
- 011 walnut finish.



## FISHER 400 60-WATT FM STEREO PHONO SYSTEM



This fine stereo system features the newest addition to Fisher famous line of Recelvers-Model 400 60.watt FM Stereo Receiver. Lafayette audio specialists have carefully selected and perfectly matched these components ooprovide the listener outstanding stereo reproduction.
Fisher $\mathbf{4 0 0} \mathbf{6 0}$-watt Stereo Receiver (less case)
Garrard A/Mark II 4 -speed Automatic Record Changer
Wood Base for Garrard A/Mark II
Pickering U38/AT Stereo Cartridge* with
. 7 Mil Diamond
2 Deluxe Lafayette SK-210 12" 3-way Speakers with $21 / 4 \mathrm{lb}$. Magnets

## LAFAYETTE

 SYSTEM PRICE WITH FREE ACCESSORIES

21 A 9857CwXM Shpg. wt., 93 lbs.
Net 409.95

## ALTERNATE SYSTEMS

Fisher Chang.
System No. Recelver er base Cart. Speaker Components shpe. We. Net 21A9858CWXM $400 \quad A \quad \dagger \quad 2$ Sk.210 Spiks. In

Enclosuresttor

21 A 9861CWXM $400 \quad$ A $\quad+\quad 2$ Decorette Il Spkr. Systems \#

250 Jbs .529 .95
-Specify Choice of Pickering U38/AT Sh t specify oll walnut, mahogany, or blonde finish.


Free with the purchase of any Fisher High. Fidellty System listed on this page-Automatic 45 RPM spindle for your record changer, rec. ord cleaning kit, stylus pressure gauge, ali cables and connectors, and 20 ft , of speaker hook-up cable.

ALTERNATE COMPONENTS



# FISHER STEREOPHONIC HI-FIDELITY SYSTEMS FISHER 75-WATT STEREO PHONO SYSTEM 

Here is a brilliant stereo phono system featuring Fisher's finest amplifier, the Model 2028. All components have been carefully selected and perfectly matched by Lafayette's Audio Specialties.
Fisher X202B 75 -watt Stereo Amplifier (lless case)
Garrard AT6/Mark II 4.Speed Record Changer Base for Garrard ATG $\dagger$ Pickering U38/AT Stereo Cartridge with . 7 Mil Diamond Needle 2 World Famous Lalayette SK-58 12"

## LAFAYETTE SYSTEM PRICE WITH FREE ACCESSORIES $305^{50}$

 Coaxial Hi-fi Speakers21 A 9862 CWXM Shpg. wt., 84 Ibs. ALTERNATE SYSTEMS

| System No. | Fishor Amp. | Chanser | Base | $\begin{aligned} & \text { SYS } 1 \\ & \text { cart. } \\ & \text { ridgo } \end{aligned}$ | $\begin{aligned} & \text { Speaker } \\ & \text { Components } \end{aligned}$ | Shpt. | ( |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 21 A 9863 CwXM | $\times 2028$ | A | $t$ | choice | 2 Sk -58 Spkrs. | 84 | 327.50 |
| 21 A 9864 CWXM | $\times 2028$ | A76 | $\dagger$ |  | 2 SK .588 Splirs. in |  | 365.50 |
|  |  |  |  | Pickert | Eliptoflex Enc. $\dagger$ | 136 lbs . | 365.50 |
| 21 A 9865 cwxm | $\times 2028$ | A |  | U38/at Shure | 2 Sk. 58 Spkrs. ${ }^{\text {S }}$ ( Eliptoflex Enc. $\dagger$ | 136 lbs. | 387.50 |
| 21 A 9866cwxM | $\times 2028$ | AT6 |  | M30 | 2 SK-210 S | bs. | . 50 |
| CWX | $\times 2028$ | AT6 |  | Emplre 880 steree | 2 Sk-210 Spkrs. in Ellotoflex Enc. $\dagger$ | 140 lbs. | 386.50 |
| 88 | 28 | AT6 | $\dagger$ | Cartridge |  |  |  |
| Jocwx | X2028 | A | $\dagger$ |  | 2 Decorette II |  |  |
|  |  |  |  |  | Spkr. Systems \# | 48 | T. |



## FISHER 60-WATT STEREO PHONO SYSTEM

A 60 watt Stereo phono system featuring Fisher's famous Model X101C stereo amplifier. The Model X101C is noted for its superb modern styling and fine stereo reproduction. All components have been carefully selected and perfectly matched by Lafayette's audlo specialists.
Fister X10IC 60 Watt Stereo Amplifier
(less case)
Garraad AT6/Mark II 4 Speed
Record Changer
Base for Garrard AT6 $\dagger$
Pickering U38/AT Stereo Cartridge with 7 Mil Diamond

## LAFAYETTE SYSTEM PRICE WITH FREE ACCESSORIES

## 26550

2 Famous Lafayette SK. 58 12"
Coaxial Hi-Fi Speakers
21 A 9871 CWXM Shpg. wt., 80 lbs. ALTERNATE SYSTEMS

| System No. | Fisher Amp. |  | Base | Cart. <br> ridst | Speaker Components | Shipg. Wt. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 21 A 9893CWXM | $\times 2028$ | A | $\dagger$ | Choice | 2 SK-58 Spkrs. | 80 lbs . | 281.50 |
| 2t A 9813CWXM | $\times 2028$ | AT6 | $\dagger$ | Plckering | 2 SK-58 Sokrs. In Eliptoflex Enc. 4 | 132 lbs . | 325.50 |
| 2149874CWXM | X2028 | A | $\dagger$ | U38/at or | 2 SK-58 Spkrs. in |  |  |
| A 9875 CWXM |  | AT6 |  | Shure | $2{ }^{\text {Eliptoffex Enc. } \dagger \dagger}$ | 132 lbs. 84 lbs. | 341.50 288.50 |
| 21 A 9876CWXM | $\times 2028$ | AT6 | $+$ | Emplre 880 | 2 Sk -210 Spkrs. in |  |  |
|  | $\times 2028$ | AT6 | + | cartridge | 2 Decorette 11 | 136 los. |  |
|  |  |  |  |  | Spkr. Systems \# | 144 lbs . | 316.50 |
| 21A 9878CWXM | $\times 2028$ | A | $\dagger$ |  | 2 Decorette II Spkr. Systems * | 144 lbs . | 338.50 |

†Specify oll walnut, mahogany, or blonde finish. \# Oll walnut finish.
Net 265.50



2 Dechrette II Speaker Systems


SCOIT 80-WAIT STEREO PHONO SYSTEM


## STEREOPHONIC HI FIDELITY SYSTEMS w FCOTT

 SCOIT 50-WATT STEREO PHONO SYSTEMSelected by Lafayette's audio specialists to provide fine stereo reproduction. All components have been carefully matched. Features Scott's outstanding Model 2220 50 -watt

Stereo Integrated Amplifier.
LAFAYETTE SYSTEM PRICE WITK FREE ACCESSORIES

## 25095 <br> NO MONEY DOWM

 Scott 2220 50-Watt Stereo Integrated Ampli. fier (liess case). Garrard AT8/Mark II 4 -Speed Record Changer, Wood Base for Garrard AT6/ Mark II. Pickering U38/AT Stereo Cartridge* with .7 Mil Diamond. 2 World-Famous Lafayette SK.58 12" Coaxial Hi.Fidelity Speakers.
## ALTERNATE SYSTEMS

System Scott Chang- Cart21 - 9816 CWXM 2220 A $\quad 2$ SK. 58 Speaker 21 9817CWXM 2220 AT6 $\quad$ - 2 SK-58 Speakers in Eliptoflex

- 2 SK. 58 Speakers in-Eliptoflex Encl.t
21 9818 CWXM 2220
A Encl.f
21 A 9819CWXM 2220 AT6 - 2 Decorette II Speaker Systems\# 21 9820CWXM 2220 A
21 A 9821 CWXM 2220 AT6 - 2 Decorette II Speaker Systems 140 Ibs 123.99 21 A 9821 CWXM 2220 AT6 2 Slenderette Speaker Systems. 140 lbs .268 .95 $\begin{array}{lllllll}21 \text { A } 9821 \mathrm{CWXM} & 2220 & \text { AT6 } \\ 21 \text { A } 9822 \mathrm{CWXM} & 2220 & \text { A }\end{array} \quad$ 2 Slenderette Speaker Systems ${ }^{\#} 140 \mathrm{lbs} .268 .95$ - Cholce of Pickering U38/AT or Shure M30 or Empire 880 Stereo Cartridge. $\uparrow$ Specify oll walnut mahogany, or blonde finish.

Shpg. Wt. Net 83 Jbs. 272.95 120 lbs. 310.50 120 lbs. $\quad 332.50$ 120


2 Sienderette Speaker Systems

## ALTERNATE COMPONENTS



## 2 Ellptoflex Enclosures



Pickering U38/AI


Emplre 880



Garrard ATB/MarkIT


## FREE

Free with the purchase of any Scott High Fidelity System Hsted on this page - Automatle 45 RPM Spindio for your record changer, Record cleaning KIt, stylus pressure gauge, all cables and connectors, and 20 ft . of speaker hook-up cable.


## SCOTT 30-WATT STEREO PHONO SYSTEM

A low cost Scott system featuring the new Scott 200830 .watt Stereo integrated Amplifiler. All components have been carefully selected and matched by Lafayette's Audio Specialists.
 Scott 200B 30 -watt Stereo Integrated Amplifier (less case). Garrard ATG/Mark II 4-speed Record Changer. Wood Base for Garrard ATG/ Mark II. Pickering U38/AT Stereo Cartridge* with .7 Mil Diamond. 2 World-Famous Lafayette SK-58 12" Coaxial Hi-Fi Speakers.
21 a 9823 CWXM .....Shpg. wt., 79 lbs........ Net 218.50

## ALTERNATE SYSTEMS


 Choice of Pickering U38/AT or Shure M3D or Emplre 880 Stereo Cartridge. + Specify oil walnut mahogany, or Glonde finish.

## ALTERNATE COMPONENTS

## 2

## 2 Decorette II

Speaker Systems

290.95


2 SK-58 Speakers

## FREE

Free with the purchase of any Scott High Fidelity System listed on thls page - Automatic 45 RPM Spindle for your record changer, Record Cleaning KIt, stylus pressure gauge, all cables and connectors, and 20 ft . of speaker hook-up cable.


## harman kardon



## STEREOPHONIC HI-FIDELITY SYSTEMS Harman-Kardon 70-Watt AM-FM Stereo Phono System

 selected and perfectiy matched by Lafayette Audio Specialists.| CHOICE OF |
| :---: |
| CARTRIOGE |
| Pickering U38AAT |



Shure M30


LAFAYETTE SYSTEM PRICE with free accessories
41950
NO MONEY DOWN only $\$ 22$ monthiy

H-K TA-7000X 70-Watt fM-FM Stereo Receiver (less case)
Garrard A/Mark II 4-Speed Automatic Record Changer
Wood Base for Changer
Pickering U38/AT Stereo Cartridge* with . 7 Mil Diamond
2 Lafayette SK-210 12-3-way Speakers with $21 / 4 \mathrm{lb}$. Magnets
21 A 9832 CWXM Shps. wt.. 104 lbs ............ Net 419.50

## ALTERNATESYSTEMS

$\begin{array}{ccc}\begin{array}{c}\text { Systom } \\ \text { No. }\end{array} & \begin{array}{c}\text { M-X Chang } \\ \text { Rec. }\end{array} \text { er Base ridge }\end{array}$
Speaker Components
Shpg. Wt. Net
TAク000 A 2 SK-210 Speakers in Ellptoflex Enc.t
21 A 9834 CWXM TA7000X A * 2 SK-215 15" 3-way Speaders 124 lbs .455 .50
21 A 9835CWXM TA7000X A \& 2 SK-215 and 2 Highboy Cabinetst ${ }^{\text {Decorette }}$
Decorefte II
Soeaker Systems
232 lbs.
168 fbs.
Specify cholce of Pickering U38/AT, Shure M3D, or Empire 880 stereo cartridge
† Specify oil walnut, mahogany, or blonde finish t+ Specify walnut or mahogany finish Oll walnut finish only


Harman-Kardon 30-watt FM Stereo Phono System Here is a superb FM Stereo Phono System for the economy-ninded audio enthusiast.
Features the famous Harman-Kardon Model FA. 3000 x - 30 -watt FM Stereo Receiver. All


Pickering U38/aT Features the famous Harman-Kardon Model FA. $3000 \times$-30-watt FM Stereo Receiver. All
components have been carefully selected and perfectly matched by Lafayette Audio components
specialists.
LAFAYETTE SYSTEM PRICE WITH FREE ACCESSORIES


NO MONEY OOWN only $\$ 15$ monthly

H-K FA-3000X 30 -watt Fm Stereo Receiver Garrard AT6/Mark II 4 -Speed Record Changer Base for Record Change.
Pickering U38/AT Stereo Cartridge* with . 7 Mil Diamond
2 World Famous SK-58 12"' Coaxial Speakers 214 9837CwxM Shpe. wt , 86 lbs. ....... Net 282.50
Shure m30

| System Ne. | $\begin{aligned} & \text { H.K } \\ & \text { Rec. } \\ & \hline \end{aligned}$ | Changor | Baso |
| :---: | :---: | :---: | :---: |
| 2143839 CWXM | FA3000x | A | $t$ |
| 21 A 9840 CWXM | FA3000X | AT-6 |  |
| 21 A 9842CWXM | FA3000x | A |  |
| 21 A 9843CWXM | F13000x | AT-6 |  |
| 21 ¢ 9844CWXM | FA3000X | AT. 6 |  |
| 21 ¢9845CWXM | FA3000x | AT-6 |  |
| 2149846 CWXM | FA3000X | A | $\dagger$ |

Speaker Components Shpg. Wt. Net 2 SK-58 Speakers SK- 58 Speakers in Eliptoflex Ercl. $\dagger$
SK-58 Speakes in Eliptoflex Ercl. $\dagger$
2 SK-210 Speabers in Eliptoflex Ercl. $\dagger$ in
2 Decorette II speaker Systemsf
2 Decorette II Speaker Systems

130 lbs. 342.50

130 tbs. 364.50 90 lbs. 303.50 136 lbs .365 .50 $150 \mathrm{lbs} . \quad 332.50$ $150 \mathrm{lbs} \quad 354.50$

- Specify choice of Pickering U38/AT, Shure M3D, or Empire 880 ste-eo cartridge


## ALTERNATE COMPONENTS

## FREE



Garrard A/Mart II


2 SK-210
Speakers


2 Eliptofier Enclosures


2 Decorette II Speaker Systems

Free with the purchase of any H-K HI-FI system on this page-Automatic 45RPM spindle for your record changer, record cleaning Kit, stylus pressore gauge, afl cables and connectors, and 20 ft . of speaker hook-up cable.

## Harman-Kardon 70-Watt Stereo Phono System

Selected by Lafayette's audio speclalists, this outstanding stereo system offers brilliant sound reproduction. Features the new Harman Kardon Award Series A. 700 70-watt stereo
integrated amplifier.
H-K A.700-70.Watt Integrated Stereo Amplifier lless case)
Garrard AT-6/Mark If 4-Speed Record Changer Base for Garrard changer
Pickering U38/AT Stereo Cartridge * with . 7 Mil Diamond
2 World-Famous Lafayette SK-58 12" Coaxial speakers
21 A 9847 CWXM Shpg. wt., 84 lbs.
LAFAYETTE SYSTEM PRICE WITH FREE ACCESSORIES


NO MONEY DOWN only $\$ 12$ monthly

Net 249.50 ALTERNATE SYSTEMS

| No. | $\begin{aligned} & \text { H-K } \\ & \text { Amp. } \end{aligned}$ | Chang. er | Base | Cart- |  | Speaker Components | Shpg. wt. | Net |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A 9848CWXM | A700 | A | $\dagger$ |  |  | 58 Spe | 84 lbs. | 271.50 |
| 21 A 9849 CWXM | A700 | AT6 | $\dagger$ |  |  | 58 Speakers in Elipt l. $\dagger$ | 129 | 309.50 |
| 21 A 9850CWXM | A700 | A | $\dagger$ |  |  | 58 Speakers in Ellptofiex |  |  |
| 214 9880CWXM | A700 | AT6 |  |  |  |  | $\begin{aligned} & 129 \text { lbs. } \\ & 93 \text { libs. } \end{aligned}$ | $\begin{aligned} & 331.50 \\ & 272.50 \end{aligned}$ |
| 2149881 CWXM | A700 | AT6 |  |  | SK-2 | 10 Speakers in Eliptoflex |  |  |
| 882C | 4700 | AT6 |  | $2$ | Dec | orette II Spe | 141 lbs. | $\begin{aligned} & 332.50 \\ & 299.50 \end{aligned}$ | 21 : 2 Decorette 11 Speaker Systems 141 lbs. 299.50 - Choice of Pickering U38/AT or Shure M3D or Empire 880 Stereo Cartridge. \# Oil walnut finish

Free with the purchase of any Harman-Kardon Mi-FI system listed on this page-Automatic 45RPM spindle for your record changer, record cleaning Kit, stylus pressure gauge, all cable and connectors, and 20 ft . of speaker hook.


## ALTERNATE COMPONENTS



## MATCHED COMPONENTS

Lafayette LA. 200 44. Watt AILTransistor Stereo Amplifier Garrard Autoslim/Mark II 4 -Speed Record thanger Base for Changer (specify finish)
Pickering U38/AT Diamond Needle Cartridge 2-Lafayette SK-58 Free-Edge 12' Coaxial Speakers


System No. Amplifler Changer rldge IS.326CWXM L-200 AT6/Mark II LS-326CWXM LA-200 AT6/Mark II
LS-327CWXM LA-200 Autoslim/Mark II LS-328CWXM LA-200 AT6/Mark II LS-329CWXM L-200 Autoslim/Mark II LS-330CWXM L-200 AT6/Mark II LS-331CWXM LA-200 Autoslim/Mark II LS-332CWXM LA-200 AT6/Mark II

## LAFAYETTE SYSTEM PRICE pum frem actassorise <br> 18950

 LS-333CWXM LA. 200 Autosilim/Marh If LS.334CWXM LA. 200 AT6/Mark IIChoice of Pichering U38/AT or Shure M30 or Empire 880 Stereo Cartridge For detalled Information on L-200 see inside bach cover. For detalled information on the other components used in the above systerns please refer to

Oiled Walnut. Mahogany or Elonde.
$t+$ Olled Walnut, Walnut. Mahogany, or Blonde pages $46,48,53$.

## Bogen

se Speaker Systoms Speakers
PHONO SYSTEM
A sparking steree system featuring one of gogen's flnest amplifiers-Model AP-250-50 watt stereo integrated amplifier. All components have been carefully selected and perfectly matehed by Lafayette Audio Specialists.
Bogen AP-250 50. Watt Stereo Integrated Amplifier (less case). Garrard AT6/Mark II 4.Speed Automatic Record Changer. Base for Garrard AT6/Mark II. Pickering U38/AT Stereo Cartridge with . 7 Mil Diamond. 2 World Famous Lafayette SK-58 12" Coaxial Speakers.

## $\left.\begin{array}{c}\text { LIFAYETTE } \\ \text { SYSTEM } \\ \text { PRICE }\end{array}\right) 95$

Plus Free Accessories
21 A 9909CWXM Shpg. wt., 78 lbs.
Net 229.95


## ALTERNATE SYSTEMS

5ystem Bogen Chan Cart-
system No. Amp ger ridre Base
19910CWXM AP250 A Speaker Components 21 A 9911 CWXM AP250 AT6 21 A912CWXM AP250 A 21 A 9913 CWXM AP250 AT6 21 A $9914 C W X M$ AP250 AT6 11 19915CWXM AP250 AT6 21 9916CWXM AP250 A 21 9916CWXM AP250 A

+ Specify oil walnut, mahogany, or blonde
Choice of Pichering U38/AT or Shure M30
t Specify oil walnut, mahogany, or blonde Oil walnut finish only.
- Choice of Pichering U38/AT or Shure M30 or Emplre 880 Stereo Car



## FREE

Free with the purchase of any Lafayette Hi Fidelity system IIsted on this page-Automatic 45RPM spindle for your record changer, record clearing Kit. stylus pres. sure gauge, alf cable and connectors, and 20 ft . of speaker hookup cable.


12 SK-58 Speakers in Ellptoflex Enctt 78251.50
| 2 SK.58 Speakers in Ellptoflex Encit 122289.95
Dollex Encif 122309.95
2 SK-210 Speakers in Eliptoflex Enclt 128252.50 Decorette II Speaker Systems \# 136 279.50 Decorette II Speaker Systems \# $136 \quad 299.50$ Emplire 880 Stereo Cartridge

## ALTERNATE COMPONENTS




## THE NEW "SLENDERETTE IIT" LAFAYETTE SPEAKER SYSTEM

## A Superb 2-SPEAKER 2.Way System

EXTRAORDINARY QUALITY AT LAFAYETTE'S UNBELIEVABLE LOW, LOW, PRICE

# $19^{50}$ 

- Ideal Choice for Floor, Shelf or Wall Mounting - Outstanding Performance Low-Cost Speaker System for Stereophonic or Monophonic Systems - Excellent Quality Extension Speaker - Improves Fidelity of Phonographs, TV Sets, AM and FM Radios - Room-Filling Music Everywhere In Your Home - Fine Speaker Performance Offering Rich Clear Sound
The new Lafayette Slenderette III is the ideal choice as a floor, shelf, or wall type speaker system for low cost stereo or monophonic systems, and for top quallty extension speaker use. Can be used for improving fidelity of existing TV sets. AM and FM radios, tape recorders, and phonographs. Enjoy smooth, wide-range sound in every room of your house. The slim styling enhances the decor of your room. Contains a special $61 / 2^{\prime \prime}$ high compliance woofer and a matched $21 / 2^{\prime \prime}$ cone tweeter with crossover network. Offers fine speaker performance-clear natural bass, full midrange reproduction, and wide dispersion of high frequencies. The speakers are mounted in a superbly constructed and finished oil walnut cabinet. Oll walnut finish is on all four sides. Measures $12 \times 18$ inches with a depth of $51 / 4$ inches. Freq. response -$50-10,000 \mathrm{cps}$. Impedance 8 ohms. Shpg. wt., 15 lbs . Imported



## THE NEW, SELECT "SLENDERETTE $\Pi$ " 3-SPEAKER 3-WAY SYSTEM <br> featuring JENSEN SPEAKERS and UNIVERSAL WOODCRAFTERS CABINET

- 3-Speaker 3-Way System - New Jensen 8" High Compliance Woofer, Jensen $6^{\prime \prime}$ Mid-Range Driver \& Jensen $3^{\prime \prime}$ Tweeter - For Shelf, Floor or Wall - Low, Low, Lafayette Price - Beautiful Styled Cabinet Finished on all 4 Sides in Finest Genuine Walnut Veneer With Cane Grille \& White Enamel Border


## Superb Quality! Fantastic Value!

The new "Slenderette $\boldsymbol{\Gamma}$ " is an Incompar able value offering superb styling and rich. deep sound. Incorporates the latest advanced acoustic design at Lafayette's low, low, price. Contains a 3 -speaker 3 -way sys. tem engineered by Jensen with newly developed Jensen components. Utilizes a new
 Jensen $8^{\prime \prime}$ high compliance woofer with rubber suspension for extra wide excursion, a Jensen six-inch midrange driver in rubber suspension, and a special Jensen 3 -Inch tweeter. Woofer electric crossover at 400 cycles, mid-range electric crossover at 2000 cycles. Response 50 to 15,000 cycles. Power capacity: 18 watts continuously, 36 watts peak. Superbly styled cabinet finished on all 4 sides in finest genuine walnut veneer with protruding cane grille \& white enamel border. Ideal for shelf, floor, or wall mounting. Includes wall bracket. Impedance 8 ohms. $211 / 4 W \times 141 / 4 H \times 41 / 4$ "D. Shpg, wt., 22 Ibs. SK.236WX

Net 29.95


## LAFAYETTE "decor-ette I" SUPERB SLIM SPEAKER SYSTEM

# decor-ette FOR VERTICAL floor mounting 

ONLY $59^{95}$
NO MONEY DOWN

- Now Lafayette Offers The Most Advanced Design and Styling for Superlative Sound in Slim Speaker Systems at Lafayette's Low Sensational price - 5-Speaker 3-Way System Custom Bullt in England to Lafayette's Rigid specifications - $2-8^{\prime \prime}$. Woofers with $1 / 2 \mathrm{lb}$. Magnets and Rigidflex Floating Piston Hyperholic Cones, 1-6" Open Back MidRange Driver, 1-0ome Lens Compression Hom Tweeter, $1-31 / 2^{\prime \prime}$ Cone-Type Tweeter - Never Before Such Speaker Value in the Concept of Slimtine Sound - Custom Assembled in a Genuine Hand-Rubbed Diled Walnut Veneer Cabinet, of Extra Heavy $3 / 4^{-}$Stock - Frequency Response, $40-20,000$ cps - Power Handling Capacity, Continuous 30 Watts; Instantaneous Peak Load Power, 60 Watts - Impedance 8 Ohms


## - 5 Speakers ! <br> - $2.8^{\prime \prime}$ Woofers with $1 / 2 \mathrm{lb}$. Magnets <br> - 1.6" Open Back Midrange Driver <br> - $1.31 / 2^{\prime \prime}$ Dome Lens Compression Hors Tweeter <br> - $1.31 / 2^{\prime \prime}$ Cone-Type Tweeter

## - Truly Magnificent Sound From a Thin Line Speaker!

The "decor-ette 11 " now makes it possible to get a trum magnificent sound from a slim-type speaker cabinet. Lafayette has had the finest British audio engineers design and construct the "decor-ette 11 " slim-type speaker system to our rigid specifications. The results achieved are of unequaled b-lliance with outstanding speaker performance at such a sensationally low Lafayette price. The genuine handrubbed oiled walnut veneer cabinet has been designed anc styled for either vertical or horizontal placement. A real space-saver, it is slim in appearance and can be placed on a bookshelf, mounted on the floor, used as a room divider or hung on the wall. The beauty of your present room will be enriched by this outstanding system in its decorator styled enclosure with smart ebony blaca and gold picture frame molding. The "decor-ette 11 " is a 5 -speaker 3 -way system utilizing the latest advanced acoustic designs. Two $8^{\prime \prime}$ woofers with $1 / 2 \mathrm{IL}$. magnets incorporate a "Rigiofiex" Floating Piston Hyperbolic Cone resulting, in a free floating cone rim and a completely rig id cone center to provide maximum distortionless bass from 500 cycles down to 40 cycles. The specially designed $6^{\prime \prime}$ mid-range open back driver provides uniform response from 500 to 7500 cy=les. The $32 /{ }^{2 \prime \prime}$ cone-type tweeter gives wide dispersion of the mid-highs smoothly from 1000 to 10,000 cycles. The dome lens type compression tweeter response is fram 5000 to $\mathbf{3 5 , 0 0 0}$ cycles. Omni-directional, this tweeter gives $360^{\circ}$ sound dispersion to add overall brilliance to the system. RC electrical crossover frequency is 5000 cps . Overall frequency response, $40-20,000 \mathrm{cps}$. Power handling capacity, continuous 30 watts; instantaneous peak load power, 60 watts. Impedance, 8 ohms. Size: $25 H \times 17 \mathrm{Lx} 43 \mathrm{~h}^{\prime}$ W. Supplled with 4 1" round walnut decorator legs which can be meunted on the cabinet for either vertical or horizontal placement. Shpg. wt., 24 los
sK-270wX Oiled Walnut Finish
Net 59.95

## SENSATIONAL "SLENDERETTE" SPEAKER SYSTEM



- 5-Speaker 3-Way System - 2 Jensen 6"Woofers 1 Jensen $8^{\prime \prime}$ Midrange Driver, 2 Jensen $31 / 2^{\prime \prime}$ Tweeters
- Low Lafayette Price
- Superb Custom Styling
- Oil Walnut Finish
- 7.Pty with Genuine Walnut Veneer

each
A new concept in the design of speaker systems enables you to place each system in almost any desired location of your choice-floor, wall, or top of bookshelf. A hermetically sealed cabinet, by Universal Woodcrafters, measuring or ly $5^{\prime \prime}$ deep, $24^{\prime \prime}$ in height, and $20^{\prime \prime}$ in length, represents an outstanding achlevement in speaker system develop. ment. A beautifully styled grill harmonizes with all home interiors. Provides unbelievably fine speaker performance at a low, low Lafayette price. Conténs a carefully integrated pneumatically dampened 5 -speaker 3 -way system engineered by jensen with specially pneumaticajly dampened
developed Jensen speaker components. Contains 2 special $6^{\circ}$ - woofer driver elements: one $8^{\circ \prime}$ midrange driver enclosed in its own sealed acoustic surroundings, completely separated from the woofer cavity, and $23 y / h^{\prime \prime}$ fully enclosed tweeters. Woofer has an electric crossover at 400 cDs . Midrange crossover at $2,000 \mathrm{cps}$. Frequency response $50.15,000$ cps. 20 watt capacity. Impedance 8 ohms. Comes equipped with hangers for wa I mounting. Oil walnut finish. Shpg, wt., 24 lbs. 5K-235WX Oil Walnut finish


## LAFAYETTE REVERBERATION AMPLIFIER and SPEAKER <br> Creates Realism of <br> Concert Hall Soundl



- Ideal for Stereo or Mono Systems
- Does Not Affect Fidelity
- Self-Contained Amplifier/ Speaker System with
Built-in Power Supply

Here is a compact version of our popular SK-250. It is a self-contained reverberation amplifier/speaker system that works with your existing component HI-FI system, AM or FM radlo, tape recorder to bring the realism of concert hall sound to your listening area. Part of the original signal is taken from a speaker system and fed through a carefulty tuned coll spring delay system. Delay time is $28 \mathrm{~m} / \mathrm{s}$. 3-tube amplifier delivers $21 / 2$ watts to a $61 / z^{\prime \prime} \mathrm{PM}$ speaker. Inputs provided are stereo/mono high level and stereo/mono low level. Front mounted control is push-pull on-off/ volume. For $110-117$ volts, $50-60 \operatorname{cps} \mathrm{AC}$. Oiled walnut cabinet measures $111 \mathrm{~K} \mathbf{W} \mathrm{Wx}$ $7 \% / \mathrm{A}^{2} 57 \mathrm{~s}^{\prime \prime} \mathrm{D}$. Shpg. wt., 7 tos.
SK- 256 Imported
Net 39.50

## SENSATIONAL SPEAKER SYSTEM JENSEN speakers <br> + UNIVERSAL WOODCRAFTERS Cabinet

+ LAFAYETTE Low Price =
THE SPEAKER SYSTEM
 BUY OF THE YEAR

- Heavy 7.Ply Furniture Veneer Cabinets
- Fiberglass-loaded Cabinet for Better Bass Response
- Jensen $12^{\prime \prime}$ Woofer, $8^{\prime \prime}$ Midrange Driver, 31/2" Enclosed Tweeter
no money down
Now you can get top speaker performance at a low, low lafayette price. The UnlVoice hi-fl speaker system is a thrilling blend of fully Integrated, unified 3 -speaker systems engineered by Jensen with specially developed Jensen components, with cabinetry by Universal Woodcrafters. Contains special $12^{\prime \prime}$ woofer; $8^{\prime \prime \prime}$ midrange driver independently pneumatically dampened in its own hermetically enclosed acoustic surroundings, completely separated from woofer cavity; $31 / z^{\prime \prime}$ fully enclased, independently baffled tweeter. Woofer electric crossover at 600 cycles, midrange electric crossover at 2000 cycles. Impedance 8 ohms. Response: $35-18,000$ cycles. Electric UV-30. Bookshelf enclosure finished on 4 sides. Speaker grille completely framed with brass inlay. $24 \mathrm{~W} \times 141 / 4 \mathrm{Hx} 13^{\prime \prime} \mathrm{D}$. Shpg. wt., 32 Ibs.
Sk-185WX Walnut finish


## LAFAYETTE MINIATURE HI-FI SPEAKER



- attractive manogany finished wood cabinet - COMPLETE WITH 25 FEET OF CABLE


Enjoy music everywhere in your home with this amazing Lafayette miniature speaker system. Perfect as an extension speaker for your den, basement, kitchen or bedroom. Use two as extension speaker units for steree or with your TV and Radio. Housed in a beautiful mahogany-finished wood cabinet with ventllated back cover. the 5 -watt $4 \times 6^{\circ \prime}$ speaker is designed to work from either 4 or 8 ohm outputs. system is supplied with 25 feet of cable which should meet any hook up requirement. Over-all size: $94 / 2 \mathrm{~W} \times 73 / 4 \mathrm{H}$ (inc, feet) $\times 34 / 2^{\circ} \mathrm{D}$. Shpg wt., 5 lbs, Imported. \$K-109 Miniature Speaker System

Net 6.95

## LAFAYETTE ADD-ON REVERBERATION SYSTEM

- Excellent for Mono or Stereo Systems
- Adds a Delightful

Works with Phono, TV, Radio, Tape Recorder Dimension to Sound without Affecting Fidelity

etely Self. Contained System with Amplifier and Speaker

## 5950

NO MONEY DOWN


A FINE REVERB SYSTEM AT A LOW PRICE
A self-contalned reverberation amplifier/speaker system with built-in power supply, that hooks into any existing stereophonic or monaural component sound system, FM or AM radio, TV set, tape recorder or electric organ. Takes part of the original signal from a speaker system and feeds this signal through a carefully tuned coil spring delay system which delays the sound for $1 / 30$ th of second. This delayed sound blends with the original sound to add acoustic dimension to your Ilstening area. Controls: 3-position selector switch for reverb, stereo center channel, crystal phono functions plus push-oull on-off/volume. Output power is 3 watts into an $8^{\prime \prime}$ PM speaker. Inputs: stereo high level, stereo low level, mono crystal phono. For $110-117$ voits, 50.60 cps AC. Olled walnut finished cabinet measures $211 / 2 W \times 114 / 2 \mathrm{H} \times 81 / 4^{\prime \prime} \mathrm{D}$. Shpg. wt., 23 lbs. Imported.
SK-250wX
Net 59.50

## LAFAYETTE "MINUETTE" HIGH-FIDELITY SPEAKER SYSTEM



Room Filling Music Everywhere in Your Home!

- Shelf Size - $81 / 40 \times 153 / 4 \times 57 /{ }^{\prime \prime} \mathrm{H}$
- Use Two For Stereo-Perfect For the Small Apartment or Listening Area
- Genuine Walnut Finish on 4 Sides
- Complete with $\mathbf{G}^{\prime}$ Extension Cable and Phone Plug

An exceptional speaker value ... the Lafayette "Minuette" HI-Fi Speaker System will bring music to any room in your home - and for a remarkably low cost. wesigned for use where space is at a premlum - ideal for the small apartment or Iistening area. Expand your stereo system to other areas of your home ...easily used In the den, kitchen, patio or bedroom. Employs a specially designed $5 \times 7^{\boldsymbol{N}}$ speaker in a rear loaded reflex type enclosure. Provides an exceptionally fine musical quality yet measures only $81 / 40 \times 15 \% / 44 \times 57 / \mathrm{a}^{\prime \prime}$ - small enough to fit anywhere. Supert Wainut finish on 4 sides allows placing speaker horizontally or vertically. Frequency Response $100 \cdot 12,000 \mathrm{cps}$. Impedance 8 ohms. Rated at 10 watts. Supplled with 6 ft . of extension cable and phone plug. Shpg. wt., $51 / 2 \mathrm{lbs}$. Imported.
SK-181
Net 12.50
Set of two for stereo. Shpg. wt., 11 Ibs.
SK-251 Oiled Walnut
Net 23.50
Set of two for stereo
Net 26.50

## LaFAYETTE POPULAR ELPTOFLEXO ENCLOSURE

## PLUS FAMOUS SK-58 ${ }^{\circledR}$ SPEAKER



## The "Eliptoflex". . . .

(1) Meets space requirements of stereo.
(2) Utilizes the full advantages of efficient $12^{\prime \prime}$ speaker performance.
(3) Provides optimum performance without use of large
wattage, expensive amplifiers.

The "Eliptoflex" utilizes a unique elliptical port which broadens frequency response and provides better transient response. A specially engineered diffracting ring eliminates cancellation effects between front and rear radiation. These engineering advances are coupled with the famous Lafayette free-edge SK-58 $\mathbf{1 2}^{\prime \prime}$ coaxial speaker with $3^{\prime \prime}$ cone type tweeter, $11 / 4 \mathrm{ib}$. TSK-5 high flux density magnet and special $3_{4}$ ' wide sheepskin cone-edge suspension and built-in crossover network level control.
"Ellptoflex" achieves a degree of natural smoothness, low-distortion and rich robust bass hitherto found only in large enclosure speaker systems or inefficient bookshelf speakers requiring high powered amplifiers. Due to its highly efficient design characteristics the "Eliptoflex" does not require costly high wattage amplification.
The "Ellptoflex" speaker system is beautifully finished on 4 sides in variety of hardwood veneers for attractive room placement either horizontally or vertically. Dimensions are $14 \mathrm{H} \times 23 \%, W_{x}$ 13\%."D. Shpg. wt., 35 Ibs.

| SY-381wX | "Eliptoflex" | Speak | Sy | Mahogany | Net | 64.50 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SY-382WX | "Eliptoflex" | Speaker | System | Walnut | Net | 64.50 |
| SY-383WX | "Eliptoflex" | Speaker | System | Blonde | Net | 0 |
| SY-384WX | "Eliptoflex" | Speaker | System | Oiled Walnut | Net | 50 |
| SY-392wX | "Eliptoflex" furniture gr | Speaker ade birc | System | Unfinished |  | 59.50 |

ELIPTOFLEX ENCLOSURE LESS SPEAKER-FINISHED ON 4 SIDES
CAB. s3wX "Eliptofle", Enclosure Mahogany Ne 36.50
CAB 84WX "Eliptoflex" Enclosure-Wainut
CAB- 85WX "Eliptoflex" Enclosure-Blonde
CAB- 86WX "Eliptoflex" Enclosure-Oiled Walnut
Net 36.50
Net 36.50
CAB-124WX "Eliptoflex" Enclosure Unfinished Birch Net 36.50
Net 29.50

- NOW IT IS POSSIBLE TO HAVE THE ADVANTAGES OF A HIGH EFFICIENCY 12" SPEAKER IN A BOOKSHELF ENCLOSURE.
- SPECIALLY DĖSIGNED 12" COAXIAL SPEAKER WITH SHEEPSKIN CONE EDGE SUSPENSION AND $11 / 4 \mathrm{LB}$. MAGNET PROVIDE A RESPONSE FROM BELOW 30 TO 15,000 CPS.
- ENCLOSURE BEAUTIFULLY FINISHED ON FOUR SIDES IN HAND RUBBED VENEERS.


## PHENOMENAL ELIPTOFLEX PERFORMANCE



## PERFORMANCE EXPLANATION

The loudspeaker is mounted on a bafle recessed in the cabinet shell with the front-plate extending martially across the front surface of the baffle forming ducts or tubes from the port openirgs to the outside air. The elliptical cutout changes the effective length of the duct acrons air. The e This variation in path lengths provide an extremely smooth
its area. The transition from duct to free air; broadens the frequency response and provide better transient response. A trinngular shapeal diffracting ring mounted on the front of the baffle board virtually eliminates undesirable cancellation effects normally produced by close coupling of front and rear cone radiation. This results in a "lens" effest, changing rela. tive particle velocities and consequently, phase relationahips so as to produce a smooth transition from front to rear radistion. Comparative faboratory and listening tests indicate that "Elintofiez" performance is demonstratively superior throughout the audio sjeetrum.
U. S. Patent No. 3,089,562

## LAFAYETTE SK-58 12" COAXIAL SPEAKER <br> WIDELY ACCLAIMED! <br> SUPERB PERFORMANCE GUARANTEED <br> - OR YOUR MONEY BACK! <br> THE ORIGINAL, EXCLUSIVE LAFAYETTE SK-58 ${ }^{\circledR 1}$ - RESPONSE 30-15,000 CPS <br> - SHEEPSKIN "FREE EDGE" CONE MOUNTING <br> - $11 / 4$ LB MAGNET WEIGHT <br> - $3^{\prime \prime}$ COAXIALLY MOUNTED TWEETER <br> - BUILT-IN LC NETWORK <br> - RATED AT 20 WATTS CONTINUOUS POWER <br> 2950 <br> NO MONEY DOWN easy pay plan see page 412

Lafayette's exclusive $12^{\prime \prime}$ coaxial is a precision-made high fidelity loudspeaker, acclaimed by music lovers, hilif enthusiasts and professional experts alike as an outstanding performance-value. It provides a truly faithful reproduction of sound without any "coloration" or distortion, its excellence being responsible for its use in innumerable high fidellty music systems today. The SK-58 incorporates, such features as heavy, high flux density TSk-5 magnets for high efficiency; 3/4" wide sheepskin cone edge suspension and special composition fibre cone material, specially treated for ultra-linear, distortion-free response; heavy rugged cast metal frame for freedom from resonances and for greater rigidity. The coaxially-
mounted $3^{\prime \prime}$ cone-type tweeter has a bell shaped mounting for maximum dispersion of high frequencies with no back radiation. With the built-in 3000 cps crossover network it contributes its share to the smooth delivery of the overall wido range response of $30 \cdot 15,000 \mathrm{cps}$. Woofer resonance in free air is 40 cps . Speaker power handling capacity is 20 watts continuous sine wave, 35 watts peak program material. Impedance of the voice coil is 8 ohms, connections being made to chrome-plated screw terminals. Finished In gray-brown opalescent enamel, the speaker is supplied complete with "brilliance" level control. Shpg. wt., 11 lbs. SK-58w 12" COAXIAL SPEAKER Imported

## LAFAYETTE $8^{\prime \prime}$ DUO-CONE HI-FI SPEAKER SK-98®

MECHANICAL 2-way DESIGN OVERALL RESPONSE 40-16,000 CPS.
LARGE MAGAET STRUCTURE
patenteo cone con-
STRUCTION ANO
MATERIAL
HIGH EXCURSION
WOOFER
9.95

## LAFAYETTE 61/2 HI-FI SPEAKER <br> COAXIAL SK-97 ${ }^{\circledR}$


overall reSPONSE 50-16,000 CPS.
SPACE SAVING ECONOMICAL FOR STEREO
BUILT-IN LC
NE TWORK
LARGE, HEAVY MAGNETS


An excellent speaker with all the best features of cosxial design, the SK-97 will provide the finest sound reproduction avallable from a speaker of this size. It is especially recommended where space and/or cost are especially recommended where space with large, heavy factors. The $61 / 2^{\prime \prime}$ wooter is equlpped with large, heavy
magnef for maximum efficiency and low distortion. The magnef for maximum efficiency and low distortion. The
$\mathbf{2}^{\prime \prime}$ tweeter is a separste speaker coaxially mounted in 2. tweeter is a separste speaker coaxially mounted in a mesh dispersion sceen provides smooth, wide-angle high frequency propogation. When properly enclosed, the response of this low cost hi-l| speaker is genuinely impressive. Its small size makes it perfect for use in a wide variety of small inclosures-ideal for use in pairs for stereo music syste ins of up to 8-10 watts. Frequency range, $50 \cdot 16,000 \mathrm{cps}$. Noofer free-alr resonance, 70 cps . Voice coll impedance, 8 ohms. Built-in electrical crossVoice coll impedance, 8 ohms. 8uilt-in electrical cross-
over network. Color-coded screw-type terminals. Requires over network. Color-coded screw-type terminals. Requires
$51 / 2^{\prime \prime}$ diam. cutout. Size is $61 / 2^{\prime \prime}$ diam., $33 / 4^{\prime \prime}$ deep. Shpg. $51 / 2^{\prime \prime}$ diam. cutout. SIz
wt., $31 / 2 \mathrm{lbs}$. Imported
wt., $31 / 2$ lbs. Imported
SK. 97
$64 \mathrm{~L}^{\prime \prime}$ COAXIAL EPEAKER
2 FOR STEREO

## LAFAYETTE DUCTED PORT BASS REFLEX SPEAKER ENCLOSURE



- accommodates either an $8^{*}$ OR 6" SPEAKER
- DUCTED PORT DESIGN FOR EXTENDED BASS RESPONSE
- attractive cane grille


## - EXCELLENT FOR STEREO

An acoustically engineered loudspeaker enclosure designed to provide full wide-range response when used with any $8^{\prime \prime}$ or $6^{\prime \prime}$ wide range or coaxial hi-fi useaker. Incorporates a special long duct over the speaker. Incorporates a special long euct over the enclosures of much greater size. Only $111 / 8^{\prime \prime}$ high. $18^{\prime \prime}$ wide and 9 ' deep - perfect for bookshelf, table top or other limited-space applications. Made of hardwood veneers throughout, hand-rubbed to a high finish, and lined with heavy acoustical padding. Attractive, decorative rattan cane grille. Available in Blonde Mahogany, Mahogany or Walnut finishes. (Please specify your choice.) Shpg. wt., 15 lbs. Made in U.S.A.
CAB-29w


## Custom-Built in England to Lafayette's Rigid Specifications

- 21/4 lb. Ceramic Magnet
- "Rigidflex" Free-Edge Cone SuspensionNo Standing Waves Or Surround Resonances
- 3-Way Axial Design Provides Unequaled Smooth Low, Mid \& High Frequency Coverage
- Special Low-Resonance Woofer Cone, Stiff Mid-Range Radiator
- Compression-Driver Tweeter
- Frequency Response: 30-20,000 C.P.S.
- Fundamental Resonance: 35 Cycles
- Power Handling Capacity: 30 Watts
- Voice Coil: 3 Inches
- Wide Dispersion Tweeter, Self Aligning Aluminum Voice Coil \& Diaphragm
- High Efficiency With Low Distortion
- Superb Transient Response
- Impedance: 16 ohms
- Unitized Die-Cast Frame


## ONE OF LAFAYETTE'S FINEST $12^{\prime \prime}$ SPEAKERS

Constructed by master English craftsmen to Larayette's rigid specifications, the "Lafayette SK-210 Sovereign 12" must be considered among the very finest 12 " speakers avallable. Engineered to satisty the most discrimirating listener, the SK-210 achieves full 3 speaker performance through its advanced triaxial design. Woofer, midrange radiator and tweeter are all axially mounted within a single rigid, unitized die cast frame, to provide an integrated, efficient wide range speaker system. Construction features incorporate a 3 inch voice coil with an exclusive "Rigidflex" cone-bonding and cone-edge treatment process to form a virtually free-edged cone suspension. All irregularities of the audible frequency spectrum are smoothed out with standing waves and surround resonances elimin. ated. High efficiency and low distortion are further assured by use of a specially designed $2 \mathrm{y} / \mathrm{Ib}$. ceramic magnet.

The quality of the Sovereign is immediately evident in its uncompromising performance. Frequency response is $30-20,000$ cps with a free-air woofer cone resonance of 35 cps. Bass response is. tight and solld withoul boom or hangover to achieve a phenominal realism. At 2000 cps, frequencies are channeled into a stiff-coned midfrequency radiator by means of a smooth mechanicat crossover. High requencles are reproduced with a silkiness and naturalwess to beyond the limits of numan hearing by means of a compression driver tweeter. This supert new tweeter incorporates a rigid, die-cast, flared, hyperelliptical horn, a $1^{\text {. }}$ diameter aluminum voice coll and diaphragm in a self-aligning assembly with air chamber and phase equalizer. A built in crossover allows the tweeter to take over at $5,000 \mathrm{cps}$ and is provided with a high.frequency $L$-pad level control with attractive escutcheon and knob. Shpg. wt., 15 ibs. SK-210W

## FAMOUS LAFAYETTE ELIPTOFLEX ENGLOSURE AND SK-2 10 SOVEREIGN 12"

## 3-WAY SPEAKER WITH 21⁄4 LB. MAGNET

PERFORMANCE MATCHED-Lafayette's tamous Eliptoflex book Sheff enclosure matched with the exceptional SK-210 Sovereign 12"3-way speaker. Finished on four sides in your choice of decorator Inishes. Size: $14 \mathrm{H} \times 237 / \mathrm{WW} \times 13 \% \mathrm{O}$. Shpe wt 39 of Y-405WX SK-210 \& Eiptoflex in Mahogany Me. Wi. 39 ibs Y-406WX SK-210 \& Eliptoflex in Walnut ….... Net 74.50 SY-407WX SK-210 Enlptoflex in Wainut ................ SY-408wx SK-210 Ellpoflex in Difed Walnut .......Net 74.50 $\begin{array}{llll}\text { SY-409wx } & \text { SK-210 \& Elpploflex in Oifed Walnut .... Net } 74.50 \\ \text { SK-210 \& Elploflex in Unfinished }\end{array}$ furniture grade birch


# LAFAYETTE 3 WAY 12" HIGH-FIDELITY SPEAKER SK-216 

## Custom Built in England To Lafayette's Rigid Specifications

- Massive 5 lb. Ceramic Magnet - Free-Edged Cone Suspension - 3-inch Long Main Voice Coil - 12 DB/ Octave Crossover Network with High Frequency Level Control - Precision Pressure-Driven Horn-Loaded Tweeter with Aluminum Diaphragm \& Coll.

Pride of British craftsmanship, coupled with Lafayette's rigid engineering specifications brings you a loudspeaker which incorporates features usually found only in much higher-priced units. The SK-216 features an exclusive patented concentric twin-gap magnetic system with a massive 5 lb . super efficient double duty cylindrical ceramic magnet. The three elements-woofer, mid-range radiator, compression tweeter-are axially mounted to achieve unparalleled, smooth wide-range speaker performance. The woofer section has a cone resonance of 35 cps, is vacuum constructed by an exclusive process, and features a plastic terminated, free-edge cone suspension completely eliminating standing waves and surround resonances. At 5000 cps , a 12 db per octave LC crossover network provides smooth transition from midrange to a precision pressure-driven horr-loaded tweeter which employs an aluminum coil and diaphragm in a self-aligning assembly with air chamber and phase equalizer. This crossover is provided with a high frequency constant impedance L-pad level control for matching of sound to room acoustics and individual listening tastes. SPECIFICATIONS: Cone Resonance, 35 cps; Overall Frequency Response. 20-20,000 cps; Magnet Weight, 5 lbs.; Magnetic Flux Density, over 250,000 Maxwells; Crossover, automatic mechanical at 2000 cps - 12 db /octave LC at 5000 cps ; Power Capacity, 50 watts; Woofer Voice Coil Diameter, 3 inches; Tweeter Voice Coil Diameter, 1 inch; Impedance, 16 ohms. Dimensions: $51 / 2^{\prime \prime}$ overall depth; $121 / 4^{\prime \prime}$ diameter. SK-216WX Shpg. wt., 25 lbs.

Net 54.50

## *1 Year Service Guarantee

*Repairs which become necessary due to manufacturing defects will be made by Lafayette at no charge during the Guarantee period. SEE PAGE 414

fEATURES MASSIVE 5 lb . CERAMIC MAGNET 3-INCH MAIN VOICE COIL

## LAFAYETTE ©riterion ELIPTOFLEX SPEAKER CABINET WITH THE SK-210

## SOVEREIGN 12 SPEAKER

Now Lafayette's renowned Eliptofiex enclosure in a new decorator inspired form. Incorporates the same inner construction and acoustic principles that have made Eliptoflex performance famous. Size: $321^{1} 2 \mathrm{H} \times 18 \mathrm{D} \times 16^{\prime} \mathrm{W}$.

## COMPLETE

$98^{50}$
NO MONEY DOWN


# Lafayette 3-Way 15 inch H-Fi Speaker SK-215 

MASSIVE 5 LB CERAMIC MAGNET<br>3 INCH MAIN VOICE COIL

Custom Built in England to Lafayette's Rigid Specifications

- Free-Edged Cone Suspension
- 12 OB/Octave Cross-over Network with High Frequency Level Control
- Precision Pressure-Oriven Horn-Loaded Tweeter with Aluminum Diaphragm \& Coil

Lafayette combined the finest British craftsmanship and advanced acoustic design to bring you this outstanding 3 -way $15^{\prime \prime}$ speaker. The SK-215 utilizes a patented concentric twin-gap magnetic system with a massive 5 lb . Super efficient, double duty cylinderical ceramic magnet. Woofer, middrange radiator and speaker are axially mounted to achieve unexcelled, efficient wide-range speaker performance. With a cone resonance of 25 cps , the woofer section is vacuum constructed by an exclusive process and features a virtually free.edged cone suspenslon that ellminates standing waves and surround resonances. An automatic mechanical crossover separates bass and mid-range frequencies at 2000 cps to a highly stable mid-range radiator. A 12 db per octave LC crossover network provides smooth transition at 5000 cps from mid-range to a prectsion pressure-driven horn-loaded tweeter employing an aluminum diaphragm and coll in a self-aligning assembly with air chamber and phase equalizer. This crossover has a high frequency constant impedance L-pad level control for matching of sound to room acoustics and individual listening tastes. SPECIFICATIONS: Cone Resonance, 25 cPS ; Overall Frequency Response, $20.20,000$ tastes. SPECIFICATLONS: Cone Resonance, 25 cps; Overall Frequency Response, $20.20,000$
cps; Magnet Welght, 5 lbs.; Magnetic Flux Denslty, over 250,000 Maxwells; Crossover
 3 inches Tweeter voice Coil Diameter, 1 inch; Impedance, 16 Ohms. Dimensions: $61 / 2^{\prime \prime}$ overall depth; $15^{1 / /^{\prime \prime}}$ diameter. Shpg. wt., 30 lbs . SK-215WX

- Repairs which become necessary due to manufacturing defects will be made by Lafayette at no charge during the Guarantee period.

SEE PAGE 414 FOR FULL DETAILS

## The <br> "Big 8 " <br> from Lafayette

## Superb 8-Inch 3-Way High Fidelity Speaker. Natural Balance-Distortionless Performance. Brilliant Sound Reproduction.

## Precision Crafted in England to Lafayette's Rigid Specifications

## PERFORMANCE SPECIFICATIONS

- Frequency Response: 35-20,000 CPS - Cone Resonance: 45 CPS - Magnet: $13 / 4$ Lb. Alcomax - Voice Coil: $3^{\prime \prime}$ Diam. Flux Density: 175,000 Gauss - Impedance: 16 -Ohms - Power Handling Capacity: 25 -Watts 2,000 CPS Mechanical Crossover 5000 CPS Electronic - Crossover With Builttn Brilliance Control - Specially Developed "Rigidflex" Free Edge Cone Suspension - Die-Cast Frame
- New Compréssion - Driver Tweeter
LAFAYETTE'S "BIG 8 "-The remarkable quality and performance of this speaker now
makes it possible to get a truly brilitiant and rich sound from an $8^{8^{*}}$ speaker. With almost
uncanny ability, the sk-212 easlly recreates the entire musical spectrum from 35 to 40,000
cps; achieving a standard of natural balance distortlonless performance and supero tran-
sient response. Every musical tone is there--from powerfiul orchestral passages and deepest
organ tones to the most delicate of solos.
precision engineered and constructed to meet Lafayette's uncompromising specifications
by master English craftsmen, the SK-212 Incorporates the latest design and construction
features. This excellence of design is best demonstrated by its 3 inch voice coill, $13 / 4 \mathrm{lb}$.
Alcomax magnet and special "rigidflex" tree edge cone suspension. Woofer, midrange
radiator and tweeter are axially mounted to provide wide range speaker performance. A
mechanical crossover separates bass and midrange frequencies at 2,000 cycles, while 5,000
cycle electrical crossover provides a smooth transition from midrange to a newily developed
compression driver tweeter. A high frequency ievel control allows matching of sound to
indlividual taste and room acoustics. Shpg. wt., $112 / 2$ lbs.
SK-212
Net 34.95


# the lafayette trihelix 



Recreates The Entire Audio Spectrum With Coneert Hall Faithfulness - The Lafayette "Trihelix" represents a major breakthrough in three way speaker design. Fresh engineering concepts have resulted in a single 10 -inch speaker designed expressly for use in bookshelf size enclosures, that delivers a quality of performance with the unmistahable feel, presence and clarity of a 3.way speaker system. The "Trihellx" is in effect a complete threeway high-fidellity speaker system, with three mechanically and electronically independent speakers mounted within a single 10 -inch frame.
Although they are individual units the 2 -inch tweeter and 5 -inch midrange speakers have been especially designed to compliment the woofer. Special treatment of the cones and cone edges with polyester resins provides an even distribution of mid and high frequencies cone edges with polyester resins provides an even dition peaks of resonances. To minimize interaction between the three cones both the without peaks of resonances. To minimize interaction between the three cones botion the
midrange and tweeter units are mounted eccentrically or off center in relation to the midrange and tweeter units are mounted eccentrically or off center in relation to the
woofer. In addition the midrange and iweeter are completely enclosed by a specially designed baffle. These unusual design features result in effectively eliminating intermodulation distortion due to interaction between woofer, midrange and tweeter cones-a common fault in conventionally designed 3 -way speakers.
The specially treated woofer cone employs a revolutionary "conical stiffener" located at the apex of the cone in order to stiffen the diaphragm and elliminate "breakup," thus providing a true piston action. This carefully designed cone-stiffening procedure, in addition to its very hish comptiance, enables the wooter to deliver a smooth, crisp, sollo bass that balances naturally against a crystal clear midrange and natural treble. A bult-in lectrical crossover network with crossover points at 1500 cos and 5000 cos, allows each speaker to reproduce its portion of the audio range smoothly and efficiently. An adjustable brilliance control permits matching of sound 10 room acoustics.
SK-180 $10^{\circ}$ ' Lafayette "Trihellx" shipg. wt., 8 lbs. Imported
Net 32.50
SB-62W Adaptor Board To Fit SK-180 To 12" Cutout

## LAFAYETTE ELIPTOFLEX ${ }^{\text {® }}$ BOOKSHELF EMCLOSURE WITH SK-180 $10^{\prime \prime}$ TRIHELIX 3-WAY SPEAKER

NO MONEY DOWN

An ideal combination of speaker and enclosure that furnishes optimum 3-way speaker performance. Eliptoflex enclosures are finished on all four sides for vertical or horizontal placement. Shpg. wt., 32 lbs .

# NEW! LAFAYETTE 3-WAY 12 INCH "SLENDER-LINE" HI-FI SPEAKER 



The Latest Advanced Techniques Have Been Incorporated In This New Lafayette 3 Way "Slender-Line" Type Speaker

## AN OUTSTANDING PERFORMANCE VALUE

## - Only $31 / 2$ " depth - can be mounted in virtually any "thin-type" cabinet

- Special low-resonance wooter cone
- Independent horn type super tweeter for wide dispersion of highs
- Frequency response $30-18,000 \mathrm{cps}$ - Free air resonance 45 cps
- Total flux density - 21,500 gauss - Total flux - 93,000 Maxwells
- 8 uilt-in mechanical crossover at $1,800 \mathrm{cps}$ and e ectrical crossover at 5000 cps
- Power handling capacity - $\mathbf{2 0}$ watts, peak 40 watts
- Impedance 8 ohms - Heavy duty die cast trame
- Complete with brilliance level control
- Superb transient response

This new superb 3-way "slender-line" 12" high fidelity speaker incorporates the latest advanced techniques in speaker design. Constructed to Lafayette rigid specifications, the Lafayette SK-260 is an unbelievable value offering rich, brilliant sound reproduction. Engineered to falthfully reproduce the complete audio spectrum from 30 to $18,000 \mathrm{cps}$, this fine speaker is but $34{ }^{\prime \prime}{ }^{\prime \prime}$ in depth, can be mounted in virtually any thin-type cabinet or shelf type enclosure. incorporates a special low-resonance woofer cone, for clean natural bass response without boom, mechanical mid-range,
and Independent horn-type tweeter for wide dispersion of highs. Offers full-bodled mid-range and quallity high frequency response enabling you to hear all the fine transients and high notes of the higher frequencles. Features heavy. duty die-cast frame. Built-in mechanical crossover at 1,800 cps and electrlcal crossover at 5,000 cps. - Power handling capacity 20 watts, peak 40 watts. Complete with brilliance level control. Impedance ohms. Shpg. Wt., 10 lbs Imported.
SK-260

# LAFAYETTE 2-WAY 12 INCH "SLENDER-LINE" HI-FI SPEAKER 

## MODEL <br> SK-255 ONLY <br> 

- Dual Cone Construction
- Heavy Duty Magnet
- 2" Edgewound "Voice Coil"
- Frequency Response: 20-13,000 cps
- Shallow Depth for Custom Mounting


## 2 for 26.95

[^2]
# LAFAYETTE ULTRA-LINEAR SK-128 ${ }^{\circ}$ FULL RANGE 8-Inch BIAXIAL SPEAKER with Acoustic Tweeter Baffle Design 

The SK-128 combines the best features of a multiple speaker system in one compact and economical unit. It offers full, even coverage of the entire audible range, with no distortion or coloration to mar your listening pleasure. The specially treated wooler cone has a unique "Conical Stiffener" at the apex which, coupled with its high compliance, enables the cone to operate in a pistonlike manner-delivering a clean, powerful bass response. The 2 -inch tweeter has its own voice coil and magnetic field. Special treatment of cone and cohe edge provides even distribution of the high frequencies, with no peaks or resonances. The unusual off-center mounting of the tweeter and its eliptical baffle minimizes interaction between tweeter and woofer and insures an overall response free of intermodulation distortion. Electrical crossover from the woofer cone to the tweeter unit is provided by a bullt-in network. An adjustable brilliance control permits matching of sound to room acoustics Efficiency of the speaker is such that it will operate from any amplifier with an output of 1 watt of more. Installed in a bass-reflex type of enclosure, It performs outstandingly, and is recommended for all high-quality music systems-whether monaural or stereophonic. SPECIFI. CATIONS: Dverall Response: $20-20,000 \mathrm{cps}(40-16,000$ $\mathrm{CDS} \pm 3 \mathrm{db})$. Free air Resonance: $\mathbf{4 5 - 6 5} \mathrm{cps}$. Impedance 8 ohms. Power Rating: 20 watts integrated Program Ma terial, Crossover: $2,500 \mathrm{cps}$. Overall Olam. 88 s $_{2}{ }^{\prime \prime}$. Overall Depth: $5^{11} \mathrm{~s}_{2}{ }^{\prime \prime}$. Baffie cut-out: 7192". Rugged, vibrationfree speaker frame with color coded screw-type terminals for quick, easy connection of amplifier leads. Shpg. wt.. 5 lbs . Imported
SK. 128 Full Range 8" Biaxial Speaher............Net 19.50


Eccentric Tweeter Mounting \& Unique Elliptical Baffle Completely Eliminates Interaction Between Woofer \& Tweeter

NETWORK


Polyester resin tweeter edge treated

Tweeter
with baffle

- 20 TO 20,000 CPS (40 TO 16,000 CPS $\pm 3$ DB) HIGH EFFICIENCY - HIGH EXCURSION WOOFER WITH UNIQUE "CONICAL STIFFENER" HANDLES HEAVY BASS PASSAGES WITHOUT "DOUBLING"


## LAFAYETTE MINI-DUCT ${ }^{*}$ BOOKSHELF ENCLOSURE WITH SK-128* $8^{\prime \prime}$ ULTRA-LINEAR SPEAKER

The perfect answer for those who demand realistic sound reproduction even where space is limited. Two of these systems are Ideal for stereo. Beautifully finished on all 4 sides for horizontal or vertical placement. Shpg. wt., 28 lbs.

Speaker System in Walnut
SY-455WX Speaker System in Oiled Walnut
SY-403WX Speaker System in Mahogany
SY-347WX Speaker System in Unfinished Birch For 3 Sided Finish Only

Net 39.50
Net 39.50

Net 39.50


Net 37.50

## CHECK THESE PHENOMENAL SPECIFICATIONS

## FAMOUS LAFAYETTE MINI-DUCT ${ }^{\circ}$ BOOKSHELF ENCLOSURE WITH SK-130 $8^{\prime \prime}$ WIDE-RANGE SPEAKER

A combination that rivals the performance of much larger speaker systems. This fine enclosure assures optimum performance from the SK_130. Only $23 \mathrm{~W} \times 111 / 2 \mathrm{H} \times 111 / 8$ " O -ideal for mounting in a bookcase or record shelf. Finished on 4 sides in a'variety of fine furniture finishes. Shpg. wt., 27 lbs.
SY-420WXM Mahogany
SY-421WXM Walnut
SY-458WXM Oiled Walnut
SY-415WXM Unfinished for 3-Sided Finish only
Net 36.95
Net 36.95
Net 36.95
Net 33.95
ASTONISHING FIDELITY from a speaker of this size and modest price. Designed and finished with typical British craftsmanship, the SK. 130 features an especially designed hyperbolic cone with a plastic surround suspension for wide compliance performance. Bass response is robust and full bodied, while the midrange and highs are virtually transparent, with never a trace of shrillness or harshness. The excellent wide-range response of the $\mathrm{SK}-130$ make it ideal for stereo when used in pairs or perfect for use as a high quality extension speaker. Overall Diam. $81 / 8^{\prime \prime} \times 4^{\prime \prime}$ Deep. Baffle cut-out $71 / 8^{\prime \prime}$. Rigid vibration-free frame is equipped with screw type terminals. Imported SK. 130 Shpg. wt., 3 lbs.

Net 12.95

- Cone Resonance: 55 cps
- Voice Coil: 1-Inch
- Impedance: 160 hms


SK-130

## LAFAYETTE ULTRA-COMPLIANCE 2-WAY SPEAKER SYSTEM

## MODEL SK-124



## Exceptional Fine Performer

- Frequency Response $40-16,000 \mathrm{cps}$
- Especially Designed Vented, Tuned Duct Type Enclosures
- Unique Mechanical 2-Way Speaker With Extra Heary Magnet
- Enclosure Finished on 4 sides
- Excellent For Stereo

[^3]$\qquad$



If true-fidelity in music is important to you ...........

## LAFAYETTE HIGH COMPLIANCE 3-WAY BOOKSHELF SPEAKER SYSTEM IN FAMOUS MINI-DUCT



NO MONEY DOWN

- FREQUENCY RESPONSE FROM BELOW 35 to $\mathbf{1 8 , 0 0 0}$ CPS - ADVANCED DESIGN $8^{\circ}$ HIGH COMPLIANCE WOOFER WITH 1 LB. MAGNET \& $1 y_{2}^{\prime \prime}$ VOICE COIL PLUS $6^{\prime \prime}$ MIDRANGE PLUS $3^{\prime \prime}$ TWEETER - 3-WAY LC ELECTRONIC CROSSOVER NETWORK - PERFECT FOR STEREO - IN AMAZING MINI-DUCT ENCLOSURE FINISHED ON ALL FOUR SIDES

Lafayette designers have succeeded in achieving a standard of performance formerly associated with very large speaker systems. The Lafayette Mini-Duct bookshelf enclosure is employed with advanced Hi-Compliance speaker design-both enclosure and speakers have been carefully engineered and matched in efficiency for a precise musical blend and balance. An unusualiy full, clean low frequency response is provided by the specially designed $8^{\circ}$ woofer with an exceptional response response characteristic. The Hi-Compliance woofer cone is suspended by a new type of tabric edging permitting extremely wide cone excursions; the true piston action of the cone plus the use of a 1 tb , magnet and $11 / 4^{m \prime}$ voice coil not piston action of the cone pius the use of a to. magnet and to eliminate distor. only provide a high efficiency bass response but also serve io eliminate distor tion and glve excellent transient response. Both the $\quad$ Midrange speaker and $3^{\text {" }}$ Tweeter have completely sealed rear housings to prevent back radiation and interaction with the woofer. The 6 db per octave LC electronic crossover network crossing over at 750 cps and $5,500 \mathrm{cps}$ employ separate balance controls for the midrange and tweeter, thereby providing precise control for balancing the speaker system to room acoustics and individual listening tastes. Handies up to 25 watts of integrated program material. Impedance $8-16$ ohms. Dimensions are $23 W \times 111 / 2 H \times 111 / 8 \sim 0$. Fine veneer finish on 4 sides. Complete with easy to follow speaker assembly instructions. Shpg. wt., 33 ibs .
SY-457WXM OILED WALNUT 3.WAY SPEAKER SYSTEM .......................... Net 52.40 SY-375WXM MAHOGANY 3-WAY SPEAKER SYSTEM ................................. Net $\mathbf{5 2 . 4 0}$ SY-375WXM MAHOGANY 3-WAY SPEAKER SYSTEM Net 52.40
Net 52.40 SY-376WXM WALNUT 3-WAY SPEAREW SY SPEAKER SYSTIEM.....................Net $\mathbf{4 6 . 9 5}$

## NEW! DUAL DIAMETER MAGNETS

Remarkable new development of dual diameter ( $O O$ ) directional grain Alnico $V$ slug magnets, in use in the 8 oeing Jets. All Lafayette speakers on this page are equipped with DD mag-
 nets except
ventional Alnico V .

## 12" COAXIAL HI-FI SPEAKER

$12^{\prime \prime}$ Alnico Y PM with $1^{\prime \prime}$ volce coil and heavy one piece cone. Speclally designed 3"Alnico V PM iweeter completes this combination speaker. Range 40 to 15,000 cps. $8 u i l l_{\text {t.in }}$ high pass filter. Power rating: 12 watts. 6.8 oz. Ainico $\forall$ magnet. Impedance 8 ohms Shpg, wt., 8 lbs.
SN-93W
Net 8.75

## 12" THREE-WAY HI-FI SPEAKER

This new 3-way speaker answers the needs of many hi-fi enthusiasts. Featuring an 8 oz. magnet it has a froquency response of $35-17,500 \mathrm{cps}$. The elliptical tweeter gives improved sound dispersion over cylindrical types. Voice colls diam-1 $1 / \mathrm{s}^{\prime \prime}$, Impedance 8 ohms. Plated steel frame finished in brown baked enamel. Has 4 way bind. ing posts. Shpg. wt., 61/2 Ibs.
SK-163:
Net 11.95
NEW! $2 \times 6^{\prime \prime}$ ELLIPTICAL TWEETER

A new wide-angle dispersion tweeter with frequency response from $2500-16,000$ cps. Will handie up to 20 watts audio power. Voice coil diameter $3 / 4^{\mu}$ with Alnico-v magnet. 8ullt-in crossover. Because of small size, this speaker can be easily mounted in many existing baffles. Depth $240^{\prime \prime}$. Shpg. wt., $61 / 2$ lbs. SK 184*

## 6" MID-RANGE SPEAKER

An excelient mid-range direct-radiator type speaker for installation in 3-way or 4-way speaker systems. Gives clean, distortion-free reproduction at rated Gives
power. Features closed back to eliminate interaction power. Features closed back to eliminate interaction
with sound waves generated from other speakers in the same enclosure. Rated power handling capacity 10 watts. Frequency response from 700 to 7000 cps . Magnet weight: 3.16 oz . Voice coil impedance: 8 ohms . Plated steel frame finished in brown baked enamel. Has 4 -way binding posts. Shpg. wt., 3 lbs.

Net 5.25

## 15' HI-FI WOOFER

## - 2 L8. ALNICO MAGAET

- 20 TO 5000 CYCLES-35 WATTS

This efficient $15^{\circ}$ low freouency woofer incorporates many exciusive features. For original eouipment or replacement, it provides highly efficient extended low-frequency response. Ideal for assembiling 2- and 3 -way speaker systems. Handles 35 watts of audlo power. Frequency response $\pm 2 \mathrm{db} 20 \mathrm{CPS}$ to 1000 Dower. Frequency response $\neq{ }^{2} \mathrm{db} 20$ CPS to 1000 CPS, and
bafling. Voice coll dia. $2^{\circ}$. Impedance 8 ohms. 31.5 bafling Ainico $V$ magnet. " Finished in beautiful orown enamel. Cone is seamless type, permanently bound to voice coll. Has 4 -way binding posts. Shpg. wt., $131 / 4 \mathrm{lbs}$. Cone Resonance 45 cycles
SK-67w"
Net 23.95

## 12" Hi-FI WOOFER

### 21.5 O2. ALNICO V MAGNET- 25 WATT

Provides efficlent, extended low-frequency response of $\pm 5 \mathrm{db}$ from 35 to 8000 CPS, and features 25 watts of power handling capacity. Periect for high-fldelity installations or for modernization of older eauipment. Ideal for assembling 2. and 3-way speaker systems at a budget price. Enclosed magnet structure-completea budget price. Enclosed magnet structure-completely dust-proof. Compliance of outer cone and inner spider carefully calculated for best bass response. 21.5 oz . Alnico $V$ magnet, $11 / 2^{\prime \prime}$ dia, voice coll, 8.0 hm impedance. All exposed surfaces are finlshed in beautiful brown ename!. Has 4 -Way binding posts. Cone Resonance 50 cycles. Shpg. wt., 8 lbs. Sk. 68

## 12" HI-FI WOOFER <br> WITH 2 POUND MAGNET

- 30 Watts
- 20-2500 Cps
- 80 omm Voice Coll Impedance
- Speaker resonance at 30 cps .

This sturdily constructed $12^{\prime \prime}$ Woofer is rated at a full 30 watts audio power. Frequency response from 20 to 2500 cps with the speaker resonant frequency at 30 cps . Quallty construction techniques provide an accordion type, specially treated edging to add to cone life. Rugged cone construction prevents break-up. 8y using special wire materlai in the voice coll circult the chance of overheating is minimized. A heavy 2 ib . Alnico $V$ magnet and $2^{\prime \prime}$ diameter voice coil permit uniform performance over the entire speaker excursion. Plated steel frame finished in brown baked enamel. Has 4 way binding posts. Shpg. wt., $101 / 2$ lbs. SK-182*

Net 22.95

## $8^{\prime \prime} \mathrm{HI}-\mathrm{FI}$ <br> WIDE RANGE SPEAKER

## 50-13.000 CPS

Answers the need for a good quality but moderately priced speaker with a range of $50-13,000$ cycles. An extremely smooth single cone reproducer - ideally suited for HI-Fi systems. Excellent for limited spacegood overall balance--power handling capacity: 10 watts-6.8 oZ. Alnico $V$ magnet-freauency response, 50-13,000 CPS when properly baffled. Rim treatment on cone minimizes possibility of diaphragm distortion. Voice coil impedance: 8 onms. Cone Resonance 85 cycles. Plated steel frame finished in brown baked enamel. Has 4 -way binding posts. Shpg. wt., 4 los. SK-69

Net 6.25

## $8^{\prime \prime}$ MID-RANGE SPEAKER

- loEAL wIDE-RANGE BUDGET SPEAKER - PERFECT FOR STEREO - RESPONSE 70-12,000 CPS BUILT-IN CROSSOVER - 10 WATT RATING J.16 OZ. MAGNET A fine coaxial high fidellty speaker with built-in electronic crossover. Rated at 10 watts, with response of $70-12,000 \mathrm{cps}$. Rigid, non-resonant frame, high efficlency 3.16 oz . Alnico 5 magnet, speciallytreated long Ilfe cone, and gasket-sealed magnet cover contribute to lts fine performance. 8 ohm voice coil. Shpg. wt., 6 libs. SK-92.

Net 5.95

## ECONOMY $8^{\prime \prime}$

## COAXIAL HI-FI SPEAKER

Ideal for use with tweeter and crossover networks to make up a 2- or 3 -way system. This $8^{\prime \prime}$ mid-range speaker is capable of producing undistorted response down to 350 cDs, the crossover frequency. Back is enclosed. Power handling capacity: 25 watts. Frequency response $350 \cdot 13,500$ cycles. Recommended to crossover at 5000 cycles to a tweeter. Cone resonance 150 cycles. Impedance: 8 ohms. Plated steel framed finished in brown baked enamel. Has 4 -way binding finished in brown ba
posts. Shpg. wt., 4 lbs.
KK. 74
Net 6.50

## 15" COAXIAL <br> HIGH-FIDELITY SPEAKER <br> 30-20,000 CPS-25 WATTS- <br> 10 02. ALNICO $V$ MAGNET

Superb standard of performance throughout the audio spectrum. Consists of specially designed $15^{\circ}$ woofer with a full $5^{\prime \prime}$ high-frequency tweeter, coaxially mounted, and $1 \mathrm{~V} / \mathrm{a}^{\text {" }}$ voice coll. Extra strong magnets are used in both units for highest efficiency and smoothest response. The $15^{\prime \prime}$ woofer gives the deep, rich bass notes sponse. The $15^{\prime \prime}$ woofer gives the deep, rich bass notes
for complete satisfaction. Frequency response: 30 20,000 CPS. Crossover frequency: 3500 CPS. Handling capacity: 25 watts, 35 watts peak; Impedance: 8 ohms. Rugged seamiess cone, finished in attractive nonmarking brown hammerloid enamel. Has 4 -way binding posts. Shpg. wt., 13 lbs. Cone Resonance 45 cycles. SN-135w

Net 17.95

## 12" COAXIAL SPEAKER

Same construction, wattage and magnet weight as SK-135W Illsted above), except tweeter is $31 / 2{ }^{2}$. Response: $40-20,000 \mathrm{cps}$. Cone resonance 50 cycles. SK.136 ............. Shpg. wt., 12 lbs. ............. Net 14.95


6.25


### 5.95



### 6.50


17.95

## LAFAYETTE SPEAKERS \& SYSTEMS

## LAFAYETTE $8^{\prime \prime}$ WOOFER

- Rated 20 watts - Free edge cone - 14.7 oz. alnico $V$ magnet
- High Compliance - 35 to 7500 cps

Ideal for 2 or $3^{3}$ way systems where space is at a premlum, this $8^{\prime \prime}$ woofer provides coverage from 35 to 7500 cps . The 14.7 oz . magnet is extraordinarily heavy for this size speaker insuring the efficiency needed for good clean response. Other features include free edge, high compliance cone, 20 watt power dissipation, voice coll dust cover. Cone resonance 50 cycles, 8 ohm V.C. Has 4 -way binding posts. Shpg. wt., $41 / 2$ lbs.
SK-164
Net 10.95


## ROYAL DANISH 12" DUAL CONE SPEAKER - HIGH FLUX DENSITY

You will be pleasantly surprised at the quality of thls fine speaker which lafayette brings you at this low price. Two cones are mounted on a single axis, and provide remarkable wide range frequency response from 45 to $14,000 \mathrm{cps}$. Reproduction of program material is exceptionaliy lifellke throughout the entire range. An exclusive, special formula cone rim treatment eliminates cone rim resonance and distortion. Also, the damping offect Improves transient response and prevents "hangover." Overall depth response and prevents "hangover." Completely enclosed. $1^{\prime \prime}$ diameter voice coli with an impedance of 8 ohms. Shpg. wt., 6 lbs. Imported.
SK-86. 12" Dual Cone HI-FI Speaker
LaFAYETTE $8^{\prime \prime}$ EXTENDED RANGE SPEAKER

- 45 to $13,000 \mathrm{cps}$
- SKIVER ROLLED CONE FOR SMOOTH RESPONSE
- 3.16 OZ. NEW TYPE MAGNET

Here is a price buster for the budget-wise hi-fi music lover. This is an extended range domestic speaker whose high sensitivity is achieved through a new hi-efficiency magnetic circuit. Ideally sulted for medium and low level monaural or stereo reproduction. It has a 1 " voice coll with 8 ohms impedance and will handle musical peaks of 10 watts. Size: $0.0 .8 \mathrm{Kan}^{\prime \prime}$; Mtg. hole dimensions $7 \mathrm{YKa}^{\circ}$;
 way binding posts. Shpg, wt., 2 los. SN. 106

## NEW! $12^{\prime \prime}$ WIDE:RANGE HI-POWER HIFFI SPEAKER

- 21.5 02. ALNICO 5 mAGNET - RATED AT 30 - Ideal For P.A. Work WATTS - RESPONSE 20-14,000 CPS O SEAMLESS CONE SPECIAL HEAVY-DUTY CONSTRUCTION Incorporating a dual-diameter (see top of facing page) magnet of high-flux density Alnico 5, this new wide-range $12^{2 "}$ PM high fidelity speaker is rated at 30 watts and is excellent for use with any hi-fl system. With proper baffing, frequency response is 20 to $14,000 \mathrm{cps}$. Special constructional features include a $11 / 2^{\prime \prime}$ volce coil; epoxy bonding of the voice coll to the seamiess cone; completely dust-proof enclosed magnet structure; fibreto metal bonds made with heat under extreme pressure; heavy cast-metal frame; metal parts heavily cadmium-plated, with exposed surfaces covered with a handsome mar-resistant hammerloid finish. Voice coll mar-resistant hammerioid impedance 8 ohms. Dutside diameter 12K"", mounting diameter $11 \%_{0}{ }^{\prime \prime}$, depth $63 / 4^{\prime \prime}$. Colorcoded 4-way bInding-post terminals. Shpg. wt. 7 lbs.
Sn. 137



## LAFAYETTE 6"x9"

 WIDE RANGE SPEAKER
## - NEW HIGH SENSITIVITY MAGNETIC

 CIRCUIT- 55 to $14,000 \mathrm{cps}$


## - SPACE SAVER CONSTRUCTION

This hi-fi extended range speaker is definitely a must for add-on stereo application and lends itself to many new applications such as adding hi-fi to autos, TV, radio sets, and also where space limitations are paramount such as shelves, horizontal enclosures etc. Thls speaker consists of a special skiver rolled cone with a 1 " voice coll with 8 ohm impedance which can handle musical peaks of 10 watts. The shell is of brown enameled heavy plated steel with a 3.16 oz . magnet of new design which produces extra high sensitivity. It has an outside diameter of $67 \mathrm{~g}^{\prime \prime} \times 9 \mathrm{x}_{0}^{\prime \prime}$ Mig. hole dimensions are $45 /{ }^{\prime \prime} \times 6 \%{ }^{\circ}$ " Depth is $3 \%$ ". Has 4 way binding posts. SK-107

Shpg. wt., 2 lbs.
Not 4.0

## 4 OUTSTANDING 3.WAY SYSTEMS <br> A SELECTION OF ECONOMY-PRICED SYSTEMS WITH 15" OR 12" WOOFERS-8" MID-RANGE SPEAKER-COMPRESSION HORN TWEETER-CROSSOVER NETWORK



EXPLODED VIEW SHDWS HDW SYSTEMS MDUNT IN CABINET-CABINET NOT INCLUDED-SEE PAGE 74

AS LOW AS A SO MONEY DOWN BUY ON TIME-SEE PAGE 412

ALL WOOFERS WITH 2-LB. MAGNETS-CLOSEO BACK MIO-RANGE. COMPRESSION TWEETERS-CROSSOVER WITH BRILLANCE AND PRESENCE CONTROLS

## 15" SYSTEMS

For the high fidelity enthusiast who desires real quality periformance with multiple components, we belleve this is an outstanding system. Consists of the SK-6TW $15^{\prime \prime}$ woofer with a 2.16 . magnet to cover mid-range frequencles, (both described fully on page 58 mat the HW-7 high frequency tweeter with acoustic lens faith fully reproduces the highest audible frequencies, and the model LN-5 3 -way inductance-capactitance networks with continuously varlable presence and brilHance controls to adjust tone balance to your personal taste. (HW-7 and LN-5 described on page 60). SY-93wxM Shpg. Wt., 25 lbs
aLTERNATE SYSTEM
Same system as above except in place of the HW .7 the Some syst as above excapibed on page 60 is . the SY-462Wxm Shpg. wt., 25 lbs.

## 12" SYSTEMS

Where a somewhat smaller system is desired due to lack of space, Lafayette offers a system identical to the $\mathrm{sy}-93 \mathrm{WxM}$ described at left except that in place of the SK-67W 15" woofer the model SK-182 $12^{\prime \prime}$ woofer described on page 58 is supplied. The full efficiency of reproduction and quality is maintained by thls fine speaker with its 2 lb . magnet. Power is sllghtly less than the $15^{\prime \prime}$ speaker but is still a pientiful 30 watts-considerably more than is needed in almost any installation. Shpg. wt., 22 lbs .
5Y-460wxm
Net 54.50

## alternate system

Identical to the above except in place of the HW-7 tweeter, the model SK-253 tweeter described on page 60 is used. Shpg. wt., 22 lbs.
SY-461WXM



## NEW LAFAYETTE-GOOOMAN "OOME LENS"

## ULTRA HIGH FREQUENCY COMPRFSSION TWEETER

- Omni-directional compression tweeter for 2, 3, and 4 way systems. Has built in crossover at 5000 cps . Handles frequencies from 5000 cps to beyond limits of human audibility - Handles up to 30 watts of power
A new "Dome Lens" ultra-high frequency hemispherical compression tweeter made in Engiand by fine Eritish craftsmen. Designed to give full $360^{\circ}$ sound dispersion, quality high frequency response of sharp transients and percussive sounds. Can be used to add orilliance to extended range speakers in 2 way systems. Ideal for super tweeter applications in 3 \& 4 way systems. When used in a complete system, this super tweeter can handle up to 30 watts of power. Capable of handling fre this super tweeter can hande up to 30 watts of power - Capable of handing fre crossover at 5000 cps . Voice coil impedance $8-16$ ohms. Dimensions: $40 \times 242^{\prime \prime}$ length. Shpg. wt., $11 / 2 \mathrm{lbs}$. Imported from England.


## CONE TYPE METAL-CASEO HI-FI TWEETER

- HANDLES 20 WATTS - FREQUENCY RESPONSE 2000.16,000 CPS

An excellently designed cone type tweeter particularly efficient in the higher end of the audio spectrum where ordinary cone tweeters tend to lose clarity and volume. With this tweeter you will be able to hear all the fine transients and high notes of the higher frequencies. Entirely enclosed in metal case with base for standing by ifself. Bracket is supplled for mounting in cabinet. Requires crossover network such as Lafayette LN-28 Diameter $3^{\circ}$. Depth $2 \% 0^{\prime \prime}$. Voice coll impedance $8-16$ ohms.
HK. 3 Hi.FI Tweeter. Shpg. wt., 4 lbs. Imported
Net 5.95
NEW LAFAYETTE LOW COST HI-FI TWEETER Frequency Respanse $\mathbf{3 , 0 0 0 - 2 0 , 0 0 0}$ Cps.
A low cost Hi-Fi tweeter designed for mounting in most existing baffles and cabinets. Reproduces high frequencies without losing clarity and volume. Even sound dispersion is insured by use of a round cone. Metal cased with completely sealed rear housing. Frequency response $3,000-20,000$ cps. Diameter $23 / 4$ inches. Depth 1 ITh inches. Voice coll impedance 8 ohms. Shpg. wt., 1 Ib. Imported. SK. 171

Net 2.25


NEW! 2- and 3-way L/C CROSSOVER NETWORK

- 4 CROSSOVER FREQUENCIES: 350, 700, 2000-3000, 5000 CYCLES
- 6 CRossover COMbinations
- 2 or 3 way crossover
- attractive metal case


## - BUILT.IN BRILLIANCE \& PRESENCE CONTROLS

This versatile unit can be used either as a 2 -way or 3 -way 6 db per oclave network. You can use this network for a 2 -way system now, easily and quickly convert to 3 -way later. Six crossover combinations are avallable - 2 -way crossover with $2000-3000$ cycle or 5000 cycle crossover, and 3 way with crossover fre quencies of 350 and 5000,350 and $2000-3000,700$ and $2000-3000$ or 700 and 5000 cycles-a total of four different crossover frequencies! Sultable for 8-16 ohm speakers. The network is housed in an attractive metal case, suitable for mounting inside enclosure or leaving out in the open. Two level controls Brilliance and Presence controls-are mounted on the front panel. If desired, these level controls may be removed, along with the beautiful gleaming copper escutcheon plate, for external mounting; controls are wired with 3 -foot long leads. High quality components are used for long life and top performance. Shpg. wt., 6 lbs. Imported
LN.5 Lafayette L/C Crossove
Net 14.95 <br> \title{

## HI-FI TWEETERS \& <br> \title{ \section*{HI-FI TWEETERS \& CROSSOVER NETWORKS} 

 CROSSOVER NETWORKS}}


## MODEL 6

An outstanding 2．way speaker system that achieves su－ perlative bass response and provides extremely smooth performance from 32 to over $16,000 \mathrm{cps}$ ．Low frequency $12^{\prime \prime}$ speaker employs acoustic suspension principle． The high frequency cone－type direct radiator，utilizes a liquid butyl rubber suspension．Unusual mounting－ the woofer frame and magnet assembly are cast right on the front panel of the cabinet．This casting is con－ structed of a fiberglass－reinforced epoxy resin mate－ structed of a fubiglass－reinforced and steel tubing．In addition the tweeter is com． rial and steel tubing．In addition the tweeter is com－
pletely encapsulated into the front panel by means of a epoxy resin．Thus the woofer and tweeter are integrated Into the front panel which actually functions as part of the frames of both speakers．When the grillecloth is mounted and the panel is glued under pressure into the fiberglass filled cabinet，the cabinet itself becomes a structural part of the system．In addition to the woofer structural part of the syster，the speaker utilizes a 1500 CDS LC cross． and tweeter，the speaker utilizes a 1500 cps LC cross． over network with air－colls and oll－ilied capacitors．A
3 －position switch permits a 5 do variation in balance 3－position switch permits a 5 db variation in balance
between the high and fow frequency sections．Power handling capaclity is 75 watts．Impedance 8 ohms．Cabi－ net is constructed of $3 / 4^{\text {＂}}$ veneer plywood and measures $12 \frac{1}{6} \times 23 \frac{1}{2} \times 117 / 0^{\prime \prime}$ ．Shpg．wt．， 36 lbs ．
21 A 4406 WX Oiled Wainut
21 A 4405 Wx Walnut 21 A 4403WX Mahogany 21 A 4404WX Korina 21 A 4407 WX Unfinished

Net 134.00
Net 134.00 Net 129.00 Net 129.00 Net 119.00


MODEL 4
An excellent performing two way loud－speaker system designed to faithfully reproduce throughout the entire audio range．The Low frequency section uses a 12 in ． acoustic suspension type speaker．The High frequency speaker is a small cone－type direct radiator．Crossover network provides independent level adjustment of 5db above 1500 cycles and also above 6000 cycles．High and low frequency sections may be connected separately． and low frequency sections may be connected separare 12 H ．Size： $121 / 2 \mathrm{Hx} 25 \mathrm{Wx}$ 1mpeda
21 A 4410wx Oiled Wainut
21 A 4409wx Walnut
21 A 4408wx Mahogany
21 4411WX Unfinished

## MODEL 10

The new Model 10 offers velvety smooth response，fol－ lowing a standardized curve within $11 / 2 \mathrm{db}$ ．A two speaker system with a special $10^{\prime \prime}$ high compliance woofer and djrect radiating cone tweeter，housed in a compact bookshelf enclosure．Audible coloration is pre－ vented through careful production and testing of compo－ nents．Operates with a 12 watt amplifier（up 1060 watts if desired）．Cabinet measures： $23 \%_{32} \mathrm{H} \times 11^{23} \%_{3} \mathrm{~W} \times 83_{4}{ }^{\wedge} \mathrm{D}$ ． Finished models，finished on all four sides．Impedance： 8 ohms．Shpg．wt．， 28 tbs．
21 a 4412 Wx olled Walnut
21 A 4413WX Walnut
21 A 4415wx Mahogany
21 A 4416WX Unfinished Birch

Net 231.00 Net 231.00 Net 224.00 Not 209.00

MODEL 10


## NEW MODEL 14

－Only 33／4＂Depth
－Uses 2 Specially Designed KLH Full Range Speakers

An exceptionally fine compact loudspeaker system designed to dellver superb sound in small living areas． Suitable for floor，wall，or bookshelf installation．The Model 14 has amazing bass reproducing capabilities． Incorporates two special compliant $3^{\prime \prime}$ full－range direct radiators controlled by a very high ratio of magnet power to cone lightness and a passive electronic net－ work which exactly matches your amplifier to the Model 14＇s low frequency power requirements．This results in a flat speaker response curve to a lower fre． quency than would otherwise be possible．Features low distortion and full frequency response．Impedance 8 ohms．For 12 watt amplifiers or larger．Size $14 \times 18 \times 33 / 4$ Shpg．wt． 17 lbs．
21 A 44i7WX Model 14 Oil WaInut
Net 49.50
21 A 44t8wx Model 14 Satin Wainut
Net 49.50


DUAL CONCENTRIC QUALITY HI－FI SPEAKERS


12＂
$15^{\prime \prime}$ MONITOR

A $15^{\prime \prime}$ dual concentric speaker of unusual design．Cone of woofer acts as part of exponential horn for iweeter Frequency response from 23 to $20,000 \mathrm{cps}$ impedance is 16 ohms．External crossover network with $1,000 \mathrm{cps}$ crossover．Handles 50 watts with less than $2 \%$ inter． modulation dlstortion．Flux density 13.500 gauss in tweeter， 13,500 gauss in woofer．Resonant frequency 32 cps． $9^{\prime \prime}$ deep， $141 / 2^{\prime \prime \prime}$ ．Overall diameter， $151 / 4^{\prime \prime}$ 32 cps． 91 wx deep， $14 \sqrt{2}$ ．Overall diameter，Net 179.00 21 A 6401wX
NEW＂12＂Monitor． $12^{\text {＂}}$ version of above． 30 watts power handling capacity．Shpg．wt．， 20 lbs ．
21 A 6402 WX ．．．．．．．No Money Down
Net 138.00
belvedere senior stereo enclosure
Designed for the $15^{\prime \prime}$ Tannoy Dual Concentric loud－ speaker．Constructed of $11 /{ }^{\prime \prime}$ bonded material，using dual damped port principle．Available in oil walnut finish．Size： $311 / 2 \times 23^{3 / 4} \times 16^{\prime \prime}$ deep．Shpg．wt．， 76 lbs ． 21 A 6425 wx Net 85.00 21 A $6425 w x$
Betvedere Jr．Enclosure－designed for Tannoy 12＂ Belvedere Jr．Enclosure－designed for fannoy
speaker systems．Avallable in oll wainut finish．Size： speaker systems．Avallable in ol
$26 \times 18 \times 12^{\prime \prime}$ deep．Shpg．wt．， 40 fbs．
21 A 6426 WX
Net 65.00

## SPEAKER SYSTEMS by FISHER

## MODEL KS－1 SLIM－LINE SPEAKER SYSTEM KITS

The Fisher KS． 1 Stim－IIne Loudspeaker System lends it－ self to virtually any type of instaliation．It can be wall mounted，placed on the floor or in a bookshelf．Com－ posed of a 10 －inch free－piston woofer with 30 CPS free－air resonance and $4-\mathrm{lb}$ ．magnet； 5 －Inch Acoustiglas packed midrange unit．LC type 3．way crossover network． 8 －ohm impedance．Supplied complete with cabinet；grille cloth．AcoustiGlas padding and instructions．Size： 18 Wx $24 \mathrm{Hx} 53 / 4$＂D．Shpg．wt．， 26 lbs.
21 A 3670 WX KS－18 Speaker System Kit
Unfinished
1 3671 WX KS－1W Speaker System Kit．
Wainut
Net 59.50

1 A 3672 WX Net 64.50 Unfinished

KS－1AB As above，Factory Assem Net
mbled．
Net

Net 84.50
21 A 3573 WX KSAW A．．a．．．．．．．factory Assemben
Walnut
Net 89.50

## MODEL XP－4A FREE－PISTON 3－WAY SPEAKER SYSTEM

Professional－type 3 －way bookshelf system with a totai of 4 speakers．Features Fisher＇s self－damping long travel $12^{\prime \prime}$ bass speaker design，Has dual matched wide dispersion $5^{\prime \prime}$ mid－range speakers and a $2^{\prime \prime}$ hemisphari－ cal cone high frequency speaker with non－directional treble response． 3 －way LC crossover network．Response： $28-20,000 \mathrm{cps}$ ．Impedance 8 ohms．Size： $241 / 2 \mathrm{~W} \times 14 \mathrm{HX}$ $121^{\prime 2} 2^{\prime \prime}$ ．Shpg．wt．， 60 lbs ．
21 A 3674 WX Scandinavian Walnut
Net 199.50 21 A 3675 WX Unfinished Birch

Net 189.50

A true book－shelf speaker offering outstanding smooth－ ness and absence of coloration of program material． The $\mathrm{S}-3$ is a three－way acoustic compliance system con－ sisting of a specially designed，low resonance wooter， mid－range unit and a wide－dispersion super－tweeter． mounted in a matched enclosure．The unique high fre－ quency design permits the full range to be clearly heard quency design permits the full range to be cleariy heard through most of the room，instead of being contined to a small critical space．Impedanc
$113 / 4 \times 93 / \mathrm{a}^{\prime D}$ ．Shpg．wt．， 37 Ibs ．
21 a 6080 Wx Olled Walnut
Net 134.95
21 A s081wX Unfinished Hardwood
Net 119.95

# Jensen QUALITY HI FIDELITY SPEAKERS NEW JENSEN "SIGMA" UNITARY LOUDSPEAKERS 



MODEL SG-80 8" DUAL CONE SPEAKER
A fine low-cost speaker for a variety of space saving enclosures. Sturdy die cast housing whth depth of only $35 \%$ ". Features "Flexair" woofer with extended bass response down to 40 cycles. Concentrically mounted auxiliary cone provides clear highs to 12,000 cycles. Uses "Syntox-6" ceramic magnet. Power handling capacity 12 -watts, 24 -watts peak. Impedance 8 ohms. Shpg. Wt., $43 / 4 \mathrm{lbs}$.
2144355
Net 16.50

## MODEL SG-84 $8^{\prime \prime}$ 3-ELEMENT COAXIAL SPEAKER

A quallty speaker of true coaxial design. Provides smooth natural sound. The "Flexalr" woofer is combined with an auxiliary radiator and direct radlator tweeter for a response from. $40-14,000$ cycles. Has H-F balance control. "Syntox-6" magnet. Shallow depth, H-F balance control. "Syntox-6" magnet. Shallow depth,
only $3 \%$ inches. Bullt-in crossover at $2,000 \mathrm{cps}$. Power capacity 12-watts, 24-watts peak. Impedance 8 ohms. Shpg. Wt., 544 lbs .
21 . 4356 ............. No Money Down .............. Net 24.50
MODEL SG-88 8" COAXIAL SPEAKER

## WITH COMPRESSION ORIVER HDRN TWEETER

A supert 2 -way $8^{\circ}$ speaker with a unique compression driver horn-loaded tweeter. Exceptionally well balanced response over the frequency range of 35 to $\mathbf{1 5 , 0 0 0}$ cycles. High compliance "Flexair" woofer and built-In electrical crossover at 2,000 cycles. Has H -f, balance electrical crossover at
control, heavy, rigid die-cast fryme, "Syastox-6"
ceramic contro, heary, irid die-cast rame, "Syntox-6" ceramic
magnet. Power handing capacity, 20 -watts, peak. Im. pedance 8 -ohms. Shpg wt., $51 / 2 \mathrm{lbs}$. 21 A 4357

Net 36.50

## MODEL SG-210 12" 3-ELEMENT COAXIAL SPEAKER



A smooth sounding true 2 -way coaxial speaker with a unique horn-loaded low crossover reflex horn tweeter and high compllance resonance "Flexair" woofer. Excellent response from 20-15,000 cycles. Has high energy

A completely new line of Jensen 8 -inch and 12 -inch loudspeakers expertly engineered for top performance to the most advanced modern standards.

- Attractively-styled, Rigid Die Cast Housings
- FLEXAIR High-Compliance Low-Resonance Feature On Most Models
- High Energy SYNTOX-6 Ceramic Magnets Throughout
- Exclusive Low-Distortion Low-Crossover Thra-Bore Compression Tweeter Models
- Built-in Electrical and Acoustical Crossovers On Multiway units
- H-F Controls For Cabinet Mounting On All Multiway Units
- Coded 8inding Post Terminals Make Stereo Connections Easy
- Complete Range of Types And Prices To Suit Every Application


## JENSEN WOOFERS, MIDRANGE SPEAKERS AND TWEETERS



Power 20 watts, $50-3000 \mathrm{cps}$, 1 mp ., 8 ohms. Magnet $1 / 2 \mathrm{Ib}$. DP-Alnico-5. Sizes $81 / \mathrm{s}^{\prime \prime}$ O.D.; $4^{\prime \prime} \mathrm{D}$; Cutout $69 / \mathrm{m}^{*}$ dlameter. Shpg. wt., 3 lbs.
21 A 4363
Net 0.75
P8-QF 8" FLEXAIR WOOFER $^{\prime \prime}$
$8^{\text {8 }}$ FLEXAIR woofer with high compliance and long, IInear travel. a full $\$ /{ }^{\prime \prime}$ ". Provides smooth, low-distortlon bass down to 36 cycles in a "bookshelf"' size enclosure. Use with P35-VAH or RP-1038 tweeter. Crossover, 2000 cycles. Power rating, 25 watts average program, Magnet wt., 3/4 lb. Alnico 5, 16 ohms. Shpg. wt., 51/4 ibs.
2144389
Net 22.50

## RP-103B TWEETER

Compresslon horn type. Power 30 watts. $2000-15000 \mathrm{cps}$. Imped., 16 ohms. size: $3^{n \prime} H_{i} 7 H^{\prime \prime} W_{i} 6 K_{0}{ }^{" D}$. Cutout $2 \times 6^{\prime \prime}$. Shps. Wt., $31 / 4 \mathrm{lbs}$.
${ }_{27}{ }_{27}$ Shps. Wt., 436
Net 18.50

## P-35VAH TWEETER

Dlrect radiator type. Power 15 watts. 2000-14000 cps. 1 mp ., 16 ohms. Size: $31 / 2 H 8 W \times 21 / \mathrm{B}^{\prime \prime} \mathrm{D}_{\text {. Cutout }} 31 / \mathrm{s}^{\prime \prime} \mathrm{dia}$. Shpg. wt., 1/4 lb.
21 A 4386
Net 4.00
JENSEN FAMOUS MIDRANGE SPEAKERS
Ps.RM $8^{\prime \prime}$ M-F Unit. For upper-bass range, or midd-range In 3 -way and 4 -way systems. Range $200-4000$ cycles. Power rating with network 40 watts, impedance 16 ohms. $1 / 21 \mathrm{Ib}$. DP-Alnico- 5 magnet. Size $81 / \mathrm{s}^{\circ} 0.0 . \times 5^{\prime \prime}$ deep. Baffle cutout $63 / 4^{\mu}$ dia. Shpg. wt., $31 / 4 \mathrm{lbs}$.
21 1. 4367
Net 12.50
PE-UM $8^{\prime \prime}$ M-F Unit. Low cost m-f unit, direct radiator type for $600-4000$ cycle range. Closed housing prevents backside radiation. Power 30 watts. Impedance 16 ohms $81 / \mathbf{s c}^{\prime \prime} 0.0 . \times 41 / 2^{\prime \prime}$ depth. Baffle cutout $63 / /^{\prime \prime}$. Shpg. wt., 3 lbs.
2144388

## ADVANCED DESIGN SPEAKERS

 FOR SLIMLINE SYSTEMS
## 3-P/W1 WOOFER

The 3-P/WI woofer was especially deslgned for performance in modern compaot enclosures. Has Jensen's molded "Polytec" plane piston radiator. Range 20 to 600 cycles. Long travel design to handle lowest frequencies without to handie lowest "requencies without
distortion. 1y/4 ib. "Syntox- 6 " magnet. Rigid die cast frame with the shallew construction. Only 2 'K ${ }_{4}^{\prime \prime}$ deep behind baffle. Baffle cutout $\boldsymbol{q}^{\prime \prime}$. Overall dam. eter, $1014^{\text {" }}$ Must be used with full divid. ing network. Impedance 16 ohms, Power rating 25 watts.
21.4370 Shpg. wt., $94 / 2$ Ibs. Net 39.75 TW- 22 TWEETER
A professlonal type tweeter which covers the frequency range from 2,000 to 14,000 cycles with smooth, transient free fidellty. May be used at crossovefree fidelty. May be used at crossover
frequencles from 2,000 to 4,000 cycles. Has dle cast housing and protective acoustic screen. Mounts in $31 / 2^{\prime \prime \prime}$ cut-out with radiator close to flush front In $3 / 4^{*}$ baffie. Depth only $1 \mathrm{Ka}^{\prime \prime}$ behind baffle. Impedance 16 ohms. May be used in speaker systems rated up to 25 watts. 21 A 4371 Shpg. wt., $11 / 4$ lbs. Net 9.75

## Jensen HI-FI SPEAKER SYSTEMS



## DELUXE 3-P SYSTEMS MAKES SOUND BETTER 7 WAYS

- 3-P Woofer Has Flat Plane Radlator-Efficlent, $\mathbf{1 0 0 \%}$ Effective Surface - Fivo All-New Speakers Blend For Smooth, Fulf Frequancy Range Coverage - Improved Transient Response - Two Layer Moided "Poirtec" Woofer Piston Suppresses Vibrational Modes - Woofer Plston diameter Precisely Proportioned to Match Enclosure Acoustics - Tiny Beads Give "Polytec" Radiator (in all speakers) Light, Interlocking, Rigid Cell Construction and Tough Surface - Flat Piston and Shallow "Syntor-5" Ceramic Magnet Give Unusually Slim cabinetry with Bies Speaker Sound


MODEL 3-P/1 "SLIM SHELF" 5-SPEAKER, 4WAY SYSTEM

- A new "slim shelf" system with advanced, full-size 3-P performance
Here's a brand new look for the popular "shelf" speaker system, with half the depth for a new, slim outline which simplifies placement and decor integration. Consists of a 3-P/W1 woofer with a 600 cycle crossover, a midrange speaker with 4,000 cycle crossover, two tweeters with crossovers at 10,000 cycles, and an ultra-tweeter for 10,000 cycles and above. Includes H-F balance control. Total frequency range is 25 cycles to the upper hearing Ifmit of the listener. A palr of "slim shelf" systems will provide the very finest stereophonic sound redroduction. Impedance, 8 ohms; power ratling, 25 watts. Measures only $137 / 8 \mathrm{H} \times 25 \mathrm{~W} \times 51 / 2 \mathrm{mD}$. Selected olled walnut veneer case with rattan grille and oak trim strips. Shpg. wt., 33 lbs.
21 A $4301 w x$
Net 119.50


> NEW! MODEL TF-4 "SLENDER-SHELF" 5-SPEAKER 4-WAY SYSTEM

A refreshingly new 5 -speaker 4 -way system combining full size with a slender format. The TF-A is beautifully designed in genulne olled watnut with custom-woven. twotone grille fabric to harmonize with any decor. Response ranges from 25 cps to inaudibility-with crossovers at $600,4,000$ and 9,000 cycles. Sound comes from expert blending of a high-compllance Flexalr woofer with heavy Syntox. 6 ceramic magnet, a special $8^{\prime \prime}$ midrange, two tweeter units, and a Sono-Dome ultra-tweeter for highs that soar beyond audibility. High frequency control on back. Power rating 25 watts. Impedance 8 ohms. Size $16 \times 251 / 2 \times 81 / 2^{\prime \prime}$. Shpg. wt. 42 lbs.
21 A 4308WX TF4, olled Walnut
Net 114.50
21 4308wx TFA OHinlshed
Net 07.50



## 3-P/2 "SUPERSLIM" 5-SPEAKER, 4-WAY PANEL SPEAKER SYSTEM

## - Combines slimness with full-dimension performance

- Can be hung on wall

The 3-P/2 puts the accent on slimness in the extreme, whlle retaining the fulfdimenslon performance of larger models. Only $3 \mathrm{~s} / \mathrm{a}^{"}$ in depth, this "supersilm" system opens up exciting new possibilities in decor. Can be hung tastefully on a wall, placed where a speaker never could be before. Employs the same complement wall, placed where a speaker never could be before. Employs 5 speakers as that in the $3-P / 1$, with H-F balance control. Impedance 8 ohms; of 5 speakers as that in the $3-P / 1$, with $H-F$ balance control.
frequency range, 25 cycles to the upper hearing limit. Sedected walnut veneer case with rattan grille and oak trim strips. Measures $28 \% \mathrm{H} 214 / 4 \mathrm{~W} 3 \%{ }^{\prime \prime} \mathrm{D}$. Shpg. wt. $361 / 4 \mathrm{lbs}$
21 4303wx
Net $\uparrow 39.50$
FAMOUS TF-3 4-SPEAKER 3-WAY
SHELF SYSTEM
a remarkable combination of value and high quallty performance, the TF- 3 features full bass, fine balance and complete frequency range. Components: $10^{\prime \prime}$ special woofer with 1 lb . Ainico. 5 magnet, two special $31 / 2^{\prime \prime}$ midrange units, and the same ultra.tweeter as in the 3-P series. Crossover at 2,000 and 10,000 cycles; includes H-F balance control. Speaker power rating: 25 watts. HIgher rated amplifiers adjusted for reasonable listening levels may be used; adequate living room sound may be ortalned with a 10 watt amplifier. Impedance, 8 ohms. Dimensions; $131 / 2 \mathrm{H} \times 23 \% / \mathrm{Wx}$ obtained with a $11{ }^{\circ} \mathrm{D}$. Shos. wt. 38 tbs.

Net 79.50
21 â $4305 W \mathrm{X}$ In Contemporary olled Walnut

## TR-9 "SLIM-SHELF" 3-SPEAKER 3-WAY SYSTEM



This fine Jensen speaker system is all-new modern design inside and out, combining wonderful ear appealing sound with slim proportioning and two-toned har monizing custom grille fabric that is delightful to the eye. Place it on any surface or hang it on the wall to blend perfectly with your decor. Components: special $3-P / W I 10^{\prime}$ " Woofer with powerful $13 / 4 \mathrm{Ib}$. "Syntox-6"' Ceramic Magnet, M-80 $8^{\prime \prime}$ Mid-3-P/W 10 Woll "Ultra-Tweeter." Cross over at 600 and 4,000 cycles; includes H-F ralance control. Frequency range: 30 cycles to beyond audibility. Power ratingi 25 balance control. Frequency range: 30 eycles to beyond audibility. Power ratingi 25 watts. Adequate living room sound obtainable with 25 lbs .
21 A 4308 WX Olled Walnut Finish Only
Net 89.50

## DO-IT-YOURSELF SPEAKER SYSTEM KITS

## KTF-3 SPEAKER KIT

Provides the necessary speaker components for TF-3 performance in a home-buil or separately bought cabinet. Kit includes the wooter, two miorange units and weeter of the TF-3 system. Includes M-F/H-F batance control, crossover network, wiring cable. enclosure vent tube and full instructions for enclosure construction. 2144354 Shpg. wt., $111 / 2$ lbs. Not lllustrated

Net 57.15

## 3 P/K SPEAKER KIT

For the economy and fun of the do-it-yourself project, the $3 \mathrm{P} / \mathrm{K}$ kit provides all the speaker components and instructions necessary to make your own superb 3-P system. Easy to connect . no soldering. Includes 3-P woofer, M-80 midrange, 2 TW-40 tweeters, E-10 SONO-DOME T.M. ultra-tweeter, M-1473 crossover network with H-F control and speaker leads, vent-tube for enclosure. Imp. 8 ohms. 21 A 4310wx Shpg. wt., 20 lbs. ... Not Illustrated

## FAMOUS ElectroWoice WOLVERINE COMPONENTS



## MODEL LT12 LOW-COST 12" 3-WAY SPEAKER

Today's most spectacular loudspeaker value! In every detall of design and construction the LT12 reflects superb engineoring and careful workmanship-Sets a new standard of quality in the low-price field! Combines design features of Wolverine full-range speakers, plus "Deep-Dish" cone and HFI tweeter. Frequency response $40 \cdot 18,000 \mathrm{cps}$. Program power handling capacity 20 watts, 40 watts peak. Free-space resonance 65 cps . ElA sensitivity 45 db . Impedance 8 ohms. Mechanical crossover $2,000 \mathrm{cps}$, electrical crossover $3,500 \mathrm{cps}$. Bullt-in crossover. Three-position switch provides positive control of tonal balance. Size: $121^{\prime \prime}$ diameter $\times 51 / 2^{\prime \prime}$ deep.
21 A 3051 Shpg. wt., 15 lbs.
Net 31.36
MODEL LSIS. Blg speaker sound at small speaker price! This popular $15^{\prime \prime}$ speaker features a heavy-duty die-cast frame, a mid-range cone providing treble response up to 13,000 cps, plus an edgewise-wound voice coll. Frequency response: 35 to $13,000 \mathrm{cps}$. Power handling capacity: 20 watts.Cone Resonance: 50 cps . Impedance: 8 ohms. Mechanical crossover frequency: 4500 cps . Size: $151 / 0^{\prime \prime}$ diameter x $611 / z^{*}$ deep. Shpg. wt., 12 lbs. 21 A 3052

Net 25.97
MODEL LS12. Shallow design fits anywhere! Famous 12" speaker with dual-cone design provides unusually clean frequency response. Has a heavy-duty frame and precision-ground internal parts. Low silhouette styling permits wall or ceilling installation. Frequency Response: 40 to $13,000 \mathrm{cps}$. Power handling capacity: 20 watts. Cone Resonance: 65 cps . Impedance: 8 ohms. Mechanical crossover frequency; 4500 cps . Sizei $121 / 4^{\prime \prime}$ diameter $\times 31 / 2^{\prime \prime}$ deep. Shpg, wt., 6 lbs . 21 A 3054

Net 20.58
MODEL LS8. Ideal for HI-FI in every room! A tavorite $8^{\prime \prime}$ speaker built to the same high standards as the $12^{\prime \prime}$ and 15" units above, the LS8 features include: Heavyduty dre-cast frame; edgewise-wound long-throw voice coll; Low silhouette design. Frequency response: 55 to 13,000 cps. Power handling capacity: 20 watts. Cone resonance 75 cps . Impedance: 8 ohms. Mechanical crossover frequency: 6000 cps . Size: $83 / 4$ diameter $\times 31 / 2^{2 \prime \prime}$ deep. Shpg. wt., 5 lbs. 21 A 3055

Net 19.11
MODEL HFI STEP-UP KIT. Complete VHF tweeter kit. Adds sparkling brilliance to LS8, LS12 or LS15. Extends response to 18,000 cps, Improves dispersion for stereo. Complete with driver, combined crossover-level control, wiring, mounting hardware and instructions. Requires $13 / 4 \times 41 / 4^{\prime \prime}$ baffle opening.
21 A 3056 Shpg. wt., 3 lbs.
Net 24.50
MODEL MF1 STEP-UP KIT. Mid-range kit to complete Wolverine 3 -way system. Improves presence and dispersion from 1,000 to $3,500 \mathrm{cps}$. Complete with horn, driver, crossover-level control, wiring and instructions. Requires $91 / 2 \times 3^{\prime \prime}$ baffle opening.
21 A 3057 Shpg. wt., 5 tbs.
Net 28.42

## DELUXE SPEAKERS by Electrozorice



## TRX SERIES

## INTEGRATED 3-WAY SPEAKERS

MOOEL 12TRX-Overall diameter $121 / 4^{\prime \prime}$. Resonance. 40 cps .25 watts. Magnet weight, $31 / 3$ Ibs. Response, $30-15.000 \mathrm{cDS}$ in recommended ARISTOCRAT enclosure. Mechanical crossover, $2500 \mathrm{cps}_{\text {; electrical cross- }}$ over, 3500 cps . Depth behind panel, $8^{*}$. Impedance. 16 ohms. Sens. rtg. 49 db . Shpg. wt.. 32 lbs. 21 a 3001wx

Net 127.40
MODEL 12TRXB-3-Way assembly completely wired with HF control, overall diam. $121 / 44^{\prime \prime}$. Resonance 45 cps .20 watts. Magnel wt., $i \mathrm{lb}$, , 2 oz. Frequency Response, $35 \cdot 15.000$ cps - Mech. crossover, 2000 Cps: bullt-in electrical crossover 3500 cps. Depth hehind panel $6!1_{0}^{\prime \prime}$. 1 mp ., 16 ohms. Sens, Rtg, 46 db . Shng. wt. 14 tbs.
21 . 3058
Net 68.60
MODEL 15RX8-Integrated 3 -way assembly completely wired with HF Control. Overall diam. 151/0". 20 watts. Magnet weight $1 \mathrm{lb} ., 2 \mathrm{oz}$. Response $30-15,000$ cps. Mech. crossover 2000 cps . elect. crossover 3500 cps. Imp. 16 ohms.
21 A 3002 WX Shoe. wt. 17 . lbs .
Net 83.30

TWEETER, MID-RANGE HORN AND ACCESSORIES


MODEI T350 AdS METY HETER
MODEL 1350 -Adds very high frequencles with exira sensitivity. For use in multiway systems having extended bass range. Response to 21 kc . Sens. Rtg. 60 db .2 lb . magnet. 16 ohms. Recommended crossover $3500^{\circ} \mathrm{cps}$. Horn. $71 / 2^{\prime \prime}$ long, $27 / \mathrm{a}^{\prime \prime}$ wide. Pot $31 / 2^{\prime \prime}$ diameter, Overall depth $41 / 2^{\prime \prime}$. Shpg, wt., $91 / 2 \mathrm{lbs}$. 21 A 3061

Net 63.70

## MID RANGE HORN

MODEL 8HD Diffraction Horn. New principle provides perfect dispersion of high frequencles through a $120^{\circ}$ solld angle. Actual cutoff 600 cPs , crossover 800 cPs , ellminating cutoff disturbances. Made of fiberglass. $37 / 4 \times 14^{1 / 4 W x} 71 / 2 " D$. Mounting hardware included. Shpg. wt. 4 lbs
21 A 3062
Net 18.62

## RADAX SERIES COAXIAL SPEAKERS

## MODEL SPBB RADAX SUPER-EIGHT- $8^{\prime \prime}$ speaker. Reso-

 nance, 55-65 cps. 20 watts. Response $35 \cdot 13,000 \mathrm{cps}$. 16 ohms impedance, Sens. itg. 45 db . Cross-over, 600 cps. 1 lb. Alnico $V$ magnet $83 / \mathbf{}^{\prime \prime}$ diam., $7^{\prime \prime \prime}$ baffle opening ${ }^{21 \text { A } 3059}{ }^{43 / 0^{\circ \prime} \text { depth behind oanel. Shpg. Wt., } 9 \text { lbs. }}$ Nét 3136MODEL SP12B RAOAX TWELVE- 12* speaker. Resonance, 40.50 cps .20 watts. Response, $30 \cdot 13.000 \mathrm{cDs}$. 16 ohms impedance. Sens. Itg. 46 db Crossover. 4500 cps. 1 lb . Alnico $V$ magnet. $12 \mathrm{~V}^{\prime \prime}$ " diameter. 11" baffe ovening $6^{*}$ depth behind panel. 21.3060 Shpg wt. 12 lbs. Net 36.75

MODEL SP 12 RADAX SUPER-TWELVE-12" Speaker Resonance, $35.45 \mathrm{cps}, 25$ watts. Response, $30-13,000$ cps. 16 ohms impedance. Sens. reg. 48 db . Cross over 4000 cps . 3 lbs. Alnico $V$ magnet. $1214^{\prime \prime}$ diameter, $11^{\prime \prime}$ baffle ooening $71 / 2^{\prime \prime}$ depth behlnd panel. 21 A 3003 wx Shpg. wt., 25 lbs.

Net 88.60

## THE NEW Electrō/oice CORONET SERIES

## Beautifully-siyled, Pre-finished

 Loudspeaker System Kits Finished In Oiled Walnuf. Can Be Assem bled In 20 Minutes Without Tools.

Designed around the famous Electro-Voice, Wolverlne CORONET I-Includes Michigan Model MC8 full-range and Michigan $8^{\prime \prime}$ extended.range loudspeakers, the $8^{\prime \prime}$ loudspeaker. Frequency Response 45 to $14,000 \mathrm{cps}$. carefuliy designed Coronet phase inverter enclosure offers outstanding performance. Distinctive styling blends harmoniously with any decor; compact enclosure may be placed on any shelf or table. Provisions made for optional compression tweeter if desired. High efficiency permits use with any amplifier. Enclosure shipped knocked down; complete assembly can be made In 20 minutes with absolutely no tools required. Finished in Olled Walnut with brass trim. Complete instructions for use printed on system back panel. Dimensions: $221 / 4 \mathrm{~W} \times 121 / 2 \mathrm{H} \times 10^{7} / \mathrm{a}^{\prime 2} \mathrm{D}$.

Impedance، 8 ohms. Shpg. wt., 26 lbs 21 A $3011 w x$

Net 39.00
CORONET II-Includes Wolverine Model LS8 full-range $8^{\prime \prime}$ loudspeaker. Frequency Response 50 to 13,000 cps. Impedance: 8 ohms. Shpg. wt., 26 lbs

## 21 A 3012 WX

Net 43.50
CORONET III-includes Electro-Volce Model SP8B fullrange $8^{\prime \prime}$ loudspeaker. Frequency Response: 40 to 15,000 cps. Impedance: 16 ohms. Shpg. wt., 31 lbs . 21 A 3013wX

Net 54.00

## FAMOUS ElectroWoice ENCLOSURE KITS



INTERAAL CONSTRUCTION SHOWING HOW SPEAKERS MOUNT

KD6

## KD6 ARISTOCRAT SPEAKER ENCLOSURE KIT

Includes all the materials required to construct the famous Aristocrat enclosure, one of the most popular enclosures ever made. Extends the bass response of many types of $12^{\prime \prime}$ coaxial and triaxial speakers up to one full octave. Efficlency and power handing capacity will both increase. Clear grained korina exterior wood surfaces have been pre. pared for finishing. Includes grilie cloth, all necessary hardware and complete step-by-step instructions. Less decorative grille and trim. complete step-by-step in
SIze: $19 \mathrm{~W} \times 295 / \mathrm{H} \times 15 \%$ " .

Net 41.16
KD9 Marquis Speaker Enclosure Kit. Build-lt-yourself version of Marquis enclosure. Similar to Aristocrat except for along-the-wall horn-loaded enclosure. Kit includes all necessary parts and instructions. Wood is unfinished clear-grained horina veneer. Size: $19 W \times 295 / 6 \mathrm{H} \times 141 / 2 " \mathrm{D}$. 21 A 3007wX Shpg, wt., 38 lbs. ak6 Decorative Trim Kit. Addition of this grille and trim set will provide for your Aristocrat or Marquis enclosure a smart finished appearance. Lacquered antique brushed brass crossbar grille. 21 a 3004 W Shpg. wt., 3 lbs.

Net 5.39


## THE $\mathcal{V}^{\text {TWO }}$

Combines a special $12^{\prime \prime}$ woofer in totally sealed enclosure and remarkable new compression-type high frequency driver utlizing ring diaphragm design for complete elimination of diaphragm deformation. Steptype level control provides balance adjustment for any listening room. Frequency Response: 30 to $15,000 \mathrm{cps}$. listening room. Frequency Response: 30 to $15,000 \mathrm{cps}$.
Crossover Frequency: 800 cps. Power Handling Capactly: Crossover frequency: 800 cps. Power Handing Capacity:
30 watts program, 60 watts peak. Impedance: 8 ohms. 30 watts program, 60 watts peak. Impedance: 8 ohms.
Finished on all four sides. Size: $25 \mathrm{~W} \times 14 \mathrm{H} \times 131 \mathrm{y}^{\prime 2} \mathrm{O}$. Shpg. wt., 28 lbs.
21 A 3014wx Model 2. Olled Walnut
21 A 3015WX Model 2. Mahogany

Net 105.84
Net 105.84


Complete new 3 -way system with $12^{\prime \prime}$ ceramic magnet wooter for extraordinary bass. Outstanding mid-range provided by new compression driver and diffraction horn combination utllizing ring-type diaphragm. $5^{\prime \prime}$ dynamic cone tweeter provides extremely smooth high frequency response. Three.way etched circuit board crossover with crossover frequencies at 800 and 3500 cps . Two steptype level controls for exact listening room balance. Frequency Response: 30 to 20,000 cps. Impedance: 8 onms. Power Handling Capacity, 30 watts program, 60 watts peak. Finished on all four sides. Size: 25 Wx 14 Hx $131 / 2^{\prime \prime} 0$. Shpg. wt., 30 lbs.
21 a 3016 Wx Model 4. Olled Walnut 21 A 3017wx Model 4. Mahogany

Net 133.28
Net 133.28

Features a special $18^{\circ}$ foam cone woofer for superior low frequency response, a speclally designed $8^{\prime \prime}$ driver for the 250 to 800 cos mid-bass frequencies, a new mid-range driver and diffraction horn combination for the 800 to 3500 cDs range and a deluxe compression VHF driver and diffraction horn for high frequency res. ponse. A 4 -way electrical crossover provides smooth transition from. one driver unit to the next. Frequency Response: 30 to $20,000 \mathrm{cps}$. Power Handling Capacity: 35 watts program, 70 watts peak. Impedance: 8 ohms nominal. Size: $32 \mathrm{~W} \times 30 \mathrm{H} \times 171 / 2^{\prime \prime} \mathrm{D}$. Shpg. wt., 107 lbs.
21 , Jo1awx Model 6. Olled Walnut ............ Net 323.40
21 a 3020WX Model 6. Mahogany
Net 323.40

## MARQUIS 63 ENCLOSURE

- Produces Optimum Performance With Electro-Voice 12" Full-Range Speaker


The Marquis enclosure is designed to produce optimum results with separate 12 -inch Electro-Voice drivers, full. range coaxial, and extended range threo-way speaker networks. Compliance and cone resonance of E.V. speakers match exactly the characteristics of the cabinet. However, this enclosure also im. proves the oparation of other proves the speakers. Size: 19Wx $291 / 2 \mathrm{Hx} 151^{1 / 2}{ }^{\prime \prime}$. Shpg. wt., 27 lbs.
21. 3008WX Marquis 63 Enc. Olled WaInut .... Net 68.60 21. 3009 WX Marquis 63 Enc. Mahogany ......... Net 68.60


## THE PRINCESS

Genuine two-way system with two specially designed cone-type speakers. Unique $8 \times 12^{\prime \prime}$ woofer provides unusual bass response from an enclosure so small. New $5^{\prime \prime}$ tweeter provides smooth high frequency response to beyond $15,000 \mathrm{cps}$. Wide-angle dispersion. Frequency Responser 60 to $15,000 \operatorname{cps} \pm 5 \mathrm{db}$. Crossover Fre quency: 2000 cps. Power Handling Capacity, 20 watts program, 40 watts peak. Impedance: 8 ohms. Finished on all four sides. Size: $191 / 2 \mathrm{~W} \times 10^{5} 5 / \mathrm{H}^{4} \times 81 / 2^{\prime 2} \mathrm{D}$. Shpg wt., 17 lbs.
21 A-3010wx The Princess. Oiled Wainut ...... Net 51.94

Features an unusualiy rigid die.cast basket, heavy magnet, Diffusicone midrange and Sphericon super-tweeter. Woofer response down to 28 cps. Multielement midrange operates over the frequency range of $1000-3000 \mathrm{cps}$. Super-tweeter disperses highs over $120^{\circ}$. both horizontally and vertically. Tweeter has reflector baffle to prevent intêraction and possible intermodulation distortion between high and low frequencies. Cross-over network built-in, with brialliance control. Overall frequency response extends from 28 to $40,000 \mathrm{cps}$. Power rating 35 watts. Impedance 8.16 ohms. $13{ }^{3 \prime \prime}$ dlam., $6 \% /{ }^{\prime \prime \prime}$ deep. Shpg. wt., $10 \% / 4 \mathrm{lbs}$.

## Net 71.54 <br> DIFFUSICONE-8 8" EXTENDED RANGE DIFFAXIAL

Speaker designed for quality performance in very small enclosures. Dual horn loaded radial projector has wide spread. Frequency response $30 \cdot 15.000 \mathrm{cps}$. Rated 21 A 6753

Net 27.44

## DIFFUSICONE-12 12" FULL RANGE DIFFAXIAL

Speaker uses the patented multielement Diffusicone midrange and a quality woofer
cone on a very rigid irame, concentrically. Dual horn.loading at cone apez mproves cone on a very rigid irame, concentrically. Dual horn-loading at cone apex improves treble performance. Mechanical cross-over at 1000 cps . Frequency response 28.15 . 000 cps. Power rating 35 watts. Impedance 8.16 ohms. $13^{\prime \prime}$ diam., $65^{\prime \prime \prime}$ deep. Shpg. Wt. 9 lbs. 21A 6754
WOOFERS MID RANGE SPEAKERS, TWEET

## MODEL $3088^{\prime \prime}$ 3-WAY DIFFAXIAL SPEAKER

Employs an extra large voice coll for $8^{\text {a }}$ wooler, a patented Multielement diffusicone midrange, and a compresslon type tweeter with "reciprocating flare" wide angle horn. Built-in electrical cross-over at 5000 cps. Frequency response $30-17.000 \mathrm{cps}$.


Net 41.16

## MODEL 6201 12" DUAL RANGE COAXIAL

Tweeter projects through the center of woofer. Separate drivers are employed for woofer and compression type iweeter. Electrical cross-over at 2500 cps with brilliance control. Frequency response from $28-18,500 \mathrm{cps}$. Power rating 35 watts. Impedance 8.16 ohms . $13^{\circ \prime}$., $67^{\circ \prime \prime}$ deep. Shpg. wt. 10 Jbs. 21 A 6750

Net 56.60

## MODEL 315C SUPER 15' 3-WAY DIFFAXIAL

Woofer has double spired, antl-breakup diaphragm. Patented Dlffusicone midrange operates between lu00 and 5:00 cps. T.50 Hypersonic drlver is centered in a "reciprocating flare," wide angle super-tweeter horn. Midrange and treble have separate balance controls. Frequency response ranges from 25 cps to inaudibility. Power capacity 50 watts. Impedance 8.16 ohms. Bulttin LC cross.over. $154 / 2$ diam. $12^{\circ \prime}$ deep. Shpg. wt. $341 / 2$ lbs.
21 A 6770 WX
Net 152.88

MODEL C-8W 8" WDOFER. Budget•priced low or mid-range speaker. Freq. response, $50 \cdot 5,000$ cps. Impedance, onms. 25 -watt rating. Ainico $V$ Gold Dot ${ }_{21 \text { A } 6755}^{\text {maget. Depth, } 41 / 4^{\prime \prime} \text {. Shpg. wt. . Wet } 14.70}$

MODEL C-12HC $12^{\prime \prime}$ HIGH COMPLIANCE WOOFER. Dual voice coil construction. Impedance, 4.20 ohms. Freq. response $20 \cdot 3,000 \mathrm{cps}$. Rated at 50 watts. Cone resonance $20 \mathrm{cDS} .6 \%{ }^{\circ}$ deep. Shpg. wt., 9 lbs.
21 A 6756
Net 48.51
MDDEL C.15HC $15^{\circ}$ HIGH COMPLIANCE WOOFER. Employs Uniferron-7 magnet material. Response to 800 cps. Has dual material. Response to 800 cps . Has dual
voice coil. Impedance, $4-20$ ohms. $60-1$ watt rating. Depth, 84/4. Shpg. wt., $233 / 4$ 21 A 6771 wx

Net 87.71
MDDEL C.15W 15* DVC WODFER. TOD performing woofer using 6 lb . Alnico $V$ Gold Dot magnet. Rated at 50 watts. Re. sponse from below 25 to 1500 cps . Impedance, 4.20 ohms, $1042^{\prime \prime}$ deep. Shpg. wt., $263 / 4 \mathrm{lbs}$.
21 A 6772 WX
Net 83.30

## MID-RANGE SPEAKERS

COBREFLEX



COBREFLEX TWIN.FLARE HORN. Mid-range horn for 3 -way speaker systems. T. 30 driver recommended. 27 " exponentiallyflared air column permits crossover as low a 350 cps . $120^{\circ}$ horizontal $\times 60^{\circ}$ vertical dispersion. Die-cast a luminum. 13 fol' $^{18}$ throat. $101 / 4 \times 181 / 2 \times 91 / 4^{\prime \prime}$. Shpg. Wl. $101 / \mathrm{lbs}$.
21 A 6766
Net 23.67
MODEL C.BM 8" MID-RANGE SPEAKER. ideal for use as midrange unit in 3.way systems. Frequency response, 700 $5,000 \mathrm{cps}$. Power rating, 50 walts. Impedance, 8 ohms $4 \frac{1}{2}$ deep. Shpg. ${ }_{21} 1 .{ }^{31 / 2} 6767$. 21 A 6767

Net 16.61 MODEL H-600 MID-RANGE AND HIGH FREQUENCY HORN, Response, 600 cps to beyond audibility. $125^{\circ}$ horizontal and $55^{\circ}$ vertical dispersion. T-30 driver and N-2A network recommended. Takes any driver with standard $13 \mathrm{ig}{ }^{\prime \prime} 18$ throat. $73 / 4 \times 83 / 4 \times 43 / 4^{\prime \prime}$. Shpg. wt. $21 / 2$ los. 21 A 6768


MODEL T. 202 SPHERICON SUPER TWEETER. Operates from 3,000-40,000 cps. ( $\pm 2 \mathrm{db}$ to $22,000 \mathrm{cps}$ ). Domed phenolic diaphragm with spherical diffractor. Built-In network and brillance control. $120^{\circ}$ omnidirectional dispersion. 8 ohms. 30 watts. Shpg. wt., 3 lbs
21 A 6757
Net 24.45
MODEL HF- 206 HYPERSONIC TWEETER. $120^{\circ}$ horizontal and $50^{\circ}$ vertical dis. persion. High frequency response to persion. High frequency response to beyond audibility. N-2B network for
5000 cps crossover recommended. 8 $5,000 \mathrm{cps}$ crossover recommended. 8
ohms. 25.50 watts. $6 \times 3 \mathrm{~K}_{6} \times 6 \mathrm{Kic}^{\circ}$. Shipg, wt. $31 / 2 \mathrm{lbs}$.
2146758
21 A 6758 ...................... 32.34 MDOEL UXT-S SUPER TWEETER. COMpression driver has Ainico $V$ magnet, coupled to "reciprocating-flare" horn for $120^{\circ}$ horizontal $\times 50^{\circ}$ vertical dispersion. For use with N-2B network. Response, For use with N-2B network. Response,
$5,000.17,500 \mathrm{cDS}$. 50 watts, 8 ohms. $5,000.17,500 \mathrm{cps} .50$ watts, 8 ohms.
Size: $41 / 4 \times 21 / 2 \times 4^{2 \prime}$. Shpg. wt., $13 / 4 \mathrm{lbs}^{2}$. Size: $41 / 4 \times 21 / 2 \times 4^{\prime \prime}$. Shpg. wt., $13 / 4$ lbs.
21 A 6759 ..................... Net 20.58 MODEL 4401 TWEETEP. Sturdy one-piece die-cast "reciprocating-flare" horn. Response, $2,500-15,000$ tps. N-2B dividing network recommended Power rating, 25 watts. Impedance, 8 ohms. Dimensions: $6 \times 23 / 4 \times 6 \mathrm{~K}_{6}{ }^{\prime \prime}$. Shpg. wt.. 2 lbs . $6 \times 2 / 4866^{\circ}$. Shpg. wt.. 2 los. Net 17.64


MODEL T-30 MID-RANGE AND HIGH FREQUENCY DRIVER. FO USe with Cobraflex or H-600 horns. Response, $350-15,000$ cps. Capacity, 50 watts. 8 ohms. $1 / 8^{\circ *}-18$ throat. $34 / 2 \times 334^{\prime \prime}$. Shpg. wit. $23 / 4 \mathrm{lbs}$ 21 A 6761

Net 29.40
MODEL N.2A CROSSOVER NETWDRK. Use singly as 6 db/Octave 2 -way network op in pairs as $12 \mathrm{db} /$ octave network. Crossover: 350 or 700 cps @ 8 or $16 \mathrm{ohms} ; 700$ cps@ 4 ohms. $35 / 8 \times 31 / 4 \times 3^{*}$. Shpg. wt., $24 / 4 \mathrm{lbs}$.

## 21 A 6763

Net 17.64
MODEL N-2B CROSSDVER. NETWDRK. Similar to N-2A except crossover: 1250, 2500 or 5000 cps @ 8 ohms; 2500 or 5000 cps @ 16 ohms; 2500 cps @ 4 ohms. $356 \times 34 / 4 \times 3^{\prime \prime}$. Shpg. wi., $21 / 4$ lbs.
21 A 6764
Net 13.72
MODEL AP-8 BALANCE CONTRDL. Ideal for use with N-2A and N-2B networks. Suits $8-16$ ohms systems. Fits panels up to $3 / 4$ " thick. Shpg. wt., 702.
21 A 6765
oz.
Net 3.87

## THE ELEGANT Unicersitu, CLASSIC MARK II

 A superb acoustically designed cabinet, constructed of fine woods and veneers finished in hand rubbed oil walnut
## NEW "TRI-PLANAR" 3-WAY SPEAKER SYSTEM

- Only $13 / 4^{\prime \prime}$ Thin

A unique slender design with true wide-range hlgh fldelity reproduction. The frequency range of $45 \cdot 17,000 \mathrm{cps}$ is made posslble by 2 woofer panel radiators In push-pull having a diaphragm area of 234 square inches. $234^{\prime \prime}$ tweeter provides brilliant yet natural highs. Sound radiates from front and rear com. pletely surrounding the llstenep. Unit may be used horizontally or vertically with movable stand. Beautifully finished in oiled walnut with cone grille. Power rating 20 watts. Impedance $4-8$ ohms. Size $15 \times 23 \times 13 / 4^{\prime \prime} \mathrm{D}$. Shpg, wt., 13 los. rating 20 watts. Impedance 4.8 ohms. Mize 21 No Money Down ......................... Net 78.35

## NEW CLASSIC DUAL 12 3-WAY SPEAKER SYSTEM

- Response: 25-40,000 cycles

A deluxe 3-way system designed to approach the performance of the renowned classic Mark il at lower cost and In a floor-space-saving hi-boy style. Uses two $12^{\prime \prime}$ high compliance direct radiator speakers. One functions as a wooter down to 25 cycles, the other reinforces the woofer and also provides flawless mid range performance The wide dispersion Sphericon tweeter assures silky highs to 4000 cpsl Power rating 50 watts impedance 4.8 ohms. Includes brilliance to $40,000 \mathrm{cps}$ l Power rating, and presence controis. Acousticany engineered wat. 65 tbs.


Net 229.50

## SENIOR II BOOKSHELF SPEAKER SYSTEM

## - Finished on All 4-Sides

For natural, balanced sound-lows, middle tones, highs-all in an expanded requency range of $30-22,000 \mathrm{cps}$. Good looking too ... fits easily on a book then or filly or horizontally Features $12^{\prime \prime}$ woofer, $312^{\prime \prime}$ Mud-range Sphericon and
21 a 6705 WX olled Walnut
21 A 6706 wX Unfinished
UP TO 24 MONTHS TO PAY SEE PAGE 412

## CLASSIC II 3-WAY SPEAKER SYSTEM

University has adapted 3 of its finest speaker drivers for use in Its newly developed Classic System. These high quality components work in harmony delivering clean sound throughout the audio frequency range. To cover the lowest octaves a $15^{\prime \prime}$ heavy-duty, high compliance we woofer operation is restricted to woorer is employed. below 150 cps . Midrange emanates from an 8 direct radiator with an enclosed basket and a viscous treated cone. The Sphericon tweeter takes over at 3000 cps. System response: $15-40,000 \mathrm{cps}$. Power input 10 to 60 watts. Tastefully appointed cabinetry. Size: $35 \mathrm{~W} \times 281 / 4 \mathrm{HX}$ $171 / 2^{\prime \prime} \mathrm{D}$. Shpg. wt., 105 lbs.
21 A 670 iwx Oiled Walnut ........................ Net 295.00 21 A 6702wX Walnut

Net 295.00

## GOODMANS."PERFECTIONIST" SPEAKER SYSTEMS

12" SPEAKER SYSTEM

## 15" SPEAKER SYTEM

 ished on all sides in oil walnut with 18 K gold trim in front.70 lbs.

Moderately priced yet unique at any price, the GoodMod's C-30 perfectionist speaker system gives you max imum listening pleasure without boom or harmonic distortion Uses 5 speakers seated into the striking enclostortion. Uses The 12" bass unit employs a special "Magnaform" ure. The 12 whass unit empley produces full bass tones. All diaphragm which produces rich full bass tones. Are-
speakers produce linear performance with an exact frespeakers produce linear performance with an exact
quency range of 30 to $20,000 \mathrm{cps}$ and beyond to 35,000 quency range of 30 to $20,000 \mathrm{cps}$ and beyond to 32.000 watts peak instantaneous musical material. Compact cabinet is beautifully finished in oil walnut and ebony black frame highlighted by 18 K gold trim. Overall dimenslons, $24 \mathrm{~W} \times 16 \mathrm{Hx} 12^{\prime \prime} \mathrm{O}$. Shpg. wt., 50 lbs.


If you are looking for falthful sound, high efficiency and magnificent cabinetry then the Goodman's G40 "Perfectionist" Speaker System is for you. 5 newly designed loudspeakers have a frequency range of 25 to 35.000 cycles. The 15 " bass unit employs the exclusive "Mag. nafoam" plastic propagator to obtain maximum linear excursion and bass response without distortion at high power levels of 40 watts or over. A 900 cycle crossover power les with a new $8^{\prime \prime}$ mid-HF sealed back radiator. two operates wha new $31 / 2^{\prime \prime}$ tweeters and wide angle compression horn for smooth treble frequencles. Master-crafted cabinet fin.
$\square$ 2 0


[^4]
## SLIMFORM DEKORATOR



## AR－2a

The AR－2a is an outstanding 3 －way loudspeaker system that uses a $10^{\prime \prime}$ acoustic suspension woofer and a dual $5^{\prime \prime}$ tweeter assembly for handiling the low and mid－ range frequencies，and a special $13 /{ }^{\prime \prime}$＂dome－type super－ range frequencies，and a speciae
tweeter for the very high frequencies．An LC cross－ iweeter for the isery high requencies．An LC cross．
over network is employed with cross－overs at 2000 over network is employed with cross－overs at 2000
and 7500 cycles．Independent level adjustment con－ and 7500 cycles．Independent level adjustment con．
trols for the midrange and supertweeter driver trols for the midrange and supertweeter driver
unlts are provided－to compensate for the acoustic units are provided to compensate for the acoustlc
characteristics of the listening area．The $10{ }^{\prime \prime}$ low frequency driver produces almost distortion－free transient response down to 30 cycies．The midrange provides remarkably transparent sound．The dome－type supertweeter used in the AR－2a operates as a direct radiator having excellent frequency response charac－ teristics－within 1.5 db of the ideal response curve from 7500 to 20,000 cycles（crossover at 7500 CDS ）． For best performance a minlmum of 20 very clean Fort best performance abinimum of 20 very clean
watts should be available．Impedance 8 ohms．Di－ watts should be available．Impedance 8 ohms．Di－
 finished on all 4 sides．Utility model of Ponderosa pine on all four sides with birch front molding．Shpg．wt．， 41 lbs ．

21 A 7225wx oiled Walnut 21 A 7226 WX Walnut 21 A 7227 WX Mahogany 21 A 7228 WX Unfinished

Net 128.00
Net 128.00
Net 122.00
Net 122.00
Net 109.00

AR－3．A 3－way speaker system combining the re－ nowned new mid－and hl－frequency speakers．The dome－ shaped diaphragm of these new mid－range and tweeter speakers represent a complate departure from conven－ tional design and provides a linear response to beyond 20,000 cycles．Mid－range magnetic structure is $\mathbf{3 . 3}$ lbs．Alnico 5 magnet．Tweeter utilizes 1.1 lb ．Alnico 5 magnet．L－C network crossover at 1，000 and 7,500 cps with Individual level controls．Impedance 4 ohms， oimensions： $14 H \times 25 L \times 111 / 2^{\prime \prime} D$ ．Shog．wt．， 60 Ibs．
21 a 7229wx Olled Walnut
21 A 7230 Wx Walnut
21 A 7231wx Mahogany
Net 225.00
21 A 7232wx Unf Pine
Net 225.00
Net 216.00
Net 203.00

AR－2．is a lower－priced system consisting of $10^{\circ}$ acoustic suspension woofer，two $5^{\text {＂}}$ mid－range speak． ers and $13 / 4$ super－tweeter．Response $42-14,000 \mathrm{cps}$ ． $\pm 5 \mathrm{db}$ ；down 10 do at 30 and $16,000 \mathrm{cDs}$ ．Harmonic distortion（ 10 watts input）under $2 \%$ down to 60 cos under $3 \%$ down to 50 cDS ． 8 ohms．Woofer employs 1.1 lb ．Alnico 5 magnet．Requires amplifier delivering 10 or more clean watts．Finished models her delivering ed bottomside．Dimensions： $25 W \times 113^{3} 0 \times 131 / 2^{\prime \prime} \mathrm{H}$ ．Shpg． wt．， 35 lbs
21 A 7234 wx olled Walnut
21 A 7235 WX Walnut
21 A $7236 W X$ Mahogany
21 A $7236 W \mathrm{WX}$ Mahogany Unfinished Pine

Net 102.00
Net 102.00
Net 96.00
Net 89.00

## CUSTOM QUALITY SPEAKER SYSTEMS

IMPORTED FROM ENGLANO


## DELUXE MODEL 711 3－WAY SYSTEM

－INCLUOES PEDESTAL BASE
－FREQUENCY CONTROL PANEL ON REAR OF CABINET
Designed to give large floor model console performance from 35 to $20,000 \mathrm{cps}$ ．Has 4 push－button controls on the back of cabinet for accurate sound blending to room acoustics．Uses 4 hand ma＇de speaker units：A $131 / 2 \times 81 / \mathrm{s}^{\prime \prime}$ acoustics．Uses 4 hand made $s p e a k e r$ units：A $131 / 2 \times 81 / \mathrm{s}^{\prime \prime}$
woofer for frequencles from 35 to $1,200 \mathrm{cps}$ ．Its ceramic woofer for frequencles from 35 to $1,200 \mathrm{cos}$ ．Its ceramic
magnet Is equivalent to a 7 lb ．conventional magnet； magnet Is equivalent to a 7 lb ．conventional magnet；
A $103 / 4 \times 63 / 4$＂mid－range speaker for frequencies from＂ A $103 / 4 \times 63 / 4^{\prime \prime \prime}$ mid－range speaker for frequencies from
1,200 to $6,000 \mathrm{cDs}$ ；Two speclally designed $312^{\prime \prime}$ 1,200 to $6,000 \mathrm{cps}$ ；Two speclally designed $31 / 2^{\prime \prime}$ tweeters for frequencles from 6,000 to $20,000 \mathrm{cps}$ ． Both the woofer and midrange speakep use patented aluminum cone with special plastic suspension．High precision crossover network operates at 1,200 and $6,000 \mathrm{cps}$ ．Enclosure contains two separate heavlly damped compartments．Cabinet is finished on all sides including back and measures $285 / 9 \times 15 \times 144 / 6^{-\prime}$ ．Supplled with separate pedestal base which allows either hori－ zontal or vertical mounting．System impedance is 8 ohms．Shpg．wt．， 65 lbs．
21 A 5903 Wx Händ－Rubbed Olled Walnut


## MODEL 319 COMPACT SYSTEM

A bookshelf speaker system with remarkable perform－ ance for its price．Frequency response is essentially flat from 50 to $15,000 \mathrm{cos}$ ．Low frequencies are re． produced from a $131 / 2 \times 81 /{ }^{\circ}$ woofer with patented aluminum cone and moided suspenston．High frequency response is obtained from a $339^{\prime \prime}$ diameter ceramic magnet iweeter．A specially designed crossover net－ work provides extremely smooth transition from lows to highs．The walnut cabinet is an infinite baffle en－ closure measuring $23 \times 111 / 2 \times 103 / /^{\prime \prime}$ and having a woven 35 lbs speaker grille．Impedance is 8 ohms．Shpg．wt．， 35 lbs.
21 5905WX Hand－Rubbed Olied Walnut

## MODEL 630 BOOKSHELF SYSTEM

An ideal bookshelf－size speaker system measuring 201／2x $11 \times 97 / s^{\prime \prime}$ ．Frequency response is relatively flat from 60 to $15,000 \mathrm{cDs}$ ．The bass frequency unit is $103 / 4 \times 65 / \mathrm{cm}^{\mathrm{m}}$ incorporating a patented aluminum cone and molded suspension．The high frequency response is obtained suspension．The high frequency response is obtained
from a $33 / 0^{\prime \prime}$ diameter tweeter with a ceramic magnet from a $33 / 0^{\prime \prime}$ diameter tweeter with a ceramic magnet．
a specially designed crossover network is provided for A specially designed crossover network is provided for
smooth transition from lows to highs．The speaker grille is made of woven metal，and the enclosure is an infinite baffie type．Impedance is 8 ohms．Shog． wt． 25 lbs．
21 A 5906 WX Olled Walnut
2i A 5907wx Unfinished Gumwood

## 60SA DUPLEX

The 605A is a precision instrument that reproduces sound faithfully．Provides unusually smooth response high Ilnearity and clean transient response．Power handiling capacity： 35 watts， 50 watts peak．Frequency response： $20-20,000 \mathrm{cps}$ ．Magnet welght： $21 / 4 \mathrm{lbs}$ ．（Iow frequency）， $1 / 2 \mathrm{lb}$ ．（high frequency）．Voice coil diame ter： $5^{\prime \prime}$（low frequency）， $13 a^{\prime \prime}$（high frequency）．The ex－ ponential multi－cellular high frequency horn distributes sound $90^{\circ}$ horizontaliy and $40^{\circ}$ verticaliy．Impedance： 16 ohms．Shpg．wt．， 44 lbs．
21 A 7625 wx
Net 168.00

## MODEL 854A／B ENCLOSURE

An outstanding acoustical cabinet．An Ideal mate for the 605A Duplex with a resultant perfect balance of the 605A Duplex with a resultant perfect balance of
size，appearance and audio qually to please the most discriminating user．Includes round legs．Size： $293 / 4 \mathrm{Hx}$ $35 \mathrm{Lx} 173 / \mathrm{A}^{\prime \mathrm{D}} \mathrm{W}$ ．Shpg．wt．， 70 lbs ．
21 a 7601 wx Walnut
Net 111.00
21 a 7602wX Mahogany
Net 111.00

## 838A＂CARMEL＂SPEAKER SYSTEM

A full－size，two－way bass reflex speaker system with a guaranteed frequency range from $30-22,000$ cycles． guaranteed frequency range from $30-22,000$ cycles． Power rating 30 watts．Uses two high compliance 414 A
bass speakers，an 8118 sectoras horn driven by 804 A bass speakers，an 8118 sectoras horn driven by 804 A high frequency driver，and an 800 －cycle dividing net－ work．N－800F ALTEC network provides the necessary
crossover．Comes with round legs．Size： $293 / 4 \mathrm{Hx} 35 \mathrm{~W} x$ $173 / 4$＂D．Shpg．wt．， 90 lbs．
21 A 7603 WX Walnut Cabine
Net 324.00
21 a 7604wx Mahogany Cabinet
Net 324.00

## EMII

Net 99.75
An ingenious adaptation of the much more expensive EMI professional studio monitor sreaker This new 2－cublc foot bookshelf speaker system combines a wide frequency range with superb translent response and relatively low distortion．It is capable of such faithful musical reproduction throughout the whole audio spec trum that any defects in the equipment used with it will be immediately and blatantly revealed．The woofer is EMI＇s exclusive，handmade 13 2土＂$^{\prime \prime} \times 81 s^{\prime \prime}$ elliplical driver with aluminum cone and special plastic suspension． There are two $312{ }^{\circ \prime}$ tweeters，specially designed with curved diaphragms．High precision crossover network designed to operate tweeters at 4500 cycles and up－ wards．Driver and tweeters completely and separately enclosed In a chamber with $3 / /^{\prime \prime}$ reinforced walls．Cabi． net is $24^{\prime \prime}$ wide $\times 13^{\prime \prime}$ high $\times 124^{* *}$ deep．Interior is designed to damp out standing waves and other spuri－ ous vibrations．Includes a carefully selected metal front grille．Impedance of system is 4 ohms．Shpg．wt．， 50 lbs ．
21 A 5901wx Hand－Rubbed Olled Wainut ．．．．Net 159.00 21 A 5902WX Hand－Rubbed Satin Walnut

Net 159.00

## WORLD FAMOUS SPEAKERS by Wharfedale



An intermediate size speaker system with impressive解" sound consists of 6 speakers with ati
 alise min
 tuned chambers handle sound from 20 to 1,500 cycles. spider capable of producing large linear excursions. Magnetic Two $51 / 4^{*}$ mid-range and two $3^{m}$ treble speakers are mounted from the rear eliminating phase distortion. Quality construction is used throughout from rigid castings of speaker baskets, to exclusive roll rimmed soft surround of bass speakers. Each range of speakers can be balanced to the listener's taste. Housed in a meticulously crafted cabinet consisting of dry sand filling between hardwood layers. It does not resonate at any frequency. Finished in oil or polished walnut, ma hog any, or unfinished. (Specify cholce). Size: $321 / 4 x$ $27 \% \times 131 \mathrm{~s}^{\prime \prime}$ ' Impedance. 8 ohms. Capacity 40 watts. Shpp. wt., 130 lbs .
21A 7511 wx w90 Olled Walnut
21 a 7512 WX W90 Polished Walnut 21 A 7513WX w90 Mahogany a 21 A 7514 WX W90 Unfinished Net 244.50 Model B67 UNIVERSAL MOUNTING BASE FOR W60, W70, and W90 SPEAKER SYSTEMS (not Mlustrated)
21 7515W Oil Walnut Shpg, wt., 7 lbs 21 7516W Polished Walnut
I Jivw Mhag. wt., 7 lbs
21 A 7517 w Mahagony Shpg. wt., 7 ibs

## DISTINGUISHED AUDIO COMPONENTS by

A handsome 2 -way speaker system with exclusive Whariedale sand-filled panels permitting full, rich bass, without spurious resonance. W-60 uses a $12^{\prime \prime}$ speaker with $2^{\prime \prime}$ dia. voice coil, and 9.5 10. magnetic assembly. Highs radiate from a $5^{\circ}$ speaker with 1.25 ib magnetic assembly acoustically isolated from $12^{\prime \prime}$ driver. Impedance 8 ohms. Power raling: 30 watts continuous, 60 watts Impedance 8 ohms. Power rating: 30 watts continuous, Requires 5 or more watts dive. L.C. type cross-over at 1500 cps. Treble control provides $0.100 \%$ attenuation of highs. Size $14 y / 4 \times 13 D \times 24^{\prime \prime} W$. Shpg. wt. 45 tbs. In true wood veneers.
21 A 7501wx W. 60 Olled Walnut
21 A 7502WX W-60 Polished Walnut
21 A 7503WX W. $60^{\circ}$ Mahogany
21 A 7504wx W. 60 Unfinished

## MODEL W. 70 THREE-SPEAKER SYSTEM

 assembly is sulphur filled and brass bushed for rigidity. Complementing $12^{\prime \prime \prime}$ driver are two additional high frequency speakers especially designed for use in the sand-filled enclosure. Result is clean uncolored sound free from spurious resonance. Impedance 8 ohms. Size: $24 \mathrm{H} \times 120 \times 21^{\circ} \mathrm{W}$. Shpg. wt., 65 lbs. In true woodNet 259.50 Net 259.50

21 A 7505WX W. 70 Oilled Walnut 21 A 7506 Wx W. 70 Walnut 21 A 7508 WX W.70 Mahogany 21 A 7509WX W. 70 Unfinished

Net 164.50

## RECOMMENDED WHARFEDALE SPEAKERS

SUPER $12 / R S / D D$. NEW, IMPROVED FULL.RANGE $12^{\prime \prime}$ SPEAKER. 17,000 lines flux density. Voice coll 12.15 ohms; cone resonance: 28.33 cps ; power 12 watts; resp. $30-18,000 \mathrm{cps}$; depth
$7^{\mu}{ }^{\text {in }}$ A 7525

 Resp. $50 \cdot 20.000 \mathrm{cps}$; Imp. $8-10$ ohms; resonance $55-65 \mathrm{cDS}$; flux density 13,000 lines; power 4 watts.
21 A 7526 Shpg. Wt., 1 lb .................... Net 26.50
SUPER 3 TWEETER. Range 3,000 to $20,000 \mathrm{cDS}$; imp. $8-15 \mathrm{ohms}$;
Net 9.95 Net 9.95 flux density 13,000 lines; depth $25 / 8$
Net 8.95

B-2074 12" COAXIAL - 1 bass 2 treble speakers on a cast-aluminum frame. Response $40-16,000 \mathrm{cos}$, built-in crossover at 2500 cps ; impedance 8 ohms; power capacity 15 watts OD $15^{\prime \prime}$ depth $7^{\prime \prime \prime}$. Recommended enclosure infinite baffie 5 cu . ft. minimum, 9 cu . ft. optimum. Infinite baffle $5 \mathrm{cu} . \mathrm{tt}$. minimum, 9 cu . ft. optimum.
21 1925.

Net 89.50 $\begin{array}{ll}21 \\ \text { B-199A } 1922^{\prime \prime} & \text { WOOFER - High efficiency woofer designed for lop-quality } 2 \text { - and } 3\end{array}$ way speaker systems. $11 / 2 \mathrm{lb}$. Alnico $V$ magnet assures low distortion and linear response over the entire frequency range of 30 to 4500 cycles, at a power level of 15 watts of program material. Cone resonance frequency 40 cycles, impedance 8
ohms. 1926
Shpg. wt., 8 lbs..
Net 52.50
B.209A $6^{\prime \prime}$ M10.RANGE - for use in 3-way systems or used with the Bozak B-207A and N. 10102 Response 200 to 3500 cos. Recommended crossovers 400 or 800 cos and 2500 CDS Impedance 8 ohms for use in 50 watt systems. Voice coll $12 / 2^{\prime \prime}$ diam. ribbon. $11 / 2$ 10. Alnico 5 magnet. $61 / 2^{\prime \prime} 0031 / 2^{\prime \prime}$ deep ( $51 / 2^{\prime \prime}$ diameter cutout).
ribbon. $11 / 2$ tb. Alnico 5 magnet. $61 / 220031 / 2$ deep
21 A 1927 .
Net 51.00 N. 10102 CROSSOVER NETWORK - (Not HIUstrated) 6 db per octave írequency divider Crossovers 400,800 and 2500 cps at 8 ohms; 800 and 2500 cps at 16 ohms. For use with B-207A and B-209A in 3-wav system 8W×8D×51/2"H.

## 21 A 1928

Shpg. wt., $61 / 2 \mathrm{lbs}$.
Net 27.50
B. 200 X TWEETERS - Direct-radiating paper-and-dural cones of this dual unit reproduces from 2000 to 16,000 cps. Dispersion: $120^{\circ}$. Power rating: 20 watts. Size: $61 / 2 W \times 31 / 44 \times 212^{\prime \prime} \mathrm{D}$.
21 A 1929

## Shpg. wt., 5 lbs

Net 32.00

## B-302A URBAN 3-WAY SYSTEM

A three-way system incorporating a bass and two treble speakers in the coaxial $12^{\prime \prime}$ B-207A and a mid-range $6^{\prime \prime}$ B-209A. Useful freq. resp.: 40 to 20,000 cps. LC network crossovers; bass to mid-range, 800 cycles; mid-range to treble, 2,500 cycles. Imp. 8 ohms; power rating 20 watts. $30 H \times 24 W \times 20^{\circ} \mathrm{D}$. Matte walnut finish. 21 A 1901wx

## DELUXE B-4000 SYMPHONY SYSTEM

The B-4000 spreads the orchestra across the full width of a gracious room while maintaining true perspective in width and depth. Eight special tweeters are arranged in a vertical column to dispense highs while a special 8 -inch mid-range speaker provides mid-frequency response. Two B-199A's provide rich, true bass. Useful frequency response, 35 to 20,000 cycles; LC network cross-over: low to mid. range, 200 cycles; mid-range to treble, 1500 cycles; imp., 8 ohms; power, 30 watts. Size: $44 \mathrm{H} \times 273 / 4 \mathrm{~W} \times 16^{\prime \prime} \mathrm{D}$.
21 A 1902WX Matte Wainut
Shpg. wt., 150 lbs.
Net 495.00
21 A 1904wx Genuine Mahogany
Net 495.00

## B-2000 SONATA BOOKSHELF SYSTEM

A complete speaker system for shelf or table-top use. A wide-range B-800 speaker covers low and middle frequencles. Two lweeters present the highs and a specially designed cross-over network segregates the frequencies. A brightness control enables you to match the speaker characteristics to the acoustical character of the room. Useful frequency response, $50-20,000$ cycles; LC network cross-over, 2500 crcles; imp.. 8 ohms: Dower. 15 watts. Size: $14 \mathrm{Hx} 231 / \mathrm{HWW}^{2} 115$ "D.
21 A 1905wx Matte Walnut
21 A 1906wX Genulne Mahogany

Net 116.50
Net 116.50
Net 101.50



B-4000



B-302A

# NEW SPEAKER SYSTEMS NEW SOLID STATE ENERGIZER/TRANSDUCER LOUDSPEAKER SYSTEMS 

The new JBL Solid State Energizer/Transducer System is a loudspeaker system matched internally with a transistorized stereo power amplifier specifically matched to the characteristics, both electrically and acoustically, to the loudspeaker system with which it is designed to function. The resuit is an audio SE402 Solid State Energizer is the transistorized optimum performance. The JBL SE402 Solized to the individual $J B L$ loudspeaker system. A special matching equalizer
tom tomized to the individual SBL loudspeaker system. A special matching equalizer
circult board is supplied with the SE402 for each individual loudspeaker system for proper matching. JBL loudspeaker systems may be purchased with or without the SE402 Solid State Energizer. Since the SE402 is a specially engineered stereo power amplifier, it may be used with any standard high quallty stereo preamplifier. IMPORTANT: WHEN PURCHASING A PAIR OF JBL LOUDSPEAKER SYSTEMS WITH THE SE402 SOLID STATE ENERGIZER, YOU REQUIRE ONLY ONE SPEAKER WITM THE will supply stereophonic audio power to both speaker systems. Advantages of the SE402 Solld State Energlier/Transducer-negligible heating, no microphonics, efimination of output transformers, designed to be housed within the speaker system enclosura. Precise mating of damping factor produces bass response remarkably close to the original performance. Short-circult-proof design eliminates fuse changes and damaged transistors.

SPRIMLINE


The Trimline 54 features the passive low frequency
radiator concept of reflex enclosure design which
doter radiator concept of reftex enclosure design which
doubles the effective radiating area at low frequencies doubles the effective radiating area at low frequencies
by ceupling $3 n$ LE8T $8^{\prime \prime}$ linear efficiency extended range transducer and a new $8^{\prime \prime}$ passive radlator to a
rigid acoustically engineered rigid acoustically engineered enclosure. Allows super-

TRIMLINE E/T54
Trimline 54 System as above but with JBL SE402 Solid State Energizer and Matching Transducer Equalizer. NOTE, For stereo systems you require only 1 E/T5

## PEAKER SYSTEM

ior performance, low distortion and increased power handling caoacity. 8 ohms impedance Handies 25 watts. With brackets for wall mounting. Finished on all 4 sides for vertical or horizontal frec.standing place. ment. Size: $20 \mathrm{~W} \times 233 / 4 \mathrm{Hx} 51 / \mathrm{B}^{20}$. Shpg. wt., 34 lbs. 21 A 4601 Wx Trimline 54 -Olled Walnut .... Net 177.00
SPEAKER SYSTEM

## LANCER 66 SPEAKER SYSTEM

Deluxe quality bookshelf system with JBL . Inear not avallable separately. Size: $123 / 4 \mathrm{~W} \times 233 / 4 \mathrm{H} \times 123 / 4 \mathrm{mD}$. efficiency loudspeakers integrally installed. A two Shpg. wt., $471 / 2 \mathrm{bs}$. way system with $10^{\prime}$ long-throw woofer and new direct raclator tweeter. The loudspeakers used are

21 A 4603wx Lancer 66 -Oiled Walnut
Net 147.00

## LANCER E/T66 SPEAKER SYSTEM

Lancer 66 Speaker System as above but with JBL 1 E/T66, with Model SE402, and 1 regular 66 Speaker SE402 Solld State Energlzer and Matching Transducer System. Shpg. wi., 60 its. Equalizer. NOTE: For stereo systems you require only 21 A 4604 wx Lancer E/T6G-Olled Walnut Net 363.00 D51-001-2 APOLLO SPEAKER SYSTEM
This elegantly styled f8L enclosure is built to the must be heard to be believed. Size: $261 / 2 \mathrm{~W} \times 261 / 2 \mathrm{Hx}$ finest standards of painstaking cabinetwork. With $18^{\prime \prime} \mathrm{D}$. Shpg. wt., 87 lbs . the fict D130 $15^{\prime \prime}$ extended range loudspeaker, 175 DLH high frequency driver and N1200 crossover net. work. the Apollo reproduces music with clarity which
21. 4605wX D51.001.2 Apollo System-Olled Walnut

Net 498.00
D51-001-2E/T APOLLO SPEAKER SYSTEM
051-001.2 Apollo Speaker System as above but with and 1 regular Apollo Speaker System. Shpg. wt., 100 SBL SE402 Solld State Energlzer and Matching Trans. Ios. ducer Equalizer. NOTE: For stereo systems you require 21 A 4606 wX D51.001-2E/T ADollo Systemonly 1 E/T Apollo Speaker System, with Model SEEO2,

Net 714.00

## Lafayetre stocks complete jbl speaker, speaker system and speaker cabinet line. EXTENDED RANGE SPEAKERS and SYSTEMS



## JBL SPEAKERS, TWEETER and CROSSOVER NETWORK

$01311^{\prime \prime}$ SPEAKER. Response: $30-17,000$ cps; capacity; 20 watts; resonance: 39 cps , 16 ohms. ${ }^{5 \prime \prime}$ "deep. Shpg. wt., 21 los.
21 A 4625 wx
Net 96.00
$0130{ }^{15 \prime \prime}$ SPEAKER. $15^{\prime \prime}$ version of above. Response: $\pm 5 \mathrm{db} 30-17,000$ cps. Cap: 25 watts; depth: $53{ }^{7}{ }^{\prime \prime}$. Shpg. wt., $221 / 2 \mathrm{lbs}$.
2144626 WX
Net 102.00
D123 12" SPEAKER. Response: $30-15,000 \mathrm{cps}$; Caps 20 watts; resonance: 35 cDs , 16 ohms. Depth: $33 / \mathrm{e}^{\prime \prime}$. Shpg. wt., 12 lbs.
2144651
Net 72.00
$02088^{\prime \prime}$ SPEAKER. 8" version of D130. Resp: $40-13,000 \mathrm{cDS}$; Cap: 12 watts; resonance: 55 cos .8 ohms. $27 \mathrm{~m}^{\prime \prime}$ deep. Shpg. wt., 6 lbs.
21 A 4652
Net 36.00
2t 4653 Same as D208 but 16 ohms ................................................................................................................................... 36.00
075 TWEETER. For 2 -way systems crossing over from 2500 cps . Impedance, 16 ohms. Shpa. Wt., 6 los.
21 . 4654
Net 63.00
N2600 DIVIDING NETWORK. For use with 075 tweeter and speakers above. Impedance 16 or 32 ohms. $43 / 4 \times 6 \times 31 / \mathrm{c}^{\prime \prime}$. Wt., $33 / 4 \mathrm{lbs}$. Not lllus.
21 . 4656
. Net 27.00

## LINEAR EFFICIENCY SPEAKERS

LEST MI-Fi SPEAKER. Response: $30-15,000$ cps; power handling capacity, 20 watts; impedance: 16 ohms; depth: $43 \mathrm{~m}^{\prime \prime}$. Non.resonant rigid, cast aluminum frame. Shpg. wt.. 11 lbs.
2144657
Net 66.00
LE14C 15" LINEAR EFFICIENCY SPEAKER. Deluxe speaker featuring $15^{\circ \prime}$ wooter and concentrically mounted high frequency radiator. Reproduces entire audio spectrum. Shpg. wt. 24 tbs.


## LAFAYETTE NEW Priterion Deluxe Hi-Fi CABINETRY

## ... to decorate your home with music

## LAFAYETTE'S CRITERION LINE-

the standard of construction and design by which all others are judged.

The Technical Know How of Lafayette's Audio Engineers Combined with that of America's Finest Furniture Craftsman, bring to you the new Lafayette Criterion Line of Acoustically Correct Hi-Fi Furniture.


EASY PAY PLAN SEE PAGE 412

Now your high fidelity listening area can look as good as it sounds. Add the elegance, grace and timeless styling of this decorator Inspired furniture grouping to your home music center, but lose nothing in performance. Painstaking acousti. cal design by Lafayette's audio engineers provides the best possible relationship between equipment and furniture. The meticulous custom crafstmanship, rich, matched, natural wood veneers and custom hand-rubbed finishes of these fine cabinets are bound to please the most discerning taste.

For Full Details Of Individual Cabinets See Description Below

## THE Friterion* TAMBOUR EQUIPMENT CABINET

Classic simpility and efegance together with truly functional design characterize this new equipment cabinet. "Component Engineered" by Lafayette's audio experts to provide ample, convenient, well-ventilated accommodations for all of your components. When matched with' its companion Criterion Eliptofiex speaker enclosure (described below) It forms a complete music center and perfectly matched furniture ansemble. The construction and design reflect the quality contained in these units: cabinets employ rigid tongue and groove construction of wo" lumber core woods throughout, with matched veneers inside as well as out. Smartiy styled with tambour sliding doors and tapered legs for graceful, decorative harmony, as well as for room space saving. Four compartments provide space for housing turntable or changer, amplifjer, tuner, etc. with room for record storage. Avallable In your cholce of five finlshes. Overall Dimensions: $44 \mathrm{~W} \times 18 \mathrm{D} \times 321 / 2^{\prime \prime} \mathrm{H}$ including legs. Shpg. wt., 70 lbs.
CAB.157wx Walnut
Net 89.50
CAB.158WX Olled Walnut
CAB.159WX Mahogany
Net 89.50
Net 89.50

## THE <br> Friterion ELIPTOFLEX SPEAKER CABINET

The same gracoful, timeless styling and fine construction as the CRITERION equipment cabinet, which it matches. Designed to accommodate any $12^{\prime \prime}$ speaker. this enclosure incorporates the inner construction and acoustic princlples of the famous Lafayette "Eliptoflex" enclosure. A specially designed elliptical port with diffracting ring broadens frequency response, increases transient response and eliminates cancellation effects between front and rear radiation. This results in low distortion, natural smoothness and unequaled performance in the low ranges. Constructed of "K." Iumber core woods with hand-rubbed natural wood veneers. Smartly styled with matching grille cloth decorative tambour borders, and tapered legs. Overall Dimenslons: $321 / 2 \mathrm{H} \times 18 \mathrm{D} \times 16^{\prime}$ W. Shpg. wt., 50 lbs . CAB. 160 WX Walnut

Net 59.50
CAB-161WX OHed Walnut
Net 59.50
CAB-162WX Mahogany
Net 59.50
NOTE: For those who have a space problem Lafayette offers the Ellptoflex speaker enclosure in bookshelf size. A complete range of finishes to match the CRITERION equipment cabinet. See Index for IIsting.

## LAFAYETTE HIFI COMPONENT SHELF/CONSOLE

## Decorator Inspired!!

## Group your Components Into A Distinctive, Custom Home Entertainment Center.

$47^{50}$OILED WALNUT FINISH NO MONEY DOWN

## $28^{95}$

 UNFINISHED
## no money down

 FOR BUDGET TERMS SEE PAGE 412As functional as it is beautiful, this new Lafayette Shelf Console combines the beauty and compact all-in-one convenience of a console with the versatility of a shelf arrangement. The Ideal answer to your Hi.Fi Stereo component placement problems - measures $621 / 2^{\prime \prime}$ long, yet holds over 150 records with more than enough room for your amplifier, turntable or record changer, tape deck and stereo speakers. Available in both finished and unfinished versions. Both feature $3 / \mathbf{y}^{\prime \prime}$ warp-proof construction. Top shelf measures $11 \mathrm{H} \times 31 / \frac{1}{2} \mathrm{~W} \times 16^{\prime \prime} \mathrm{D}$. Lower shelf is $151 / 4 \mathrm{H} \times 151 / 2 \mathrm{D} \times 311 / 2^{\prime} \mathrm{W}$ and to protect your records contains a veneered rear panel, finished on both sides to allow placement of the unit as a room divider. Speaker compartments are 27 Hx $160 \times 143 /{ }^{\prime}$ 'W-Large enough to accept virtually all of lodays popular bookshelf size units and are spaced far enough apart to provide proper separation for ster eo. Overall dimensions: $621 / 2 \mathrm{~W}$ $\times 160 \times 333 / 4$ "H including $5^{\prime \prime}$ legs. Shipped knocked down-Assembles in minutes. Shpg. wt., 65 lbs . CK-37wx Olled Walnut Finish on Genuine Walnut veneered Flake Core ......................tet 47.50 CK-36WX Unfinished Flake Board

- ROOM FOR ALL YOUR COMPONENTS - STURDY $3 / 4^{\prime \prime}$ WOOD NON-WARP CONSTRUCTION - HOLDS OVER 150 RECORDS - AN ATTRACTIVE ADDITION TO ANY HOME - PLACE ALONG A WALL OR USE AS A ROOM DIVIDER


## LAFAYETTE CUSTOM CRAFTED EQUIPMENT CABINET

BEAUTIFUL CABINETRY DESIGNED TO ENCLOSE YOUR COMPONENTS

- Available In A Variety of Fine Finishes - Rigid $3 / 4^{n}$ Wood Warp-Proof Construction - Genuine Walnut Veneer Outside and Inside " "Component Engineered" To Provide Adequate CircuIation For Your Equipment


## A magnificent example of contemporary furniture de- section has room for a pull-out drawer to provide

 sign - it's slender, graceful styling is sure to win easy access to your record changer. Proper circulation approvat in virtually every fine music room/living room of air around components is maintained by use of a arrangement. Features rigid ${ }^{3 / 4} 4^{4}$ wood warp-proof con- perforated rear panel. Precision fitted swing out front struction with two adjustable center shelves to accom- doors are equipped with magnetic latches. Size:modate virtually any amollier and tuner. modate virtually any amplifier and tuner. The bottom $331 / 4 " \mathrm{H}$ overall (including $5^{\prime \prime}$ legs) $\times 180 \times 20^{\prime \prime} \mathrm{W}$.
CAB. 151 wx Olled Walnut Finish on Genuine Walnut veneered Flake Core, CAB-152wX Lacquered Walnut Satin Finish

## Easy To Assemble

## LAFAYETTE CUSTOM CRAFTED EQUIPMENT CABINET KIT



- $3 / 4^{\prime \prime}$ Furniture Grade White Birch
- Fine Contemporary Styling

- Room For All Your Components
- Holds Up To 150 Records


## Outstanding Value!



FOR BUOGET TERMS SEE PAGE 412

BUILD THIS ATTRACTIVE EQUIPMENT CABINET YOURSELF AND SAVE! You needn't be a skilled cablnet maker, you don't even need special tools. An evening of your time and a simple screwdriver is all that's required to assemble this tasteful, functional cabinet. The slim low silhouette styling will enhance any room or decor and is engineered to accommodate all of your components plus room for 150 records. Constructed of $3 / 4$ " furniture grade white birch ready for finishing. Back is of $1 / 4^{\prime \prime}$ perforated hardboard to ensure adequate ventilation for equipment. Features include sliding doors with brass finger pulls plus Features include sliding doors with brass finger pulls plus
$5^{\prime \prime}$ brass ferruled legs. Four spacious compartments are
provided each measuring 13 " $\mathrm{H} \times 161 / 2^{\prime \prime} \mathrm{D} \times 161 / 2^{\prime \prime} \mathrm{W}$. An adjustable shelf kit for positioning components and a slide out drawer for record changers are avallable at extra cost. Overall size $331 / 4^{\prime \prime H} \times 36^{\prime}$ Wr18"D Including $5^{\prime \prime \prime}$ legs. Complete with detalled lilustrated instructiens, all parts and hardware.
CK-32wx Shpg. wt., 40 lbs.
Net 39.95
Accessory Panel. or Shelf Kit - Use $\varepsilon s$ shelf or front panel for components. $13 \times 161 / 3 \times 3 /{ }^{\prime \prime}$
CK. 33 Shpg. wt., 4 ibs.
Net 1.65
Slide out drawer for record changers - Installs easily in


# THE FAMOUS LAFAYETTE READY-TO-FINISH, EASY-TO-ASSEMBLE KIT FORM  <br> <br> as Low as 2150 <br> <br> as Low as 2150 <br>  <br> The loudspeaker is mounted on a recessed baffle board extending partally across the front surface of the cabinet forming ducts or tubes. The elliptical cutout varies the effective length of the duct across it's area and provides an extremely smooth transition from duct to free air; broadens frequency response, provides better transient response. A triangular shaped diffracting vides better transient response, A triangular shaped dill racting ring virtually eliminates undesirable cancellation effects and acts as a "lens," changing relative particle velocittes and consequently, phase relationships 10 as to produce a smooth transition from front to rear radiation. 

Acoustic Grille A Bookshelf-Size Enclosure Engineered

## by Lafayette Research - ASSEMBLE IT, FINISH IT, and SAVE!


here is the ELIPToflex COMPLETELY

- The Same Speaker Cabinet That Set A New Standard of Excellence - Utilizes the Full Advantages of Efficient 12" Speaker Performance - Provides Optimum Performance Without Use of Expensive Large Wattage Amplifiers - 3 Sides Prepared For Finishing. For Horizontal Placement

This is the same Lafayette Eliptofiex Speaker Cabinet that set a new standard of speaker enclosure excellence-now available in ready-to-finish easy-to-assemble kit form. The easy-to-follow instruction sheet, with large plctures, gulde you step-by-step for easy assembling. When completely assembled and highlighted with your favorite finish-you'll be amazed at the professional looking results.
You'll aiso appreciate the engineering excellence of this speaker cabinet. The Eliptoflex utilizes a unique elliptical port which broadens frequency response and provides better transient response. A specially engineered diffracting
ring elliminates cancellation effects between front and rear radiation. The "Eliptoflex" achieves a degree of natural smoothness, low distortion and rich robust bass. Due to its highly efficient design characteristics, costiy high wattage amolification not required. The Kit is available in elther ready-to-finish birch or in ready-to-finish genuine walnut veneer. Assembled the "Ellptoflex" measures 14 Hx $237 / \mathrm{HW} 13 \mathrm{Ky}$ "D. Shpg. wt., 24 lbs. CK-14AWX Ready-To-Finish Kit in Birch Net 21.50 Ready-To-Finish KIt with Walnut Veneered Acoustically Correct flake Core. CK-34WX

Not 24.50

## Lafayette BASS REFLEX SPEAKER BOOKSHELF ENCLOSURE KIT FOR 8" or 6" SPEAKERS



- Precision Cut - Fits Together Smoothly
- Adapts For $8^{\prime \prime}$ or $6^{\prime \prime}$ Speakers
- Easy To Follow Pictorial Instructions
- Versatile - Use As Floor or Bookshelf Enclosure BUILD IT YOURSELF... All that's required to construct this excellent bookshelf speaker enclosure is a screwdriver and thirty minutes of your time. Expensive woodworking equipment Isn't needed-each cabinet component has been precision cut and fits together perfectiy. There's nothing else to buy...acoustic padding, grill cloth and hardware are provided. Use any $8^{\circ \prime}$ or $6^{\circ \prime \prime}$ speaker; the mounting board has been precut for $8^{\prime \prime}$ speakers and an adapter is supplied for $6^{*}$ speakers.
Designed for horizontal placement in a bookshelf, along a wall, etc. Constructed of $3 / 4^{"}$ plywood on 3 sides with handsame plcture frame molding. (See Lafayette's professional finishing kits). Dimensions: $23 \times 912 \times 11^{\circ}$. Avallable In elther birch or walnut unfinished veneers.
CK-31wx 8 irch Kit Shpg. wi. 15 lbs
Net 10.95 CK-35WX Walnut veneered flake Core Kit .i..........Net 13.95 Speakers for Lafayette CK-31 Cabinet Kit. Lafayette $8^{\circ \prime}$ Duo-Cone Speaker; $40-16,000$ cps response. \$K-98 Shpg. Wt. $51 / 2$ tbs.


Assembles In Less Than 30 Minutes!


# BUIID-YOUR-O YNY EASY-TO-ASSEMBLE LAFAYETTE SPEAKER ENCLOSURES 

## LAFAYETTE UNIVERSAL HIFI BASS REFLEX ENCLOSURE KITS



## Easy To Assemble

GENUINE $34^{\prime \prime}$ WALNUT PLYWOOD RECORD CABINET AND ADD-ON KIT COMPLETE WITH MATCHING LEGS


- Each Cabinet Holds 125 LP's - Add-on-unit Doubles the Capacity
- Precislon-machined for Easy Assembly - Genuine Walnut Veneer on Lumber Core Sides and on Flake Core Top and Bottom


## RECORD CABINET 95 <br> Walnut <br> walnut <br> 

Now you can store all your phonograph records in a handsome furniture piece that adds to the decor of your nome. Constructed of genuine walnut veneer on lurn ber core sides and on flake Core Top and Bottom you can stain or tinish. Expertly precision-machined at the factory-even the screw holes are set. Complete with four $5^{\prime \prime}$ legs, 4 ferrules, 4 brackets, 4 glides. Kit aiso consists of 2 side pleces, Dattom, top, Ko" masonitz back plate and 4 dividers. All hardware included-all you need is a screwdriver. Complete assembly instructions. Assembled, cif legs, the cabinet measures $30 \mathrm{~W} \times 140 \times 141 / 2^{\prime \prime} \mathrm{H}$. Shos. wt., 34 los . CK-16wX Walnut Unfinished Cabinet Kit with Birch Legs in Walnut Finis. wh., Net 21.95 ADD-ON CABINET
Add-on cabinet gives you double the space without doubling the price, You simply take the top board off the record cabinet, put on the add-on cabinet, and use the top board as the top of the add-on cabinet. Add-on unit kit consists of 2 sides, bottom plece, back plate, 4 dividers. Hardware and instructions included. Assembled it measures $30^{\prime \prime}$ wide, $14^{\prime \prime}$ deep, $1334^{\prime \prime \prime}$ high. CK-18WX Wainut unfinished kit


Use this professional walnut oiling kit to achieve a beautiful oil finish on all walnut furniture ... as well as an attractive walnut cotored finish- on light col. ored woods. such as birch. Materials are identical to those used ty protessional finishers; kit contains wal. nut oiling mixture, walnut paste wax, sandpaper and instructions. Shipg. wt.. 2 los. MS. 592

Net 2.69
OILED WALNUT STAIN FOR LIGHT WOODS To be used with MS- 592 for an attractive wainut-colored finish on $\operatorname{light}$-colored woods, such as burch, etc. MS.931 Shpg. wt., 1 lt.

## LAFAYETTE PROFESSIONAL FINISHING KITS



- truly professional fivish
- COMPLETE WITH EVERYTIING YOU NEED
- EASY TO-FOLlow INSTRUCTIONS

Stock No
A real deluxe finishing kit containing all you need to give a professional furniture finish to your cabinets. There is nothing extra to buy and no mixing of ingredients required. Kit contains 2 cans of high gloss varnish, and one each of lilter-stain, sealer, and solvent, brush and sandpaper plus complete easy-fo-follow directions for obtaining various types of finish. You'll be surprised at how your finished cabinet will compare with commercial work because the kit was designed by professional woodworkers. Shpg. wt., 6 los

MS. 584 MS.585 MS. 586 MS. 587 MS-588 MS. 698
MS.697 MS-589

Finish Walnut Mahogany Fruitwood Chuitwood Cherry Golden
Maple Harvest Wheat Ebony

# CUSTOM HI-FI INSTALLATION ACCESSORIES 

## TAPERED LEGS IN HARDWOOD,

 BRASS AND WROUGHT IRON- Easy to Attach - Hardwood \& Brass Legs Have self. leveling Guides Give Contemporary Look to TV Sets, Cabinets, Bookcases, Other Furniture
Sets of 4 legs, beautifuliy designed to complement hi-11 cabinets, radios, record players, book-cases, etc. Make any TV set a consolette! All types are easily attached. Unfinished hardwood legs are $13 / 4{ }^{\prime \prime}$ in diameter at top, with graceful taper. Sanded and ready to finish, with brushed brass ferrule at tip. Adjust to straight or flared style after attaching platform! Includes self.leveling swivel glide; complete with hardware. Brass legs fea ture all steel, rust resistant tubular construction with fine lacquered brass electroplate finish Automatic self. leveling, self-locking gulde; complote with hardware. Wrought Iron legs are "hairpin"" style, sturdily constructed of $3 / / "$ rod with welded steel top already drliled
for insertion of screws. Perfect for home-built benches, bookcases, other furnituris,



## FURNITURE FINISH TAPERED LEGS

Molded in high-impact plastic-a mar proof, seratch proof-vitually indestructible, pre-finished leg. Wood tone colors are molded In-no further finishing is required. Bracket permits stralght or angle mounting. Auto-adiust, self levelling ferrules. Three wood tone finishes to match most fyrniture colors. Set of four legs-complete with hardware.

| Mahogany |  |  |  | Walnut |  |  | Ebony |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| He | Stock ${ }^{\text {a }}$ |  |  | sto |  | et of 4 | stock |  |  |
| 4" | ML.181 | 11/2 | 2.21 | ML. 185 | 11/2 | 2.21 | ML-189 | 11/2 | 2.21 |
| $6^{\prime \prime}$ | ML-182 | 13/4 | 2.80 | ML-186 | 13/6 | 2.80 | ML. 190 | 13/4 | 2.80 |
| 12" | ML-183 | 21/2 | 4.09 | ML. 187 | 21/2 | 4.09 | ML-191 | 21/2 | 4.09 |
| $14^{\prime \prime}$ | ML-184 | 31/4 | . 4.47 | ML-188 | $3 \mathrm{~V} /$ | 4.47 | ML. 192 | $31 / 4$ | 4.47 |

## CUSTOM SHELF ACCESSORIES

## AS LOW AS <br> .4. per Pair

- Designed for open-shelf Mi.Fl units
- Create your own Bookshelf-Wall-Units-etc.
- Go as High and as Wide as you choose

Change blank walls into the most functional and attractive areas in your home. Easily installed-adjust shelf height in seconds-create an infinite number of designs. Brackets are adjustable at $1^{\prime \prime \prime}$ intervals, locking nut tightens against strip. Strip standards, $12^{\prime \prime}$ long, can be interlocked to make any length standard. Change and enlarge wall arrangements at any time. Slim standards are barely visible. Sheives have an airy, floating look.

| Shelf Width | cold | silyer | Black | Shys. Wh. | Net per pair |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ${ }^{\prime \prime}$ | ML-272 | ML-278 | ML-280 | 8 or. | . 44 |
| $8^{\prime \prime}$ | ML-273 | ML-277 | ML-201 | 10 oz . | . 50 |
| 10"* | ML-274 | ML-278 | ML-212 | 12 oz | . 64 |
| 12" | ML-275 | ML-279 | ML-203 | 14 oz . | . 77 |

Strip Wall Standards. $12^{\prime \prime}$ long, interlock to any desired tengths. Shpg. wt., 602. Imported.
ML- 284 Gold
Net ea. . 18
ML. 285 Silver

Net ea. 18
ML. 286 Blac

Net ea. . 18

## FINE FURNITURE FINISHED SHELVES

## - Prefinished in Walnut

- All Six Sides Squared
- Fine Edge-Glued Hardwood

Dennix Hardwood Shelves are kiln-dried to prevent warping. Use for divlders, spacers, and brackets, or use your own ideas for utlilization of wasted wall or corner space. Fine hardwood beautifully finished in walnut. All $8^{\prime \prime}$ deep.

| stock no. | LENGTH | SHPG WIT. | NEL |
| :---: | :---: | :---: | :---: |
| ML-319 | $24^{\text {" }}$ | 31/2 lbs. | 2.98 |
| ML-320 | $30^{\prime \prime}$ | 41/2 libs. | 3.38 |
| ML-321 | $36^{*}$ | $51 / 2 \mathrm{lbs}$. | 4.05 |
| ML.322w | $48^{\prime \prime}$ | 71/2 lbs. | 6.10 |
| mL .323 wx | $60^{\prime \prime}$ | 91/2 lbs. | 8.10 |

## 12" LAZY SUSAN BEARING

- COMPACT - INTERLOCKED UNIT - USES 140 BALL BEARINES

Unilimited versatility in making and assembling turntables and rotating fixtures of all kinds. $\mathbf{1 2}^{\text {n }}$ diameter ball race plus 140 precision made steel ball bearings insure maximum stability for the larger items such as T.V. sets, tables, efc. Can also be used for corner cabinet shelves-book stands-coffee tables-storage, etc. Attaches easily to first and second surface. One unit construction-no loose parts. Center opening allows for center post. 6 K." I.D. Shpg. wt., 2 lbs..$~_{\text {. }}$
$110-428$


## STOP GAPS

- Attach To Open Ends of Shelves for Neat Book Shelves
- For Desk or Table Book-Rack
- For Handsome Desk Tray
- For Napkin or

Envelope Holder

- For Shelves $\% \%^{\prime \prime}$ to $\% 4^{\prime \prime}$ Thick

Keep books in place with STOP GAPS. They are easily attached to ends of shelves which lack side pieces. Extremely goodlooking and made of hardwood 'Unfinished" - sanded smooth or pre-finished in Wainut. Will add grace to your shelves. Packed in pairs Safety screws fur. nished. Shpg. Wt.. $11 / 2$ lbs.
ML-352 Unfinished
Per Pair
Walnut Finish
ML. 353 Wainut Finish 1.38 Per Palr ........ Net 1.78

## QUEEN ANNE PERIOD LEGS

- Beautiful Sturdy Legs For Indoor or Outdoor Use
- In Popular 29" Size

Graceful decorator legs for wood top table, glass top table, tile top table, planters, etc. Heavy 12 gauge top plate; strong concealed welds; ho" steel rod. Jet black baked enamel finish, 29" high Complete with screws. Shps
Wt. 111 los. set of 4 .
ML-329 Set of 4 legs
ML-329 Set of 4 legs

## EARLY AHERICAN LEGS

## - Extro Heavy Top Plate

- Easy to Arfoch

Unfinished legs in the popular Early American motif. Made of fine furniture quality kiln-dried hardwood. Smoothly sanded, ready for finishing. $\begin{array}{cccc}\text { Stock No. } & \text { Nt. } & \text { Shps. } & \text { wt. }\end{array}$ Net set of 4 $\begin{array}{llll}\text { ML.324 } & 6^{\prime \prime} & 11 / 2 \text { lbs. } & 2.22 \\ \text { ML.325 } & 12^{\prime \prime} & 21 / / \mathrm{lbs} . & \mathbf{2 . 9 9} \\ \text { ML. } 326 & 16^{\prime \prime} & 31 / 4 \text { lbs. } & 3.75 \\ \text { ML. } & \end{array}$ ML-327


## ROCK MAPLE Shelf Brackets

 - Unlimited Decorator Arrangements - Unylelding Cantilever DesignThe easiest-quickest way to add sheives to any wall. Brackets and standards are of solid maple-steel reinforced. Will support hundreds of pounds. Unique gripping method assures slipproof, firm hold and perfect alignment. Simple to build with no holes to drill-just screw into place. Extremely versatile-bulid as high or as wide as you like. Perfect for record storage-hi-fi installations - book dhelves - decorator display. Satín smooth-ready for firish.

| stock No. | Description | Shpg. Wt. | $\begin{gathered} \text { Net } \\ \text { Per Pal } \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| ML. 141 | $6{ }^{\prime \prime}$ bracket | 3/4 lb. | . 68 |
| M1.142 | 8:" bracket | 3/4 lb. | . 78 |
| Mt.143 | 10" bracket | 1 lb . | . 88 |
| ML-144 | 12"* bracket | 11/2 lbs. | . 98 |
| ML. 145 | $14^{\prime \prime}$ oracket | 2 lbs. | 1.18 |
| ML-146 | 131/2" Standard | 2 lbs . | . 98 |
| M4.147 | $6^{\prime \prime}$ Standard | 8 oz . | . 68 |



## PRE-FAB COMPLETE WDOD DRAWERS



| Stock No. | Depth Overall | Shps. Wt. | Net |
| :---: | :---: | :---: | :---: |
| ML. 293 | $8^{\prime \prime}$ | 2 lbs. 2 oz. | 2.25 |
| ML. 234 | $10^{\prime \prime}$ | 2 lbs. 602. | 2.48 |
| ML. 295 | $12^{\prime \prime}$ | 2 lbs. 802. | 2.70 |
| ML.296 | $14^{\prime \prime}$ | 2 lbs. 10 oz. | 2.93 |

## "DO-IT-YOURSELF" SHELF SPACERS

-No sawing, hammering, or tancy tools needed The newest accessory for assembling hi-11 units, chests, cabinets, shelves, etc. Unique, interchangeable dowel and hole design per. mits quick and easy attachment. Soacers are available in 10 or $14^{\prime \prime}$ heights. Bottom leg is 4" high-matching cap for top finlsh Genuine northern hardwood $11 / 2^{\prime \prime}$ stock. sanded and ready for finishing. Makes possible thousands ready for finishing. Makes possible thousands
of shelf combinations. Simplest quickest means of shelf combinations. Simplest quickest means of building or altering units to your needs. ML. $92-10^{\circ}$ spacer - Wt. 6 oz. .... Net .59 ea. ML.93-14" spacer - Wt. 8 oz. .... Net . 83 ea, ML.94- cap -Wt. 1 oz. .... Net. 10 ea. ML.95- $4^{\prime \prime}$ leg - Wt. 3 02. .... Nel. 19 ea.

## SELECTED HI-FI ENSEMBLES OF



## Lafayette "Universal" Hi-Fi Bass Reflex Enclosures For 2 Way or 3 Way Systems

LAFAYETTE UNIVERSAL SPEAKER ENCLOSURES can be used for almos any combination of speakers. Has cutout for $15^{4}$ speaker olus adapter for $12^{\prime \prime}$. Also a cutout for $81 / 2^{\prime \prime}$ or $8^{\prime \prime}$ speaker plus adapter for $5^{\prime \prime}$ and blank wood block if such speakers are not desired. In addi tion, a tweeter opening is provided for most standard tweeters, plus adapter for Lafayette, HK-3, HW- 7 or similar type plus blank wood block if no tweeter is used
Solldly constructed of $3 / /^{\boldsymbol{\pi}}$ stock. Finished models of genuine veneers on accoustically correct flakecore. Universal speaker panel is de talled with picture frame molding and covered with pleasing olastlc grille. 5" tapered offset legs are edge-tipped with brass ferrules. Lined internally with acoustic material. $287 / \mathrm{H}^{2} 231 / 2 W \times 16^{\prime \prime} \mathrm{D}$. Shpg wt. 54 Ibs


## Games-Philip Contemporary



This beautlifully styled 70" cabinet has been designed with everything you need in utility as well as the finest appearance in contemporary simplicity. The meticulous custom craftsman. ship, rich. matched mature wood veneers and custom hard-rubbed finish will please the most discriminating taste. Includes dual $12^{\prime \prime \prime}$ speaker enclosures, with baffle plates, 2 sliding doors, sliding changer carrlage, record partition and equipment section. Overall size: $70 \mathrm{~W} \times 18 \mathrm{Dx}$ 335, "H. Leg $101 / 2^{\prime \prime}$. Inside speaker compartment $15 \frac{1}{2} 2^{\prime \prime} \times 20^{\prime \prime} \mathrm{H}$. 2 Equipment sections, 1 blank panel, 1 shelf: $170 / 4 \mathrm{~W} \times 71 / 2 \mathrm{H} \times 151 / 2^{\circ} \mathrm{O}$. Record storage section. Shpg. wt., 160 lbs . CAB-167WX .......No Money Down....... Net 189.50


# ELEGANT DECORATIVE BEAUTTY 

## Deluxe Modern Stereo Ensemble

Styted for today
Practical too. Lets you choose your own hi-fldelity equip. ment and speaker system and surround them In luxurious cabinetry. Sturdily bultt of selected woods of 5 -ply walnut. Ensemble consists of equipment cabinet and two matching speaker enclosures. Outside dimensions of cabinets, $383 / 4 \mathrm{~W} \times 301 / 2 \mathrm{H} \times 194 / 2^{\prime \prime} \mathrm{D}$; outer dimensions of each speaker cabinet. $20 \mathrm{~W} \times 301 / 2 \mathrm{Hx}$ $191 / 2^{\prime \prime}$. Includes $12^{\prime \prime}$ precut speaker baffle; 2 removable shelves and equipment compartment in left side; ( $18 \mathrm{~W} \times 253 / 4{ }^{\prime \prime} \mathrm{H}$ ) changer board ( $18 \mathrm{~W} \times 16^{5} /{ }^{\prime \prime}{ }^{\prime 2}$ D) $5^{\prime \prime}$ below motor board, and record compartment ( $141 / 2 \mathrm{H} \times 253 / 4 \mathrm{HH}$ ) in right side with Ift-top. Magnetle door fasteners
CAB.165WX Walnut Equipment Cabinet Only. Wt. 123 lbs
Net 99.50
Each Net 54.50


## Multi-Purpose Contemporary Equipment Cabinet

Add contemporary charm to your decor. Spacious cabinet will hold all of your hi.fidelity equipment in the best arrangement for your pleasure and convenience. Crafted in fine woods, it is finished beautifully in walnut. Has 6 roomy compartments. The top three are $94 / 4 " \mathrm{Hx} 151 / 2^{\prime \prime} \mathrm{D}$. Each lower side compartment is $191 / 4 \mathrm{~W} \times 131 / 4 \mathrm{HH}$. The lower center compariment is $181 / 4 \mathrm{~W} \times 131 / 4^{\prime \prime} \mathrm{D}$. Overall dimenslons: $60 \mathrm{~W} \times 29 \mathrm{H} \times 18^{\prime \prime} \mathrm{D}$. Three sculptured sliding doors make access to components easy without taking up space in your room. Shpg. wt., 110 lbs .
CAB-168X Walnut Finish. No Money Down
Net 99.50

## Contemporary Multi-Purpose Stereo Cabinet

Long, lean and graceful. A complete cabinet which will house the hi-fldelity components and speakers of your cholce in the luxurious surroundings of fine wood and finish. The twin speaker compartments will accommodate 2.12" speakers. Two sliding doors cover 2 roomy equipment sections. Each $17 \mathrm{~W} \times 183 / 4 \mathrm{Hx}$ $161 / 2^{\prime \prime} 0$. Shelf is removable. Overall dimensions: $72 \mathrm{~W} \times 291 / 2 \mathrm{H} \times 18^{\prime \prime} \mathrm{D}$. (Including legs). Walnut finish. Shpg. wt, 166 lbs. CAB.i69WX

No Money Down
Net 139.50


13950
st momp NO MONEY DOWN

## French Provincial Equipment Cabinet



7950 $\$ 5$ monthly NO MONEY DOWN

Create an air of old world elegance with cabinetry of enduring beauly. Makes a signiticant contribution to any room. Features two doors and lift lid. Overall dimensions: $42 \mathrm{~W} \times 333 / 4 \mathrm{H} \times 201 / 2^{\prime \prime} 0$. Left compartment Interior with 2 shelves: 18 W×25 $3 / 4 \times 211 / 2^{\prime \prime} \mathrm{D}$. Right compartment with Ifft lid, record changer board $18 \mathrm{~W} \times 104 z^{\prime \prime} \mathrm{D}_{\text {; }}$ record storage space $141 / 2 \mathrm{H} \times 18 \mathrm{~W} \times 171 / 4^{\prime \prime} \mathrm{O}$ with 2 dividers. Matching speaker cabinet for precut for $12^{\prime \prime}$ speakers. $333 / 4 \mathrm{H} \times 24 \mathrm{~W} \times 201 / 2^{\prime \prime} \mathrm{D}$. Finished in beautiful cherry.
French Provinclal Equipment Cabinet. Wt., 111 lbs .
CAB-170wX. No Money Down .................... 159.50 French Provincla! Speaker Enclosure. Wt., 63 lbs. CAB.171wx ..........No Money Down ......... Each Net 79.50


# MADE BY ADMIRAL FOR LAFAYETTE the admiral ENSIGN WITH NEW AdDED features 

Lafayette's sensational Low, LOW price on admiral's newest AND MOST POPULAR ENSIGN CHANGER

- 4 Speed $-162 / 3,331 / 3,45$ and 78 RPM.
- Plays Stereo or Monaural Records
- Quality Ceramic Turnover Stereo Cartridge
- Automatic 3.Way Shut-Off
- Intermixes Records of Same Speed
- Heavy Duty Constant Motor
- Single Knob Speed/Function Control

[^5]

## MODEL "A" MARK II AUTOMATIC TURNTABLE

Wired For Stereo and Monaural

## - 4.SPEED

A precision Iurntable and tone arm with the convenience of automatic record changing. It has many quallity features found only in professional manual players. Polished 6 ib . cast turntable. "Laboratory balanced," 4 pole shaded constant speed motor is completely shlelded. Tone arm is dynamically balanced with adjustable counterweight and spring tension - no side pressure on groove. Tracking force is set by sliding knuried knob along scale. Pusher changing mechanlsm featuring 1 plece center spindle. Level adjusted without tools, using knurled knob. Five wire system, fully wired for stereo - utilizing separate ground wire to minimize residual hum. Dimensions: $163 / 4^{\prime \prime}$ across $\times 141 / \mathrm{g}^{\prime \prime} .6^{\prime \prime}$ above and $27 / 0^{\prime \prime}$ below motor board. Complete with Itine cord, pickup leads, plug-In shell, mounting hardware, standard and manual spindles, 45 rpm adaptor. Less cartridge and automatic 45 rpm spindle. For $100 \cdot 130$ VAC 60 cycle. Richly finished in grey, charcoal and chrome. Shpg. wt., 19 lbs . Imported from England. 21 A 3701wx Less cartridge and base ...... Net 78.50

## MODEL AT 6 MARK II AUTOMATIC TURNTABLE

Wired for stereo and monaural - 4.SPEED

A new, moderately priced automatic turntable designed to combine deluxe features with compactness. Tubular tone arm dynamically counter-balanced with adjustable counterweight; has built-in gram scale. Oversize turntable for periect balance, heavy flywheel action. Qulet, powerful, 4 -pole shaded motor. Completely separate automatic and manual controls; 2 spindles with short spindle for playing records singly. Replaceable plug-in cartridge shell with bayonet connector permits use of any cartridge. Richly finished in grey, charcoal and chrome. Dimensions: $153 / \mathrm{H}^{\prime \prime}$ left to right, $131 / \mathrm{s}^{\prime \prime}$ front to rear, $47 / \mathbf{g}^{\prime \prime}$ above and $27 / \mathrm{a}^{\prime \prime}$ below top of motor board. Additional $11 / 2^{\prime \prime}$ required at rear of arm and on right side for clearance of counterweight. For $100-130$ VAC. 60 cycles. Shpg. wt., 12 tbs. Imported from England. 21 A 37COW Less cartridge and base ......... Net 54.50

## AUTOSLIM "P"

## MARK II

## INTERMIX CHANGER

Wired for stereo and monaural - NOW WITH PLUG IN HEAD - 4-SPEED

An ultra-compact, automatic-manual changer at a remarkably low price. Only $61 / 4^{\prime \prime}$ overall height. Intermixes all records, i.e. records of different sizes can be stacked in any sequence. Separate manual and automatic controls - featuring Garrard's new center-changeing mechanism. The Autoslim employs a new type of 1 urntable and a 4 -pole shaded motor, achieving bal. ance and quiet turning. Richly lfinished in grey, char ance and quiet turning. Richly inished in grey, char front to rear; $43 / 8^{\prime \prime}$ above top of motorboard, $27 / 8^{\prime \prime}$ below For 100.130 VAC, 60 cycles. Shpg. wt., 9 ibs. Imported from England.
21 A 3703 W Less cartridge and base
Net 39.50

GARRARD HI-FI COMBINATIONS PRICED-LOW
Your choice of any Garrard changer and any of these famous $\mathrm{Hi}-\mathrm{Fi}$ cartridges installed at Lafayette's regular low prices


CARTRIDGES ONLY
21 A 5301L Pickering U38/AT ........ Net 16.61 21 3401L Empire 880 .................Net 17.95 21 6201L Shure M3D

Net 17.95

## CHANGERS WITH CARTRIDGES



GARRARD TAMBOUR TABLE CABINETS


Beautifully buflt of stain and scuff resistant formica in rich walnut color. Cover recessep as shown in insert. Records may be played with case closed precut mtg. board. Size: $151 / 2 \mathrm{Dx} 101 / 4 \mathrm{H} \times 18^{\circ} \mathrm{W}$. Shpg. Wt., 15 lbs . PK-668wx For Model A. Net 34.50 PK-669WX For AT-6, AutosIlm .......... Net 34.50 PK-670wx With Uncut Board Net 34.50


## GARRARD PRESSURE GAUGE

For accurately measuring tracking force. Large circular scale, transparent plastic window. Gauge reads 0.12 grams with $1 / 2$ gram markings. Scale pan is of swiveling balance type. Measures pressure at the stylus and at the actual record fevel. Easy to operate. Comes with 5 gram brass weight for cheching calioration. PK.788 Garrard SPG3 Imported from England

## DUST COVERS



## VALUE PACKED CHANGER and CARTRIDGE COMBINATIONS

## A SELECTION OF WORLD FAMOUS HIGH FIDELITY CHANGER <br> AND CARTRIDGE COMBINATIONS AT LAFAYETTE'S REGULAR LOW, LOW, PRICES.



Your Choice of Any One of These 3 Superb Stereo Cartridges Installed in the Changer You Select
See Listings for Lafayette's Low, Low Prices on Changer and Cartridge Combinations. Price Includes Installation of Cartridge.

## MIRACORD STUDIO SERIES HI-FI AUTOMATIC TURNTABLES



The Miracord Studio $\mathbf{1 0 H}$ is the answer for audlophiles who require a turntable and those who need to change records. Features a hysteresis motor, and adjustable counter-balance tone arm, and the famous "Magic Wand" spindle. Push. buttons select automatic or manual operation at any of 4 speeds playing all records including the new $331 / 37^{7 \prime \prime}$ type. Jam proof tone arm. Satin chrome finish on atl machined parts. Positive locking 4 -contact plug-In head accepts all cartridges. Imported from $\mathbf{W}$. Germany
Studlo Model 10 H less base and cartridge.
Studio Model. Same as above but with speclally designed heavy dufy shaded pole induction motor instead of hysteresis motor designed heavy duty shaded 4 pole induction motor instead of hysteresis motor. Imported from W. Germany. 2t A 1602wX Model 10 less base and cartridge ACCESSORIES MIRACORD TURNTABLES
21 1603W Wood Base, Oll Wainut. Shpg. Wt., 4 lbs.
21 A 1604 w Wood Base, Unfinished. Shpg. Wi., 4 lbs
21 A 1626 Automatic 45 RPM Spindle. Shpg. wt., $i$ lb.
21 A 1605 W Unfinished Mounting Board. Shpg. wt., $11 / 2 \mathrm{lbs}$
21 A 1627 Extra Plugtn Head. Shpg. wt., i/2 lib'
Net 89.50
9.95

21 A 1625 "Miracover" plastic dust cover, Shpg, wt., $11 / 2$ lbs

## COMBINATION PRICES

PK-738wX-Model 10 H with Plckering U38/AT cartridge. PK.739wX-Model 10H with Emplre 880 cartridge. PK-740wX Model 10 H with Shure M30 cartridge.

PK-741wX-Model 10 with Pickering U38/AT cartridge. PK-742WX Model 10 with Empire 880 cartridge. PK-743wX-Model 10 with Shure M30 cartridge.

ANY ONE 9951 ANY ONE 8951

## LESA Model CD $2 / 21$ Stereo Record Changer

## The fully automatic jam-proof changer plays up to eight records of any size with automatic intermix. Easy to operate -oniy two controls for all cycles, speed selection, start, stop and reject. Fast 6 second change cycle. Autornatically shuts off after last record. Rumble, flutter and wow are extremely low compares with professional turntables. Other features include a heavy duty 4 pole motor, and a high inertia turntable. Non-resonant tone arm is equipped with a universal 4 -terminal plug-in shell prewired for monaural and stereo. Two tone gray. Slze: $131 / 2 \times 111 / 2^{\prime \prime}$, requires $4^{\prime \prime}$ above and $31 / 4^{\text {n }}$ below. Shpg. wt., 17 lbs. Lesa CD $2 / 21$ Automatic changer, less cartridge, less base. <br> 21 a 4801wx lloported from <br> Italy …........... Net 44.50 <br>  <br> PK.754w Lesa CD $2 / 21$ plus <br> Pickering U38/AT cartridge <br> PK-755W Lesa CO $2 / 21$ plus Empire 880 cartridge <br> PK.756W Lesa CD $2 / 21$ plus <br> unnoc $44^{51}$ Shure M3D cartridge

## LESA CD $3 / 31$ AUTOMATIC RECORD CHANGER

Deluxe Lesamatic changer. Professional Pick-Up arm with a stylus pressure Gauge and counterbalance adjustment screw with marked gram measurements. Large heavy high-inertia, non-magnetic turntable dynamically balanced for ellimination of wow and flutter. Heavy Outy, Shaded, 4-P ole Motor. Equipped with interchangeable spindle for manual operation. Silver-gray, polished alumfnum and dark gray finish. Dim. 131/2x 1112.

21 A 4802 wX Shpg wt. 20 lbs. Net 69.50
COMBINATION PRICES
PK-757wK Lesa CD $3 / 31$ plus
PK-758WX Pickering U38/AT

PK-759w Empire 880 cartridge
PK-759wx Lesa CO3/31 plus Shure M30 cartridge

ACCESSORIES FOR LESA CD 2/21 21 A 4804 Wood base- wainut ...... Net 4.75 and CD $3 / 31$ RECORD CHANGER 21 A 4805 Wood base-mahorany Net 4.75

## WOOD BASES - BOARDS - CASES FOR GARRARD RECORD CHANGERS



LAFAYETTE RECESSED WOOO MOUNTING BLSES (A) PK.782W Oll Wainut Avaliable in 3 finishes. Shpg. wt., 4 lbs. PK.782W Oll Walnut finish, for Model A PK-780w Mahogany finish, for Model A PK-781w Blonde finish, for Model $A$
PK.785W Oll Walnut, for AT6 and Autoslim
PK-783W Mahogany, for AT6 and Autoslim
Net 3.95
Net 3.95 PK.784W Blonde. for AT6 and Autoslim ..

Net 3.95
Net 3.95
LAFAYETTE WOOD MOUNTING BOAROS (B)
Stock No. Unfinished, smooth sanded. Shpg. wt., $11 / 2$ los.
Net 3.95
Net 3.95

## GARRARD CARRYING CASES (C)

Portable Wood cases with handsome simulated leather covering. Shpg. wt., 6 tbs.
PK-405W For A, 88/11, RC88 and RC98 15.00
PK-406W Fnr ATb, AUTOSLIM and 210

# LAFAYETTE STEREO TURNTABLES DELUXE 4-SPEED STEREO INTEGRATED TRANSCRIPTION TURNTABLE 

## SUPERB STUDIO QUALITY PERFORMANCE

- 3 lb . Balanced 12" Aluminum Turntable - Rumble and Noise Better Than - 50 db - Speed Control Provides $\pm 7 \%$ Variation of Each Speed - Wow \& Flutter Below 2\% - Precision Lightweight 12" Aluminum Tone-Arm - Plug.In Shell For Popular Stereo Cartridges - Adjustable Counterbalance Weight - Perfect Tracking Even at 2 Grams - Automatic On.Off Switch Built Into Tone Arm Rest - Perfect For Both Stereo and Monaural
Designed and Constructed To Meet The Most Precise Professional Standards-The Lafayette FK-449 combines on a single mounting plate a four-speed transcription turntable and tone arm... each unit precision engineered to complement the other.
Ideally sulted for stereo, the turntable features a specially designed heavy duty 4 pole induction motor, free-floating and shock mounted to virtualiy eliminate vibration. The 3 lb . rim-weighted $12^{\prime \prime}$ aluminum table is constructed with a permanently fubricated ollite bronze bearing while the precision spindle turns on a single ball bearing. Speeds-162/h, 331/3, 45 and 78 rpm are selected by means of a click-in shift lever ("off" positions between all speed positions). The oversize idier disengages in off positions. A speed control allows for $\pm 7 \%$ variation of each speed. Noise and rumble are - 50 db below average recorded level with wow and flutter less than $0.2 \%$
The $12^{\prime \prime}$ Transcription Tone Arm has been designed to track perfertly at the lowest stylus pressures recommended by cartridge manufacturers. Stylus force adjustment is easily ac complished by simply rotating the Knurled Knob at the rear of the arm. Use of ball bearing suspensions result in a high compliance lateral, vertical movement. A plug-in head is provided which accepts most of todays popular stereo cartridges. The unique arm-rest serves a double duty-simply lift the tone arm from the lock position to start the motor and replace to stop. Complete with stroboscope disc, 45 rpm adapter, shielded nook up cables and AC line cord. The entire motor plate is spring suspended and measures $161 / 4 \times 121 / 2^{\prime \prime}$ requires $4^{\prime \prime}$ below motor board. For $105-120$ volts $60^{\circ}$ cycles AC. Shpg. wt., 15 lbs. Imported PK-449WX Less Base and Cartridge ............................................................ 49.50 Extra plug in cartridge shell with necessary mounting hardware for PK-449. Shpg. wt., 1 to PK-499

Net 1.69
WOOD BASE for PK-449WX. Finest selected hardwood veneers. Mitered corners, 5/" sides $1 / 2^{\prime \prime}$ top. For turntable and $12^{\prime \prime}$ arm. Size $171 / 2 \mathrm{~W} \times 131 / 20 \times 37 / \mathrm{a}^{" H}$. Speclfy: mahogany, walnut or blonde finish. Shpg. wt., 5 lbs.
PK.504WC


## LAFAYETTE 4-SPEED PROFESSIONAL TRANSCRIPTION PLAYER WITH 3-LB. 12-INCH ALUMINUM TURNTABLE

- Ideally suited for steredi better than - 50 db rumble molse vibrationless moton SUSPENSION - BELOW O.2\% WOW \& FLUTTER - MAGNETIC EDOY-CURRENT BRAKE - 3 LB 12" BAL. ANCEO \& MACHINED ALUMINUM TURNTABLE SPEED CONTROL FOR $\pm 7 \%$ VARIATION OF EACH SPEED You will be delighted at the superior quality of this fine instrument. Features include heavy, rim-welghted, 3 16. machined-aluminum $12^{\prime \prime}$ turntable, magnetic brake with speed control $\pm 7 \%$ variation of each speed; the extremely low noise and rumble figure of -50 db below average recorded level; wow and flutter (speed variations) of less than $0.2 \%$; new-type oversize precision-ground idler with special fubrication features; positive-locking detents on 4 -speed single-knob speed selector; ("off" positions between all speed positions) free-floating shock-mounted motor; automatic ider disengagement in "off" positionsi precision spindle turns on single ball bearing; heavy duty 4 -pole induction motor. Heavy rubber furntable mat. For $\mathbf{1 0 5 - 1 2 0}$ volts, 60 cps AC; draws 0.13 amperes. Size of motor plate $11 \times 10 \times 141 / z^{\prime \prime}$; requires $4^{\prime \prime}$ below motor board, $11 / 2^{\prime \prime}$ above. Complete with stroboscopic disc, 45 rpm adapter, AC line cord. Shpg. wt., 14 lbs PK-240W $12{ }^{\text {n }}$ TRANSCRIPTION TURNTABLE

Imported
Net 37.50

| Comb. No. | Turntabla | Arm | Cartridge | Nat |
| :--- | :---: | :---: | :---: | :---: |
| PK-671WM | PK-240W | Shure M232 | Shure M30 | 72.50 |
| PK-787WM | PK-240W | Empire 980 | Empire 880P | 85.80 |

SPECIAL-VALUE COMBINATIONS

Shipping weight of these combinations is 18 lbs .
WOOD BASE for PK-240W. Size and construction identical to base Hlustrated above with PK-449WX turntable. Specify walnut, mahogany or blonde. PK.505wC Shpg. wt., 5 lbs.

Net 9.95

## LAFAYETTE INTEGRATED STEREO TRANSCRIPTION PLAYER

- S-CONTACT PLUG IN HEAD FOR ALL STEREO CARTRIDGES - 4-SPEED, HEAYY DUTY 4-POLE TRANSCRIPTION TYPE INDUCTION MOTOR - MAGNETIC BRAKE FOR $\pm 7 \%$ SPEED AOIUSTMENF - STYLUS WEIGHT ADJUSTMENT SCREW ON TONE ARM - RUMBLE AND NOISE -40 DB LESS THAN $0.3 \%$ WOW
Here is a modestly;priced complete hi-fl, compatible stereo pickup system, designed against obsolescence, This top quality manual player features a 5 -contact, plus-in head to accommodato the latest stereo as well as monaural cartridges. The lightweight tone arm is an integral part of the mounting plate and requires no installation. Equally important in contributing to the excelient performance of this system in the new 4 -speed turntable assembly. It is equipped with a quiet, heavy duty 4 -pole motor, with an exclusive magnetic brake for instantaneous fine adjustment of each speed. Stroboscope disc also included. Smooth operation is assured further by the $10^{\prime \prime}$ heavy turntable, flitred with rubber mat. Provision for easy adjustment of stylus pressure is avallable. Dimensions of mounting plate $12^{1} \mathrm{~K}_{\mathrm{c}}{ }^{\prime \prime}$ left to right, and $107 / \mathrm{s}^{\prime \prime}$ front to rear. Requires $23 / 4^{\prime \prime}$ below and $3^{\prime \prime}$ above motor board. For 105.120 V , 60 cps . Accessories included are: 45 rpm adaptor, output cable to amplifer and plug in heads. Shpge wt., i4 ibs. Imported
PK-1605w Complete Stereo Transcription Player less Base and Cartridge PK-673WM PK-160SW with Pickering U38/AT Cartridge PK.769WM PK.160SW with Empire 880 P Cartridge PK-675WM PK-160SW with Shure M30 Cartridge
PK.675WM PK.160SW with Shure M30 Cartrid
PK. 162 WC Wood base for above, finished in mahogany or blonde (please Specify). Shog. wt., 5 lbs


Net 26.95 Net 37.95 Net 37.95 Net 37.95 Net 37.95 Net 4.50


## STEREOPHONIC TURNTABLES, TONE ARMS, AND CARTRIDGES

## \#ATRCHILD

 PROFESSIONAL TURUTABLESA new high fidelity turntable. 2 -speed operation ( 331 h and 45 rpm ), single belt drive, Speed Sentinel control varies turntable speed $\pm 1 / 2 \%$, highly styled and precision turntable platter. Entire assembly supplied on a channel for easy mounting. Rotational speed controlled from top. Strobe disc included to determine correct speed. Size: $19 \times 16 \times 10^{\circ}$. Complete delermine correct speed. Size: $19 \times 16 \times 10$. Complete
with unfinished mounting board, but less base, 19x with unfinished mounting board, but less base, 19x
$16^{\circ}$. For $110 \mathrm{~V}, 60$ cycle, AC. Requires $11 / 4$ " clearance $16^{\prime \prime}$. For $110 \mathrm{Y}, 60$ cycle, AC. Requires 14
above turntable, $312^{\prime \prime}$ below, Less base. 21 A $3503 W \mathrm{~W}$ - Shpg. Wt., 21 lbs. Same as above but in kit form.
21 A 3504 WX
Net 69.95
Net 58.00 MODEL $440 C B W$. Base for above. Includes walnut mounting board, walnut wraparound. $19 \times 16 \times 8^{\prime \prime}$ Shpg. Wt. 12 lbs.
21 A 3505 W


MODEL 412.18 PROFESSIONAL TURNTABLE

MODEL 412-18. Single-speed $331 / 3 \mathrm{rpm}$ basic unit. Double belt drive and step-down idier eliminates silip page. Self-lubricating hysteresis synchronous motor balanced 15 lb . turntable. Ball-thrust bearing in nylon seat. Main shaft micro-honed, runs in polished babbitt. Speed accuracy $\pm 0.3 \%$. Acoustically silent-exceeds NARTB specs by 3 to 1 margin. Requires mounting board $16^{\prime \prime}$ wide, cutout $131 / \mathrm{xa}^{\prime \prime}$; $6^{\prime \prime}$ clearance below board. For $110 \cdot 120$ volts, 60 cps AC. Shpg. wt., 28 lbs. Less base and tone arm.
21 A $3507 w x$
Model 412.18 K same as above, but in klt form
21 A 3508WX
form
412-88F-Base for models 412-18 and 412-18K turntables. Shock mounted. In oil finished walnut with white formica top for all $12^{\prime \prime}$ arms. $173 / 4 \times 143 / 4 \times 61 / 4^{\prime \prime}$ 21 a 3509 WX Shpg. wt., 6 lbs

Weathers Stereo tone arm and CARTRIDGES

## (A)

(A) MOOEL PS. 11 PROFESSIONAL

STEREO TONE ARM-CARTRIDGE SYSTEM Professional pickup system with variable capacitor sys tem and patented ampliffer bridge circuit. Frequency tem and patented amplififer bridge circuit. Frequency
response $\pm 1$ do $20-20,000$ cps. compliance 20x10-6 response $\pm 1 \mathrm{db} 20-20,000$ cps. Compliance $20 \times 10-9$
$\mathrm{~cm} / \mathrm{dyne}$. Channel separation 40 to $35 \mathrm{db} 20.15,000 \mathrm{cps}$ Output -1 volt at $1,000 \mathrm{cps}$. Tracking force $1 / 4$ to 1 gram. Hum and noise -60 db \& $7 \mathrm{~cm} / \mathrm{sec}$. 1000 cps Moving mass . 6 MG . - amplifier pridge circuir. Dim. $21 / 4 \mathrm{H} \times 3 \mathrm{~W} \times 51 / 4 \mathrm{~L}$. With 0.3 mil diamond stylus. Shpg wt., 2 lbs.
21 A 6925 L
Net 129.50
(B) WEATHERS LDM STEREO CARTRIDGE The LDM stereo cartridge utilizes the same principle as Weathers Professional model used today by many FM stations across the nation for multiplex stereo broad stations across the nation mor multiplex enereo
casting. Featured is a special "Siress Generator"s prin. ciple which ellminates excessive weight and mass. To tally free of induced hum, - will track perfectiy a one gram (recommended). Specs: Stylus: 7 mil radius diamond, 3 milligram tip mass; Freq. Response: 20 to $20,000 \mathrm{cps}$ at $\pm 2 \mathrm{db}$; Output: $5 \mathrm{mv} @ 7$ centimeters per sec . Shpg. wt., 702.

| per sec. 926 L |
| :--- |
| 1 |

Net 39.50


A deluxe record playing instru ment (RPI) which features: a seven pound plus, dynamically balanced non-ferrous platter. Precision oscilloscope balanced, high torque, 4.pole motor that resists variathons in line voltage up to $\pm 10 \%$. A unique three point suspension system provides remarkable acous. tic isolation that is virtually Im. pervious to mechanical vibration or acoustic feedback. Dynamically balanced professional tone arm. Stylus pressure is added by a multiple-coil, precision watch type spring through a direct reading dial. The self-stabllizing feature of the spindie permits changing of adding records to the stack during play. Dimensions: $127 / 9^{\prime \prime}+1 / 2^{\prime \prime}$ width ${ }^{\circ}$ depth $10^{3} 4^{\prime \prime}+1 / 2^{\prime \prime \prime}$, above top of motor board $61 / 2^{\prime \prime}$ below top of motor board $31 / \mathbf{g}^{\prime \prime}$. Shpg. wt., $191 / 4 \mathrm{lbs}$. Imported
*Additional $1 / 2^{\prime \prime}$ allows for counterweight clearance in cabinet installation.
21 A 6500 WX Dual 1009 RPI
Net 94.75
ACCESSORIES FOR DUAL 1009
21 A 6525 Model AS- 645 RPM spindle
Net 4.80
21 A 6526 Model CH-6 Extra Cartridge Holder
21 a 6501 Oil walnut base for dual 1009. Shpg. wt., 3 ibs.................Net 9.95

## DUAL 1009 TURNTABLE/CARTRIDGE COMBINATIONS

A selection of world famous stereo cartridges installed in the Dual 1009 RP: Turntable at Lafayette's regular low, low, prices
Dual 1009 RPI plus Pickering U38/AT stéreo cartridge
21 A 6502WX
Dual 1009 RPI plus Shure M 30 stereo cartridge
21 A 6503 WXM
Dual 1009 RPI plus Empire 880 stereo cartridge
Dual 1009 RPI
21 a $6505 W X M$
Net 54.76

Net 94.76

ADC.1/MARK II


## AOC. 40

## ADC STEREO PICKUPS

Model AOC-1/Mark II. Compatible with the finest stereo equipment. Pickup distortlon is reduced to the point where it is negligible with channel separation ... 30 db from $50-7,000 \mathrm{cps}$. Tracking as low as $1 / 2$ gram. Frequency response is 10 to $20,000 \mathrm{cps} \pm 2 \mathrm{db}$. Designed to fit all standard $1 / 2^{\prime \prime}$ and Yi" mounting centersadapts to virtually all tone arms. Complete with RIO Diamond .6 mil stylus.
21 A1300 Shpg. wt., 8 or
Net 49.50
ADR-R1 diamond replacement assembly for ADC-1 cartritge.
$21 A 1301 \mathrm{~L}$
Net 25.00
Model AOC-40. Features adjustable counterweight; accurately machined and treated tone arm of walnut wood suppresses extraneous resonances. Arm lengthtreated tone arm of walnut wood suppresses extraneous resonances. Arm length-
21A1302L Shpg. wt., 2 ibs.
Net 44.50
Model ADC-85. Pritchard Pick-up System consists of ADC-40 with ADC-1/Mark II stereo cartridge.
2141303 Shpg wt, $21 / 2 \mathrm{Ibs}$
Net 89.50


## NEW GRADO LABORATORY SERIES MODEL MK-1 TURNTABLE

- Designed for the complex Problems of Stereo - Pre-mounted on Oiled Wainut base


## The Grado Laboratory Series MK-1 Turntable with its exclusively patented between

 bearing center drive system" Is a completely new concept in turntable design Operates as a "gyroscopic flywheel" mounted between bearing centers. Flywhee weighs 9 lbs. thus allowing for a smooth and easy rotation of the platter. Wow and flutter are unmeasurable, rumbler $=70 \mathrm{db}$. Because of the ease of rotation practically no power is required to drive the flywheel. Utilizes $\mathbf{2} \mathbf{1 2}$-pole, hysteresis synchronous type motors. Single speed operation for minimum distortion and maximum sound reproduction qualities. Size: $16 \mathrm{~W} \times 131 / 2 \mathrm{Dx} 81 / 2^{\prime \prime} \mathrm{H}$. Shpg. wt., 30 lbs MK-1 Turntable mounted on olled walnut base.21 A 4100WX
Net 99.50
Model MK-1 Integrated turntable with Laboratory series tone arm and Dustat; mounted on oiled walnut base.
21 A 4101wx
Net 153.00


A superb instrument designed for the ultimate in stereo performance. Constructed of the finest hand-rubbed gumstock walnut with metal fittings of machined aluminum. Features include separate balance adjustments for the vertical and lateral minum. Features include separate balance adjustments for the wertical and lateral plane of arm movement. A precise micrometer tracking force adjustment is
accurate to the tenth of a gram. Total length of the arm is $114^{\prime \prime}$ with a minimum of ear overhang. Supplled completely wired to the preamp, with no soldering necessary. Shpg. wt., 3 lbs.
"LAB" SERIES CARTRIOGE
Moving coll cartridge provides utmost quality. Freq. response $\cdot 10-30,000$ cps $\pm 1 \mathrm{db}$ output 6 mv at 10 CMV ; channel separation 30 db ; compliance $12 \times 10.6$ $\pm 1 \mathrm{dbj}$ output 6 mv at 10 CMV; c 21 A 4126L

Net 49.50

## "Classic' CARTRIOGE

Same basic design as Lab series, but frequency response $15-29,000 \mathrm{cps} \pm 1 \mathrm{db}$, and channel separation 25 db ; with diamond stylus
21 A 4127
Net 37.50
"SENATOR" CARTRIOGE
High quality, economically priced moving coll cartridge. Freq. response 18-24,000 cps $\pm 1.5 \mathrm{db}$; output 9 MV , Separation 20 db , compliance $8 \times 10^{-6}$. With diamond stylus.
21 A 4128 L
Net 24.95

## RENOWNED AR 2-SPEED STEREO TURNTABLE TONEARM COMBINATION

- Complefe With Precision Tane Arm
- Oiled Walnut Base and Transvarent Dust Cover


A new outstanding turntable featuring a precision arm oll walnut base and transparent dust cover in one compact unit. The rugged 3.3 lb . balanced aluminum plater Is bett driven from synchronous motors operat. ing at $331 / \mathrm{y}$ and 45 RPM, turntable and arm are shockmounted from the top plate eliminating vibration. Tone arm floats down to the record if dropped, but damp. ing mechanism is disengaged as soon as the needie touches the record. Meets NAB specifications for broadcast equipment on wow, flutter and speed accuracy. Also includes cables, overhang adjustment device and needle force gauge. Size with coverdevice and nee
$123 / 4 \times 163 / 4 \times 51 / 4$
$123 / 4163 / 4 \times 51$
21 A 720
Net 68.00
EASY BUDGET PLAN SEE PAGE 412

## Weathers famous thin line turntables

## WEATHERS K-"66" STEREO INTEGRATED TURNTABLE



- Complete with LDM Stereo Cartridge and Stereo Tone Arm
- Uses 2 Precision Hysteresis Synchronous Motors
- $331 / 3$ RPM Turntable
- Only $2^{\text {m }}$ High-Including Beautiful WaInut gase
A lightwelght, low silhouette turntable departing radically from conventional "battleship" design. Rumble, wow, flutter and acoustic feedback are virtually ellm inated. Suspension on neoprene "seismic platform" produces Isolation from floor vibrations of more than 500 to 1. Accurate with in one revolution per hour. Size: $16 \mathrm{~W} \times 140 \times 2$ " H (excluding tone arm). Shpg. wt. 8 lbs
21 A 6901wx
Net 129.50

MODEL ML-66 STEREO TURNTABLE


- Only 2 Inches High-Weighing But 6 lbs. Including Beautiful Walnut Base
- Uses 2 Precision Hysteresis Synchranous Motors
- Single Speed $331 / 3$ RPM

A IIghtweight, low silhouette turntable departing radically from conventional "battleship" design. Not only striking In appearance but also engineered enpecially for today's high compliance stereo cartridges and tone arms. Rumble, wow flutter and acoustic feedback are virtually eliminated. Süspension on neoprene "seismic platform" produces isolation from floor vibrations of more than 500 to 1. Accurate within one revolution per hour. Size; $16 \mathrm{Lx140} \mathrm{\times 2} 2^{\prime \prime} \mathrm{H}$. Shpg. wt., 7 lbs.
MODEL ML. 66 Turntable Only with WaInut Base 21 A 6902WX
MODEL ML-65A Turntable with Walnut Base Net 75.00 grated Viscous Stereo Tone Arm.
21 6903wX Shpg. wt., 8 lbs.
Net 99.50

TD-124 TRANSCRIPTION TURNTABLE Engineered to meet the most critical broadcast standards. Incorporates all newest features: 4 -speed, each speed adjustable Bulit-in stroboscope complete with neon bulb $112 / 2 \mathrm{ib}$. cast-iron and aluminum turntabe - 4 precision-machined levelling knobs and built-In spirit level Cueing clutch - Single control knob - Low wow, flutter, rumble - New-design Induction type roto-lsolated drive motor - $151 / 2 \times 127 / 0^{\prime \prime}$; depth $23 / 4^{\prime \prime}$ - Shpg. wt., 32 lbs.

21 A 3201wx
Net 125.00
Walnut Wood Base for TD-124. Shpg. wt., 6 lbs.
21 A 3202w
Mahogany Wood Base for TD-124. Shpg, wt., 6 lbs
bogen-presto Variable SPEED Hi-Fi Stereo Turntables


MODEL B50-16LCS-Factory equlpped for stereo, this model will accept standard stereo and monaural car tridges. For discs up to $16^{\omega}$ diameter. Continuously variable speed control from below 16 to 86 rpm , notched at $16^{2 / h} 331 / \mathrm{s}, 45$ and 78 rpm . Heavy-duty 4 pole con-stant-veloclity motor. Weighted balanced turntable of $113 / 4^{\prime \prime}$ diameter, is fitted with a serrated rubber pad to minimize transter of mechanical vibration. "Wow" less than $0.5 \%$; negligible rumble. "Feather-Drop" action of pickup arm prevents damage to stylus of record Adjustable stylus pressure. Supplied with vibration isolators. For $95-125$ volts, 60 cps AC. Mounting space isolators. Fo $95-125$ volts, 60 cps ac. Mounting space
$15 \times 117 / 8 \times 234^{\prime \prime}$
above and $1 \%{ }^{\prime \prime}$ below mounting board. $15 \times 117 / 8 \times 23 / 4^{\prime \prime}$ above and 17
Shpg. wt. 17 lbs . Imported.
Shpg. wt. 17 lbs. Imported.
2141750 W PB-5 Mahoga 5 lbs. 21 A 1751w
H-2 Plug in Head-wired for stereo for B50

## THORENS



## SWISS CRAFTED TURNTABLES

TD-135 4-SPEED STEREO TURNTABLE

Net 49.90
Net 4.80
Net 2.75


MODEL BE1 PHONO MECHANISM-completely wired forstoreophonic and monaural high fidelity systems. Four pole, heavy duty, constant-velocity motor and nonferrous $73 / 4$ lbs. turntable providing no measurable hum or fiutter. Four speeds, 162/3, 331/, 45 and 78 rpm continuously variable from 29 to 86 rpm. Protessional style arm has plug-in head. Arm Is raised and lowered by Illp-switch and features micrometer-type, easy to read weight adjustment gauge. For $95-125$ volts 60 cps AC. Shog. wt., 20 lbs. with piug-in head, less cartridge. 21 A 1753 wx ....Importad. Net 64.95 MODEL COV-1 Plastic Dust Cover for B61 Turntable. Shpg. wt., 1 lo .
. Dust 1-1756

Net 5.50
P8-6 Walnut Wood Bases for B61. Shpg. wt., 5 lbs .
21 A 1754 w
Net 5.25
H-4 Aluminum Head - Plug-In head for B61
2141755
Net 4.00
Net 2.75

## 



 Troub 28 lbs .

Net 175.00

Net 175.00

## EMPIRE DELUXE 398 RECORD PLAYBACK SYSTEM

The Troubador consists of the 208 transcription tum. table and the 980 stereo/Balance arm completely shock-mounted on a walnut base, with AC line cord and shielded phono input cables. No cartridge is supplled. The DC8 turntable is a professional quality, precision. bulit turntable operating at $331 / 3,45$ and 78 rpm . Features a handy push-button power control. Pop-up 45 pm adapter spindle. Rumble and wow speclifications urpass laboratory and broadcast requirements. 110 surpass laboratory
volts, 60 cycle, AC.
The 980 Arm is Empire's finest and is fully described on another page in this section. Overall size of roubador 398 system is $17 \mathrm{~W} \times 15 \mathrm{D} \times 8 \mathrm{y} \mathrm{a}_{4} \mathrm{H}$. Shpg. Wt.,

TD-121
331/3 RPM TURNTABLE

- Uses BTD-125 Professianal Stereo Infegroled Tone Arm

Exceeds NAB speclfications for rumble, wow and flutter Features include, 4 speeds plus automatic shut-off - 8 lb . cast-iron, non-magnetic $12^{\prime \prime}$ table - Varlable speed control ( $\pm 3 \%$ ). For operation at any voltage trom 100 to 250 volts, $50-60$ cycle AC. $15 \mathrm{Wx} 12{ }^{\prime \prime} \mathrm{D}$; extends $21 / 2^{\prime \prime}$ below panel, $3^{\prime \prime}$ above. Shps. Wt., 35 lbs . 21 A 3204 Wx TD- 135 Integrated Turntable .... Net 125.0 n Walnut Base for TD-135. Shpg. wt., 6 lbs. 21 A 3205w
Mahogany Base for TO-135. Shpg. wt., 6 lbs.
21 A 3206 W

# STEREO CARTRIDGES by PICKERING, SHURE and EMPIRE 

## SHURE CARTRIDGES and TONE ARMS



## THE MAGNIFICENT M3D PROFESSIONAL CARTRIDGE

\author{

- Studio Quality
}
- Shure Finest Designed to satisty the critical ear of the music lover, the reproduction of this moving coll cartridge is singularly smooth and completely compatible. It plays both stereo and monaural discs. The cartridge features low distortion, high output ( 5 mv per channel) minimum hum pickup and no magnetic attraction plus the following specificatlonss Response, 20 to 15,000 cps. Channel separation more than 20 db . Compliance, $4.0 \times 10 \cdot{ }^{\circ} \mathrm{cm} /$ dyne. Tracking force, $3^{\prime}$ to 6 grams . Fits all 4 -lead and 3 -lead cartridge holders. With 0.7 mll diamond stylus,

21 A 6201 L Model M3D
Shpg. wt., 5 oz
Net 15.08
${ }_{21}$ A 6202 L Type N3D Replacement diamond stylus assembly
Net 10.29
M7D CUSTOM STEREO CARTRIDGE
A new moving magnet stereo cartridge with .7 mll diamond stylus. Frequency response: 20 to $15,000 \mathrm{cps}$. Channel separation: More than 20 db at 1000 cps . Output voltage: 5 mv per channel at 100 cps . Vertical and lateral compliance: $3.5 \times 10.6 \mathrm{~cm} /$ dyne. Recommended ioad impedance is 47,000 ohms. Tracking force: 4 to 7 grams . Tracks perfectly in all record changer arms. Has 4 terminals, adaptable to 3 -terminal arms. Shpg. wt., $50 z$.
21 A 6203L Shure M7D
Stereo stylus assembly for M7D, including 7 mil diamond.
21 A 6204L SHURE N7D
Net 11.76

## SPECIAL LOW FORCE CARTRIDGES

The M3 and M7 cartridges are avallable with the N21 Diamond stylus for finest compliance. Use only in arms that track at 2 grams or less.
21 A 6205 L M3-N21D
Net 48.30
21 A G206L M7-N21D
Net 38.01
21 A 6207 N N21D Replacement diamond stylus
Net 24.25


## SERIES M33 STEREO CARTRIDGES

Extraordinary compliance for use in low pressure turntable arms. Features channel separation of over 22.5 db, frequency response $20-20,000$ cps., output per channel 6 mv ., and compliance of $22.0 \times 10-6$. Fits standard $1 / 2^{\prime \prime} \mathrm{mtg}$. centers. Has 4 terminals with adaptor for 3 -terminal stereo or monaural use. Model M33-7 supplled with .7 mil diamond stylus for use with tracking force of $11 / 2$ to 3 grams: M 33.5 with .5 mil diamond stytus for $12 / 2$ grams or under. Shipg. Wt., 702 oz. 21 A 62081 Model M33.7
21 A 6209L Model M33-5
21 A 6210 L N33.7 diamond stylus only
21 A 6211 L 33.5 dlamond stylus only
Net 35.77
Net 35.77
Net 35.77
Net 19.11
Net 19.11


## SHURE STEREO DYNETIC

 GARD-A-MATIC HI-FI CARTRIDGE ASSEMBLY For Garrard Type A \& AT6 Changers$24^{75}$

- Factory Mounted in Garrard-Type Pick-up Head
- Special Retractile Safety-Suspension System Provides Scratch-Proof, Bounce-Proof Performance
- Automatically Prevents Needle Damage, Prolongs Record Llfe
The M99 "Gard-A.Matic" Cartridge is especially designed for use with Garrard A and AT6 automatic.turntables. If arm is dropped or needle pressure exceeds 3 grams, entire cartridge retracts and a soft-no-scratch "bumper" contacts the record surface eliminating damage to the $0007^{\prime \prime}$ diamond stylus and/or record. Nothing else to buy-completely assembled-just plug in! Response, 20-20,000 cps. Output Voltage, 6 mv per channel. Separation, 22.5 db @ 1000 cps. Tracking, $11 / 2$ to 3 grams. With . $0007^{\prime \prime}$ diamond stylus. Shpg. wt., 2 oz. 21 A 6212 Shyre M99/A Cartridge Assembly

Net 24.75 21 A214. Shure M99/AT6 Cartridge Assembly

Net 24.75


## SHURE PROFESSIONAL TONE ARM

A new premium quality tone arm that ACCEPTS PRACTICALLY ALL CARTRIDGES and permits them to operate at their maximum potential performance. Features precision ball bearings at all pivot joints, plug in head with positive alignment lock and variable height adjustment. Positive visual control over balance without altering overall arm length. Tracking force 0.8 grams. Comes with arm rest, mounting ing overall arm length. Tracking force 0.8 gr
template mounting hardware. Shpg. wt., 2 lbs .
template mounting hardware. Shpg. Wt.,
21 A 6251 S Shure M232 for $12^{\prime \prime}$ Records
Net 29.35
21 A 6252 L Shure M236 For $16^{\prime \prime}$ Records
21 A 6253 L Shure A23H Extra PI'g in head
Net 2.35

## PIGKERIMG CARTRIDGES and STYLI

## THE SUPERB U38/AT

## At Last a Cartridge Designed to Take

Full Advantage of Automatic Turntables
A completely mu-metal shielded stereo cartridges
which has the high compliance and ruggedness
demanded by all types of automatic turntables and
changers. Combines high output of 10 mv per chan.
nel with extremely low signal-to-noise ratio. Frea. responses +2 db . from 20 to $20,000 \mathrm{cps}$.; Interchannel isolation 35 db ; Tracking force 2 to 5 grams. Complete with .7 mil diamond stylus. Mounts on Ko" to $1 / 2^{\prime \prime}$ centers. Shpg. wt., 7 oz . 21 . 5301 L

Net 16.61
21 a 5302 L Type D-3807AT repl. diamond stylus
Net 9.70

## PICKERING PLUG-IN HEAD ASSEMBLIES FOR GARRARD AUTOMATIC TURNTABLES

- Pre-Mounted Head Assemblies Featuring Plckering's Exclusive "Floating

New, plug-In head assemblles with pre-mounted cartridge for Garrard automstic turntables featuring Pickering's exclusive "Floating stylus." Includes superb U38/AT stereo fluxvalve cartridge with D3807AT Safe-V-Guard "Floating Stylus" pre-mounted in plug-in heads for Garrard Type A and Model AT6 automatic turn tables. Tracking force 4 grams. Shpg. Wt., 1202.
21 A 5312 L GA/38AT Cartridge Assembly for Garrard A
Net 21.51
21 A 5314L G6/38AT Cartridge Assembly for Garrard AT6
Net 21.5
D3807AT-Type. 7 Mill Safe-V-Guard Floating Stylus Replacement.
Net 9.70

## PICKERING MODEL 380 STEREO FLUXVALVE CARTRIDGE

Fits all record changers and tone arms. Hermetically sealed in precious mu-metal for hum-free performance. Response flat from 20 to 20,000 cycles. Chan-
 nel separation of 25 db . Output: $2 \mathrm{mv} / \mathrm{cm} / \mathrm{sec}$
channel. Four output terminals. Recommended tracking force shown alongside stock numbers. 380 A and 380 C with .7 mil diamond stylus, 380 AA with .5 mll Shpg. wt. 502
21 A 53031 Model 380 C For Changers-Tracking force 4.7 grams. 21 A 53041 Model 380A For Tone Arms-Tracking force $2-5$ grams. 21 A 5306L Type D-3807C Repl .7 mil diamond for 380 C

Net 11.64
Net 11.64
21 a 5307 L Type D.3807A Repl .7 mil diamond for 380A
Net 9.70

## DIAMOND STYLI FOR OTHER PICKERING CARTRIDGES



## EMPIRE CARTRIDGES and TONE ARMS

## THE OUTSTANDING 880

## - Frequency Response $10-28,000 \mathrm{cps}$

- Channel Separation over 30db

Emplre's Madel 880 is a fine hiofl stereo cartildge
that will glve outstanding reproduction. Channel separation exceeds 30 db . Freq. response for Model 880 is $10-28,000$ cps and Model 880P 6-30,000 cps
 $\pm 1.5 \mathrm{db}$. Output is 8 mv per channel, balanced to 25 db . Dynamic mass is $.7 \times 10^{-1}$ grams and compliance is $15 \times 10^{\circ} \mathrm{cm} /$ dyne. Model 880 supplied with .7 mil diamond stylus, tracking pressure $3 / 4$ to 6 grams , and is recommended for changers, automatic turntables and some tone arms. Model 880 p has .6 mil diamond stylus, matic turnables and some tone arms. Model 880 m has $\mathbf{6}$ mil diamond stylus, track
7.02.
21 A $3401 L$ Model 880

Net 17.95
21 A 3402L Model 880P
21 a 3403 L .7 mil diamond stylus for 880
21 i 3404 L .6 mll diamond stylus for 880 P
Net 19.95

## EMPIRE 980 ARM

Features free suspension and perfect dynamic balance in all plạnes. Maximum compliance, tracks at less than 1 gram. Fundamental resonance 8 cycies. Calibrated knob ""dials" stylus force up to 8 grams


5 -wire circuit eliminates ground loops. 4 ft . shielded cable assembly plugs in

21 A 3430 L Satin chrome finish
Net 50.00
21 A3430L Satin chrome finish
21 A 3431 L Satin Gold finish
Net 50.00

# GENERAL ELECTRIC HI-FI COMPONENTS 

## VR-1000 SERIES ORTHONETIC MAGNETIC STEREO CARTRIDGES

 21 A 3801L VR-1000-5 Cartridge 21 A 302L Type DR-5D Repl. diamond stylusVR-1000-5 21 A $3803 L$ VR-1000. 7 Cartridge 21 3804L Type DR-7D Repl. diamond stylus

## G.E. MONAURAL SERIES VRII

 VARIABLE RELUCTANCE CARTRIDGESWill fit wherever old RPX cartridges were used. Al require the use of a preamplifier. Frequenty Response 20-20,000 cps; Tracking Pressure - (with tone arms 4 grams - -22 milivolts nominal at $10 \mathrm{~cm} / \mathrm{sec}$. Mounting either $1 / 2^{\prime \prime}$ standard or $K_{s}^{\prime \prime}$; Terminals: Plug-in design. Independently replaceable ' Clip-In-Tlp styll. Mu-metal shlelding and special anti-hum coils.
"TRIPLE-PLAY" CARTRIDGES (A) Convenient dual-stylus variable reluctance cartridges $\Rightarrow 45$ (wist of the knob brings elther microgroove (LP or (001m ) standard 78 rpm styll into posilion. 1 or standard records. All models have indlvidually replace. able, slide-in, "clip-in-tip" styli. + Synthetic

## Stock

$\begin{array}{cc}\text { No } & \text { GE Type } \\ 21 \text { i } 3605 & 4 \mathrm{G}-050 \\ 21 & 3810 \\ 4 \mathrm{G}-052\end{array}$

| Stylus | Met |
| :--- | ---: |
| $1 \& 3$ mil sapphire | 7.61 |
| 1 mll dlamond -3 mll | 9.97 |
| sapphire $\dagger$ |  |
| $1 \& 3$ mil diamond | 11.73 |

21 A 3811 4G-053 $1 \& 3$ mil diamond 11.73

## "SINGLE-PLAY" CARTRIDGES (B)

Single-stylus variable-reluctance cartridges with replaceable "clip-in-tip" sapphire or diamond styli: 1 mil (.001") microgroove and 3 mil (.003") standard 78 rpm types. Shpg wt., 6 oz $\dagger$ Synthetic

## Steck



## MODEL VR-1000-5 FOR TURNTABLES

Complete with .s mil diamond styius designed for use with professional type turntable and tone arm or any changer requiring less than 4 grams tracking force. Freq. response $\pm 3$ db from 20 to 20,000 cycles with recom-
 cycles. Channel separation up to 30 db per channel at 1000 cycles. Recommended tracking force 1.3 grams. Lateral compliance $6 \times 10^{-6} \mathrm{~cm} /$ dyne. Vertical compliance $9 \times 10.4 \mathrm{~cm} / \mathrm{drne}$. $1 / 2$ inch mounting centers. Shpg. wt., 600.

Net 14.38
Net 8.19

## MODEL VR-1000-7 FOR CHANGERS

This model is essentially the same as the VR-1000-5 but is designed for the greater tracking force of $3-7$ grams required by most changers. Separation is 25 db optimum in critical stereo range. Lateral compliance is $4.5 \times 10^{-6} \mathrm{~cm} /$ dyne, vertical compliance, $4.0 \times 10-6 \mathrm{~cm} /$ dyne. Shpg. Wt., 6 oz
$\begin{array}{lr}\text { Net } & 12.22 \\ \text { Net } & 6.78\end{array}$

## PHONO ACCESSORIES



## 6.E. VR-22 STEREOPHONIC MAGNETIC VARIABLE <br> V. 22 STEREDPHONIC MAGNETIC VARIABLE RELUCTANCE HIGH <br> FIDELITY CARTRIDGES

MODEL VR-227 with .7 mil diamond stylus. A ground strap allows use of this cartridge with elther 3. or 4wire stereo systems. SPECIFICATIONS: Frequency response: $20-17,000 \mathrm{cps}$. Output; 6 mv . per channel at stylus velocity of $5.5 \mathrm{~cm} / \mathrm{sec}$. Channel separation: up to 30 db . Lateral compliance $3 \times 10^{-6} \mathrm{~cm} /$ dyne. Vertical compliance: $2 \times 10.6 \mathrm{~cm} /$ dyne. Recommended load, each channels 47,000 ohms. Recommended tracking force: 5 107 gms . Shpg. wt. ${ }^{6} \mathbf{~ o z .}$
21 A 3805 L GE VR-227
21 A 3806L GE VR-222 Repl. diamond stylus.... Net 4.76 MODEL VR- 225 with .5 mil diamond stylus. Designed for use with transcription arms and turntables. Essentially the same as VR-227 except frequency response $20-20,000 \mathrm{cps}$ lateral compliance $4 \times 10^{-4} \mathrm{~cm} / \mathrm{dyne}$; recommended tracking force; 2 to 4 gms. Shpg. wt., 6 oz.
21 A 3807L GE VR-225
Net 10.75 21 A 3808L GE VR-221 Repl. diamond stylus... Net 5.45


## GE MONAURAL PREAMP (F)

UPX 003C - Self-powered preamp for use with GE or similar magnetic cartridges and low level mikes. Has 7025 tube in equalizing circuit, plus rectifier. Input jack, mike-phono switch, $14^{\prime \prime}$ output lead with phono plug. 18 ob hass boost at 50 cps on "Phono", Flat on "Mike". For 117 volts, 60 cycies AC. $3 \% \times 3 \% \times 33 / 4$ " Complete with tube. Shpg. wi., 2 lbs.
21 A 3900 UPX-003C
Net 11.72
 2 $-15$ 8 7 E 11

## GE REPLACEMENT STYLI FOR ALL MODELS

## "CLIP-IN-TIP" STYLI <br> FOR VRII SERIES (C) <br> For Ppx "CLIP-IN-TIP" STYLI (C) <br> 

Replacement for individual styus tips on either "triple. play" or "SIngle-play": modelels of the virt Series only $\frac{1}{5}$ NOT FOR RPX TYPE A SERIES. Shpg. W., 2 oz.
stock

| Stac | Cf Troe | stm | et |
| :---: | :---: | :---: | :---: |
| 21.3318 |  | 1 mil sapphiref | 1.57 |
| ${ }^{21} 1 \wedge^{3319}$ | ${ }_{46-025}{ }^{4 G}$ | ${ }_{3}^{2.5}$ mill sappphire $\dagger$ | 57 |
|  | ${ }_{4}^{46-035}$ | ${ }^{3} \mathbf{3}$ mil sapphire | 4.08 |
| ${ }_{21} 1^{13322}$ | ${ }^{4 G-020^{*}}$ | 2.5 mild diamond | 4.08 |
| ${ }^{323}$ | ${ }_{46-030}$ | 3 mill diamond | 4.08 | - For 100 impedance $\ddagger$ SYnnhetic

SINGLE STYLI (E) (NOT Clip-In-Tip) For replacement in ord-style single-stylus cartridges
RPx. $040,-041,-063$, 061 . Assembliles complete

 styilit These cartidiges are not converible to "cllp-In.
tips. Shos, wt., 2 oze tils",
stocis
Shpg. wt., 2 oz.
Stock

| O. | CE Trpe | Strlus | Nes |
| :---: | :---: | :---: | :---: |
| ${ }^{382}$ |  | 1 minid diamo | , |
|  | RP | ${ }_{3}^{2.5 ~ m i l i l ~}$ | ${ }^{4.088}$ |
| ${ }^{21}$ A ${ }^{33227}$ |  |  |  |
|  |  |  |  |
|  |  |  |  |

$-145,-146,-147$ Also used as replacements in the above Dual Stylus Assembilies - RPJoioa $-012 \mathrm{~A},-013 \mathrm{~A},-007 \mathrm{~A},-011 \mathrm{~A}$. old stylus tip sildes out, new one slides in.
Stock
$\qquad$
$\begin{array}{ll}\text { GEType } \\ 21 \text { R3E3t } & \text { RPJ.01D }\end{array}$
21 R 21832 RPJ-020
21 A 3833 RPJ-03D
21 A3.34 RPJ-01S
21 R 3835 RPJ-02S*
$\begin{array}{lll}21 \text { R } 3835 & \text { RPJ } \\ 21 & 02 S^{*} & 1 \text { mil sapphire }\end{array}$
21 R 3836 RPJ-03S 2.5 mil sapphire

## For low impedance $\uparrow$ Sunthetic

## DUAL STYLUS ASSEMBLIES (D)

Convert old-style RPX-050, RPX-052, RPX-053, RPX-047 for use with "clip-in-tip" Indlvidually replaceable styll. Complate with styll as shown. Shpg. wi., 2 ©z.
Comple
Stock

| Stock |
| :--- |
| No. |
| 210 |

GE Type
37 RPJ.010A
No. 21 A3 RPJ.010A
21 A 3838 RPJ.012A
21 A 3838 RPJ.012A
Stylus
183 mil sapplire
21 A 3839 RPJ-013A 1 mill diamond- 3 mil
21 A 3840 RPJ-007A* $\quad 182.5$ mil sapphire
21 A 3841 RPJ-011A* 182.5 mil diamond
182.5
yntheile.

## PICKERING-STANTON HIGH FIDELITY CARTRIDGES AND ARMS



## SERIES 481 CALIBRATION STANDARD STEREO FLUXVALVE CARTRIDGE

- Designed by Audio Engineers for the Broadcast Studio

More than a pickup, the $481^{\circ}$ series is individually calibrated and developed for the recording industry as a laboratory standard for quality control. Frequency response: $\pm 1 \mathrm{db}$ from $20-10,000 \mathrm{cps}$ and $\pm 2 \mathrm{do}$ to $17,000 \mathrm{cps}$. Channel separation: 35 db . grams, Output: $5 \mathrm{mv} / \mathrm{cm}$; Type 481 A with .7 mli diamond stylus for arms with racking force 2 to 5 grams, Output $.8 \mathrm{mv} / \mathrm{cm}$. Not recommended for changers. Shpg. wt.. 7 oz.
Shpg. Wt.. 7 Oz.
21 A 5325 L Model 481A.
Net 48.00
21 A 5326 L Model 481AA
OIAMONO STYLI FOR ABI SERIES-FOR TONE IRMS

| Stock No. | Mir. No. | Slue | Iraching Force | Net |
| :---: | :---: | :---: | :---: | :---: |
| 2145327 | D-4007A | 7 mil | 2.5 Grams | 18.00 |
| 21 A 53201 | D-4005AA | .5 mil | 1/2-21/2 Grams | 19.50 |
| 21 A 53291 | D-4010A | 1 mll | 2-5 Grams | 18.00 |
| 21 A 5330 L | D-4027 | 2.7 mil | For 78 RPM Recorots | 12.00 |

## PROFESSIONAL SERIES 400 STEREO FLUXVALVE CARTRIDGES

Professional series designed for both broadcast and home
high fidelity systems. Freq. response $20-20,000 \mathrm{cps}$. Separation: 35 db . Outputs: type $400 \mathrm{C} 2.6 \mathrm{mv} / \mathrm{cm}, 400 \mathrm{~A} 1.4 \mathrm{mv}, 400 \mathrm{AA} .85 \mathrm{mv}$. Use 400 C for changers with tracking force $4.7 \mathrm{grams}, 400 \mathrm{~A}$ for arms of 2.5 grams and 400 AA with arms $1 / 2$ to $21 / 2$ grams. Shpg. wt., 7 ot.
$21 / 2$ grams. Shpg. Wt., 7 oz.
21 A 5331 L Type 400 C with diamond stylus
21 A 5332 L Type 400 A with .7 mll diamond stylus
21 a 5333 L Type 400 AA with .5 mil diamond stylus.
21 A 5334 L Type $0-4007 \mathrm{C} .7 \mathrm{mil}$ stylus for 400 C
21 a 5327 L Type $D-4007 \mathrm{~A} .7 \mathrm{mil}$ stylus for 400 A
21 A 532 L Type $0-4005 \mathrm{~A} .5 \mathrm{mil}$ stvlus for 400 A
Net 36.00
Net 42.00
Net 43.50
Net 12.00
Net 18.00


## STANTON UNIPOISE 200 ARM

Designed for tracking less than 1 gram with a high compliance, iow mass stylus. Features single pivot bearing for friction-free motion in all planes, simple balance adjustment in all planes, super-sensitive calibrated stylus force adjustment, all metal construction, ultra light-weight. $11 \mathrm{H}^{\prime \prime}$ overall length. Universal cartridge mount. Wi. of moving system $41 / 2 \mathrm{oz}$. Shpg. wt., 2 lbs. 21 A 5351 Less Cartridge

## NEW! (Dotlensak TAPE RECORDERS



MODEL T-1400 HI-FI TAPE RECORDER

- 10 WATTS PUSH.PULL OUTPUT RESPONSE $\mathbf{4 0 . 1 5 , 0 0 0}$ CPS $\pm 3{ }^{3}$ DB AT $71 / 2$ IPS O OISTORTION LESS THAN $0.8 \%$ - WOW AND FLUTER BELOW $0.3 \%$ - SIMPLIFIED KEYBOARD CONTROL - WEIGHS ONLY IS LBS.

A really precision portable high fidelity recorder made by a famous manufacturer of precision optics. Dual speed 3.75 and 7.5 inches per second), dual-track-provides up to 4 hrs. of record or playback time. Utilizes miniaturized components and all-metal airplane-type construction to achieve real portabillty-weighs only 18 lbs.p measures $61 / 2 \times 101 / 4 x$ $113 / \mathbf{4}^{\prime \prime}$. Takes reets up to $7^{\prime \prime}$. Additional features of this outstanding recorder include: signal-to-noise ralio 48 db ; 2 special hum balance controls; "Balanced Tone" high fidelIty; exclusive high speed rewind lever; 2 -level recording Indicator; precision index counter. Supplied complete with ceramic wide-range microphone, 1 reel of tape, 1 empty takeup reel, radio-ty attachment cord and hi-ft cable. For $\mathbf{1 1 0 - 1 2 0}$ volts, 60 cycles AC. Shpg. wt., 21 Ibs. Also available in 50 -cycle units; specify.
AK-500WX
Net 169.00

## NO MONEY DOWN

## MODEL T-1440 FOUR-TRACK STEREO HI-FI TAPE RECORDER

The Mi-FI enthusiast's dream in a compact portable tape recorder for true stereo performance. Has all the styling and superb features of the famous monaural T-1400 plus stereo head and built-in second preamplifier. Plays 2 and 4 -track monaural and 2 and 4 -track stereo. Records up to 4 separate monaural tracks on single roll of tape. $61 / 2^{\prime \prime} \times 1014^{\prime \prime} \times 11^{13} 4^{n}$. Shpg. wt., 24 lbs .
RK.501wX
Net 189.00

## ACCESSORIES FOR WOLLENSAK TAPE RECOROERS

TSC-405-VINYL SLIP.OVER CASE, fits all models.
RK-410w Shpg. wt., 2 lbs.
Net 6.75
TE-401 EARPHONES. Low impedance. for all models. RK-411 Shpg. wt., 8 oz. Net 9.45 TF-404 MECHANICAL FOOT COHTROL. FOF T-1400 and T-1500 Serles.
RK-412 Shpg. wt., 2 lbs.
Net 15.75
A-196-2 MICROPHOHE EXTENSIOH CORO. FOR T-1400 and T-1500 Series.

1 lb.
WK- 414 Shpg. wt., 1 lb . ............................... 6.75
A.196-13 HI.FI CABLE. Connects recorder to Hi-Fi amp or AM-FM tuner. For all models.

A-196-12 ATTACHMENT CORD. Connects recorder to TV, radio or phono. For all models.
RK-416 Shpg. wt., 4 oz.
Net 2.25
B-179-5 MIXER. Three inputs-Permits mixing of any combination of 3 microphones, phonos, or radios. for all models.
RK. 418 Shpg. wt., 2 lbs.
Net 13.50
A-196-15 STEREO PRE-AMP CABLE. COnnects lower channels of recorder output to input of radio, IV or phono. For T-1440.


MO MONEY DOWN
MODEL T-1580
STEREO TAPE RECORDER

## 2 \& 4-Track Stereo or Mono

 Record/Playback
## - Sound-on-Sound 2 Speeds-71/2 $233 / 4$ lps

A superb 2 and 4 -track stereo or mono tape recorder by Wollensak. features sount-on-sound recording, PA volce over playback, separste volume control on each stereo channel, precision index counter for accurate monitoring, and a batance tone control on each channel. An instant stop switch is provided for precise editing while an automstic shut-off Instantly turns the mechanism off when the end of the reel Is reached. Incorporated is an automatic head demagnetizer and a self-adjustigg breaking system. Specs-Freq. response: $40 \cdot 18,000 \mathrm{cps} \pm 3 \mathrm{db}$ @ $71 / 2 \mathrm{ips}, 40-13,000 \mathrm{cps} \pm 3 \mathrm{db}$ at $31 / 4 \mathrm{jps}$; Play time: up to 8 hours on 4 -track mono, up to 4 hours on 4 . track stereo; Power output: 11 watts per stereo channel ( 22 watts mono); Wow and flutter: less than $.3 \%$ each speed; Signal-to-Noise ratlo: greater than 48 ob; Power consumptioni 110 volts AC only; In. puts: mike, phono-radio, and preamp. Complete with 2 mikes, vinyl cover, accessoriss and cables. Size: $61 / 2 \times 101 / 4 \times 113 / 4^{n}$. Shpg. wt., 26 lbs.
RK.474WX
Net 319.00

## NEW NORELCO CONTINENTAL "401" FULLY TRANSISTORIZED PORTABLE TAPE RECORDER

## 28950

## - COMPLETELY TRANSISTORIZED <br> - 4-TRACK STEREO RECORD/PLAYBACK - 4 SPEEOS-71/2, $33 / 4,1 \%$, $1 / 1 /$ IPS

 - mixine ahd múltiplay facilitiesThe model " 401 " self-contalned transistorized stereo tape recorder was designed for use by serious music lovers, studio-recordists and high fidelity enthusiasts. for four-track stereo and mono recording and playback. Four tape speeds: 71/2, $31 / 4,11 / \%$ and $1 \%$, ips. FREQUENCY RESPONSE: $60 \cdot 16,000$ cDS at $71 / 2$ ips, $60-$ $14,000 \mathrm{cps}$ at $33 / 4 \mathrm{ips}, 60 \cdot 10,000 \mathrm{cps}$ at $17 / 8 \mathrm{ips}, 60-$ 4,500 cps at ' $x_{6}$ Ips. 4th speed permits 32 hours of recording on single reel. Signal-to-Noise ratio is better than 40 db . Wow and flutter are less than $0.4 \%$ at $71 / 2$ lps. INPUTS: One 2-channel input for stereo microphone; two 2-channel inputs for stereo tuners or phonos. OUT: PUTS: For extension speakers (2); for external ampli flers (2); for stereo headphones (1). Completely self-contained-Includes two wide-range speakers ( 1 in lid) and dual element stereo-dynamic microphone. For 117 volts, 60 cps AC. Size $181 / 2 \times 15 \times 10^{\circ \circ}$. Shpg. wt., 55 lbs. (Imported from Holland) RK-443WX

Net 289.50
RECEIVE LAFAYETTE F-767 STEREO HEADPHONES for only 1 CENT with purchase of Norelco 401 Tape Recorder.
RK-447wXM Norelco 401 plus Lafayette headset........... 289.51
 Net 2.50 RK-258wX RK-257WX

MODEL 86 STEREO COMPACT TAPE DECKS
Reknown Viking $1 / 4$-track transport mechanism has been combined with a stereo/playback preamplifier of advanced design Employs a sharp cut-off filter to prevent beating of bias fre quency with 38 Kc multiplex carrier freqcency. Other Fea tures: "Erase-Protek" recording interlock; monaural-stereo selector switch; automatic equalization for Loth $33 / 4$ and $71 / 2$ ips speeds; variable playback preamplification and "sound on sound"'. Incorporates separate calibrated $V y$ meters, digital tape counter and head set shift control. Fraquency response $25-16,000 \mathrm{cps} \pm 3 \mathrm{ob} @ 71 / 2 \mathrm{ips}$. Microphone and tape head inputs on front panel; high level input on rear panel. flutter and wow less than $0.2 \%$. Capstan belt drive. Sizes $13 \times 13 \times 91 / 2^{\prime \prime}$ deep. (Fits $121 / 2 \times 121 / 2^{\prime \prime}$ opening). Requires $1 f 0-115 \mathrm{v} .60$ cycle AC © 125 watts
"STEREO-COMPACT" RMQ. Records, erases and plays back $1 / 4$ track stereo and monaural plus $1 / 4$ \& $1 / 2$-track stereo play. back. Anodized Aluminum. Shpg. wt., 25 lbs.

Net $\mathbf{3 2 4 . 5 0}$
"STEREO-COMPACT" ERQ, Records, erases and plays back $1 / 2$ track stereo and monaural plus $1 / 2 \& 1 / 2$-track stereo play. back. Anodized Aluminum. Shpg. wt., 25 lbs.

Net 332.00
RECEIVE LAFAYETTE F-767 STEREO HEADPHONES for only I CENT with the purchase of sither viluing stereo compact deck.
RK-330wXM Viking stereo Compact RMQ plus Lafavette Meadset ......... 324.51
RK-33iwxM Viking Stereo Compact ERQ plus Lafayette
332.01

## - Ay gin model hlr

## RECORDING INDICATOR

Dramatic red on black back lighted "Recording" indi. cator illuminates when your tape recorder is in operation. Adds professional touch to recording sessions Helps ellminate unwanted Interruptions and noise. $4 \times 8$ inch oval case in gray, high impact plastic. Easily attached to any tape recorder. Shpg. wt., 1 ib.
RK.
RK-403

## NEW <br> LAFAYETTE RK-600 4-TRACK STEREO TAPE RECORDER



## an unprecedented value AT SUCH A LOW PRICE!

## FULLY SELF.CDNTAINED

Has Built-in Stereo Record and Playback Amps Large $4 \times 6^{\prime \prime}$ Speakers Built Into Each End of Case... Supplied with 2 Dynamic Mikes, Patch Cords and Spare 7" Reel.

The RK. 600 is a complete 4 -track, 2 -speed stereo lape recorder. needs no extra amplifiers or speakers. Plug in the microphones supplled and make "live" stereo recordings anywhere play the tape back and hear your recording in full-dimension stereo-you'll be amazed how wonderfully easy it is! The RK. 600 also has inputs for recording from radios, FM tuners, Hi-fi amplifiers, etc. Simply connect the patch cords supplied to your program source and follow the simple recording procedure, either in stereo or monaural... lets you keep a permanent recording of your favorite musical programs, etc. The recorder also makes "sound-with-sound" recordings a feature that allows you to accompany yourself in a duet, add your volce to pre-recorded music, etc. And, "sound-with-sound" allows you to re-record one track if you are dissatisfied with Itwithout removing the recording on the other track!
other features include fast-forward and fast-rewind faclities, simple tape threading arrangement, individual neon recording level Indicators, a hi-lo tone switch, speaker muting switch, plus extension speaker outputs, The RK-600 is housed in a smart scuff-resistant gray case with handle and is supplied complete with 2 dynamic microphones, patch cords and empty $7^{\prime \prime}$ reel. For 117 v .
 60 cycles

Net $\mathbf{\$ 2 9 . 5 0}$
RK-600wX
RT-10 Tape— $7^{\prime \prime}$
reel of $1200-\mathrm{ff}$. acetate tape for above. Shpg. wt., 1 lb.
Net 8.59

## SPECIFICATIONS

Frequency Response: $40-15,000 \mathrm{cps}$ at $71 / 2 \mathrm{ips}, 40 \cdot 9,000 \mathrm{cDS}$ at $33 / 4$ ips. Stereo Separation: 40 db . Wow \& flutter: As low as $0.3 \%$. $\mathrm{S} / \mathrm{N}$ Ratio: 45 db . Reel Capacity: $7^{\prime \prime}$ reel. Speakers: (2) built-in $4^{\prime \prime} \times 6^{\prime \prime}$ oval. Audio Dutput: 2 watts. Heads: 4 -track-separate record/playback and erase heads, mu-metal shielded.

## 12950

$\$ 7$ monthly
NO MONEY
DOWN

Delivery Nov. 1, 1963

## DELUXE FEATURES

INDIVIDUAL CHANNEL RECORD BUTTDNS, Offer choice of single track monaural recording or dual track stereo recording. SOUND-WITH-SOUND RECDRDING. This feature allows you to listen to one track as you record on the other track. Lets you sing-along with your favorite orchestra, is ideal for speech or language studies or other special effects.
Individual channel volume controls. Provide volume adjustment on playback, act as input level controls during recording.
POSITIVE.ACTION CONTROL LEVER. ASsures easy control of rewind. fast forward and record/playback aperations.
PaUSE CONTROL. Provides safe, Instant stop for editing-control is selt-holding.
SOUND DEFLECTOR SIDE PANELS. Let you deflect speaker sound for best stereo effect.
2-SPEEDS. Choice of $71 / 2$ ips or $33 / 4$ ips by means of simple capstan adjustment
HI AND LD LEVEL INPUTS, Stereo inputs for recording from microphones, FM stereo tuners, stereo amplifiers, radios, etc. MONITOR OUTPUTS. For playback through stereo amplifter, or for headphone monitoring during recording.

## NEW CONCORD 550 TRANSISTORIZED STEREO TAPE RECORDER

- Completely Self-Contained and Transistorked - 3 Speeds: $71 / 2,3 \neq 17 / \mathrm{lps}$.
- Professional Tape Heads-1/a-Track Stereo Erase: 1/a-Track Stereo Record/Play


## 26950

NO MONEY DOWN $\$ 14$ monthly The model 550 is a transistorized portable tape recorder with everything you need for recording and playback built right into Its compact case. Takes reels up to 7 inches. Easy to use pushbutton control system. Outstanding features include: 2 professional-type $1 / 4$-track laminated tape heads, 10 watts of audio power, two edgewise VU meters, monitoring facilities and digital tape counter. Frequency Response: $40-16,000 \mathrm{cps} @ 71 / 2 \pm 2 \mathrm{db}, 40-12,000 @ 33 / 4 \pm 2 \mathrm{db}$ and 50 $7,000 \mathrm{cps} \pm 3 \mathrm{db}$. Signal-to-Nolse Ratio, better than 50 db . Outputs for external amplifiers and speakers. One nigh impedance and one low impedance input. All inputs and outputs are color coded Wow and Flutter less than $0.2 \%$ ms at $71 / 2$ lps. Comes complete with a dynamic mike, coded. Wow and flutter less than pord, extension speaker cord and empty tape reel. For 110.120 volts AC, 60 cycles. Size: patch cord, extension speaker cord and empty
$14 \mathrm{Wx} 936 \mathrm{Hx} 1378^{\prime 0} \mathrm{D}$. Shpg. wt. 38 los. Imported. RK-480WX

Net 269.50


Receive Famous Lafayette F-767 Stereo Headphones for lc with purchase of Concord 550 Stereo Tape Recorder.
Concord 550 plus Headphone RK.482WXM. Net 269.51.


## NEW SENSATIONAL TAPE KITS

Complete tape kits designed specifically for recording use. Each wit contalns actual recording tape and is loaded with needed accessorles. Packed in a beautiful, functional carrying case.

TK7-7" TAPE KIT Contains: Two $3^{\prime \prime}$ reels, two $31 / 4^{\prime \prime}$ reels, two $5^{\prime \prime}$ reels, two $7^{\prime \prime}$ reels, two reels Tape 1200'A 1 Splicer, 1 Splicins Tape, 2 Leader Tapes, 1 Stobe Tape 5 Tape Clips, 1 Book- "How To Make Better Tape Recordings," I Marking Pench.
RT-160 $7^{\prime \prime}$ Tape Kit. Shpg. wt., 6 lds.
Net 9.95 TK3-3" TAPE KIT. Contains: Three $3^{\prime \prime}$ reels, two $31 / 4 "$ reels, one $3^{\prime \prime}$ reel tape. $1.31 / a^{\prime \prime}$ reel Tape, 1 Splicer, 1 Splicing Tape, 2 Leader Tapes, 1 Strobe Tape, 6 Tape Clips, 1 Book "How To Make Better Tape Recordings." I Marking Pencil. RT-16 $3^{\prime \prime}$ Tape Kit. Shpg. wt., $31 / 2$ los.

BUTOBA MODEL MT-7 DELUXE PORTABLE TRANSISTR HFF TAPE RECORDER

- Takes $3^{\prime \prime}$ Reels - Takes $3^{\prime \prime}$ Reels Push-Button Contral - Push-Button Controls \& 17/ ips Reproductión
A deluxe, fully portable 2 -track tape recorder offering remarkable sound reproduction. Weighs a mere 7 lbs. and operates from 4 inexpensive 1.5 V batteries. Has simple pushbutton operation and uses $3^{\prime \prime}$ reels at speeds of either $33 / 4 \mathrm{lps}$ on $17 \% \mathrm{ips}$. Plays over 2 hours on one reel at $1 / / \mathrm{ips}$. Features include fast forward and rewind, quick-stop push-button, record level indicator, radlo and mike inputs, and oulit-in high-quality elliptical $31 / 2^{\prime \prime} \times 6^{\prime \prime}$ speaker. Includes batteries and dynamic microphone. Frequency response 100$12,000 \mathrm{cps}$ at $33 / 4 \mathrm{ips}$. Wow \& Flutter $\pm 0.5 \%$, output Power 1.0 watt. Size: $121 / 2^{\prime \prime} \times 81 / 2^{\prime \prime} \times 31 / 2^{\prime \prime}$
RK-510wX Butoba MT. 7 Shpg. wt. 8 lbs. BA-155 Extra batteries (4 required)


# The Norelco' CONTINENTAL ' $100^{\prime}$ PORTABLE TAPE RECORDER 

## NEW NORELCO CONTINENTAL '301'

 Instantaneous recording is yours, anywhere, with this handy 2 -track recorder. Excellent for use at lectures, ball games, theater perform with any constant Excellent for use at ecistorized circuit; tape compatability with any consiant tures completely transistecorder, modulation and battery life meter; bulit-in speed $17 / 2$ ips 2-track recorder, mod vontrol for recording and playback. Com$4^{\text {se }}$ speaker and combined vorerd on your shoulder. Weighs a mere 7 bs. pact, you can carry it and record on your shoulder. hande all recording and playSimple operation, 3 self-locking push-buttons phonograph. Output for external back functions. Has input for mike, "D" cells up to 20 hrs. Built-in storage amplifier. Operates on 6 low cost "D" celis up 20 ips constant speed space for dynamic microphone and cables included. $4^{\prime \prime}$ reels providing up to 2 hours of capstan drive. Readily handies $3^{\mu}$ and $4^{\prime \prime}$ reels providing up 100 cps. Size recording and playback time per reel. Response: $100-6000$ case. Shpg. recording and playolosed in a handsome high-impact polystyrene case. Shipg. $1042 x 3 w x y$ Made in Holland.
.. Net 99.50 wt. 9 los. Made in Holland.

Net ea. . 13 BA-157 "D" cell batteries for Model 100, 6 req

Net .13


- Separate Transistor Stereo Record and Playback Amplifiers
- $1 / 4$-Track Heads for Erase/Re. cord/Playback
- New Hysteresis - Synchronous Capstan Motor precision stereo/monaural tape deck, the RP. 100 provides stereol mono $1 / 4$-track erase, record, and playback; plus $1 /$-track stereo/mono playback. Sound-on-sound. Features: Dual meters for monitoring stereo record levels; professional hyster. esis-synchronous capstan motori 2 take-uo and rewind motors, auto. matic end of tape switch and imp proved drive system. SPECIFICATIONS: Tape Speed - $71 / 2$ or $33 / 4$ lps; up to $7 "$ reel size: Flutter and Wow $0.15 \%$ at $71 / 2$ ips, $0.2 \% 33$ ips; Signal-to.noise response: $30-17,000 \mathrm{cps}$ @ $71 / 2$ los, $40 \cdot 15,000$ transport completely assembled ratio - 55 db . RP. 100 K semikit: Includ and stereo playback preamps in kit and tested with 3 heads; stereo record, and sack, $7^{\text {" }}$ deep. Shpg. wt. 28 ibs. form. Dimensions: 15v/4 wide, 133/" front-to-back, RK-275WX RP. 100W wired and tested with 3 heads, stereo record, playback preamplitiers
RK-275WX
Net $\mathbf{4 5 0 . 0 0}$ RK-277w Shps wt 13 ibs


## RK-277W Shps wt, 13 los.



Receive famous Lafayette $\mathbf{F} .767$

## NEW CIPHER VII 4-TRACK STEREO TAPE RECORDER



Records and plays tape recorder capable of flne stereo sound reproduction Plays horizontally bach stereo 4 -track tape and 2 -track mono at 3 sption for volume hataly or vertically. Each channel is indinidually 3 speeds. for volume and tone. Has facilities for sound is individually controlled features include 2 separate speahers for sound-on-sound rezording. Other 10 feet; 2 dynamlc microphones, duat which can be spread apart up to stop lever, fast forward and rewinal vu meters, editing controls up to mátic tape-shut-off at end of tape. Frontital tape index courter and autoquency responser $35-15,000$ cps $@$ Front panel headphone receptacles Firecps @ 17\%. Signal-to-noise cps @ 71/2 ips, 35-12,500@ $33 / 4$ ios 25 . Fre. per channel. For $110-125 \mathrm{~V} 60$ cycios Detter than 50 do. Output pewer. $53,7,000$ RK.J56wX Cipher VII Stereo Tape Recorder: $20 \times 151 / 2 \times 73 / 4^{\prime \prime}$. Shog. Wt., 48 lbs

LAFAYETTE
Net 219.95

## NO MONEY OOWN

## $\$ 11$ monthly

- $100 \%$ Iransistorized
- Completely Self-Contained
- 4. Track Stereo Plavback


## - 4-Track Mono Record/Playback

clircuitry means tonger life and super-slow 11 provid, ho warm-up ilme. Four speeds 71/2, 334, 1\% reel. Ideal for collectors of pre-recorded sterecording time on a singite $7^{\prime \prime}$ lengthy material. Four.track pre-recorded stereo tape and those who pererd radio and speaker, through self-contained dual preamps external amplifier or Flutter 0.14 playback. Frequency response $60-16,000$ at 74 - track mono Flutter $0.14 \%$ @ $71 / 2$ ips. Includes dynamic microphat $71 / 2$ ips. Wow 8 RK-486WX MC. Size: $161 / 2 \times 151 / 2 \times 81 / 4^{4 \prime}$. Shpg. wt., 32 ibs Me cable. For 117 V ,


Stereo Meadphones for 1 cent with purchase of either EICO RP-100K or RP-100W Tape Deck. RK-332wxM Eica RP-100K plus F767 Headset ...... 299.96 RK-335WXM Eico RP.100W plus F767 Headset ...... 450.01 plus F767 Headsel....... 450.

# 画ROBERTS PROFESSIONAL TAPE RECORDERS璃 



## "997" DELUXE 4-TRACK STEREO RECORDER

- Exclusive Multiple Adjustment Head
- 4-Track Stereo and Monaural Record/Playback Plus 2-Track Stereo Playback

A fully self-contained portable stereo tape recorder that offers professional capabitity and versatility, Use it in conjunction with your stereo system as a tape deck or as a portable with its own self-contained extended-range monitor speakers and 6 -watt stereo amplifier. The exclusive Roberts multiple adjustment head allows instant selection of all record/playback functions. It preclsely locates and aligns heads for 4 -track stereo or monaural record/playback and 2-track stereo playback. Operates in both horizontal or vertical positions and employs a new high torque, fan cooled hysteresis-synchronous motor. Features also includet stereo head preamp and motor. Features also includet stereo head, preamp and
speaker outputs from each channeli six stereo outputs

- Simplified Sound-with-Sound Record/Playback
- Professional Lever-Type Automatic Shut-Off
for stereo headphones or six sets of stereo speakers: easy-to-use sound-with-sound "Duet" recording (ideal for learning languages, etc.); buift-in automatic head demagnitizer; pause lever; 3 -digit index counter; twin Illuminated VU meters; interlocking controls to prevent accidental erasure of recorded lape. Frequency Response: $40-15,000 \mathrm{cps} @ 71 / 2 \mathrm{ips} \pm 2 \mathrm{db} ; 40-12,000$ cps @ $33 / 4 \mathrm{ips} \pm 2 \mathrm{db}$. Wow and Flutter: Less than $0.12 \%$ rms. Signal-to-Nolse Ratio: 50 db below recorded " 0 " level. Record Inputs: 2 high impedance mike inputs; 2 high level line inputs. Accepts up to $7^{\prime \prime}$ reels. For $110-125$ volts, 60 cps AC. Size: $14 \mathrm{~W} \times 20 \mathrm{Hx9} 9^{\prime \prime} \mathrm{D}$. RK-393WX Shpg. wt.,50 lbs......Imported.......... Net 449.95


## "1057" 4-TRACK STEREO RECORDER

- Exclusive Multiple Selector Panel
- 4-Track Stereo And Monaural Record/Playback Plus 2-Track Stereo Playback
An outstanding and highly versatile portable stereo An outstanding and highly versatile portable stereo
tape recorder that combines matchless performance with ease of operation. Can be used as a fine tape deck with your present stereo system, as a central sound system with your stereo tuner and record changer or as a self-contained portable using its own built-in stereo amplifier and monitor speakers. Exclusive multiple selector panel contains: stereo preamp outputs; 3-position internal speaker switch (normal-mute-monitor); four stereo output jacks for stereo headsets of extension speakers: channel transfer switch for making professional-type multiple sound-on-sound recordings. Also, sound-over-sound and sound-with-sound recording can be made. Operates in both vertical and horizontal


## - Makes Multiple Sound-On-Sound Recordings <br> - Built-In Automatic Head Demagnetizer

positions (ideal for custom installation). Other important features include: dual easy-to-read iltuminated VU meters; automatic tape shut-off; FM stereo recording facilities; 3-digit inder counter; interlocking controls to orevent accidental erasure of recorded tapes in all operating positions; four mixing record inputs; four outputs; separate volume and tone controls for each channel; high torque, wave:wound split phase motor Frequency Response: $40-15.000 \mathrm{cps} @ 74 / 2 \mathrm{ips} \pm 2 \mathrm{db}$ Signal-to-Noise Ratio: 42 db below recorded " 0 " level. Wow and Flutter: Less than $0.2 \%$. Accepts up to $7^{\prime \prime}$ reels. For 110.125 volts, 60 cps AC. Size: $133 \frac{1}{6} \mathrm{~W} \times 15 \mathrm{Hx}$ $71 / 2$ "D. Shpg. wi., 32 lbs. Imported. RK-394wX

Net 339.95

## "1055" 4-TRACK STEREO RECORDER

- 4-Track Stereo and Monaural Record/Playback - Perfect for Custom Installation

A new compact, self-contained stereo tape recorder that combines professtonal features with light weight and simplified control. Operates either horizontally or vertically through its own self-contained stereo amplifier and monitor speakers, of through your existing stereo system. Records and plays back both 4 -track stereo and monaural recordings and has facilities for recording FM stereo broadcasts. Interlocking controls prevent accidental erasure of tape in rewind or fast prevent accidental erasure of tape in rewind or fast forward. Other professional features include: edit lever;
edit guide; automatic shut-off; built-in head demagne: tizer; digital index counter; separate left and right channel volume controls and tone controls; easy-to

- Automatic Shut-Ofi
- Ready for Recording FM Stereo Broadcasts
read Vu meter with channel selector switch; left and right channel preamplifier outputs. Frequency Response: $50-15,000 \mathrm{cps} @ 71 / 2$ ips $\pm 3 \mathrm{db} ; 70-10,000 \mathrm{cps} @$ $33 / 4$ ips $\pm 3 \mathrm{db}$. Signal-to-Noise Ratio: Better than 42 db. Wow and Flutters Less than $0.2 \%$ @ $71 / 2$ ips. Record Inputs: 2 high impedance mike inputs, 2 high impedance high level phono/radio inputs. Blas and Erase Frequency: 100 KC. Motor and Drive: New heavy-duty motor, dynamically balanced rotor and flywheel. Tube Complement: 2-12AT7, 2-6BM8, 1-6CA4. Accepts up to $7^{\prime \prime}$ reels. For $110-125$ volts, $60 \operatorname{cps} A C$. Sizei $131 / 4 \mathrm{Wx}$ $131 / 4 \mathrm{Hx9} \mathrm{~K}_{6}{ }^{\circ} \mathrm{D}$. Shpg. wt., 2 BB lbs. Imported RK-320WX

Net 269.95

ROBERTS TAPE RECORDER ACCESSORIES


0eluxe stereo headset offers mono-stereo selector switch and 2-channel volume adjustment for balancing stereo to individual taste and hearing ability RK- 322 Shpg. wt., 3 lbs. Importec.

## 90-03 CERAMIC MICROPHONE

This high-quality ceramic microphone has a frequency response of 50 to $12,000 \mathrm{cps}$. It incorporates a unique combination stand and lavatier attachment. Ideat for use singly for monaural, or in pairs for "live" stereophonic recording RK-323 Shpg. wt., 2 lbs. Imported.

Net ea. 17.95

## NEW AMERICAN CONCERTONE MODEL 605-4RK PROFESSIONAL TAPE DECK

- Plays Tape from End to End and Back Automatically
- 2 \& 4-Track Stereo Record/Playback
- All-Eiectric Push-Button Dperation

Exclusive Reverse-0.Matic operation plays tape from end to end and back auto-matically-doubles your listening time without changing reels. Has four separate heads for 4 -track erase, record, playback and 2 -track playback. Sound-on-sound and add-sound recordings can be made (controlled from front panel by convenlent switch) Contains three separate hysteresis-synchronous drive motors, twin easy: to-read VU meters and 3 -digit index counter. Solenoid operated brakes assure rast, sure braking action. Automatic rewind for fast 45 .second rewind of $1200^{\circ}$ tape. sure brak Respon $50-15000 \mathrm{cps}+2 \mathrm{db}$ (14/ ips, $50-8.000 \mathrm{cps} \pm 2 \mathrm{db}$ @ Frequency Response: $50-15,000 \mathrm{cps} \frac{1}{2} 20$ @ $74 / 2$ lps, $50-8.050 \mathrm{cps}$ @ $31 / 4$ ips. $33 / 4$ pss. Flutter and Wow: Less than $.2 \%$ rms @ $71 / 2$ less than $.25 \%$ rms @ $31 / 4$ ips. Signal-to-Noise Ratio: Better than 55 db . Has four Hi- 2 inputs ( 2 line and 2 microphone) and Lo-2 cathode follower outout. Comes with portable carrying case. For 115 volts. $60 \mathrm{cDS} A C$. Size: $161 / 2 \mathrm{~W} \times 141 / 3 \mathrm{H} \times 6 \frac{1 / 6 " 0}{}$. Shpg. Wt. 48 lbs . Imported RK-222WX

# Tandberg <br> WORLD RENOWNED FOR QUALITY AND PERFORMANCE 



A deluxe stereo tape deck featuring 3 speed recording ( $71 / 2,33 / 2$, and $17 / 0$ jps.) and 3 four track record, erase and playback tape heads. Four buitt-In pre-amplifiers, two for recording and two for playback. Five push-buttons make for easy operation. Features: built-in FM multiplex, ferrite core erase head, spring-on pressure pad, micro-switch for automatic tape stop, new hysteresis-sync motor and screw-typé clutch adjustment. Utilizes printed clicuitry for reliability and low maintenance costs, d.c. heating of all tubes, and precision components. SPECIFICATIONS: INPUTS - 2 microphones, 2 High Level, and 2 Low Level; Frequency Response -$30-20,000 \mathrm{cps}$ at $71 / 2 \mathrm{ips}, 30-15,000 \mathrm{cps}$ at $33 / 4 \mathrm{ips}$; and $50-7 \mathrm{COO} \mathrm{cps}$ at $17 / 0 \mathrm{ips}$. NOISE LEVEL: 57 OB below maximum record level: RECORO LEVEL INDICATORS: TWO sensitive electronic Beam Tubes. WOW AND FLUTTER: $0.1 \%$ RMS at $71 / 2 \mathrm{ips}, 0.2 \%$ RMS at $3 \% / 4 \mathrm{ips}, 0.25 \mathrm{RMS}$ at $1 \% / 8 \mathrm{ips}$; CROSS-TALK REJECTION greater than 60 db , 11 Tubes plus 2 Selenium Rectifiers. Lightweight compact, and handsomely styled. For 110.125-145-200-220-245 volts, 60 CPS AC 16 long. 12 wide, $6^{\prime \prime}$ high with teakwood cabinet, less mike. Shpg. wt, 30 libs. Imported from Norway. RK. 359WX
MODEL TC-56. Luggage type carrying case for 64
Net 498.00
RK. 366 W Shog. wtor los 64
Ne: 24.50


## MODEL 74 <br> 4-TRACK TAPE RECORDER

- Records/Plays 4-Track Stereo-Mono
- Three Speeds$17 / 33 / 4,71 / 2$ ips
- Built in Amplifiers and Speakers
- Furnished In Teakwood Cabinet

An extraordinarily fine self-contained 3 -speed stereo tape recorder for your home Has bullt-in 6 -watt stereo amplifier and $27 \times 4^{\prime \prime}$ speakers. Precision laminated 4-tracl head records and plays-back 4-track stereo and mono tapes. Sound-on-sound. Ferrite core erase head, erases any mono track, individualiy or in pairs. Tape motion level controls forward, fast/forward, rewind and "Fiee" position for easy tape threading; also includes pause control, automatic tape stop. record/playback amplifier mode switch; separate volume control. Dual record level indicators amplifer mode switch; separate volume control. Dual record level indicators,
Synchronous motor. Response: $30-16,000 \mathrm{cps} \pm 2 \mathrm{db} @ 7 \%$ ips; $40-10,000 \mathrm{cps}$ Synchronous motor. Response: $30-16,0 \mathrm{cocps} \pm 2 \mathrm{db} @ 7 \% \mathrm{ips} ; 40-10,000 \mathrm{cps}$
$\pm 2 \mathrm{db} @ 33 / 4 \mathrm{ips} ; 55-5000 \mathrm{cps} \pm 2 \mathrm{db}$ @ $17 / \mathrm{lps}$. Wow and flutter $.15 \%$ @ $71 / 2 \mathrm{ips}$. Mic and Ilne stereo inputs, external speaker output. With teakwood cabinet, cords, tape-up reet. Less mikes. $15 \mathrm{y} \times 11^{11} \mathrm{~K}_{4} \times 6^{\prime \prime}$. For $117 \mathrm{~V}, 60$ cycles AC. Shpg. wt., 27 Ibs , RK-35awx Imported. No Money Down
Model TC. 56 Luggage Type Carrying Case for 74.
RK.366W Shpg 7 jos.
Net 24.50

## NEW WOLLENSAK T-1980 PROFESSIONAL STUDIO

 SERIES STEREO TAPE RECORDER\author{

- 2 \& 4 Track Stereo or Mono Record/Playback • Sound-on-Sound • 2 Speeds- $71 / 2 \& 331 / 4$ IPS
}


## SPECIFICATIONS

Fiea Jps, $40 \cdot 13,000 \mathrm{cps} \pm 3 \mathrm{db}$ at $34 / 4$ jps; Play time: up to 8 hours on 4-track mono, up to 4 hours on 4-track stereo; Power output: 11 watts per stereo channel ( 22 watts mono); Wow and Flutter: less than $.3 \%$ each speed signal-to-Nolse ratio greater than 48 db . Power consumption 110 volts AC only; Inputs: mike, phono-radio, and voits AC only; Complate with 2 dynamic mikes. size: preamp. Complete with 2 dynamic mi
$211 / 2 H \times 91 / 6 \mathrm{~W} \times 123 / 4{ }^{*} \mathrm{D}$, Shpg. wt., 44 lbs .

A deluxe self-contalned tape recorder engineered to meet the requirements of both the professlonal and the consumer. The T-1980 provldes complete facilities for 2 \& 4 track stereo or monaural record/playback. Features sound-on-sound recording 3 -digit index counter for precise indexing of tape, separate VU meter for left and rlght channel; separate balance and volume controls for each channel. An instant stop swifch is provided for precise editing. Automatic shutoff when the end of a reel is reached. Automatic head demagnetizer. Self. adjusting breaking system. RK-502WX


## F-44 SERIES

## MODEL 4460

F-4460 is major advance In 4-track recorders, A tape deck offering superlor recording facilities with preamplifier included. Separate erase, record, and playback heads of precision narrow track design eliminate reverse channel cross-talk. New hysteresis motor with internal fan coaling permits timing accuracy of $\pm 1 \%$. Features automatic tape take-up, bulit-in mixer - 4 inputs; 2 VU meters and excluslve "Auto-Set" shutoff which operates for either un. attended recording or playback. Specs: Freq. Response $50 \cdot 15,000 \pm \mathrm{db}$ at $7 \mathrm{~L} / \mathrm{z}_{\mathrm{i}}$ $50.8,000 \mathrm{cps} \pm 2 \mathrm{db}, 33 / \mathrm{lps}$; Flutter \& Wow under $0.2 \% \mathrm{pms} .71 / 2 \mathrm{ips}$. $\mathrm{S} \cdot \mathrm{N}$ ratio: Better than $55^{\circ}$ do at $71 / 2$ ips. Size in case $9 \times 15 \times 174 / 2^{\prime \prime}$. For 117 V AC 60 cps. Shpg. wt., 38 los.
RK.470WX
Net 595.00

## AMPEX MODEL F-4470

RK-471wx Same as F-4460 but with self-contained speakers Net 695.00 AMPEX MODEL F-4450

Net 549.50


MODEL 622

Professional recorders by Ampex for sfudio quality recordings in the field. Feature: monitor of tape or source while recording; separate mixing controls for mike and line, horizontal or vertical operation; big $3^{\prime \prime}$ VU meter(s); feed 600 ohm broadcast line. Hysteresis motor. Durable lightweight carrying case, Response: $40-10,000 \mathrm{cps} \pm 2 \mathrm{db} @ 71 / 2 \mathrm{ips}$. Flutter and wowi less than $0.17 \%$ @ $71 / 2 \mathrm{lps}$. 7 and $5^{-}$reel size. Mike Flutter and wows less than $0.17 \%$ @ $1 / 2$ lps. 7 and 15 reel size. Mike
and line inputs. Front panel headphone jack. For 11 N 60 cycles AC.
MODEL 602-02 Portable Monaural Recorder.Full track $7 / 2 / 2 \mathrm{ips}$. A rugged dependable recorder that will meet your performance pequirements for a professional mono unit. $8 \times 131 / 4 \times 161 / 2^{\prime \prime}$. Shpg. wt., 28 lbs

Net 625.00
MODEL 6022-01 Portable Stereo Recorder. Two track heads with selec-tive-track erase head. 2-electronic channels give you the versatility of 2 -track stereo or half-track mono in one unlt. $71 / 2$ lps. $8 \times 131 / 4 \times 23^{\prime \prime}$ Shpg. wt., 42 lbs.
RK-458wx
Net 875.00
MODEL 622 Speaker/Amplifler for use with above. 10 -watts power output. $8^{\prime \prime}$ speaker. For 117 V 60 cycles AC. Portable carrying case:


Net 189.50

## the LATEST in TAPE RECORDER design



## - Complete Audio Center with Solid-State Computer-Type Circuitry <br> - Self-Contained 4 Track Stereo and Monaural

 Record/Playback FacilitiesThis outstanaing new insirument is fully transistorized and completely self-contained. In addition to being an exceptionally fine stereo tape recorder, it is a complete stereo preamplifier and 20 -watt amplifier ( 10 watts per channel) as well. When used with a record player, tuner and speaker systems, It becomes the center of a complete high fidellity home music system. With It you can record and playback 4 -track stereo and monaural tapes and obiain such special effects as Sound-on-Sound, Sound with-Sound and Echo Effects. Features: 47 Transistors, 26
Dlodes in Plug-in Computer-type Modules; All-electronic Switching; Three separate Dlodes in Plug-in Computer-type Modules; All-electronic Switching; Three separate Tape Heads; Three Separate
Two Separate Playback Amplifiers; Three Individual Inputs per Channel; SimultanTwo Separate Playback Amplifiers;

- Bullt-in 20-Watt Stereo Integrated Amplifier
- 47 Transistors, 26 Diodes
- Sound-on-Sound, Sound with Sound

Preâmplifier Outputs; Twin 5" Monltoring Speakers; "OTL" Output Transformless Circuitry; Two VU Meters for Record or Playback; Instant Pause Swltch; $45-\mathrm{sec}$. High-speed Rewind and Fast Forward for $1200^{\circ}$ tape. SPECIFICATIONS: Tape Speeds, $71 / 3$ and $33 / 4$ los (plus 0 position for use as amplifier only); Frequency Response, $30-20,000 \mathrm{cps} \pm 3 \mathrm{db} @ 71 / 2 \mathrm{ips} \& 30-15,000 \mathrm{cDs} \pm 3 \mathrm{db} @ 33 / 4 \mathrm{ips}$; Audio Output, 10 watts per channel (undistorted); $\mathrm{S} / \mathrm{N}$ Ratlo, more than 50 ob @ Audio output, $b$ speeds; Bias Frequency. 85 KC. Complete with elegantly styled case and 2 omnidjrectional dynamic microphones. For 117 volts, 60 CDS AC. Overall Dimensionst $15 \% \mathrm{WWx} 131 / 2 \mathrm{Hx} 73 / 3^{\circ} \mathrm{D}$. Shpg, wt., 44 lbs . Imported

RK-347WX
NO MONEY OOWN
Net 600.00

## NEW RT-360 PROFESSIONAL TAPE RECORDER



MODEL RT-360 WITH DK-1 ACCESSORY MOTORS

## - Now You Can Make High Fidelity Stereo Copies of

 Your Favorite Tapes all on the Same MachineThe revolutionary 8ell RT-360 Professional Tape Recorder allows you to duphcate high quallty stereo or monaural tapes with one machine. Utillzes the famous mechanlsm of the Bell T-347 deck with three-motor drive and electro-dynamic braking. Contains a 16 -watt stereo amplifler with playback response from 30 to $20,000 \mathrm{cps}$. @ 71/2 ips with negligible wow and flutter. Twin $6 \times 9$ g oval speakers are housed in folding, removable baffles which may be relocated for optimum stereo sound. Accessory motorized adapters permit use of any size reel up to $101 / 2^{\prime \prime}$ to extend paying time capacity up to 6 hours in stereo or 12 hours in $V$-track mono @ $33 / 4$ ips. These adapters are also used in the duplicating function. This duplicating feature has a wide variety of applications, especially among musical organizations or business groups. No toss of quality is noticeable between the original tape and the copy. Elther a stereo or monaural copy can be made from a stereo tape. Recorder section has separate 4 -track record, playback and erase heads. Fast forward and rewind speed averages $30^{\circ}$ per second. Power amplifler has an output of 8 watts per channel 16 watts total. Hum and noise are 70 do below rated output. Tube Complement: (Playback Preamp) 3-12AX7; (Record Amp) 2-12AX7, 2-12AT7,
 Shpg. wit. 48 lbs .

## Shpg. wt. 48 IDS. Model RT-360

## NO MONEY OOWN

Net 449.95 MODEL DK-1 ACCESSORY MOTORS for Tape Duplicating. Set of 2 , accommodate $1022^{\prime \prime}$ reels for long-play in normal modes, or to handle extra reels when duplicating tape. These motorized adapters have electrodynamic braking and fast forward/rewind-same features as those in the deck. Shpg. wt. 9 lbs.
9 RK-50s Model DK-1 Motors, Less $101 / 2^{\prime \prime}$ Reels

- 4.Track Stereo Record/Playback
- 3.Motor Drive- 3 Separate Tape Heads
- With Record/Playback Preamplifier
- Piano Key Controls

Records and plays back 4-track stereo or mono tapes. Has bult-in stereo record/playback preamplifier with 4 inputs ( 2 Hiz for mikes, 2 Hi-Z for amp. or tuner), 4 outputs and 6 tubes. You can record Sound-on-Sound, Duo-Sound (re-record monaural source for stereo-like effect) and make special echo effects by adding reverberation as you record. Off-the-tape monitoring permits you to hear what is being recorded as you are recording it. Special teatures (1) 3 Separate Orive Motors (2) 3 Separate 4-Track Heads (3) Electro-Mechanical Braking (4) Twin Vu Meters (5) Index Counter (6) Tape LIfters (7) Automatic Stop Switch. Plano-type keys control Tape Speed, Otf-Run Rewind Fast Forward Standby. Frequency Response: Off-Run, Rewind, Fast Forwar ios. Flutter: balow $0.2 \%$ ( $71 / 2$ $18-16,500 \mathrm{cps} \pm 3 \mathrm{db}$ @ $71 / 2 \mathrm{ips}$. Flutter: below $0.2 \%$ @ ${ }^{71 / 2}$ ips. Takes up to $7^{\prime \prime \prime}$ reels. Wood-grained and chrome finish, Size: $15 y / 4 W \times 131 / 2$ Front to Back. Requires $5^{\prime \prime \prime}$ below and ${ }^{2}$ above mounting surface (Including preamp). Shpg. wt.. 23 ibs. RK-272WX ............NO MONEY OOWN


## LaFAYETtE <br> $\square$ <br> \& <br> BONUS

Receive famous Lafayette F-767 Stereo Headphones for 1 -cent with purchase of Bell T-347 Stereo Tape Deck.
RK-488wxM Bell T. 347 plus Lafayette F. 767 Stereo Headphones


TYPE 111 STANDARD TAPE - $11 / 2$ MII Acetate Coated with red oxide. Popularly used for high fidelity all purpose recordings. On plastic reels except *NART日 metal reels. Av, shpg. wt., 8 oz. ea.

| Stock | Type |  | Length | Net Each |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| - Me. | No | Re | Feat | 1.11 | 12 up |
| RT-181 | 111-1.5 | $3{ }^{\prime \prime}$ | 150 | 46 | 41 |
| RT-178 | 111.3 | $4^{\prime \prime}$ | 300 | . 88 | . 79 |
| RT-179 | 111-6 | 5" | 600 | 1.47 | 1.31 |
| RT-180 | 111.12 | 7" | 1200 | 2.29 | 2.05 |
| QT-162 | 111.25 H | Hub | 2500 | 5.56 | 4.95 |
| RT-183 | 111-25R** | 101/2" | 2500 | 7.12 | 6.41 |
| RR-184 | 111-50 H | Hub | 5000 | 11.10 | 9.99 |
| RT-185 | 111-50R | $14^{\prime \prime}$ | 5000 | 14.44 | 12.99 |

TYPE 190 EXTRA-PLAY TAPE - $50 \%$ more playing time on standard size reels. 1 mil acetate base. All on claslic reel except *NARTB aluminum reel. Av. shpg. wt., 12 oz.

| Stock | Type |  | Length | Net Each |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Reel | Fent | $1 \cdot 11$ | 12 Un |
| RT-193 | 190.9 | $5{ }^{\prime \prime}$ | 900 | 2.29 | 2.05 |
| RT-194 | 190.18 | 7" | 1800 | 3.60 | 3.23 |
| RT-155 | 190.36R | 101/2** | 3600 | 8.40 | 7.56 |

SCOTCH LEADER TIMER TAPE Type 24-1W. Has 1 second Interval markings for $31 y^{\prime \prime}$. $71 / 2^{\prime \prime \prime}$ and $15^{\prime \prime}$ per second speeds. 100 ft . $1 / 4^{\prime \prime}$ wide roll, Individually boxed. 5 ou,
RT-206. Lots of 12 Ea. 53 Singly Ea. 59

## RECORDING TAPES AND ACCESSORIES

TYPE 150 EXTRA.PLAY TAPE-1 Mil extra strong Polyester base high fidelity tapes. Withstands high tersion and break resistant. All plastic reels except *NARTB aluminum reel. Av, shpg. wt., 12 oz .

| Stock | Type |  | Lencth | Net Each |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Me | Aoel |  | 14 | 124 |
| RT-190 | 1509 | 5" | 900 | 2.35 | 2.12 |
| RT-191 | 150-18 | $7^{\prime \prime}$ | 1800 | 4.05 | 3.65 |
| RT-192 | 150-36R* | 104/2" | 3600 | 9.41 | 8.47 |

TYPE 120 HIGH-OUTPUT TAPE - Acetate base recording tapes of $11 / 2 \mathrm{mll}$ thickness. Provides 8 to 12 db highe? output than standard types. On plastic reel excep ${ }^{*}$ NARTE reel and $\dagger$ MARTB hub. Av. shpg. wt., 14 oz .

| $\begin{gathered} \text { Stock } \\ - \text { No. } \end{gathered}$ | $\begin{aligned} & \text { Type } \\ & \text { Ne } \end{aligned}$ | Reel | $\begin{aligned} & \text { Length } \\ & \text { If. } \end{aligned}$ | $\begin{aligned} & \text { Net Each } \\ & 1-11 \text { 12 Up } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| RT-186 | 120-6 | 5 " | $600^{\circ}$ | 1.47 | 1.31 |
| RT-167 | 120-12 | $7{ }^{\prime \prime}$ | $1200^{\prime}$ | 2.29 | 2.05 |
| AT-188 | 120-25H $\dagger$ | Hub | 2500 | 5.56 | 4.99 |
| RT-189 | 120-25R* | 101/2" | 2500 | 7.12 | 6.41 |

TYPE 200 TENSILIZED-Tensilized Polyester .50 mb tapes. Provides twice as much playing time as the 1.5 mil standard tape. Stronger and more durable that usual long-play tapes. On plastic reel, Av. Shpg. wt. 12 oz .

Net Each

| Stock |  |  | Net Each |
| :---: | :---: | :---: | :---: |
| - Me | 10 | Rael Largt | 1.11 .12 ln |
| -T-197 | 200-24 | $7{ }^{\prime \prime}$ 2400 | $6.20 \quad 5.59$ |
| RI-198 | 200-48RPS | 101/2" $4800^{\circ}$ | 14.3812 .94 |

## SCOTCH SPLICING TAPE (B)

Pressure-sensitive tape made especially for spiling and editing magnetic tape. Av, shpg. wt., 3 oz.
SCOTCH $41-1 / 2 S ~$
RT-176
.

RT-175
Rots of 12, Ea. 46
Singly, Ea. . 34 Singly, Ea, . 51

TYPE $290-1 / 2$ MII polyester tensilized tape super strang $50 \%$ extra playing time has silicon lubricant to give minimum of friction wear. LENGTH MET EA.
 $\begin{array}{lllllll}\text { RT } 199 & 290-6 & 31 / 4^{\circ} & 600^{\circ} & 1.93 & 1.73 \\ \text { RT. } 200 & 290.36 & 7^{\prime \prime} & 3600^{\circ} & 7.81 & 7.03\end{array}$
Type 175 Tenzar-11/2 Mil tenzar coated with a high potency oxide, offers 16 times greater tear resistance than acetate backing. For conlinuous play, fast stops and starts non-drying silicone lubricated to protect recorder heads. Av. wt. 1002.

| Stock | Type | Length |  | Net Each |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Mo. |  | leel | Feet | 1:11 | 12.418 |
| RT-203 | 175-6 | 5" | 600 | 1.57 | 1.41 |
| RT-204 | 175-12 | 7" | 1200 | 2.45 | 2.2 |

Type 282 Sandwich Tape-11/2 Mil polyester. Features micro thin protective layer over oxide coating lasts up to 30 times as long as standard tapes. Reduces head wear and tape recorder maintenance. Av. Shpg. wt., 10 oz .

| teck | Type |  | Lensth | Net Each |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Ma. |  | seel |  | 1.11 | 12-3p |
| RT-201 | 282-6 | 5* | $600^{\circ}$ | 2.03 | 1.82 |
| RT-202 | 282.12 | $7{ }^{\prime \prime}$ | $1200^{\circ}$ | 3.20 | 2.81 |

Aluminized Sensing Tape. Type 51 7/32S To actuate automatic stop and reverse on recorders so equipped. $150^{\prime \prime}$ long $x$ /3/2" wide. One side foll, other adhesive. Shpg. wt. 402.
RT-205 Lot of 121.67 Ea .
Singly 1.05 Ea .


## MAGNETIC <br> TAPE

CARTRIDGES

Fits new cartridge machines. Records both monaural and stereo sound, Eliminates threading, rewinding, spare reels. Small size makes them ideal for storage in home libraries. Mylar base, Shpg, wt., 12 ozs.
Stock Net Each



RCA
RCA MAGNETIC SOUND TAPES AND ACCESSORIES RED SEAL SERIES
The same tape used for RCA Yictor Masters
ACETATE-BASE TAPES -. New acetate base magnetic recording tapes on plastic reels. Av, shpg. wt., 10 oz.

| Stock No. | $\begin{gathered} \text { rypo } \\ \text { No } \end{gathered}$ |  |  |  |  | $12 \mathrm{men}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RT-260 | 15A.1.5 | $3{ }^{\prime \prime}$ | $150^{\prime}$ | 1.5 | . 46 | 41 |
| RT-250 | 10A-9 | 5" | $900^{\circ}$ | 1.0 | 2.29 | 2.06 |
| RT-263 | 15A-6 | 5" | $600^{\circ}$ | 1.5 | 1.47 | 1.32 |
| RT-264 | 10A-18 | $7{ }^{\prime \prime}$ | 1800 ${ }^{\circ}$ | 1.0 | 3.60 | 3.23 |
| RT-254 | 15A-12 | $7{ }^{\prime \prime}$ | $1200^{\circ}$ | 1.5 | 2.29 | 2.06 |

MYLAR GASE TAPES - New mylar base tapes, on plastic
reels. Full frequency range response, low nolse, high reels. Full frequency range response, low nolse, high
strength and extreme durablity. Tensilized mylar. Ay shpg. wt., 10 oz.

| Stock Mo. | Type No. | Resl Leneth |  | Mils | Net Each |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RT-261 | $10 \mathrm{M}-2.25$ | \% | $225^{\circ}$ | 1.0 | . 66 | . 59 |
| RT-265 | 5TM. 3 | 3" | $300^{\circ}$ | 0.75 | 1.05 | . 94 |
| RT-251 | 5M-12 | 5" | 1200' | 0.5 | 2.97 | 2.68 |
| RT-252 | 10M-9 | 5" | $900^{\circ}$ | 1.0 | 2.35 | 2.12 |
| RT-253 | 15M.6 | 5" | $600^{\circ}$ | 1.5 | 1.73 | 1.56 |
| RT-258 | 5TM-12* | 5" | $1200^{\circ}$ | 0.75 | 3.11 | 2.79 |
| RT-255 | 5M-24 | $7{ }^{7 \prime}$ | 2400' | 0.5 | 5.14 | 4.61 |
| RT-256 | 10M-18* | $7{ }^{7}$ | 1800' | 1.0 | 4.05 | 3.65 |
| RT-257 | 15M-12 | $7{ }^{\prime \prime}$ | $1200{ }^{\prime}$ | 1.5 | 2.71 | 2.50 |
| RT-259 | 5TM-24* | 7" | $2400^{\circ}$ | 0.75 | 5.71 | 5.14 |

## RCA SPLICING TAPES

Pressure sensitive for editing and splicing. Shpg. wt.,
3 oz.

| RT-266 | Type 515C1 | 1/4" $\times 100^{\prime \prime}$ | Net . 17 |
| :---: | :---: | :---: | :---: |
| RT-267 | Type 511cl | $12^{\prime \prime} \times 100^{\circ}$ | 2 |
| RT-268 | Type 512C1 | 1/2" $\times 150^{\prime \prime}$ | 30 |
| RT-269 | Type 513C1 | $3 / 4^{\prime \prime} \times 100^{-}$ | Net .32 |
| RT-270 | Type 514C1 | $3 / 4^{\prime \prime} \times 150^{\circ}$ | Net. 39 |



## lafayette quality is backed by our money-back guarantee

## LAFAYETTE'S FAMOUS

 MONEY-BACK GUARANTEEYOU BE THE JUDGE!
Lafayette's tape is made by outstanding nationally known manufacturers. It is first quallty, splice free, red oxide coated, with full frequency response, uniform output and no "drop-outs". Resistant to moisture, heat, cold and abrasion.

We guarantee absolute satisfaction or your money back. If for any reason you are dissatisfied, refurn the tape in 30 days and we will refund your money. You are the sole juge.

## LAFAYETTE ACETATE BASE RECORDING TAPE

Acetate base magnetic recording tape with uniform standard red oxide coating provides wide range high fidelity response over the audio spectrum. Features nolse free reproduction, low abrasion and uniform output. In 1 mil and $14 / 2$ mil thickness.

## LAFAYETTE MYLAR BASE RECORDING TAPE As Low As 63 $\dagger$

Mylar base is especially strong, ourable and break resistant, and is virtually impervious to heat, cold or humidity. All in clear plastic reels, individually boxed. $\begin{array}{lllll} & \text { Wt. } & \text { Net Per Reel } \\ \text { Stock } \\ \text { No. Feet Reel mils Lbs. } & 1.4 & 5-24 & 25\end{array}$

| No. | Feet | Reel | Mils | LDs. | $1-4$ | $5-24$ | 25 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RT-20 | 300 | $3^{\prime \prime}$ | $1 / 2$ | $1 / 2$ | -69 | .63 |  | R


| RT-17 | Feet | Reel Mils | Lbs. | $1-4$ | $5-24$ | 25 | $5^{\prime \prime}$ | $11 / 2$ |
| ---: | ---: | ---: | :--- | :--- | ---: | ---: | ---: | ---: |
| RT-18 | 900 | $5^{\prime \prime}$ | 1 | $1 / 2$ | 99 | .90 | .85 |  |
| RT-10 | 1200 | $7^{\prime \prime}$ | $11 / 2$ | $1 / 4$ | 1.20 | 1.10 | .99 |  |
| RT-11 | 1800 | $7^{\prime \prime}$ | 1 | $11 / 49$ | 1.49 | 1.35 |  |  |

## LAFAYETTE RECORDING TAPES AND ACCESSORIES



## -

## :



## LAFAYETTE BULK TAPE ERASER AND DEMAGNETIZERS

## PROFESSIONAL MODEL

 FEATURES- Completely Erases Tape
- Two Erasing Coils
- Erases up to $1^{\prime \prime}$ Tapes
- Erases $1 / 4^{\prime \prime}$ Tapes in One Operation-No Reversing
- For $3^{\prime \prime}, 5^{\prime \prime}, 7^{\prime \prime}$ or 101/2" Reels


A carefully designed and precisely manufactured tape "degausser" for complete rotate 2 or 3 turns, take off, and that's all. Reduce tape hiss to the level of new "virgin" tape. Two completely separate coils, are used for doubly-effective erasures even of large, $104^{\prime \prime}$ reels. Will erase $1^{\prime \prime}$ wide tape. An extra powerful unit for heavy-duty use-draws over 9 amperes. Can be used to demagnetize tape, magnetically stripped film, plus toots and watches. Has a heavy, custom finished
case, a rugred non-magnetic top, heavy duty on-off switch and power cord. Has case, a rugged non-magnefic top, heavy duty on-off switch and power cord. Has
buitr-in. fuse. Pilot light prevents accidentally leaving it turned on. Size $61 / 477 /$ sx built-n. fuse. Pilot light prevents accidentally leavin
$34 / 2^{\prime \prime} .105-125 \mathrm{~V}, 60 \mathrm{cycte}$. Shpg. wt., 14 los . Imported. 3/2"': $105-125 \mathrm{~V}, 60$ cycle. Sho
$\mathrm{ML}-120$ Professional Model

## STANDARD MODEL

Similar to professional model for all size reels but handles only standard size $144^{\prime \prime}$ tapes or smaller and reet must be turned over once. Has separate spindie positions for $1042^{\prime \prime}$ and 3,5 , and $7^{\prime \prime}$ reels; non-magnetic bakelite plate for reel rest. One powerful coil consumes 5 amps . Metal case $71 / 2 \times 43 / 4 \times 34 / 2^{\prime \prime}$. Shpg. wt., 9 lbs. Imported. ML-176

## LAFAYETTE TAPE HEAD DEMAGNETIZERS <br> $3^{95}$ <br> OELUXE MDDEL WITH 3 removable pole pieces



Has 3 compiete sets of removable pole pieces: straight, $45^{\circ}$ and $90^{\circ}$ for quick easy use with
any tape head. Removes magnetism that acany lape head. Removes magnetism that ac-signal-to-noise ratio. For 110 Volt 60 cycle. Shpg. wt., 1 lb . Imported.
PK.238
Net 3.95


## 289 economy MODEL

Features very strong field with a single prode. Its thin cross-sectional size allows it to be used on all heads. For 110 V 60 cycle. Shpg. Wt., 12 oz . Imported. MS. 694

Net 2.89

## 600 FT. MYLAR TAPE ON $31 / 4^{\prime \prime}$ REEL

 - A full hour of recording!600 ft . or top quallty $1 / 2 \mathrm{mil}$ mylar base recording tape on a $31 / 4$ " reel that will give you a full hour of playing time on 2 tracks at $33 / 4 \mathrm{ips}$. Fits all recorders. Especially ideal for miniature and transistorized recorders. Shpg. wt., $12 \mathbf{0 z}$.
RT-21
Net ea., 1.30; 5-24 ea., 1.15 ; 25 up ea., 1.05

## LAFAYETTE RECORDING HEADS

- Each Set Contains 2 Heads for Record-Playback and Erase


## - Ideal for Experimenters $1 / 4$ TRACK STEREO SET

A complete 2 piece set ideal for experimenters. Consists of one $1 / 4$ track record-playback head and one erase head, both with mounting brackets. RECDRD HEAD SPECS: Impedance, $3.3 \mathrm{~K} @ 1 \mathrm{KC}$ OC resistance: 700 ohms; Sensitivity: - 55 db ; Cross talk -45db; bias current 0.5 MA ; voice current: $37.5 \mu \mathrm{~A}$ @1 KC; response $100-12,000$ cps. Inductance 0.5 H . CAP: . 0002 in. ERASE HEAD: DC resistance .65 ohms; GAP: . 004 in: erase current .18A; blas freq: $30-65 \mathrm{KC}$; Erasure - 60 db . Size, $Y, W^{2} 7 / \mathrm{a}^{\prime \prime}$ cent. to cent. hole mounting. Shpg. wt., 4 oz. Imported. F-831

Net 7.95


## RECORO PLAYBACK and ERASE HEADS for MINIATURE TRANSISTORIZED TAPE RECORDERS

A two-plece set consisting of one record/playback and one erase tape head. Designed fpr use in dual track miniature tape recorder. These units will replace the heads in most Japanese-bullt recorders, and are also excellent for the experimenter. Record/playback head specifications: impedance 5.5 K at 1 KC ; DC resistance; 1 K ohm; reproduction level: -52db (recording at +2 db ); bia: frequency: 35 KC ; bias current: 1 ma ; voice current: 0.03 ma ; response: $100-7000 \mathrm{cps} \pm \mathrm{Sdb}^{2}$ S/N ratio. better than 45 db ; bias system: AC \& OC reproduction: gap: .00024 in . ( -006 mm ); dimenstons 395 approx. M, Wx $3 / 4 H x^{11} 1_{0}{ }^{\prime \prime} D$. Erase head same dimensions. Total shpg. wt., 3 oz. Imported.
F-920
Net 3.95
NEW LAFAYETTE RECORD/PLAYBACK \& ERASE HEADS


Ideal for the experimenter interested in Tape Recorders. Recording head: 4K ohm impedance @ 1000 cps; recording current, 20 microamps $\pm 20 \%$; blas current 500 microamps; bias frequency, 45 to 50 KC . Playback output, $-48 \mathrm{db} \pm 2 \mathrm{db}$; Response to 10 KC $\pm 3 \mathrm{db}$. Erase head: Erasing current 150 milliamps; Impedance, 30 ohms $\pm 25 \%$ @ $\pm 0 \mathrm{KC}, 0 \mathrm{OC}$ resistance 0.5 ohms $\pm 20 \%$. Slze $3 / / W^{2}{ }^{\prime \prime}$, $H x^{2} y_{2}^{2}$ " $D$. Mounting flange, hole-to-hole, 1 Ke". Shpg. wt., 5 01. Imported

## ROBINS GIBSON GIRL ${ }^{\odot}$ Stereo "4" Tape Splicers <br>  <br> A <br> B <br> GIBSON GIRL® STEREO "4" <br> (B) TS-4S STEREO "4" STANDARD TAPE SPLICER <br> (D) SP-4 "SEMI-PRO" TAPE SPLICER

## TAPE SPLICING EQUIPMENT

These precision tape splicers meet the critical requirements of splicing 4 track tapes without affect. ing program material on the outside tracks. They work equally as well for single track and 2 track tapes. Blade centering adjustments for lifetime maintenance.
( $)$ TS-8D STEREO "4" DELUXE TAPE SPLICER
The ultimate tape splicer with Space-Age, design of indestructable IMPLEX. For rapid tape editing and repairs. Cuts tape diagonally, and trims minute concave indentations on sides of splice to prevent adhesive contact. with critical recorder parts. Has replaceable cutter cartridge, blade centering adjustment, "see-thru" windows Indicafe operating positions easy-threading tape dispenser complete with roll of $1 / 2^{\prime \prime}$ splicing tape, and safety locking device. Instructions. Shpg. wt. 1 lb, RT. 320

Net 7.85
RK-8 Replacement Kit for TS-8D (Not Illus.) Replacement cutter cartridge and 2 cutting pads. With instructions. Shpg. wt., 302.

Net .85
"Utility version of the TS.8D has alf deluxe features except for "see-thru" windows. Made of metal and plastic. Replaceable cutter cartridge and blade cen. tering adjustment. Tape dispenser complete with 100 roll of ${ }^{3} \mathbf{b}^{\prime \prime}$ spilecing tape. shpg. wt., 12 oes.
RT-322
... Net 5,70
(C) TS-4J STEREO "4" JUNIOR TAPE SPLICER

Same as TS-4S without tape dispenser and splicing tape. Us es $3 \mathrm{~m}^{\prime \prime}$ splicing tape. Shpg. wt., 8 oz.
RT-323
RT-323
RK-3 Replacement Kit for TS-4S \&
J Splicers (Not Illus.)
Replacement cutter cartridge and two cutding pads. With instructions. Shpg. wt., 3 oz.

## RT. 324

RK-2 Replacemen Kit Net .es
tor older TS-4A ser-
ies Splicers (Not Illus.) as above. Shpg. wt., 3 oz.
RT-325

Small efficient low-cost non-stereo splicer has tape alignment guide with adhesive back, cutting unit, and Dlade cover. Made of Plastic. Makes diagonal cuts and "GT. 328 GIrl" trim. Shpg. wt., 3 oz.
RT. 328
Net 1.50
H-4 "Hobbyist" Tape Splicer (Not Illus.)
The lowest priced tape splicer avaliable, Ideal for those using their equipment occasionally. Consists of adhesive backed plastic tape fuide and unique curved
 RT-327

Net 75
(E) ROBINS SPLICING TAPE

Special formula. Mylar, tackiness, thickness, strength and cold flow carefully controlied. 100" long. $1^{\prime \prime}$ core stock Wo Mrr. No. width shpg. Wf. Net RT. 328



## ri. 331

ST -375
ST. 500
ST. 750
ST. 500
ST. 750

## TAPE RECORDERS



F

## (F) JCT-2 "JOCKEY CLOTH" FOR TAPES

Cleans and Iubricates tape while running. With Silicone. Reduces squeal, chatter, head and tape wear. Washable and reuseable. Shpg. wt., 301.

## T. T. 332

Net .60

## (G) TI-1 TAPE RECORDER THREADER

Slip threader on, turn crank - and tape is securely threaded. For all $3^{\prime \prime}-7^{\prime \prime}$ reels. Shpg. wt., 2 oz. TT. 333

TC-12 TAPE CLIPS (Not Illus.)
Unique plastic reuseable clips prevent tapes from unwinding. Fit all reels. Phg. of 12. Shpg. wi., Pkg, 3 oz. Tr. 334

Net Per Phg. 24
(1) HE-5 "TAPE CLEAN"
$5^{\prime \prime}$ reel of chemically treated cloth tape. Just run through and clean recording head, tape guides, etc. Wi., $6 \mathrm{oz}^{2}$

SL-30S Reel Labels (Not Illus.)
30 adheslve labels. Write or type reef title, date and No. Wt., 2 oz.
RT. 336
Net .27

(1) TE-24 TAPE EDITING AND SPLICING BOOKLET By Haynes. A 24 page, fully illustrated $6 \times 9^{\circ \prime \prime}$ guide book Hiled with valuable tips on spliceless editing, dubbing, erasure of clicks, -lading, etc.
BM- 21 Postpaid in U.S.A
(I) TE-48 TELEVISION TAPE RECORDING

By Goodall. A 48 page semi-technical booklet that shows how it is done.
aK- 12 Postpald in U.S.A.

## (I) TE- 128 HOW TO GET THE MOST OUT OF

TAPE RECORDING
By Sheridan. 128 pages packed with informative ideas about tape recording. Illustrated.
8K-13 Postpald in U.S.A.

## (I) HC- 2 TAPE HEAD CLEANER

Efficient solvent removes distortion producing dirt, grime and oxides from heads. Bottle has applicator cap. 2 fl. oz. Shps. wt., 4 of.
RT. 337
Net 60

## (J) RC-2-22 TAPE HEAD LUBRICANT

Silicone base Hquid. Reduces head and tape wear. 2 fl. oz. Shpg. wt., 4 oz. With applicator cap.
RT. 346
(J) RC-2-33 TAPE AND PHONO DRIVE OIL

A must for tape drives. 2 11. Oz. Applicator cap.
Net .45
(J) RC-2.56 "NON-SLIP"

Save on repair bills. Apply liquid with applicator to old, glazed phono and tape drive wheels. Stops slip. page, 2 fi. oz. Shpg. wt., 407.
QT-344
Net .60

## (W) HO. 6 HEAD DEMAGNETIZER

U.L. listed. Removes tape damaging residual magnetism from tape head for optium signal/noise ratio, lowest noise level. Maintains "like new" performance with your tape recorder. Compact, easy to use. Size: 4 56ax $11 / 4^{\prime \prime}$ dia. $110 \mathrm{v}$.60 cy . A.C. Shpg. wt., 1 lb .
RT-338
HD-3 Head Demagnetizer (Not Illus.)
An efficient low cost version of the above for those who use recorders less frequently. Non U.L. 110 v .60 cy. A.C. $31 / 2^{\prime \prime}$ long $\times 11 / 4^{\prime \prime}$ dia. Shpg. wt., 8 oz .

## (L) ME-99 BULX TAPE ERASER

U.L. listed. Erases a complete reel of tape at one time with residual nolse levels 3 to 6 db below most erase head levels. Takes reels up to $10^{\circ}$ dia, and tapes to $1 / \mathbf{2}^{\prime \prime}$ thick. A must for 4 track machines using full or 2 track recorded tapes. Has safety momentary switch. Size: $51 / 4 \times 63 / 4 \times 33 / 4^{\prime \prime}$. $110-120$ v. $50-60 \mathrm{cy}$. A.C. Shpg. wt., $81 / 2 \mathrm{lbs}$.

## RT. 340

Net $\mathbf{2 6 . 0 0}$
ME-77 Bulk Tape Eraser (Not IIlus.)
Efficient low cost model, for tapes up to $7 \times 1 / 4^{\prime \prime}$ wide. Erasure 2-4 db below normal erase head levels non U.L. Size: $21 / 2 \times 61 / 4 \times 31 / 4^{\prime \prime}$. 110 v. 60 cy. A.C. Shpg. WT. 5 lbs.

Net 14.70
(M) RH- 2 REEL HOLDERS

Prevents reel wobbling. A must for vertical decks. Pkg. 2. Shpg. Wt., 302.

Net . 51
(N) TK- 5 TAPE STROBE KIT

Permits you to check speed, flutter and wow accuracy of recorders operating at $15,71 / 2$, and $33 / 4$ speeds. Complete with instructions. Kit has strobe tapes and light. For 110 v. 60 cy . A.C. Shpg. wt., $1 / \mathrm{lb}$.
(0) TRQ-3 AMAZING NEW TELE-TAPE

## BEEPER-INDUCTOR

Makes it easy to record phone conversations and to comply with the law. Transistorized sig. gen, - timer and altached high efficiency ferrite core induction coil automatically injects 1 KC "Beep" into phone lines and recorder at 15 second intervals. On-0ff switch. K20 30 v . battery lasts for more than 3000 average calls. Has $6^{\prime}$ cable to phone and to recorder. No suction cups. Easy-On spring fastening to phore. Approx. $5 \times 2 \times 11 / 2^{\prime \prime}$ Shpg. wt., 1 Jb
RT.340 léss battery
Net 15.80
BA-121 Battery for above
Net 1.51

## (P) TRP-1 TELE-TAPE INDUCTOR PICK-UP COIL

High efficiency ferrite core produces $\mathbf{3 - 5} \mathrm{db}$ more gain, high signal-noise ratio. No suction cups, easy-on me. chanical spring fastening. Has 6 ft . shielded cable to ear piece. Shpg. wt., 602.
DT. 349
Net 3.00
(0) PP. 1 REPLACEMENT PRESSURE PADS

A complete assortment of pre-cut felt pressure pads to fit almost all recorders. Shpg. wt., 2 oz.

## TAPE RECORDER HEADS-SPLICERS-ACCESSORIES



## DELUXE ACCESSORY KIT

Robins TK-8DLK. Contains TS-8D splicer, HC-2 cleaner, RC.-2-22 head lubricant, $\Pi$-1 tape threader, JCT-2 cloth, RH-2 reel holders, TC- 12 clips, SL-30S reel labels and TE-24 book. Shpg. wt., 2 lbs.
RT-350
Net 10.05

## STANDARD ACCESSORY KIT

Type TK-4STD. Contains: TS-4S Siandard Stereo "4" splicer. ST. $375{ }^{3 / 6 " x} 100^{\prime \prime}$ splicing tape. $\pi$ - 1 tape threader, TC-12 tape holding clips, HC-2 head cleaner, JCT-2 tape cleaning cloth, SL- 30 reel labels, and TE-24 gulde book to better tape splicing and editing. Shpg. wt., $11 / 2 \mathrm{lbs}$.

## JUNIOR ACCESSORY KIT

Type TK-4JR. Same as above but with TS-4J Junior splicer. Shpg. wt., $11 / 2 \mathrm{lb}$. RT-406.

## TAPE KARE KIT

Type TK-7. A complete kit of electronic chemicals for better fape recorder maintenance. Contains $\mathrm{HC}-2$ head cleaner, RC-2.22 head and guide lubricant, RC-2.33 tape and phono drive oil. RC-2-56 Non-Slip for tape


## MAGNETIC TAPE SPLICER



- Cut Both Ends Simultaneously - Easy to Operate - Durabie Et Sturdy

An excellent accessory that splices tapes accurately and eliminates joint noise. Both ends cut simultaneously. Nickeled brass finish. Shpg. wt., 1 it.日T-387

COUSINO TAPE SPLICER KIT

Convenient plastic splicer with adhesive backing for mounting on your recorder of workbench. Holds tape without clamps. Kit consists of splicer, blade and 24 hand precut splieing tape tabs. Shpg. wt., 6 oz. hand precut splicing tape Net 1.20 PRE-CUT TAPE TAB REFILLS-For above, 24 pre-cut splicing tape tabs. Shpg. wt, 2 oz RT. $369^{\prime}$ Pre-Cut Tape tabs

Net $=20$

Everything you need for fast, professional tape edit. Ing and repairing. Easy-to-use cold anodized aluminum spilielng block has specias sllde-out plastic storage splicing block has specisl slide-out plastic storage compartment. Complete with blade and of color coded Quth Splice Mylar splicing and editing of color coded Quft Splice Mylar splicing and editing
strips-will not shrink or become britile with age. strips-will
Shpe. wt. 8 or
IT-370

## EOITALL TAPE EDITING KIT

Net 1.4


This kit has all the equipment required to execute a complete editing job on a professional basis. The cutting block supplied is simple to operate but is precise in its application; made of duraluminum precisely machined and polished (makes stralght or diagonal cut). All accessories such as grease pencil, blades, splicing tape ( 66 ft . roll of $1 / \mathrm{Ia}^{*}$ ). supplied. Comes with instruction Dooklet-In a smart metal case. Shpg. wt., 1 ib. QT. 371 EDITALL KIT


## ROBINS M/M 4-TRACK STEREO CONVERSION KIT



## ROBINS M/M <br> TAPE RECORDER HEADS

Type 5K17. Converts $90 \%$ of all U.S. made two-track stereo recorders to 4-track with only a screwdriver and pllers. Contalns 4 -track record-play head, head alignment tape, hardware and instructions. For monaural units too, but additional amplifiers are required. For Ilst of convertable models send for 17H ROBINS Head Guide Book. Shpg. wt., 8 oz
Guide Book. Shpg. wt., $80 z$
RT-403
Net 10.80 5Ki7U. Same is $5 K 17$ except head mounts from opposite

## side. T-404 <br> FILMAGIC TAPE MAINTENANCE

Adds life and performance to tape and tape recorders. The kit contalns all the elemerits needed for cleaning and conditioning both tapes and critical recorder parts. Consists of: Elther Flange or Suction cup type Pylon with sleeve: Tape conditioner fluid; and head condenser fluid Can be used to clean capstans, rubber ider rollers alsn. Shpg. wt., 31/2 ozs.

## RT.372 Kit with suction cup Pylon Net 3.45

 RT-373 Kit with flange-type Pylon ....................... Net 3.45 REPLACEMENT PARTSRT-374 2 oz. Head Cleaner RT-375 2 oz . Tape Conditioner RT-375 2 oz. Tape Condition
RT. 376 Pkg. of 6 sleeves

Net 98
Net 98 Net .75

## RECORDER PATCH CORD



## CH2

Ideal For Making Connections From Radio, Phono of TV
To-Tape Recorder
Handy 6 ft . lead has insulated alligator clips at one end and RCA phono plug at the other. Supplied with shielded phono plug adapter to adapt the RCA phono plug to standard phono plug if necessary. Attach alligator clips to speaker Aliach alligator clips to speaker terminats and simply plug other end
into tape recorder. Ideal for recordinto tape recorder
ing from Radio. Phono or TV. Shpg. ing from Radio, Pho
wt. 8 oz . Imported MS.565

## TAPE CLEANER <br> 



Tape is impregnated with special formula cleaner. Simply run through like regular roll of tape. Entire job done in 2 minutes. Can be reused many times. $\mathbf{1 0 0}^{\circ}$ roll on $5^{\prime \prime}$ reel. Shpg. wt., 8 oz.
RT-378
RT-378
RT-379
3r Reel


STROB-LOOP
RECORDER TEST TAPE

Checks speed, timing, wow and flutter. For $71 / 2$ IPS. Accurate within $1 / 10$ of one percent. Shpg. wt., 602. RT. 380

AUDID 400
head demagnetizer
Will remove all permanent magnetism from recording head. Operates on $110 \mathrm{~V}, 60 \mathrm{cy}$. AC. Shpg. wt., 1 lt . RT-115

Qually recording heads for replacement on monaural and stereo recorders and for conversion. Letters in cotumn headed "USE" indicate: $M=$ monaural, $S=s$ tereo, $R P=r e c o r d / p l a y, E=e r a s e$. Robins $\mathrm{M} / \mathrm{M}$ guide IIsted below shows proper head to use for your recorder. Shpg. wt.; $60 z$.

| No. | Reblins No. | Description | Use* | Net |
| :---: | :---: | :---: | :---: | :---: |
| RT-408 | 2FM20.5000 | 2 Track Monaural | RPE | 12.00 |
| RT-351 | 3F20-101 | 2 Track Stereo | RP | 17.40 |
| RT. 352 | 3F20-105 | 2 Track Stereo | RP | 17.40 |
| RT. 353 | 3FM20-104 | 2 Track Monaural | RP | 7.80 |
| RT-392 | 3FM20-108 | 2 Track Monaural | RP | 7.80 |
| RT. 393 | 3FM20.502 | 2 Track Monaural | RPE | 21.00 |
| RT-354 | 3L20-101 | 2 Track Monaural | 2MRP | S.00 |
| RT. 394 | 5 SV17 | 4 Track Stereo | 4SRPE | 19.20 |
| RT. 395 | 50117 | 4 Irack Stereo | 4SRP | 9.60 |
| RT. 396 | 50117.105 | 4 Track Stereo | 4SRP | 0.60 |
| RT-397 | $5 S 1$ | 2 Track Monaural | 2ME | 4.20 |
| RT-398 | $5 S 1.103$ | 2 Track Monaural | 2ME | 4.20 |
| RT. 355 | 5SS1 | 2 Track Stereo | 2SE | 7.80 |
| RT-356 | 7817 | 2 Track Stereo | 2SRP | 9.00 |
| RT-357 | 7EM12A | 2 Track Monaural | 2ME | 4.80 |
| RT-399 | 7 H 17 | 2 Track Monaural | 2MRP | 6.00 |
| RT. 358 | 717 | 2 Trach Monaural | 2MRP | 6.00 |
| RT-359 | 7L17-108 | 2 Track Monaural | 2MRP | 6.00 |
| RT.390 | 90E3 | 4 Track Stereo | 4SE | 6.00 |
| RT-400 | 10820LS | 2 Track Stereo | 2SRP | 14.40 |
| RT-401 | 10L17-104 | 2 Track Monaural | 2MRP | 6.00 |
| RT-391 | 40EM12A | 2 Track Monaural | 2ME | 4.80 |



## ROBBS M/M TAPE HEAD REPLACEMENT AND CONVERSION GUIDE

Type 17H. 'List recorders by manufacturer's name and model number and shows proper Robins head or kit for replacement or converslon. No charge with any order for other merchandise.
RT - 402
Net 24

## SHURE RECORDING HEADS


Hulf track (upper track) replacement heads for tape recorders. All are high impedance except * is low. Type TR5B-J equipped with Cinch plug and $14^{\prime \prime}$ insulated leads. Av. shpg. wt., $1 / 2$ to.

| stack No. | Shure Ne. | Functions | Replacement For | $\begin{aligned} & \text { Net } \\ & \text { Each } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| RT. 381 | . 815 | Record Playback Erase | Bell RT-65 <br> Revere T10C, TR200 <br> Shure TR5, TR5H | 8.82 |
| RT-382 | 815H | Record Playback Erase | Revere T500, TR600 Tapemaster TH21, PT121, PT125 | 6.82 |
| RT-383 | 816 | Record Playback | Ampro 730, 731 Masco R-3, M-60 Shure TR6C | 7.06 |
| T-304 | 817* | Record Playback | RCA SRT-403, 402, Wilcox Gay 3 All Shure TR16A | 5.29 |
| RT-385 | TR58-J | Record Playback Erase | Revere T-700 TR800, TR-20 Shure TR5D | 10.00 |
| RT. 386 | TR16-J | Record Playback | $\begin{aligned} & \text { Wilcox Gay } 3 A 10 \text {, } \\ & 2 A-10 B \end{aligned}$ | 5.29 |
| RT-387 | TR522」 | Record Playback Erase | RCA TTRC1, TTR2, 7TR3, 8TR2, 8TR3 Shure TR5Z. 1 | 10.8 |

MDDEL TRS4J $1 / 4$ R/P TRACK HEAD
Magnetic lape head with wide response, $30 \cdot 15,000 \mathrm{cps}$ Magnetic tape head with wide respor Crosstalk - 35 db . Output 1.4 mv @ 1 Kc .


## TE28J $1 / 4$ TRACK ERASE HEAD

Rugged dual channei erase. Double gap. 4-40 single stud mounting. Erase voltage $\mathbf{1 7 - 2 6}$ for 60 db erasure.

## $\int_{1000}^{\infty}$ <br> 1000 <br> 3100 <br>  <br> 

2-TRACK AND 4-TRACK STEREOPHONIC AND MONO TAPE HEADS Finest quallty heads for replacement and conversion. All heads are "NO MOUNT" type. If side mount or base mount required, use Quik.Kits listed below. For information on exact head \& kit for your recorder, order replacement guide listed below. R/P means record-play. Shpg. wt., $60 z$
RECORD OR RECORD/PLAY. Laminated core heads are for professional use or when optimum performance is required. 3000,3100 , and 3200 Series are solld core. Response: $30,15,000 \mathrm{cps}$ at $71 / 2$ lps. 1 ke interchannel

ERASE. Efficient double-gap construction, all metal case. High-impedance types require $100-150 \mathrm{~V}$., Medlum-im. pedance types $30-50 \mathrm{~V}$. For erase frequencies up to 100 kc .
cross-talk rejection on stereo heads is 50 db .

## 4-TRACK STEREO CONVERSION KITS FOR WOLLENSAK AND REVERE

Both 2-track stereo and 4-track stereo pre-recorded tapes may be placed on the recorders converted with these kits. Monophonic models when converted require additional external amplifier a nd speaker. If in doubt about your model, send for frae guide shown on this page. Shpg. wt., 6 oz.
WR-35 CONVERSION KIT - Converts all 2-track stereo units to 4 -track stereo playback. Contains a 4 -track stereo $\mathrm{r} / \mathrm{D}$ head which replaces the 2-track stereo head

Net 25.50
Wh-40 CONVERSION KIT - Corverts all Wollensak and later Revere monophonic units to 4 -track stereo playback. Has a 4-track stereo $1 / \mathrm{p}$ head and a monophonic


Net 32.50
WR-60 CONVERSION KIT - Converts all Wollensak and later Revere monophonic and 2.track stereo to 4 -track stereo playbach. Shifter contril permits recording of 4 monophonic tracks or (with addition of recording


Net 49.50
4-TRACK CONVERSION EIT FOR WEBCOR
 serles), 2800 and 2900 series resorders. Converts monophonic and stereo recorders te 4 track stereo play. back. Retains monophonic record and playback. Has
 track tapes. Monophonic recorders require PC-100 patch cord to bring out 2 nd channel to an external playback


Net 36.00
PATCH CORO AND JACK For conaecting one channel of the Stereo-Klt to the audio system of the converted


Net 2.50


Use QuIK-KIT table for hardware to

| STOCK <br> NO. | MFRS. <br> TYPE |
| :---: | :---: |
| RT-431 | 1000 |
| RT-432 | 1002 |
| RT-433 | 1003 |
| RT-434 | 1800 |
| RT-435 | 1802 |
| RT-436 | 1803 |
| RT-437 | 2600 |
| RT-438 | 2602 |
| RT-439 | 2603 |
| RT-440 | 3000 |
| RT-44! | 3001 |
| RT-442 | 3100 |
| RT-443 | 3101 |
| RT-444 | 1400 |
| RT-445 | 1401 |
| RT-446 | 2200 |
| RT-447 | 2201 |
| RT-448 | 3600 |
| RT-449 | 3601 |

Base mount styles.
4-tr. stereo, R/P high-imp. for tubes
4-tr. stereo, R/P low-Imp. for transistors
4-tr. stereo, record only, tubes/trns.
2-tr. stereo, R/P high-imp. for tubes 2-tr. stereo, h/P low-imp. for transistor

2-tr. mono, R/P high-imp. for tubes
2-tr. mono, R/P low-imp. for transistors 2-tr. mono, record only, tubes/trns
2-tr. mono, R/P high-imp., solld core
2-tr. mono. R/P med.imp., solid core Same as 3000 , w/center track, mtl. tace
4-tr. stereo erase, high-impedance
4-tr. stereo erase, medium-impedance
2.tr. stereo erase, high-impedance

2-tr. stereo erase, medium-impedance
2-ir. mono erase, high-impedance
QUIK-KITS
For adapting Nortronics No mount heads above to Side or Base mount styles. Av. wt., 4 oz. SIDE MOUNT
TOCK NO. QK \# STOCKNO.

| RT-450 | 38 | RT-460 | 66 | All R/P except $3000,3100,3200$ |  |
| :--- | :---: | :---: | :--- | :--- | :--- |
| RT-451 | 20 | RT -461 | 21 | $3000,3100,3200$ R/P |  |
| RT-452 | 18 | RT-462 | 19 | All Erase Heads <br> RT-453 | 103 |

## NET EACH

## FREE! Newest edition of Nortronics Tape Head Replacement Guide! The

 plled in the most complete reference of specific replacement heads ever comof original heads... gives photos and details on all of Nortronics 4-track stereo of original heads . . gives photos and details on all of Nortronics 4 -track stereo Conversion Kits... handy recording accessories . plus information on newly designed head mounting assemblies to up-date older professional transports! Guide includes special insert with full order information. RT 459

## Tortromics TAPE RECORDING ACCESSORIES

RECORDING AMPLIFIER RAIOO Ideal for use with any tape ALICNMENT TAPE AT- 100 Full trach, $71 / 2$ ips speed. deck or stereo head klt. Two required for stereo record. Provides sine wave signals of 50 to $10,000 \mathrm{CDS}$ for Ing. Has NARTB equalization, VU meter, monitor lach, high level and low level inputs. Sensitivity for full recording level: 1 mv (low level), 2 v (high level). Provides 65 kc blas current, adjustable to match any head. Erase output for either high impedance ( 6000 to $10,000 \mathrm{ohms}$ ) or low impedance ( 20 to 30 ohms) erase head. Full fre. quency response. S/N ratio, 55 db . Also synchronization for stereo recording purposes using 2 RA.100's. For 110 120 v, 60 cps AC. Size $2 \% / 4 \times 5 \% 008^{\prime}$ W. Shpg. wt. 8 lbs.
RT-415 RA.100(Fig. A)
HA-S MOUNTING ASSEMBLY. NEW! Complete w/adjusting screws for azimuth, height, face alignment. Accepts a TG. 7 Gulde Post on 'ooz $\dot{\text { gide }}$ of head. For all No mount R/P heads above, excepi $500,3100,3200$ Series. 402. RT-458 (Fig. $\boldsymbol{F}$ )

Net 2.25
L-5 BRACKET. Universal type, for Installing side mount heads on any tape recorder. stereo and monaural head altgnment, record level and tone control adjustment, and frequency response check.
Shpg. wt. ${ }^{4}{ }^{4} \mathbf{0 2}$. (Fig, B)
T60F circuit. Use with AIL above. Frequency range: $70-100 \mathrm{kc}$, depending on Imped. 6 oz.
RT. 454
RT. 454 Fig. C
Net 4.50
T60. 72 bias oscillator coll. For single-ended or push. pull transistor circuits. Supplles 30.80 V at 60.100 hc to med. Imp. Record, R/P and Erase heads listed above. 602.

RT. 455 Fig. C ..................................................... Net 4.50
TG.7.ADJUSTABLE TAPE GUIOE POST. NEW! Most versatito
tape guide ever madel High-precision tolerances. Sap-phire-hard coating for extra long life. 3 oz.


## NORTRONICS REPLACEMENT TAPE RECORDER HEAD KITS

 HEAD KITS. These HEAD-KITS inslude correct head(s), all mounting hardware, and instructions needed for replacement. " $R_{\text {" " " }}$ " " of " $E^{*}$ preceding HEAD-KIT number signify record, play, or erase. "hpis is single head used for record/playback "RPE" is complete replacement assembly, mounted on plate, and ready to
## Stock No.

$\qquad$
Make \& Model No.
ordio 2A10, 2A10B, SAl1 Revere T-10, T-11. T.700, T.900, T-1100, T-2000, TR-20.
RT-419
RT-419
RT-420
RT 471 Revere T-204
RT-4 Revere T-204-4

| RT-420 | Revere T-2200 Series |
| :--- | :--- |
| RT-422 | Revere T-2200 Series |

RT-422 Revere T-2200 Series
RT-423 Sony 101
RT-424 Sony 262-D, 262-SL
RT-425. Webcor 2007, 2008, $210^{7}$
RT-426
RT. 427 2250, $3291,220,2205$
RT. 427 Webcor 2202, 2205, 2205-1, 2300
RT-428 Webcor 2001, 2009, 2810, 2811, 2812, 2816. 2819 , 2891, 2892, 2896, 2910, 2919 RT-428 Webcor 2820,2820 -LC. 2821, 2822
RT-429 Webcor 2827, 2897, 2923,
RT-418 Wollensak T1500, T1600, Wollensak
RT-419 Wollensak T1515
RT-420 Wollensak T-1515-4, T1616-4
RPE 20 15.60
RPE 20
RPE 40
RP. 20
RP- 2
E.50
RP-2
E. 52
E. 54

RP. 3
E. 51

| RP- 4 | 12.00 |
| :--- | :--- |


| RP. 5 | 12.30 |
| :--- | :--- |


| RP.5* | 12.50 |
| :--- | :--- |

RP-6 $\ddagger \mathbf{2 3 . 8 0}$
RPE-20 15

| RPE. 40 | 32.50 |
| :--- | :--- |
| RP. 2 | 22.60 |
| E 50 | 11.00 |


| RT-421 Woltensak T-1515-4, T1616-4 E 50 | 11.00 |
| :--- | :--- | :--- | :--- |

## LAFAYETTE HI-FI STEREO-HEADPHONES

 Rubber Ear Cushions for Maximum Comfort and Best Bass Response - High Sensitivity - Input of 1-2 MW Provides Ample Listening Volume
## LAFAYETTE'S LAFW, LOW PRICE 1188

## The headband is covered with an air-filled

 vinyl bag which serves as a gentle air cushion, ellminating discomfort. Vinyl bag can be deflated, removed for washing and re-inflated. Soft foam rubber ear pads keep out external noise, provide maximum bass response and make these headphones extremely comfortable to wear. Sensitivity Frequency response, $30-15,000$ cycles. Impedance. 8 ohms per phone. The headphones come with a cylindrical junction box to protect the voice colls against power overloads. Phones plug into the box, and the two pairs of loads from the box are connected to dual or single channel source for stereo or monaural operation. Complete with all cables, wires, overload junction box and 3-connector plug.
## JUNCTION BOX

For connecting stereo headphones to an existing system without the need of continuaily disconnectIng speakers. Impedance $4 \cdot 16$ ohms. Has separate earphone jacks for stereo or monaural, separate volume controls for each side of the headsel. and
 ported.

## SHARPE

 STEREO
## LIVE TONE HEADSET

- Wide Frequency Response
- Low Distortion
- High Attenuation of Ambient Nolse


## 4350

Capable of the finest hlgh fidelity stereophonic sound reproduction. Circumaural design results in a flat frequency response from 30 to 11,000 cycles, dropping off gradually 1015,000 cycles, with low distortion. A unique, liquid.filled cushion on each phone provides an efficient seal to the head resulting in a 40 do attenuation of amblent noise, plus a high degree of wearer comfort. Each phone has a $10-0 \mathrm{hm}$ impedance. Shatterproof construction of acoustically desirable material. With cable terminated in a standard 3 -connector phone plug. Shpg. wt., $11 / 2 \mathrm{lbs}$. 21 a 7802 ....... Imported from Canada...... Net 43.50 2147802

## JENSEN

HS-1 STEREO
HEADPHONE

- Frequency Response: 20-15,000 cps.


## 2495

Lightweight headphones for stereo or mono use. Provide extreme lows down to 20 cycles without booming, to $15,000 \mathrm{cDs}$. Removable foam ear cushions exclude outside noise. . can be easily cleaned. High compliance, curvilinear, molsture resistant diaphragm. With 8 -foot cord, standard 3 -contact phone plug, plus jack. Impedance 8 ohms per channel. Shpg. wt., $21 / 4$ lbs.
2144351 .......... No Money Down
Net 24.95

## Model CC- 1 STEREO HEADPHONE CONTROL CENTER

Provides "Space Perspective" of stereo sound
2144352 Shpg. wt., $31 / 2 \mathrm{lbs}$.
Net 39.75 <br> \section*{Nel 4.59 <br> \section*{Nel 4.59 <br> SUPEREX ST-M STEREO MASTER HEADPHONE}

# For the audio connolsseur who demands the finest in stereophonic headphone per- 

 formance, the Pioneer Stereophones combine broad frequency response and falthful reproduction with comfort-oriented design to fulfill the most exacting requirements. The Stereophones are actually two $2 \sqrt[2]{2 \prime \prime}$ high fidelity dynamic speakers with a frequency response range of 25 to 15,000 cycles. Perfect for stereo and monaural operation, the headphones are rated at $1 / 2$ watt maximum input; impedance, 8 ohms per phone. The soft foam rubber ear pads provide extremely comfortable listening, help to keep out nolse and maintain an excellent bass response. Imported.F. 770 Shpg. wt., 2 lbs.

Net 19.95
Model SE-2 resisfor box for SE-1. Permits flexible one-switch change-over from speakers to Stereophones.
F.800

Net 4.95
Model SE-3 " $\gamma$ " connector for connecting 2 or more sets of headphones to a single source.
F. 801

Net 2.45
Model SE-4 $12^{\prime}$ extension cord for SE-1 phones
F- 802
Net 2.95

## KOSS stereo headsets AND ACCESSORIES



EASY PAY PLAN SEE PAGE 412 For discriminating music lovers. The comfortable Stereo Master headphone brings to your ear the full audlo frequency range, from the lowest fundamental of the organ to the highest overtone of the violin... 20 20,000 cycles. A separate dynamic woofer. ceramic tweeter in each phone makes this realistic sound possible. Can be used for monaural listening too. Impedance $8-16$ ohms. Complete with crossover network, monaural adapter, connecting cable. Shpg. wt., $34 / 2$ ibs.
21 Nool No Money Down
Net 29.95

## AKG MODEL K50 DYNAMIC STEREO HEADPHONES



Thriliing stereo with falthful reproduction are yours with the lightweight K 50 headset. Designed to ellminate overshoot doubling or disturbing resonances. Special dynamic capsules slide on chromium plated wire springs. Response: $20 \cdot 25,000 \mathrm{cps}$. Less than $1 \%$ distortion. For stereo or mono connection. Impedance 200 ohms per unit. $61 / 2$ foot cable equipped with standard phone plug. Shpg. wt., $11 / 2$ ibs. Imported.
21 A 7901
Net 23.50
21 A 7902 Rubber ear cushions for K-50 Net pr. 1.90


Model SP-3 Sterephones (Fig. A)
The Koss SP-3 Sterephones are a specially constructed headsêt that provide a wide freouency range of 30 15,000 cycles by means of unusual $31 / 2$ dynamic repro. ducers incorporated Into each earphone. They are extremely comfortable to wear, light and rugged. Ideal for Stereo, they can also be used for monaural sound Since they have an impedance of 40 hms . they can be connected directly to amplifier outputs or across connected directly to amplifier outputs or across
speaker voice coll leads. Shipping welight 2 los. 21 A 4501

MODEL A-1220 AMPLIFIER
An Amplifier especially designed for use with the Stereophones. Can be connected directly to a Stereo ceramic cartridge or to the outputs of the preamps of a stereo recorder or tuner. Eauipped with 2 Phono jacks, a gain control for each channel. and 2 Phone jacks, a gain control for each channe in a 2 Phone jacks. Attractively made and compact, his unit iends itself to a wide variety of uses. Three tubes plus rectifier. Transformer powered. Shipping weight, 4 Ibs-
21 Net $\mathbf{3 4 . 9 5}$

## MODEL T-1

Contalns matching transformers for monitoring 600 to $10,000 \mathrm{ohm}$ outputs to oulput jacks for Stereophones and a terminal board is provided for connection to various troes of equipment. Shipping weight $11 / 2$ lbs. 21 A 4503

MOOEL T-S JUNCTION BOX
Junction Box for connecting stereophones to existing stereo or monaural system. Impedance 4.16 ohms. Contains 2 volume controls for changing the Voiume of each side of the headset Independently. Has 2 output jacks for stereo or monaural use. Eouipped with speaker on-off switch for personalized listening. Shipping weight $11 / 4$ lbs.
21 A 4504
Net 8.95
NEW MODEL PRO-4 PROFESSIONAL HEADSET (FIg. B) Rugged construction. Adjustable, spring steel headband and fluid filled cushions for more efficient seat. Response: $30-20,000$ cps. Imp. 4 ohms 8 -foot cord. Shpg. sponse: 30
wt. 3 lbs.
21 a 4505 No Money Down
Net 45.00

# LaFAYETTE 2.SPEED STEREO PLAYBACK TAPE DECK 

- Dual NAB Equalized Transistorized Stereo Playback Preamps Allows Use With Virtually Any Stereo Amplifier
- 2 Speeds-71/2 \& 33/4ips
- Accepts Full-Size 7 Inch Reels
- Automatic Shut-Off At End Of Tape


## COMPARE THESE PERFORMANCE SPECIFICATIONS

 - Frequency Response: @ 71/2 IPS, 50-15,000 CPS $\pm 1.5 \mathrm{db} ; @ 33 / 4$ IPS, $50-9,000 \mathrm{CPS} \pm 2 \mathrm{db}$ - Wow \& Flutter . $15 \%$ @ 71/2 IPS. $0.2 \%$ @ $31 / 4$ IPS - Cross Talk \& Stereo Channel Separation: 50db - Signal To Noise Ratio: 50db - Playback Output with Built-In Stereo Playback Preamplifiers $\mathbf{0 . 5 V}$ - $110-120 \mathrm{~V} 60$ cycles AC operation

## PLAYS BACK

- Stereo $1 / 4$-Trajk; $1 / 2$.Track
- Monaural $1 / 2$-Track; Full-Track

There is nothing to equal the superlative reproduction and fidelit; of prerecorded stereo tape. And now at thls Lafayette low price you can equip your musle system with this RK-141 Lafayette Stereo Flayback Tape Deck. Pre. cision engineered to satisfy the mast discriminating music listener, the RK-141 will playbacr with uncompromising fidelity $1 / 4$-track and $1 / 2$.track sterec tapes plus $1 / 2$-track and full-track monaural tapes. Unlike olner units requirlng separate playback preamplifiers, the PK-141 Is equipped with fts own built-in 6 -transistor dual stereo playback preamplf. flers equalized for the NAB tape curve ... allows use witi, virtually any stereo amplifier by merely connecting to the auxiliary, tuner, or hi-level tape imputs. Its tape handiling quallties and mechanism reflect the careful design and construction employed-precision laminated playbach head; tape is automatically disengaged from the tape head in rewind, fast, forward and stop positions. Automatic shut-off at the end of the tape. The 4-po e, heavy-duty, constant speed induction motor is fused anc employs a dynamically balanced $\mathrm{I} / \mathrm{ywh}$ eel. A front panel speed selector switch al. lows Instant selection of $71 / 2$ of $39 / 4 \mathrm{ips}$ speeds. In addition, two rugged lever-action controls provide for Rewind, Off, Play and Fast Forward functlors, Accepts all size tape reels up to and Including $7^{\prime \prime}$. Measures $103 / 40 \times 14 \frac{1}{6} \mathrm{~W} \times 5^{\prime \prime} \mathrm{H}$. Complete with shielded hook up cables. Shpg. wt., 17 lbs. Imported
RK-141WX
Furniture Grade Walnut Base for RK. 141 Shpe................ 59.50 Furniture Grade Walnut Base for RX-141. Shpg. wt., 4 lbs. RK-148W Portable carrying Case for RK-141. Shpg. wt., 5 ibs. RK.147w

Net 9.95


Electro Scriber telephone pickup will enable you to amplify, record and make a permanent record of any tetephone conversation. Simply place phone base on phono Scriber and plug Scriber into amplifier or tape recorder input. Amplifies cleanly and clearly. Shpg. wt., 1 lb .
MS-220 Model ES701 for standard cradle phone Net 1.35 MS. 221 Model ES702 for push-bution phone .... Net 8.53


NEW TELEPHONE PICKUP COIL 189

Designed to feed into the microphone input of either a tape recorder or any high gain amplifler. Easily attached to the telephone bv suction rubber type attachment. The coll is electrostatically shielded to minimize hum pick-up. When properly positioned on telephone handset, the output of this devise is more than ade. quate for a fully modulated tape recording. Complofe quate for a fully modulated tape recor
with 5 , shielded cable. Shpe. wt., 6 ors.
MS-693 Imported
Net 1.89


## REEL LOCKS <br> 

Set of Two
Holds tape recorder reel in place by locking spindle to reel. Especially useful if recorder is in vertical position. Will not interfere with normal operation of reels. Easily removable. Shpg. wt., 6 oz . Imported
MS-564 Set of tro


Induction elephone pickup. Telephone conversations can now be picked up with no tapping of wires of special relephone circults. Simply place the phone base, either cradie or $u$ aright type, on the plckup platfoum and connect the le ds to the high impedance input of any medium gain : udio amplifier, or directly to any tape, disc or wire recerder. Shpg. wt., 8 ols.

Net 1.95


Ourable ch pboard storage cases covered in simulated leather. Heids $57^{\text {" }}$ peels . $n$ separate compartments. Size: $8 \times 7 \times 41 / 2$ Shpg. wt., $1 / 2 \mathrm{lb}$.
RT-361
Net .95

## MITIL TAPE STORAGE CHEST

STANDARD CASE: Sturdy all steel carrying case. Holds 12 $7^{\prime \prime}$ of $5^{\prime \prime}$ reels and cons. Twin snap locks for positive closure; perfect portabllity. closure; perfect portablity.
Guards against exposure and Guards against exposure and
accidental erase. Platinum gray hammerlold finish. Metat separators between reels. Includes index cords. Shpg. $w t .5$ lbs.
RT. 360
Nel 2.99

## CLEAR PLASTIC REELS



Individually boxed plastic

reets for recording tape. Av. shpg. wt. 4 oz. singly MS. $9203 \xi^{\prime \prime}$ Reel in lots of 6, Ea., $^{2}$. 23 ; singly, Ea., 26 MS-692 $5^{\prime \prime}$ reel. .... In lots of 6, Ea, 26 Singly, Ea. . 25 MS-261. $7^{\text {mir }}$ reel. .... In lots of E, Ea. . 38 Singly, Ea. . 45


## METAL STORAGE CANS

Your best protection for val uatle recorded tapes and movie film. Cans are ribbed for easy storage. Precision fit makes opening and closIng easy. Attractively finished $n$ grey. 3 sizes to choose from to fit any size' reel. Av shps. wt. 8075.
日T. $3643^{\prime \prime}$ Can. lots of 6. Ea. .ts Singly, Ea 20 RT-365 5" Can lots of 6, Ea, 27 Singly, Ea. . 30 lots of 6. Ea. . 36 Singly, Ea. . 39
TWIST-LOCK STYRENE CANS

- Buy the set - save 45c and GET THE CHEST FREE!


12 dust-free, molsture-proof ubbreakable styrene tape cans in storage chest. Can has foolproof twist lock feature and is ribbed for convenient stacking. Center locking stud prevents reel mosement on all $7^{\prime \prime}$ reels and most $3^{\prime \prime}$ and $5^{\prime \prime}$ reels. Shpg. wt., 6 lbs.
RT-362
Net 4.95
TWIST LOCK CANS ONLY
R1-363

## Deluxe <br> LAFAYETTE MODEL RK-155 PROFESSIONAL-TYPE 4-TRACK STEREO RECORDER

## An Outstanding Achievement in Tape Recorder Design!

- Records 4-Track Stereo and 4-Track Monaural
- Plays 4 - and 2-Track Stereo and 4-Track Monaural
- Two Speeds $33 / 4$ \& $71 / 2$ ips
- Wide Frequency Response for Life-Like Reproduction
- Sound-On-Sound
- Automatic Tape Stop
- Outstanding for Recording FM Multiplex 8roadcasts
- 2 Full-Tone, Self-Contained Matched Stereo Speakers


COMPLETE WITH 2 dynamic mikes, output cables, and 7 -inch empty tape reel.

## SPECIALLY DESIGNED TO RECORD FM MULTIPLEX BROADCASTS!

## A Complete Recording Studio in One Casel

A. Two Level Meters for Precise Channel Balance. B. Two Full-Tone SelfContained Matched Stereo Speakers C. Digital Tape Counter Helps You Find Right Place on Reel D. Pause Control for Expert Editing E. Master and Individual Channel Vclume Controls F. Positive Action Motor Controls
A remarkable tape recorder at an even more remarkable low price! The RK-155 offers so many outstanding features. Records 4 -track stereo and 4 -track monaural and plays back 4- and 2-track stereo and 4-track monaural. Records on one channel at a time (sound-on-sound) enabling you to accompany yourself for music or language lessons. Outstanding tape mechanism features a 4 -pole heavy-duty air-cooled induction motor and rubber belt drive for double flutter filtering. Pressure pads and tape heads are mu-metal shielded to prevent hum pick-up. Superb electronics consist of stereo transistorized preamos and vacuum tube amplifiers. 80 KC bias operation permits perfect FM stereo multiplex recordings. Useful automatic tape stop prevents tape spillage if tape breaks or runs cut in Rewind, Wind or Record-Play functions. Complete with luxurious simulated leathe case, 2 dynamic microphones, output cables, and empty tape reel, Shpg. wt., 34 Ibs. Imported
RK-155WX
Net 169.95
RT-10 Lafayette Recording Tape. 1200 ft . Shpg. wt., 1 lb.
Net 1.59

Frequency Response: $40-18,000 \mathrm{cps} @ 71 / 2 \mathrm{ips} ; 40-12,000 \mathrm{cps} @ 33 / 4 \mathrm{ips}$. Amplifiers: 4 transistors, 7 tubes, fall-wave bridge rectifier. S/N Ratio: 45 db , Interchannel Separation 45 db or better: Wow \& Fluter:Less than $0.25 \%$ @ $71 / 2 \mathrm{ips}$, Under $0.4 \%$ @ $33 / 4$ ips; 8 ias \& Erase: 80 KC : Controls: Pause; 2 Record Buttons W/Safety Interlocks, Rewind/Stop/Play; Stop/Fast Forward, Two $4 \times 6^{\prime \prime}$ speakers, Tone control switch, Stereo/Mono Speaker Switch, 3 volume controls, 4 input jacks, 6 output jacts. For 117 volts 60 cycles AC. Size $153 / 4 \mathrm{Wx} 71 / 2 \mathrm{Hx} 111 / 4{ }^{\text {N } D}$

## Page 102

## PROFESSIONAL 4-TRACK STEREOPHONIC RECORD and

 PLAYBACK TAPE DECK Amazing Qurlity at an Excitingly Low Price Complete with Built-in Transistorized Record \& Playback Preamps Add This Exquisite Recorder To Your Present Hi Fi System- Automatic Cut-off Switch Stops Recorder at End of Tape or When Tape Breaks - Separate Record/Play and Erase Heads-Mu-metal Shielded to Eliminate Hum - Plays 4-Track Stereo, 2-Track Stereo, 4-Track, 2.Track and Full-Track Mono - Records 4-Track Stereo or Mono from FM, AM, FM Multiplex, Radio or Phono Sources; Live from Microphones - Records Sound-on-Sound - 2 Level Indicator Meters-One for Each Channel - Individual Volume Controls - Self.Holding Pause Control


## Deluxe!

 Lafayette Model RK-140
## NOW YOU CAN AFFORD TO ADD THE MAGNIFICENT QUALITY OF TAPE RECORDING TO YOUR PRESENT HI-FI SYSTEM

## 



2 Recording Lever Meters


Index Counter


## S P E C I FICATIONS

Frequency Response, Record/Playback: $40-1 \varepsilon, 000 \mathrm{cps} @ 71 / 2 \mathrm{ips}$; $40-12,000 \mathrm{cps}$ @ 334 i ips, 4 transistors, 4 tubes, 1 full-wave bridge rectifier. Audio Output: 8 volts per channel, S/N Ratio: 45 db . Interchannel Separation: 45 db or betteri Wow \& Flutter: Less than $0.25 \%$ @ $71 / 2 \mathrm{ips}$. Under $0.4 \%$ @ $33 / 4 \mathrm{Ips}$; Bias $\&$ Erase: 80 KC : Rewind Time: Less than 4 minutes for 1200 H . of tape. Speed Accuracy: start to finish-under $2 \%$. Controls: Pause, 2 Record Buttons W/Safety Interlocks. Rewind/Siop/Play Stop/Fast Forward; Power on/Speed Selector, 3 volume controls, Counter: 3 digit. 2 audio output, 2 monitor jacks, 4 input jacks. For 117 volts 60 cycles $A C$. size: $15 \mathrm{~W} \times 61 / 8 \mathrm{H} \times 10^{1 / 2}{ }^{\prime 2} \mathrm{D}$.

Add the magnificent fidellty of tape with this outstanding tape recorder re producer. The RK-140 abounds in professional-type features making It suitable to meet every stereo and monophonic recording situation. Beautifully styled and designed. Tape transport and electronic components are integrated into one lightweight unit, for use in either a portable carrying case or a handsome bultin home installation. Rugged tape transport has an ultra quiet 4 -pole air-cooled induction motor and belt drive for double flutter filtering. Provides smooth drive action. Automatic tape stop at end of the tape or during a break in the tape, and handy pause control give absolute control over tape. Superb electronics consist of transistorized and tube stereo preamps for self-contained record and play. back facilities. Makes 4-track stereo and monophonic recordings, plays back 2. and 4 -track stereo and monophonic tapes. The two channels operate independently to permit recording one channel at a time (sound-on-sound). Clear FM dently to permit recording one channel at a time (sound-on-sound). Clear FM pressure pads are mumetal shielded to eliminate hum. The simplicity of the

RK-140 makes it the ideal tape deck-all transport and electronic controls are located on the top panel for easy access. Two jacks are provided for con nection of stereo microphones (not included) for making "live" stereo recordings. Two recording meters permlt accurate recording levels to be set, making it simple to have professional-type recordings you will be proud of. The Pause control further assists in making "pro" recordings by stopping the tape momentarify for editing out commercials, poor notes etc. Other features in. clude: Speed change lever/power on-aff selects $33 / 4$ or $71 / 2$ ips; master volume control; rewind/stop/play lever; stop/fast forward; on-off pilot light. Takes up to $7^{\prime \prime}$ reels. For 117 V , 60 cycles AC. Tape Deck is complete with preamps, 4 connecting cables and empty reel. Shpg. wt., 20 lbs. Less Case and Microphones. RK-140WX Imported
RK-143WX Deck with carrying case
RK-159W Base; Furniture Grade Walnut .............................................................Net Net 114.50 PA-401 Dynamic Microphone ..............................................................4.7. Net 4.75 .2 for-8.95

## PROFESSIONAL OPERATING FEATURES

A. SUPPLY REEL-Takes up to $7^{\prime \prime}$ size
B. AUTOMATIC CUT-OFF SWITCH-Stops recorder at end of tape or if tape breaks. Also serves as tape guide C. TAKE-UP REEL-F or Reels up to 7 inches
D. HEADS-Separate Record/Play and Erase. Mu-metal Shielded Heads and Pressure Pads Ellminate Hum E. INDEX COUNTER-Accurately Indicates Tape Position in Either Direction
F. SPEED CHANGE LEVER/POWER ON-OFF-Selects 2 Speeds $33 / 4 \mathrm{ips} \& 71 / 2 \mathrm{ips}$ Automatically Equalized G. LEVEL INDICATORS-2 Meters Indicate Recording Levels For Each Channel
H. INDIVIDUAL VOLUME CONTROLS-For Each Channel Can Also Be Used For "Trick" Sound Effects
I. MASTER VOLUME CONTROL-Provides over-all Playback Level
J. RECORD BUTTONS-One for Each Channel Permits Sound-On-Sound
K. PAUSE CONTROL-Self-holding-Makes Editing Easy L. REWIND/ STOP/PLAY LEVER-Instantaneous Selection. Rewind Time Less Than 4 Minutes For 1200 ft . Reel M. STOP/FAST FORWARD-Fast Forward Control and Stop which Stops Tape Quickly Yet Gently from Fast Forward Motion
N. MICROPHONE JACKS-2 Side Mounted Stereo Input Jacks for Microphones


## TRANSIITORIZED 1000 CPS AUDIO GENERATOR

MODEL TE.39

- LOW DISTORTION SINUSOIOAL OUTPUT - adJUSTABLE AMPLITUDE


## - SELF-POWEREO

- COMPLETELY WIRED. NOT A KIT

Lafayette offers a compact transistor audio oscillator with a sinusodial output at 1,000 cycles. The stability is excellent, and the wave form has less than $2 \%$ distortion. The output amplitude is adjustable up to 0.5 V . RMS or more. Completely self-contalned, powered by a small 9 volt battery-can be used anywhere. This little oscillator can be put to many uses. Can be used to adjust audio amplifiers for linearity or to make low frequency power measurements. For troubleshooting audio amplifiers the oscillator can be connected to various stages to localize the malfunction. In an amateur radio station, this oscillator can be used to test and adjust AM and SSB transmitting equipment. On AM, it can serve as a constant, pure audio signal to check and troubleshoot speech amplifiers, and to adjust modulators for proper performance. On SSB, it can be used to make single tone power measurements, or to check suppression of the unwanted sldeband, etc. The oscillator output can be attached to the phono input of a radlo or. to the input of any audio amplifier to serve as a code practice oscillator. Key can be inserted in the ampilifier or in the oscillator battery lead. Output is taken from two binding posts In the rear (spaced to accept a GR plug if one is desired). There is an adiustment inside which can be used to minimize distortion after battery changes, if the proper equipment for wave form analysis is avallable. The TE-39, by virtue of its portability and compactness, can often be used in place of a more bulky generator, taking up only a little space and operating independently of the commercial power lines. Housed in an attractive metal box with a sloping front panel. The on-off switch and separate amplitude control are on front panel. With 9 V . battery. Imported. TE. 39 Shpg. wt., $11 / 2$ los. BA-2 9V. Replacement Battery for TE 39

- Ideal for Hobbyists, Experimenters and Replacement Use
- Highly Sensitive
- Front Panel Area Only $7 / 8^{\prime \prime} \mathrm{W} \times \mathrm{K}_{8}{ }^{\prime \prime} \mathrm{H}$
- Rubber Cushion Mount


## 195

A miniature clear plastic front level meter which wilf Indicate relative audio levels for tape recorders, FM sets or transistorized audio equipment. Compact, it is designed for in-panel mounting. The raised face meas. ures only $7 / 9^{" *}$ wide $x K_{0}$ "high. Actual size of meter is ures only $7 /{ }^{\prime \prime}{ }^{\prime \prime} \times 1^{\prime} W \times 1^{\prime \prime} \mathrm{L}$. Sensitivity: 250 microamps; Internal reslstance -260 ohms. Full scale 500 microamps. Complete with rubber cushion support.
TM-31 Shog. wt.. 1 oz. Imported.


UNIQUE TWO COIL GALVANOMETEQ TYPE PRECISION METER MOVEMENT

- SEVEN RANGES OF METER SENSITIVITY
- PROVISION FOR USE AS VU METER ANO TAPE RECOROER LEVEL INOICATOR
MAXIMUM METER SENSITIVITY 120 ua
Provides the solution to all stereo balancing problems. When both signals are equal and balanced the resultant deflection on the scale will measure 0 . Individual channels may be measured by two slide switches. Stable meter action and protection from peak voltages is provided by special damping networks. Single sevenstep range control serves for both channels and facll. Itates use of meter with all amplifier power levels. By itates use of meter with all amplifier power levels. By properly positfoning this control the movements may be used as VU meters when terminated across the
600 -ohm load. The scales are calibrated in "Volume 600 -ohm load. The scales are calibrated in "Volume
Units". Sensitivity is 1.2 volts for 0 vu or 100 percent Indication. Finished in a rich satin gold. Overall size is $4 \% \mathrm{~L} \times 51 / 8 \mathrm{Hx} 4 \mathrm{~K}_{6}{ }^{\circ W} \mathrm{~W}$. Imported
TM-66 Audio Analvst
Net 11.95

Ends the problem of balancing your stereo system. Two precisely damped loudness meters mounted at opposite ends of the meter assembly provide a continuous comparison of speaker levels. The scales are calibrated in "Volume Units" and percent. 1.2 volts input sensitivity for 0 VU or 100 percent indication. You can balance the entire system in one step. The special call. brating switch and 20 ob attenuation controls permit exact matching of channels. It is the ideal recording level indicator for inexpensive stereo tape recorders, replacing the troublesome "magic eyes" or neon bulbs, and giving more accurate, more reliable readings. Safeguarded against burning out by two internal OC blocking capacitors. Greater than 8,000 ohm impedance permits connecting to output circults without loadjng. The entire unit is housed in an attracive plastic case $\boldsymbol{y}^{\circ} x$ $11 / 2^{\prime \prime} \times 57 \mathbf{y}^{\prime \prime}$. Shpg. wt., $21 / 2$ lbs. imported
TM-40 STEREO BALANCE METER
Net 7.95

## AUDIO OUTPUT VU LEVEL METER



A level meter for monaural systems, this unit is call brated in Volume Units and percentages in accordance with standard VU meter practice. Precise damping enables quick and accurate indication of the average level of all non-sinusoidal audio signals. It has a maximum sénsitivity of 1.2 volts for 0 VU indication with a built-In 20 db attenuation control. This meter has countless uses, its 8300 ohm impedance being high enough not to load most circuits. It can be used for accurate level control of home hi-fi systems, es peclally where the amplifier feeds a remote loudspeak er. It is ideal as a consistently accurate recording level indicator to replace the clumsy "magic-eyes" and neon bulbs of tape recorders, it indicates proper level in PA, paging and commercial music distribution sys. tems. Housed in a compact plastic case 4" $\times 2 K_{0} \times$ $13 \mathrm{e}^{\mathrm{m}}$. Shpg. wt., 2 lbs. Imported
TM 20 AUOIO OUTPUT LEVEL METER
Net 5.95

## LANGUAGE RECORDS

Learning languages is fun by the amazing new con-versa-phone method. In minutes, you'll be understanding and speaking a new language. Expert instructor teaches you perfect pronunication as you follow each phrase in the lesson manual. Contains $1-10^{\prime \prime}-334 / 3$ RPM phecord and manual. Shpg. wt., 3/4 Ib.

| PR-28 French | PR-36 Swedish |
| :--- | :--- | :--- |
| PR-29 Spanish | PR-37 FInnish |
| PR-30 Itallan | PR-38 Norwegian |
| PR-31 German | PR-39 Mod. Greek |
| PR-32 Hebrew | PR-51 Hungarian |
| PR-33 Russian | PR-52 Turkish |
| PR-34 Japanese | PR-62 Arablic |
| PR-35 Portugese | PR-35 Polish |

Any Portugese
Any of above


CONVERSA-PHONE CHILDRENS LANGUAGE COURSE 279

Learning foreign languages is an important part of every child's education. With these specialiy prepared record courses, learning a language is easier than ever. Lessons are in the form of stories that amuse your child as they teach. The ideal gift, comes with an unbreakable LP record, an Illustrated instruction book and a colorful protective jacket. Shpg. wt., 1 lb . PR-58 Spanish PR-60 German PR-59 French ANY TITLE 2.79

## 1000 MOST FREQUENTLY USED WORDS

Single LP record pronounces slowly, distinctly 1000 most commonly used overyday words. With manual listing all words. Shpg. wt.. 1 lb .
$\begin{array}{lll}\text { PR } 54 & \text { Spanish PR-56 German TITLE }\end{array}$

Learn a language as it is actually spoken, for travel and study, for use in restaurants, shopping, sightseeing efc. Features dual language recording-first an English sentence then its foreign equivalent. Each set consentence, $331 / 3$ ip records for $11 / 2$ hours tains 3 high-fidelity $332 / 3$ ip records for $12 / 2$ hours playing time plus convenient manual with fuk rect and phonetic transcriptlon. Shpg. wt., 3 lbs.

PR-468 French
PR-469 Spanish
PR-470 German PR-471 Russian PR-472 Itallan

## PR-473 Japanese

PR-474 Modern Greek
PR-475 Portuguese
PR-476 Modern Hebrew

## Page 104

## LAFAYETTE COMPLETE CABLE ASSEMBLIES FOR HI-FI AND P. A.

High quality extension cables "tailor made" for users of recorders, hi-fi equioment. etc. All plugs molded directly to various cable combinations. Shielded cable for high impedance (mike, etc.) connections; parallel wire for low impedance (speaker, etc.) connections. Average shpg. wt., 8 oz .


RCA TYPE PHONO PLUG (B) TO VARIOUS CONNECTIONS. All cables shielded except * unshielded parallel cable. Avg. shpg. wt., 9 oz, Imported

| Stock No. | One Termination |  |  | Cable Length | Other Termination | Net |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MS-486 | Straight | RCA phono | plug (B) |  | Straight RCA phono plug (B) | 39 |
| MS 480 | Straight | RCA phono | plug (B) | 60 in. | Stralght RCA phono plug (B) | 47 |
| MS-481 | Straight | RCA phono | plug ( 8 ) | 72 in. | Straight phone plug (G) | . 69 |
| MS-487 | Straight | RCA phono | plug (B) | 48 in. | RCA-type phono jack (D) | . 54 |
| MS. 483 | Stralght | RCA phono | plug ( 8 ) | 60 in . | RCA-type phono jack (D) | . 59 |
| MS. 484 | Straight | RCA phono | plug (B) | 72 in. | Barrel-type phone jack (C) | . 60 |
| MS-555 | Straight | RCA phuno | plug ( ${ }^{\text {P }}$ | 72 in. | Mike connector (F) | . 88 |
| MS-556* | Straight | RCA phono | plus (B) | 120 in. | Alligator clips (1) | 81 |
| MS-573 | Straight | RCA phono | plug (B) | 36 in. | Stripped \& tinned ends (J) | . 34 |
| MS-574 | Strajght | RCA phono | plug (B) | 48 in. | Stripped \& tinned ends (J) | . 36 |
| MS. 575 | Straight | RCA phono | plug (B) | 60 in . | Stripped \& tinned ends (J) | . 39 |
| MS-576 | Straight | RCA phono | plug (B) | 72 in. | Stripped \& tinned ends (J) | 41 |
| MS-577 | Stralght | RCA phono | plug (B) | 144 In . | Stripped \& tinned ends (J) | . 69 |
| MS-805 | Straight | RCA phono | plug (B) | 72 in. | $90^{\circ}$ RCA phono plug (E) | . 54 |
| MS-806 | Stralght | PCA phono | plug ( 8 ) | 120 in. | $90^{\circ}$ RCA phono plug (E) | 72 |

$90^{\circ}$ PHONE PLUG (A) TO VARIOUS CONNECTIONS. Std. $1 / /^{\prime \prime}$ sleeve; completely shielded. All cables shielded except * unshielded paraliel cable. Avg. shipg. wt., 9 oz.Import

| Stöck No. | One | Termination | Cable Length | Other Termination | Net |
| :---: | :---: | :---: | :---: | :---: | :---: |
| MS. 545 | $90^{\circ}$ | phone plug (A) | 72 mm . | Straight RCA phono plug (B) | 72 |
| MS-546 | $90^{\circ}$ | phone plug (A) | 72 in. | Straight RCA phono jack (D) | . 85 |
| MS. 547 | $90^{\circ}$ | phone plug (A) | 72 in. | Straight-barrel phone jack (C) | . 93 |
| MS-548 | $90^{\circ}$ | phone plug (A) | 72 in. | Mike connector (F) | . 93 |
| MS-549 | $90^{\circ}$ | phone plug ( $A$ ) | 120 in. | Mike connector (F) | 1.26 |
| MS. 550 |  | phone plug (A) | 72 in. | $90^{\circ} \mathrm{RCA}$ phono plug (E) | . 72 |
| $\text { MS. } 551^{*}$ |  | phone plug (A) | 72 in . | Stripped and tinned ends (J) | . 51 |
| MS.552* | $90^{\circ}$ | phone plug (A) | 72 in. | Alligator clips (1) | 68 |

$90^{\circ}$ RCA PHONO PLUG (E) TO VARIOUS CONNECTIONS. All cables shlelded except unshielded parallel cable. Avg. shpg. wts 9 oz.imported


PHONE PLUG (G) TO VARIOUS CONNECTIONS. Std. $1 / 4^{\prime \prime}$ diam. sleeve; completely shielded. All cables shielded. Avg. shpg. wt., 9 oz. Imported


[^6]

SPEARER PHASING CONTROL
Allows you to reverse speaker connection to obtaln cor rect ohasing without disconnecting leads from speakers. A must for stereo. Complete with screw terminals and all mounting hardware. Shpg. wt., 1 ib . Imported MS.756 Speaker Phasing Contro

Net . 98

## STEREO-MONAURAL-REVERSE SWITCH

Lets you switch instantly from stereo to monaural or reverses stereo channels. 2 phono jacks input... 2 phono jacks output. Completely shielded, ready to mount with all hardware. Shpg., wt., 1 lb . Imported MS. 757 Stereo-Monaural-Reverse Switç $\ldots . . .$. Net 1.29

## MULTI-INPUT SELECTOR CONTROL

Connects any one of 5 inputs to 1 output AM, FM, phono tape, aux. Completely shielded to prevent hum. Complete with mounting hardware. 5 phono jacks input, 1 phone jack output. Shpg. wt., 1 Ib. Imported mS-758 Multi Input Selector

Net 1.76
$\qquad$
$\qquad$
.62


## PHONO-TUNER ADAPTER

2 phono jack inputs; simple switch selects either. A con venient phono output jack for connecting to amplifier Includes mounting screws. Av. shpg. wt. for above units is 1 lb . Imported



Two shielded insulated cables, (of different color tones, for easy identification of channels) inside a common chrome grey plastic jacket, providing two completely isolated channels. Av. shpg. wt., 6 oz. Imported

| TYPE | LENGTH |  | NET |
| :---: | :---: | :---: | :---: |
| MS.807 | $36^{\circ}$ | Phono plugs | 1.17 |
| MS.808 | $6^{\circ}$ | at all ends. | 1.35 |
| MS.809 | $10^{\circ}$ |  | 1.62 |

*332A
\#336A

SWITCHCRAFT ADAPTERS - Shielded plug adapters for mikes \& Mi-Fi cables
332A-2 cond. phone jack input to female mike out- 342 -Uual-purpose binding post/banana jack input, put. Coupling ring back converts mike conn. to male phono plug output. type.

## MS-865

Net 1.54
334A-phono jack input to female mike Nef 1.03 343-Phono adaptors-female phono jack in end of output. MS. 862

Net .73
3348 - Phono jack input to male mike connector output. MS-873

Net .73
$336 \mathrm{~A}-2$ cond. Phone jack input to whono plug output. MS-875 33 A-Phono plug at one end with male met . 85 nector at other end.

MS-877
Net .73
MS. Tip jack input to phone plug outlet
349A-Phono plug coupler-with phono plug Net 1.26 end.

## SWITCHCRAFT COMPLETE CABLE ASSEMBLIES FOR HI-FI AND P. A.

High quality extension cables "tailor made" for users of recorders, hi-fi equipment, etc. All plugs molded directly to various cable combinations with grey plastic handle; built in electrical shield and cable clamp. Chrome
grey shielded cable for high impedance (mike, etc.) connections; chrome grey parallel wire for low impedance (speaker, etc.) connections.


PHONE PLUG (A) TO VARIOUS CONNECTIONS. Std. $1 / a^{\prime \prime}$ dia. sleeve; completely shielded. All cables shielded except * unshlelded parallei cable. Av. Shpg. wt., 5 oz .

| Stock No. | One Termination | cable Length | Other Termination | Net |
| :---: | :---: | :---: | :---: | :---: |
| MS. 600 | $90^{\circ}$ phone plug ( A ) | 72 in . | $90^{\circ}$ phone plug ( A ) | 1.53 |
| MS. 601 | $90^{\circ}$ phone plag (A) | 120 ln . | $90^{\circ}$ phone plus (A) | 2.06 |
| MS-602 | $90^{\circ}$ phone plag (A) | 25 ft . | $90^{\circ}$ phone plug ( A ) | 2.79 |
| MS-604 | $90^{\circ}$ phone plig (A) | 120 in . | Straight RCA phono plug (8) | 1.62 |
| MS-606 | $90^{\circ}$ phone plug (A) | 120 ln . | Straight RCA phono jack (D) | 1.76 |
| $\begin{aligned} & \text { MS-608 } \\ & \text { MS-609 } \end{aligned}$ | $90^{\circ}$ phone plas (A) <br> $90^{\circ}$ phone plug (A) | $\begin{array}{r} 120 \mathrm{im} . \\ 25 \mathrm{ft} . \end{array}$ | Phone extension jack (C) <br> Phone extension jack (C) | $\begin{aligned} & 2.06 \\ & 2.79 \end{aligned}$ |
| MS-614 | $90^{\circ}$ phone plug ( A ) | 120 in. | $90^{\circ} \mathrm{RCA}$ phono plug (E) | 1.62 |
| $\begin{aligned} & \text { MS-616** } \\ & \text { MS-617* } \end{aligned}$ | $90^{\circ}$ phone P Ug (A) <br> $90^{\circ}$ phone pug (A) | $\begin{aligned} 120 \mathrm{in} . \\ 72 \mathrm{in} . \end{aligned}$ | Stripped and tinned ends (J) Spade lugs (H) | $\begin{array}{r} 1.12 \\ .88 \end{array}$ |
| $\begin{aligned} & \text { MS-618** } \\ & \text { MS-620* } \end{aligned}$ | $90^{\circ}$ phone dlug (A) <br> $90^{\circ}$ phone dilug (A) | $\begin{aligned} & 120 \mathrm{ln} . \\ & 120 \mathrm{ln} . \end{aligned}$ | Spade lugs (H) Alligator Clips (I) | $\begin{aligned} & 1.18 \\ & 1.41 \end{aligned}$ |
|  | MISCELLANEOUS CABLES |  |  |  |
| Stock No. | One Termination | cable Le | Other Termination | Net |
| MS-664* | Spade lugs (H) | 120 in . | Spade lugs (H) | 53 |
| MS-665* | Spade lugs (H) | 25 tt. | Spade lugs (H) | 1.03 |
| MS. $666^{*}$ | Alligator clips (I) | 120 in . | Alligator clips (1) Alligator clios (I) | $\begin{aligned} & 1.00 \\ & 1.50 \end{aligned}$ |
| MS.667* | Alligator clips (1) | 25 ft . |  |  |
| MS-668 |  | 36 in . 72 in | Mike Connector (F) Mike Connector (F) | 1.18 1.47 |
| MS 669 | Mike Connictor (f) | $72 \mathrm{in} .$ | Mike Connector (F) Mike Conntector (F) | 1.47 2.06 |
| MS. 670 | Milke Conn ictor (F) | $144 \mathrm{in} .$ | Mike Connector (F) Mike Connector (F) | 2.96 2.94 |
| MS-671 | Mike Conn ector ( $\mathbf{F}$ ) Phono Extension Jack | $\begin{aligned} & 25 \mathrm{ft} \\ & \text { (D) } 36^{\prime \prime} \end{aligned}$ | Mike Connector ( F ) <br> Phono Extension Jack (D) | 2.94 .97 |
| MS-925 MS.927 | Phono Extension Jack Phono Extension Jack | (D) $36^{\prime \prime}$ <br> (D) $72^{\prime \prime}$ | Phono Extension lack (D) Phono Extension Jack (D) | .97 1.15 |


| Stock No. | One Termination | Cable Length | Other Termination | Nel |
| :---: | :---: | :---: | :---: | :---: |
| MS.621 | St-aight phone plug (G) | 72 ln . | Straight phone plug (G) | 53 |
| MS-622 | Straight phone plug (G) | 120 in . | Straight phone plug (G) |  |
| MS-623 | Straight phone plug (G) | 25 ft . | Straight phone plug (G) | 2.79 |
| MS.626 | Straight phone plug (G) | 25 ft . |  | 2.79 <br> 1.53 |
| MS-627 | Straight phone plug (G) | 72 in. | $90^{\circ}$ phone plug ( $A$ ) | 1.53 |
| MS-628 MS-629 | Straight phone plug (G) Straight phone pluz (G) | $\begin{aligned} 120 \mathrm{in} . \\ 72 \mathrm{ln} . \end{aligned}$ | $90^{\circ}$ phone plus (A) $90^{\circ}$ RCA phono plug (E) | 2.06 1.18 |
| $\begin{aligned} & \text { MS- } 629 \\ & \text { MS- } 630 \end{aligned}$ | Straight phone plug (G) | 120 in . | $90^{\circ} \mathrm{RCA}$ phono plug (E) | 1.62 |
| Ms-631** | Straight phone plug (G) | 72 in . | Spade lugs (H) | . 88 |
| MS-632* | Straight phone plug (G) | 120 in . | Spade lugs ( H ) | 1.18 |
| MS.633** | Straight phone plug (G) Straight phone plug (G) | 72 in . | Alligator clips (i) | 1.41 |

## rCA TYPE PHONO PLUG AND OTHERS TO VARIOUS CONNECTIONS

All Cables shielded except = unshielded parallel cable. Av. shpg. wt., 5 oz.

| Stock No. | One Termination | Length | Other Termination | Net |
| :---: | :---: | :---: | :---: | :---: |
| MS-645 | $90^{\circ}$ RCA phono plug (E) | 120 in. | Phone extension jack (C) | 1.62 |
| MS-650* | $90^{\circ}$ RCA phono plug (E) | 72 in. | Stipped and tinned ends |  |
| MS-652** | $90^{\circ}$ RCA phono plug (E) $90^{\circ}$ RCA phono pluz (E) | $\begin{aligned} & 120 \mathrm{in} . \\ & 120 \mathrm{in} . \end{aligned}$ | Spade lugs (H) Alligator clips (1) | 1.32 |
| MS.654* | $90^{\circ}$ RCA phono plug (E) |  |  | 1.97 |
| $\begin{aligned} & \text { MS-656 } \\ & \text { MS-657 } \end{aligned}$ | Straight RCA phono plug (B) Stralght RCA phono plug (B) | $\begin{array}{r} 120 \mathrm{in.} \\ 25 \mathrm{it} \\ 72 \mathrm{in.} \end{array}$ | Mike Connector ( $\boldsymbol{r}$ ) <br> Mike Connector (F) Spade lugs (H) | 2.70 |
| MS-660* | Straight RCA phono plug (B) | 72 in. | Spade lugs (H) |  |
| $\begin{aligned} & \text { MS-661*** } \\ & \text { MS-662* } \end{aligned}$ | Stralght RCA phono plug (B) Straight RCA phono plug (B) | $\begin{aligned} & 20 \mathrm{in} . \\ & 72 \mathrm{in} . \end{aligned}$ | Spade lugs (H) <br> Alligator clips (I) | 1.03 |

## ELECTRO-VOICE DIAMOND STYLI



$\left\{\begin{array}{l}1 \\ 8 \\ 8 \\ 8 \\ 8\end{array}\right.$
Retractable Cable Assembly Supplied with 4 feet of cable, stripped and tinned at one end. Shpg. wt., 5 oz . With straight 2 -cond. phone plug MS-923

Net 1.91 With Rt. angle 2 -cond. phone plug WS-924 With single microphone connector. With single microphone connector.
MS-925

## SWITCHCRAFT CABLE ASSEMBLIES FOR

## WOLLENSAK. REVERE AND WEBCOR RECORDERS

Shielded $6^{\prime}$ cable with 3-cond, phone plug (G) with in ternal resistor to Phono Plug (B). For Webcor part 2925 MS-818 Shpz. wt. 4 oz. Net 1.9 Unshielded $10^{\circ}$ cable with 3 -cond. Phone Plug (G) with internal resistor to Alligator clips (1) for Webcor part

## 2934. <br> MS-8is

Shpg. wt, 602.
Net 1.91
White Shlelded $6^{\prime}$ cable with short KA 2 -cona. Phone Plug (A) to standard 2 -cond. Phono Plug (B).
MS-820 Shpg. wt., 402.
Net 1.47 White Shlelded $25^{\circ}$ cable with short RA $2 \cdot$ cond. Phone Plug (A) to std. 2 -cond, short ext. jack (C). MS-821 ShDg. wt. 802.

Net 3.50 White Shielded $2^{\prime}$ cable with short 2 -cond. Phone Plug (A) to Phone Ext. Jack (C).

MS-822 ........................................ 2 oz 22
Grey shielded 10 ft . cable with 3 -cond. phone plug (G) with internal resistor to phono plug (B). For Webcor recorders.
MS-859 Shpg. wt., 602.
Net 2.35
White shielded 15 ft . cable with short right angle 2 cond. phone plug (A) to short phone ext. jack (C). MS. 868 Shpg. wt., 602.

Net 2.94


MINIMIX FOR WOLLENSAK
$\Rightarrow$ ANO REVERE NO. 313
Designed especially for use with late models of Reverse and Wollensak Tape Recorders. Designed no mor mixing two sound sources Into one output. Inputs are special jacks to accept those presently used on the above mentioned recorders. Spe-
cial short plug output jack to flt microphone input jacks. Shog. WL, 502.
MS-823
Net 5.26

## LAFAYETTE DIAMOND STYLI

## MADE FOR LAFAYETTE BY THE FOREMOST AMERICAN MANUFACTURERS

 explained in the table below.
$L P=$ SINELE 1 MIL DIAMOND MICROGROOVE FOR $331 / 3$ AND 45 RPM
$A G=$ SINGLE 2 MIL DIAMOND ALL GROOVE FOR ALL SPEEDS
ST = SINGLE 3 MIL DIAMOND STANDARD FOR 78 RPM COMB = DUAL 1 MIL DIAMOND AND 3 MIL SYNTHETIC SAPPHIRE
Identify your needle by cartridge number and illus. ration and order by stock no. Note that all needies listed here are for monaural cartridges.


REPLACEMENT STYLI FOR GE CARTRIDGES

ALL DIAMOND STYLI ARE NOT ALIKE - MADE FROM WHOLE DIAMONDS - PRECISION GROUND AND POLISHED


SAPPHIRE STYL
Alk are made of fine synthetic sapphire which is superior to mined sapphire for use on phonographs.

FULL 1 YEAR REPLACEMENT GUARANTEE AGAINST DEFECTS IN WORKMANSHIP AND MATERIAL ON ALL DIAMOND STYLI


ANY DIAMOND or DIAMOND-SAPPHIRE NEEDLE IN THIS LISTING

FOR GE VR II CARTRIDGES (FIG. 35)
Direct replacements for clip.In styli in GE VR 11 series models 4 G .050 $4 \mathrm{G}-052,4 \mathrm{G}-053,4 \mathrm{G} .040,4 \mathrm{G}-041,4 \mathrm{G}-063,4 \mathrm{G}-061$ cartridges. Avg. shpg. $\mathrm{Wt}, 2 \mathrm{Oz}$
PS- 48 - 1 mil diamond LP clip-in stylus. Replaces GE 4G-010........Net 1.69 PS-546 -1 mil sapphire LP clip-in stylus. Replaces GE 4 G .01 S Net 19 PS. $540-3$ mil sapphire 78 clip-in stylus, Replaces GE 4G.03S MODERNIZATION ASSEMBLIES (FIG. 33)
Modernize your old triple-play cartridge. These assemblies replace both the old and new series " $A$ ". Once installed, you can replace one point at a time.
DIAMOND SAPPHIRE, Replaces OId RPJ-013 and new RPJ-013A. Avg. wt 2 az PS-46
DUAL DIAMOND. Replaces old GE RPJ-012 and RPJ-012A.
PS.79 -
DUAL SAPPHIRE, Replaces old GE RPJ.DID and new RPJ-01OA PS.545 -

## Net . 99

STEREO STYLI FOR GE GC-7 (Fig. A en apposito page) Exact diamond replacement for GE Stylus ST-7D
PS-87-

STEREO STYLI FOR VR227 (Fig. A) On Dpposite Page Exact diamond replacement for GE Stylus VR-22? PS 89

Styli For Old Type GE Cartridges (F
Net 1.69
PS-45 -Olamond 1 mil (LP) replaces GE RPJ. 004 PS. 501 - Sapphire 1 mil (LP) replaces GE RPJ.OO5

FOR GE SERIES A CARTRIDGES (FIG. 34)
Individual styli replacements that clip in to all $G E$ " $A$ " series. Avg. wt., 202.
PS. 47 二-Diamond 1 mil (LP) replaces GE RPJ.01D . Net 1.69 PS.543 -Sapphire 1 mil (PP) replaces GE RPJ-01S .......Net .69 PS. 542 - Sapphire 3 mil ( 78 ) replaces GE RPJ-03S

## DIAMOND <br> STYLI FOR

G.E. AS LOW AS

## POPULAR MONAURAL DIAMOND and DIAMOND-SAPPHIRE STYLI

| $\begin{aligned} & \text { stock } \\ & \text { NO. } \end{aligned}$ | sizE N. | 1 FIC. | - CARTRIDEE | $\begin{aligned} & \text { REPLACES } \\ & \text { JENSEN NO. } \end{aligned}$ | $\begin{gathered} \text { STOCK } \\ \text { MO. } \\ \hline \end{gathered}$ | $\begin{array}{\|l\|l\|} \hline \text { SIZE } \\ \hline \end{array}$ | F16. | CARTRIOGE | REPLACES IENSEN NO. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PS-10 | $\mathrm{F}^{\text {FOR }}$ | $\left.\right\|^{1} 1$ | ARAL CARTR1DGE 409A11, 209811.1 $409812,409 A 12$ | S JPS-30LPD | $\begin{aligned} & \text { FOR ELAC MIRATWIN CARTRIOGE } \\ & \text { PS-43 \|LP \|20\|MST 2A, } 20 \end{aligned}$ |  |  |  |  |
| PS-11 <br> PS-12 <br> PS-15 <br> PS-17 | LP | 2 | 40A15-2 | E.90LPD |  |  | GAR | CARTRIO |  |
|  | ${ }^{16}$ | 3 | 40916 | A.7520 | P5-44 |  | 131 \|c. |  | , 6A-97LPD |
|  | Comb. | 7 | 409820 409130 | $\begin{aligned} & \text { JPS } 3650 \\ & \text { ABILPO } \end{aligned}$ | PS-4 |  | $\begin{gathered} \text { GOL } \\ 138 \end{gathered}$ | CARTR S0000 |  |
| FOR ASTATIC CARTRIDGES |  |  |  |  | FOR |  | MAGNAVOX CARTRIOC |  | $1 \text { CRSODLPD }$ |
| PS-20 |  |  | (AC Series, 407, 41 T , |  | PS-51 | Com |  |  |  |
|  | LP | 3 3 | 42-1. 907 series, |  |  |  | 37 | 3-1,560170 | M.50S0 |
| $\begin{aligned} & \text { PS-23 } \\ & \text { PS. } 24 \end{aligned}$ | LP. |  |  | M-70LPD |  | LP |  | 7, 560180 | CRA-5SLPD |
|  |  |  | 517, $517 \mathrm{LI}, 57 \mathrm{TM}$ |  | PS. 15 |  | 6 | 560177, 560188-1 |  |
| PS-25 | comb. | 14 | ccot 409, $55-\mathrm{T}, \mathbf{3 5 7}$ | A71s0 A-HILPO | PS 70 | comb. | 51 |  | $\begin{aligned} & \text { JPS-36SD } \\ & \text { S-66S0 } \end{aligned}$ |
|  |  |  | CAC, Ca, ce-1, LaO. |  |  |  | PHI | RRTRID |  |
| PS 17 | LP | 7 | Le0-1, 9T, et.33, |  | PS-5 |  | 43 | 2, 76-4649 016 | PH-13S0 |
| $\begin{aligned} & \text { PS-28 } \\ & \text { PS-29 } \\ & \text { PS- } 27 \end{aligned}$ |  |  | 166i series |  | PS-56 | . | 431 | 45.0009, 425.001 , ${ }_{\text {425-0014 }}$, | PH-13SO |
|  | $\begin{aligned} & \text { IP } \\ & \text { A6 } \\ & \text { tP } \end{aligned}$ | 176 | LT-30, LT-4, LT-40, LT-40.1, | A.73LPD |  |  |  |  |  |
|  |  |  | 51-1, 53-1, 59-1 | $\begin{aligned} & 1.2520 \\ & \text { A.74LPD } \end{aligned}$ | FOR PERPETUUM EBNER CARTRIOGES <br>  |  |  |  |  |
|  |  |  | Mc, cc, ${ }^{\text {cc-1 }}$ |  |  |  |  |  |  |  |  |  |  |
|  |  | 19 ) | $613-0,863-0,64 \mathrm{~T}$, $66,66-1,68$ $94 T$ |  | PS-66 |  | 22 P70 | (1), MO) | RX5S2LPD |
| PS. 30 | LP | 15 | 60.31, $62-1,68-1$, | A-671P0 |  |  |  |  |  |
|  |  |  | 114, 120, 124 series, |  |  |  |  |  |  |  |  |  |  |
| PS. 35 |  |  | \%. |  | PS. 26 | LP | 12.746 | 5575 | M-74LPD |
|  |  |  | 422. 324 T series, | CRA-5SLPO | $\begin{aligned} & \text { PS. } 27 \\ & \text { PS. } 10 \end{aligned}$ |  | 18.74 | $\begin{aligned} & \mathbf{7 4 9 8 4}, 76297 \\ & 55652,76257 . \end{aligned}$ | A-74LPD |
|  |  |  | 312-T8, TS, 4141 |  |  |  |  | 70-1). 75044 | JPS-30LPD |
|  | $\mathrm{P}^{\text {FOR }}$ | AUDAK CARTRIOGES 25 D-L-8, Mi-@ 7,L-6, R-2 |  | AUSSOLPO | PS. 70 | Comb. |  | 988370-2) |  |
| PS-10 |  |  |  | $\begin{aligned} & \text { PS. } 61 \\ & \text { PS. } 25 \end{aligned}$ | Comb. | 52797 | -1, | S-63LPD |  |
|  | FOR ELECTRO-VOICE CARTRIDCES |  |  |  | FOR RONETTE CARTRIDGES |  |  |  |  |
| PS-11 |  |  | 20, 22.34, |  |  |  |  |  |  |  |
|  | $1 \times$ |  |  | E-901 PD | PS-35 |  |  |  | CRA-SSLPO |
|  |  |  | SM, $840 \mathrm{Mm}, 850$ |  |  |  |  |  |  |
|  |  |  |  |  | PS.69 |  |  |  | A-56 |



The open end type (Fig. 54) reslaces both Fig. $53 \& 54$

## STEREO DIAMOND AND DIAMOND-SAPPHIRE STYLI



| STOCK | PT. | REPLACES |  |  |
| :--- | :--- | :--- | :--- | :--- |
| MO. | SIZE | FIG. | CARTAIDGE | JENSEN NO |

FOR ACOS CARTRIDGES
P5.88|S5T| G |73.1 | AC 30XSD FOR ADMIRAL CARTRIDGES

PS.81 SOR ASTATIC CARTRIDGES
PS-92 SST| N I 17, 170
FOR COLUMBIA CARTRIDGES

FOR ELAC-MIROTWIN CARTRIDGE
 PS.126 SST $_{\text {D }}$ D KST-104, PE-182

FOR ELECTRO VOICE CARTRIDGES
PS-80 S 1 C | 21 and 26 Series | E 98xO FOR EUPHONICS CARTRIDGES

PS. 127 IS P U.1-2-4.S
PS. 136 SST $\mid$ T $\mid$ U. 8
EUIXSO

FOR GENERAL ELECTRIC CARTRIDGES | PS. 87 |  |  |  |
| :--- | :--- | :--- | :--- |
| PS.89 | S | GC7 | A |
| GR22 |  |  |  |

PS-135 SST U C100 G21XSO PS.80 FOR MAGNAVOX CARTRIDGES $98 \times 0$


FOR MONARCH (BSR) CARTRIDGES P5.86 5 IF |TCBS, TC-ASH FOR MOTOROLA CARTRIOGES
PS-80

| PS-80 | S | C | S9864 | F |
| :--- | :--- | :--- | :--- | :--- |



KEY TO STEREO POINT COOES HOW TO OROER Tablo below explains symbofs in column heat "PT SIZE."
$s=.7$ MIL DIAMOND
SST $=.7$ MIL DIAMOND and 3 MIL SAPPMIRE
SLP $=.7$ MIL DIAMDND and 1 MIL SAPPMRE

- Synthetic

FOR TELEFUNKEN CARTRIDGES
PS.90 SST| HIT $\mathbf{2 0 . 2}$
PS. 80 FOR VM CARTRIDGES

E98×0
\$71x50
FOR WEBCOR CARTRIDGES
PS. 80
PS.81

| $\$$ | $C$ | 21P573 |
| :--- | :--- | :--- |
| $\$$ | B | 21 1P596, 21P5s8 |
| SST | D | 21P700.1-2.3.4 |

E98XD
CRA57X CRA57X0
$571 \times 50$
FOR ZENITH CARTRIDGES
PS. 81 S. S B| 142.99B
CRA57X0

## NEW!. 7 MIL

DIAMOND STYLUS
for SHURE M7D
STEREO
CARTRIDGE


PS. 91

## REPLACEMENT SAPPHIRE STYLI

KEY TO POINT CODE
Table below explains symbols in column headed "PT SIZE."
LP = SINGLE : MIL MICROGROOVE FOR 33 Y/3 AND 45 ค先
AG = SINGLE 2 MIL ALL GROOVE FOR ALL SPEEDS ST = SINGLE 3 MIL STANOARD FOR 78 RPM COMB $=$ DUAL 1 MIL AND 3 MIL SAPPMIRES $S$ = SINGLE. 7 MIL STERED

## REPLACEMENT SAPPHIRE STYLI

Lafayette synthetic sapphire needles are of the finest quality, precision ground to fine tolerances. They are specially made for Lafayette by the finest manufacturers and brought to you at the lowest possible prices. All needles listed below have svnthetic sapohire Doints exceot those marked with * which are osmium. Illustrations (see column headed "FIG" below) are on the facing page. Av. Shpg. wt., 2 oz.


## (玉аншии)24


(A) CHANGER AND TURNTABLE COVERS Ourable, flexible plastic. Protect from harmful dust, molsture, soot, etc. Shps. wt., 6 oz.
PK-153 type CC-5S $17 \times 15 \times 81 / 4$ PK- 776 type CC- $2 \quad 131 / 2 \times 15 \times 8^{\prime \prime}$ PK. 154 .type CC- $3 \mathrm{~S} 22 \times 161 / 2 \times 9^{\prime \prime}$

RIGID COVER
Rigid cover with collapsible sides for easy storage.
Size: $12 \times 151 / 2 \times 5^{\prime \prime}$. Clear color.
(B) E1S PROTECTIVE DIS-CLOSURES

Round bottom polyethylene plastic sleeves protect $12^{\prime \prime}$ records against scratching. Seals out dust and moisture. Ends finger marking. Package of 15. PK-455 ...........Shpg. wt., 7 07.................... Pkg. . 58
(B) EJIS PROTECTIVE JACKET COVERS

Same as above except square covers which can be used either to cover $12^{\prime \prime}$ records or standard $12^{\prime \prime}$ record jackets. Pkg. of 15 .
PK-456
(C) NB-1 "KLEENEEDLE" BRUSH

Automatic changer needle brush. When arm is cycled stylus is wiped over brush. Removes dust, lint, etc. from styius for better performance and less stylus wear. Has adhesive pad for mounting.

- $\quad$ - 107

Shpg. wt., 4 oz.

## (D) RBL-1 CLIP-ON RECORD BRUSH AND TONE ARM LIFT

Clips to tone arm. Convenient finger grip reduces fumbling. Floating soft nylon brush removes dust ahead of stylus.
PK-711 ................Shpg, wt., 3 02......................Net .60
(D) RB-75S

As above except clip-on record brush only.
.Shpg. wt., 3 oz.
Net .29 TA-1 TONE ARM LIFT (Not lllus.)
Convenient finger grip to raise and lower tone arm without scratching record. Shpg. Wt., 307.

## PK-774

Net .21
(E) PC-12S 12" POLYESTER PHONO CUSHION Low priced foam mat, cushions record drop, prevents slippage, $113 / 4^{\prime \prime}$ dia./wt. 3 oz .
PK-151
Same as above except 93/4" dia.
PK-152 Foam mat for 45 RPM players
Net . 59
(E) PC- 22 NEW RIM-REST PHONO CUSHION Has graduated ridges for $7^{\prime \prime}, 10^{\prime \prime}$ and $12^{\prime \prime}$ records, Records rest only on rims. Delicate sound grooves do not touch RIM-REST. Fits all changers and turntables. Made of hi-impact plastic. $12^{\prime \prime}$ dia. A hi-fi necessity. Made
PK. 713

## Clelel



## (F) TL-1S TURNTABLE LEVEL

Top performance of Stereo and Mono records require a level turntabie. Easy-to-use bubble indicator level for accurate leveling of changers and turntables, in sures correct tracking. Prevents excessive stylus and groove wear. Goid anodized aluminum case.
PK-714

Net .69

## STROBE DISCS (Not Illus.)

Place on turntable under neon light. Checks $162 /$ $331 / 3$ and 45 RPM speeds. Shpe. Wt., 2 oz. PK. 712 type SD. 4 S Same for $162 / 3,331 / 3$ and Net 20

RA-4S 45-RPM RECORD SPIDERS (NOT ILLUS.) Low cost. hi-compact plastic adapters. Pkg. of 5 . PK-716 Pkg, of 5 Shpg. Wt. 3 az .................. 17 SA-45 adapter for manual lurntables. No spiders needed. PK. 461

Net .15

## (G) SG-2 STYLUS GAUGE

Sturdy accurately calibrated. Measures stylus pressure from $1 / 2$ to 8 grams. Avoids excessive wear and damage to your records and styli and enables you to get the optimum performance by foliowing recommended tracking pressure. Shag. wt., 5 oz.

## PR-978

IP-16S VIBRATION ISOLATION PAD (NOT ILLUS.) Place under changers, tape recorders, amplifiers, TVS etc. Absorbs vibratlon and acoustlc feedback. Protects furniture. Resilient cloth covered rubber foam $131 / 2 \mathrm{x}$ $161 / 2^{\prime \prime}$
PK. 155

J5-1S "JOCKEY CLOTH"" FOR RECORDS nti-static cleaning (NOT ILLUS.) records. Cleans and lubricates red with silicone for PK-33 Cleans and fubricates, reduces wear, washable.

ESK-4 PHONO LEVELING KIT (Not Ilfus.) A level turntable is essential to avoid excessive wear of styli and record grooves. Kit contains four adjustable rubber feef to mount under turntable base and circular 4-way splrit level for permanent mounting on top deck of turntable. Shpg, wt., 1 lb.

## (d) ESK-5 STROBE LIGHT KIT

For testing turntable for proper speed. Consists of strobescope card and neon IIght. Place strobe disc on turntable, set changer to desired speed and hold lamp over appropriate dots. Movement shows if turntable is correct. For $110-120 \mathrm{v}, 60 \mathrm{cy}$. A.C. PK. 724
( 1 R

ROBINS SOUND ENGINEERED PHONO ACCESSORY KITS An assortment of the most popular and most needed accessories required by all phono users to maintain optimum hi-fi, stereo phono performance. These accessory kits áre not onily extremely useful, buif make excellent gifts

(H) Stylus gauge, turntable level, stylus microscope, record cleaning cloth. automatic needle brush, and arm Ilft
PK. 722 ESK. 2 (M) Stylus pressure gauge, turntable level, a unique acrylic lens

PK- 723 ESK. 1 (K)
.
402.
(N) ESK-6 "ROB-0-STAT"

RECORO CLEANING KIT
Contains super-fine velvet and foam mit, $1 \mathrm{H} / 4 \mathrm{oz}$. plastlc bottle of antl-static detergent-lubricant and a foam pad for cleaning velvet. The finest record cleaning kit available for those who value their records.

(I) ESK-7 "DISK-WHISK-KIT"

Triple action automatlc record cleaner, clips to tone arm. No suction cups or adhesires. Light weight floating nylon brush and floating mohair cylinder loosen and remove dirt from record groves while record plays. Liquid cleans pad and lubricates record.
 ESK. 8 Renewel Kit for ESK.7, Contains bottle of fluid and two mohair cylinders. PK. 727 ..............Shpg. wt 3 .

AUTOMATIC
Net 1.20
(L) HFS-1S'ROBINS AUT
"HI-FI" MINDER

Automatically turns your amplifiers off when automatic record changer stops. (after last record has played) allows you to fall asleep to your favorite music without "burning-up" your eqvioment. Changer plugs into one outlet of Hi-fi Minder - amplifier into olher outlet. Switch control allows you to use amplifier without changer. For European changers, Garrard,
 (L) HFS-2S

Same as above except for American changers, Webcor PK-720

Net 6.00


Robins Exact Phonograph Replacement Parts all are idler wheel replacements except * pulley, +Drive wheel $\ddagger$ Inter Wheels idier wheel, \#cycle drive wheel. Av. Shpg. wt., 4 oz.

## RECORDER DRIVE REFERENCE GUIDE

Lists 73 manufacturers and over 500 models with part numbers and Robins replacement number.
PK. 710 Free with any order for these parts.

Type No. Description Mrors. Part No.
PK-680 Admiral G400A59, G400A279; Columbin Reries 360 : ©. E, MMN:043, HMY•060

 (6750; Slivertone K
PK. 588
PK-589

PK. 587
PK 592
PK. 593

## - K

## K-681 K-584 <br> PK-584 PK-682 PK.

## PK-683

PK. 583
PK-684t
PK-590t
PK-686 ${ }^{\text { }}$
 VM 3141.33 .54



Type No,
PK-688"

Desertpition Orig. Mirgrs, Part No.
(1. H. HMW - 0k3: Motorota 3139 :
HCA 76746 : Nilivertorta 3139

(i.\%. HMW-AIE: Wehror 11 X 4 An (i.E. RMW-072 Wehrou 11 X 45 B Motarola $14 \mathrm{R4}$ : IUCA $7889 \%$ VM 3484 Motorola 3483: ICCA 78i26: YM 3483 IK'A 10.241): KCA 78.004 : II 3482 Adn. ?8C1R-105, 98B15-97:
160 A 105414
Collaro 2782 (157)
Collaro 3889 (54-41), 3689 (56-47)
Monarch RM3yA (All i-speed models)

Ihtleo $35-805.3-3$;
Wehar $11 \times 160 \%$

RRA $88757:$ VM 5375
Wetror 11 X6ss, $11 \times 754$
Weber $11 \times 1201$
veturar IIX1192
Zenth M1111s
Zenith S16921
Zenith N169g2, s217 M4
Sell Nound TH-101-2003; Latayette
$964-1-115$
$964-A-115,964-A-130 ;$ : Pentron
964-A-115, 964-A-130:
Vebear 11XIIM:
VM 5731

## EXCEPTIONAL VALUES IN PHONO ACCESSORIES



## LAFAYETTE HIGH FIDELITY STEREO-MONAURAL TEST RECORD - tests rumble each channel otests level each channel - teSts balance tests equalization stylus wear test - TESTS RESONANCE INCORPORATES PHASE CHECK

## rens necono

A Lafayette exclusive to help you check both stereo and monaural systems. For stereo testing this two sided $12^{\circ}$ L.P. stereo record has on its stereo side sided 1000 cycle bands to check the level of each channel separately; balance check to set the level of each channel using special metronome recording; rumble test. There are stylus wear test grooves on both outer and inner edges of each side to check both stereo and monaural stvil. Incorporates phase adjusting check to simplify phasing of speakers. For monaural testing it provides an RIAA equallzation test

## STEREO TONE ARM with CRYSTAL STEREO CARTRIDGE



An exceptional value! A stereo tone arm ready for use with all stereo and monaural LP records at an amazingly low price. Modern, plastic, stralght line design with off set plug-in head which has a wide-range stereo cartridge with single synthetic sapphire stylus. Output is 1 volt per channel-high enough to connect directly to basic amplifier. Stylus pressure adjustable by varlable spring tension. Has finger-lift for ease in handling. Mounts easily-requires only one $K_{0}$ " hole and is secured by single locknut. May be mounted on turntable base of up tq $1 / /^{\prime \prime}$ thickness. Easy helaht adjustment at base of arm. Overall length 10". Finished in gleaming black with gold trim. Shpg. wt., 1 ib . Imported. gleaming black with gold trim. Shpg. wt., 1 lb . Imported. PK-171 Stereo Tone Arm with cartridge PK- 172 Replacement cartridge Net 1.95 PS. 576 Replacement needie

Net .49
MODERN 4-SPEED TURNOVER PICKUP

- 2\% Vout ourput 245

- DUAL SYNTHETIC SAPPHIRE
- 40-12,000 CYCLES

A terrific value! Modern, plastic, straight-line design with offset head, furnished with tumover-type, highoutput crystal cartridge ( $21 / 2 \mathrm{~V}$.) with dual synthetic sapphire styll. Power enough to connect directly to basic amplifier, Stylus pressure adjustable by varlable spring tension. Has finger lift for ease in handling. Overall length $81 / 2^{\prime \prime}$. Height from base to bottom of arm Overall length $81 / 2^{\prime \prime}$. Height from base to bottom of arm
is 1 Khf $^{2}$. Simple base mount with $11 /{ }^{" \prime}$ spaced mounting.
Shieided leads. Smooth, gray finish plastic arm. Shpg. wt., 2 lbs. Imported
PK-157
Net 2.45
PK-158 Synthetic Sapphire LP replacement needle

Net .49 PK-159 Synthetic Sapphire Std. replacement needle

Net .49
in 9 steps from 30 to 15,000 cycles, a continuous glide band from 10 to 35,000 cycles, to test for resonances of tone arm or of cabinet. The periodic use of this record to check on your equipment performance will easlly pay off by catching any costly deflelencies or by diagnosing faults and errors. Also features sections of stereo sound effects of jet planes, boat whistles, etc. A terrific value and a "must" for the HI-Fi enthuslast. Comes with com. plete instructions for use, Shpg. wi., 1 lb. PR-14

## IMPORTED STEREO/ MONAURAL PICKUP



Employs a highoutput crystal turnover cartridge for elther stereo or monaural operation. Frequency response, $\mathbf{2 0 - 1 8 , 0 0 0}$ cycles; output, 1 volt per channel. Crosstalk between channels is 15 db or more down. Each channel has a separate shielded output cable. Travel lock arm rest prevents accidental damage to records. The pickup arm is designed to be mounted in a single, circular hole, \%"" in dlameter. Equipped with side aftachment for easy lifting and sefting down. Durable plastic construction. Shpg. wt., 7 oz. Imported
PK-537
Synthetic Sapphire LP replacement needie for above PS. 576
Synthetic Sapphire STD replacement needle for above PS-579

## 4-SPEED HI-FI TURNOVER PICKUP



- ARM TAKES STERED OR MDNAURAL CAR TRIOGES WITH WIDE RANGE MONAURAL CARTRIDGE AOJUSTABLE ARM HEIGHT ANO STYLUS PRESSURE
Arm is wired for stereo, anticipating future conversion. Has a wide range turnover monaural crystal eartridge with dual synthefic sapphire styil. Output is $11 / 2^{\prime \prime} \mathrm{V}$. Easy height adjustment at base, $116^{\prime \prime}$ to $1 \%_{0 \prime \prime}$. Also stylus pressure adjustment. Plastle arm $912^{\prime \prime}$ Iong overall. Base $174^{\prime \prime}$ with mounting holes on $1 \%{ }^{\prime \prime}$ centers. Shielded leads. Satin smooth light maroon finish: ters. Shielded leads. Satin
Shpg. wt., 2 lbs. Imported


## PK-146

Net 2.75
PK. 15 Synthetic Sapphire LP replacement Needle

Net .49 Needie

## ROTRON WHISPER FAN

## MADE IN U.S.A.

- Super Silent
- Compact Design
- Introduces No Distortion
- Reduces Service Costs
- Ideal For Cooling Hi.fi Equipmen

Now From Rotron, a leader in precislon fans, the Ideal fan for cooling hi-fi equipment. Extremely quiet, Introduces no distortion, yet it moves 60 cubic feet of cool air per minute. Lets your equipment last longer! Compact in design, it can be easily installed in any position. Alrflow is reversible. Advanced heavy sys. tem; slow speed and pre-fubrication will provide years of malntenance-free operation. For $115 \mathrm{VAC}, 60 \mathrm{cps}, 7$ watts. Size: $11 / 2^{\prime \prime}$ deep and $41 \mathrm{~K}_{4}^{\prime \prime}$ square.
PK-329 ShpR. Wt., 1 lb .
Net 14.85

## THE ORIGINAL DUST BUG"



Automatically removes dirt and dust on each playing. Light plastic arm mounts by suction cup. Can be permanently mounted by rubber cement. The bottle of antistatic cleaning fluid has a bullt-In wick for application to a brush and pad at the end of arm. Shpg. Wt., $6 \mathbf{0 z}$. PK. 169 Standard model (A) Imported.

Net 5.95
CHANGER DUST BUG (B). The fuft and pad assembly clips onto arm of changer. Performs the same as the standard model. Shpg. wt., 4 oz .
PK-712 Changer model (B) Imported. .............. Net 4.95 DISPENSER DF ACTIVATING FLUID. For Dust Bugs.
PK. 247 …....................... ............ Net 1.25 PK. 773 Replacement Plush Pad and Nylon Brush Net 1.50

## STYLOGRAPH STYLUS



A real boon to record collectors. Helps protect your records and insure continued quality reproduction. An invaluable aid to inspect other small pointed objects too. Shows a large illuminated sithouetfe on a $1 \times 11 / 2^{\prime \prime}$ ground glass screen. Easy to use, needle cartridge need not be removed from tone arm. Complete with on/ofi switch, bulb and two penlight batteries. Size: 53/4x17/6x $15 \mathrm{~s}^{\prime \prime}$. Shpg, wt., $80 z$. Imported
PK-634
Net 3.29
BA-155 Extra batteries lor above, each
Net 13


TONE ARM CONTROL

An absolutely essential ad. dition for every $\mathrm{HI}-\mathrm{Fi}$ enthusiast. Ends groove and stylus damage caused by accidental dropping of tone arm onto record, greatly extending record life. Accurately and smoothly low. ers tone arm into run-In groove and lifts arm off record at end of play. Ideal for "cueing." Designed to fit practically every known turntable arm as well as record changer with manual features. Supplied with adhesive mounting base to keep unit in position and with both wood and metal mounting screws for permanent installation. Shog. wt., 6 02. Imported MS. 785

LAFAYETTE
SPECIAL STYLUS

## INSPECTION MICROSCOPE

with this pocket-sized inspection microscope you can examine your stylus tip for signs of wear, imperfections general condition. Its 50X magnification is enough to provide a good, clear image for ouservation. Size $37 /$ long x $4 / 2^{-\prime}$ diam. Shpg. wt., 8 oz .
PK-237
Imported
Net 98

## Page 110 <br> LAFA YETTE VALUES T\&L PADS FADERS-MIXERS-SWITCHES

STEREO LEVEL BALANCE CONTROL

- Dual Concentric 8 ohm L Pads
- Logarithmic Curve


Provides individual level control for stereo speakers. Varles "brilliance" or "presence" Controls stereo extensions without mismatching. Oual control mounted on concentric shaft. Gold-finished brass plate and attractive black knobs with gold trimming. L pad for 8 ohm circuits. Plate is $21 /{ }^{\circ}$ across; overall depth 8 ohm circuits. Plate is $21 / \mathrm{K}^{\circ}$
$31 / 4^{\circ}$. Shps, wt., 10 oz . Imported
VC-55 Level Control
Net 2.89


## DELUXE STEREO LEVEL BALANCE CONTROL

- Dual Concentric 8 ehm L Pad
- Logarithmic Curve


## 395

Two phono jacks enable you to plug in extension or monitoring speakers from the front. Screw terminals in the rear provide for a simple, permanent hookup. Control mounted on concentric shaft. Brushed brass plate with attractive black with goldtrim knobs. Concentric $8 \mathrm{ohm} L$ pads. Use it to control volume on a second set of speakers. Plate is $41 / 2 \times 23 / 4$ "; from front of knob to plate $1^{\prime \prime}$; Overall depths $33 \mathrm{~m}^{\prime \prime}$. Shpg. wt., 1 lb . Imported VC-56 Oeluxe Level Control

Net 3.95

## LAFAYETTE L PADS



New L pads for use as "brilliance" controls to vary tweeter level, or as "presence" controls to vary mid. range speaker level. Both wirewound elements are concentrically mounted within one plastic housing. With gold-finished metal escutcheon plate, mtg screws, and attractive black knob. Size: 1 Ki" dia., $7 / 6^{" \prime}$ deep (less shaft), $21 / 2^{\prime \prime}$ deep overall. Shpg. wt., 6 oz. Imported VC.49-L pad for 8 ohm circults. VC. $50-\mathrm{L}$ pad for 160 hm clrcuits

Net 1.39
Net 1.39

## (D) <br>  <br> LAFAYETTE T-PADS <br> 385

T Pads (D). Constant impedance control to adjust speaker volume. With brass satin plate for wall mounting with all parts and instructions. Shpg. Wt., 10 or VC 5216 ohm T Pad 1 mported

(G)

## LAFAYETTE REMOTE SPEAKER FADERS <br> VOLUME CONTROL ADAPTER <br> Stereoline balance

AS LOW AS
(E)
emote Speaker Fader (E). Provides adjustable volume level for Radio, TV, Hi-Fi and remote speaker. Gradually increases volume on one speaker while diminishing volume on the other. May also be used to adjust shing volume on the other. May aiso be used to adjust
volume for 1 speaker. Gold plate for front panel mountvolume for 1 speaker. Gold plate for front panel m
ing, With instructions. Shps. wt., 6 oz. Imported ing.
$V C \cdot 53$

## vC. 53

Remote soeaker Fader (G) Same as vc. 53 Net . 69 wall mounting. Shpg. wt., 6 oz. Imported
vC-54
Net . $B \mathrm{~s}$ signais to be fed into the high gain input of tape dual stereo chamnel control. Shpg. wt., 6 oz MS-770 Imported
 phone plug output. Shpg. Wt., 6 02. Imported
MS. 769 MS-769 to a single mixed high impedance input channel. Each Overall size $23 / 4 \times 13 / 4 x^{7 / 6}$. Shpg. wt., $1 / 2 \mathrm{lb}$. Imported PK-239 AUDIO MIXER $13 / 6 \times 11 /{ }^{\prime \prime}$ overall. Imported
PK. 242 $13 / 4 \times 7 / 0^{m}$ overall. Imported
PK-243
PK

## LAFAYETTE VC-64 STEREO

 speakers without fear of mismatch or affecting volume or "presence". Output and input screw terminais for Wt., $11 / 2 \mathrm{lbs}$. Imported

## STEREO SELECTOR SWITCHES

## (Fig. A)

 switch for multiple-speaker Stereo Hi-Fi. Selects 3 sets of speakers In any combination, with up to 60 watts of audio power. Mounted on an attractive, gold-finished, steel, electric outlet plate. $23 / 4 \times 41 / 2{ }^{2}$. Shpg. wt., 1 1b. Imported. (Fig. B) As above in enclosed case $2^{\prime \prime} \mathrm{Hx} 4^{\prime \prime} \mathrm{W} \times 3^{\prime} \mathrm{O}$.
## LAFAYETTE MINIATURE HI-FI AUDIO MIXERS

With this handy, small mixer you can announce titles before playing records, mix two high impedence microphone inputs or perform any other mixing operation where 2 high impedance input channels are converted to a single mixed high impedance input channel. Each
input channel has its own easy acting level control for oulet mixing; all mounting in shielded, chrome plated housing. Has momentary switch to protect speaker while inserting into system. Has 2 RCA type female input jacks and one male RCA plug on output side.

AUDIO MIXER-Same quality and characterisfics as PK. 239 except output is standard Phone Plug. Size $31 / 4 \mathrm{x}$

Net 1.39
AUDIO MIXER-Same quality and characteristics as PK. 239 except output is standard Female Mike Connector. Inputs consist of 2 Male Mike Connectors. Size $23 / 4 x$

Net 1.59


159


Two precision 8 -ohm level controls concentrically mounted for stereo In one compact unit. lideal for controlling individual volume control of stereo extension trolling individual volume control of stereo extension of main speakers. Also may be used to vary "brilliance" each channel provide for simple permanent hookup. Handsome cream finish with gold panel plate, Overall Size including knobs: 3\%6"H $\times 41 / 2 " \mathrm{~W} \times 21 / 4 " \mathrm{D}$. Shog.

Net 3.98
 (Fig. 8 - Permits remote selection of any 3 PAIRS OF SPEAKERS
(Fig. A) A constant impedance speaker selector

M\$-765 Stereo Speaker Selector Switch Net 1.59
duilt-in volume control circult permits high volume recorders without overloading. Phono Jack Input to phono plug output. Completely shielded. Designed for use in unbalanced stereo channels; use in pairs for

Net 79


VOLUME CONTROL ADAPTER-Same as MS-770 above except has phono jack input to a 2 -conductor standard


Multiple Speaker Switch (A). Constant impedance device for controlling any 6 remote speakers; up to 63 different combinations. Wall mounting with brass olate. Shpg. wt. 10 oz . With instructions and hardware MS-459 imported

Net 2.10
Multipie Speaker Switch (H). Identical to above but mounted on flat, gold-embossed plate for mounting on flat panel. $34 / 2 \times 25 / 6^{* \prime}$. Shpg. wt., 10 oz . Imported
MS-544
Net 1.19

## LAFAYETTE 3-SPEAKER SELECTOR SWITCHES


(Fig. B) Selects any one of 3, or ary combination of 2 or 3 speakeis with up to 60 watts of audio power. A constant impedance device. On gold finished steel electric outlet plate with black and ivory knob. $23 / 4 x$ $41 / 2^{\prime \prime}$. Shpg. wt., 1 lb. Imported

Net 1.39
(fig. C)
Same as
$\times 4 / 2 \times 21 /{ }^{\prime \prime}$ MS. 567 Imported
(C)


> LAFAYETTE REMOTE SPEAKER SWITCHES
(F)

## 59

.79
Remote Speaker Switch (C). Connects remote speaker to any existing set. Turns both on or either speaker on or off. With gold embossed plate for front panel mounting. Shpg wt., 6 oz. Imported
MS-469 With all parts and instructions .......... . Net . 59
Remote Speaker $\$$ witch ( $F$ ). Same as MS-469, except for wall mounting. Shpg. wt., 6 oz. Imported MS-470

Net .79

# HI-FI INSTALLATION, AUDIO AND PHONO ACCESSORIES 



With the advent of stereo records, correct stylus pres sure becomes all important in obtaining the best reproduction and least stylus and record wear. Lafayette's stylus pressure gauge is an accurate device that allows you to read with the pickup in normal playing posilion. Range, 0.30 gm . No spring and minimum moving parts. Shpg. wt., 1 Ib. Imported PK-223

## WEATHERS STYLUS FORCE GAUGE

Provides a simple, accurate measure ment of phonograph pickup force. All metal construction and it contains no soring. Shpg. wt., 1 to.
PK-254 WEATHERS P. 675
Net 2.00


Checks weight of pickup arm from one gram to. 4 ounces. Has 2 scales, plus calibrated dial with 4:1 scale multiplier. Shps. wt., 1 tb.
PK- 72
DELVAN RECORD CLEANER KIT


Keep your records free from dirt and .dust that give your records those annoying pops and reduce record life. One application keeps records static free for months. Velvet type pad gets into the grooves. With needle brush. Shpg. wt., 10 ozs. PK-193

LEKTROSTAT RECORD CLEANING KIT


Clean your valuable records the professional way with the Lektro stat method. Kit contains a nongumming anti-static detergent in polythylene bottle. Squeeze to apply for comptete ellmination of static in the record grooves. Also included is an applicator made of soft yet firm velvet. contained in a qovel plastic pouch. Shpg. wt., 1002. PK-249

Net 8.96


Deep clean your records the modern way. Specially prepared detergent anti-static record cleaning fluid protects your valuable records as it cleans. Just a few drops on new velvet-foam rubber applicator mitt will give your records a professional cleaning job. Supplied with anti-static fluid, velvet applicator mitt and polyure. thene pad. Shpg. wt., 1002
PK-508
Net 1.29


## RECORD STATIC and DUST ELIMINATOR

## Sprays a fine mist which keeps your rec

 ord clear of surface noise created by static (common to all vinyl records) and clean of dust attracted by the static charge Prevents groove and needle wear caused by static-dust and keeps records lustrous. Extends their life. Two applications a year Is sufficient. Enough for hun dreds of records. Shpg. wt., 802. PK-105Net .88

RECORD CARRYING CASES


FOR 12" RECORDS
(Fig. A) Handsome case holds $60-12^{\prime \prime}$ records without jackets, 36 with. Solid wood frame lock corner construction. Covered with Pyroxolin coated cloth, washable and long wearing. Two tone. Sure-hold lock. Complete with numbered separators and index. $131 / 4 \times 7 x$ $141 / 2^{\prime \prime}$. Shpg. wt., 7 tbs.
PK. 458
Net 5.75

## FOR 7" RECORDS

(Fig. B) Same construction as above. Double sided. Holds 120 records. $151 / 2 \times 7 \times 81 / 4^{\prime \prime}$. With index and separators. Shpg. wt., 7 lbs.
PK-459
Net 5.25


Attractive, brass plated rack carries 60 records of all sizes. Spring steel separators numbered 1 to 60. Heavy carrying handle. Rubber tipped feet. Size $17 \mathrm{Lx} 53 / 4 \mathrm{H} \times 7^{\prime} \mathrm{D}$. Shipg. wt., 4 lbs.
PK-227
Net 1.79

## STOR-A-OOR RECORD RACK



## - Hangs On Wall or Deer

 - Steres Up to 60 Recerits - Recerds Easily AccessibitConveniently store your prectous records in this sturdy aluminum record rack whefe they can be easily reached when needed, yet out of the reach of children. Rach hangs on wall or door without taking up floor space. Stores up to 60 records in theif jackets, as record manufacturers recommend. Handsomely designed to fit any decor. Permits jackets to be displayed for theif decorative effect. Bright aluminum finish. Dimensions: 16Wx 40LI31/2"D. Shpg. wt., 3 Ibs.
ML-261
Net 5.25

## SLIDE-OUT DRAWER FOR RECORD CHANGERS <br>  5

Designed for custom installations of record changers in bookcases, cabinets, tables, etc. Made of durable ply wood and equipped with heavy duty steel slides which operate smoothly and quietly on ball-bearings. Slides extend drawer up to $103 / 4$ " beyond edge of cabinet. Supplied with uncut blank top. Unfinished wood permits your painting to suit your own decor. Size $16 \times 16 \times 31 / 2^{\prime \prime}$. Shpg. wt., 8 lbs.

Net 6.95

## BALL BEARING HEAVY DUTY SLIDES

Drawer silides made of 16 raure steel. Supports 50 lbs. Ball bearing, double-extenslon type, drawer slides. Length ' 15 " travel length $11{ }^{\prime \prime}$, extended 22". Shpg. wt., 5 lbs
per pair Net 1.75
ML-34
SHORT TYPE. Same construction as above but $13^{\prime \prime}$
long; travels $9^{\prime \prime} ;$ extends to $22^{\prime \prime}$. long; travels $9^{\prime \prime}$; extends to $22^{\prime \prime}$.
ML-113
per pair Net 1.50

## RECORD ALBUMS


(1)

(i) RECORD ALBUM - Durable. Holds 12 records. A set of these handsome maroon albums with gold lettering will add to the appearance of your record library. Shpg. wt. 1 Ib
PK. 296 for $7^{\prime \prime}$ records ..................................................... 63 (2) LP ALBUM BOXES - Stores records in jackets. Dust proof. Rigid overlapping sides. Covered in washable, durable Kyvar with chestnut board, deeply padded covers. Beautiful wine-maroon, gold embossed. Shpg. wt., 3 lbs.
PK-241 Holds 15 - 12" Records
Net 1.95


## 2 TUBE AMPLIFIER WITH TUBES

(Fig. A) Uses a $50 L 6$ and 3575 rectifier lube. Has volume control with switch and tone control. Chassis size: $21 / 2 \times 31 / 2^{\prime \prime}$. For $110125 V$, AC or DC. With cord and plug, tubes, diagram but less output transformer. Shpg. wt., 3 lbs
Shpg.
PK.
Net 4.50
THREE TUBE AC-DC PHONO AMPLIFIER
(Fig. B) Equipped with a variable tone control and a separate volume control with off position. Delivers up to two watts output. Phonograph motor connects to the amplifier. Uses 3 tubes: 12AV6, 50C5, and 35W4 rectifier. For $110-125 \mathrm{~V}$ AC or DC. $21 / 8 \times 41 / 2^{\prime \prime}$ steel chassis. With cord and plug, schematic, but less tubes and output transformer. Shipg. wt., 2 ibs.
and
$\mathrm{PK}-23$
Net 3.25
(Fig. C) OUTPUT TRANSFORMER matches output tube to $3-4$ ohm voice coil. Shpg. Wt., $1 / 2 \mathrm{lb}$.
TR. 10 Singly
ea. .49
In lots of 5 ea.

## FIBRE GLASS INSULATION



Excellent sound absorbing materlal. For lining interiors of speaker cabi nets, consoles, phonos, TV's, etc Damps medium and high frequency reverberation and distortion. Sulf. able for many other installation pur poses. 9 sq. ft., $1^{\prime \prime}$ thick with glue and applicator. Shpg. wt. 1 lb. SB-40
DEIUXE BASS REFIEX KIT: 20 square feet
feet. 16x16x1" Bonded fibre-glass. Shpg. wt., 2 lbs.
SB-55
Net 2.70


TUFFLEX INSULATION
Sound absorbing insulating material. Exceltent for use in lining speaket cabinets, radio-phonograph consoles, etc. $1 / 2^{\prime \prime}$ thick. $11^{\prime \prime \prime}$ width only. 7-ft. is the minimum length sold. SB. 28 ...... 7 ft. ......... Net 1.00 Longer lengths per foot .... Net . 14 $1^{\text {". }}$ TUFFLEX. Double the thickness of above. Supplied only in $12 x 18^{\circ \circ}$ sheets. SB-29 Complete with case-to grace any location in your Home or Business. Small Enough To Fit Anywhere.

- Separate Stereo Volume-Balance Controls
- Variable Tone Control With On-Off Switch
- Front-Panel Phono-Tuner Switch for Selection of Phono or Tuner
- Selector Switch for Monaural or Stereo Operation

One of the finest stereo values we have ever offered. This attractive, compact dual channel stereo amplifier will amaze you with its fine performance-ldeal for that low cost stereo system you are planning for your living room, den, bedroom or business. It's petite size lends itself easily to any location-it's attractive low silhouette styling will blend beautifully with the furniture decor in any room of your home or business. Excellent for converting your present monaural console or portable to stereo.
Controls include separate Left Channel and Right Channel Volume-Balance Controls, Sterea Monaural Mode swltch, Variable Tone control with On-Off switch. Phono/Tuner Selector switch; 4 jacks in rear for stereo tuners and stereo crystal or ceramic phono cartridges; 2 pair of 4 -ohm output terminals accept most speakers. Tubes and components mounted horizontally for compactness. Complete with case. Tube complement: 1-12AX7, 2-35C5, plus $35 W 4$ rectifiler. Size: $71 / \mathrm{W} \times 2 \mathrm{~K}_{0} \mathrm{H} \times 5 \mathrm{H}^{\sim} \mathrm{D}$.
PK. 728 Shpg. wt., 6 lbs. Imported
Net 17.95

## COMPLETE STEREO PHONO SYSTEMS



## STEREO/5 AMPLIFIER

- Individual Stereo Volume-Balance Controls
- For Both Stereo and Monaural
- Fully Wired - Ready For Stereo


This rugged. precision made dual channel stereo amplifier will amaze you with its fine quality... Ideal for that low cost stereo system you're pianning for your home or business. Perfect for converting your present consote or portable to stereo. Controls include separate left channel and right channel volume controls, stereu-monaural mode switch, tone control switch and on-off switch. Provision for crystal or switch, tone conirol switch and on-off switch. Provision for crystal or complement 235 C 5 . $1-12 \mathrm{AX} 4$ plus 35 W 4 rectifier. Size: $41 / 2 \mathrm{Hx} 54 / 2 \mathrm{Wx}$ $44 / 2$ "D, 115 -volt 60 cycles.
PK-441 Shpg. wt., 5 lbs.
Net 10.95

AS LOW AS


(mx-441 Altomato)
Trutest Stereo/8 Stereo Amplifler, Lafayette Webcor Automatic 4 Speed Record Changer with wide range cartridge*. 2 Lafayette SK-109* Minla. ture Speaker Systems in Attractive Mahogany veneer finish. Above system supplied complete with $25^{\circ}$ speaker cable for each speaker. Shpg. wt. 26 los.

Net 54.50
Same system as above except with Stereo/5 stereo amplifier instead of stereo/8 stereo amplifier PK.798wXM ....... Shpg. wt., 25 Ibs. ........ Net 49.50 PK-TSHW Mahogany base for changer .... Net 3.95 *See pages 47 and 78 for full description

## BATTERY OPERATED PHONO MOTOR

## - 3 SPEEOS <br> - OPERATES ON FOUR FLASHLIGHT CELLS

A rugged, constant phono motor and turntable with low wow and flutter. Low current drain gives 135 hours of normal use from 4 standard flashlight cells. New 6 -inch plastic turntable will play $45,331 / 3,16$ RPM records. Easy mounting, singe assembly. Depth below mounting surface 2 in Shpg. wt., 4 lbs.
ML. 9 Battery operated phono motor and turntable Net 10.20 A- 157 Batterles for above

RADIO BROADCASTER/PHONO OSCILLATOR


Have fun making announcements and broadcasting music through your own radio - with this broadcaster. Simply connect high impedance microphone or phono pickup to broadcaster and tune in broadcaster on radio. No wiring between the broadcaster and radio set. Pretuned to 1600 on radio dial but easily retuned. With $128 E 6$ and 35 W 4 tubes, phono jack, 2 feet of antenna, schematic and line cord. Completely wired. Chassis size: $4 \times 2^{\prime \prime}$. For $110-125 \mathrm{~V}$ AC/DC operation. Shpg. wt., 2 lbs. PK-25

4-SPEED PHONO MOTOR WITH TURNTABLE
Quiet, dependable A.C operation assured by rubber shock-mounted friction drive motor. Speed change control through idler driving on $8^{\circ \prime \prime}$ turntable. Mounting centers $44 / 2 x$ 33/8 21/9" depth below base plate. Shpg. wt., $34 / 2 \mathrm{jbs}$.
ML- 24 Phooo and turntable ...........Net 5.35 PK-149 Mounting board for motor .. Net . 95


## STEREO RUMBLE FILTER

Filters out turntable vibration and rumblemakes every low-priced turntable and changer quiet and rumble-free. Designed for use with ceramic or magnetic cartridges. 3.position selector switch-ceramic, magnetic cartridge, off. Just plug it in between cartridge and amplifier inputs. Dverall size: 5x2\% \% $\%$ " Shpg. wt., 14 oz. Imported
PK-444 Sterea Rumbler Fiter
Net 2.49


## STEREO PHASER SELECTOR

This specially designed switch offers a simple and smooth melhod for changing over from monaural to stereo operation or to "rephase" the speakers if they should happen to be in electrical opposition. In monaural operation the monaural signal is fed to two amplifiers and two speaker systems; in stereo opera. tion each of the two channels is fed to its own amplllier and speaker. Has polished brass embossed plate for mounting on speaker enclosure or Hi-fi panel. All hardware and instructions are included. Shpg. wt., 10 oz.
PK-228
Nef 1.03

# PHONO ACCESSORIES—Recording Dises • Repair Parts 

QUALITY GRILLE CLOTHS FOR HI-FI INSTALLATIONS





Choice selection of latest patterns and beautiful decorator colors. Made of finest quallty vinyl plaslic, woven with proper mesh for passage of high fre. quencies as well as low. Shpg. wt., $\left(36^{\prime \prime} \times 36^{\prime \prime}\right)^{8} 8 \mathrm{oz}$. ( 18 "×24") 502.

> Description
> Mahogany background with gold stripe Blonde background with mahogany stripe Fine gold mesh
> Ebony background with silver motif
> Black background with gold cobweb
> Mahogany background with gold cobweb Walnut background with gold stripe

## FREE SAMPLE SWATCHES

Supplied free. Just specify stock number below for assortment.
SG-28
Fig $36 \times 36$ N0 $18 \times 24$
For use with Fig. No. Net No. Net
Mahogany … A SG-10 2.39 SG-22 1.25
Blonde.
All colors
Ebony
Ebony
Mahogany
Walnut

## RECORDISC <br> RECORDING BLANKS

Blue label: bond base for home use; purple label: alu minum base, general purpose; red label: heavy alu minum, profession,al; "GM" label: heavy aluminum, wide range. Red label and GM label are. $021^{\prime \prime}$ thick, purple label, .012". All double faced. Blue is 6 to a phg., all others 5. Avg. shpg. wi., $80 z$.

| Stock No. | Size Ins. | Label | Wt. Phg. | Net Ea. | Per Phg. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PR-17 | 61/2" | BLUE | $1 / 2$ LB. | . 17 | . 90 |
| PR-22 | 642" | PURPLE | $1 / 2$ LB. | . 23 | 1.05 |
| PR-23 | $8{ }^{\prime \prime}$ | PURPLE | $3 / 4$ LB. | . 33 | 1.50 |
| PR-24 | 10" | PURPLE | 1 LB . | . 46 | 2.10 |
| PR-18 | 61/2" | RED | 1/2 LB. | . 30 | 1.35 |
| PR-19 | $8{ }^{\prime \prime}$ | RED | 3/4 LB. | . 40 | 1.80 |
| PR-20 | 10" | RED | 1 LB | . 59 | 2.70 |
| PR-21 | 12" | RED | $21 / 2$ LB. | . 13 | 3.30 |
| PR-25 | $8{ }^{\prime \prime}$ | GM | 3/4 LB. | . 53 | 2.40 |
| PR-26 | $10^{\circ \prime}$ | GM | 1 LB. | . 66 | 3.00 |
| PR-27 | $12^{\prime \prime}$ | GM | 21618. | 83 | 3.75 |

The highest quality recording discs on heavy aluminum base, smoothly coated on both sides. Use Red Label for professional recording; Yellow Label for general studio professional recording; Label is .027" base for home and school work; Blue Label is $.027^{\prime \prime}$ base for home
recording. All Red and Yellow Labels are $.050^{\circ \prime}$ base except ${ }^{*}$ are .040 .

## PANDAMUS $\binom{$ CLOTH }{ GRILLE }

A highly attractive natural color straw fabric, grille cloth that is ideal for many types of decor. $27^{\prime \prime}$ wide. Supplied only in 1 yd. lengths. Shpg. Wt., 802 S6.16 Net per yard 1.55 S6. 16


## SPEAKER REDUCING BOARDS

Enables mounting of smalter speakers in oversize enclosures. Boards are sturdy $5 / 8^{\prime \prime}$ plywood, precut to exact size. All mounting holes are drilled. Brown stained. SB. 18 Adapts $8^{\prime \prime}$ speaker to $12^{\prime \prime}$ speaker cabinet or baffle. Wt., 1 lt. SE-19 Adapts 12"
baffle. Wt., $12 / 2$ lbs.

| Stock | Size |  |  |  | Net Each |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Std. |  | Std. |
|  |  | Label | Wt. | Phg. | Singly | Plig. |
| PR. 63 | 7 | RED | 502. | 25 | . 91 | . 82 |
| PR-84 | 8 | RED | 502. | 25 | . 72 | . 65 |
| PR-65 | $10^{*}$ | RED | 602. | 25 | 1.01 | . 91 |
| PR-66 | 12 | RED | 902. | 25 | 1.67 | 1.50 |
| PR-67 | 16 | RED | 1 LB . | 25 | 3.01 | 2.10 |
| PR-68 | $8^{\prime \prime}$ | YELLOW | 502. | 25 | . 61 | . 55 |
| PR-69 | $10^{\circ}$ | YELLOW | 602. | 25 | . 81 | . 72 |
| PR-70 | 12 | YELLOW | 902. | 25 | 1.30 | 1.18 |
| PR. 71 | 16 | YELLOW | 1 LB . | 25 | 2.42 | 2.18 |
| PR-72 | $61 / 2$ | BLUE | 302. | 50 | . 32 | . 29 |
| PR. 73 | 8 | BLUE | 402. | 50 | . 46 | . 41 |
| PR-74 | 10 | BLUE | 502. | 50 | 66 | . 59 |

## AUDIO POINT CUTTING NEEDLES

All have . 003" tip except microgroove types have $.0005^{\prime \prime}$ High quality for professional as well as amateur use All have $87^{\circ}$ included angle. Shpg. wt., 202.

| Stock | Mfr. |  |  |
| :--- | :--- | :--- | :--- | :--- |
| No. | No. | Description | NET |
| PR-75 | $14 . S$ | Short dural shank, sapphire tlp | 4.85 |
| PR-76 | $20-S$ | As above for microgroove | 4.85 |
| PR-77 | $14 . L$ | Long dural shank, sapphire tip | 4.85 |
| PR-78 | $20 . L$ | As above for microgroove | 4.85 |
| PR-79 | $34-S$ | Short brass shank, stellite tlp | 1.47 |
| PR-80 | $34-L$ | Long brass shank, stellite tip | 1.47 |



## 

 No M Mfr.PR-75 14.S Short dural shank, sapphire tip
PR-76 20.S As above for microgroove
$\begin{array}{lll}\text { PR-77 } & \text { 14.L Lons dural shank, sapphire tip } \\ \text { PR. } 78 & 20.1 & \text { As above for microgroove }\end{array}$
PR-79 34-S Short brass shank, stellite tip

## GEOMETRY

Learn 352 useful basic facts necessary for high school Geometry students. For a clearer understanding of geometry, let the record automatize the geometric definitions, postuilates, and theorems so that they are ready for instant application to the problems you must solve. Deals with Definitions, Postulates, Theorems and. Axioms as applicable to lines and points, angles, triangles, polygons, circles, ares, segments, areas, etc.
PR-464

## 8IOLOGY

Learn 428 useful, basic facts essential for high school Blology students. Deals with Plants, Insects, Blood, Enzymes, Hormones, Allmentary Tract, Bacteria, Viruses, Cells, Cytoplasm, Protoplasm, Brain and Nerves, Re. oroduction, Diseases, etc.
PR-465

## PHYSICS

This record teaches 439 of the most necessary items from the varied branches of physics. Deals with measfrom the varied branchests: laws, rules, theorifes; motion; work, power. machines ${ }_{\text {; }}$ electricity; magnetism; electronics, radio; weather; the atom; nuclear energy; refraction; color; reflection; illumination; matter and force; heat; wave motion and sound; sound and music; etc. PR-466

## ML-23 Size $18 \times 24^{\prime \prime}$ Shpg. wt. 3 los.

LEVEL AND LEVELING SCREWS

Precision, circular level indicator and 4 adjustable felt ipped leveling screws and nuts. Provides quick adjustment for exact leveling of turntabe. Easy to instail, PK-273

## HIGH SCHOOL REVIEW SERIES

## GEOMETRY-BIOLOGY-GENERAL SCIENCE-PHYSICS-CHEMISTRY

12" Long Playing $331 / 3$ Records. 3 Invaluable aids in review and study Each record supplied
complete with Learning Aid Booklet. Shpg. wt., 1 ib .


GENERAL SCIENCE
This record teaches 456 of the most necessary litems from the vast diversity of general science subjects; such as astronomy, meteorology, geology, chemistry, electricity, radio and television, measurement, engines, sound, light, plants and insects, bacteria, blood, cells, diseases, etc. PR-467

Net 3.59

## CHEMISTRY

Let this record teach you easily the hundreds of chemistry facts essential to good grades in chemistry. Deals with symbols and valences, water and solutions, colloids. halogens, laws and measures, metals, laboratory preparations, etc.
PR. 463
Net 3.59

Thoroughly tested and approved, flexicone will improve your speaker sound quality and frequency response by softening the outer edges of the speaker cone thereby reducing the cone resonance from 10 to 40 cps. Easily applied in just 15 minutes. One threebottle wit contains enough material for four $8^{\prime \prime}$ speak. botle ers. Complete with instructions. Shpg. wi., 802 MS. 571

Net 1.76


## CHUCK-TYPE <br> REPLACEMENT NEEDLES

Designed to fit most phonograph cartridges with screw Desi chuck Economy priced Shanks are offset to provide spring action. Points are 2 mil for use with $331 / 3,45$ and 78 RPM records. Shanks designed for easy positioning in chuck. Type A has hard osmium lip and is packaged on individual cards. Type B has synthetic ruby tip and is packaged in individual plastic case.
OSMIUM NEEDLE (A)
PK-21 Single, ea 29
.29
Lots of 10 , ea.
RUBY NEEDLE (B)
PK-14 Single, ea. 69 . Lots of 3, ea.

## ELECTRO-VOICE • SONOTONE • ASTATIC CARTRIDGES

## ELECTROVOICE "POWER POINT" PLUG-IN CARTRIDGES <br> 

Integral cartridge and needie assemblies wide range high compliance. No soldering, no wiring. All les mount, slip right into old mount. If converting, use mounts listed below. Under Styli $\mathrm{D}=$ Diamond, $\mathrm{S}=$ MONAURAL TYPES (FIG. A)
Output 1 volt. 20-12,000 cps. Track force $5-8$ grams.


Type PFT-1. Fixed, for 51-1, 52-2, 53-3 Type PT. 2 Turnover. for models 56, 560 S

Type PFT-3. Fixed for 61 and 610 S -239
Tyoe PT-3 Turnover for 66 and 660S
0.238

Net . 59 Net 5 Net .Net .5 Net .59

Synthetic sapphire. Under "Speed" $S T O=78 ; L P=$ $331 / 3$ and $45, A L L=331 / 3,45$, and $78 . \quad \$ 3=$ stereo and all monaural speeds; S-LP= Stereo and $331 / 3$ and 45 LP. Shpg. wt., $30 z$

## EXACT REPLACEMENTS FOR ZENITH COBRAS

## Steck EV. 2 en Ne. No. Ne.

| stack Ne. | EV. No. | $\begin{gathered} 20 n . \\ \mathrm{Ne} . \end{gathered}$ | Styll | peed |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0.247 | 1090 | 142.74 | 0-.001 | LP | 0 | . 8 |
| 0-248 | 109 | 142.71 | S. 001 | LP | 0 |  |
| D-249 | 110 | 142.72 | S-. 002 | ALL |  | 2. |
| -250 | 1110 | 142.76 | D. $0001,5.003$ | ALL | E | . 7 |
| - 0.251 | 111 | 142.77 | S-.001, s-.003 | ALL | E | 4.4 |
| 0.232 | 1160 | 142.88 | D-.001, S-. 003 | ALL | F | 5.1 |
| 0.253 | 115 | 142-89 | 2-S-. 001 | LP | F | 2.3 |
| 0-234 | 116 | 142.87 | S-.001, S-.003 | ML | F | 2.2 |
| 0.237 | 106 | 142.108 | .001, .0007 | 53 | c | . 5 |
| 258 | 1060 |  | .001, . 0007 | 53 | C | 7.62 |
| EXACT REPLACEMENTS FOR WEBCOR (FIG C |  |  |  |  |  |  |
| $\begin{aligned} & 0.246 \\ & 0.231 \end{aligned}$ | $\begin{aligned} & 76 \\ & 760 \end{aligned}$ | white Pink | $\begin{aligned} & 5-.001,5.003 \\ & 0.001,5-.003 \end{aligned}$ | $\mathrm{AL}$ |  | . 32 |
| XACT REPLACEMENTS FOR ASTATIC (FIG. G) |  |  |  |  |  |  |



Hi-FI Ceramic cartridges. Exclusive design eliminates turntable rumble. 21 serles are single needle types with .7 mil styli to play stereo and IP monaural. 26 series are turnover types with .7 mil and 3 mil styll to play stereo and all monaural records. Types with match magnetic phono input. TIP COOE S = SYNTHETIC SAPPHIRE, $O=$ OIAMONO, freq. $20-16,000$ cycles $\pm$ $21 / 208$ with 3 meg input load. Tracking force 6 grams ; output . 5 volt, separation 20 db ; vert, rumble rejec. tion 15 db ; distortion below $3 \%$. Standard $K_{s}$ to $1 / 2^{\prime \prime}$ mtg. centers. Shpg. wt., 3 oz.

| Ne. | E.V. | \$tyli | Mot |
| :---: | :---: | :---: | :---: |
| D-212 | 21 | S. 7 | 5.58 |
| 0.213 | $22^{\circ}$ | S-. 7 | 7.35 |
| 0.214 | 210 | D-. 7 | 6.82 |
| 0-215 | 220* | 0.7 | 10.58 |
| D-215 | 26 | S.7, 5-3 | 6.17 |
| 0.217 | $27^{\circ}$ | 5-7, 5-3 | 1.94 |
| 0.218 | 260 | D-.7, 5-3 | 1.70 |
| - 212 | 270* | 0.7, 5.3 | 11.57 |

## E. V. REPLACEMENT NEEDLES

 for series 21 and 26 cartridges.Stock E.V
E.V.
Me.

Tip
.7 Mil 0
.7 Mil S
3 Mil S

SONOTONE ARMS AND CARTRIDGES


STEREO TONE ARM WITH CARTRIOGE
Attractive light weight plastic arms with series 12 stereo crystal cartridge with 2 synthetic sapphire styil. See listing at right for specs. $81 / 2$ " long. Shpg. wt., at rig
2 lb.

Stock Mfe.

| No. | $\begin{aligned} & \text { Nre } \\ & \text { No. } \end{aligned}$ |  | Color | t |
| :---: | :---: | :---: | :---: | :---: |
| 8-497 | T-01 | 12 THRS | Black | 21/2 |
| D-403 | T-11 | 12THRS | Tan | $21 / 2$ |
| D-438 | T.01 | 12 TLAS | Black | 1 |
| -405 | 11 | TA |  |  |



## SONOTONE $3 T$

 ceramic cartridgeFor monaural use. Features extended response of $20-15.000 \mathrm{cps}$, with gradual roll-off to $20,000 \mathrm{cps}$. Bullt-in RIAA equallzation. Superior compllance. With 1 mil and 3 mil styli assembly. Tracks at 6 gm . All sapphires are fine synthetic. Shpg. wt. 302.


| o. | No. | Fig. | S Magnavox | Het |
| :---: | :---: | :---: | :---: | :---: |
| 0.265 | 463 | 1 | 560216-1-2, 5602 | 6.17 |
| 0.266 | 4630 | 1 | 560219-2, $560228-1-2,5602$ | 6.53 |
| 0.267 | $461+$ | 2 | 560281-1-4, 56029 | 6.17 |
| 0.268 | $4610 \dagger$ | 2 | 560290-1.3* | 6.53 |
| 0. 269 | 459 | 3 | 560259-1-2, 560275-1-2 | 6.17 |
| D. 270 | 459b $\dagger$ | 3 | 560290-1.3* | 8.53 |
| $\begin{aligned} & \text { for N } \\ & 2 \text { hol } \end{aligned}$ |  |  | 1 or -3 use Astatic 459 Iic 461 series for single |  |

4 Lead turnover stereo cartridges. - for stereo, LP and 78, others for Stereo and LP. With 2 synthetic sapphire styli. Complete with mtg. bracket and plug connectors. Shpg. wt., 4 oz.

No. No. Vcits styll Net $0-406 * 12 \mathrm{TH} \cdot \mathrm{RS} \quad 21 / 2 \quad .783 \mathrm{MHI} 3.44$ 0-407 12TH-RS77 $21 / 2$ TWO 7 Mll 3.44
 Series 8TA incorporate rumble suppres sion and have standard $1 / 2^{\prime \prime}$ mounting centers. Response is $\mathbf{2 0 - 1 5 . 0 0 0}$ cps with radual roll-olf to 20,000 cos: output is 0.3 volts; compliance is $3 \times 10.4 \mathrm{~cm} /$ dyne. for each channel Separation is 20 db ; tracking force is 3.6 gm . weint 712 oms. All models are turnover wiges with 2 styll for all mare furnover types with 2 styil for all monaural and stereo records. $S=$ Synthetic Sapp, $0=$ Dia-
mond. Avg. shpg. Wt., 4 oz.

| SONOTONE STEREO CARTRIDGES |  |  |  |
| :--- | :--- | :--- | :--- |
| D.389 | 8TA-4S | S.7.S3 | 5.14 |
| 0.3911 | BTA-4SO | $0.7 . \$ 3$ | 7.65 |
| 0.393 | BTA.4S77 | 5.7 .57 | 5.14 | 0.393 8TA-4S77 S.7.S.7 5.14

## D.387 Replacement Styli for above

| D.387 | N.8TA.S | S7.S3 | 1.47 |
| :--- | :--- | :--- | :--- |
| 0.386 L | N.8TA.S0 | 07.53 | 3.23 |
| 0.392 | N. $8 T A . S 77$ | 57.57 | 1.47 |

## SONOTONE CERAMIC STEREO CARTRIDGES FEATURING

## NEW SONO.FLEX "F" STYLUS



The new Sono-Flex "F" needle featured in the series 9 TAF and 16 TAF listed below is an accident-proof drop. proof needte. Can be flicked, knocked, twisted in a 360 degree circle and it will spring back.
SERIES STAF CERAMIC STEREO CARTR

$$
\begin{aligned}
& \text { aegree circle and it WII spring Dack. } \\
& \text { SERIES STAF CERAMIC STEREO CARTRIDGES }
\end{aligned}
$$

Response $\pm 1 \mathrm{db} 20-17,000 \mathrm{cps}$, with roll off to 20,000
Compliance $5.5 \times 10.6 \mathrm{~cm}$. Separation 30 db ; tracking
cps; output 3.5 volt; Compliance $5.5 \times 10.6 \mathrm{~cm}$. Separation $30 \mathrm{db;}$ tracking force 2.5 gms . Weight 3.2 gms . Turnover with dual styli. All sapphires in series 9TAF and 16 TAF are high quality synthetic sapphires. Shpg. wt., 602 , $\begin{array}{llll}\text { Stock Mo. Mfr. No. } & \begin{array}{c}\text { Description } \\ \text { D-428 }\end{array} \quad \text { 9TAF-SF } & 0.7 \mathrm{mH} . \text { saph., } 0.3 \text { mil. saph. } & \text { Net } \\ 0.20\end{array}$ $\begin{array}{llll}\text { D-428 } & \text { TTAF-SF } & 0.7 \mathrm{mH} . \text { saph., } 0.3 \mathrm{mil} . \text { saph. } & 5.20 \\ 0-429 & \text { 9TAF-S77 } & 0.7 \mathrm{mil} \text { saph., } 0.7 \mathrm{mil} \text { saph. } & 5.20\end{array}$ $\begin{array}{lll}\text { 9TAF-S77 } & 0.7 \text { mil. saph., } 0.7 \mathrm{mil} \text { saph. } & 5.20 \\ \text { 9TAF-SO } & 0.7 \text { mil. dia., } 0.3 \mathrm{mil} \text { saph. } & .08\end{array}$

## SERIES IGTAF CERAMIC STEREO CARTRIDGE

Response $\pm 1 \mathrm{db} 20-10,000 \mathrm{cps}$, with roll off to 12,000 cps; output .63 volt: Compliance 2.4; Separation 22 do; Tracking force 5.7 grams, weight 2.75 grams, Turnover with dual styli. Shpg. Wt., 602.

## Stock Ne. <br> $0-431$ $0-432$ <br> MTF. No. <br> 16TAF-S77 16 TAF.SO

EPLACEME
0.7 mil Description
0.7 mil saph., 0.3 mil . saph
0.3 mil . da., 0.3 mil saph

## Net

3.82
3.82

EMT STYLI FOR 9TAF AND 16AF CARTRIDGES
The now Sono-Fiex " $F$ " stylus is also a replacement for old models, 9T, 9TA, 16T, 16TA Stereo Ceramic cartridges

| Stock No. | Mfr. No. | Description |
| :---: | :---: | :---: |
| 0-434 | ON.9916.SF | 0.7 mit. saph., 0.3 mil . saph. |
| 0.435 | ON. 9916 -S77F | 0.7 mil saph., 0.7 mil , saph. |
| D-436 | ON-9916-SOF | 0.7 mil. dia., 0.3 mil . saph. |

## SONOTONE 18T CERAMIC STEREO CARTRIOGES



Channel separation 25 db . Dual sapphire or diamond-sapphire styli. Std. $1 / 2$ inch mig. centers. Output 1.0V. All sapphires in series I8TAS and 1012 listed below are fine synthetic sapphire. Shpg. wt., 60 oz.


## SONOTONE UNITIZED CERAMIC STEREO CARTRIDGES



This fully compatible ceramic stereo cartridge can be installed in practically any tone arm in a few minutes. Terminal soldering has been eliminated by a unlque plug socket design. Covers the complete high fidelity range $20-15,000$ cycles flat RIAA. $0.5 V$ output. 6.8 gms track ing force. Shpg. wt., 6 ox.

Tumover mount with .7 mil. and 3 mil . saph. styli
Turnover mount with .7 mil. dla. and 3 mil. saph.
Turnover mount with two .7 mil . saph. styli
Turnover mount with two .7 mil . saph. styli
Turnover mount with dia. 8 saph. 7 mil . styli

# ASTATIC PICKUP CARTRIDGES 



TURNOVER TYPES
All are equipped with dual synthetic sapphire styli; 1 mil (LP) and 3 mil (std 78). Average shog. wt., 602.

| Stock No. | Mfr. No. | Fig. | NET | Stock No. | Mir. No. | Fig. | MET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D-128 | 401 | AA | 4.09 | D. 161 | 124 | $\checkmark$ | 3.79 |
| D. 129 | 4078 | 8 | 4.97 | D. 168 | 3107 | U | 3.20 |
| D. 132 | 415 | AA | 5.58 | D. 169 | 31075 | $v$ | 3.20 |
| D. 133 | 4178 | 8 | 5.88 | 0. 171 | 3127 | U | 3.20 |
| 0.139 | 535 | P | 4.67 | 0.112 | 31275 | $v$ | 3.66 |
| D. 141 | 555 | PP | 4.61 | 0.189 | 31475 | $v$ | 3.20 |
| 0.142 | 57 | Pp | 5.59 | 0.190 | $316 T 5$ | $v$ | 3.50 |
| 0.146 | 6278 | K | 3.88 | 0.177 | 405 | $j$ | 4.67 |
| 0. 147 | $627 Y$ | J | 4.67 | 0.178 | 406 | RR | 4.67 |
| D. 148 | 64TS | R | 4.09 | 0. 181 | 409 | PP | 5.59 |
| 0.151 | 6678 | K | 5.29 | 0-182 | 410 | 0 | 3.12 |
| 0.152 | 66TS | RR | 4.26 | 0.185 | 420 | 88 | 3.20 |
| 0.153 | 66 TY | 1 | 3.82 | 0.186 | 422 | 88 | 3.50 |
| 0. 165 | 118 | $v$ | 3.79 | 0.187 | 424 | V | 3.82 |
| D. 166 | 120 | V | 3.79 | 0.191 | 426 |  | 4.41 |

## STANDARD GROOVE TYPES

Single needie type for STO (78) only. Types marked have synthetic sapphire 3 mil styll, $\dagger$ has osmium stylus, others less needle. Shpg. wt., 60 oz .

| Stock No. | Mftg. No. | Fig. | NET | Steck No. | Mte. No. | Fig. | NET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0.111 | 2 | C | 5.29 | D. 125 | 26 | G | 2.81 |
| 0.112 | 4 | G | 2.62 | 0.127 | 32 | G | 2.62 |
| D. 113 | 6 | G | 2.62 | D. 150 | 66-3* | H | 2.91 |
| D. 116 | 12 | $F$ | 2.62 | D-174 | 401 | W | 3.50 |
| D. 117 | 12 U | $F$ | 2.91 | 0.175 | 402t | X | 4.67 |
| D-124 | 24 | G | 2.91 | D-176 | 403 | 0 | 6.17 |

All with synthetic sapphire 1 mil styll for LP only. Shpg. wt., 602.

| Steck No. | Mig. No. | Fig. | NET | Stock No. | Mfg. No. | Fig. | NET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D. 130 | 40-1 | A | 3.82 | D-110 | 310.1 | $T$ | 2.91 |
| D. 136 | 50-1 | M | 5.59 | 0.180 | 408 | 0 | 2.62 |
| D-137 | 51-1 | 0 | 4.35 | 0.183 | 414-1 | U | 2.62 |
| 2.145 | 62.1 | 0 | 2.91 |  |  |  |  |

All equipped with single 2 mil synthetlc sapphire styll for all speeds except . is osmium tip and $t$ is less needle.

| Stoct No. | Mfr. No. | FIS. | NET | Stect No. | Mif. No. | Fig. | NET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D. 122 | $16+$ | H | 2.32 | 0.149 | 66.2 | H | 2.91 |
| D. 123 | $22+$ | H | 2.32 | D. 164 | 1064 | S | 2.91 |
| D. 126 | 28 + | N | 2.32 | 0.170 | $310 \cdot 2$ | $T$ | 2.91 |
| D.131 | 40-2 | A | 3.82 | 0.173 | 312.2 | T | 3.21 |
| 0.138 | 51.2 | 0 | 4.35 | 0.179 | $407{ }^{\circ}$ | $Y$ | 2.62 |
| D. 140 | 53.2 | 00 | 4.35 | D. 192 | 414-2 | U | 2.62 |
| D. 143 | 59-2 | 0 | 5.00 | 0.184 | 416.2 | U | 3.20 |
| D. 144 | $60 \cdot 2$ | H | 4.12 |  |  |  |  |

禺

## STEREO MONAURAL CARTRIDGES

All crystal turnover cartridges except * which are ceramic turnover. All are equipped with 7 mil and 3 mil synthetic sapphire styll except $\dagger$ has 7 mil diamond and 3 mil syn. thefic sapphire styll to play stereo, LP and std. 78 RPM. Shpg. wt., 602.

| Stock No. | Fig. | infr. No. | Dutput | Press. | Freq. | Net |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0.193 | A | 70.TS | 2.0 V | 8 gr . | 50-10k | 4.26 |
| 0.194 | A | 74-TS | 2.0 V | 8 gr . | 50.10K | 4.26 |
| 0.195 | B | 76758 | 2.0 V | 8 gr . | 50.10K | 4.67 |
| 0.196 | A | 80 -TS | 0.8 V | 6 gr . | 50.15K | 4.41 |
| D.208 ${ }^{\text {- }}$ | 2 | 17 | 0.4 V | 5 gr . | 20-20K | 6.91 |
| D.209 ${ }^{\text {c }}$ | 2 | 170 | 0.4 V | 5 gr . | 20-20K | 9.26 |
| D.263 | 8 | 860 | . 8 V | 6 gr . | 50.15K | 7.94 |
| 0.284 | 8 | 86TSB | . 8 V | 6 gr . | 50-15K | 5.00 |

## ASTATIC SOUND.FLO CARTRIDGE-STYLI COMBINATIONS

## PLUG-IN DIRECT REPLACEMENTS <br> ZENITH • WEBCOR • EV • RCA - WEB ELEC

Exact replacements with styll. Column headed TIP coded: L-1 mil sapphire; LO 1 mil diamond; LS 1 mil and 3 mil sapphires; $L 0 . S-1$ mil diamond and 3 mil sapphire; LL - two 1 mil sapphires; CC - two 2 mil sapphires; SS - two 3 mil sapphires. Dot color identifies original cartridge. Shpg. wt., 4 oz. All sapphires are fine synthetic.
Stock Ast. Replaces

| $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | Ast. <br> No. | Dot | Tip | E.V. | Webcor | We | Ienith | M15 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D.197 | 915 | White | L.S | 76S | A1919 | V-2 | - | 2.32 |
| 0.198 | 917 X | Pink | LO.S | 760S | A1920 | V.20 | - | 5.85 |
| 0.199 | 931 | Blue | L.S | 56 | - | V-1 | 142-80 | 2.32 |
| 0.200 | 937 x | Drange | LO.S | 560 S | - | V-10 | 142.83 | 5.45 |
| 0.201 | 931-1 | Red | L.L | 51-1 | - | - | - | 2.32 |
| 0.202 | 93 T -2 | Green | C.C | 52-2 | - | - | - | 2.32 |
| 0. 203 | $93 \mathrm{~T} \cdot 3$ | Black | S-S | 53.3 |  | - | - | 2.32 |

## PLUG-IN CARTRIDGE FOR RCA

Exact replacement for RCA part 105837 used in models 9JO1, 9E02, 9303, 6EY30.
Type 89.1 silicone filled, used in RCA Chrysler automobile phonographs.
D.158 ASTATIC 83.1 . With 1 mil sapphire
0.159 ASTATIC 83-1X With 1 mil diamond

Net 2.06
0.159 ASTATIC 83-1X. With 1 mil diamond
D-160 ASTATIC $89-\mathrm{T}$. With 1 mil sapphire

Net 7.06

## astatic sound-flo ceramic stereo cartrioges

These ceramic cartridges replace most existing mon-
aural ceramic and crystal cartridges. Completely com patible, plays either stereo or monaural records. 4 terminals for hum-free performance. Channel separation, 20 db except 13AT and 13ATX is 25 db . Response $20-15,000 \mathrm{cps}$ exceot 13AT and 13ATX is $30-20.000$ RIAA equalized. 0.5 v output. 6 gm . trackIng force. Tip code: LT $=.7$ MII and 3 MII LSS=Two .7 Mili; Sone .7 Mil fits all standard arms with Astatic mounts Complete assembly includes plug-in cartridges and needle. Shpg. wt., $60 z$.
Stock No. Ast. No. Tip Mount Net Steck Mo. Ast. No. Tip Mount Net

| 0.115 | $11 T 78$ | LSS WITH | 4.67 | 0.121 | $13 T X$ | LT* LESS | 6.44 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 0.114 | 1117 | LSS LESS | 4.09 | 0.204 | $13 A T$ | LT LESS | 4.67 |
| 0.119 | $13 T B$ | LT WITH | 4.67 | 0.205 | $13 A T X$ | LT* LESS | 8.20 |
| 0.118 | $13 T$ | LT | LESS | 4.09 | 0.206 | 9.78 | S |
| 0.120 | $13 T B X$ | LT* WITH | 1.03 | 0.207 | $9.78 X$ | S* WITH | $\mathbf{4 . 2 6}$ |
|  |  |  |  |  |  |  |  |

# ASTATIC SOUND.FLO PLUG.IN MONAURAL CARTRIDGES 



Outstanding plug-in ceramic cartridge and needle combinations. Turnover type with dual 1 mII and 3 mil styll. Ali sapphire styll in series 81 and 89 listed below are high quality synthetic sapphires

## 81 SERIES WIDE RANGE

NO 81TE, Replaces Sonotone 2T, E-V 56, Shure PC2, 4 series and many others. Complete assembly includes cartridge, 2 sapphire styli, mtg. bracket, housing turnover lever. Shpg. wt., 602 0.156

Net 2.91
0.154 81T. Replacement cartridge and styll assembly for 81 TB

Net 2.32
0-155 81TBX. Same as 81 except with diamond-sapphire styll........... Net 5.37
D-157 81TX. Replacement cartridge and styll assembly. for 81 TBX.......... Net 4.68

## 89 SERIES HIGH FIDELITY

NO 8өT8. Replaces Sonotone 3T, E.V 86, Shure PC-6 series, Magnavox 560212-2. $560192-1,560215-2$. Complote assembly includes cartridge, 2 sapphire styll, mtg. bracket, housing, turnover lever. Shpg. wi., 602.
0.161
0.160 89T. Replacement cartridge and styd assembly for 897 B 0.162 89TBX. Same as 897B except with diamond-sapphire stylif.......... Net 7.03 D. 163 89TX. Replacement cartridge and styli assembly for 89TBX .......... Net 6.43

## ASTATIC MOUNTING BRACKETS



## Page 116

## POPULAR REPLACEMENT CARTRIDGES

## FAMOUS PICKERING MARK IIC CARTRIDGE

## 779

Complete with Pickering Type D9007 Diamond Stylus

## REPLACEMENT CARTRIDGES FOR RCA



- Replacement for cartridges in many thousands of RCA45 and many LP record changers. Imported
- 1 MIL SYNTHETIC SAPPHIRE STYLUS - $2.3 V$ OUTPUT
- HIGH IMPEDANCE CRYSTAL - TAKES 7.10 GMS PRESSURE - 5/b"MTG CENTERS
EXACT REPLACEMENT FOR MANY STANDARD 45 RPM and $33 \mathrm{~V} / 2$ RPM CARTRIOGES RCA $\qquad$

| 74067 | 75575 | W31AR | P73AR |
| :--- | :--- | :--- | :--- |
| 74625 | 76318 | P73 | P73R |
| 75476 |  | P73A |  |

PK. 168
Net 1.25
Synthetic Sapphire replacement stylus for PK. 188 PS-555

## ADMIRAL CARTRIDGES

## 620



ADMIRAL 409B11-2-Turnover cartridge replaces 409A11 For Admiral changer models RC210, RC211, RC212, RC220, RC221, RC222, RC320, RC321 and RC322. Complete with two (LP and standard) osmlum needles. Shpg. wt., 12 oz. D-101

Net 6.20

## PHONO CARTRIDGES 3.5 VOLT OUTPUT <br> 

Guaranteed high quality exact duplicates for direct replacement of all standard cartridges such as L70, L82, L92, W60B, N10, and many others. Pin plug connectors for all 78 r.p.m. Shps. wt., 1202 . Imported PK-11 each.

## PHILCO CARTRIDGE

750

## PHILCO

Genuine Philco Universal replacement for Philco part numbers $425-0011,425-0016$ and $325-8024$. Fits changer models M20, M22, M24, M24A, M25, M26 and many others. Comes with 2 styli. Shpg. wt., $120 z$. PK. 94


- 7 Mil Diamond Stylus
- Response $\pm 2 \mathrm{db}$ 10-30,000 CPS

Here is the famous Pickering Mark II C Cartridge with Pickering D9007 . 7 mil diamond stylus that reproduces both mono and stereo perfectly. Uses "T-Guard" stylus assembly. Tracking force: $\mathbf{3 - 7}$ grams; separation: 25 db ; output:. 025 volts per channel. Shpg. wt., 3 ozs. PK.603L

Net 7.79
SONOTONE 2T-S (Supersedes 9980-S) Turnover Ceramic Cartridge


This cartridge is used to replace Astatic AC, ACD, CAC GC, LQD, ELECTRO-VOICE 16 TT .33 43, $46 \mathrm{~T}^{\prime}$, 96T: SHURE WC' series from WC22 to WC36, W22, W26: WEBSTER ELECTRIC AX, A1, A9-1. Used on VM, Columbia 360. Webster, Crescent record changers and many other types now in use. Excellent hi-ft characteristics as extended frequency range and low distortion. All with the added advantages of ceramic safety from humidity and heat. Has 1 mil stylus for LP records and 3 mil for standard-both synthetic sapphire. Shpg. wt., 8 oz. PK-40 40 Net 2.95
genuine zenith cobra cartridges


All Zenith cartridges are identlified by color. Just match color to obtain exact replacement. For diamond cartridges listed below gold will replace green and blue; white replaces blue; gray replaces brown. wt., $50 z$. | STOCK | ZENITH |  |  |
| :--- | :---: | :---: | :---: | :--- | :--- | :--- |
| NO. | NO. | COLOR | COBRAMATIC |
| MODEL |  |  |  | STVLUS $\quad$ NET

$1=$ Synthetic
ZENITH 45RPM SPINDLE FITS ALL COBRAMATIC CHANGERS
Zenith $\$ 22006$ spindle filts all moders, Cobramatic changers and eliminates use of "spiders"' and other devices to insert in records. Natural color matches any unit. Simple instructions with each unit. Shpg. wi., 1 lb. PK-391 Zenith S22006

Net 4.35

## GENUINE MAGNAVOX CARTRIOGES


$\qquad$
Genuine Magnavox exact replacement cartridges complete with indicated styll. Shpg. wt., 12 oz . $t=$ synthetic STOCKNO. MAG. NO. FIG. STYLI

D-77L 560158-2 A Diam/Sapphiret 11.52 $\begin{array}{lllll}\text { D.78L } & 560169.1 & \text { B } & \text { Diam/Sapphiret } & 10.52 \\ & & & & \end{array}$

STEREO CRYSTAL TURNOVER CARTRIDGE
NEW!


- EXCELLENT frequency response
- HIGH OUTPUT - LOW TRACKING FORCE - DUAL STYLI

Frequency response $40 \cdot 14,000 \mathrm{cps}$. Tracks with low stylus pressure and high output voltage. Excellent chan nel separation for stereo effect. Supplled with turnover mechanism. knob and dual synthetic sapphire styll to play records of all speeds. Completely compatible. Fits all standard arms. Shpg. wt., 6 02. Imported PK. 258

Net 2.75
REPLACEMENT STYII
PK-281 Synthetic Sapphire Stereo LP
PK-282 Synthetic Sapphire STD (78)
PS-86L DIAMDND Stereo LP
Net 69

REPLACEMENTS FOR RONETTE CARTRIDGES


## REPLACEMENTS FOR RONETTE CARTRIDGES

Hi.Fidelity cartridge for use in Collaro, Webcor. Gar. rard. VM and many players using Ronette cartridge type T0.284V or similar equipment with 2 synthetic sapphire styli for LP and 78. Output is .7 volts. Frequency response 30 to 15.000 c.D.s. Complete with turnover mechanism and knob. Will fit most tone arms. Shpg. wt., 6 0Z. PK-450 Imported ................................. 1.75

HIGH DUTPUT MODEL
Similar to above to replace Ronette TO-222 and simllar units. Output 2.2 volts. Frequency response $\mathbf{3 0 - 1 2 , 0 0 0}$ c.p.s. Shpg. wt., 6 oz. Imported

PK-451
Net 1.75
-) RCA CARTRIDGES
enuine RCA exact replacement cartridges complete with indicated styll. Shpg. wt., 12 oz.

| Stock No. | RCA No. | Fig. | Speed | Stylus | t |
| :---: | :---: | :---: | :---: | :---: | :---: |
| D. 36 | 70338 A | A | 78 RPM | Sapp. $\dagger$ | 6.17 |
| 0.37 | 74067 | B | 45 RPM | Sapp. $\dagger$ | 2.62 |
| D-38 | 75575 | C | 45 RPM | Sapp.t | 2.62 |
| D-39 | 77779* | D | ALL | SapptOsm | 3.81 |
| Turno | er dual ne | e. | + All sapp | es, synth |  |

## -RETRACTOMATIC CARTRIDGE



Webster Electric No. P2-1 spring mounted high output crystal cartridge. Has 2 mil osmium stytus to play all speeds. Output 5 v on 78,2 volts on LP.
Output 5 v on 78,2 volts on LP.
$0-65$ Webster Elec. No. P2-1 crystal 0.65 Webster Elec. No. P2-1 crystal
cartridge. Shpg. wt., $902 . \quad$ Net 2.91

## BSR STEREO AND MONAURAL TURNOVER CARTRIDGES

The BSR TC8S stereo and TC8H high output monaural cartridges are designed for quality performance at a special low price. Both are turnover types. STEREO CARTRIDGE: sensitivity, $240 \mathrm{mv} / \mathrm{cm} / \mathrm{sec}_{;}$compliance, $1.4 \times 10^{-4} \mathrm{~cm} /$ dyne: channel separation, 16 db at 1000 cps, 20 db at 4000 cps ; balance between channels, within 3 db ; tracking force, $5-9$ grams. MONAURAL CARTRIDGE: sensitivity $500 \mathrm{mv} / \mathrm{cm} / \mathrm{sec}$; compliance, $2.0 \times 10 . \mathrm{cm} /$ dyne; tracking force, 7.10 grams. Complete with turnover mechanism, shpg. wt.. 3 oz. Imported PK-601 TC8H High output monaural cartridge Net 1.95 PK-602 IC8S Stereo cartridge

# LAFAYETTE BUDGET-PRICED TV PICTURE TUBES 

## FULL ONE-YEAR GUARANTEE

Tubes which fail in normal use within one year will be replaced upon receipt
of your returned tube. You pay only transportation.
Net price "with Dud" base on your prepald shipment or delivery of old picture tube (Dud). Returned tubes must be intact and without scratches. Green glass duds not accepted. When ordering give stock number and type. Every Lafayette picture tube is top quality-made of entirely new materials except the glass, which is tested and inspected to meet new-glass standards. "Indicates aluminized screens. Hindicates metal lubes.

| Stock |  | $\begin{aligned} & \text { NET } \\ & \text { Less } \end{aligned}$ | PRICE With | Stack |  | NET Less | PRICE With |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mo. | Tyos | D4, | Dud | No. | Tuge | Dud | Dud |
| P. 404 X | $108{ }^{\text {P4A }}$ | 7.50 |  | PT-407X | 178WP4* | 24.75 | 19.50 |
| PT-405X | 12KP4A* | 10.62 |  | PT.408X | 1782P4* | 24.75 | 19.50 |
| PT. 350 X | 12LP4A | 10.00 |  | PT.359X | 17CP4 $\dagger$ | 18.00 | 15.95 |
| PT.352X | 14C/B/EP48* | 12.75 | 11.75 | PT.360X | 17GP4/TP4 $\dagger$ | 19.50 | 17.50 |
| PT. 351 X | 14EP4/CP4 | 11.25 | 10.25 | PT.361X | 17HP4/RP4 | 13.50 | 12.00 |
| PT-391X | 140P4A* | 14.25 |  | PT-362X | 17HP48/RP4C | 15.00 | 13.50 |
| PT-393X | 14RP4* | 14.25 | 13.25 | PT.363X | 17LP4/VP4 | 15.00 | 13.50 |
| PT.353X | 16AP4/AP4A $\dagger$ | 15.95 | 14.95 | PT. 364 X | 17LP4A/VP48* | 17.70 | 16.20 |
| PT.354X | 16 GP 4 ; | 14.86 | 13.86 | PT. 397 X | 170P4/YP4 | 13.50 | 11.50 |
| PT.355X | $16 \mathrm{KP} / \mathrm{RPA}$ | 10.50 |  | PT.398X | 17QP4A/YP4A* | 15.00 | 13.50 |
| Pr.356X | 16KP4A/RP4A/ |  |  | PT.366X | 19AP4A/AP4B $\dagger$ | 17.25 | 15.75 |
|  | TP $4 A^{*}$ | 12.50 |  | PT.367X | 20CP4A/DP4A | 13.50 | 11.50 |
| PT.394X | 17avP4 | 16.50 | 13.50 | PT.368x | 20CP4D/DP4C* | 15.75 | 14.50 |
| PT-395X | 17AVP4A. | 18.35 | 15.35 | PT.370X | 21ACP4A |  |  |
| PT-357X | 178P4/8P4A | 12.00 | 9.95 |  | AMPGA/8SP4* | 19.25 | 12.75 |
| PT-358X | 178P48* | 13.50 | 12.50 | PT.372X | 21ALP4A/ |  |  |
| PT-396X | 178RP4* | 24.75 | 19.50 |  | B/ATP4A* | 19.25 | 12.50 |

## RCA-GE-SYLVANIA PICTURE TUBES



Made of all new parts except that glass envelope may be re-used after test-inspection to meet new-glass standards. Brands which may be shipped Indicated by $R=R C A, G=G E, S=$ Sylvania. Shpg. Wts. shown top of page.

ONE-YEAR GUARANTEE
Tubes failing in normal use within 1 year will be replaced. You pay only transportation.

| Stoch No. | Type B | Brand | Net |
| :---: | :---: | :---: | :---: |
| PT-200X | 5AXP4 | R-G | 25.50 |
| PT-201K | 51P4 | $R \cdot G$ | 55.00 |
| PT.202X | 7JP4 | R | 23.84 |
| PT.203x | 8AP4A | G | 13.06 |
| PT.500X | $80 \mathrm{P4}$. | A | 25.68 |
| PT-204X | 8XP4 | R-G | 27.95 |
| PT-205X | 8YP4 | G | 29.50 |
| PT.206X | 9QP4A | G | 31.23 |
| PT-207X | 10ABP48 | S | 25.81 |
| PT.208X | 108P4A/EP4 | R | 29.40 |
| PT-209X | 10FP4A/BP4A/ 8P4C/8P4D/CP4 | R-G | 31.36 |
| PT.534X | 10MP4A | S | 29.40 |
| PT.591X | 11 AP4 | G | 33.98 |
| PT-212X | $\begin{aligned} & 12 \mathrm{KP4A/LP4A/} \\ & 12 \mathrm{KPAA/LP4A/LP4C/} \\ & \text { QP4A/TP4/ZP4A } \end{aligned}$ | R-G | 31.36 |
| PT-214X | 12UP48 | S | 23.52 |
| PT-216X | SG-14AJP4/SP4/VP4 | G | 32.54 |
| PT.321X | 14ATP4 | R-G | 28.28 |
| PT.536X | $14 A \cup P 4$ | G-S | 32.23 |
| PT-217X | 14EP4/CP4A/BP4A/ DP4/EP4 | R | 28.51 |
| PT.538X | SG.140P4A/HP4/ BAP4/HP4 | R-G | 29.83 |
| PT-222X | SG.14WP4/NP4A/ RP4A/SP4/2P4 | R-G | 32.23 |
| PT.539X | 14XP4A | G.S | 32.23 |
| PT-225X | 16AP4A | R-G | 28.29 |
| PT.571X | 16ASP4 | 6 | 43.12 |
| PT-572X | 16ATP4 | G | 41.16 |
| PT.573x | 16AYP4 | R | 31.36 |
| PT.226X | 160P4A | R-G | 29.40 |
| PT.229X | 16 GP 48 | R-G | 28.42 |
| PT-568X | SG-16KP4A/QP4/ RP4A/TP4/UP4/XP4 | G | 30.06 |
| PT-233X | 16LP4A/CP4/2P4 | G | 33.32 |
| PT.234X | 16 TP4 | R | 30.06 |
| PT-235X | 16WP4A/SP4A/ VP4/YP4 | R-G | 33.32 |
| PT-239X | $\begin{aligned} & \text { SG-178P48/8P4C/ } \\ & \text { AP4/JP4 } \end{aligned}$ | R-G | 25.32 |
| PT-237X | SG-178JP4/ATP4A/AV | VP4A/ |  |
|  | C8P4/CLP4/UP4 | R-G | 27.14 |
| PT-242X | $\begin{aligned} & \text { SG-178WP4/8VP4/ } \\ & \text { CSP4 } \end{aligned}$ | R-G | 29.14 |


| Stock No. | Type | Brand | Net |
| :---: | :---: | :---: | :---: |
| PT-247X | 17CP4 | R-G | 27.78 |
| PT.323X | 17CDP4 | R-G | 36.82 |
| PT-24JX | $17 \mathrm{CFP4}$ | R-G | 26.02 |
| PT-244X | SG-17CKP4/8RP4/ 82P4/CAP4 | G | 29.64 |
| PT.541X | 17CRP4 | G | 26.78 |
| PT-542X | 17CTP4 | $G$ | 35.52 |
| PT-543X | 17CYP4 | R | 34.45 |
| PT-251X | 17DAP4 | R-G | 35.52 |
| PT-252X | 170KP4/DTP4 | R-G | 29.64 |
| PT.253X | 170LP4 | G | 29.64 |
| PT-254X | 170QP4 | R-G | 29.64 |
| PT.504X | 170RP4 | R-G | 35.52 |
| PT.324X | 170SP4/8RP4/82P4/ CAP4/CKP4/CWP4 | R-G | 29.64 |
| PT. 505K | $170 \times 84 / D 2 P 4$ | R-G | 29.64 |
| PT-255K | 17FP4/FP4A | G | 25.48 |
| PT-256X | $17 \mathrm{GP4}$ | R-G | 30.40 |
| PT-257X | SG-17HP48/RP4C | R-G | 25.32 |
| PT.258X | SG-17LP4A/VP48 | R-G | 24.12 |
| PT-260X | SG-170P4A/UP4/YP4 | R-G | 26.14 |
| PT-262X | 17 TP 4 | R-G | 31.75 |
| PT-265X | 19AP48 | R-G | 32.52 |
| PT-544X | 19ABP4 | R-G | 36.82 |
| PT-546X | 19AHP4 | R-G | 32.90 |
| PT-508X | 19AJP4 | R.G | 32.90 |
| PT. 507 X | 19AUP4/AFP4 | G | 40.50 |
| PT.509X | 19AVP4/XP4/8VP4 2P4/8LP4 | R-G | 32.90 |
| PT-510x | 19AXP4/AYP4/BWP4 | R-G | 32.90 |
| PT.574X | 198DP4 | G | 32.90 |
| PT.512X | 198HP4 | $G$ | 32.90 |
| PT.547X | 198LP4 | G | 32.90 |
| PT.575X | 198QP4/NP4 | $G$ | 40.50 |
| PT.548X | 198 TP4/YP4 | R-G | 32.90 |
| PT.549X | $19 \mathrm{CDP4}$ | S | 32.90 |
| PT.578X | $19 \mathrm{CHP4} / \mathrm{CFP4} / \mathrm{CKP4}$ |  |  |
|  | ACP4 | R-G | 32.90 |
| PT.550X | 19CFP4 | G | 36.95 |
| PT-551X | 19CKP4 | G | 36.95 |
| PT. 576 X | 19CUP4 | G | 36.95 |
| PT-577X | 190EP4 | G | 36.95 |
| PT-327X | 19294 | G | 32.90 |
| PT-269X | SG-20CP4D/0P4C | R-G | 35.28 |
| PT-272X | SG-20HP4D/LP4/MP4 | 4 R-G | 35.28 |
| PT-274X | SG-21ACP4A/AMP4A/AMP23A AQP4A/BSP4/CUP4 R-G 30.14 |  |  |
|  |  |  |  |



| Stock No. | Type | Brand | Net |
| :---: | :---: | :---: | :---: |
| PT.561X | 238VP4 | G | 47.04 |
| PT. 309X | 23CP4/CP4A/AVP4/ BNP4/GP4/HPG | R-G | 47.04 |
| PT-562X | 23C8P4/BQP4/UP4 | R-S | 48.34 |
| PT. 581 X | 23DAP4 | R | 42.90 |
| PT.567x | 2308P4 | G | 41.82 |
| PT. 582X | 23DKP4 | $G$ | 48.34 |
| PT.583X | 230LP4 | G | 48.34 |
| PT-584X | 230QP4 | G | 54.88 |
| PT.585X | 230SP4 | $G$ | 54.88 |
| PT.586X | 23DYP4 | G | 48.34 |
| PT.525X | 23EP4 | R-G | 47.04 |
| PT-526X | 23FP4/FP4A/KP4A/ MP4A/WP4 | R-G | 40.28 |
| FT-564X | 23JP4 | R-G | 47.04 |
| PT.334X | 23KP4/KP4A | G | 40.28 |
| PT.527X | 23MP4/MP4A/WP4 | G | 40.28 |
| PT.528X | 23NP4 | G | 40.28 |
| PT-587X | 23TP4 | G | 52.26 |
| PT-565X | 23UP4 | G.S | 47.04 |
| PT-560X | $\begin{aligned} & 23 Y P_{4} / \mathrm{XP}_{4} / \mathrm{AFP4} / \\ & \text { BDP4/BTP4 } \end{aligned}$ | R-G | 47.04 |
| PT-588X | 232P4 | G | 47.04 |
| PT.310x | SG-24AEP4/ANP4/ DP4A/YP4/ZP4 | R-G | 43.54 |
| Pr-311X | 24AHP4/LP4 | R-G | 46.93 |
| PT-589X | 24A.JP4 | G | 43.54 |
| PT-529X | 24ATP4 | R | 56.10 |
| PT-339X | 24AUP4 | R-G | 43.54 |
| PT.566X | 24AVP4 | G | 58.03 |
| PT-530X | 248AP4 | R | 60.73 |
| PT.316X | SG-24CP4A/ADP4/QP4/ |  |  |
| PT.567X | 27LP4 | G | 73.98 |
| PT.531X | 27MP4 | R | 78.40 |
| PT-320X | SG-27RP4/EP4/GP4/ NP4 | R-G | 73.98 |
| PT-590X | $27 \times 1$ | 6 | 73.98 |
|  | COLOR TUBES |  |  |
| Stoch Na. | Type | Brand | Net |
| PT-281K | 21AXP22A | R | 106.46 |
| PT.514X | 21CYP22A | R | 104.93 |
| PT-516X | $21 F 8 P 22$ | R | 111.46 |
| PT.570X | 21FJP22/FKP22 | R | 142.18 |

# 60\% OFF MFR'S SUGGESTED LIST* <br> -Lafayette Never Sells at These Mrr's. Suggested List Prices Which May or May Not Be Generally Followed by Retailers. <br> <br> ASSORTMENT PRIVILEGE: <br> <br> ASSORTMENT PRIVILEGE: <br> <br> TUBES MAY BE ASSORTED <br> <br> TUBES MAY BE ASSORTED FOR QUANTITY PRICE 

 FOR QUANTITY PRICE}
up to RECEIVING TUBES up ro

REPLACEO TYPES: When the original type is no longer avallable we will ship the newer, directly interchangeable version.

## 12 MONTH GUARANTEE

All receiving tubes are guaranteed for 12 months from date of purchase. We will replace any tube that does not give efficient performance for a full 12 months' period. This of course does not apply to burned out or broken tubes. Average
-Lafayette Never Sells at These Mfr's. Suggested List Prices Which May or May Not Be Generally Followed by Retailers.

## ASSORTMENT PRIVILEGE: tubes may be assorted for quantity price

| Tube Type | Mir. <br> Sugz. List* | $\begin{aligned} & \text { Net } \\ & 1.9 \end{aligned}$ | $\begin{gathered} \text { Each } \\ 10-49 \end{gathered}$ | $\begin{aligned} & \text { Asst. } \\ & 50 \cdot U p \end{aligned}$ | Tube Type | Mir. <br> Sugg <br> List* | $\begin{aligned} & \text { Net } \\ & 1 \cdot 9,1 \end{aligned}$ | $\begin{gathered} \text { Each } \\ 10.495 \end{gathered}$ | $50.0 p$ | Tube Type | Mir. <br> Sugg. <br> List* | $\begin{aligned} & \text { Net } \\ & 1.91 \end{aligned}$ | 10.495 | Asst. 50-Up | Tube Type | Mir. Sukg. List | 1.9 | $\begin{array}{r} \text { Each } \\ 10-49 \end{array}$ | $\begin{aligned} & \text { Asst } \\ & 50 \cdot \mathrm{Up} \end{aligned}$ | Tube Type | Mir. Sugq. List* | $\begin{aligned} & \text { Net } \\ & 1.91 \end{aligned}$ | $\begin{gathered} \text { Each } \\ 10-49 \end{gathered}$ | $\begin{aligned} & \text { Asst. } \\ & 50 . U p \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 024 | 2.40 | 1.18 | 1.06 | . 96 | 38E6 | 2.25 | 1.10 | . 99 | . 90 | 5A24 | 5.65 | 2.77 | 2.49 | 2.26 | GAN8A | 4.00 | 1.96 | 1.76 | 1.60 | 68R8A | 3.65 | 1.79 | 1.61 | 1.46 |
| 0244 | 2.15 | 1.05 | . 94 | . 86 | 38N4A | 3.05 | 1.49 | 1.34 | 1.22 | 588 | 5.30 | 2.60 | 2.33 | 2.12 | 6A05A | 2.15 | 1.05 | . 94 | . 86 | 6BS8 | 3.75 | 1.84 | 1.66 | 1.50 |
| 024G | 2.60 | 1.27 | 1.14 | 1.04 | 38NG | 3.75 | 1.84 | 1.66 | 1.50 | 5 BC 3 | 2.30 | 1.13 | 1.02 | . 92 | 6406 | 2.60 | 1.27 | 1.14 | 1.04 | 6BU8 | 2.80 | 1.37 | 1.23 | 1.12 |
| 1 A3 | 6.55 | 3.20 | 2.88 | 2.62 | $39 \cup 8$ | 3.10 | 1.52 | 1.37 | 1.24 | 5BE8 | 3.30 | 1.62 | 1.46 | 1.32 | 6A07GT | 4.00 | 1.96 | 1.76 | 1.60 | 68V8 | 3.15 | 1.54 | 1.39 | 1.26 |
| 1A5GT | 4.25 | 2.08 | 1.87 | 1.70 | 38Y6 | 2.60 | 1.27 | 1.14 | 1.04 | 5BK7A | 3.40 | 1.66 | 1.49 | 1.36 | 6408 | 3.15 | 1.54 | 1.39 | 1.26 | 68w4 | 2.90 | 1.42 | 1.28 | 1.16 |
| 1A7GT | 5.75 | 2.82 | 2.53 | 2.30 | 3826 | 2.30 | 1.13 | 1.02 | . 92 | 5807A | 4.00 | 1.96 | 1.76 | 1.60 | GAR5 | 2.65 | 1.30 | 1.17 | 1.06 | 68w8 | 3.50 | 1.71 | 1.55 | 1.40 |
| 1402 | 3.00 | 1.47 | 1.32 | 1.20 | 3 CB6 | 2.30 | 1.13 | 1.02 | . 92 | 5BR8 | 3.65 | 1.79 | 1.61 | 1.46 | 6AR8 | 5.15 | 2.52 | 2.26 | 2.06 | 68X7GT | 4.35 | 2.13 | 1.92 | 1.74 |
| $14 \times 2$ | 3.05 | 1.49 | 1.34 | 1.22 | 3CE5 | 2.35 | 1.15 | 1.03 | . 94 | 5878 | 3.30 | 1.62 | 1.46 | 1.32 | 6AR11 | 4.35 | 2.13 | 1.92 | 1.74 | 6BY5GA | 5.10 | 2.50 | 2.24 | 2.04 |
| 183 CT | 2.90 | 1.42 | 1.28 | 1.16 | 3CF6 | 2.70 | 1.32 | 1.19 | 1.08 | 5BW8 | 3.40 | 1.66 | 1.49 | 1.36 | GAS5 | 2.40 | 1.18 | 1.06 | . 96 | 68Y6 | 2.50 | 1.22 | 1.11 | 1.00 |
| 1C5GT | 5.30 | 2.60 | 2.33 | 2.12 | 3656 | 2.45 | 1.20 | 1.08 | . 98 | 5CG8 | 3.35 | 1.64 | 1.48 | 1.34 | 6A58 | 3.80 | 1.86 | 1.67 | 1.52 | 6BY8 | 2.65 | 1.30 | 1.17 | 1.06 |
| 1 DN5 | 3.65 | 1.79 | 1.61 | 1.46 | 3 CY 5 | 3.05 | 1.49 | 1.34 | 1.22 | 5CLAA | 3.35 | 1.64 | 1.48 | 1.34 | 64511 | 5.00 | 2.45 | 2.20 | 2.00 | 6826 | 2.25 | 1.10 | . 99 | 90 |
| 1G3GT/ |  |  |  |  | 30G4 | 3.40 | 1.66 | 1.49 | 1.36 | $5 \mathrm{CM8}$ | 3.80 | 1.86 | 1.67 | 1.52 | GaT6 | 1.90 | . 93 | . 84 | . 76 | 6827 | 4.00 | 1.96 | 1.76 | 1.60 |
| 183GT | 2.90 | 1.42 | 1.28 | 1.16 | 3DK6 | 2.40 | 1.18 | 1.06 | . 96 | 5CO8 | 3.95 | 1.93 | 1.74 | 1.58 | GATBA | 3.80 | 1.86 | 1.67 | 1.52 | 6828 | 4.45 | 2.18 | 1.96 | 1.78 |
| $1 \mathrm{H2}$ | 3.05 | 1.49 | 1.34 | 1.22 | 3076A | 2.20 | 1.08 | . 97 | . 88 | 5C25 | 4.35 | 2.13 | 1.92 | 1.74 | GAU4GTA | 3.60 | 1.76 | 1.58 | 1.44 | $6 \mathrm{C4}$ | 1.85 | . 91 | . 81 | 74 |
| 1H5GT | 4.15 | 2.03 | 1.83 | 1.66 | 3 D 24 | 4.10 | 2.01 | 1.81 | 1.64 | 5DM8 | 5.10 | 2.50 | 2.24 | 2.04 | 6AU5GT | 4.30 | 2.11 | 1.90 | 1.72 | 655 | 4.25 | 2.08 | 1.87 | 1.70 |
| 113 | 2.90 | 1.42 | 1.28 | 1.16 | 3EA5 | 2.85 | 1.40 | 1.26 | 1.14 | 5014 | 2.65 | 1.30 | 1.17 | 1.06 | GAUG | 2.10 | 1.03 | . 93 | . 84 | $6 \mathrm{C6}$ | 8.30 | 4.07 | 3.66 | 3.32 |
| 11.3 | 2.90 | 1.42 | 1.28 | 1.16 | 3EH7 | 2.75 | 1.35 | 1.22 | 1.10 | 5EAB | 3.15 | 1.54 | 1.39 | 1.26 | 6AU84 | 3.50 | 1.71 | 1.55 | 1.40 | 6C8G | 8.55 | 4.19 | 3.77 | 3.42 |
| 116 | 6.80 | 3.33 | 3.00 | 2.72 | 3EJ7 | 2.75 | 1.35 | 1.22 | 1.10 | 5ES8 | 5.80 | 2.84 | 2.56 | 2.32 | 6AV5GA | 4.20 | 2.06 | 1.85 | 1.68 | $6 \mathrm{C9}$ | 5.80 | 2.84 | 2.56 | 2.32 |
| 1LA4 | 8.45 | 4.14 | 3.73 | 3.38 | 3ER5 | 3.50 | 1.71 | 1.55 | 1.40 | 5EU8 | 3.35 | 1.64 | 1.48 | 1.34 | GAV6 | 1.65 | . 80 | . 73 | . 66 | $6 \mathrm{6C10}$ | 3.00 | 1.93 | 1.74 | 1.58 |
| 1LAG | 6.20 | 3.04 | 2.73 | 2.48 | 3F55 | 3.05 | 1.49 | 1.34 | 1.22 | 5EW6 | 2.65 | 1.30 | 1.17 | 1.06 | 6AV11 | 3.00 | 1.93 | 1.74 | 1.58 | SCA4 | 2.10 | 1.03 | 93 | 84 |
| 1L84 | 865 | 4.24 | 3.82 | 3.45 | $36 \times 5$ | 4.05 | 1.98 | 1.78 | 1.62 | 5 F67 | 2.75 | 1.35 | 1.22 | 1.10 | 6AWBA | 3.70 | 1.81 | 1.63 | 1.48 | 6CA5 | 3.15 | 1.54 | 1.39 | 1.26 |
| 1166 | 8.30 | 4.07 | 3.66 | 3.32 | 3658/ |  |  |  |  | $5 F V 8$ | 3.15 | 1.54 | 1.39 | 1.26 | GAX3 | 2.70 | 1.32 | 1.19 | 1.08 | $6 \mathrm{CA7}$ | 5.20 | 2.55 | 2.30 | 2.08 |
| 1LE3 | 7.00 | 3.43 | 3.09 | 2.80 | 3 Bu | 3.10 | 1.52 | 1.37 | 1.24 | 5GH8 | 3.95 | 1.93 | 1.74 | 1.58 | GAX4GTB | 2.65 | 1.30 | 1.17 | 1.06 | 6CB5A | 8.25 | 4.04 | 3.64 | 3.30 |
| 1165 | 6.80 | 3.33 | 3.00 | 2.72 | 3HA5 | 4.05 | 1.98 | 1.78 | 1.62 | 5GM6 | 2.65 | 1.30 | 1.17 | 1.06 | 6AX5GT | 2.95 | 1.44 | 1.30 | 1.18 | 6CB6A | 2.25 | 1.10 | . 99 | . 90 |
| 1LH4 | 8.05 | 3.94 | 3.55 | 3.22 | 31.4 | 6.40 | 3.14 | 2.83 | 2.56 | 5GX6 | 2.30 | 1.13 | 1.02 | . 92 | $64 \times 8$ | 3.70 | 1.81 | 1.63 | 1.48 | 6DCGGA | 5.80 | 2.84 | 2.56 | 2.32 |
| 1LN5 | 8.15 | 3.99 | 3.59 | 3.26 | 304 | 3.55 | 1.74 | 1.57 | 1.42 | 5HG8 | 4.45 | 2.18 | 1.96 | 1.78 | 6AY3 | 2.75 | 1.35 | 1.22 | 1.10 | 6CE5 | 2.35 | 1.15 | 1.03 | . 94 |
| 1N2A | 4.65 | 2.27 | 2.05 | 1.86 | 305GT | 5.65 | 2.77 | 2.49 | 2.26 | 516 | 2.85 | 1.40 | 1.26 | 1.14 | GAY11 | 2.95 | 1.91 | 1.72 | 1.56 | 6CF6 | 2.55 | 1.25 | 1.12 | 1.02 |
| 1N5GT | 5.20 | 2.55 | 2.30 | 2.08 | 354 | 3.20 | 1.57 | 1.41 | 1.28 | 5KE8 | 5.05 | 2.47 | 2.22 | 2.02 | 6 628 | 5.55 | 2.71 | 2.44 | 2.22 | 6CG7 | 2.45 | 1.20 | 1.08 | . 98 |
| 1R4/1294 | 7.75 | 3.80 | 3.42 | 3.10 | 3 V 4 | 2.50 | 1.22 | 1.11 | 1.00 | 514 | 12.10 | 5.93 | 5.34 | 4.84 | 688 | 7.30 | 3.58 | 3.22 | 2.92 | 6CG8A | 3.30 | 1.62 | 1.46 | 1.32 |
| 1 R5 | 3.05 | 1.49 | 1.34 | 1.22 | 4AU6 | 2.35 | 1.15 | 1.03 | . 94 | 578 | 3.40 | 1.66 | 1.49 | 1.36 | 6810 | 3.50 | 1.71 | 1.55 | 1.40 | 6CH8 | 5.20 | 2.55 | 2.30 | 2.08 |
| 152A | 2.70 | 1.32 | 1.19 | 1.08 | 4AVG | 1.85 | 91 | 81 | .74 | 5046 | 2.10 | 1.03 | . 93 | . 84 | 6843 | 2.75 | 1.35 | 1.22 | 1.10 | $6 \mathrm{CK4}$ | 3.00 | 1.47 | 1.32 | 1.20 |
| 154 | 4.35 | 2.13 | 1.92 | 1.74 | 4BC5 | 2.35 | 1.15 | 1.03 | . 94 | $5 \cup 46 B$ | 2.10 | 1.03 | . 93 | . 84 | 68A6 | 2.00 | . 98 | . 88 | . 80 | $6 \mathrm{CL5}$ | 9.60 | 4.70 | 4.23 | 3.84 |
| 155 | 2.90 | 1.42 | 1.28 | 1.16 | 4 CB | 4.05 | 1.98 | 1.78 | 1.62 | $5 \cup 8$ | 3.30 | 1.62 | 1.46 | 1.32 | 6847 | 5.95 | 2.91 | 2.62 | 2.38 | GCL6 | 3.75 | 1.84 | 1.66 | 1.50 |
| 174 | 2.90 | 1.42 | 1.28 | 1.16 | 4BL8/ |  |  |  |  | 5V3A | 3.85 | 1.89 | 1.70 | 1.54 | 6BABA | 3.85 | 1.89 | 1.70 | 1.54 | 6CL8A | 3.15 | 1.54 | 1.39 | 1.26 |
| 104 | 2.90 | 1.42 | 1.28 | 1:16 | XCF80 | 2.55 | 1.25 | 1.12 | 1.02 | 5V4GA | 3.50 | 1.71 | 1.55 | 1.40 | 6BC4 | 5.35 | 2.62 | 2.35 | 2.14 | 6CM6 | 3.30 | 1.62 | 1.46 | 1.32 |
| 105 | 2.65 | 1.30 | 1.17 | 1.06 | 4BNG | 3.75 | 1.84 | 1.66 | 1.50 | 5VGGT | 2.40 | 1.18 | 1.06 | . 96 | 6BC5/ |  |  |  |  | $6 \mathrm{CM7}$ | 2.90 | 1.42 | 1.28 | 1.16 |
| 1v | 5.85 | 2.87 | 2.58 | 2.34 | 4807A | 4.00 | 1.96 | 1.76 | 1.60 | $5 \times 46$ | 3.35 | 1.64 | 1.48 | 1.34 | 6CE5 | 2.35 | 1.15 | 1.03 | . 94 | $6 \mathrm{CM8}$ | 4.25 | 2.08 | 1.87 | 1.70 |
| 1V2 | 2.10 | 1.03 | . 93 | . 84 | 4BS8 | 3.85 | 1.89 | 1.70 | 1.54 | $5 \times 8$ | 3.45 | 1.69 | 1.52 | 1.38 | 68C7 | 3.80 | 1.86 | 1.67 | 1.52 | 6CN7 | 2.90 | 1.42 | 1.28 | 1.16 |
| 1×2A | 3.05 | 1.49 | 1.34 | 1.22 | $4 \mathrm{BU8}$ | 3.10 | 1.52 | 1.37 | 1.24 | 5Y3GT | 1.75 | . 86 | . 77 | . 70 | 6BC8 | 4.00 | 1.96 | 1.76 | 1.60 | 6C04 | 3.00 | 1.47 | 1.32 | 1.20 |
| $1 \times 28$ | 3.05 | 1.49 | 1.34 | 1.22 | 4826 | 2.25 | 1.10 | . 99 | . 90 | 5Y4GA | 2.55 | 1.25 | 1.12 | 1.02 | 68D6 | 2.45 | 1.20 | 1.08 | . 98 | 6 608 | 3.50 | 1.71 | 1.55 | 1.40 |
| 243 | 10.50 | 5.15 | 4.64 | 4.20 | 4827 | 4.05 | 1.98 | 1.78 | 1.62 | 5Y4GT | 2.65 | 1.30 | 1.17 | 1.06 | 68D11 | 3.90 | 2.50 | 2.24 | 2.04 | 6CR6 | 2.40 | 1.18 | 1.06 | 96 |
| 2AF48 | 4.05 | 1.98 | 1.78 | 1.62 | $4 \mathrm{CB6}$ | 2.30 | 1.13 | 1.02 | .92 | 523 | 3.30 | 1.62 | 1.46 | 1.32 | 6BE3 | 3.00 | 1.47 | 1.32 | 1.20 | 6CS6 | 2.35 | 1.15 | 1.03 | . 94 |
| 2AN2 | 3.20 | 1.57 | 1.41 | 1.28 | 4CE5/ |  |  |  |  | 524 | 8.35 | 4.09 | 3.68 | 3.34 | 68E6 | 2.20 | 1.08 | . 97 | . 88 | 6 6S 7 | 2.95 | 1.44 | 1.30 | 1.18 |
| 2AS2 | 3.20 | 1.57 | 1.41 | 1.28 | 48 C 5 | 2.35 | 1.15 | 1.03 | . 94 | 647 | 8.50 | 4.17 | 3.75 | 3.40 | 6BF5 | 3.55 | 1.74 | 1.57 | 1.42 | 6CU5 | 2.35 | 1.15 | 1.08 | . 94 |
| 28N4A | 2.55 | 1.25 | 1.12 | 1.02 | $4 \mathrm{CS6}$ | 2.35 | 1.15 | 1.03 | . 94 | 6 6A | 6.85 | 3.36 | 3.02 | 2.74 | 6856 | 1.80 | . 88 | . 79 | . 72 | 6CU6 | 4.35 | 2.13 | 1.92 | 1.74 |
| 2CW4 | 4.45 | 2.18 | 1.96 | 1.78 | $4 \mathrm{CY5}$ | 2.85 | 1.40 | 1.26 | 1.14 | 6ABGT | 8.60 | 4.21 | 3.79 | 3.44 | 6BF8 | 4.35 | 2.13 | 1.92 | 1.74 | 6CU8 | 4.15 | 2.03 | 1.83 | 1.66 |
| $2 \mathrm{CY5}$ | 3.05 | 1.49 | 1.34 | 1.22 | 4DE6 | 2.65 | 1.30 | 1.17 | 1.06 | GAB4 | 2.15 | 1.05 | . 94 | . 86 | 68F11 | 3.65 | 2.32 | 2.09 | 1.90 | 6CW4 | 4.45 | 2.18 | 1.96 | 1.78 |
| 20S4 | 4.45 | 2.18 | 1.96 | 1.78 | 4DT6A | 2.25 | 1.10 | . 99 | . 90 | 6AB5/ |  |  |  |  | 6BG6GA | 6.50 | 3.19 | 2.87 | 2.60 | 6CW5 | 3.60 | 1.76 | 1.58 | 1.44 |
| 2DV4 | 6.25 | 3.06 | 2.75 | 2.50 | 4EM7 | 3.80 | 1.86 | 1.67 | 1.52 | 6N5 | 8.05 | 3.94 | 3.55 | 3.22 | 6BH3 | 2.95 | 1.44 | 1.30 | 1.18 | ${ }_{6} \mathrm{CX8}$ | 3.85 | 1.89 | 1.70 | 1.54 |
| 2024 | 4.05 | 1.98 | 1.78 | 1.62 | 4EJ7 | 3.80 | 1.86 | 1.67 | 1.52 | 6 6AB7 | 8.25 | 4.04 | 3.64 | 3.30 | 68M6 | 2.70 | 1.32 | 1.19 | 1.08 | 6CY5 | 2.80 | 1.37 | 1.23 | 1.12 |
| 2EN5 | 2.10 | 1.03 | .93 | . 84 | 4ES8 | 4.60 | 2.25 | 2.03 | 1.84 | 6AC5GT | 6.25 | 3.06 | 2.75 | 2.50 | 68H8 | 3.65 | 1.79 | 1.61 | 1.46 | 6 CY 7 | 3.20 | 1.57 | 1.41 | 1.28 |
| 2ER5 | 3.50 | 1.71 | 1.55 | 1.38 | 4EW6 | 2.65 | 1.30 | 1.17 | 1.06 | 6AC7 | 5.10 | 2.50 | 2.24 | 2.04 | 6813 | 2.00 | 1.30 | 1.17 | 1.06 | 6C25 | 4.10 | 2.01 | 1.81 | 1.64 |
| 2FH5 | 3.05 | 1.49 | 1.34 | 1.22 | 46K5 | 4.15 | 2.03 | 1.83 | 1.66 | 6AD76 | 9.40 | 4.61 | 4.15 | 3.76 | 6816 | 2.60 | 1.27 | 1.14 | 1.04 | 606 | 7.80 | 3.82 | 3.44 | 3.12 |
| 2FO5A | 4.05 | 19 A | 1.78 | 1.62 | 4658/ |  |  |  |  | 6AF3 | 2.90 | 1.42 | 1.28 | 1.16 | 6817 | 3.15 | 1.54 | 1.39 | 1.26 | 6 CD 10 | 3.10 | 2.01 | 1.81 | 1.64 |
| 2FS5 | 3.10 | 1.52 | 1.37 | 1.24 | 4848 | 3.10 | 1.52 | 1.37 | 1.24 | 6AF4A | 4.00 | 1.96 | 1.76 | 1.60 | 6818 | 3.50 | 1.71 | 1.55 | 1.40 | 6DA4 | 2.70 | 1.32 | 1.19 | 1.08 |
| $2 F Y 5$ | 2.80 | 1.37 | 1.23 | 1.12 | $4 \mathrm{G25}$ | 2.40 | 1.18 | 1.06 | . 96 | 6AF6G | 6.20 | 3.04 | 2.73 | 2.48 | $68 \mathrm{K4}$ | 8.00 | 3.92 | 3.53 | 3.20 | 6045 | 2.80 | 1.37 | 1.23 | 1.12 |
| 2 GK 5 | 4.05 | 1.98 | 1.78 | 1.62 | 4HM6 | 2.40 | 1.18 | 1.06 | . 96 | 6AFII | 5.00 | 2.45 | 2.20 | 2.00 | 68K5 | 3.70 | 1.81 | 1.63 | 1.48 | 6085 | 5.30 | 2.60 | 2.33 | 2.12 |
| $2 \mathrm{CU5}$ | 4.25 | 2.08 | 1.87 | 1.70 | 4HS8 | 3.05 | 1.49 | 1.34 | 1.22 | 6465 | 2.75 | 1.35 | 1.22 | 1.10 | 68678 | 3.40 | 1.66 | 1.49 | 1.36 | $60 C 6$ | 3.40 | 1.66 | 1.49 | 1.36 |
| 3A2 | 4.85 | 2.38 | 2.14 | 1.94 | 4JC6 | 3.50 | 1.71 | 1.55 | 1.40 | 6AG7 | 5.90 | 2.89 | 2.60 | 2.36 | 68L7GTA | 3.95 | 1.93 | 1.74 | 1.58 | 60 CB | 3.20 | 1.57 | 1.41 | 1.28 |
| 383 | 3.40 | 1.66 | 1.49 | 1.36 | 4JD6 | 3.50 | 1.71 | 1.55 | t. 40 | 6AG11 | 2.95 | 1.91 | 1.72 | 1.56 | 6BL8 | 3.95 | 1.93 | 1.74 | 1.58 | 6DE4 | 2.80 | 1.37 | 1.23 | 1.12 |
| 3AF4A | 4.05 | 1.98 | 1.78 | 1.62 | 5 M M | 3.55 | 1.74 | 1.57 | 1.42 | 6AH4GT | 3.45 | 1.69 | 1.52 | 1.38 | 6BM8 | 3.05 | 1.49 | 1.34 | 1.22 | 60E6 | 2.55 | 1.25 | 1.12 | 1.02 |
| 3AL5 | 2.05 | 1.01 | . 91 | . 82 | 5AN8 | 4.00 | 1.96 | 1.76 | 1.60 | 6AM6 | 4.70 | 2.30 | 2.07 | 1.88 | $68 \mathrm{N4}$ | 2.50 | 1.22 | 1.11 | 1.00 | GDE7 | 3.40 | 1.66 | 1.49 | 1.36 |
| 3 AT2 | 3.20 | 1.57 | 1.41 | 1.28 | 5405 | 2.20 | 1.08 | . 97 | . 88 | 6 AK5 | 4.30 | 2.11 | 1.90 | 1.72 | 6BN4A | 2.50 | 1.22 | 1.11 | 1.00 | 60G6GT | 2.50 | 1.22 | 1.11 | 1.00 |
| 3AUS | 2.35 | 1.15 | 1.03 | . 94 | 5AR4 | 4.50 | 2.20 | 1.99 | 1.80 | 6AL3 | 2.75 | 1.35 | 1.22 | 1.10 | 6BN6 | 3.20 | 1.57 | 1.41 | 1.28 | 6018 | 5.00 | 2.45 | 2.20 | 2.00 |
| 3 3V6 | 1.90 | . 93 | . 84 | . 76 | 5AS4A | 3.30 | 1.62 | 1.46 | 1.32 | 6AL5 | 1.85 | . 91 | . 81 | . 74 | 6BN8 | 3.05 | 1.49 | 1.34 | 1.22 | 60K6 | 2.35 | 1.15 | 1.03 | . 94 |
| 3AW3 | 3.40 | 1.66 | 1.49 | 1.36 | 5AS8 | 4.15 | 2.03 | 1.83 | 1.66 | 6AL7GT | 5.75 | 2.82 | - 53 | 2.30 | 6825 | 2.40 | 1.18 | 1.06 | . 96 | 6DM4 | 2.75 | 1.35 | 1.22 | 1.10 |
| 382 | 9.85 | 4.82 | 4.35 | 3.94 | 5 518 | 3.65 | 1.79 | 1.61 | 1.46 | 64111 | 4.40 | 2.16 | 1.94 | 1.76 | 6B066A | 4.35 | 2.13 | 1.92 | 1.74 | 60N6 | 7.45 | 3.65 | 3.29 | 2.98 |
| 3846 | 2.50 | 1.22 | 1.11 | 1.00 | 5AU4 | 3.40 | 1.66 | 1.49 | 1.36 | 6AM4 | 5.90 | 2.89 | 2.60 | 2.36 | 6806G78/ |  |  |  |  | 60N7 | 3.50 | 1.71 | 1.55 | 1.40 |
| 38C5/ |  |  |  |  | 5AV8 | 4.05 | 1.98 | 1.78 | 1.62 | GAM8A | 3.45 | 1.69 | 1.52 | 1.38 | 6CU6 | 4.35 | 2.13 | 1.92 | 1.74 | 6004 | 2.65 | 1.30 | 1.17 | 1.06 |
| 3CE5 | 2.35 | 1.15 | 1.03 | .94 | 5AW4 | 2.80 | 1.37 | 1.23 | 1.12 | GAN4 | 6.55 | 3.20 | 2.88 | 2.62 | 6807A | 3.95 | 1.93 | 1.74 | 1.58 | 6005 | 7.70 | 3.77 | 3.39 | 3.08 |



RECEIVING TUBES (CONT.)

| Tube Type | Mir. <br> Sugg. Net Each Asst. List* 1.9 10-49 50.Up |  |  |  | Tube Type | $\begin{gathered} \text { Mfr } \\ \text { Sugg } \\ \text { List } \end{gathered}$ |  | $\begin{aligned} & \text { Each Asst. } \\ & 10-4950-U p \end{aligned}$ |  | Tube Type | Mir. <br> Sugg. Net Each Asst. <br> List* 1.9 10-49 50.Up |  |  |  | Mfr. <br> Sugg. Net Each Asst. List* $1.9 \quad 10.49$ 50.Up |  |  |  |  | Tube Type |  | $\begin{aligned} & \text { Net } \\ & 1.9 \end{aligned}$ | $\begin{gathered} \text { Each Asst } \\ 10-49 \text { 50-UD } \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $17 E W 8$ | 2.80 | 1.37 | 1.23 | 1.12 | $19 \times 8$ | 4.35 | 2.13 | 1.92 | 1.74 | 30AG11 | 3.00 | 1.93 | 1.74 | 1.58 | 50FES | 3.65 | 1.79 | 1.61 | 1.46 | 117L7GT/ |  |  |  |  |
| 17GE 5 | 4.45 | 2.18 | 1.96 | 1.78 | 20 E 27 | 3.65 | 1.79 | 1.61 | 1.46 | 32ETS | 2.20 | 1.08 | . 97 | . 88 | 50FK5 | 2.30 | 1.13 | 1.02 | . 92 | M76T | 10.15 | 4.97 | 4.47 | 4.06 |
| 17615 | 4.60 | 2.25 | 2.03 | 1.84 | 21675 | 4.70 | 2.30 | 2.07 | 1.88 | 32ET5A | 2.20 | 1.08 | . 97 | 88 | 50HC6 | 2.30 | 1.13 | 1.02 | . 92 | 117N7GT | 13.60 | 6.66 | 6.00 | 5.44 |
| 17 GT 5 | 4.25 | 2.08 | 1.87 | 1.70 | 228 BH | 3.05 | 1.49 | 1.34 | 1.22 | $34 \mathrm{GO5}$ | 2.10 | 1.03 | . 93 | . 84 | SOHK6 | 2.30 | 1.13 | 1.02 | . 92 | 117P7GT | 13.60 | 6.66 | 6.00 | 5.44 |
| $17 \mathrm{GV5}$ | 4.45 | 2.18 | 1.96 | 1.78 | 22054 | 3.10 | 1.52 | 1.37 | 1.24 | 34G05A | 2.10 | 1.03 | . 93 | 84 | 50L6GT | 2.55 | 1.25 | 1.12 | 1.02 | 11723 | 4.35 | 2.13 | 1.92 | 1.74 |
| 17GW6 | 4.25 | 2.08 | 1.87 | 1.70 | 22 J66 | 6.10 | 2.99 | 2.69 | 2.44 | 35A5 | 6.00 | 2.94 | 2.65 | 2.40 | $50 \times 6$ | 6.20 | 3.04 | 2.73 | 2.48 | 11726 GT | 7.10 | 3.48 | 3.13 | 2.84 |
| 17H3 | 2.50 | 1.22 | 1.11 | 1.00 | 24 A | 6.60 | 3.23 | 2.91 | 2.64 | 35 B 5 | 3.40 | 1.66 | 1.49 | 1.36 | 50Y6GT | 4.50 | 2.20 | 1.99 | 1.80 | EF183/ |  |  |  |  |
| $17 \mathrm{JB6}$ | 4.60 | 2.25 | 2.03 | 1.84 | 25AV5GA | 4.25 | 2.08 | 1.87 | 1.70 | 35 C 5 | 2.15 | 1.05 | . 94 | . 86 | 50Y76T | 4.50 | 2.20 | 1.99 | 1.80 | 6EH7 | 3.80 | 1.86 | 1.67 | 1.52 |
| 17128 | 3.80 | 1.86 | 1.67 | 1.52 | 25AX4GT | 2.90 | 1.42 | 1.28 | 1.16 | 35028 | 3.45 | 1.69 | 1.52 | 1.38 | $60 \mathrm{FX5}$ | 2.50 | 1.22 | 1.11 | 1.00 | EF184/ |  |  |  |  |
| 18 A5 | 4.10 | 2.01 | 1.81 | 1.64 | 25BK5 | 3.65 | 1.79 | 1.61 | 1.46 | 35EH5 | 2.20 | 1.08 | . 97 | . 88 | 70L76T | 10.15 | 4.97 | 4.47 | 4.06 | 6EJ7 | 3.80 | 1.86 | 1.67 | 1.52 |
| 18FW6 | 2.15 | 1.05 | . 94 | . 86 | 2580664 | 4.60 | 2.25 | 2.03 | 1.84 | $35 \mathrm{GL6}$ | 2.50 | 1.22 | 1.11 | 1.00 | 75 | 6.80 | 3.33 | 3.00 | 2.72 | 5879 |  |  |  |  |
| 18FW6A | 2.15 | 1.05 | . 94 | . 86 | 25Ba66TB/ |  |  |  |  | $35 \mathrm{HB8}$ | 4.55 | 2.23 | 2.01 | 1.82 | 78 | 7.20 | 3.53 | 3.18 | 2.88 | 5881 | 6.40 | 3.14 | 2.83 | 2.56 |
| $185 \times 6$ | 2.15 | 1.05 | . 94 | . 86 | $25 \mathrm{CU6}$ | 4.65 | 2.27 | 2.05 | 1.86 | 3516 GT | 2.40 | 1.18 | 1.06 | . 96 | 80 | 4.20 | 2.06 | 1.85 | 1.68 | 6973 | 4.50 | 2.20 | 1.99 | 1.80 |
| $185 \times 64$ | 2.15 | 1.05 | . 94 | . 86 | ${ }_{25}^{25 C 5}$ | 2.15 | 1.05 | [.94 | . 86 | 35 W 4 | 1.10 | . 54 | . 49 | . 44 | ECF80/ | 4.20 | 2.06 | 1.85 | 1.68 | 7025 | 2.95 | 1.44 | 1.30 | 1.18 |
| 18FY6 18 FYGA | 1.65 1.65 | 88 | 73 | . 66 | 25CA5 25 CDGGB | 3.10 5 | 1.52 | 1.37 2.58 | 1.24 | 3574 3573 | 4.80 | 2.35 | 2.11 | 1.92 | ECF80/ |  |  |  |  | 7027a | 6.60 | 3.23 | 2.91 | 2.64 |
| 18FY6A | 1.65 2.15 | -80 | . 73 | . 66 | 25CD6GB 250K4 | 5.85 1.75 | 2.87 .86 | (2.58 | 2.34 .70 | 3523 3524 GT | 5.00 2.70 | 2.45 1.32 | 2.20 1.19 | 2.00 1.08 | 6BL8 | 3.95 | 1.93 | 1.74 | 1.58 | 7189 | 2.85 | 1.40 | 1.26 | 1.14 |
| 19au4 | 3.50 | 1.71 | 1.55 | 1.40 | 250N6 | 6.35 | 3.12 | 2.80 | 2.54 | 3525GT | 1.85 | . 91 | . 81 | . 74 | 6 V 4 | 1.60 | . 78 | . 71 | 64 | 7189 | 2.85 3.70 | 1.40 | 1.26 | 1.14 |
| I9AU4GTA | 3.45 | 1.69 | 1.52 | 1.38 | 25EC6 | 5.70 | 2.79 | 2.51 | 2.28 | 36Am3A | 1.60 | . 78 | . 71 | . 64 | EM81/ |  |  |  |  | 7247 |  |  |  | 1.48 |
| 19BG6GA | 6.50 | 3.19 | 2.87 | 2.60 | 25EH5 | 2.30 | 1.13 | 1.02 | . 92 | 36AM3B | 1.60 | . 78 | . 71 | . 64 | 6045 | 2.80 | 1.37 | 1.23 | 1,12 | 7355 | 3.05 |  |  | 1.22 |
| $19 \mathrm{CL8A}$ | 3.50 | 1.71 | 1.55 | 1.40 | 25F5A | 4.05 | 1.98 | 1.78 | 1.62 | 41 | 5.80 | 2.84 | 2.56 | 2.32 | ECL82/ |  |  |  |  | 7408 | 2.15 | 1.05 | 94 |  |
| 19EA8 | 3.40 | 1.66 | 1.49 | 1.36 | 2516 | 8.85 | 4.34 | 3.91 | 3.54 | 42 | 5.15 | 2.52 | 2.26 | 2.06 | 6BM8 | 3.05 | 1.49 | 1.34 | 1.22 | 7543 | 3.10 | 1.52 | 1.37 | 1.24 |
| $19 E 28$ | 3.80 | 1.86 | 1.67 | 1.52 | 25L6GT | 2.65 | 1.30 | 1.17 | 1.06 | 43 | 7.60 | 3.72 | 3.35 | 3.04; |  |  |  |  |  | 75814 | 4.50 | 2.20 | 1.99 | 1.80 |
| $19 H R 6$ $19 H 56$ | 2.45 | 1.20 | 1.08 | . 98 | 25W4GT | 2.70 | 1.32 | 1.19 | 1.08 | 47 | 9.15 | 4.48 | 4.03 | 3.66 | 6 6G6 | 3.25 | 1.59 | 1.43 | 1.30 | 7591 | 2.95 | 1.44 | 1.30 | 1.18 |
| $19 \mathrm{HS6}$ $19 \mathrm{HV8}$ | 2.55 3.80 | 1.25 | 1.12 | 1.02 1.52 | ${ }_{25 W 665}$ | 3.25 4.60 | 1.59 2.25 | 1.43 2.03 | 1.30 1.84 | 50A1 | 6.65 6.25 | 3.25 3.06 | 2.93 2.75 | 2.66 | 84/624 | 3.25 | 1.59 |  | 1.30 | 7695 | 4.40 | 2.16 | 1.94 | 1.76 |
| 1916 | 3.95 | 1.93 | 1.74 | 1.58 | 2526GT | 3.05 | 1.49 | 1.34 | 1.22 | 5085 | 6.25 2.80 | 1.06 | 1.75 | 2.50 1.12 | ECC85/ |  |  |  |  | 7868 | 3.30 |  |  | 1.32 |
| 19JNB | 3.20 | 1.57 | 1.41 | 1.28 | 27 | 5.40 | 2.64 | 2.38 | 2.16 | 50 C 5 | 2.15 | 1.05 | . 94 | . 86 | GAQ8 | 3.20 | 1.57 | 1.41 | 1.28 |  |  |  |  |  |
| 19KG8 | 2.80 | 1.37 |  | 1.12 | 276B5/ |  |  |  |  | 50DC4 | 1.90 | . 93 | . 84 | .76 | HCCE5 |  |  |  |  |  |  |  |  |  |
| 1978 | 3.50 | 1.71 | 1.55 | 1.40 | PL500 | 3.95 | 1.93 | 1.74 | 1.58 | 50EH5 | 2.30 | 1.13 | 1.02 | . 92 | 17EW8 | 2.80 | 1.37 | 1.23 | 1.12 |  |  |  |  |  |

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This new series of selected individually lab-tested rubes reatures rube to-tube uniformity, sec-tion-to-section uniformity to the most stringent specifications. Hum, nolse, microphonics and distortion kept to absolute minimum-life to the maximum. Gold-protected pins. Individual plastic foam cushion packing. Any tube failing to give 10,000 hours of effective performance within 2 vears from purchase may be returned for no charge reolacement. Avg. Shpg. Wt., 802 .

| Stock $\mathrm{No} .$ | 10M Type Ne. | Net <br> Each | Stock No. | 10M Type No. | Net Each | Stock No. | 10M Type No. | $\begin{gathered} \text { Net } \\ \text { Each } \end{gathered}$ | Stock Ne. | ISM Type No. | Net <br> Eack |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TU-500 | EABC80/6AK8 | 2.80 | TU-501 | ECC83/12AX7 | 2.20 | TU-514 | EF86/6267 | 2.50 | TU-521 | EK90/6BE6 | 2.10 |
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| TU. 503 | EBF89/60C8 | 2.65 | TU-510 | ECC91/6J6 | 2.55 | TU-517 | EF94/6AU6 | 2.05 | TU.524 | E195/6015 | 2.55 |
| TU-504 | EC90/6C4 | 2.85 | TU-511 | ECF $80 / 6 \mathrm{BL} 8$ | 3.05 | TU-518 | EF95/6AKS | 3.25 | TU-525 | HBC91/12AV6 | 1.95 |
| TU. 505 | ECC81/12AT7 | 2.55 | TU.512 | ECH8I/6AJ8 | 2.65 | TU-519 | EF183/6EH7 | 2.60 | TU. 526 | 7025 | 2.35 |
| TU. 506 | ECC82/12AU7 | 2.20 | TU-513 | ECLB0/5AB8 | 2.75 | TU-520 | EF184/6EJ7 | 2.60 |  |  |  |

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| CL.B749 | 12AU7, ECC82, 5814, 6067, 6189, 6680 | 2.80 |
| ML.B759 | 12AX7, ECC83, 5751, 6057, 6681, 7025 | 3.00 |
| CL. 0717 | 6AL5, EB91, 5726, 605e, 6097, 6663 | 3.80 |
| GL-KT66 | 6L6, EL37, 5881, 5932, 1614, 7027 | 4.50 |
| CL-KT77 | 6L6GB, EL34, 6CA7, 7581 | 5.50 |
| GL-KT88 | 6L6GC, 6550, 7027A | 6.95 |
| GL-N709 | 6BQ5, EL84 | 3.80 |
| CL-U52 | 5U4G, 5T4, 5931 | 2.90 |
| GL. 477 | 5AR4, G230, G232, G234, 5V4 | 3.70 |
| CL. $\cup 707$ | 6X4, E290, 5993. 6063, 6202,6203 | 3.40 |
| CL.U709 | 6CA4, E281 | 3.20 |
| GL-2729 | EF86, 6267, 6CF8 | 3.00 |
| GL.N709.MP* | Same Types as GL.N709 | 8.60 |
| GL-KTE6.MP* | Same Types as GL-KT66 | 10.00 |
| CL-K777.MP* | Same Types as GL.KT77 | 12.00 |
| CL.KTAB-MP* | Same Types as GL-KT88 | 14.90 |



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## LAFAYETTE SEMICONDUCTOR SPECIALS <br> FOR EXPERIMENTER KIT BUILDER, HOBBYIST QUALITY SEMICONDUCTORS AT ECONOMY 'PACKAGE' PRICES



## LAFAYETTE SPECIAL <br> SILICDN POWER RECTIFIERS



Top hat lead type silicon rectifiers excellent for TV Radio and power supplies as half-wave, full wave rectifiers, and voltage doublers. Type A: $750 \mathrm{Ma}, 400 \mathrm{PIV}$ © $25^{\circ} \mathrm{C}$
SP. 196 Shpg. wt., 4 oz.
Net .57
10 for 5.13; 100 for 47.00
Type 8: $750 \mathrm{Ma}, 200 \mathrm{PIV}$ @ $25^{\circ} \mathrm{C}$. $500 \mathrm{Ma}, 200 \mathrm{PIV} @ 90^{\circ} \mathrm{C}$.
SP-197 Shpg, wt., 4 oz.
10 for $4.25,100$ Net .48


## PNP AUDIO TRANSISTOR

## AS LOW AS



General audio type PNP transistor for experimenters and hobbyists, for code practice oscillators and similap small signal devices. In new JETC 30 welded case, \$P. 146

Net, singly, each 39

POPULAR POWER TRANSISTORS TESTED
TO MEET SPECIFICATIONS MEDIUM POWER TRANSISTORS Beta $=30$ BVcer $=36$ Volts: Shpg. wi., 12 or Similar to: 2N155, 2N176, 2N235, 2N242, 2N255, 2N256, 2N301, 2N307 2N554, AR-S, CTP-1104, TS' 176, etc.
176. etc

SP-147 Medium Power
Transistor Net ea. . 65


HIGH POWER TRANSISTORS
Beta $=50$. BYcer- $\mathbf{3 6}$ Volts Min Shog wi
Beta $=50$; BVcer $=36$ Volts Min. Shpg. wt., 12 02. Similar to. 2N157A, 2N176B, 2N235A, B, 2N257, 2N285A, 2N301A, 2N352. 2N399, etc.
SP-277 High Power Transistor
Net ea. . 69
In lots of 100 . Each
NEW! PHOTO-MULTIPLIER POWER

## TRANSISTOR

## A COMPLETE PHOTOELECTRIC

 SYSTEM IN ONE UNIT- photo electric cell
- power transistor amplifier
- electronic relar


## 17

## 79

Complete with Instructiuns, Data and Diagrams for photo control systems, photo-electronic amplifiers; Relays. Alarms, etc. Shipg. wt. 6 oz.
SP-256
Ea. Net $1.79 \quad 3$ for 4.77

## 30 MC HIGH GAIN TRANSISTOR



Migh Quallity PNP RF transistor-Excellent for 27MC Citizens Band Walkie Talkie Transceivers, etc. 30 to 35 MC. Average Beta - 25. Shpg. wt., 6 ol.
\$p-271

GENERAL PURPOSE DIODES
EXCELLENT DETECTOR FOR TRANSISTOR AND VACUUM TUBE RADIO RECEIVERS


SP. 148 General Purpose Diode Net .10 each; 10 for .90
HIGH POWER STUD-MOUNT SILICON RECTIFIERS
12 AMPERE 200 PIV
SILICON RECTIFIER
$11 /{ }^{\prime \prime}$ long overall, Ko hex. ShpR. wt., 6 oz.
SP. 267 Net. ea. 1.09
12 AMPERE 400 PIV
SILICON RECTIFIER
$11 /{ }^{\prime \prime}$.ong overalt, $\mathrm{K} \mathrm{m}^{\prime \prime}$ hex. Shpg. wt., 602. 10 for for $17.50 \quad$ Applications
20 AMPERE 400 PIV SILICON RECTIFIER $11 / /^{\prime \prime}$ long overall, "1/i" hex. Shpg, wt., 8 oz. SP-269

Net. ea, 2.98; 10 for 26.00
50 AMPERE 50 PIV SILICON RECTIFIER
110" hex. Shpg. wt. 10 oz
SP-270
Net. ea, 3.50; 10 for 30.00

## RECTIFIER MOUNTING KITS

Consist of 2 Mica Washers, 1 plated nut, 1 Tefion Washer, 1 Plated Washer, 1 Connector lug. Shpg. wt., 401.

SP-272 For K"" Hex. Base Net. ea. .17; 10 for 1.59 SP-273 For "1/s" Hex. Base Net. ea, .27; 10 for 2.49 SP. 274 For 1 1/4" Hex. Base Net. ea. .35; 10 for 3.15



TI SILICON CONTROLLEO RECTIFIERS


TI SILICON POWER REGULATOR-
SINGLE ANOOE
Types are Anode to stud configuration. For Cathode to stud add suffix "R" to type no. (i.e., IN2970R.) Suffix "A " $=\overline{\overline{2}} \pm \frac{10}{}$

| Type | 1.24 | 25.99 | $\begin{aligned} & 100 \cdot \\ & 999 \end{aligned}$ | Type | 1.24 | 25.99 | $999$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1N2970 | 5.85 | 5.50 | 4.40 | 1N300 | 5.85 | 5.50 | 4.40 |
| 1N2971 | 5.85 | 5.50 | 4.40 | 1N3005 | 5.85 | 5.50 | 40 |
| 1N2972 | 5.85 | 5.50 | 4.40 | 1N3007 | 6.45 | 6.05 | 4.85 |
| 1N2973 | 5,85 | 5.50 | 4.40 | 1N3008 | 6.45 | 6.05 | . |
| 1 N 2974 | 5.85 | 5.50 | 4.40 | 1N3009 | 6.45 | 6.05 | 4.85 |
| 1 N2975 | 5.85 | 5.50 | 4.40 | 1N3011 | 6.45 | 6.05 | 4.85 |
| 1N2976 | 5.85 | 5.50 | 4.40 | 1N3012 | 6.45 | 6.05 | 4.85 |
| 1 N 2977 | 5.85 | 5.50 | 4.40 | 1N3014 | 6.45 | 6.05 | 4.85 |
| 1N2979 | 5.85 | 5.50 | 4.40 |  | 6.45 | . 05 |  |
| 1N29 | 5.85 | 5. | 4. |  |  |  |  |
| 1 N2982 | 5.58 | 5.50 | 4.40 | IN2970A | 7. | 6.75 |  |
| 1 N 2984 | 5.85 | 5.50 | 4.40 | ru |  |  |  |
| 1N2985 | 5.85 | 5.50 | 4.40 4.40 |  | 7.2 |  |  |
| 1N2986 | 5.85 | 5.50 5.50 | 4.40 | insolia | 7.20 | . 7 |  |
| 89 | 5.85 | 5.50 | 4.40 4.40 | 2970 |  |  |  |
| 1N2990 | 5.85 | 5.50 | 4.40 | thru |  |  |  |
| 1N2991 | 5.85 | 5.50 | 4.40 | 1N30118 |  |  |  |
| 1N2992 | 5.85 | 5.50 | 4.40 |  |  |  |  |
| 1N2993 | 5.85 | 5.50 | 4.40 | 3012 | 9.80 | 9.20 |  |
| $1 \times 2995$ | 5.85 | 5.50 | 4.40 | thru |  |  |  |
| 1 N2997 | 5.85 | 5.50 | 4.40 | 1N3015 | 9.80 | 9.20 |  |
| 1 N2999 | 5.85 | 5.50 | 4.40 | 1N3015 |  | 9.2 |  |
| 1 N 3000 | 5.85 | 5.50 | 4.40 | 1N30128 |  |  |  |
| 1N3001 | 5.85 | 5.50 | 4.40 |  |  |  |  |
| 1N3002 | 5.85 5.85 | 5.50 | 4.40 |  |  |  |  |
| 30 | 5. | 5. | 4 | 1N30 |  |  |  |

## TI DIFFUSED SILICON 1 WATT REGULATORS

Tolerance $\pm 20 \%$; Type

| Type | 1.99 | 100.999 | Type | 1.99 | 100.299 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1N3016 | 2.95 | 2.20 | 1N3046 | 3.55 | 2.65 |
| 1N3017 | 2.95 | 2.20 | IN3047 | 3.55 | 2.65 |
| 1N3018 | 2.95 | 2.20 | 1 N 3048 | 3.55 | 2.65 |
| 1N3019 | 2.95 | 2.20 | 1N3049 | 3.55 | 2.65 |
| 1N3020 | 2.95 | 2.20 | 1N3050 | 3.55 | 2.65 |
| 1N3021 | 2.95 | 2.20 | 1 N 3051 | 3.55 | 2.65 |
| 1N3022 | 2.95 | 2.20 |  |  |  |
| 1 N 3023 | 2.95 | 2.20 | 1N3016A | 3.25 | 2.45 |
| 1N3024 | 2.95 | 2.20 |  |  |  |
| 1N3025 | 2.95 | 2.20 | thre |  |  |
| 1N3026 | 2.95 | 2.20 | 1N3044A | 3.25 | 2.45 |
| 1N3027 | 2.95 | 2.20 |  |  |  |
| 1N3028 | 2.95 | 2.20 | 1N30168 | 3.85 | 2.90 |
| 1N3029 | 2.95 | 2.20 | thru |  |  |
| 1N3030 | 2.95 | 2.20 | 1N30308 |  |  |
| 1N3031 | 2.95 | 2.20 | 1N30308 | 3.85 | 2.90 |
| 1N3032 | 2.95 | 2.20 |  |  |  |
| 1N3033 | 2.95 | 2.20 | 1N30318 | 4.70 | 3.50 |
| 1 N3034 | 2.95 | 2.20 | thru |  |  |
| 1N3035 | 2.95 | 2.20 | IN30448 | 4.70 | 3.50 |
| 1 N 3036 | 2.95 | 2.20 |  |  |  |
| 1 N3037 | 2.95 | 2.20 |  | 5.20 |  |
| 1N3038 | 2.95 | 2.20 |  | 5.20 | 3.90 |
| 1 N3039 | 2.95 | 2.20 | thru |  |  |
| 1N3040 | 2.95 | 2.20 | IN3051A | 5.20 | 3.90 |
| 1N3041 | 2.95 | 2.20 |  |  |  |
| 1 N3042 | 2.95 | 2.20 | 1N3045B | 7.85 | 5.90 |
| 1N3043 | 2.95 | 2.20 |  |  |  |
| 1N3044 | 2.95 | 2.20 | ${ }_{\text {thry }}$ |  |  |
| 1N3045 | 3.55 | 2.65 | 1N30518 | 7.85 | 5.90 |

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## TI POWER REGULATORS AND DOUBLE

 ANODE CLIPPERS

# －PHILCO SEMICONDUCTORS PHILCO．  

Explanation of Symbols：LFC－Low Frequency Communications（smali signal amplifiers）：MFC－Medium Frequency Communications（Below 3 MC）；HFC High Frequency Communications（ 3 to 30 MC ）；VHFC－Very Nigh Frequency Communications（ 30 to 300 MC ）；UHFC－Ultra High Frequency Communications
（ 100 to 500 MC ）；GP－General Purpose；LSSW－L ow Speed Switching；MSSW－ Medium Speed Switching（Below 5 MC）；HSSW－High Speed Switching（Above 5 MC ）；HCSW－High Current Switching；CH－Chopper；C－Control；VA－Video Amplifier．

PHILCO GERMANIUM TRANSISTORS
All are MADT family except＝MAT；$\dagger=S 8 T_{i}=$ Power Amp； ${ }^{1}$＝Alioy Junction；＝Epitaxial Mesa；$=$ MIL Type $\ddagger=$ MFS

| TYPE | USE | NET | EACH 100. 999 | TYPE | USE | NET | EACH 100. 999 | TYPE | USE | NET | EACH 100. 999 | TYPE | USE | NET | $\begin{aligned} & \text { EACH } \\ & 100 . \\ & 999 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2N128 | HFC | 6.30 | 4.62 | 2N597T | LSSW | 2.63 | 1.93 | 2N1499品 | HSSW | 1.43 | 1.05 | 2N2402 |  | 2.25 | 1.60 |
| 2N128＊＊ | HFC | 6.68 | 4.90 | 2N5987 | LSSW | 2.55 | 1.87 | 2N1499A． | －HSSW | 1.73 | 1.27 | 2N2699 |  | 2.93 | 1.95 |
| 2N207T | LFC | 1.95 | 1.43 | 2N598\％ | LSSW | 3.08 | 2.26 | 2N1500 | HSSW | 6.38 | 4.68 | T0037．A | 027 | ． 75 | ． 55 |
| 2N207AT | LFC | 2.10 | 1.54 | 2N5997 | LSSW | 3.08 | 226 | 2N1500． |  | 7.35 | 5.35 | T0074T1 |  | 5.25 | 3.85 |
| 2N207B7 | LFC | 2.25 | 1.65 | 2N599才． | LSSW | 3.90 | 2.86 | 2N1726 | MFC | 1.05 | ． 77 | T1324 1 |  | 1.28 | ． 94 |
| 2N223T | LFC | 1.08 | ． 80 | 2N6007 | LSSW | 3.45 | 2.53 | 2N1727 | MFC | ． 98 | ． 72 | T1359 |  | 1.13 | 83 |
| 2N224\％ | GP | 1.10 | ． 81 | 2N600\％ | MSSW | 3.98 | 2.92 | 2N1728 | MFC | 1.02 | ． 75 | T1360t |  | ． 98 | 72 |
| 2N2254 | GP | 2.20 | 1.61 | 2N6D1T | MSSW | 3.83 | 2.81 | 2N1742 | UHFC | 2.93 | 2.15 | T1361 $\dagger$ |  | 1.05 | ． 77 |
| 2N2269 | GP | 1.02 | ． 75 | 2N6709 | GP | 3.38 | 2.48 | 2N1743 | UHFC | 2.87 | 2.11 | T1760 |  | 7.13 | 5.23 |
| 2N227\％ | GP | 2.04 | 1.50 | 2N6717 | GP | 4.13 | 3.03 | 2N1744 | UNFC | 2.25 | 1.65 | T1796\％ |  | 4.88 | 3.58 |
| 2N232t | MFC | 1.05 | ． 77 | 2N672才 | HCSW | 3.38 | 2.48 | 2N1745 | VHFC | 1.80 | 1.32 | T1826＊ |  | 1.80 | 1.32 |
| 2N240 | MSSW | 5.63 | 4.13 | 2N673T1 | HCSW | 4.13 | 3.03 | 2N1746 | HFC | ． 90 | ． 66 | T1905 |  | 2.93 | 2.15 |
| 2N240t． | MSSW | 5.93 | 4.35 | 2N674T1 | GP | 4.88 | 3.58 | 2N1747 | HFC | ． 98 | ． 72 | T1943 $\ddagger$ |  | 2.40 | 1.76 |
| 2N3174T1 | MFC | 4.05 | 2.97 | 2N675\％ | GP | 5.78 | 4.24 | 2N1748 | VA | 1.05 | ． 77 | T1960 |  | 1.47 | 1.08 |
| 2N344 $\dagger$ | HFC | 3.45 | 2.53 | 2N768 | HSSW | 5.85 | 4.29 | 2N1748A | VA | 1.13 | .83 | T2028 | UHFC | 4.50 | 3.30 |
| 2N345 $\dagger$ | HFC | 4.35 | 3.19 | 2N769 | HSSW | 6.75 | 4.95 | 2N1749 | VA | 1.43 | 1.05 | T2029 | UHFC | 3.30 | 2.42 |
| 2N346 $\dagger$ | HFC | 5.85 | 4.29 | 2N779 | HSSW | 5.63 | 4.13 | 2N1750 $\dagger$ | MFC | 1.17 | ． 86 | T2030 | UHFC | 2.25 | 1.65 |
| 2N386 | GP | 6.75 | 4.95 | 2N779A | HSSW | 3.53 | 2.59 | 2N1752 | MFC | ． 90 | ． 66 | T2038 |  | 1.50 | 1.10 |
| 2N387＊ | GP | 9.75 | 7.15 | 2N846 | HSSW | 5.40 | 3.96 | 2N1754 | HSSW | 1.35 | ． 99 | T2039 |  | 1.50 | 1.10 |
| 2N393＊ | MSSW | 4.35 | 3.19 | 2N846A | HSSW | 5.40 | 3.96 | 2N1785 | MFC | ． 90 | ． 68 | T2040 |  | 1.05 | ． 77 |
| 2N393＊＊ | MSSW | 4.73 | 3.45 | 2N976 |  | 4.35 | 3.19 | 2N1786 | MFC | ． 83 | ． 61 | T2122 |  | 4.20 | 3.08 |
| 2N3957 | MFC | ． 93 | ． 69 | 2N977 |  | 7.43 | 5.45 | 2N1787 | MFC | ． 90 | ． 66 | T2157 |  | 2.25 | 1.65 |
| 2N396ATI | MFC | 1.50 | 1.10 | 2N1122＊＊ | MSSW | 5.48 | 4.00 | 2N1788 | MFC | 1.20 | ． 88 | T2158 |  | 2.63 | 1.93 |
| 2N404T | MFC | ． 74 | ． 54 | 2N1122A | MSSW | 6.75 | 4.95 | 2N1789 | MFC | 1.13 | ． 83 | T2160 |  | 12.53 | 9.19 |
| 2N404T． | MFC | ． 94 | ． 62 | 2N1123 $\ddagger$ | LSSW | 3.30 | 2.42 | 2N1790 | MFC | 1.17 | ． 86 | T2176 |  | 2.99 | 2.19 |
| 2N4289 | MFC | 2.33 | 1.71 | 2N1124T | LFC | 1.95 | 1.43 | 2N1864 | MFC | 1.05 | ． 77 | T2250\＃ |  | 3.08 | 2.26 |
| 2N428t＊ | MFC | 2.93 | 1.95 | 2N1125才 | GP | 2.85 | 2.09 | 2N1865 | HFC | 1.05 | .77 | T2255T |  | 3.45 | 2.53 |
| 2N499 | VHFC | 3.58 | 2.90 | 2N11287 | LFC | 1.43 | 1.05 | 2N1866 | HFC | 1.13 | .83 | T2352 | VA | 4.35 | 3.19 |
| 2N499＊ | VHFC | 4.20 | 3.05 | 2N11297 | GP | 1.65 | 121 | 2N1867 | HFC | 1.10 | ． 81 | T2364 |  | 5.25 | 3.85 |
| 2N499A． | VHFC | 5.18 | 3.80 | 2N1130才 | GP | 1.43 | 1.05 | 2N1868 | VHFC | 1.88 | 1.38 | T2379 |  | 1.79 | 1.31 |
| 2N501 | HSSW | 6.38 | 4.65 | 2N1158 | VHFC | 5.25 | 3.85 | 2N2048 | VHFC | 1.80 | 1.32 | T2384 |  | 1.17 | ． 86 |
| 2N501A | HSSW | 7.35 | 5.35 | 2N1158A． | VHFC | 7.13 | 5.23 | 2N2180＊ |  | 4.73 | 3.47 |  |  |  |  |
| 2N502 | VHFC | 2.93 | 2.15 | 2N1204 | HCSW | 6.38 | 4.68 | 2N2360 | UHFC | 2.63 | 1.93 | T2399 |  | 1.49 | 1.09 |
| 2N502A | VHFC | 3.75 | 2.75 | 2N1204A | HSSW | 6.38 | 4.68 | 2N2361 | UHFC | 2.40 | 1.76 | T2400 |  | 1.32 | ． 97 |
| 2N503 | VHFC | 2.25 | 1.65 | 2N1411 | ASSW | 3.74 | 2.74 | 2N2362 | UHFC | 2.10 | 1.54 | T2444 | HSSW | 3.90 | 2.86 |
| 2M504 | VHFC | 3.45 | 2.53 | 2N1416T |  | 2.16 | 1.59 | 2N23747 | LFC | ． 98 | 72 | T2500 | HCSW | 4.05 | 2.97 |
| 2N534T | LFC | 2.33 | 1.71 | 2N1427＊ | MSSW | 4.58 | 3.36 | 2N2375TI | LFC | ． 83 | ． 61 | T2590 |  | 1.17 | ． 86 |
| 2N535\％ | LFC | 2.78 | 2.04 | 2N14789 | LSSW | 1.43 | 1.05 | 2N237811 | LFC | 1.85 | 1.21 |  |  |  |  |
| 2N535AT | LFC | 3.00 | 2.20 | 2N1494 | HCSW | 6.83 | 5.01 | 2N2398 | UHFC | 3.75 | 2.75 | T3005T |  | 3.08 | 2.26 |
| 2N5358\％ | LFC | 3.38 | 2.48 | 2N1494A |  | 6.83 | 5.01 | 2N2399 | UHFC | 3.30 | 2.42 |  |  |  |  |
| 2N536\％ | LFC | 3.38 | 2.48 | 2N1495 | HCSW | 7.35 | 5.39 | 2N2400 |  | 1.28 | ． 94 |  |  | 1.24 | 25 up |
| 2N5 88 | HFC | 1.43 | 1.05 | 2N1496 | HCSW | 7.80 | 5.72 | 2N2401 |  | 1.43 | 1.05 | T2351 |  | 60.00 | 35.00 |

PHILCO SILICON TRANSISTORS
All are family type SADT except＝SAT；$\dagger=$ SPAT； $A=$ Silicon Planar（Epitaxial）；
＝Silicon Mesa（Epitaxlal）

| TYPE | USE | NET | $\begin{gathered} \text { EACH } \\ 100 . \\ 999 \end{gathered}$ | TYPE | USE | NET 1.99 | EACH 109. 995 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2N495＊ | MFC | 11.63 | 8.53 | 2N1429＊ | C | 8.78 | 8.44 |
| MIL |  |  |  | 2N1472 | HSW | 12.15 | 8.91 |
| 2N496＊ | MSSW | 11.63 | 8.53 | 2N1663 | HSW | 12.75 | 9.35 |
| MIL |  |  |  | 2N1676＊ | CH | 11.70 | 8.58 |
| 2N706 | HCSW | 1.55 | 1.04 | 2N1677＊ | CH | 8.85 | 6.49 |
| 2N706B | HCS | 4.91 | 3.60 | 2N2086 | HCSW | 10.95 | 0.03 |
| 2N770 | HSSW | 11.63 | 8.53 | 2N2087 | HCS | 11.55 | 8.47 |
| 2N771 | HSSW | 12.75 | 9.35 | 2N2181＊ |  | 15.60 | 11.44 |
| 2N772 | HSSW | 12.15 | 8.91 | 2N2182＊ |  | 31.50 | 23.10 |
| 2N773 | HFC | 8.70 | 6.38 | 2N2183＊ |  | 14.93 | 10.95 |
| 2N774 | HFC | 9.00 | 6.60 | 2N2184＊ |  | 30.15 | 22.14 |
| 2N775 | HFC | 9.60 | 7.04 | 2N2185t | CH | 15.00 | 11.00 |
| 2N776 | VHFC | 9.75 | 7.15 | 2N2186 | CH | 30.60 | 22.44 |
| 2N777 | VHFC | 10.50 | 7.70 | 2N2187 | CH | 31.50 | 23.10 |
| 2N778 | VHFC | 11.10 | 8.14 | 2N2274 $\dagger$ | CH | 9.00 | 6.60 |
| 2N784A | UHFC | 9.61 | 6.39 | 2N2275 ${ }^{\text {＋}}$ | CH | 19.50 | 14.30 |
| 2N834A | UHFC | 4.13 | 2.75 | 2N2276 | CH | 6.00 | 4.40 |
| 2N858 $\dagger$ | C | 9.23 | 6.77 | 2N227T | CH | 13.20 | 9.68 |
| 2N859 ${ }^{\text {¢ }}$ | C | 10.43 | 7.65 | 2N2278 | CH | 12.00 | 8.80 |
| 2N860 $\dagger$ | C | 8.48 | 8.22 | 2N227 $\dagger$ | CH | 25.80 | 18.92 |
| 2N861\％ | C | 6.00 | 4.40 | 2N2280† | CH | 4.50 | 3.30 |
| 2N862† | C | 8.33 | 6.11 | 2N2281 ${ }^{\text {＋}}$ | CH | 10.05 | 7.37 |
| 2N863 $\dagger$ | C | 4.50 | 3.30 | 2N2380 | HCSW | 3.75 | 2.75 |
| 2N864 $\dagger$ | CH | 6.23 | 4.57 | 2N2478 | HCSW | 7.13 | 5.23 |
| 2N865 $\dagger$ | C | 8.25 | 6.05 | 2N2479 | HCSW | 3.75 | 2.75 |
| 2N1118＊ | MFC | 11.63 | 0.53 | 2N2651 | HSSW | 4.43 | 2.95 |
| M 1 |  |  |  | 2N2710 | HSSW | 9.77 | 6.50 |
| 2N1118A | ＊MFC | 15.75 | 11.55 | T1426＊ |  | 6.45 | 4.73 |
| 2N1119＊ | MSS | 11.83 | 8.53 | T1452＊ |  | 8.85 | 6.49 |
| MIL |  |  |  | T1453＊ |  | 18.00 | 13.20 |
| 2N1199 | HSW | 11.63 | 8.53 | T1507＊ |  | 11.70 | 8.58 |
| 2N1199A | HSW | 12.15 | 8.91 | T1582＊ |  | 18.00 | 13.20 |
| MIL |  |  |  | T1962＊ |  | 19.35 | 14.19 |
| 2N1200 |  | 9.60 | 7.04 | 72157 |  | 2.25 | 1.65 |
| MIL |  |  |  | T2158＊ |  | 2.83 | 1.33 |
| 2N1201 |  | 11.10 | 8.14 | T2160t | SSW | 12.53 | 9.15 |
| MIL |  |  |  | T2208 $\dagger$ |  | 13.43 | 9.85 |
| 2N1267 | HFC | 8.70 | 6.38 | T2309＊ |  | 1.43 | 1.05 |
| 2N1268 | HFC | 9.00 | 6.60 | 12410 |  | 1.28 | ． 94 |
| 2N1269 | HFC | 9.60 | 7.04 | T2456 $\dagger$ |  | 2.93 | 2.15 |
| 2N1270 | VHFC | 9.75 | 7.15 | T2464＊ |  | 2.63 | 1.93 |
| 2N1271 | VHFC | 10．56 | 7.70 | T2612† |  | 2.53 | 1.93 |
| 2N1272 | VHFC | 11.10 | 8.14 | T2655＊ |  | 2.55 | 1．87 |
| 2N1428＊ | C | 8 | 4 |  |  |  |  |

PHILCO TUNNEL DIODES
net each


| TYPE | NET 1.99 | ACH 100. 999 | TYPE | NET 1.99 | $\begin{aligned} & \text { EACH } \\ & 100 \\ & 999 \end{aligned}$ | TYPE | $\begin{aligned} & \text { NET } \\ & 1.99 \end{aligned}$ | $\begin{aligned} & \text { EACH } \\ & 100 . \\ & 999 \end{aligned}$ | TYPE | NET | EACH <br> 10－99 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1N26 MIL | 6.50 | 5.10 | 1 N78 MIL | 6.50 | 5.10 |  |  |  | 1 N 2792 1 N 2792 M | 250.00 625.00 | 208.75 |
| 1N26M | 16.15 | 12.75 | IN78M | 13.75 | 10.80 | IN780 1N780M | 55.00 13750 | 42.00 | 1N2792M | 625.00 32.00 |  |
| 1N26R | 9.90 | 7.80 | 1N78R | 8．25 | 6.50 | IN780m 1N780R | 137.50 82.50 | 108.00 65.00 | 1N3093 | 32.00 16.70 | $28.00$ |
| 1N26MR | 19.45 | 15.30 | IN78MR | 16.50 | 13.00 | IN780MR | 185.00 | 65.00 130.00 | 1N3482＊ | 16.70 29.50 | 13.35 21.60 |
| 1N26A | 7.75 | 8.05 | 1N78A | 8.10 | 6.38 | IN147A | ． 98 | ． 71 | $\begin{aligned} & 1.4120 \text { F } \\ & L 4122= \end{aligned}$ | 35.40 35.40 | $\begin{aligned} & 26.00 \\ & 26.00 \end{aligned}$ |
| 1N26AM | 19.30 | 15.20 | 1N78AM | 20.30 | 15.90 | 1N263 | 12.50 | 9.19 | L4130 \＃ | 35.40 | 26.00 |
| IN26AR | 11.65 | 9.15 | IN7EAR | 12.10 | 9.55 | 1N263M | 26.85 | 19.69 | 14131 | 35.40 | 26.00 |
| 1N26AMR | 23.00 | 18.20 | IN78AMR | 24.30 | 19.10 | 1N1838＊ | 37.50 | 30.00 | L4132 | 35.40 | 26.00 |
| 1 N26B MIL． | 27.25 | 21.75 | 1 N78B MIL | 12.00 | 9.45 | 1N1838 ${ }^{\text {c }}$ | 93.75 | 75.00 | L4133＊＊ | 35.40 | 26.00 |
| 1N26BM | 68.00 | 53.50 | 1N788M | 30.00 | 23.60 | P960 | 1.33 | 1.33 | L4134 \＃ | 35.40 | 26.00 |
|  |  |  |  |  |  | Typ | 1.9 | 10.99 | 14135 | 35，40 | 26.00 |
|  |  |  |  |  |  | L4110t | 120.00 | 1 | 14136 | 35.40 | 26.00 |
| 1N268R | 40.85 | 32.65 | IN788R | 18.00 | 14.20 | ［4111 | 80.00 | － | 14137 \＃ | 52.60 | 35.00 |
| 1N26BMR | 81.75 | 65.30 | IN78日MR | 36.00 | 27.40 | 14112 | 120.00 | － | 14138 \％ | 35.40 | 26.00 |
| 1N26C 1 N 26 CM | 31.15 77.85 | 25.50 83.75 | IN78C MIL | 45.00 113.00 | 35.40 89.00 | 14412 | 14.00 | － | P901＊＊ | 90.00 | 68.00 |
| 1N26CM | 77.85 | 63.75 38.22 | 1N78CM | 113.00 | 89.00 | L44137 | 8.00 | － | P902＊＊ | 105.00 | 77.00 |
| $1 N 26 C R$ 1 N26CMR | 48.20 96.40 | 38.22 76.45 | IN78CR IN78CMR | 67.50 135.00 | 53.00 106.00 | L4414t | 5.30 | 25.70 | P903＊＊ | 105.00 | 77.00 |
| IN26CMR | 56.40 | 76.45 | IN78CMR | 135.00 | 106.00 | GAU．4017 | 35.00 | 25.70 | P904＊＊ | 105.00 | 77.00 |


| HILCO TUNNEL DIODES |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | EaCH |  |  |  |
|  |  |  |  |  |  |
| $\begin{aligned} & \text { 1N3353 } \\ & \text { iN3580 } \end{aligned}$ | 6.40 4.75 | $\begin{aligned} & 4.25 \\ & 3.25 \end{aligned}$ | 1N3561 | 4.75 3.95 | 5 |
| PHILCO TYPE AOI TRANSISTOR 30 Mc ．SURFACE BARRIER TRANSISTOR RF－oscillator．If |  |  |  |  |  |
| 401 |  |  |  | 100.999 ea．． 72 | $\begin{array}{r} .98 \\ 72 \\ \hline \end{array}$ |
| TRANSISTOR SUBSTITUTION HANOBOOK |  |  |  |  |  |
| Vol．4．Newly revised edition with over 15,000 direct substitutions．Includes basing diagrams，polarity Identi－ fication and manufacturers for over 6,000 transistor |  |  |  |  |  |
| es plus over 12，900 substitutions．Provides all data |  |  |  |  |  |
| 2 placed to select suitable transistor re． |  |  |  |  |  |
| 2，500 American replacements for foreign |  |  |  |  |  |
| transistors，plus a semi－conductor diode |  |  |  |  |  |
|  |  |  |  |  |  |
| possible，when it is appropriate and |  |  |  |  |  |
|  |  |  |  |  |  |

RCA GERMANIUM TRANSISTORS
Symbol Designations: $B C=B$ roadcast frequencies: $\mathrm{HF}=$ High frequencies: $L S=$ Large signal: $P=P$ ower; $S S=$ Small signal; $S W=$ Switching: ${ }^{\circ}=$ Mesa; $\quad$ Epitaxial; $t=$ Thyristor. All are PNP except $\triangle$ are NPN.


| Jan2 |  | 2.48 | 1.65 | $2 \mathrm{~N} 1215 \dagger$ | Sw | 4.54 | 3.03 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 N 388 | SW | 59 | . 40 | 2 N 1216 | SW | 2.97 | 1.98 |
| USN2N388 | ${ }^{\text {S }}$ SW | . 61 | . 41 | 2 N 1224 | HF | 1.24 | 83 |
| 2 N 388 A 4 |  | 2.57 | 1.72 | USA2H122 | 4 HF | 2.06 | 1.38 |
| 2 N 395 | SW | 66 | . 44 | 2 N 1225 |  | 1.40 | 94 |
| 2N396 | sw | 84 | . 56 | USA2N122 |  | 2.31 | 1.54 |
| $2{ }^{2} 3964$ | sw | 84 | 56 | 2 N 1226 | HF | 1.40 | . 99 |
| 2 N 397 | SW | 1.34 | . 89 | ${ }^{2 N 1300}{ }^{\circ}$ | Sw | 1.16 | . 77 |
| 2 N 398 | SW | 1.30 | 87 | $2 \mathrm{~N} 1301^{*}$ | sw | 1.49 | . 99 |
| USN2N398 | SW | 1.47 | . 98 | 2N13024 | Sw | . 50 | 33 |
| 2 N 398 A | SW | 1.30 | . 87 | USN2N1 | $2 \leq$ | 51 | 4 |
| 2 N 398 B | SW | 1.30 | 87 | 2 N 1303 |  | 50 | 33 |
| 2 N 404 | SW | . 41 | 28 | USN2N130 | 3 SW | 51 | 34 |
| USAF2N | SW | . 50 | . 33 | 2 N 13044 |  | 61 | 41 |
| 2 N 404 A | Sw | . 66 | 44 | USN2N13 | - |  | 43 |
| 39071 |  |  |  | 2 N 1305 | SW | . 48 | . 32 |
| 2 N 404 | SW | 1.24 | . 83 | USN2N130 | SW | . 64 | . 43 |
| $2 \mathrm{2N405}$ | SS | 40 | . 23 | 2 N 13064 |  | . 79 | . 57 |
| ${ }_{2} \mathbf{N 4 0 6}$ | SS | 35 | 23 | USN2N130 | ¢ $\triangle$ S | W. 86 | . 57 |
| 2N407 | LS | 45 | 30 | 2 21307 | 5w | 79 | 53 |
| 2 N 408 | Ls | . 41 | 28 | USN2N130 |  | . 6 | 57 |
| 2 N 409 | is | . 54 | . 36 | $2 \mathrm{~N} 1308{ }^{\text {a }}$ |  |  | . 74 |
| 2 N 410 | BC | . 51 | . 34 | USN2N130 |  | 1.19 | . 79 |
| 2 N 41 | 8 C | . 58 | . 39 | $2 \mathrm{N1309}$ | SW | 1.07 | 72 |
| 2 N 412 | ${ }^{8 C}$ | . 54 | . 36 | USN2N13 |  | 1.19 | 79 |
| 2 N 14 | Sw | . 61 | . 41 | 2 N 1319 | SW | 1.65 | 1.10 |
| 2 N 441 | P | 2.67 | 1.78 | $2 \mathrm{N1358}$ |  | 5.94 | 3.96 |
| 2 N 442 | P | 3.14 | 2.09 | USA2N135 |  | 6.77 | 4.51 |
| 2 N 443 | P | 3.47 | 2.31 | $2 \times 1384$ | SW | 1.82 | 1.21 |
| 2N578 | SW | 99 | . 66 | $2 \mathrm{H1395}$ | HF | 1.49 | . 99 |
| 2 N 579 | SW | 1.57 | 1.05 | 2N1396 | HF | 1.65 | 1.10 |
| 2 N580 | SW | 2.06 | 1.38 | 2 N 1397 | HF | 2.15 | 1.43 |
| $2 \mathrm{NSE1}$ | sw | . 50 | . 33 | 2 N 1412 | P | 6.19 | 4.13 |
| 2 N 582 | SW | . 99 | . 66 | USN2N141 |  | 7.67 | 5.12 |
| 2 5 583 | sw | 83 | . 55 | 2 N 1450 | SW | 2.06 | 1.38 |
| 2 S 584 | Sw | 3.22 | 2.15 | 2 N 1524 | BC | . 51 | 34 |
| $2{ }^{2} 5854$ | sw | . 99 | . 66 | 2 N 1525 | BC | . 54 | . 36 |
| 2 25886 | SW | 1.73 | 1.16 | ${ }_{2} 21526$ | BC | . 54 | . 36 |
| 2N591 | SS | . 58 | . 39 | 2 2N1527 | BC | . 58 | . 39 |
| $2{ }^{2} 643$ | SW | 1.40 | 94 | 2N16054 | sw | 1.24 | . 83 |
| 2 N 644 | Sw | 65 | 1.10 |  |  |  |  |
| 2N645 | SW | 2.64 | 1.76 | 2N1605A |  | 1.50 | 1.00 |
| 2N646 | sw | 1.82 | 1.21 | 2 N 1631 | 8 BC | 5 | 42 |
| 2N647A | LS | 1.16 |  | ${ }_{2}^{2 N 1632}$ |  |  | 40 42 4 |
| 2N649A | LS | . 86 | . 57 | 2N1637 | 8C | 56 | 42 .37 |
| ${ }_{2} 2 \mathrm{N7710}{ }^{\text {a }}$ | SW | 1.98 | 1.32 1.16 | 2 N 1638 2N1639 | ${ }_{8 C}^{8 C}$ | 59 | 40 |
| 2N711* | sw | 1.16 | . 77 | ${ }^{2} \mathrm{~N} 16883^{\circ}$ | SW | 1.65 | . 10 |
| 2N794* | SW | 1.49 | . 99 | $2 \mathrm{~N} 1853^{\circ}$ |  | 1.32 | . 88 |
| 2N795* | SW | 1.98 | 1.32 | ${ }_{2 \text { Ni }}$ | Sw | 1.32 | 8 |
| ${ }_{2}^{2 N 7928 .}$ | SW | ${ }_{3}^{2.89}$ | 1.93 2.20 | ${ }_{2} \mathrm{NHP54*}^{\text {a }}$ | sw | 1.65 | 10 |

RCA GERMANIUM TRANSISTORS Cont'd.

| Type | Use | Net Each |  | Type | Use | Net Each |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 100. |  |  | Net | 100. |
|  |  | 1.99 | 999 |  |  | 1.9 | 999 |
| USN/ |  |  |  | 2N2273* | SW | 4.13 | 2.75 |
| 2N1854* | * Sw | 1.65 | 1.10 | USA/ |  |  |  |
| 2N1905 | P | 4.13 | 2.75 | 2N2273 |  | 4.95 | 3.30 |
| 2N1908 | P | 6.60 | 4.40 | $2 \mathrm{~N} 2482^{*}$ | SW | 6.19 | 4.13 |
| 2N2147 | is | 2.06 | 1.38 | 2 N 2613 | SS | . 59 | . 40 |
| 2N2148 | Ls | 1.58 | 1.06 | 2N2614 | SS | . 54 | 36 |


| RC | SILICON <br> Net Each |  | RECTIFIERS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Type | 1.99 | 999 | Type | 1.99 | 999 |
| 1N248C | 1.82 | 1.21 | 1N1200A | 1.40 | 94 |
| 1 N 248 RC | 1.82 | 1.21 | 1 1200RA | 1.40 | 94 |
| USAIN249B | 3.30 | 2.20 | USAFIN1200 | 2.72 | 1.82 |
| 1N249C | 2.31 | 1.54 | USAFIN1201 | 3.30 | 2.20 |
| 1 N249RC | 2.31 | 1.54 | 1N1202A | 2.72 | 1.82 |
| USAIN2508 | 4.54 | 3.03 | 1 N 1202 RA | 2.72 | 1.82 |
| 1 1250C | 3.30 | 2.20 | USAFIN1202 | 3.96 | 2.64 |
| 1N250RC | 3.30 | 2.20 | 1 N 1203 A | 4.13 | 2.75 |
| 1 N 440 B | . 73 | 48 | IN1203RA | 4.13 | 2.75 |
| 1 N 4418 | . 76 | 51 | USAFIN1203 | 5.12 | 3.41 |
| 1 N 442 B | 87 | . 58 | $1 \mathrm{N1204a}$ | 5.12 | 3.41 |
| 1 N 443 B | 1.09 | . 73 | 1 l 1204 Ra | 5.12 | 3.41 |
| 1 N 444 B | 1.24 | 83 | USAF1N120 | 6.27 | 4.18 |
| 1N445B | 1.60 | 1.07 | 1 N1205A | 6.19 | 4.13 |
| 1N536 | 45 | . 30 | 1N1205RA | 6.19 | 4.13 |
| 1N537 | 50 | . 33 | USAF1N1205 | 7.43 | 4.95 |
| 1N538 | 53 | 35 | 1 N 1206 A | 7.43 | 4.95 |
| janins3s | . 64 | 43 | 1 121206RA | 7.43 | 4.95 |
| 1N539 | . 59 | . 40 | USAFIN1206 | 8.65 | 5.78 |
| 1 5540 | . 68 | 45 | 1N1612 | 1.07 | 72 |
| janinsao | . 86 | 57 | $1 \mathrm{N1612R}$ | 1.07 | 72 |
| 1N547 | 96 | . 64 | 1N1613 | 1.24 | 83 |
| Janinsat | 1.24 | . 83 | 1N1613R | 1.24 | 83 |
| 1N1095 | 76 | 51 | 1N1614 | 1.90 | 1.27 |
| IN1183A | 2.56 | 1.71 | IN1614R | 1.90 | 1.27 |
| ini183RA | 2.56 | 1.71 | 1N1615 | 4.13 | 2.75 |
| 1N1184a | 3.22 | 2.15 | 1N1615R | 4.13 | 2.75 |
| inilbara | 3.22 | 2.15 | 1N1616 | 6.02 | 4.02 |
| 1N1186A | 4.70 | 3.14 | 1N1616R | 6.02 | 4.02 |
| 1N1186RA | 4.70 | 3.14 | USA1N2 | 7.8 | 5.23 |
| 1N1187 | 7.01 | 4.68 | 1N2858 | 40 | 26 |
| 1N1187R | 7.01 | 4.68 | 1 12859 | 45 | 30 |
| 1N1188 | 8.66 | 5.78 | 1N2860 | . 48 | . 32 |
| 1N1188R | 8.66 | 5.78 | 1N2861 | . 56 | . 37 |
| 1N1189 | 10.31 | 6.88 | 1 12862 | . 66 | 44 |
| IN1189R | 10.31 | 6.88 | 1 N 2863 | 73 |  |
| 1N1190 | 12.38 | 8.25 | 1N2864 | 92 | 62 |
| iN1190R | 12.38 | 8.25 | 1 N 3193 | 41 | . 28 |
| 1N1195A | 5.36 | 3.58 | 1 N3194 | . 58 | . 39 |
| IN1195RA | 5.36 | 3.58 | 1N3195 | 91 | 61 |
| 1N1196A | 6.60 | 4.40 | 1 N3196 | 1.24 | 83 |
| 1N1196RA | 6.60 | 4.40 | 1 N3253 | 45 | 30 |
| iN1197A | 8.25 | 5.50 | 1 N3254 | . 61 | 41 |
| iN1197RA | 8.25 | 5.50 | 1N3255 | 94 | 63 |
| iN1198a | 9.90 | 6.60 | 1N3256 | 1.27 | 85 |
| 1N1998A | 9.90 | 6.60 | 1 N 3563 | 1.65 | 1.10 |
| 1N1199A | 1.24 | . 83 | 1 1/3754 | . 36 | . 24 |
| iN1199Ra | 1.24 | 83 | 1 13755 | 40 | 26 |
| USAFINI 199 | 2.06 | 1.38 | 1N3756 | 45 | 30 |

RCA GERMANIUM CDMPENSATING DIODE

|  |  |  |  |
| :---: | :---: | :---: | :---: |
| Type | 1.99 | Net Each | 100.999 |
| 1N2326 | .50 |  | 33 |


250.MW SILICON ZENER DIODES (Fig. A)

$250-$ MW SILICON ZENER DJODES (Fig. B)
$20 \%$ TOLERANCE

| TPE NO. | NET EACH |  |  | NET EACH |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1/426.8D | 2.15 | 1.95 | 1/42430 | 2.55 | 2.35 |
| 1/427.50 | 2.15 | 1.95 | V/2450 | 2.55 | 2.35 |
| 1/428.20 | 2.15 | 1.95 | 1/42470 | 2.55 | 2.35 |
| 1/429.10 | 2.15 | 1.95 | 1/42500 | 2.55 | 2.35 |
| 1/41100 | 2.15 | 1.95 | 1/2510 | 2.55 | 2.35 |
| 1/2110 | 2.15 | 1.95 | 1/2520 | 2.55 | 2.35 |
| 1/4120 | 2.15 | 1.95 | 1/2560 | 2.55 | 2.35 |
| 1/42130 | 2.15 | 1.95 | 1/2620 | 2.55 | 2.35 |
| 1/42140 | 2.15 | 1.95 | 1/2680 | 2.55 | 2.35 |
| 1/2150 | 2.15 | 1.95 | 1/2750 | 2.55 | 2.35 |
| 1/42160 | 2.15 | 1.95 | 1/42820 | 2.55 | 2.35 |
| 1/2170 | 2.15 | 1.95 | 1/42910 | 2.55 | 2.35 |
| 1/42100 | 2.15 | 1.95 | 1/421000 | 2.75 | 2.60 |
| 1/2190 | 2.15 | 1.95 | 1/21050 | 2.75 | 2.60 |
| 1/2200 | 2.15 | 1.95 | 1/421100 | 2.75 | 2.60 |
| 1/2220 | 2.15 | 1.95 | 1/421200 | 2.75 | 2.60 |
| 1/4240 | 2.15 | 1.95 | V421300 | 2.75 | 2.60 |
| 1/2250 | 2.15 | 1.95 | 1/21400 | 2.75 | 2.60 |
| 1/4270 | 2.15 | 1.95 | 1/21500 | 2.75 | 2.60 |
| 1/2300 | 2.15 | 1.95 | V421600 | 2.75 | 2.60 |
| 1/2330 | 2.15 | 1.95 | V/21750 | 2.75 | 2.60 |
| 1/4360 | 2.15 | 1.95 | $1 / 421800$ | 2.75 | 2.60 |
| 1/4390 | 2.15 | 1.95 | 1/22000 | 2.75 | 2.60 |


|  | $10 \%$ TOLERANCE |  |  |
| :---: | :---: | :---: | :---: |
| $1 / 26.8010$ | thru $1 / 4239010$ | 2.55 | 2.40 |
| $1 / 4243010$ | thru $1 / 4291010$ | 3.10 | 2.85 |
| $1 / 42100010$ | thru $1 / 22200010$ | 3.45 | 3.25 |
| $5 \%$ TOLERANCE |  |  |  |
| $1 / 426.805$ | thru $1 / 423905$ |  |  |
| $1 / 42405$ | thru $1 / 229105$ | 3.60 | 3.30 |
| $1 / 4210005$ | thru $1 / 4220005$ | 3.75 | 3.45 |
|  |  | 4.00 | 3.75 |


| 400-MW SILICON ZENER DIODES (fig. A) 5\% TOLERANCE |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NET EACH |  |  |  | net each |  |
| TYPE NO. | 1-24 | 25.99 | TYPE NO. | 1.24 | 25.99 |
| 1N3506 | 3.35 | 3.25 | 1H3520 | 3.35 | 3.25 |
| 1 N3507 | 3.35 | 3.25 | 1N3521 | 3.35 | 3.25 |
| 1N3508 | 3.35 | 3.25 | JN3522 | 3.35 | 3.25 |
| 1N3509 | 3.35 | 3.25 | IN3523 | 3.35 | 3.25 |
| 1N3510 | 3.35 | 3.25 | IN3524 | 3.35 | 3.25 |
| 1N3511 | 3.35 | 3.25 | 1N3525 | 3.35 | 3.25 |
| 1N3512 | 3.35 | 3.25 | 1N3526 | 3.95 | 3.80 |
| 1N3513 | 3.35 | 3.25 | 1N3527 | 3.95 | 3.80 |
| 1N3514 | 3.35 | 3.25 | 1N3528 | 3.95 | 3.80 |
| IN3515 | 3.35 | 3.25 | 1N3529 | 3.95 | 3.80 |
| 1N3516 | 3.35 | 3.25 | 1N3530 | 3.95 | 3.80 |
| 1N3517 | 3.35 | 3.25 | 1N3531 | 3.95 | 3.80 |
| 1N3518 | 3.35 | 3.25 | 1N3532 | 3.95 | 3.80 |
| 1N3519 | 3.35 | 3.25 | 1N2533 | 3.95 | 3.00 |
|  |  |  | 1N3534 | 3.95 | 3.80 |


1N746A thru 1N759A 2.75



10-WATT SILICON ZENER DIODES (fig. E)
$10 \%$ Tolerance
NET EACH

|  | NET EACH |  |  | NET EACH |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TYPE NO. | 1.24 | 25.99 | TYPENO. | 1.24 | 25.98 |
| TNT351- | 6.40 | 5.85 | 1N1816 | 6.75 | 6.20 |
| 1N1352 | 6.40 | 5.85 | 1N1817 | 6.75 | 6.20 |
| 1N1353 | 6.40 | 5.85 | 1N1818 | 6.75 | 6.20 |
| 1N1354 | 6.40 | 5.85 | TN1819 | 6.75 | 5.20 |
| 1 N 1355 | 6.40 | 5.85 | 1N1820 | 6.75 | 6.20 |
| 1N1356 | 6.40 | 5.85 | 1N1821 | 6.75 | 6.20 |
| 1N1357 | 6.40 | 5.85 | 1N1822 | 6.75 | 6.20 |
| 1N1358 | 6.40 | 5.85 | 1N1823 | 6.75 | 6.20 |
| 1N1359 | 6.40 | 5.85 | IN1824 | 6.75 | 6.20 |
| IN1360 | 6.40 | 5.85 | IN1825 | 6.75 | 6.20 |
| 1N1361 | 6.40 | 5.85 | 1N1826 | 6.75 | 6.20 |
| 1N1362 | 6.40 | 5.85 | IN1827 | 6.75 | 6.20 |
| 1N1363 | 6.40 | 5.85 | 1N1828 | 6.75 | 6.20 |
| 1N1364 | 6.40 | 5.85 | IN1829 | 6.75 | 6.20 |
| 1N1365 | 6.40 | 5.85 | 1N1830 | 6.75 | 6.20 |
| 1N1366 | 6.40 | 5.85 | 1N1831 | 6.75 | 6.20 |
| 1N1.97 | 6.40 | 5.85 | 1N1832 | 6.75 | 6.20 |
| 1N1368 | 6.40 | 5.85 | fN1833 | 6.75 | 8.20 |
| 1N1369 | 6.40 | 5.85 | TN1834 | 6.75 | 6.20 |
| 1N1.70 | 6.40 | 5.85 | 1N1835 | 6.75 | 6.20 |
| 1N1371 | 6.40 | 5.85 | IN1836 | 6.75 | 6.20 |
| 1N1372 | 6.40 | 5.85 | IN2008 | 6.75 | 6.20 |
| 1N1373 | 6.40 | 5.85 | IN2009 | 6.75 | 6.20 |
| 1N1374 | 6.40 | 5.85 | 1N2010 | 6.75 | 6.20 |
| 1N1375 | 6.40 | 5.85 | IN2011 | 6.75 | 6.20 |
| 1N1805 | 6.40 | 5.85 | IN2012 | 6.75 | 6.20 |
| 1N1806 | 6.40 | 5.85 | IN2043 | 5.65 | 5.20 |
| 1-1807 | 6.40 | 5.85 | 1N2044 | 5.65 | 5.20 |
| 1N1808 | 6.40 | 5.85 | 1N2045 | 5.65 | 5.20 |
| 1N1809 | 6.40 | 5.85 | 1N2046 | 5.65 | 5.20 |
| 1N1810 | 6.40 | 5.85 | 1N2047 | 5.65 | 5.20 |
| 1N1811 | 6.40 | 5.85 | IN2048 | 5.65 | 5.20 |
| IN1812 | 6.40 | 5.85 | IN2049 | 5.65 | 5.20 |
| IN1813 | 8.60 | 7.95 | IN2498 | 6.30 | 5.85 |
| IN1814 | 8.60 | 7.95 | IN2499 | 6.30 | 5.85 |
| IN1815 | 8.60 | 7.95 | IN2500 | 6.30 | 5.85 |
| 5\% Tolerance |  |  |  |  |  |
| TN135tA | IN1 |  |  | 8.40 | 7.80 |
| 1N1805A | IN1 |  |  | 8.40 | 7.60 |
| 1N1813A | IN1 |  |  | 13.25 | 12.20 |
| IN1816A th | 1N1 |  |  | 8.75 | 8.05 |
| IN2008A th | IN20 |  |  | 8.75 | 0.05 |
| IN2043A th | IN2 |  |  | 7.15 | 6.55 |
| 1N2498A | IN2 |  |  | 8.20 | 7.30 |

## DICEKSON DIODES • Thermallö̀y HEAT SINKS

OICKSON 10 WATT SILICON ZENER DIODES (Fig. E)


OICKSON 1.5 WATT SILICON ZENER DIODES (Fig. D)

| PE NO. |  | 25.99 | TrPE Mo. | 1.24 | 25-99 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1.526.80 | 3.50 | 3.20 | 1.5243D | 3.50 | 3.20 |
| 1.527.50 | 3.50 | 3.20 | 1.5245D | 3.50 | 3.20 |
| 1.528.20 | 3.50 | 3.20 | 1.51470 | 3.50 | 3.20 |
| 1.529.10 | 3.50 | 3.20 | 1.5250 D | 3.50 | 3.20 |
| 1.52100 | 3.50 | 3.20 | 1.52510 | 3.50 | 3.20 |
| 1.52110 | 3.50 | 3.20 | 1.5252 D | 3.50 |  |
| 1.52120 | 3.50 | 3.20 | 1.5756 D | 3.50 | 3.20 |
| 1.52130 | 3.50 | 3.20 | 1.5262D | 3.50 | 3.20 |
| 1.52140 | 3.50 | 3.20 | 1.5268 D | 3.50 |  |
| 1.52150 | 3.50 | 3.20 | 1.52750 | 3.50 | 20 |
| 1.52160 | 3.50 | 3.20 | 1.52820 | 3.50 | 3.20 |
| 1.52170 | 3.50 | 3.20 | 1.52910 | 3.50 |  |
| 1.52180 | 3.50 | 3.20 | 1.521000 | 3.50 | 3.20 |
| 1.52190 | 3.50 | 3.20 | 1.521050 | 3.50 | 3.20 |
| 1.52200 | 3.50 | 3.20 | 1.521100 | 3.50 | 3.20 |
| 1.52220 | 3.50 | 3.20 | 1.521200 | 3.50 | 3.20 |
| 1.52240 | 3.50 | 3.20 | 1.521300 | 3.50 | 3.20 |
| 1.52250 | 3.50 | 3.20 | 1.521400 | 3.50 | 3.20 |
| 1.52270 | 3.50 | 3.20 | 1.521500 | 3.50 | 3.20 |
| 1.52300 | 3.50 | 3.20 | 1.521500 | 4.45 | 4.10 |
| 1.52330 | 3.50 | 3.20 | 1.521750 | 4.45 | 4.10 |
| 1.5236 D | 3.50 | 3.20 | 1.521800 | 4.45 | 4.10 |
| 1.5239 D | 3.50 | 3.20 | 1.522000 | 4.45 | 4.10 |
| 1.576.8010 thru 1.521500 10 Tolerance $\quad 5.00$ |  |  |  |  |  |
|  |  |  |  |  |  |
| 1.57160010 thru 1.52200010 |  |  |  | 6.65 | 6.1 |
| 1.576.805 thru 1.5215005 ${ }^{5 \%}$ Tolerance |  |  |  |  |  |
|  |  |  |  |  | 6.00 |
| 1.5216005 thru 1.5220005 |  |  |  | 8.25 | 7.60 |

1.52616005 thru 1.5215005
dICKSON TEMPERATURE COMPENSATED ZENER REFERENCE DIODES
6.2 Volt; Max. Oyn. Imp. 15 Ohms
(Type A, 10 Ohms); (Fig. A)

| TYPE NO. | NETEA. <br> 1.24 25.99 TYPE MO. |  |  | $\begin{aligned} & \text { NET EA. } \\ & 1.24 \quad 25.99 \\ & \hline \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1N821 | 4.00 | 3.40 | 1N825 | 7.90 | 6.90 |
| 1N821A | 5.65 | 4.85 | 1N825A | 11.25 | 9.70 |
| 1 1823 | 5.00 | 4.25 | 1N827 | 26.75 | 23.25 |
| 1 N 823 | 50 | 6.50 | 1N827, | 29.00 | 25.25 |


| 9.2 Volt; | Max. | Dyn | mp | (Fig | A) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1N935 | 3.45 | 3.00 | USN1N937B | 10.80 | 9.95 |
| 1N935A | 3.80 | 3.35 | 1N938 | 7.60 | 7.00 |
| 1N935B | 4.40 | 3.90 | 1N938A | 8.60 | 7.90 |
| USN1N935B | 6.20 | 5.70 | IN938B | 11.60 | 10.65 |
| 1N936 | 3.80 | 3.40 | USNIN939B | 14.60 | 13.40 |
| 1N936A | 4.45 | 4.20 | 1N939 | 17.60 | 16.20 |
| 1N936B | 5.25 | 4.85 | 1N939A | 24.25 | 22.30 |
| 1N937 | 6.55 | 6.05 | 1N939B | 27.00 | 24.85 |
| 1N937A | 7.20 | 6.55 | USN1N939B | 33.60 | 31.00 |
| 1N937B | 8.00 | 7.35 |  |  |  |
| 11.7 Volt; | Max. Dyn. Imp. 30 Dhms; (Fig. A) | Dyn. Imp. 30 Dhms; (Fig. A) |  |  |  |
| 1N941 | 4.55 | 4.20 | 1N943A | 9.30 | 8.55 |
| 1N941A | 4.95 | 4.55 | 1N9438 | 10.45 | 9.60 |
| 1N941B | 5.65 | 5.20 | 111944 | 9.90 | 9.10 |
| 1N942 | 5.00 | 4.60 | 1N944A | 11.25 | 10.35 |
| 1N942A | 5.95 | 5.50 | 1N944B | 14.95 | 13.75 |
| 1N9428 | 6.90 | 6.35 | 1N945 | 23.00 | 21.15 |
| IN943 | 8.55 | 7.85 | 1N945A | 31.35 | 28.85 |
|  |  |  | 1 N945B | 37.55 | 32.45 |

 $\begin{array}{llllll}1 \mathrm{~N} 2163 & 3.60 & 3.40 & \text { 1N2167A } & 11.20 & 10.75\end{array}$ $\begin{array}{llllll}\text { IN2163A } & 5.00 & 4.80 & \text { 1N2168 } & 15.00 & 13.80 \\ \text { 1N2164 } & 4.80 & 4.60 & \text { 1N2168A } & 18.50 & 17.00\end{array}$ $\begin{array}{llllll}\text { 1N2164 } & 4.80 & 4.60 & \text { 1N2168A } & 18.50 & 17.00 \\ \text { 1N2164A } & 5.80 & 5.50 & \text { IN2169 } & 20.70 & 19.20\end{array}$ $\begin{array}{lrrlrr}\text { 1N2165 } & 7.20 & 6.60 & \text { 1N2169A } & 26.00 & 24.80 \\ \text { 1N2165A } & 10.70 & 9.80 & \text { 1N2170 } & 25.00 & 23.45\end{array}$ $\begin{array}{llllll}\text { IN2165A } & 10.70 & 9.80 & \text { IN2170 } & 25.00 & 23.45 \\ \text { 1N2166 } & 7.00 & 6.75 & \text { 1N2170A } & 37.50 & 35.50 \\ \text { 1N2166A } & 8.40 & 8.05 & \text { 1N2171 } & 34.95 & 33.40\end{array}$ $\begin{array}{llllll}\text { 1N2166A } & 8.40 & 8.05 & \text { 1N2171 } & 34.95 & 33.40 \\ 1 N 2167 & 8.80 & 8.40 & \text { 1N2171A } & 44.95 & 43.60\end{array}$

| (N2620 | 3.80 | 3.55 | 1N2622B | 8.75 | 8.05 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| IN2620A | 4.05 | 3.75 | 1N2623 | 8.40 | 7.60 |
| 1N2620B | 4.55 | 4.20 | 1N2623A | 9.45 | 8.70 |
| 1N2621 | 4.30 | 3.95 | 1N2623B | 12.70 | 11.65 |
| 1N2621A | 5.20 | 4.80 | 1N2624 | 20.70 | 19.00 |
| 1N2621B | 6.30 | 5.85 | 1N2624A | 27.05 | 24.90 |
| 1N2622 | 7.15 | 6.55 | 1N2624B | 36.20 | 33.30 |
| IN2622A | 7.65 | 7.05 |  |  |  |
| 8.4 Volt | Max. | Dyn. Imp. 15 Ohms; (Fig. A) |  |  |  |
| 1 N3154 | 4.30 | 3.95 | 1N3156 | $11.60$ | 10.65 |
| 1N3154A | 5.65 | 5.20 | 1N3156A | 14.70 | 13.50 |
| 1N3155 | 4.85 | 4.45 | 1N3157 | 23.80 | 21.90 |
| 1N3155A | 7.20 | 6.60 | 1N3157 | 25.75 | 23.70 |
| 11.7 Volt; | Max | Oyn. Imp. 25 Dhms; (Fig. B) |  |  |  |
| 1N3580 | 4.60 | 4.20 | 1Na582B | $10,20$ | 9.40 |
| 1N3580A | 4.90 | 4.50 | 1N3583 | 10.20 | 9.40 |
| 1 N3580B | 5.65 | 5.20 | 1N3583A | 11.10 | 10.20 |
| 1N3581 | 5.20 | 4.80 | 1N3583B | 14.75 | 13.55 |
| 1N3581A | 6.10 | 5.60 | 1N3584 | 23.75 | 21.85 |
| 1N3581日 | 7.30 | 6.70 | 1N3584A | 30.85 | 28.35 |
| 1N3582 | 8.45 | 7.75 | 1N3584B | 34.60 | 31.80 |
| A | 9.20 | 8.45 |  |  |  |

THERMALLOY HEAT SINKS FOR SEMICONDUCTORS
Aluminum heat sinks give high-efficiency heat removal in transistorized circulis. Model numbers terminating in a diglt are finished gold chromate per Mil.C-5541 uninsulated. Model numbers ending with lefter 405 have special hard anodized finish exceeding Mil-A-8625, 400 volt insulation. Assur
shock and vibration

## THERMALLOY 1101 AND 1103 SERIES

 CONDUCTION-COOLED TYPES FOR TO-5, -9 Two-piece threaded construction tightens to firmly grip both sides of transistor weld liange where case from transistor to heat sink. Fits all T0-5, 9 cases. THERMALLOY 2218 SERIES CONVECTION-COOLED TYPES FOR TO-18
Same as 2215 Series but for TO-18. NET EACM
 $[$ THERMALLOY 2205 AND 2207 SERIES THERMALLOY 2205 AND 2207 SERIES
CDNVECTIDN-CDOLED TYPES FOR TO.5, 9 Designed especially for metal-header transistors for maximum area contact between transistor and heat sink. Two-piece threaded construction (finned type), with screwdrlver slot on threaded Insert. Provides shortest thermal path from transistor to heat sink fins. where heat is removed by natural convection or forced air. Tapped holes in base enable direct mounting to circuit board for minimum lead lengths and retention under shock and vibration
*For PSI devices. 2207 Is black anodized per MIL-A-8625


Aluminum two-plece threaded construction (finned type) tightens to grip both sides of transistor weld flange. Small size and light weight enables lead mounting. Flange contact provides shortest thermal path from transistor to heat sink fins, where heat is removed by natural convection or forced air. NET EACM
 CY CONDUCTION CDOLED TYPES FOR TO-18 wo-piece threaded construction tightens to firmly grip both sides of transistor weld flange where case temperatrom transistor to heat sink for highest from transistor to heat sink for highest efficiency. This flange contact also eliminates need to match heat sink with transistor case diameter-fits all TO.18 transistors. Assures transistor retention under severe shock and vibration. Model 1107 same finish as 1104A.

 | Stock No. No, Mounting | Weight | 99 | 499 | .995 |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $3 S S .184$ | $1104 A$ | Tapped Hole | .037 | 02 | .80 | .60 |
| $35 S .185$ | 1107 | Stud | .045 | .02 | .85 | .65 | THERMALLOY 1109 SERIES CONDUCTION-COOLED TYPES FOR T0-8

Same as 1104 and 1107 Serles but for 10.8

|  |  |  |  | 1. | 100 | 500 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Stock No. | No. | Mountine | Weitht | 99 | 499 | 998 |
| 3SS.186 | 1109 | Tapped Hole | 36402. | . 90 | . 70 | . 60 |
| 3S5.187 | 1109 | Tapped Hole | . 36402. | 1.15 | . 95 | . 85 |

## MOOEL 2501 NATURAL CONVECTION HEAT SINK

 Designed to answer need for versatile, inexpensive, high efficient heat dissipator with extraordinary low thermal resistance $1.95^{\circ} \mathrm{C} / \mathrm{Watt}$ in $50 \%$ less volume. Requires no blower and can be used mounted flush against the sldes of a chassis. Madel 2501-8 is single layer heat sink, anodized black with mounting holes, and with semiconduc. tor mounting hole pattern (choice of P1, P2, P3 or P4). Mas spot face on one side. Model $2501-\mathrm{C}$ is same as $2501-8$ except with added IK." dia. spot face on fin side. Size $4^{\circ " L} \times 3^{\prime} w \times, 687^{\circ \prime}$ Thick. Shpg. wt., 1 lb .

| Stock No. | Model No. | 1.24 | 25-49 | 50-99 | $\begin{aligned} & 100 . \\ & 499 \end{aligned}$ | $\begin{aligned} & 500- \\ & 999 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 355-20 | 2501-8/P1 | 2.50 | 2.34 | 2.1 \# | 2.02 | 1.86 |
| 355-30 | 2501-8/P2 | 2.65 | 2.49 | 2.33 | 2.17 | 2.01 |
| 355-20 | 2501-8/P3 | 2.65 | 2.49 | 2.33 | 2.17 | 2.01 |
| 355-32 | 2501-8/P4 | 2.80 | 2.64 | 2.48 | 2.32 | 2.16 |
| 355.33 | 2501-C/P1 | 2.94 | 2.74 | 2.56 | 2.37 | 2.18 |
| 355.34 | 2501-C/P2 | 3.09 | 2.99 | 2.71 | 2.52 | 2.33 |
| 3S5-35 | 2501-C/P3 | 3.09 | 2.99 | 2.71 | 2.52 | 2.33 |
| 3S\$-36 | 2501-C/P4 | 3.24 | 3.05 | 2.86 | 2.67 | 2.48 |

MOOEL 2502 NATURAL CONVECTION HEAT SINK

|  | A double layer version of model 2501 The fin design of the 2502 optimizes the effect of the heat transfer coeffi cient avaliable in free convection flow, and provides maximum dissipation per unit. Has surface area of 112 sq . In and low thermal resistance of -1.3 C/Watt. Requires no blower. Model 2502-8 is anodized black. Avaliable in patterns P1, P2, P3 and P4 semiconductor mounting holes. Has 1K." spot face on one side. Model 2502.C is same as $2502-8$ but has 1 Ki" dia. spot face on both sides. Size $4^{\prime \prime} \mathrm{L} \times 3^{\prime \prime} \mathrm{W} \times$ 1.281" Thick. Shpg. wt. 1 , 1 b . |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Stock No. | Model No. | 1.24 | 25-49 | 50-99 | $\begin{aligned} & 100 . \\ & 499 \end{aligned}$ | 500 990 |
| 355.37 | 2502-8/P1 | 3.52 | 3.29 | 3.06 | 2.83 | 2.0 |
| 3SS-38 | 2502-8/P2 | 3.67 | 3.44 | 3.21 | 2.98 | 2.7 |
| 355-21 | 2502-8/P3 | 3.67 | 3.44 | 3.21 | 2.98 | 2.7 |
| 355-40 | 2502-B/P4 | 3.82 | 3.59 | 3.36 | 3.13 | 2.80 |
| $355-41$ | 2502-C/P1 | 3.95 | 3.70 | 3.45 | 3.20 | 2.94 |
| 3ss-42 | 2502-C/P2 | 4.10 | 3.65 | 3.60 | 3.35 | 3.09 |
| 35S-43 | 2502-C/P3 | 4.10 | 3.85 | 3.60 | 3.35 | 3.09 |
| 55.44 | 2502-C/P4 | 4.25 | 4.00 | 3.75 | 3.50 |  |

## MOUNTING KITS FOR MODELS <br> 2501 AND 2502 HEAT SINKS

GROUNDING MOUNTING KITS ShpE. wt., oz.


INSULATED MOUNTING KITS
$\begin{array}{llllllll}355-47 & 1205 M 2.1 / 2 & 1 / 2 \prime \prime & .60 & .56 & .52 & .48 & .44 \\ 355.48 & 1205 M 2.3 / 4 & 1 / 4 & 60 & 55 & .52 & .48 & .44\end{array}$
M3 MOUNTING KIT -
FOR 2501. 2502 \& 2503 HEAT SINKS
Consists of 2 aluminum brackets, 4 speed nuts and machine screws. Enables mounting heat sink to either a vertical or horizontal chassis.
$355-49 \mathrm{M3}$ $355-49 \quad \mathrm{M} 3$


LAFAYETTE MINIATURE SELENIUM RECTIFIER Premium quality and small size make thls precision rectifier ideal for prototype and miniature applications measures "'Oxy2'W plus $1 / 4$ " mounting lip. Rated Input-117NAC, 110 to 130 V DC; Output-10ma OC $20 \mathrm{ma} D \mathrm{C}$ intermittent; Amblent Temperature $40^{\circ} \mathrm{C}$ Maximum input capacifiance 10 MFD . Two convenlent solder lus terminals. Imported

| Ms- |
| :--- |

Net 49

## HIGH DENSITY SELENTUM RECTIFIERS

Replacements for radios, TV sets, HI-FI, etc. 130 VAC input; 380 max. peak inverse volts. All have solder lugs. Avg. shpg. wi., 4 oz.

## Stock

 No. Ma Not L/10 Stock Each No. Ma Each EachNo. Mat | No. | Ma | Each | Each | No. | Ma | Each | Each |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| RE-50 | $65-75$ | .42 | .40 | RE-53 | 350.400 | 1.19 | 1.11 |
| RE.51 | $100-150$ | .52 | .48 | RE-54 | $450-500$ | 1.28 | 1.19 |
| RE-52 | $250-300$ | .98 | .50 | 日E- 55 | $550-600$ | 1.58 | 1.47 |



ASTRO UNIVERSAL MOUNTING HEAT SINKS


Versatile, inexpensive, highly efficient heat sinks Incorporate a universal transistor hole pattern and are mounted with universal mounting bracket kit Allows the direct mounting of the most common power transistors such as stud type. TO-6 and TO-36 cases, TO-3 case, TO-48 case, and 2 N1015, 2 N1016 and WX118 transistors. Model 2505 has thermal resistance of $1.9^{*} \mathrm{C} /$ watt at a power level of 30 watts. Models 2504 and 2506 have performances $90 \%$ that of Models 2501 and 2503 respectively. Av. Shpg. wt., 12 oz .

|  |  |  | Net Each |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Stock No. | Model | Size | 1-24 | 25-99 | 100.499 |
| 355-39 | 2504 | $4 \times 3 \times 11 / 0$ | 1.15 | 1.00 | . 90 |
| 355-31 | 2505 | $4 \times 3 \times 11 / 4{ }^{\prime \prime}$ | 1.25 | 1.10 | . 95 |
| 355.60 | 2506 | 51/6×3×11/4" | 1.50 | 1.30 | 1.10 |

## MODEL 2513 UNIVERSAL NATURAL CONVECTIDN <br> mULTIPLE HEAT SINK

## With UNIVERSAL HOLE PATTERN FOR

 MOUNTING VIRTUALLY ALL POWER TRANSISTORSDesigned as inexpensive, highly efficient heat sink for mounting two power transistors. Mounting surfaces provide closest possible contact to the transistor face. Universal transistor hole pattern permits the direct mounting of "Diamond," "Door Knob," "Stud Type" and many others. The double "T" fin construction provides unusually large surface area resulting in dissipation equal to that of commercial units with more than twice the size. Size $51 / 8 \times 14 / 4 \times 3^{m}$ Shpg. wt., 1202

|  |  | Net Each | 500 - |  |
| :--- | :--- | :--- | :--- | :--- |
| Model Mo. | 1.24 | 25.99 | $100-499$ | 999 |
| 2513 | 1.75 | 1.60 | 1.50 | 1.40 |

## 2700 SERIES NATURAL CONVECTION HEAT SINKS

## - Designed For Computer and

 Printed Circuit ApplicationsThese small, fight natural convection heat sinks op timize the effect of the heat transfer coefficient available in free convection. Black anodized aluminum. Accommodate transistors with TO-5, T0-9, T0-11, T0-12, TO-16, TO-26, TO-31, TO-33, TO-39, TO-42, and TO-43 cases. Provided with $\# 3 / 48$ machine screw to clamp transistor. Model 2701 is $1.9 \times .635 \times .25^{\prime \prime}$ high; 2702 is $1.57 x .7 \times .25^{\prime \prime}$ high; 2703 is $1.67 \times 1.14 \times .25^{\prime \prime}$ high; 2704 is $2.75 \times .7 x .400^{\circ}$ high. Shpg, wt., $402.2704-\mathrm{A}$ for TO-
Accommodates TO-5, T0-9, T0-11, T0.12, TO-16, TO-29, TO-33. T0-39, TO-42 and TO-43 case types. Dissipates heat from transistors by conduction. Provides sufft ciently large surface contact with chassis. Black anodized aluminum, with $\$ 4 / 40$ machine screw for clamping. 2801 is $.87 \times .5 \times .25^{\prime \prime}$ high; 2802 is $1.5 \times .5 \times .25^{\prime \prime}$ high. Shpg. wt., $402.2^{\circ} \mathrm{C} / \mathrm{W}$ att per transistor tem. perature difference between transistor case 8 chassis Model 2801 accommodates 1 transistor; 2802 - two Model 280
transistors.
Stock Model Net Eech

| Stock | Model | Net Each |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| No. | No. | 1.25 | $25-49$ | $50-99$ | $100-499$ |
| $355-23$ | 2801 | .75 | .69 | .64 | .59 |
| 355.69 | 2802 | .98 | .91 | .85 | .79 |



## MALLORY MAGNESIUM.COPPER SULPHIDE RECTIFIERS

Single phase, full-erase all metal bridge type rectifiers. Self-healing rectifying film Constant output and not affected by temperature extremes ( $-90^{\circ}$ to $\pm 265^{\circ} \mathrm{F}$. Type of mounting: "Insulated bolt; "Full load; it Resistive load. Cont = Continuous; RE-60 for Electric Fence; RE-61 for 6SAC4-2 charger; RE-62 for 6SAC6-3 charger.

Input output


26 and TO-31 cases; 2704-8 for TO-5 and TO-9 cases. Stock Model ${ }^{\circ} \mathrm{C} /$ Watt 1.24 Net Each
No. No.

| No. | No. | ${ }^{\circ} \mathrm{C} / W a t t$ | 1.24 | $25-49$ | $50-99$ | $\mathbf{1 0 0 - 4 9 9}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $35 S-22$ | 2701 | 28 | .80 | .75 | .70 | .65 |
| $355-64$ | 2702 | 23 | .88 | .82 | .76 | .71 |
| $355-65$ | 2703 | 18 | .98 | .91 | .85 | .79 |
| $35 S-66$ | $2704-A$ | 12 | .60 | .55 | .49 | .41 |
| 355.67 | $2704-\mathrm{B}$ | 12 | .87 | .81 | .72 | .61 |

## $1!$

 SARKES TARZIAN SILICON RECTIFIER Model 500 Cartridge is rated at 500 milli amps. Mounts in standard fuse holder for 3AG fuse. Can take up to a maximum input of 280 volts AC. Size $1^{\prime \prime} \mathrm{L} \times 13 z_{2}^{\prime \prime}$ diam.; endsRE-39 Sllicon Rectifier Lots of 10, each 1.25 Net 1.40 Model M-150 Same as above, but takes up to 150 Milliamps. Size: $1^{\prime \prime L} x^{1 / 2} \mathbf{I n}^{\prime \prime}$. Shpg. Wt., 3 ozs.
RE- 40 Silicon Rectifier Lots of 10 , each .84 Net .93 EL-183 BUSS 4405 HOLDER FOR SINGLE M500 ....... . 13 EL. 184 BUSS 4408 DUAL HOLOER FOR TWO M500 …... 25

## I/R 750 Ma . RADIO \& TV SILICON

## RECTIFIER

18
Replaces selenium units without any need for conversion. Size: $11 / 8 \times 11 / 2 \times 1{ }^{\prime \prime}$. Shpg. wt., 9 ozs.
......Lots of 10 , ea. 1.65 ...Singly 1.82
SILICON T.V. 502 COLOR T.V. REPLACEMENT Rated $750 \mathrm{MA} @ 260 \mathrm{~V}$. For many color T.V. sets, also $142 \times 11 / 2 \times 1^{\prime \prime}$ chrcuits in black and white sets. Size $12 / 2 \times 11 / 2 \times 1^{\prime \prime}$. Shpg. wt., 9025.
$142 \times 11 / 2$
RE-38

TYPE CMU = MIL RV4N
Fig. A. All have linea

| $\mathrm{Mo}$ | anms Ne . | Stock Me. |  | $\begin{gathered} \text { Mfr. } \\ \text { Mo. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| 3VC-569 | $50 \mathrm{CMU} 50{ }^{\text {c }} 1$ | 3VC-585 | 35,000 | - |
| 3VC-570 | 100 CMU 1011 | 3VC-586 | 50,000 |  |
| 3VC. 571 | 150 CMU-1511 | 3VC. 587 | 75,000 | CMU-7531 |
| 3VC-572 | 250 CMU-2511 | 3VC-588 | .1 Meg | C |
| 3VC. 573 | $350 \mathrm{CMU}-3511$ | 3VC. 589 | 15 Meg . | CMU-154 |
| 3VC-574 | 500 CMU 5011 | 3VC-590 | 25 Meg | CMU-254 |
| 3VC. 575 | 750 CMU .7511 | 3VC. 591 | 35 Me | CMU-3541 |
| 3VC-576 | 1,000 CMU-1021 | 3VC-592 | 5 Mer | 04 |
| 3VC-577 | 1,500 CMU-1521 | 3VC-593 | 75 Meg . | CMU-7542 |
| 3VC-578 | 2,500 CMU-2521 | 3VC-594* | 1.0 Meg . | 105 |
| 3VC.579 | 3,500 CMU-3521 | 3VC.595 | 1.5 Meg . | 52 |
| 3VC-580 | 5,000 CMU-5021 | 3VC-596 | 2.0 Meg . |  |
| 3VC.581 | 7,500 CMU-7521 | 3VC.59 | 2.5 M |  |
| 3VC-582 | 10,000 CMU-1031 | 3V | 5 M |  |
|  | 15,000 CMU-1531 |  |  |  |
|  |  |  |  |  |

Famous "AB" pots now made to meet military MIL-R. 94 specifi cations and 200 hour salf spray corrosion test of military speci fication $Q Q-\mathrm{M}-151$. Two watt, Molded elements, highly reliable dust-proof, splash-proof, iribedded contacts. All have ilnear taper All $10 \%$ tolerance except * are $20 \%$. Avg. shpg, wt

## TYPE CLU MIL RV4L

Fig. B Locking type with nut and slotted shaft. 1 sha $^{\prime \prime}$ diam.

|  | Ohms | Mir. No. | Stock No. | Ohms | Mfr. No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 3VC.749 | 50 | CLU. 5001 | 3VC-655 | 35.000 | CLU. 353 |
| 3VC.739 | 100 | CLU-1011 | 3VC. 752 | 50,000 |  |
| 3VC.648 | 150 | CLU-1511 | 3VC-656 | 75,000 |  |
| 3VC.744 | 250 | CLU-2511 | 3VC.742 | Meg. | CLU-1 |
| 3VC-649 |  | CLU-3511 | 3VC-657 | 15 Meg | CLU-15 |
| 3VC-750 | 500 | CLU. 5011 | 3VC.747 | . 25 Me | CLU-25 |
| C. 650 | 750 | CLU-7511 | 3VC-658 | . 35 Me |  |
| 3VC.740 | 1,000 | CLU-1021 | 3VC-753 | 5 Meg |  |
| 3VC-651 | 1,500 | CLU-1521 | 3VC-659 | 75 Meg | - |
| 3VC. 745 | 2,500 | CLU-2521 | 3VC.743 | 1.0 Meg. |  |
| 3VC-652 | 3,500 | CLU-3521 | 3VC-660 | 1.5 Meg. |  |
| 3VC.751 | 5,000 | CLU-5021 | 3VC-661 | 2.0 | LU |
| 3VC-653 | 7,500 | CLU-7521 | 3VC. 748 | 2.5 Meg. | LU-25 |
| 3VC-741 | 10,000 | CLU-1031 | 3VC-662 | 3.5 Me |  |
| 3VC-654 | 15,000 | CLU-1531 | 3VC-754 | 5.0 |  |
| 3VC. 746 | 25,000 | CLU-2531 |  |  |  |

3VC-707 type CS-1 SPST swith for any above,

## OHMITE TYPE "AS" MINIATURE MOLDED COMPOSITION <br> POTENTIOMETER

## or Type RV6L Pots

Exceptionally reliable. Lightweight and compact. Only K10 long, $1 / 2^{*}$ dia. Molded composition resistance and collector tracks bridged by a molded composition brush Terminals molded directly into the control element. Unit is dust-tight, splash-proof and fungus resistant. Goldplated terminals. Rated 0.5 watt continuous, 350 w Screwdriver slotted, shaft-locking type. Temp. range -55 to $120^{\circ} \mathrm{C}$. All linear taper type. Meet QQ-M-151 MIL-R-94A and Ela requirements. All tolerances $\pm 10 \%$ except * $20 \%$. Shpg. wt. $20 z$.


Two watt. Molded elements, highly reliable, dust-proot splash-proof, imbedded contacts. All have $2^{\prime \prime}$ round $1 / 4$ shafts. All $1 x_{2}{ }^{\prime \prime}$ diam. $\times K_{0}{ }^{\prime \prime}$, except CCU are $K_{0} "$ deep Mount in $3 \mathbf{h}^{\prime \prime}$ " hole on up to $1 / h^{\prime \prime}$ panets. All $10 \%$ tolerance except * are $20 \%$. Avg_ shpg. wt., 502.

|  |  |  | EAR | APER |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Stock No. | $\begin{gathered} \text { Mig. } \\ \text { No. } \end{gathered}$ | Ohms | Stock No. | Mfg. No. | hms |
| 3VC-728 | CU-5001 | 50 | 3VC-679 | CU-3531 | 35,0 |
| 3VC. 723 | CU-1011 | 100 | 3VC-731 | CU- 5031 | 50,000 |
| 3VC. 672 | $\mathrm{CU} \cdot 1511$ | 150 | 3VC-680 | CU-7531 | 75,000 |
| 3VC. 732 | CU. 2511 | 250 | 3VC. 726 | CU. 1041 | Meg |
| 3VC.673 | CU. 3511 | 350 | 3VC-681 | CU-1541 | 15 Meg |
| 3VC. 729 | CU.5011 | 500 | 3VC. 735 | CU-2541 | 25 Meg |
| 3VC-674 | CU-7511 | 750 | 3VC-682 | CU-3541 | . 35 Meg |
| 3VC. 724 | CU-1021 | 1000 | 3VC-737 | CU-5041 | 5 Meg |
| 3VC-675 | CU-1521 | 1500 | 3VC-683 | CU-7542 | 75 Meg |
| 3VC. 733 | $\mathrm{CU}-2521$ | 2500 | 3VC. 727 | CU-1052 | $1 \mathrm{Meg}^{*}$ |
| 3VC-676 | CU-3521 | 3500 | 3VC-684 | CU-1552 | . 5 Meg |
| 3VC-730 | CU-5021 | 5000 | 3VC-685 | CU-2052 | 2 Meg |
| 3VC. 677 | CU-7521 | 7500 | 3VC. 736 | CU. 2552 | $5 \mathrm{Meg}{ }^{\text {* }}$ |
| 3VC.725 | CU. 1031 | 10,000 | 3VC. 686 | CU-3552 | 3.5 Mes |
| 3VC-678 | CU-1531 | 15,00n | 3VC. 738 | CU-5052 | $5 \mathrm{Meg}{ }^{\text {* }}$ |
| 3VC-734 | CU-2531 | 25,000 |  |  |  |
| Any of | above |  |  | Ne | 1.9 |

CA and CB -LDGARITHMIC TAPERS
Type CA is clockwise, $C B$ is counterclockwise.

| stock No. | Mig. No. | Ohms | Stock No. | $\begin{gathered} \text { Mig. } \\ \mathrm{No} . \end{gathered}$ | Ohms |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 3VC.713 | C8-1031 | 10,000 | 3VC.710 | CA-2 | 250 |
| 3VC. 714 | CB-2531 | 25,000 | 3VC.712 | CA. 5041 | 500,00 |
| 3VC. 715 | CB-5031 | 50,000 | 3vc. 709 | CA-1052 | 1 Me |
| 3VC.708 | CA-1041 | 100,000 | 3VC. 711 | CA-2552 | 2.5 Mef |
| Net eac |  |  |  |  |  |

TYPE CCU LINEAR TAPER DUALS
Stock
 $\begin{array}{llllll}3 V C-719 & \text { CCU- } 2531 & 25,000 & 3 V C .722 & \text { CCU } 5041 & 500,000\end{array}$ $\begin{array}{lllll}3 V C-721 & \text { CCU-5031 } & 50,000 & \text { 3VC. } 718 & \text { CCU- } 1052 \quad 1 \text { Meg.t }\end{array}$ Net Each
3VC-707 Type CS-1 SPST SWITCH, for AB POTS Net . 66


For Level Control of low impedance audio circuits. Rated at 15 watts peak audio, 4 watts D.C. Accessorles furnished: one bar knob, one Dial Plate, with matched rotation, one nut, one lock washer, $2^{\prime \prime}$ grooved shaft Bushing $7 / 8 \mathrm{dia}$. $x^{3 / 4}{ }^{\prime \prime}$ long. Shpg. wi., 7 oz .

| Stock No. | Mlg. No. | Ohms | Stock No. | Mfg. No. | Ohms |
| :---: | :---: | :---: | :---: | :---: | :---: |
| VC. 143 | 12 | 2 | VC. 151 | 1250 | 250 |
| VC. 144 | 14 | 4 | VC. 152 | 1500 | 500 |
| VC. 145 | 16 | 6 | VC-153 | 1600 | 600 |
| VC. 146 | 18 | 8 | VC. 154 | 1.1000 | 1K |
| VC-147 | 115 | 15 | VC-155 | L2000 | 2K |
| VC-148 | 150 | 50 | VC-156 | 13000 | 3 K |
| VC-149 | 1100 | 100 | VC. 157 | 14000 | 4K |
| VC. 150 | 1200 | 200 |  |  |  |

Guantity Prices (No assortment)
Lots of $10,2.59 \mathrm{Ea}$. Lots of 25, 2.46 Ea LA-PADS
Same as above but with a $1^{*}$ Bushing. 2 nuts, 2 lock washers, $11 / 2 \times 11 / 2^{\prime \prime}$ dial plate. Shpg, wi.. 8 oz . Stoch No. Mfe. No. Ohms ${ }^{\text {V }}$. Stoch No. Mfg, No. Ohms
 Lots of 10 Quantity Prices (No Assortmen
Lots of $10,2.71 \mathrm{Ea}$
Lots of $50,2.37 \mathrm{Ea}$
Lots of $25,2.57 \mathrm{Ea}$

## DUAL L-PADS

Ganged pads for stereo use. Same specifications as single L Pads bushing $3 / 8 \times 31 / 40$. Shpg. Wt., 1 lb. Ohm
 Lots of $10,5.42$ Ea, Quantly Prices (No assortment) Lots of $10,5.42 \mathrm{Ea}$.
Lots of 50.4 .75 Ea.
$\begin{array}{lll}\text { Lots of } 25,5.13 & \text { Ea } \\ \text { Lots of } 100,4.27 & \end{array}$
T-PADS


## MALLORY SUBMINIATURE 5-WATT WIRE WOUND

Wire wound control rated at 5 watts. Break down volt- dia, $x 7 / 8^{\prime \prime}$ depth. $1 / 4$ " shaft dia. Bushing dife. $3 / \mathrm{m}^{\prime \prime}$ with age 900 VAC RMS. Linear taper $\pm 10 \%$ tol. Dim. $3 / /^{\prime \prime}$ Net Each

Net Each
Stock

OHMITE "AB".2-WATT COMP. POTS
contro Resistance wire is wound over a solid ceramic core each turn locked by vitreous enamel. Copper graphite control brush, except - silver-graphite contac brush, assures positive contact and constant pressure.
Ohmages above 5000 have silicone ceramic coating. All mount on panel up to $1 / 4^{\prime \prime}$ thick. Ratings Indicated are at full setting. U.L. approved. Less knob. Av: shpg wt., 1002.

MODEL E-121/2-WATT 78" dia, "4/4. Stack No. Mfo Mo $3 \mathrm{VC}-755$ 0101* 3VC.756 0102 $\begin{array}{ll}\text { 3VC-757 } & 0103 \\ \text { 3VC. } 758 & 0104\end{array}$ 3VC. 7590105 3VC-760 0106 $\begin{array}{ll}\text { 3VC. } 761 & 0107 \\ \text { 3VC. } 762 & 0108\end{array}$ 3VC.763 0109 3VC. 7640110
3VC-765 0111
$\begin{array}{ll}3 V C .766 & 0112 \\ 3 V C .767 & 0113\end{array}$ $\begin{array}{ll}3 V C .767 & 0113 \\ 3 V C .768 & 0114\end{array}$ 3VC. 7690115 $\begin{array}{ll}\text { 3VC. } 770 & 0116 \\ \text { 3VC. } 771 & 0117\end{array}$ 3VC.772 0118 $\begin{array}{lll}3 V C .773 & 0119\end{array}$ $\begin{array}{ll}3 V C .774 & 0120 \\ 3 V C .775 & 0121\end{array}$ $\begin{array}{ll}\text { 3VC.776 } & 0122\end{array}$

 | 3VC-671 | 4191 | 10,000 | JVC-664 | 4201 | 5.06 | 4.30 | 3.39 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3VC-668 | 4192 | 12.500 | - | - | 5.50 | 4.68 | 3.69 |

$\begin{array}{llllllllll}3 V C-668 & 4192 & 12.500 & \\ 3 V C-669 & 4193 & 15,000 & 3 V C-665 & 4202 & 5.50 & 4.68 & 3.69\end{array}$

| 20,000 | 3VC-666 | 4203 | 6.16 | 5.24 | 4.13 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 25.000 | 3VC-667 | 4204 | 6.82 | 5.80 | 4.57 |



TYPE Cl-A Continuously compensated volume control that automatically masntains depth and brilliance even at whisper level. Shaft length $3^{\prime \prime}$, Width "\%o". Shpg. wt., 5 OZ.

| Stock No. | Mfg. No. | Oescription | Net |
| :---: | :---: | :---: | :---: |
| VD-225 | C1-60 | $1 / 2$ meg, plain | 2.35 |
| VD. 226 | C1-60.S | 1/2 meg, with switch | 2.76 |
| V0.227 | C1.70 | 1 meg, plain | 2.35 |
| VD-228 | C1.70-S | 1 meg, with switch | 2.76 |

TYPE C2-100-A compact dual concentric unit that permits any degree of compensation for low volume listening. Separate controls for volume and degree of compensatlon. Use in hi-fl, radio. TV, etc. Universal
(repiaces 100 K to 1 meg) control. Supplied with dual (replaces 100 K to 1 meg )
knob. Shps. wt., 6 oz .
VD-229 C2.100 Senior Compentro!

## CTS - IRC CONTROLS

## EXPLANATION DF IRC TAPER

A. Linear, C. Logarithmic, audio or antenna shunt. D. Tapered both ends, grid blas and antenna. H. Tapped log.; automatic bass. compensation. L. Left hand taper for focus control. P. Semi-log. reverse taper for, picture control. Q. Same as $P$ but steeper curve. R. Right hand taper for contrast and picture control. S. Special taper-based on specific application, U. Siandard linear taper.

## IRC Q CONTRDLS

## WITH UNIVERSAL SHAFTS

Knurled, flatted and slotted, 3" shaft. "Ko" dia., $1 / 4^{" 1}$ long bushing. Has removable shaft, interchangeable with special shafts listed on this page. "Includes 270 ohm, $1 / 2$-watt flxed bias resistor. Less switch. Set taper explanation above. Av. shpg. wt., $40 z$.

| Steck No. | IRC Type | OHMS | Taper | Stock No. | IRC Type | OHMS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| VC-961 | Q11-201 | 250 | A | VC.971 | 013-128 | 100K |
| VC-931 | Q11-103 | 500 | A | VC-962 | Q11-228 | 125K |
| VC-932 | Q11-105 | 750 | A | VC-964 | 011.328 | 150 K |
| VC-987 | 017 -105 | 750 | P | VC-979 | Q13-328 | 150K |
| VC-933 | - Q11-108 | 1000 | A | VC-947 | 011.129 | 200k |
| VC.988 | Q17.108 | 1000 | 0 | VC. 948 | Q11-130 | 250K |
| VC-934 | Q11-109 | 1500 | A | VC-972 | Q13-130 | 250K |
| VC-989 | Q17-109 | 1500 | 0 | VC. 949 | 011.131 | 300K |
| VC-935 | Q11-110 | 2000 | A | VC-950 | 611-132 | 350K |
| VC-990 | Q17-110 | 2000 | 0 | VC-973 | 013-132 | 350k |
| VC-966 | Q13-111 | 2500 | C | VC.951 | Q11-133 | 500k |
| VC-991 | Q17-111 | 2500 | Q | VC-974 | Q13-133 | 500 K |
| VC-936 | Q11-112 | 3000 | A | VC-983 | 014-133 | 500k |
| VC-992 | Q17-112 | 3000 | Q | VC-995 | Q17-133 | 500K |
| VC-937 | 011.114 | 5000 | A | VC.952 | 011-134 | 600K |
| VC-967 | Q13-114 | 5000 | C | VC-953 | Q11-136 | 750K |
| VC-993 | Q17-114 | 5000 | 0 | VC.954 | 011.137 | 1 meg |
| VC-938 | $011-115$ | 7500 | $A$ | VC-975 | Q13-137 | 1 meg |
| VC-939 | Q11-116* | 10K | A | VC-984 | Q14-137 | 1 meg |
| VC-968 | Q13-116 | 10K | C | VC-996 | 017.137 | 1 mes |
| VC-980 | $014.116^{*}$ | 10K | 0 | VC-955 | Q11-138 | 1.5 meg |
| VC. 994 | Q17-116 | 10K | 0 | VC. 956 | Q11-139 | 2 meg. |
| VC-940 | Q11-119 | 20 K | A | VC-976 | Q13-139 | 2 meg |
| VC-986 | Q16r119. | 20k | S | VC-997 | Q17-139 | 2 meg |
| VC-941 | Q11-120 | 25K | A | VC.963 | Q11-239 | 2.5 meg |
| VC-969 | Q13.120 | 25K | C | VC. 957 | Q11-140 | 3 meg |
| VC.981 | Q14-120* | 25k | 0 | VC. 977 | Q13.140 | 3 meg |
| VC-942 | 011.121 | 30K | A | VC-998 | Q17.140 | 3 meg |
| VC-943 | 011-122 | 35k | A | VC-958 | 011-141 |  |
| VC. 944 | 011.123 | 50k | A | VC-965 | Q12-141 | 5 meg |
| VC.970 | 013-123 | 50 K | C | VC-978 | Q13-141 | 5 meg |
| VC-982 | Q14-123. | 50 K | D | VC-999 | Q17-141 | 5 meg |
| VC-945 | Q11-125 | 75K | $A$ | VC-959 | Q11-142 | 7.5 meg |
| VC-946 | Q11-128 | 100K | A | V6-960 | Q11-143 | 10 meg |

TAPPED Q CONTROLS
All values are in megohms except with * which are in ohms
Stock


## TYPE M ADD-ON MULTI-SECTIONS

Eastly attached to $Q$ controls to form ganged multi-section controls Shpg. wt., 202

| $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | IRC Type | OHMS | TPR. | Stock No. | IRC Type | OHMS | TPI. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| V0.118 | M11-103 | 500 | A | V0.135 | M13-130 | 250K | C |
| Vo-119 | M11-108 | 1 K | A | V0.129 | M11-133 | 500k | A |
| V0-120 | M11-110 | 2K | A | V0.136 | M13-133 | 500 K | C |
| Vo. 121 | M11-112 | 3K | A | VD-130 | M11-137 | 1 meg | $A$ |
| Vo-122 | M11-114 | 5K | A | Vo.137 | M13-137 | 1 meg | C |
| V0.123 | M11-116 | 7.5K | $A$ | VD. 138 | M13-138 | 1.5 meg | C |
| Vo-141 | M17-116 | 10K | Q | VD. 131 | M11-139 | 2 meg | A |
| VD-124 | M11.120 | 25K | A | VD.139 | M13-139 | 2 meg | C |
| V0-125 | M11-121 | 30K | $A$ | V0.140 | M13-140 | 3 meg | c |
| VD-126 | M11-123 | 50K | A | V0.142 | M17-140 | 3 meg | 0 |
| VD-127 | M11-128 | 100K | A | V0-132 | M11-141 | 5 meg | A |
| VD. 134 | M13-128 | 100K | C | VD-133 | M11-143 | 10 meg | A |
| VO-128 | M11-130 | 250K | $\checkmark$ |  |  |  |  |
| NET EACH |  |  |  |  |  |  | 1.32 |

a CONTROL SWITCHES
Quickiv attached. U.L. Approved. ShDg. wh., 202.
VB-10 Type $76-1$ - SPST.
VD. 11 Tyoe $76-2$ DPST.
VD. 11 Type $76-2$ - DPST.
VD-14 Type $76-4$ - SPDT.

## 4 WATT WIRE WOUND TYPE WPK

Universal wire wound control. For replacement of 2, 3 and 4 watt long Knob Master Shaft $11 / 4$ dia., "K/4 deep behind mounting face. 3

| Stack No. | Type | Ohms | Tpr. | Stock No. | Type | Ohms | Tpr. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| VD. 23 | WPK-10 | 10 | U | VD-40 | WPK-1350R | 1350 | R |
| V0-24 | WPK-20 | 20 | U | VD-41 | WPK-1500 | 1500 |  |
| V0.25 | WPK-30 | 30 | U | VD-42 | WPK-1500L | 1500 | L |
| VD-26 | WPK-50 | 50 | U | V $0-43$ | WPK-2000 | 2000 |  |
| V0-27 | WPK-100 | 100 | U | Vo-44 | WPK-2000L | 2000 | L |
| V0.28 | WPK-200 | 200 | U | VD-45 | WPK-2250L | 2250 | L |
| VD-29 | WPK-250 | 250 | U | V0-46 | WPK-2500 | 2500 | U |
| VD. 30 | WPK-300 | 300 | U | VD-47 | WPK-2500R | 2500 | R |
| VD-31 | WPK-400 | 400 | U | VD-48 | WPK. 3000 | 3000 | U |
| VE. 32 | WPK-500 | 500 | U | V0-49 | WPK-4000L | 4000 | 1 |
| V0. 33 | WPK-600 | 600 | U | VD. 50 | WPK-5000 | 5000 | U |
| V0.34 | WPK-650 | 650 | U | V0.54 | WPK-5000L | 5000 |  |
| V0.35 | WPK. 750 | 750 | U | V0.55 | WPK-6000 | 6000 | U |
| V0.36 | WPK-750L | 750 | L | V0.51 | WPK-6000L | 6000 |  |
| V0. 37 | WPK-750R | 750 | R | V0-52 | WPK-7500 | 7500 | U |
| V0.38 | WPK-1000 | 1000 | U | V0. 53 | WPK-7500L | 7500 | L |
| $\begin{aligned} & \text { VD-39 } \\ & \text { NET EACH } \end{aligned}$ | WPK-1350 | 1350 | U | VD.56 | WPK-10000 | 10K | U |
| Stock No. | Type | Ohms | Tpr. | Stock No. | Type | Ohms | pr. |
| V0.57 | WPK-12500 | 12.5K | U | V0.59 | WPK-20000 |  |  |
| $\text { Vo. } 58$ <br> NET EACH | WPK-15000 | 15k | U | V0-60 | WPK-25000 | 25K | ${ }_{36}$ |
| Stock No. | Type | Ohms | Tpr. | Stock No. | Type | Ohms | Tpr. |
| V0. 61 V0.62 | $\begin{aligned} & \text { WPK-30,000 } \\ & \text { WPK- } 40,000 \end{aligned}$ | $\begin{aligned} & 30 K \\ & 40 K \end{aligned}$ | $\begin{aligned} & \mathbf{U} \\ & \mathbf{U} \end{aligned}$ | VD-63 | WPK-50,000 | 50K | V |

## TYPE WPS 4 WATT WIRE WOUND

Universal wire wound control. For replacement of 2, 3 and 4 watt controls. Dimensions: $11 / 4$ " dia., "/ha" deep behind mounting face. $1 / 4$ " long shaft, slotted and knurled. All types have linear taper except those marked * which have left hand taper for focus control.
Stack

| $\begin{aligned} & \text { Steck } \\ & \text { No. } \end{aligned}$ | 12C Type | Ohms | Tap | $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | 1RC Type | Dhms | Tap |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| VB-70 | WPS.10X5 | 10 | 5 | Y0-83 | WPS-200×100 | 200 | 100 |
| V0.71 | WPS-15X7.5 | 15 | 7.5 | VD-84 | WPS 250 | 250 |  |
| V0.72 | WPS-20X10 | 20 | 10 | V0.A5 | WPS. 500 | 500 |  |
| VD-69 | WPS-25 | 25 | - | VD-86* | WPS-500L | 500 |  |
| V0.73 | WPS-25×12.5 | 25 | 12.5 | VO-87 | WPS 1000 | 1000 |  |
| V0.74 | WPS.30X15 | 30 | 15 | VB.88 | WPS 1500 | 1500 |  |
| VD-75 | WPS-40 | 40 | - | VD-89 | WPS-2000 | 2000 |  |
| Y0.76 | WPS-40K20 | 40 | 20 | V0-50 | WPS-2250 | 2250 |  |
| VD. 77 | WPS-50X25 | 50 | 25 | V0-31* | WPS-2250L | 2250 |  |
| V0.78 | WPS-60 | 60 |  | V0. 82 | WPS-2500 | 2500 |  |
| VB.79 | WPS-80K40 | 80 | 40 | V0.93 | WPS-3000 | 3000 |  |
| V0-80 | WPS-100×50 | 100 | 50 | V0.94 | WPS 4000 | 4000 |  |
| VD.81 | WPS. $140 \times 70$ | 140 | 70 | V0.95* | WPS-4000L | 4000 |  |
| Yo-82 | WPS-150×75 | 150 | 75 | VD.96 | WPS. 5000 | 5000 |  |
| Plain Cor | nitrols |  | esch |  | Controls |  | 1.68 |
| VD-12 | 76-11 SPST | VIT | Net |  | 76-12 DPST |  | . 74 |

4 watt "add-on" control sections for use with tyoes WPK or WPS controls
Addition of WM section converts either of the above types to dual section
control unlts. Size $\mathrm{Yb}^{\prime \prime}$ deep + pot. dimensions. Shpg. wt., 2 oz.


A continuously compensated control that boosts lows and highs as volume is decreased. Specifically designed for the audio frequency spectrum. Maintains depth and brilliance even at whisper levels. Complete with instructions. Types $76-1,76-2$, of $76-4$ switches may be


A ready aopustment of signal input to television sets. In most installations, it corrects or substantially reduces such conditions as: adjacent channel interference; background picture on weaker sta. tions. poor definition. In service work it can be used to dupticate fringe area signals. Shpg. wt. 402.
Signais
VB- 15
Net 2.59 SPECIAL C CONTROL SHAFTS
Steck
No. Type Description Net No. Type Description Net VC-914 AO Master Shaft, $3^{\mu}$ Long .44 VC-923 NQ $3 / 10^{n \prime}$ Universal Shaft .56 VC-915 AO5 Master Shaft, $5^{\prime \prime}$ Long .65 VC-924 PQ $1 / 4^{\prime \prime}$ full round shaft VC. 816 80 Slotted Remote Auto CntI. . 82 VC-925 RO $1 \mathrm{H}^{\prime \prime \prime}$ slotted S.D. Shaft VC-917 GQ Slotted Philco Shaft $\quad .50$ VC-926 Sa $3 / \mathrm{L}^{\prime \prime}$ slotted S.D. Shaft VC-910 HO RCA Shaft
VC-819 JQ $4 / \mathrm{sec}^{\prime \prime}$ Shaft for Zenith $.65 \mathrm{VC}-928$ UQ Same BQ, but with clutch VC-920 KQ Motorola Shaft $\quad .56$ VC-92s Vo Magnavox Shaft
VC-921 LQ Belmont and M.W. Shaft .82 VC-930 WQ Zenith Shaft


MALLORY MIDGETROL

A high quality round shaft carbon control only $15 / \mathbf{1 6}^{\prime \prime}$ in dia. to service radio sets, ampllifiers and TV. Shaft can be easily cut to any required lensth, and is readily adaptable and knob adaptors for knurled and push-on-knobs, one Palnut and instruction sheet. Shps. wt., 3 oz .

| Stock No. | Mfg. No. | Ohms | Tpr. | stock No. | Mfg. No. | Ohms Tpr |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| VC-413 | U-1 | 100 | 4 | VC-439 | U.36 | 75K |
| vC-414 | $\mathrm{U}-2$ | 500 | 4 | VC. 440 | U-39 | 100K |
| VC-467 | U-751R | 750 | 2 | VC-441 | U. 40 | 100K |
| vC-415 | U-3 | 1K | 2 | VC-442 | U-41 | 100K |
| VC-416 | U-4 | 1K | 4 | VC-465 | U.415 | 125K |
| VC. 417 | U-5 | 1500 | 2 | VC-443 | U-42 | 150K |
| VC-418 | U-5L | 1500 | 4 | VC-444 | U. 43 | 300K |
| VC-419 | U-6 | 2 K | 4 | VC-445 | U-44 | 250K |
| VC-420 | U.7 | 2500 | 2 | VC-446 | U-45 | 250K |
| VC-421 | U.8 | 3K | 4 | VC-447 | U-46 | 250K |
| VC-422 | U-9 | 3K | 2 | VC-448 | U. 48 | 500K |
| VC-423 | U-12 | 5K | , | VC-449 | U-50 | 500K |
| VC-424 | U-14 | 5K | 4 | VC-450 | U-51 | 750K |
| VC-425 | U-18 | 10K | , | VC-451 | U-52 | 1 Meg. |
| VC-426 | U-19 | 10K | 2 | VC-452 | U-52R | 500 |
| VC. 427 | U-20 | 10K | 4 | Vc-453 | U-53 | 1 Meg |
| VC-428 | U-21 | 15K | 1 | Vc-454 | U-54 | 1 Meg. |
| VC. 429 | U-22 | 15K | 2 | VC-463 | U-155 | 1.5 Meg. |
| VC.430 | U-24 | 20K | 1 | VC-455 | U-55 | 2 Meg. |
| VC. 431 | U. 26 | 20K | 4 | VC-456 | U-56 |  |
| VC-432 | U-28 | 25K | 2 | VC-464 | U-255 | 2.5 Meg . |
| VC-433 | U-28A | 25K | 1 | VC-457 | U. 57 | 3 Meg. |
| VC-434 | U. 29 | 25k | 4 | VC-458 | U. 59 | 3 Meg. |
| VC-435 | U-30 | 30K | 4 | VC-459 | U-63 | 5 Meg |
| VC. 436 | U. 33 | 50k | 1 | VC-460 | U. 65 | 5 Meg. |
| VC. 437 | U-34 | 50K | 2 | VC-461 | U-67 | 5 Meg |
| VC. 438 | U-35 | 50K | 4 | VC-462 | U-82 | 10 Meg . |

Any of above
QUANTITY PRICES-NO ASSORTMENT
Lots 25 . ea. .91
Lots 100 , ea. .76

SINGLE TAPPED MIDGETROLS


DOUBLE TAPPED MIDGETROLS

| Stock | $\underset{\substack{\text { Mfg. } \\ \text { No. }}}{ }$ | overall. Resistances | $\operatorname{Tap}_{1}$ | $\begin{aligned} & \text { tances } \\ & \text { Tap } 2 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| VC-477 | UDT-283 | 500K | 100K | 200K |
| VC-483 | UDT-289 | 1 Meg. | 250K | 500k |
| VC. 478 | UDT-291 | 1.5 Meg . | 225K | 500K |
| VC-479 | UDT-295 | 2.25 Meg. | 250K | 500K |
| VC-480 | UDT-296 | 2.25 Meg. | 500K | 1 Meg. |
| VC-482 | UDT-303 | 3.3 Meg. | 300K | 1.5 Meg. |
| Any of above QUANTITY PRICES - NO ASSORTMENT |  |  |  |  |
|  |  |  |  |  |
| Lots 25, ea. 1.13 .................... Lo |  |  |  |  |
| Lots 100 | - 94 |  | ots | a. $\quad .90$ |

## MIDGETROL ACCESSORIES

DS-36 Special $3^{\prime \prime}$. Extension Shaft. For tubular shaft Midgetrois ahd 2 -watt wire-wound controls. Also couples front and rear sections together for single-shaft dual control. Shpg; wt., 2 oz.
VC-380 (DS. 36)
DS.37 *" diameter shaft. For use with row Midgetrois to meter shaft. For use with round-shaft Shps. wt. 2 oz.
v-381 (bs-37)
EB- 158 Special with $3 /{ }^{3 \prime \prime}$ milled double flat. Shpg. wt., 2 oz. Net 50
VC-382 (EQ-158) EB-214 Special Bushing $1 / 2^{\prime \prime}-28$ thread, 2K." long with .403 milled double flat. Shps. wt., 2 oz.
VC .383 (EE-214) .............................................. Net . 53


SU INSULATED SHAFT MIDGETROLS FOR TV


## TAPPED AND DOUBLE TAPPED PUSH.PULL CONTROLS

| $\begin{gathered} \text { Stock } \\ \text { No. } \end{gathered}$ | $\begin{gathered} \mathrm{Mlg} \\ \mathrm{No} . \end{gathered}$ | Ohms | Tapped @ | aper |
| :---: | :---: | :---: | :---: | :---: |
| VC-281 | PP-254DT154 | 250K | 100k-150K | 4 |
| VC-283 | PP-55T25 | 500K | 200k | 4 |
| VC-286 | PP-55DT1683 | 500 K | 84K-168K | 4 |
| VC. 288 | PP.55T254 | 500K | 250x | 1 |
| VC. 279 | PP.16T55 | 1 Meg | 500K | 2 |
| VC-297 | PP. 16715 | 1 Meg | 100K | 1 |
| VC. 298 | PP-16T25 | 1 Meg | 200K | 2 |
| VC-292 | PP. 160 T 55 | 1 Meg | 250K.500K | 4 |
| VC. 291 | PP260T16 | 2 Meg | $500 \mathrm{~K}-1 \mathrm{Meg}$ | 1 |
| VC-290 | PP-26T16 | 2 Meg | 1 Meg | 4 |
| VC-294 | PP-360126 | 3 Meg | 1 Meg-2 Meg | 4 |
| VC. 284 | PP-46T26 | 4 Meg | 2 Meg | 4 |

AnV of above
QUANTITY PRICES-MO ASSORTMENT
Lots 25 , ea. 1.43
Lots 50. ea. 1.32

## THEATRE SPEAKER CONTROLS



EXPLANATION OF MALLORY TAPERS
Taper No. 1-For audio or antenna shunt circuits.
Taper No. $2-$ For serles circults or cathode voltage controls.
Taper No. 4-Linear taper for voltage divider circuits.

## SENSITIVITY CONTROLS

Replaces hum, balance, Ilnearity, agc, hold controls, etc. Contact arm grounded to cup small wire wound, rated at 2 watts. Slot is provided for screw driver adjustment. Stops at 100 ohms. All are rheostats except $f$ are potentiometers. * has polyethylene knob. Shpg. wt., 6 oz.
FLANGE MOUNTING RHEOSTATS AND POTENTIOMETERS

| Stock No. | $\begin{aligned} & \text { Mfts. } \\ & \text { Mo. } \end{aligned}$ | Ohms | Stock No. | Mfg. No. | Ohans |
| :---: | :---: | :---: | :---: | :---: | :---: |
| VC.108 | FL-6 | 6 | VC. 117 | Fl. 500 | 500 |
| VC. 106 | FL. 15 | 15 | VC. 118 | FL-600 | 600 |
| VC-107 | FL-40P $\dagger$ | 40 | VC. 119 | FL-600S* | 600 |
| VC-110 | FL.75 | 75 | VC. 120 | FL.750 | 750 |
| VC. 121 | FL-100 | 100 | VC-100 | FL.1K | 1K |
| VC-111 | Fl-100Pt | 100 | VC. 101 | -FL.2K | 2K |
| VC-112 | F.150 | 150 | VC-102 | FL-2KS | 2 K |
| VC. 113 | FL-200 | 200 | VC. 103 | FL-3K | 3K |
| VC-114 | Fl-200Pt | 200 | VC-104 | FL-4K | 4K |
| VC-115 | FL-250 | 250 | VC-105 | FL-5K | 5K |
| VC-116 | FL-250P $\dagger$ | 250 |  |  |  |
| Any type | Above, Eact |  |  |  | . 41 |

PRINTED CIRCUIT RHEOSTATS

| Stock No. |  | Ohms | Stock No. |  | Ohms |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| VC. 129 | PFL-1.5 | 1.5 | VC-137 | PFL-1K | 1000 |
| VC-130 | PFL-15 | 15 | VC. 133 | PFL-1.5K | 1500 |
| VC-138 | PFL-60A** | 60 | VC-134 | PFL-3K | 3000 |
| VC-131 | PFL. 100 | 100 | VC. 135 | PFL-4K | 4000 |
| VC. 139 | PFL-1004** | 100 | VC. 136 | PFL.5K | 5000 |
| VC-132 | PFL. 600 | 600 |  |  |  |

CARBON TRANSISTOR CONTROLS
Linear taper (4), rated $1 / 4$ Watt: Audio
Universal $1 / \mathbf{s}^{\prime \prime}$ steel shaft $1 / \mathbf{c}^{*}$ long
with $1 / 4^{\prime \prime}-32$ bushing and screw-driver
slot except * has so" long nylon shaft.


| Stock No. | $\begin{aligned} & \text { Mfg. } \\ & \text { No. } \end{aligned}$ | hms Tpr | Stock Stock N | Mfg. No. Ohms Tpr. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| VC. 530VC. 531 | ML | 1 K 14 VC .536 |  | MLCI5A | 100K |
|  | MLC252A | 2500 | VC. 551 | MLC15L | 100K |
| VC-532 | MLC53A | 5 K | VC-537 | MLC256 | 200K |
|  | MLC53L | 5K 4 | VC-538 | MLC254L | 250K |
| VC.533 | MLC14L | 10 K 4 | VC. 539 | MLCN55L* | 500K |
| VC.535 | MLC54L | 50K | VC-540 | MLCN16A* MLCN16L* | $\begin{array}{llll}1 & \mathrm{Meg} \\ 1 & \mathrm{Meg} & 1 \\ 4\end{array}$ |
| Any of above QUANTITY PRICES-NO ASSORTMENT Lots 25, ea. 1.03 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Lots 10 | , ea. 8 |  |  | Lots 175 | ea. . 81 |

## SWITCH TYPES

Same as above but with an S. P. S.

VOLUME CONTROL ACCESSORIES



A47 SERIES $1 / 2$ WATT CONTROLS
Universal type carbon con trol for servicing Hi Fi, Radio, IV and amplifiers Shaft interchangeable with special shafts listed on center of page. Each control
supplied with $3^{\prime \prime}$ long knurled split shaft. Body dim.
 Stock No.

| Stock No | Ohms | Taper | Stock No. | Ohms | Taper |
| :---: | :---: | :---: | :---: | :---: | :---: |
| VD-847 | 500 | S | V0.874 | 75K | V |
| VD.848 | 750 | S | VD. 875 | 100K | 5 |
| vo-849 | 1000 | S | VD. 876 | 100k | 2 |
| VD-850 | 1500 | S | vo. 877 | 150 K | S |
| VD-351 | 2000 | S | V0.378 | 200 K | S |
| V0-852 | 2500 | S | VD. 879 | 250 K | \$ |
| VD-853 | 3000 | S | V0.880 | 250 K | 2 |
| Vo-854 | 4000 | S | VD-881 | 300K | S |
| vo.855 | 5000 |  | V0.882 | 500k | S |
| V0-856 | 7500 | S | VD-883 | 500K | 2 |
| V0-857 | 10K | S | VD-884 | 750K | 5 |
| V0-850 | 10K | v | VD-885 | 750K | 2 |
| VD-859 | 10K | w | VD-886 | 1 Meg | S |
| VD-860 | 10K | 2 | V0.887 | 1 MeR | 2 |
| V0.861 | 15K | S | V0.888 | 1.5 Meg | 5 |
| V0-862 | 15k | V | V0-889 | 2 Meg | 2 |
| YD-863 | 15K | w | V0.890 | 2 Meg | 5 |
| VD-864 | 20x | S | VD-691 | 2.5 Meg | s |
| Y0.865 | 25 K | S | V0.692 | ${ }^{2} 3 \mathrm{Meg}$ | S |
| VD-866 | 25 K | W | Vo. 993 | 3 Meg | 2 |
| V0.867 | 25k | , | vo.694 | 4 Meq | S |
| VD-668 | 30k | S | VD.895 | 4 Meg | 2 |
| VD-669 | 40 K | S | V0.896 | 5 Meg | 2 |
| V0.870 | 50 K | S | V0-897 | 5 Meg | S |
| V0-871 | 50 K | ${ }^{W}$ | VD-698 | 7.5 Meg | S |
| V0. 872 | 50k | 7 | VD-899 | 10 Meg | S |



## C47S PUSH-PULL CONTROL

Same as A47 series but with push-pull switch. Av. 1\%." dia., $1 \times \mathrm{H}^{\prime \prime}$ deep $\times 13_{2}^{\prime \prime}$ long bushing. Av. Shivg.

| Stock No. | Ohms | Taper | Stock No. | Dhms | Taper |
| :---: | :---: | :---: | :---: | :---: | :---: |
| VD-913 | 1000 | $v$ | VO-918 | 750K | Z |
| V0-912 | 250K | S | vo. 919 | 1 Meg | S |
| VD-914 | 250K | 2 | V0. 820 | ${ }_{1} \mathrm{Meg}$ | 2 |
| VD-915 | 500 K | S | VD-921 | 2 Meg | 5 |
| V0.916 | 500k | $z$ | Vo-s22 | 2 Meg | 2 |
| V0.917 | 750K | s |  |  |  |

SERIES C47SF TAPPED PUSH-PULL CONTROLS

| Stock Ne. | Ohms | Tapped | stack No. | Ohms | Tapped |
| :---: | :---: | :---: | :---: | :---: | :---: |
| V0.923 | 500K | 250K | vo. 225 | 1 Meg | 250K |
| V0.924 | 500K | 150 K | VD-927 | 2 Meg | 1 Meg |
| Vo.925 | 1 Meg | 500K |  |  |  |

## s

A47F SERIES TAPPEO CONTROLS
Same as the "A47" series Dut tapped. Av. shpg. wt.. 401.
 VO. 818
VD. 819
VD. 820
VD. 821
YD.

## V

## VD V V

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Stock No. ${ }^{2}$ Description

| tock N | Descriptian |  | Net Each |
| :---: | :---: | :---: | :---: |
| V0.967 | SPST | 5 A -125VAC | . 44 |
| V0.964 | SPST | 15A-10VUC | . 65 |
| V0.965 | DPST | 3A-125VAC | . 50 |
| V0-966* | DPST | 3A-125VAC/DC | . 50 |
| VO-968 | DPST | 15A-10VDC | . 65 |

SPECIAL A47 CONTROL SHAFTS
Interchangeable with shafts of A47. A47F and AD47.



B47 1/2-WATT TAB MOUNT
Designed for applications where bushingless controls are required. Has phenolic shaft. "X," dia. $x$ "hen" deep with $1^{\prime \prime}$ shaft. Av. shpg wt., 602


| sock No | Ohms | Taper | Stock No. | Ohm | Taper |
| :---: | :---: | :---: | :---: | :---: | :---: |
| VD. 928 | 500 | S | VD-941 | 250K | S |
| VD. 929 | 750 | S | Vo.942 | 330K | 2 |
| VD.930 | 1000 | S | V0.943 | 500k | s |
| Vo.931 | 1500 | S | VD-944 | 500k | 2 |
| V0-932 | 2500 | S | VD-945 | 1 Meg | S |
| V0-933 | 3K | S | VO. 946 | 1 Meg | 2 |
| VD-934 | 5K | S | VD-947 | 1.5 Meg | S |
| VD-935 | 10K | S | VD-948 | 2 Meg | S |
| VD. 936 | 25K | S | VD-949 | 2.5 Meg | S |
| Y0.937 | 50k | S | V0.953 | 3 Meg | 5 |
| VD-938 | 100k | S | V0.952 | 5 Meg | S |
| VD. 939 | 150 K | S | VD-954 | ${ }_{5} \mathrm{Meg}$ | 1 |
| VD-940 | 200K | S | VD-955 | 7.5 Meg | S |

## B47S TAB MOUNT WITH SWITCH

Same as 847 with on/off switch. Slze: "Ko" dia. $x$ $1^{\prime \prime}$ deep with $11 / 2^{\prime \prime}$ metal shaft.

| Stock Nc. | Ohms | Taper | Stock No. | Ohms | Taper |
| :--- | :--- | :--- | :--- | :--- | :--- |
| VO.956 | 250 H |  |  |  |  |


| Stock Nc. |
| :--- |
| VO-956 |
| VD.957 |
| Vo.958 |
| VD.-959 |


| 250 K | $S$ |  |
| :--- | :--- | :--- |
| 250 K | 2 |  |
| 500 K | S |  |
| 500 K | 2 |  |
| Any type above. |  |  |

EXPLANATION OF CLAROSTAT TAPERS
S- Straight or unitorm res. change with rotation
-Right-hand $20 \%$ res. at $50 \%$ of CCW rotation W- Left-hand $20 \%$ res. at $50 \%$ of CW rotation z-Left-hand (log audio) $10 \%$ res. at $50 \%$ of CW rotation
 SERIES 58 4-WATT CONTROLS

Linear, wire, wound, $10 \%$ tolerance, highly stable, smooth operation. Shaft 142" long, $74^{\prime \prime}$ bushing, $1 / 4^{\prime \prime}$ diam. wt.


| Steck No. | Trpe | Dhms | Not | Stock No. | Type | Ohms | Net |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| VD. 350 | 58.1 | 1 | . 91 | VD-366 | 58-400 | 400 | . 91 |
| VD. 351 | 58-2 | 2 | . 91 | V0.367 | 59-500 | 500 | . 91 |
| vo. 352 | 58-4 | 4 | . 91 | V0.368 | 58.750 | 750 | 1 |
| V0-353 | 58-6 | 6 | . 91 | VD-369 | 58.1000 | 1 K | . 9 |
| VD. 354 | 58.10 | 10 | . 91 | V0.370 | 58.1500 | 1.5 K | . 91 |
| VO-355 | 58-15 | 15 | . 91 | Vo. 371 | 58.2000 | 2 K | . 91 |
| VD. 356 | 58-20 | 20 | . 91 | V0.372 | 58-3000 | 3K | . 91 |
| vo. 357 | 58.25 | 25 | . 91 | V0.373 | 58-5000 | 5K | . 91 |
| V0.358 | 58-30 | 30 | . 91 | Vo. 374 | 58.7500 | 7.5K | . 91 |
| V0.359 | 58.40 | 40 | . 91 | vo. 375 | 58-10K | 10K | 91 |
| V0.360 | 58-50 | 50 | . 91 | VD-376 | 58-15K | 15K | 1.18 |
| V0-361 | 58.60 | 60 | . 91 | Vo. 377 | 58-20K | 20K | 1.18 |
| VD. 362 | 58.75 | 75 | . 91 | VD.378 | 58-25K | 25k | 1.18 |
| VD. 363 | 58.100 | 100 | 91 | V0.379 | 58.30k | 30 K | 1.59 |
| VD. 364 | 58-200 | 200 | . 91 | V0.380 | 58-40K | 40 K | 1.59 |
| VD. 365 | 58.3 | 300 | 11 |  | 50k | 50 K | 1.59 |
| 58C1 5ERIES 5\% CONTROL Same as series 58 except $\pm 5 \%$ tol. |  |  |  |  |  |  |  |
| $\begin{aligned} & \text { VE.54 } \\ & \text { VE. } 55 \end{aligned}$ |  | $\begin{gathered} 10 \\ 100 \end{gathered}$ |  |  | . 56 |  | 1000 |
| Any type above . . . Each 1.32 |  |  |  |  |  |  |  |

## SPECIAL ORIVE IN THEATRE L PADS

For theatre and similar sound systems. Replacement for RCA, International, Motiograph, and Simpley Equip and other applications. * 80 hm L pad has 2 separate winds of 5 ohms and 40 ohms. Units have $3 / \mathrm{e}-32$ bushing $3 / /^{"}$ long and $11 / 2^{\prime \prime}$ round shaft. Shpg. wt., 4 02.
stect

No.
Ohms
Net Each
8 ohm L pad with 2 windings*
1.77

VO-816
vo. 812
35 ohm Tapered rheostat
1.29

CONSTANT IMPEOANCE 10-WATT OUTPUT

## ATTENUATORS

Series CIB rated at 10 watts but will handle up to 30-watts In audio circults. Linear attenuation provided in 3 do steps up to 24 do., then 30 do followed by infinity. Supplied with dial plate and bar knob. One hole mounting 3 "* bushing dia. $1^{\prime \prime}$ shaft. Shpg. wt., 402.

| Sthat Ne | Ohms | Stact. Mo. | Ohms |
| :--- | :---: | :---: | ---: |
| VE-40 | 6 | VE-38 | 200 |
| VE-41 | 8 | VE-37 | 250 |
| VE-34 | 15 | VE-38 | 500 |
| VE-35 | 50 | VE-39 | 600 |

## CLAROSTAT EXACT REPLAGEMENT T.V. CONTROLS

These controls are identical to the originals in every detail. Just remove old control and substitute the clarostat RTV

the mfr': no. on the control. Then check the list below for the mfr's part number and order your control by the stor.t no. Av. shpg. wt., $60 z$.

SILVERTONE

| Stock No. | Mfr. No. | TV Part No. | Net |
| :---: | :---: | :---: | :---: |
| V0-801 | RTV. 305 | A24124 | 2.62 |
| vo. 801 | RTV. 305 | P8-24124A | 2.62 |
| vo-801 | RTV-305 | A24142 | 2.62 |
| vo.641 | RTV. 361 | PB-24142 | 3.06 |
|  | STROMBERG-CARLSON |  |  |
| vo.654 | RTV-462 | VAN1A | 2.68 |
| Vo.644 | RTV. 388 | 157.0019 | 3.12 |
| Vo.631 | RTV-260 | 37.73153-1.2 | 3.06 |
| V0.631 | RTV-260 | R73153 | 3.06 |
| VD-644 | RTV-388 | 37-73876-3 | 3,12 |
| TELE-VOGUE |  |  |  |
| vo. 635 | RTV. 316 WES | vc.0040-A GHOUSE | 2.62 |
| V0.806 | RTV-317 | V.9877-1 | 3.06 |
| V0. 807 | RTV-288 | V-9877-2, 3 | 3.06 |
| vo.806 | RTV-317 | V.9877-10 | 3.06 |
| Vo-653 | RTV-455 | V-9877M-7 | 3.06 |
| V0-810 | RTV. 511 | V.14391-3 | 2.62 |
| vo.811 | RTV- 523 | V.14391-4 | 2.68 |
| Vo. 672 | RTV. 662 | 270V002M02 | 2.68 |
| vo. 673 | RTV-665 | 270V051H01 | 1.50 |
|  |  | NITH |  |
| Vo.616 | RTV. 98 | 63-1670 | 1.32 |

## $\frac{\sqrt{35}}{-\frac{10}{4}}$ <br> IRC AUTO RADIO CONTROLS <br> These controls wili replace your older ones without any

 change. Avg. shpg. wt., 802.
## BUICK

| Stock No. | Year | Part No. | Net Ea. |
| :---: | :---: | :---: | :---: |
| VC-822 | 1946-53 | 188512084 | 2.09 |
| VC. 817 | 1954.56 | 18 K 33457 | 2.09 |
| CHEVROLET |  |  |  |
| VC-818 | 1949-50 | 7258084 | 2.47 |
| VC-82D | 1951.52 | 1219708 | 2.47 |
| VC. 824 | 1953.54 | 7262941 | 2.47 |
| VC-825 | 1953.54 | 7264210 | 2.47 |
| VC. 817 | 1953.56 | $18 \times 33457$ | 2.09 |
| VC. 826 | 1955 | 7265265 | 2.47 |
| VC-827 | 1955-56 | 7265220 | 2.47 |
| VC. 830 | 1956 | 7266842 | 2.47 |
| VC. 828 | 1955-57 | 7265302 | 2.47 |
| VC-829 | 1955.58 | 7266193 | 2.47 |
| VC. 833 | 1957 | 7269186 | 2.47 |
| VC-823 | 1958 | 7270450 | 2.47 |
| VC-835 | 1958 | 7270479 | 2.47 |
| VC. 836 | 1959 | 7273302 | 2.47 |
| VC-840 | 1959 | 7273367 | 2.47 |
| VC-892 | 1960 | 7275710 | 2.47 |
| VC-893 | 1961 | 7278528 | 1.91 |
| VC. 894 | 1961 | 7276939 | 1.91 |
| FORD |  |  |  |
| VC. 800 | 1948-50 | 1222808 | 2.09 |
| VC.801 | 1950 | 188591266 | 2.09 |
| VC-804 | 1952.53 | L219586-3 | 2.09 |
| VC-805 | 1952.53 | 18 K 511635 | 2.09 |
| VC. 806 | 1954 | L219586-7 | 2.09 |
| VC.808 | 1955 | 1219656-1 | 1.38 |
| VC-809 | 1955 | 188531299 | 1.38 |
| VC-810 | 1956 | L219681.1 | 2.09 |
| VC-811 | 1956 | 188534483 | 2.09 |
| VC-812 | 1957 | 2090035-1 | 2.09 |
| VC. 813 | 1957 | 18 K 539059 | 2.09 |
| VC. 815 | 1957.58 | 2090035-2 | 2.09 |
| VC.843 | 1959 | 2090035-3 | 2.09 |
| VC. 895 | 1960 | $2090405-1$ | 1.91 |
| VC-896 | 1960 | 18C562768 | 1.91 |
| VC.897 | 1961 | 2090405-8 | 1.91 |
| OLDSMOBILE |  |  |  |
| VC. 822 | 1951-52 | 188512084 | 2.09 |
| VC-817 | 1954.56 | 18 K 33457 | 2.09 |
| PLYMOUTH |  |  |  |
| Vc. 837 | 1952 | 18 A501616 | 1.38 |
| VC-844 | 1956 | 188536704 | 2.09 |
| VC-846 | 1957 | 188540376 | 1.38 |
| VC-898 | 1960 | 188563140 | 1.91 |
| PONTIAC |  |  |  |
| VC-817 | 1955.56 | 18 K 33457 | 2.09 |
| VC. 886 | 1951-52 | 7260043 | 2.47 |
| VC-888 | 1955-56 | 7265495 | 2.47 |
| VC.899 | 1960 | 7275708 | 2.52 |
| VC. 900 | 1961 | 1277542 | 1.95 |
| VOLKSWAGEN |  |  |  |
| VC-817 | 1953-56 | 18 K 33457 | 2.09 |

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## OHMITE

1RC


| Ohms | Ohins | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Megs | Megs | 1城䞨 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0.24 | 1.1 | 5.1 | 24 | 110 | 510 | 2400 | 11,000 | 51,000 | 0.24 | 1.1 | 5.1 |
| $0.27 *$ | 1.2* | $5.6 *$ | 27* | 120 | $560{ }^{*}$ | 2700** | 12,000 | 56,000* | 0.27 * | 1.2* | 5.6 * |
| 0.30 | 1.3 | 6.2 | 30 | 130 | 620 | 3000 | 13,000 | 62.000 | 0.30 | 1.3 | 6.2 |
| $0.33{ }^{*}$ | $1.5 *$ | $6.8{ }^{*}$ | 33* | 150** | 680* | 3300* | 15,000 | 68,000* | $0.33 *$ | 1.5* | $6.8{ }^{\circ}$ |
| 0.36 | 1.6 | 7.5 | 36 | 160 | 750 | 3600 | 16,000 | 75,000 | 0.36 | 1.6 | 7.5 |
| $0.39{ }^{*}$ | $1.8{ }^{*}$ | 8.2" | 39** | 180** | $820{ }^{\text {8 }}$ | $3900^{*}$ | 18,000** | 82,000* | 0.39 ${ }^{\text {+ }}$ | 1.8* | 8.2 * |
| 0.43 ${ }^{0.47}$ | 2.0 | $9.10{ }^{\text {a }}$ | 43 | 200 | 910 | 4300 | 20,000 | 91,000 | 0.43 | 2.0 | 9.1 |
| 0.47 0.51 | $2.2{ }^{\text {2 }}$ | 10* | 47 51 | 220 240 | $1000^{*}$ 1100 | 4700** | 22,000* | 0.1 meg | 0.47* | 2.2 * | $10^{*}$ |
| 0.56 * | 2.7* | 11 * | $56^{*}$ | 240 ${ }^{\text {27 }}$ | 1100 1200 | 5100 5600 | 24,000 27,000 | $0.11 \mathrm{meg}^{\text {a }}$ 0.12 meg | 0.51 0.56 | 2.4 | 11 12* |
| 0.62 | 3.0 | 13 | 62 | 300 | 1300 | 6200 | 30,000 | 0.13 meg | 0.62 | 3.0 | 13 |
| $0.68{ }^{*}$ | 3.3* | 15* | 68* | 330 * | 1500* | $6800{ }^{*}$ | 33,000 | 0.15 meg* | 0.68 * | 3.3 * | $15 *$ |
| 0.75 | 3.6 | 16 | 75 | 360 | 1600 | 7500 | 36,000 | 0.16 meg | 0.75 | 3.6 | 16 |
| $0.82{ }^{*}$ | $3.9 *$ | $18{ }^{*}$ | 82* | 390* | $1800{ }^{*}$ | $820{ }^{*}$ | 39,000 | 0.18 meg* | $0.82 *$ | 3.9** | $18 *$ |
| 0.91 | 4.3 | 20 | 91 | 430 | 2000 | 9100 | 43,000 | 0.20 meg | 0.91 | 4.3 | 20 |
| $1.0 *$ | 4.7* | 22* | $100^{*}$ | 470* | 2200* | 10,000 | 47,000* | $0.22 \mathrm{meg}{ }^{*}$ | 1.0 | 4.7* | 22* |

## ALLEN-BRADLEY-OHMITE and IRC RESISTORS

## CARBON TYPES

Molded, insulated resistors that meet rigid MIL-R-1IC specifications, EIA (RETMA color coded. Brand new factory fresh stoch with full length leads. Sizes: . $140 \mathrm{Lx}, 067^{7 \prime}$

$10 \%$ TOLERANCE CARBON TYPES
Available within limits of ranges listed below and in sizes shown in master chart with asterisk.

Net Ea. (Assorted but
 Min. 100 of a Vatue)


| RS-24C | $1 / 10$ |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| RS-10C | $1 / 2$ | RC. 20 | 10 ohms to 10 meg | .24 | .20 | .16 | .14 | .122 | .112 | .105 |
| RS-11C | 1 | RC. 32 | 10 ohms to 22 megs | .10 | .09 | .06 | .04 | .04 | .032 | .03 | $\begin{array}{lllllllllll}\text { RS-11C } & 1 & \text { RC- } 32 & 10 \text { ohms to 22 megs } & .16 & .11 & .085 & .04 & .04 & .032 & .05 \\ \text { RS.12C } & 2 & \text { RC-42 } & 10 \text { onms to } 22 \text { megs } & .22 & .19 & .14 & .11 & .09 & .045 & .042\end{array}$ $5 \%$ TOLERANCE CARBON TYPES

Avaliable within limits of ranges below, in all sizes shown in master chart.
Net Each. Assorted Net Ea. (Assorted but

| $\begin{gathered} \text { Steck } \\ \text { No. } \end{gathered}$ | Watts | $\begin{gathered} \text { MHI } \\ \text { Equir. } \end{gathered}$ | Range | Net Each, Assorted |  |  | Net Ea. (Assorted but Min. 100 of a Value) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 1.4 | 5.49 | 50.99 | $\begin{gathered} 100- \\ 249 \end{gathered}$ | $\begin{array}{r} 250 \\ 499 \\ \hline \end{array}$ | $\begin{aligned} & 500 . \\ & 999 \end{aligned}$ |  |
| RS.13C | 1/2 | RC-20 | 10 ohms to 22 megs | . 20 | . 18 | . 12 | . 075 | . 073 | . 065 | . 056 |
| RS.14C | 1 | RC. 32 | 10 ohms to 22 megs | . 32 | . 28 | . 18 | . 125 | . 123 | . 11 | . 09 |
| RS-15C | 2 | RC. 42 | 10 ohms to 22 megs | . 45 | . 40 | . 24 | . 19 | . 185 | . 175 | . 16 |



TEXAS SILICON SENSITOR SOLIO STATE TEMPERATURE SENSING RESISTORS - Temperature CompensatinE - Temperature sensing

Used in countless applications from Geophysics to Missiles - Amplifiers - Power Supplies - Servos - Magnetic Amps - Computers - Telemetering Temperature coefficient of $0.7 \% /{ }^{\circ} \mathrm{C}$. Avallable in following standard reststances, in ohms.



IRC BWH WIRE-WDUND TYPES
Exceptionaliy stable and completely insulated. Meets or exceeds all MIL-R-11C re. quirements. Rated @ $1 / 2$-watt $137^{\circ} \mathrm{C}$ ambient temp; 2 -watt @ $115^{\circ} \mathrm{C} ; 2$-watt @ $70^{\circ} \mathrm{C}$. Size: Kux/zz". Shpg. wt., 2 oz .

10\% TOLERANCE WIRE-WOUNO TYPES
Avallable within limits of ranges below in sizes with asterisk in master chart.


Avaliable within limits of ranges listed below in all sizes listed in master chart.

## Net Each, Assorted

| $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | Watts | Mil Equir. | Range | Each, Assorted |  |  | $\begin{aligned} & \text { Min. } \\ & 100 . \\ & 249 \end{aligned}$ | of a Value) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 1-4 | 5.49 | 50-99 |  | 499 | 999 |
| RS-242C | 2 | RC. 32 | 0.24 to 9.1 ohms | . 47 | . 40 | . 35 | . 285 | . 189 | . 141 |
| RS-243C | 2 | RC-32 | 10 to 1 K ohms | 30 | . 25 | . 20 | . 18 | . 12 | . 09 | OHMITE DHM'S LAW CALCULATOR

Jolves Ohm's Law problems with just one setting of the slide. Has parallel resistance computing scales. Covers range from 0.01 ohm to 100 megohms. Current scale in amperes and milliamperes. Handy pocket size $9 \times 3^{\circ}$ RS-245 Shpg. wt., 2 oz

Net .25

## NEW! 1/10 WATT MINIATURE CARBON-FILM RESISTORS AT LOW, LOW PRICES MASTER CHART EIA (RETMA) VALUES SPECIFY RESISTANCE WANTED

| Ohms | Ohms | Ohms | Ohnis | Ohms | Ohms | Ohms | Ohms |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5.1 | 22 | 91 | 390 | 1600 | 6800 | 30.000 |  |
| 5.6 | 24 | 100 | 430 | 1800 | 7500 | 33,000 | 0.13 meg |
| 6.2 | 27 | 110 | 470 | 2000 | 8200 | 36,000 | 0.15 meg |
| 6.8 | 30 | 120 | 510 | 2200 | 9100 | 39,000 | 0.16 meg |
| 7.5 | 33 | 130 | 560 | 2400 | 10,000 | 43,000 | 0.28 meg |
| 8.2 | 36 | 150 | 620 | 2700 | 11,000 | 47,000 | 0.20 meg |
| 9.1 | 39 | 160 | 680 | 3000 | 12,000 | 51,000 | 0.22 meg |
| 10 | 43 | 180 | 750 | 3300 | 13,000 | 56,000 | 0.24 meg |
| 11 | 47 | 200 | 820 | 3600 | 15,000 | 62,000 | 0.27 meg |
| 12 | 51 | 220 | 910 | 3900 | 16,000 | 68,000 | $0.30 \mathrm{meg}$ |
| 13 | 56 | 240 | 1000 | 4300 | 18,000 | 75,000 | $\begin{aligned} & 0.33 \mathrm{meg} \\ & 0.36 \mathrm{meg} \end{aligned}$ |
| 15 | 62 | 270 | 1100 | 4700 | 20,000 | 82,000 | 0.39 meg |
| 16 | 68 | 300 | 1200 | 5100 | 22,000 | 91,000 | 0.43 meg |
| 18 | 75 | 330 | 1300 | 5600 | 24,000 | 0.1 meg | 0.47 meg |
| 20 | 82 | 360 | 1500 | 6200 | 27,000 | 0.11 meg | 0.51 meg |

## - REALLY MINIATURE-ONLY $.28^{\prime \prime} \mathrm{L} \times .08^{\prime \prime}$ DTAM <br> LOW NOISE

Lafayette brings you true miniaturization combined with the advantages of carbon fllm resistors. Rated at $1 / 10$ watt, tolerance $\pm 10 \%$ they have a special synthetic resin insulation, withstand high degrees of heat, humidity and shock. Very low temperature coefficient and noise factor. imported to sell at these low prices SPECIFY RESISTANCE VALUE. RS-250

Net ea. 12
5 for $\mathbf{. 5 0 ,} 25$ for 1.75, 100 for 5.00, 1000 for 40.00
INDUSTRIALS: ASK FOR QUOTATIONS IN LARGER QUANTITIES

## WUERTH SURGISTOR COMBINES <br> \section*{FUNCTIONS OF RESISTOR and RELAY}

A Surgistor is connected directly into the power line circult of any electrical device. It's function is to limit the Inrush current until the tube heaters are warmed suf liciently to accept the full voltage without damage. Starting resistance 100 ohms, circult resistance 0.2 ohms. Power range 320 watts maximum. Self-mounting.
TS-317 $(4100-2)$ Shpg. wt., 6 oz. .......................................................................

Master Chart Resistance Values For Fixed Type Resistors. Specify Stock No. and ohmage On Your Order.


- MALLORY POWER RESISTORS

Mallory power resistors are the finest quality wirewound on ceramic cores. They are covered with bakedon vitreous enamel and give full wattage dissipation. Leads or lugs are firmly imbedded. Consult listings below and master charts for ohmages availa each type. BE CERTAIN YOUR ORDER SP
OUR STDCK NO. AND OHMAGE DESIRED.

TYPE HHJ-S WATT FIXEO

Avallable in all ohmages in chart through 25,000 ohms except 225 and 2750 . Has both lugs and wire leads. Tube size $K_{0} x l^{\prime \prime}$. Tolerance $\pm 5 \%$ on all values above 10 ohms , others $\pm 10 \%$. Shus. wt., 3 oz .
SPECIFY STOCK NO. AND OHMAGE ON YOUR ORDER

| Stock No. | Ohms | Net Each |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 3RS.251c | 1.300 | . 45 | . 39 | . 32 | $\frac{1024}{.28}$ |
| 3RS-252C | 350-5000 | . 49 | . 43 | . 35 | . 30 |
| 3RS-253C | 6000-10,000 | . 52 | . 45 | . 37 | . 32 |
| 3RS-254C | 12,500-15,000 | . 56 | . 47 | . 39 | . 34 |
| 3RS-255 | 20,000 | . 60 | . 50 | . 42 | . 36 |
| 3RS-256 | 25,000 | . 62 | . 52 | . 43 | . 38 |

Available in all ohmages in master chart thru 50,000 ohms, except 1.5 and 2750 ohms. Has both lugs and wire leads. Tube size K $\mathrm{K}_{\mathrm{s}} \mathrm{Ml} \mathrm{m}^{\prime \prime}$. Tolerance $\pm 5 \%$ on all values above 10 ohms, others $\pm 10 \%$. Shpg. wt., 401.

SPECIFY STOCK NO. ANO OHMAGE ON YOUR OROER

| Stock <br> NR. Ohms | 1.9 | Net Each <br> 10-24 25-99 100-249 |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 3RS-257C 1-1000 | . 50 | . 43 | . 36 | . 31 |
| 3RS-258C 1100-5000 | . 52 | . 45 | . 37 | . 32 |
| 3RS-259C 6000-10.000 | . 62 | . 54 | . 44 | . 38 |
| 3RS-260C. 11,000 20,000 | . 70 | . 60 | . 50 | . 43 |
| 3RS-261C 22,500-40,000 | . 72 | . 64 | . 53 | . 45 |
| 3RS-262C 45.000-50,000 | . 82 | 71 | . 58 | . 50 |

TYPE
TYPE 2HJ-20 WATT FIXED

Available in all ohmages in chart marked. Has both lugs and wire leads. Tube slze \%ox $\boldsymbol{2}^{\prime \prime}$. Tolerance $\pm$ 5\%. Shpg. wt., 402.
SPECIFY STOCK NO. AND OHMAGE ON YOUR ORDER.

| Stock. |  | Net Each |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
| MO. | Ohms | 1.9 | $10-24$ | $25-99$ | $100-249$ |
| 3FS-263C | $5-1500$ | .60 | .52 | .43 | .37 |
| 3RS-264C | $1750-2500$ | .62 | .54 | .44 | .38 |
| 3RS-265C | $2750-10,0 C 0$ | .72 | .64 | .53 | .45 |
| 3RS-266C | $12,500-30,000$ | .75 | .65 | .54 | .46 |
| 3RS-267C | $35,000-50,000$ | .88 | .77 | .63 | .54 |
| 3RS-268 | 75,000 | 1.28 | 1.11 | .92 | .79 |
| 3RS-269 | 100,000 | 1.41 | 1.22 | 1.01 | .86 |

TYPE 2.5HJ-25 WATT FIXED
Available in all ohmages marked I, lug terminals
furnished with mounting feet. Tube size $\mathrm{Kan}^{2} \mathrm{x}^{2 \prime \prime}$. Shpg. wt., 602 Stoct

3RS-271C $2000-2500$
3RS-272C $\quad 3000-10,000$
3RS-273C
12,500-25,000
3RS-274C $30,000-40,000$
3RS-275 50,000
3RS-276 75,000
3RS-277 100,000
1.9

## — TYPE 5HJ-50 WATT FIXED

Avallable in all onmages in chart marked with + . Tube size Ko $\times 4^{\prime \prime}$. Lug terminals. 2 mtg . feet furnished. Toler. ance $\pm 5 \%$. Shpg. wt., 502.
SPECIFY STOCK NO. AND OHMAGE ON YOUR ORDER

| Stock |  | Net Each |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NO. | Ohms | 1.9 | $10-24$ | 25.99 | 100.249 |
| 3RS-277C | 10.1000 | .97 | .84 | .69 | .59 |
| 3RS-279C | $1500-5000$ | 1.00 | .87 | .71 | .61 |
| 3RS-280C | $7500-10,000$ | 1.09 | .94 | .78 | .67 |
| 3RS-281C | $12,500-20,000$ | 1.19 | 1.03 | .85 | .73 |
| 3RS-282C | $25,000-40,000$ | 1.36 | 1.18 | .97 | .83 |
| 3RS-283 | 50,000 | 1.52 | 1.32 | 1.09 | .93 |
| 3RS-284 | 75,000 | 1.74 | 1.50 | 1.24 | 1.06 |
| 3RS-285 | 100,000 | 1.88 | 1.63 | 1.34 | 1.15 |

Available in all ohmages in chart marked + . Tube size Ko $_{0} \times 6^{\prime \prime}$. Lug terminals, 2 mtg . feet furnished. Tolerance $\pm 5 \%$. Shpg. wt.. 402.

## 

| Stock No. | Oh |  | Net Each |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 3RS-206C | 10-1000 | 1.15 | . 99 | . 82 | . 70 |
| 3RS-287C | 1500-5000 | 1.20 | 1.04 | 85 | 23 |
| 3RS-288C | 7500-10,000 | 1.27 | 1.11 | . 91 | . 78 |
| 3RS-289C | 12,500.20,000 | 1.37 | 1.19 | . 98 | . 84 |
| 3RS-290C | 25,000-40,000 | 1.54 | 1,33 | 1.10 | 94 |
| 3RS-291 | 50,000 | 1.72 | 1.49 | 1.23 | 1.05 |
| 3RS. 292 | 75,000 limata | 1.95 | 1.69 | 1.39 | 1.19 |
| 3RS-293 | 100,000 | 2.08 | 1.80 | 1.48 | 1.27 |



Avaliable only in ohmages listed below. Tube size $3 / 4 x$ $61 / 2^{\prime \prime}$. Tolerance $\pm 5 \%$. Lug Terminals. 2 mtg . feet suppiled. Shpg, wt., 4 oz .
SPECIFY STOCK NO. AND OHMAGE ON YOUR ORDER

| Stock | 0tums | $\begin{gathered} \text { Net Each } \\ 1.9 \quad 10-24 \quad 25-99170.249 \end{gathered}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 3RS-294C 25, 50, 100, 150, 250, |  |  |  |  |  |
|  |  |  |  |  |  |
| 3RS-295C | 1500, 2K, 2500, 5 K | 1.41 | 1.22 | 1.01 | . 86 |
| 3RS-296C | $7500,10,000$ | 1.53 | 1.33 | 1.09 | 94 |
| 3RS-297C | 15,000, 20,000 | 1.66 | 1.44 | 1.18 | 1.01 |
| 3RS-298C | $25 \mathrm{~K}, 30 \mathrm{~K}, 40 \mathrm{~K}$ | 1.88 | 1.63 | 1.34 | 1.15 |
| 3RS-299 | 50,000 | 1.95 | 1.69 | 1.39 | 1.19 |
| 3RS-300 | 75,000 | 2.16 | 1.87 | 1.54 | 1.32 |
| 3RS-301 | $1 \mathrm{C} 0,000$ | 2.41 | 2.09 | 1.72 | 1.48 |

Avaliable only in ohmages listed below. Tube size $11 / 8 x$ $1012^{\prime \prime}$. Tolerance $\pm 5 \%$. Lug terminals. 2 mtg. feet supplied, Shpg, wt., 1 lb.
SPECIFY STOCK NO. AND OHMAGE ON YOUR ORDER

| stock No. | Ohms | $1-9$ | $\begin{gathered} \text { Net Each } \\ 10-24 \quad 25.99 \quad 100-249 \end{gathered}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 3R5-302 | $\begin{aligned} & 25,50,75,100,250 \\ & 500,750,1000 \end{aligned}$ | 2.17 | 1.88 | 1.55 | 1.33 |
| 3RS-303C | $\begin{aligned} & 1500,2 k, 2500,3 K, \end{aligned}$ | 2.24 | 1.94 | 1.60 | 1.37 |
| 3RS-304C | 7500. 1CK | 2.39 | 2.07 | 1.71 | 1.46 |
| 3RS.305 | 20,000 | 2.55 | 2.21 | 1.82 | 1.56 |
| 3RS-306C | 30,000-40,000 | 2.63 | 2.28 | 1.88 | 1.61 |
| 3RS-307 | 50,000 | 2.71 | 2.35 | 1,94 | 1.66 |
| 3RS-308 | 75,000 | 2.87 | 2.49 | 2.05 | 1.76 |
| 3RS-309 | 100,000 | 3.05 | 2.64 | 2.18 | 1.87 |

## EXTAA MOUNTING FEET

## Stock



MALLORY VARIABLE
RESISTORS


Same fine quallty and construction as the ilxed types, but with an exposed sectlon of winding to provide tapping-off of resistance values from 0 to the max. value of the resistor. All with lug terminals, tolerance $\pm 10 \%$, each supplied with 2 mtg . feet and one adustable cilip. Consult Ilstings below and master chart or ohmages available in each type. Be CERTAIN TO for ohmages available in each type. Be CERTAIN
SPECIFY STOCK NO. AND OHMAGE ON YOUR ORDER.

MASTER CHART OF VALUES FOR VARIABLE RESISTORS

| Ohms | Ohms | Ohms | Ohms |
| :---: | :---: | :---: | :---: |
| 75* | 750* + | $4000^{\circ}+$ | 12,000* |
| $100^{*}+$ | 800 | 4500 | 15,000*+ |
| 150* + | $1000 *$ | $5000 *$ | 20,000 + |
| 200* + | 1250* | 6000* | 25,000 |
| 250* + | 1500*+ | 7000 | 30,000+ |
| 300* | 2000* | 7500* + | 35,000 |
| 350 | 2250 | 8000 | 40,000- |
| 400* | 2500* + | 8500 | 50,000+ |
| 500* + | $3000{ }^{*}+$ | 9000 | 75,000 |
| 600 | 3500 * | 10,000 + |  |

TYPE 1AV-10-WATT VARIABLE-
Avallable in all ohmages in chart through 10,000 ohms Tube size $5 / x_{0} \times 13 / 4^{\prime \prime}$. Shpg. wt., 302.
SPECIFY. STOCK NO. AND OHMAGE ON YOUR ORDER


3RS-312C $6000-10,000 \quad 1.12 \quad .97$
$\longrightarrow$

| Avaliable Tube size | 1 | cha | art marked |  | with - |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% $\mathrm{K}^{2} 2^{\prime \prime}$. Shpg. | 502. |  |  |  |
| SPECIFY | Stock no. And | OHMAE | ON | YOUR | ORDER |
| Stock |  |  |  | Each |  |
| No. | Ohms | 1.9 | 10.24 | 25.99 | 100.249 |
| 3RS-313C | 1-1000 | 1.14 | . 99 | . 81 | . 70 |
| 3RS-314C | $1250 \cdot 5000$ | 1.17 | 1.01 | . 83 | 71 |
| 3RS-315C | 6000.10,000 | 1.26 | 1.09 | . 90 | . 77 |
| 3RS-316C | 12,000-20,000 | 1.29 | 1.12 | . 92 | . 79 |
| 3RS-317 | 25,000 | 1.42 | 1.23 | 1.02 | . 87 |

TYPE 5AV. 50 WATT VARIABLE
Avallable in all ohmages in chart marked with Tube size K $\times 4^{\prime \prime}$. Shpg. wt., 502 . SPECIFY STOCK NO. AND OHMAGE ON YOUR ORDER Stock Net Each

| MR. | Ohms | 1.9 | 10.24 | $25-99$ | 100.249 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 3RSS.318C | $5-1000$ | 1.48 | 1.28 | 1.06 | .91 |
| 3RS-319C | $1500-5000$ | 1.51 | 1.31 | 1.08 | .92 |
| 3RSS320C | $7500-10,000$ | 1.59 | 1.38 | 1.13 | .97 |
| 3RS-321C | $15,000-20,000$ | 1.69 | 1.46 | 1.20 | 1.03 |
| 3RS-322C | $25,000-40,000$ | 1.86 | 1.62 | 1.33 | 1.14 |
| 3RS-323 | 50,000 | 1.95 | 1.69 | 1.39 | 1.19 |

Aval TYPE 7.5AV-75 WATT
Avaliable in all ohmages in chart marked + . Tube stre Kax $\times 6^{\circ}$. Shpg. wt., 602.
Stock Ne. Ohms

$\begin{array}{ll}\text { 3RS-325C } & 1500-5000 \\ \text { 3RS-326C } \\ 7500-10,000\end{array}$
3RS-327C $1500-20,000$
3RS-328C $25,000 \cdot 40,000$
3RS-329 50,000
TYPE 10AV-100 WATT VARIABLE
Available only in ohmages listed below.
$61 / 2^{\prime \prime}$. Shpg. Wt., 1 10.

SPECIFY STOCK NO. AND OHMAGE ON YOUR OROER | Stock No. Ohms |  | 1.9 | 10-24 | $25-99$ | 100.249 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $3 H S-350 \mathrm{C}$ | $50,100,500$, | 1000 | 1.91 | 1.66 | 1.37 | 1.17 |

| 3RS.331C | $2 K, 2500,3 K, 4 K .5 K 1.97$ | 1.71 | 1.41 | 1.21 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3RS-332C | $7500.10,000$ | 2.09 | 1.81 | 1.49 | 1.28 |

## 3RS-332C 7500 . 10,000 <br> 3RS.333C $15,000,20,000$

3RS-334C 25K, 30K, $35 \mathrm{~K}, 40 \mathrm{~K}$
$\begin{array}{ll}3 R S-335 & 50,000\end{array}$
$\begin{array}{ll}3 \text { RSS } 336 & 75,000\end{array}$
$\begin{array}{cccccc}\text { 3RS-337 } & 100,000 & 2.95 & 2.56 & 2.11 & 1.81 \\ \text { TYPE } 20 \text { AV- } 200 \text { WATT VARIABLE } & \\ \text { Available only in ohmages Hsted below. Tube size } 12 \% \times x\end{array}$
Available only in onma
$101 / 2^{\prime \prime}$. Shpg. Wt., 1 lb . AND OHMAGE ON YOUR ORDER
SPECIFY STOCK NO.

$\begin{array}{llllll}\text { 3RS-338C } & 50,100,500,1000 & 3.13 & 2.71 & 2.23 & 1.91\end{array}$
$\begin{array}{lllllll}3 \text { BRS-339C } & 1500,2 K, 2500,5 K & 3.19 & 2.77 & 2.28 & 1.96\end{array}$
JRS-340C 10,000
3RS.341 20,000
3RS-342C $25 \mathrm{~K}, 30 \mathrm{~K}$
3RS-343 50000
$\begin{array}{ll}\text { 3RS }-343 & 50,000 \\ \text { 3RS } 344 & 75,000\end{array}$
3RS-345 100.000



## PORTABLE A-B TYPES

BA.143
BA-144
BA-146
BA-146
BA.149
BA.150
BA-151
BA.

# BATTERIES, CHARGERS \& MERCURY CELLS 



LAFAYETTE 9-VOLT TRANSISTOR RADIO BATTERY CHARGER AND ELIMINATOR

- Charge Bat. tery, Operate Set On AC, or Both
- Isolated Transtormer - Shock.Proof


Just Plug into any 117 -volt AC receptacle and recharge your old 9 -volt battery for many hours of extra use or operate your set indoors without using the battery at all; or you can both charge battery and operate set at the same time. Has 4-position switch for above functhons plus off position and pilot light. It is well fittered insuring low hum and excellent regulation to minimire power losses and to extend life of your set. Transformer is islolated to eliminate shock hazard. Complete with ivory plastic case, AC cord and assort. of snaps to fit
 wt. 1 lb . Imported
F. 790 ib. Imported
"B" BATTERY ELIMINATOR and
CHARGER for PORTABLE RADIOS

- Adjustable

Terminals


( $A$.

## 221⁄2V BATTERIES

Used in many hea
(Fif. A.) Replaces Burgess Y 15 or Eveready 505 BA-14 Lots of 10 each . 53 Singly, ea, . 59 (Fit. B.) Replaces Burgess U15 or Eveready 412. BA. 12


Replaces Eveready 416, Burgess UX-45, and RCA VS $318671 / 2 V$ B batteries used in Radio Control units and many portables. Just plug in the AC cord and you can save your battery for outdoor use. Also recharges your battery. 110 volts $31 / 2 \times 1 x^{5} / 6=$. Shpg. wt., 702.1 imported F-550

Net 2.45


SHURITE BATTERY

## TESTER

Pocket tester with bright plated case, metal dial, ano prods. sturdily built. Test batteries without load. Ideal for testing batteries used in transistor cir cults, model rallroads, hearing aids, portable radios. etc. Shpg. wt., 8 oz. hearine alo battery tester Idea! for checking $1.5,15,22.5,30,33$, and 45 volt batteries.
MT-446
Net 3.71

## MEW! OYNAMIC BATTERY CHARGER FOR 6-VOLT LANTERM BATTERIES

- Extends Battery Life 15-30 Times Guaranteed Unconditien. ally for One Year

Keep lantern batteries like new for months-far exceed ing their normal life. Pays for itself many times over. Equipped with in Isolating step-down power transformer, it is safe from shock hazard. Just connect charger leads to battery binding posts and plus charger into any 117 volt AC outiet. Chart showing chargeable battery types and charging time required is included. Size: $13 / 4 x$ 134224/*
CV-61 ...................Shpg. wt.. $7 / 4 \mathrm{Ib}$.
Net 4.55

## MERCURY BATTERIES

FOR TRANSISTOR APPLICATIONS

| Stack No. |  |  |  | Volts | stips. We. Met Ea. |  | Steck Mo. | Replaces |  |  | Volts |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mallory | Repleces <br> Eveready Bursess |  |  |  |  | Mallory E | Eveready | Burcess |  |  |  |
| BA-501 | TR-152R | E.152N | H.152R | 2.5 | 202. | . 78 |  | BA-227 | RM-1R | E-1 | HG-1R | 1.35 |  |  |
| 8A-502 | TR-162R | E. 162 | H-162R | 2.5 | 302. | . 67 | BA.220 | RM-3R | E-3 | HG-3R | 1.35 | 3 oz | 1 |
| 8A-233 | TR-132R | E.132N | H-132R | 2.5 | 3 or. | .22 | BA-279 | RM-4R | E-4 | HG-4R | 1.35 | 402. | . 8 |
| BA.504 | TR-113R | E-113 | H.113R | 4.0 | 302. | 1.65 | BA.514 | RM-4RT |  |  | 1.35 | $40 \%$. | 11 |
| 6.4.505 | TR-153R | E-153N | H-153R | 4.0 | 202. | 1.25 | BA-232 | RM-12R | E-12 | HG-12R | 1.35 | 302. | 82 |
| 84.506 | TR-163 | E-163 | H. 163 | 4.0 | 3 oz . | 1.05 | B4.516 | RM-42R | E-42 | HG-42R | 1.35 | 10 oz . | 5 |
| BA.234 | TR-133R | E-133N | H-133R | 4.0 | 302. | 1.18 | 8. 0.517 | RM-42RT |  | 1000 | 1.35 | 1002. | 1.30 |
| BA.237 | TR-233 | E.233 | H-233 | 4.0 | 9 oz . | 1.90 | BA.238 | RM.400R | E-400 | HG-400R | 1.35 | 102. | 2 |
| BA.507 | TR-114R | E-114 | H-114R | 5.0 | 302. | 1.50 | BA-239 | RM-401 | E. 401 | HG-401 | 1.35 | 202. | .34 |
| BA-508 | TR-164. | E-164 | H. 164 | 5.0 | 302. | 1.25 | BA-518 | RM.450R | R 2.450 | HG-450R | 1.35 | 202. | . 34 |
| 8A.235 | TR-134R | E-134N | H-134R | 5.0 | 3 oz . | 1.45 | BA.240 | RM-502R | E-502 | HG-502R | 1.35 | 302. | . 62 |
| BA-531 | TR-234R | E-234N | - | 5.4 | 402. | 2.50 | 84-51 | RM-601R | R E-601 | HG-601R | 1.35 | 3 ot. | .3 |
| BA-509 | TR-115R | E-115N | H.115R | 6.5 | 302. | 1.70 | BA-241 | RM-625R | R E-625 | HG-625R | 1.35 | 102. | .34 |
| BA.510 | TR-165 | E-165 | H. 165 | 6.5 | 3 oz . | 1.60 | 8A.520 | RM-625R | RT - 630 |  | 1.35 | 102. | . 39 |
| BA-511 | TR-135R | E-135N | H.135R | 6.5 | 402. | 1.85 | 84.242 | RM-630 | E. 630 | HG. 630 | 1.35 | 102. | . 30 |
| 64.533 | TR-175 | E-175 | H-135 | 7.0 | 102. | 1.05 | 84.521 | RM-640 | E-640 | HG-640 | 1.35 | 201. | . 30 |
| -4.512 | TR-145 | E-145 | H-145 | 7.5 | 302. | 1.55 | BA.515 | RM-4I |  | HG-675 | 1.4 | 302. | . 28 |
| 84.513 | TR-136R | E-136N | H-136R | 8.0 | 502. | 2.18 | 84.522 | RM-675 | E-675 | NG-675 | 1.4 | 102. | 26 |
| BA. 332 | TR-126 | E-126 | H-126 | 8.4 | 102. | 1.05 | BA-536 | RM-312 | E-312 | HG-312 | 1.4 | 102. | 24 |
| BA-236 | TR-146 | E-146 | H-146 | 9.0 | 302. | 1.05 | 84.537 | RM-520 |  |  | 1.4 | 102. | .16 |
| 8A.534 | TR-177 |  | H. 177 | 9.8 | 102. | 1.25 | BA.230 | 2M-9 | E-9 | HG-9 | 1.5 | 5 cz . | .31 |
| 8A.535 | TR-169 | E. 169 |  | 12.6 | 302. | 3.50 | BA-231 | DM-9N | E-9N |  | 1.5 | 502. | . 60 |
|  |  |  |  |  |  |  | 84-243 | 302478-M | M E-30247 | $78-$ | 9.8 | 9 ibs. | 5.27 |




This versatile, rugged unit incorporates an extra low-ripple filter circuit. Ideal for latest all-transistor 6 or 12 volt equipments and any conventional ones using vacuum tubes. Selection of voltage range automatically provides appropriate current range Fused transformer primary. Continuous voltage adjustment with Variac. 2 DC ranges and dual-range ammeter for accurate readings. Ranges: high range $=0.16 \mathrm{~V}$. $1.5 \%$ ripple at 2 amps, $2 \%$ at 6 amps; 6 amps continuous, 12 amps intermittent tow range $=0-8 v, 0.3 \%$ ripple at 2 amps, $1.5 \%$ at 10 amps. 10 amps continuous, 20 amps intermittent. For $105-125$ volts $50 / 60$ cycle a.c. All components and instructions included. $874 \times 101 / 2 \times 734^{\prime \prime}$. Shpg. Wt., 19 lbs .
TE-193 Kit
Net 39.95
Model 1060. As above, but factory wired and tested
TE-194

## MODEL 1050K 6-12 VOLT

## BATTERY ELIMINATOR \& CHARGER

Provides dependable 6 -12 volt source where AC ripple component is tolerable. 2 DC ranges: $0.16 \mathrm{v}, 6$ amp continuous 12 amps intermittent; $0-8 \mathrm{v} 10$ amps continuous 20 amps intermittent. Continuous voltage adjustment with variac. Meters; voltmeter. $0-20 \mathrm{v}$., ammeter, 0.20 amps. All components and instructions included. For $105-125$ volts a.c. $50 / 60$ cycle. $83 / 4 \times 101 / 2 \times 733^{4}$ ". Shpg. wh.. 15 los. TE. 195 Kit

Net 29.95
Model 1050. As above, but factory wired and tested. TE-196

Net 38.95
Model 1055K - An L-C filter gives additional filtering for \#1050K or simllar unit. Size: $5 \times 4 \times 53 /{ }^{4 \prime}$ ". Shpg. wt., 7 lbs.
TE-198 Kit
Model 1055. As above, but factory wired and tested.
TE-199

## MODEL 1064K 6.12 VOLT

## BATTERY ELIMINATOR \& CHARGER

An excellent low ripple unit useful for transistor, tube, "hybrid" auto radio repair or wherever minimum ripple is mandatory. Features 2 DC voltage ranges, 6 or 12 V. DC separate voltmeter and dual ranse ammeter-up to 10 amperes continuous. $A C$ ripple: $0.3 \% @ 2$ amperes. For $105-125$ volts, $50 / 60 \mathrm{c}$; Size; $81 / 2 \mathrm{H} \times 53 / \mathrm{W} \times 71 / 2 \mathrm{~K}^{\prime \mathrm{D}}$. Shpg. wt., 14 lbs
TE-262 Kit
Net 45.95
Model 1064. As above, but factory wired and tested.
TE-263
COLD-START BOOSTER-CHARGER Our First combination Battery Charger and Booster

- 50 Amp Booster ( 6 volt)
- 25 Amp Booster (12 volt)
- 10 Amp Charger ( $6 / 12 \mathrm{v}$ )

Perfect for starting $6 \mathrm{~V}, 8 \mathrm{~V}, 12 \mathrm{~V}$ cars. Works as a booster-as a charger. Supplied with heavy copper cables; thermal switch prevents overheating; works up to $200-\mathrm{ft}$. away from AC power source. Power output: 12 V Boost, 25 amps maximum; 6 V Boost, 50 amps max.; $6 / 12 \mathrm{~V}$ Charge, 10 amps tapering to 5 amps max.; max.; $6 / 12 \mathrm{~V}$ Charge, 10 amps tapering to 5 amps max
Power input: 5 amps max. at 117 V AC, 60 cycles. CV-58 Shpg. wt., $91 / 2 \mathrm{lbs}$.

Net 11.95
Net 15.95

## SCHAUER BATTERY CHARGERS

#  

MODEL K412, 12 V ECONOMY CHARGER
A small, efficient, low priced unit for charging 12 V batteries at a 3 amp . rate. Built according to Schaver's high standard of quality of components and engineer ing. Size: $41 / 4 \times 43 / 4 \times 61 / 4^{*}$. Shpg. Wt., $41 / 2$ lbs.
cv. 63 for 12 V batteries

Net 6.69

## MODEL A5612 4-AMP 6 AND 12 VOLT CHARGER

Charges-both 6 and -12 volt batteries, rechafging average battery overnight. 4.ämp. charging rate tapers to 2 amps . Has automatic circuit breaker, accurate ammeter and selector switch for 6 or 12 volts. Size: $41 / 4 \times 43 / 4 \times 61 / 4 \mathrm{~m}$. Shpg. wt.. 5 lbs.
CV. 64

## 6:AMP OVERNIGHT CHARGERS

Will charge the average run-down battery in 7.9 hours. Delivers 6 amps to charge battery. Has ammeter to indicate exact rate of charge. Size: $61 / 4 \times 1 / 8 \times 71 / 6 \mathrm{~m}$. Shpg. wt., 8 ibs
CV-65 Model B412 for 12 V batteries
Net 10.88
CV. 66 Model B4612. Charges either 6 or 12 volt batteries Net 12.98

## MODEL C4612, 10.AMP HEAVY DUTY CHARGER

This model will recharge 6 and 12 volt batteries in 6 hours or less. Ideal for heavy duty batteries on trucks, tractors, etc. Charging rate tapers to a safe finishing charge. Has meter. Size: $61 / 4 \times x / 61 / 9 \times 74 / 4$ ". Shpg. wt., 10 lbs
CV. 67 Model C4612 For 6 and 12 volt batteries

Net 15.84
MODEL A-B410 CHARGER PLUG FOR CAR
Permits charger to be plugged into convenient cigarette lighter receptacle. A'real convenience.
CV-68 Model A.8410 For हv cars
Shpg. wt., $80 z$.
Net 1.15
CV-69 Model A. 8412 For 12v cars
Shpg. wt., 802
Net 1.15

## TERADO BATTERY CHARGERS



5-AMP HI-POWER CHARGER (A)
A five ampere taper charger, to charge $6-12$ volt batteries overnight. Full wave circuit contains 2 sllicon rectifiers, Includes charge indicator light, $8^{\prime}$ AC cord. No installationptugs into cigarette lighter socket. Size: $21 / 4 \times 21 / 2 \times 41 / 2^{\prime \prime}$. Shpg. wt., 3 lbs.
CV. 21 Model 50180

Net 13.69
10-AMP SUPER CHARGER (B)
A ten ampere tapef charger, for ${ }^{-} 6$ or 12 volt batteries. Charges 12 volt battery in 5 hours. Full wave sllicon rectifier circuit. Includes charge indicator meter. $8^{\prime}$ heavy duty AC cord, overload circuit breaker. Connects directly to battery, or plugs into cigarette lighter socket. Size: $3 \times 5 \times 6^{\prime \prime}$. Shpg. wt., $71 / 21 \mathrm{lgs}$. CV-22 Madel 50181

Net 25.45
WILLARD RECHARGEABLE BATTERIES
Type 25 . 2. Rated at 2 volts for 21 ampere-hours. Original equipment in G.E. models 250 and 260. Size: $217 / 2 \times 2 \pi / 22 \times 6^{\prime \prime}$. Shpg. wt. $31 / 2$ lbs. BA-450 Net 9.25
Type ER6-28 Photo-Flash Battery. Rated at 2 volts for 6 amp . hours. Up to 250 flashes per charge. Size: $11 / 6 \times 23 / 4 \times 4 / 4{ }^{\prime \prime}$. Shpg. wt., $11 / 2 \mathrm{lbs}$.
BA-451 ...................................................................

## BATTERY BOOSTER CABLES

Standard equipment for, starting stalled cars, charging batteries, etc. Made with heavy duty, flexible rubbercovered cable. Rugged copper-clad positive action grips identified by Black and Red heavy vinyl covered handies. Shpg. wt., 3 lbs.
MS. 7668 ft . long, set of 2
MS.766 12 ft . long, set of of 2
MS-767 12 ft . long, set of 2
MS-491 12 ft . long, 6 gauge copper cable ... Net 3.15
MS. 492 Battery Booster Clip only (specify Red or Black)

## CONVERTERS-BATTERY CHARGERS and ACCESSORIES



These are small, convenient power units used for converting 6 or 12 volts D.C. te 110 A.C. for operating electrical appliances that work on 110 A.C. only. Units are equipped with cigarette IIghter plug-in, of direct connection to car battery in the case of the larger wattage converters. Choice depends on maximum load of equipment operated-such as electric shavers, radios, phonos, tape recorders, small power tools, mixers and blenders, etc. Special "hash-free" filtering in ali units, except 50103 for auto shaver.

| Stock Ne. | Typo | input DC Velts | Contin. | Interm. | Size | WL. | Net |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CV-11 | 50102 | - 6 | 10 | 15. | $2 \times 3 \times 4$ " | 2 | 9.12 |
| CV-12 | 50103 | 12 | 15 | 20 | $2 \times 3 \times 4$ " | 2 | 8.12 |
| CV-13 | 50115 | 6 | 35 | 40 | $21 / 2 \times 21 / 2 \times 41 / 2{ }^{\prime \prime}$ | 3 | 15.66 |
| CV-14 | 50116 | 12 | 40 | 50 | $21 / 2 \times 21 / 2 \times 41 / 2^{\prime \prime}$ | 3 | 15.66 |
| cV- 15 | 50126 | 6 | 60 | 75 | $4 \times 5 \times 6$ " | 8 | 32.65 |
| cV-16 | 50127 | 12 | 75 | 100 | $4 \times 5 \times 6$ "' | 8 | 32.65 |
| CV-18 | 50137 | 6 | 75 | 100 | $4 \times 5 \times 6{ }^{\prime \prime}$ | $91 / 2$ | 45.73 |
| CV. 19 | 50138 | 12 | 100 | 125 | $4 \times 5 \times 6{ }^{\prime \prime}$ | $91 / 2$ | 45.73 |
| cV. 17 | 50134 | 12 | 85 | 110 | $4 \times 5 \times 6^{\prime \prime}$ | 9 | 37.88 |
| CV-20 | 50153 | 12 | 175 | 200 | $5 \times 5 \times 11^{\prime \prime}$ | 22 | 71.87 |

## TERADO "DYNAMO"

Convert Your Table Model Radio to a Car or Boat Radio
Operate any small radio in any 12 volt car, truck, boat of traller. No installation just plug into cigar Ilghter. Needs no outside antenna - table radios will operate on their own bulit-in antenna, will also operate your electric shaver or any electric appllance up to 20 watts. Complete with generator condensor and ignition noise suppressor. Measures ondy $\mathbf{2}^{\prime \prime} \times 2^{\prime \prime} \times 3^{3 / 44^{\prime \prime}}$. Shpg. wt., 2 lbs.
CV-26
.Net 8.46


## TERADO QUIK-SHAVE

Any shaver, new or old, gives super performance with QUIK-SHAVE,
which changes household AC electricity into jet powered DC. Lengthens shaver life. Up to $88 \%$ more cutting power for faster, closer, more comfortable shaves. Plug QUIK-SHAVE into wall outlet, attach shaver cord, and shave twice as tast!
CV. 10 Shpg. wt., 8 ozs. U.L. Approved

Net 3.85


## BATTERY RECHARGER and ELIMINATOR

- Recharges-All Standard "Flashlight" Batteries ("C", " 0 ", and Penlite " $Z$ ") - Restores "Life" to Battery' operaled Toys Safo, isolated Power Supply
The new dry cell battery recharger and elimi nator is like having an endless supply of flashlight batteries. Recharges " $C$ ". " $D$ " and " $\boldsymbol{T}$ " cell batteries in 2 to 4 hours-keeps battery. operated toys always on the go. It's a battery eliminator too-simply plug into any 110 V AC outlet. Delivers 4 to 6 V . DC for "recharge" or "ellminate." Shpg. wt., $11 / 2$ lbs. cV. 59



## BATTERY HOLDER

Ultra-compact bakelite battery case. Holds $8.11 / 2$ volt " $Z$ " penlite cells for supplying 12 volts. $2 \%_{2}{ }^{\prime \prime}$ holes, $11 / 0^{\prime \prime}$ on centers for mounting. Size: $2 K_{1} \times 23 / 6 \times 1 K_{4}^{\prime \prime}$. imported
MS-902 Shpe. wt., 3 az.
Net . 59


TRANSISTORIZED POWER CONVERTER


- Converts 12 VDC To 117 VAC
- Small Enough To Mount in Any 12 -Volt Car Or Boat
- Supplies voltage for Any NO MONEY Equipment Requiring From DOWN 10 To 125 Watts
Rated at 125 watts continuous duty, this fully transistorized, highly efficient converter plugs into your car's cigarette lighter socket to supply 117 volts AC to operate any equipment requiring 10 to 125 watts including electric shavers, recorders, record players, radio, TV and many others. Has "Power to Spare" for extra years of dependable service. Shpg. wt. 5 Jbs.
cV- 62


## DYNAMIC HIGH POWER INVERTER

|deal For TV, HI.FI,

## CB \& Ham

- Completely Transistorized - Exceptionally Stable - Ruggedly Constructed


## Non

The Dynamic Television Inverter is just the right power converter capable of operating any TV, CB, Ham or Hi-fi rig from any 12 volt battery source. Completely transistorized, it features the same output power characteristics as AC house power. No loss of B+ In TV brilliance. Has excellent stability under loads to 220 watts. The Dynamic inverter is equipped with a heavy gauge line cord for connection to a 12 volt battery. Not recommended for motors or fluorescent lights. Complete with instructions and 90 days warranty CV. 57 Shog. wt.. 5 lbs.


## RADIO TRANSVERTER

- Fits all Cars - Plugs into Cigarette lighter
- For all 9-Volt Transistor Radios

Now you can avold the expense of buying a cap radio with this new radio transverter. Simple to operateremove 9 -volt battery from your transistor radio, connec contacts from transverter to battery contacts in the radio, and then plug Into the cigarette lighter. Fits all cars. Shpg. wt., 602. A-102 For 12 -volt Cars AA. 103 For 6 -volt Cars


These Battery Holders were especially designed for use These Battery holders were especially designed for use in transistor and sub-miniature electronic gear, are
made of Aluminum Alloy, sturdy construction with insulated, nickel plated Brass eyeletts. All multiple holders mount batterles side by side except items marked - mount end to end. Av. shpp. wi., 3 ozs.


| Steck No. | Holds | Burgess | Eveready | RCA | Mallory | Net Ea. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MS-137 | 1 |  |  |  |  | . 20 |
| MS-138 | 2 |  |  | v5074 |  | . 34 |
| MS-169 | 3 | 7 | 912 |  |  | . 44 |
| MS-170 | 4 | 8 |  |  |  | 57 |
| MS-139 | 1 | 2.9R. | ES. E12, |  | RM12R. | . 20 |
| MS-181 | 2 |  | E133, E502, |  | Th133R. | . 34 |
| MS.380* | 2 |  | 505, 915, | VS034 | RM502R, | . 44 |
| MS.171 | 3 |  | 1015E |  | 2M.9 | . 44 |
| MS 182 | 4 |  |  |  | TR233R |  |
| MS-173 | 1 | 1 | 935 |  |  | . 24 |
| MS-174 | 2 |  | TR233R | VS035 |  | . 34 |
| MS-381* | 2 |  |  |  |  | . 44 |
| MS-175 | 1 | 2, 0. | 950 |  | RM42R | . 24 |
| MS-176 |  |  |  |  |  | . 34 |
| MS-382* | 2 |  |  |  |  | . 44 |
| W5.177 | 1 | 015 | 412 | YS084 | RM412R | . 24 |
| MS. 178 | 2 |  |  | V084 |  |  |
| MS. 183 | 1 | U20 | 413 | YS085 | RM413R | 28 |
| MS. 184 | 2 |  |  |  |  |  |
| MS-225 | 1 | $Y 10$ | 504 |  |  | . 20 |
| MS. 383 | 2 |  |  |  |  | . 34 |
| MS. 384 |  | $Y 20$ | 506 |  |  | . 28 |
| MS-385 | 1 | $K 10$ | 417 |  |  | . 28 |
| MS. 386 | 1 | K15 | 420 | VS083 |  | . 28 |
| MS. 387 | 1 | U10 | 411 |  | RMM11R | . 28 |
| MS.388 | 1 | ITt | E401 |  | RM401R | . 20 |
| MS. 389 | 2 |  |  |  |  | . 37 |
| MS. 390 | 3 |  |  |  |  | . 44 |
| MS-391 |  |  | E1 |  | RM1R | . 28 |
| MS. 392 |  |  | E 3 |  | RM3R | . 26 |
| MS. 39.7 |  |  | E4 |  | RM4R | 28 |

## SOLID TANTALUM ELECTROLYTIC CAPACITORS

## SOLID TANTALUM ELECTROLYTICS

Extremely compact capacitors for miniaturized circuitry. Feature long life, stable operation low DC leakage. Reliable performance from $-80^{\circ} \mathrm{C}$. to $+125^{\circ} \mathrm{C}$. Dry construction-cannot leak. at $85^{\circ} \mathrm{C}$; derate $35 \%$ at $125^{\circ} \mathrm{C}$. Meets , for moisture resistance shock, vibration. Absence of oxternal weld allows either vead to be bent next to case. 2 oz, For plastic insulating sleeving, change mir. Type No. from " $A$ " to " $C$ " and add 02 each to price; for Mylar insulating sleeves change Mfr. Type No. from "A" to "D" and add . 02 each to price.


Texas Instruments Parent Device capacitor rating system gives you the advantage of high-voltage capacitors for lower voltage applications AT NO INCREASE IN COST. Higher voltage parent devices give you a built-in safety factor and simplify your stocking and procurement procedures. For example, a tan-TI-cap solid tantalum capacitor $1 \mu \mathrm{f}$ parent device is rated at 6 to 35 volts and functions in any circuit up to this maximum voltage rating. Lower voltage parent device ratings are also available, such as $10 \mu \mathrm{f} \mathbf{6}$.20 volt capacitor. All Texas Instruments tan-Tl-cap solid tantalum capacitors tisted below are parent devices and are stocked by LAFAYETTE RADIO ELECTRONICS CORPORATION for your convenience and immediate delivery.



NET EACH

| Stock No. | $\begin{gathered} \text { MIg's } \\ \text { Type SCM } \end{gathered}$ | mid | V | Tolerance | Size | 1.24 | NET 25-49 | $\begin{aligned} & \text { EACH } \\ & 50-99 \end{aligned}$ | $\begin{gathered} 100 . \\ 499 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 CC 240 | 472 FP 03544 | 0047 | 35 | 20 | F | 1.30 | 1.04 |  | 72 |
| $3 \mathrm{CC213}$ | 472FPO35A2 | . 0047 | 35 | 10\% | $F$ | 1.50 | 1.20 | 1.01 | .83 |
| $3 \mathrm{CC214}$ | 562FP035A2 | 0056 | 35 | 10\% | F | 1.50 | 1.20 | 1.01 | . 23 |
| $3 \mathrm{CC241}$ | 682FP035A4 | . 0068 | 35 | 20\% | F | 1.30 | 1.04 | . 81 | 72 |
| 3 CC 215 | 682FP035A2 | . 0068 | 35 | 10\% | F | 1.50 | 1.20 | 1.01 | .3 |
| 3CC254 | 822FPO35A2 | . 0082 | 35 | 10\% | F | 1.50 | 1.20 | 1.01 | 83 |
| $3 \mathrm{CC242}$ | $103 \mathrm{FP} 035 \mathrm{5A}$ | 010 | 35 | 20\% | F | 1.30 | 1.04 | .88 | 72 |
| $3 \mathrm{CC216}$ | 103FP035A2 | 010 | 35 | 10\% | F | 1.50 | 1.20 | 1.01 | . 3 |
| $3 \mathrm{CC217}$ | 123FP035A2 | . 012 | 35 | 10\% | F | 1.50 | 1.20 | 1.01 | . 03 |
| $3 C$ C243 | 153FP035A4 | . 015 | 35 | 20\% | F | 1.30 | 1.04 | . 80 | . 72 |
| 3 CC 218 | 153FP035A2 | . 015 | 35 | 10\% | F | 1.50 | 1.20 | 1.01 | . 83 |
| $3 \mathrm{CC219}$ | 183FP035A2 | . 018 | 35 | 10\% | F | 1.50 | 1.20 | 1.01 | 83 |
| $3 \mathrm{CC244}$ | 223FPO35A4 | . 022 | 35 | 20\% | F | 1.30 | 1.04 | 88 | 72 |
| $3 \mathrm{CC220}$ | 223 FPO 3542 | . 022 | 35 | 10\% | F | 1.50 | 1.20 | 1.01 | .3 |
| 3 CC 221 | 273 FPO35A2 | . 027 | 35 | 10\% | F | 1.50 | 1.20 | 1.01 | . 03 |
| $3 \mathrm{CC245}$ | 333 FPO 3544 | . 033 | 35 | 20\% | F | 1.30 | 1.04 | . 81 | . 72 |
| 3 CC 222 | 333FP035A2 | 033 | 35 | 10\% | F | 1.50 | 1.20 | 1.01 | . 13 |
| $3 \mathrm{CC223}$ | 393FP035A2 | . 039 | 35 | 10\% | F | 1.50 | 1.20 | 1.01 | . 8 |
| $3 \mathrm{CC246}$ | 473FP035A4 | 047 | 35 | 20\% | F | 1.30 | 1.04 | . 81 | . 72 |
| $3 \mathrm{CC224}$ | 473FP035A2 | 047 | 35 | 10\% | F | 1.50 | 1.20 | 1.01 | 83 |
| $3 \mathrm{CC225}$ | 563FPO35A2 | . 056 | 35 |  | F |  | 1.20 | 1.01 | . 03 |
| 3 CC 247 | $683 F P 03544$ | . 068 | 35 | 20\% | F | 1.30 | 1.04 | . 88 | . 72 |
| $3 \mathrm{CC226}$ | 683 FPO 3542 | . 068 | 35 | 10\% | F | 1.50 | 1.20 | 1.01 | . 3 |
| $3 \mathrm{CC227}$ | 823 FPO35A2 | . 082 | 35 | 10\% | F | 1.50 | 1.20 | 1.01 | . 83 |
| $3 \mathrm{CC248}$ | 104 FPO 3544 | . 10 | 35 | 20\% | F | 1.30 | 1.04 | . 81 | . 72 |
| $3 \mathrm{CC228}$ | 104FPO35A2 | . 10 | 35 | 10\% | F | 1.50 | 1.20 | 1.01 | . 33 |
| $3 C C 229$ $3 C C 249$ | 124FPO35A2 154 FPO 3544 | . 12 | 35 35 | 10\% | F | 1.69 | 1.35 | 1.14 | . 84 |
| $\begin{aligned} & \text { 3CC249 } \\ & \text { 3CC230 } \end{aligned}$ | $154 \mathrm{FPO} 35 \mathrm{A4}$ | . 15 | 35 | 20\% | F | 1.46 | 1.17 | . 99 | . 73 |
| 3CC230 3CC231 | 154 FP035A2 | . 15 | 35 | 10\% | F | 1.69 | 1.35 | 1.14 | . 84 |
|  | 184FP035A2 | 18 | 35 | 10\% | F | 1.65 | 1.35 | 1.14 | . 4 |
| 3 CC 250 | 224FP035A4 | 22 | 35 | 20\% | F | 1.46 | 1.17 | 95 | 73 |
| $3 \mathrm{CC232}$ | 224FP035A2 | 22 | 35 | 10\% | F | 1.69 | 1.35 | 1.14 | . 8 |
| $3 \mathrm{CC233}$ | 274FP035A2 | 27 | 35 | 10\% | F | 1.69 | 1.35 | 1.14 | . 84 |
| 3CC251 | 334FP035A4 | 33 | 35 | 20\% | F | 1.46 | 1.17 | 99 | . 73 |
| 3 CC 234 | 334FP035A2 | . 33 | 35 | 10\% | F | 1.69 | 1.35 | 1.14 | .04 |
| 3CC235 | 394FP03542 | . 39 | 35 | 10\% | F | 1.69 | 1.35 | 1.14 | . 84 |
| 3 CC 252 | 474FP03544 | 47 | 35 | 20\% | F | 1.46 | 1.17 | . 99 | . 73 |
| $3 \mathrm{CC236}$ | 474FP035A2 | 47 | 35 | 10\% | F | 1.69 | 1.35 | 1.14 | . 84 |
| $3 \mathrm{CC237}$ | 564FP035A2 | . 56 | 35 | 10\% | F | 1.69 | 1.35 | 1.14 | . 04 |
| 3CC253 | 684FP03544 | 68 | 35 | 20\% |  | 1.46 | 1.17 | . 99 | .73 |
| $3 \mathrm{CC238}$ | 684FP035A2 | . 68 | 35 | 10\% | F | 1.69 | 1.35 | 1.14 | . 84 |
| $3 \mathrm{3CC239}$ | 824FP035A2 | . 82 | 35 | 10\% | $F$ | 1.69 | 1.35 | 1.14 |  |
| $3 \mathrm{CC271}$ | 105FP035A2 | 1.0 | 35 | 10\% | F | 1.69 | 1.35 | 1.14 | . 84 |
| 3 CC 202 | 105FP035A4 | 1.0 | 35 | 20\% | F | 1.46 | 1.17 | . 99 | . 73 |
| 3 CC 269 | 105FP050A2 | 1.0 | 50 | 10\% | F | 2.44 | 1.95 | 1.64 | 1.42 |
| 3 CCC 98 | 125FPO20A2 | 1.2 | 20 | 10\% | F | 1.69 | 1.35 | 1.14 | . 84 |
| $3 \mathrm{3C1} 124$ | 125BP035A2 | 1.2 | 35 | 10\% | B | 1.76 | 1.41 | 1.19 | . 87 |
| 3 CC 270 | 125BPO50A2 | 1.2 | 50 | 10\% | B | 2.57 | 2.06 | 1.73 | 1.48 |
| $3 \mathrm{CC190}$ | 155FP020A4 | 1.5 | 20 | 20\% | F | 1.46 | 1.17 | . 99 | . 73 |
| 3 CC 99 | 155FPO20A2 | 1.5 | 20 | 10\% | F | 1.69 | 1.35 | 1.14 | . 84 |
| $3 \mathrm{CC203}$ | 155BPO35A4 | 1.5 | 35 | 20\% |  | 1.52 | 1.22 | 1.03 | . 75 |
| $3 \mathrm{CC125}$ | 155BP035A2 | 1.5 | 35 | 10\% |  | 1.76 | 1.41 | 1.19 | . 87 |
| $3 \mathrm{CC267}$ | 155BPO50A2 | 1.5 | 50 | 10\% | B | 2.57 | 2.06 | 1.73 | 1.40 |
| 3CC100 | 185FP020A2 | 1.8 | 20 | 10\% | F | 1.69 | 1.35 | 1.14 | 44 |
| 3 CC 126 | 185BPO35A2 | 1.8 | 35 | 10\% | B | 1.76 | 1.41 | 1.19 | 8 |
| $3 \mathrm{CC268}$ | 185BPO50A2 | 1.8 | 50 | 10\% | B | 2.57 | 2.06 | 1.73 | 1.48 |
| $3 \mathrm{CC191}$ | 225FP020A4 | 2.2 | 20 | 20\% | F | 1.46 | 1.17 | . 99 | . 73 |
| $3 \mathrm{CC101}$ | 225FP020A2 | 2.2 | 20 | 10\% | $F$ | 1.69 | 1.35 | 1.14 | 14 |
| 3CC204 | 225BP035A4 | 2.2 | 35 | 20\% | B | 1.52 | 1.22 | 1.03 | . 75 |
| 3 Cc 127 | 225BPO35A2 | 2.2 | 35 | 10\% | B | 1.76 | 1.41 | 1.19 | . 87 |
| 3 Cc 265 | 2258 PO 50 A 2 | 2.2 | 50 | 10\% | B | 2.57 | 2.06 | 1.73 | 1.40 |
| 3 CCL 75 | 275 FPO 01542 | 2.7 | 15 | 10\% | F | 1.69 | 1.35 | 1.14 | . 84 |
| $3 \mathrm{CC128}$ | 2758 PO 5542 | 2.7 | 35 | 10\% | B | 1.76 | 1.41 | 1.19 | . 87 |
| $3 \mathrm{3CC266}$ | 275 BPO 5042 | 2.7 | 50 | 10\% | B | 2.57 | 2.06 | 1.73 | 1.48 |
| ${ }_{3 C C} 76$ | 335 FPO 1542 | 3.3 | 15 | 10\% | P | 1.69 | 1.35 | 1.14 | 84 |
| $3 C C 205$ $3 C C 129$ | 335 BPO 3544 3358 PO 542 | 3.3 | 35 | 20\% | 8 | 1.52 | 1.22 | 1.03 | 75 |
| 3 CCl 29 $3 \mathrm{CC263}$ | 3358 PO 3542 | 3.3 | 35 | 10\% | B | 1.76 | 1.41 | 1.19 | . 87 |
| $3 C C 263$ $3 C C 48$ | 335BPO50A2 | 3.3 | 50 | 10\% | B | 2.57 | 2.06 | 1.73 | 1.48 |
| $3 \mathrm{CC272}$ | 395FP010A2 | 3.9 | 10 | 10\% | F | 1.69 | 1.35 | 1.14 | . 84 |
| $3 \mathrm{CC264}$ | $3958 P 035 A 2$ 395 P 050 A | 3.9 3.9 | 35 50 | 10\% | 8 | 2.57 | 2.06 | 1.73 | 1.48 |
| 3 CC 164 | 475 FPO10A4 | 3.7 | 10 | 10\% | 8 | 2.57 1.46 | 2.06 | 1.73 | 1.48 |
| 3CC 49 | 475FPO10A2 | 4.7 | 10 | 10\% | F | 1.69 | 1.35 | 1.14 | 73 |

# PARENT DEVICE SYSTEM 

Hermetically sealed in subminiature metal cases. Solid lectrolyte cannot leak or corrode, stable capacitance and low dissipation over temperature range of $-80^{\circ} \mathrm{C}$
nominally $600 \mathrm{ppm} /{ }^{\circ} \mathrm{C}$. With plastic film sleeves. Shpg.
Case size indicated by last letter in type number. All
slzes include plastic sleeva.

| Code | Diam. 2 Length | Code | 0 mm .2 Leagt |
| :---: | :---: | :---: | :---: |
| ${ }^{\text {A }}$ | .104" $\times$. $312^{\prime \prime}$ | R | 285" $\times .759^{\prime \prime}$ |
| B | .190\% $\times .500^{\circ}$ | $s$ | . $347^{\prime \prime} \times .859^{\prime}$ |

TYPE 150D 6WVDC-8VDC SURGE $\pm 20 \%$ TOLERANCE


TYPE 150D 35 WVDC-40 VDC SURGE

| $3 \mathrm{CE}-38$ | 472x003542 | . 0047 | 1.32 | 1.06 | . 90 | . 74 | 3C8-111 | 684×0035A2 | . 68 | 1.48 | 1.19 | 1.01 | 75 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $3 C 8.99$ | 682x0035A2 | . 0068 | 1.32 | 1.06 | . 90 | . 74 | 3CB-112 | 105x0035A2 | 1.0 | 1.48 | 1.19 | 1.01 | . 75 |
| 3CE-100 | 103x0035A2 | . 01 | 1.32 | 1.06 | . 90 | . 74 | $3 \mathrm{CB}-113$ | $155 \times 003582$ | 1.5 | 1.54 | 1.24 | 1.05 | . 77 |
| $3 C B-101$ | 153x0035A2 | . 015 | 1.32 | 1.06 | . 90 | . 74 | 3CB-114 | $225 \times 003582$ | 2.2 | 1.54 | 1.24 | 1.05 | . 77 |
| $3 C 8.102$ | 223x0035A2 | . 022 | 1.32 | 1.06 | . 90 | . 74 | $3 C 8.115$ | $335 \times 003582$ | 3.3 | 1.54 | 1.24 | 1.05 | . 71 |
| $3 \mathrm{CB}-103$ | 333x0035A2 | . 033 | 1.32 | 1.06 | . 90 | . 74 | $3 \mathrm{CB}-116$ | $475 \times 003582$ | 4.7 | 1.54 | 1.24 | 1.05 | . 77 |
| 3CE-104 | 473x0035A2 | . 047 | 1.32 | 1.06 | . 90 | . 74 | 3CB-117 | $685 \times 003582$ | 6.8 | 1.54 | 1.24 | 1.05 | . 77 |
| 3C8-105 | 683x0035A2 | . 068 | 1.32 | 1.06 | . 90 | . 74 | $3 C 8.118$ | 106xC035R2 | 10 | 2.54 | 2.04 | 1.72 | 1.26 |
| $3 \mathrm{CB} \cdot 106$ | 104×0035A2 | . 10 | 1.32 | 1.06 | . 50 | . 74 | 3C8-119 | 156r0035R2 | 15 | 2.54 | 2.04 | 1.72 | 1.26 |
| $3 \mathrm{CB}-107$ | $154 \times 0035 A 2$ | . 15 | 1.48 | 1.19 | 1.01 | . 75 | 3CB-120 | 226x0035R2 | 22 | 2.54 | 2.04 | 1.72 | 1.26 |
| 3CE-108 | 224x0035A2 | . 22 | 1.48 | 1.19 | 1.01 | . 75 | 3CB-121 | $336 \times 0035 \$ 2$ | 33 | 4.72 | 3.78 | 3.19 | 2.47 |
| 3 CB -109 | $334 \times 003542$ | . 33 | 1.48 | 1.19 | 1.01 | . 75 | $3 C 8.122$ | 476x0035\$2 | 47 | 4.72 | 3.76 | 3.19 | 2.47 |
| $3 C B .110$ | 474×0035A2 | . 47 | 1.48 | 1.19 | 1.01 | . 75 |  |  |  |  |  |  |  |

TYPE 150D 50WVDC - 60 VDC SURGE

| $\begin{gathered} \text { stock } \\ \text { No. } \\ \hline \end{gathered}$ | $\begin{array}{r} 1500 \\ \text { NO. } \\ \hline \end{array}$ | $\mu \mathrm{F}$ | 1.24 | $\begin{aligned} & \text { NET E } \\ & 25-49 \\ & \hline \end{aligned}$ | $50-99$ | $\begin{array}{r} 100 . \\ 499 \\ \hline \end{array}$ | $\begin{gathered} \text { stock } \\ \mathrm{Ne} . \end{gathered}$ | $\begin{aligned} & 150 \mathrm{D} \\ & \mathrm{No.} \end{aligned}$ | - 5 | 1.24 | $\begin{aligned} & \text { NET E } \\ & 25-49 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { ACH } \\ & 50.99 \\ & \hline \end{aligned}$ | $\begin{array}{r} 100 . \\ 499 \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 CB -189 | 472×9050A2 | . 0047 | 2.48 | 1.99 | 1.68 | 1.45 | 3 CB -883 | $334 \times 9050 \mathrm{~A} 2$ | . 33 | 2.48 | 1.99 | 1.68 | 1.45 |
| 3СВ-190 | $562 \times 9050 \mathrm{~A} 2$ | . 0056 | 2.48 | 1.99 | 1.68 | 1.45 | 3C8.884 | 394x9050A2 | . 39 | 2.48 | 1.99 | 1.68 | 1.45 |
| $3 C 8.191$ | 682×905042 | . 0068 | 2.48 | 1.99 | 1.68 | 1.45 | 3CB-885 | 474×905042 | . 47 | 2.48 | 1.99 | 1.68 | 1.45 |
| 3C8-192 | $822 \times 905042$ | . 0082 | 2.48 | 1.99 | 1.68 | 1.45 | 3 CB 888 | 564×9050A2 | . 56 | 2.48 | 1.99 | 1.68 | 1.45 |
| $3 \mathrm{CB-193}$ | $103 \times 9050 \mathrm{~A} 2$ | . 01 | 2.48 | 1.99 | 1.68 | 1.45 | 3 CB 888 | $684 \times 905012$ | . 68 | 2.48 | 1.99 | 1.68 | 1.45 |
| 3 CB -194 | $123 \times 9050 \mathrm{~A} 2$ | . 012 | 2.48 | 1.99 | 1.68 | 1.45 | 3 CB -888 | 824x9050A2 | . 82 | 2.48 | 1.99 | 1.68 | 1.45 |
| $3 \mathrm{CB}-185$ | $153 \times 9050 \mathrm{~A} 2$ | . 015 | 2.48 | 1.99 | 1.68 | 1.45 | $3 \mathrm{CB}-889$ | 105×905042 | 1.0 | 2.48 | 1.99 | 1.68 | 1.45 |
| 3C8-196 | $183 \times 9050 \mathrm{~A} 2$ | . 018 | 2.48 | 1.99 | 1.68 | 1.45 | 3CB-850 | $125 \times 905082$ | 1.2 | 2.62 | 2.10 | 1.77 | 1.52 |
| 3 CB 197 | $223 \times 9050$ A2 | . 022 | 2.48 | 1.99 | 1.68 | 1.45 | 3C8-691 | $155 \times 905082$ | 1.5 | 2.62 | 2.10 | 1.77 | 1.52 |
| 3 CB -198 | $273 \times 9050 \mathrm{~A} 2$ | . 027 | 2.48 | 1.99 | 1.68 | 1.45 | 3 CB .892 | $185 \times 905082$ | 1.8 | 2.62 | 2.10 | 1.77 | 1.52 |
| 3C8-199 | $333 \times 905042$ | 033 | 2.48 | 1.99 | 1.68 | 1.45 | $3 \mathrm{CB}-93$ | $225 \times 905082$ | 2.2 | 2.62 | 2.10 | 1.77 | 1.52 |
| 3C8.871 | $393 \times 905042$ | . 039 | 2.48 | 1.99 | 1.68 | 1.45 | $3 \mathrm{CB}-894$ | $275 \times 905082$ | 2.7 | 2.62 | 2.10 | 1.77 | 1.52 |
| 3C8-872 | 473x9050A2 | . 047 | 2.48 | 1.99 | 1.68 | 1.45 | 3 CB -695 | $335 \times 905082$ | 3.3 | 2.62 | 2.10 | 1.77 | 1.52 |
| $3 \mathrm{C8} 8873$ | $563 \times 9050$ A2 | . 056 | 2.48 | 1.99 | 1.68 | 1.45 | 3 CB . 896 | $395 \times 9050 \mathrm{B2}$ | 3.9 | 2.62 | 2.10 | 1.77 | 1.52 |
| $3 \mathrm{CB}-74$ | $683 \times 905042$ | . 068 | 2.48 | 1.99 | 1.68 | 1.45 | 3 CB . 897 | $475 \times 905082$ | 4.7 | 2.62 | 2.10 | 1.77 | 1.52 |
| $3 \mathrm{C8} 875$ | $823 \times 905042$ | . 082 | 2.48 | 1.99 | 1.68 | 1.45 | 3 CB -898 | $565 \times 9050 \mathrm{R} 2$ | 5.6 | 4.28 | 3.43 | 2.90 | 2.47 |
| $3 \mathrm{CB}-76$ | $104 \times 9050 \mathrm{~A} 2$ | . 1 | 2.48 | 1.99 | 1.68 | 1.45 | $3 \mathrm{CB}-999$ | $685 \times 9050 R 2$ | 68 | 4.28 | 3.43 | 2.90 | 2.47 |
| $3 \mathrm{CB-677}$ | 124×9050A2 | . 12 | 2.48 | 1.99 | 1.68 | 1.45 | 3 CB -900 | $825 \times 9050 \mathrm{R} 2$ | 8.2 | 4.28 | 3.43 | 2.30 | 2.47 |
| 3 CB 879 | 154×9050A2 | . 15 | 2.48 | 1.99 | 1.68 | 1.45 | 3C8-901 | $106 \times 9050 \mathrm{R} 2$ | 10 | 4.26 | 3.43 | 2.90 | 2.47 |
| 3C8-880 | 184 $\times 9050 \mathrm{~A} 2$ | . 18 | 2.48 | 1.99 | 1.68 | 1.45 | 3CB-902 | 126x9050R2 | 12 | 4.28 | 3.43 | 2.90 | 2.47 |
| 3C8-881 | 224×9050A2 | . 22 | 2.48 | 1.99 | 1.68 | 1.45 | $3 \mathrm{CB}-903$ | $156 \times 9050 \mathrm{R2}$ | 15 | 4.28 | 3.43 | 2.90 | 2.47 |
| 3 CB -882 | $274 \times 905042$ | . 27 | 2.48 | 1.99 | 1.68 | 1.45 | 3 CB .904 | 186x9050R2 | 18 | 4.28 | 3.43 | 2.90 | 2.47 |


| $\begin{gathered} \text { STOCK } \\ \text { No. } \end{gathered}$ | TYPE 150D 6WVDC-8VDC SURGE $\pm 10 \%$ TOLERANCE |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & 150 \mathrm{D} \\ & \mathrm{No} . \\ & \hline \end{aligned}$ | $\mu \mathrm{F}$ | 1.24 | $\begin{aligned} & \text { NET I } \\ & 25-49 \end{aligned}$ | $\begin{aligned} & \text { EACH } \\ & 50.99 \end{aligned}$ | $\begin{aligned} & 100 \\ & 499 \end{aligned}$ |
| 3CB.168 | 565×9006A2 | 5.6 | 1.70 | 1.37 | 1.16 | . 86 |
| $3 C 8-170$ | 685x9006A2 | 6.8 | . 1.70 | 1.37 | 1.16 | . 86 |
| 3CB-181 | 476x900682 | 47 | 1.77 | 1.42 | 1.20 | . 88 |
| 3CB-182 | $566 \times 900682$ | 56 | 1.77 | 1.42 | 1.20 | . 88 |
| TYPE 150D 10WVDC-13VDC SURGE $\pm 10 \%$ TOLERANCE |  |  |  |  |  |  |
| $3 C 8-164$ | 395x9010A2 | 3.9 | 1.70 | 1.37 | 1.16 | . 86 |
| 3CB. 166 | 475x9010A2 | 3.9 | 1.70 | 1.37 | 1.16 | . 86 |
| 3 CB -176 | $276 \times 901082$ | 27 | 1.77 | 1.42 | 1.20 | . 88 |
| 3C8-179 | 336×901082 | 33 | 1.77 | 1.42 | 1.20 | . 88 |
| 3C8-180 | 396x901082 | 39 | 1.77 | 1.42 | 1.20 | . 88 |
| TYPE 1500 15WVDC-18VDC SURGE $\pm 10 \%$ TOLERANCE |  |  |  |  |  |  |
| 3CB-160 | 275×9015A2 | 2.7 | 1.70 | 1.37 | 1.16 | . 86 |
| 3CB-162 | $335 \times 901542$ | 3.3 | 1.70 | 1.37 | 1.16 | . 86 |
| $3 C 8.176$ | $186 \times 901582$ | 18 | 1.77 | 1.42 | 1.20 | . 88 |
| 3C8-177 | 226x901582 | 22 | 1.77 | 1.42 | 1.20 | . 88 |
| TYPE 150D 2OWVDC-23VDC SURGE $\pm 10 \%$ TOLERANCE |  |  |  |  |  |  |
| 3CB-152 | $125 \times 902042$ | 1.2 | 1.70 | 1.37 | 1.18 | . 86 |
| $3 C B-154$ | 155x902042 | 1.5 | 1.70 | 1.37 | 1.16 | . 86 |
| 3CE-156 | 185x902042 | 1.8 | 1.70 | 1.37 | 1.18 | . 86 |
| 3C8-158 | 225x9020A2 | 2.2 | 1.70 | 1.37 | 1.16 | . 86 |
| 3CE-172 | $825 \times 902082$ | 8.2 | 1.77 | 1.42 | 1.20 | . 88 |
| 3CB-173 | 106x902082 | 10 | 1.77 | 1.42 | 1.20 | . 88 |
| 3 CB -174 | $126 \times 902082$ | 12 | 1.77 | 1.42 | 1.20 | . 88 |
| उСВ-175 | $156 \times 902082$ | 15 | 1.77 | 1.42 | 1.20 | . 88 |

TYPE 150D 35WVDC-4OVDC SURGE

| 3 CB -123 | 472x9035A2 | . 0047 | 1.52 | 1.22 | 1.03 | 5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $3 C 8.124$ | 562x9035A2 | . 0056 | 1.52 | 1.22 | 1.03 | . 85 |
| 3CE. 125 | 682×9035A2 | . 0068 | 1.52 | 1.22 | 1.03 | . 85 |
| 3C8. 126 | 822x9035A2 | . 0082 | .1.52 | 1.22 | 1.03 | . 85 |
| 3 C8.127 | 103x9035A2 | . 01 | 1.52 | 1.22 | 1.03 | . 85 |
| 3C8-128 | 123x9035A2 | . 012 | 1.52 | 1.22 | 1.03 | . 85 |
| 3C8. 129 | $153 \times 903542$ | . 015 | 1.52 | 1.22 | 1.03 | . 85 |
| 3 CB -130 | 183×9035A2 | . 018 | 1.52 | 1.22 | 1.03 | . 85 |
| 3CB-131 | 223x9035A2 | . 022 | 1.52 | 1.22 | 1.03 | . 8 |
| 3C8. 132 | 273x9035A2 | . 027 | 1.52 | 1.22 | 1.03 | . 85 |
| 3 CB .133 | 333x9035A2 | . 033 | 1.52 | 1.22 | 1.03 | . 85 |
| 3 CB -134 | 393x903542 | . 039 | 1.52 | 1.22 | 1.03 | . 85 |
| 3C8. 135 | 473×9035A2 | . 047 | 1.52 | 1.22 | 1.03 | . 85 |
| 3C8-136 | 563x9035A2 | . 056 | 1.52 | 1.22 | 1.03 | . 85 |
| 3CB-137 | 683×9035A2 | . 068 | 1.52 | 1.22 | 1.03 | . 05 |
| 3C8-138 | 823x9035A2 | . 082 | 1.52 | 1.22 | 1.03 | . 65 |
| 3CB-139 | 104×9035A2 | . 10 | 1.52 | 1.22 | 1.03 | . 65 |
| $3 C 8.140$ | 124x9035A2 | . 12 | 1.70 | 1.37 | 1.16 | . 86 |
| 3 CB .141 | 154×903542 | . 15 | 1.70 | 1.37 | 1.16 | . 86 |
| 3 CB . 142 | 184×9035A2 | . 18 | 1.70 | 1.37 | 1.16 | . 86 |
| $3 C 8.143$ | 224x9035A2 | . 22 | 1.70 | 1.37 | 1.16 | . 66 |
| 3 CB .144 | 274×9035A2 | . 27 | 1.70 | 1.37 | 1.16 | . 16 |
| $3 C B .145$ | 334x9035A2 | . 33 | 1.70 | 1.37 | 1.16 | . 86 |
| 3 C8. 146 | 394×9035A2 | . 39 | 1.70 | 1.37 | 1.16 | . 86 |
| 3C8.147 | 474×9035A2 | . 47 | 1.70 | 1.37 | 1.16 | 6 |
| 3C8. 148 | 564×9035A2 | . 56 | 1.70 | 1.37 | 1.16 | . 86 |
| 3 C8-149 | 684×9035A2 | . 68 | 1.70 | 1.37 | 1.16 | . 86 |
| 3C8-150 | 824×9035A2 | . 82 | 1.70 | 1.37 | 1.16 | . 16 |
| 3 CB -151 | 105x9035A2 | 1.0 | 1.70 | 1.37 | 1.16 | . 66 |
| 3 CB -153 | 125x9035B2 | 1.2 | 1.77 | 1.42 | 1.20 | 88 |
| 3CB-155 | 155×903582 | 1.5 | 1.77 | 1.42 | 1.20 | . 68 |
| 3CB-157 | $185 \times 903582$ | 1.8 | 1.77 | 1.42 | 1.20 | . 88 |
| 3CB-159 | $225 \times 903582$ | 2.2 | 1.77 | 1.42 | 1.20 | . 88 |
| 3 CB -161 | $275 \times 903582$ | 2.7 | 1.77 | 1.42 | 1.20 | . 8 |
| $3 C 8.163$ | 335x903582 | 3.3 | 1.77 | 1.42 | 1.20 | 88 |
| $3 C 8.165$ | 395x903582 | 3.9 | 1.77 | 1.42 | 1.20 | . 68 |
| 3C8-167 | 47549035B2 | 4.7 | 1.77 | 1.42 | 1.20 | . 88 |
| 3C8-169 | 565x903582 | 5.6 | 1.77 | 1.42 | 1.20 | 88 |
| 3C8-171 | $685 \times 903582$ | 6.8 | 1.71 | 1.42 | 1.20 | . 88 |
| 3C8-185 | 156x9035R2 | 15 | 2.92 | 2.34 | 1.98 | 1.45 |
| 3C8-186 | 226×9035R2 | 22 | 2.92 | 2.34 | 1.98 | 1.45 |
| 3 CB -187 | $336 \times 9035 \$ 2$ | 33 | 5.43 | 4.34 | 3.67 | 2.84 |
| 3C8-188 | 476×9035S2 | 47 | 5.43 | 4.34 | 3.67 | 2.64 |

## ATTENTION INDUSTRIAL USERS

ALL 1500 SERIES SPRAGUE TANTULUMS ARE AVAIL.
ABLE WITHOUT SLEEVES. WRITE FOR QUOTATIONS.
Lafayette will caray all mew values amd
TYPES AS TMEY ARE ANNJUNCED BY YHE FACTORY,
PLEASE CONSULT OUR IMDUSTRIAL DIVISIONS FOR
PLEASE CONSULT OUR INDUSTRIAL DIVISIONS FOR

TAS SOLID ELECTROLYTE sulated) and CS13 (insulated). Sintered anode.solld electrolyte in hermetically sealed minlature metal case. $\pm 20 \%$ tolerance ( $\pm 10 \%$ tolerances avallable on request). Values with ( $\left.{ }^{( }\right)$are preferred MIL types. Size: (A)
 (G) 341 dia, $X .750$. For MYLaR insul. Sleeve, add to prices shown and change next-to-last type number to
"1". (Example: TAS 334 MOO6PIA). 50 volt Units Avail. able on Special Order.

## 6WVDC-8VDC SURGE

| Slock No. | $\begin{aligned} & \text { TAS } \\ & \text { Type } \end{aligned}$ | NET EACH |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  | MFD. | 1.24 | 25.49 | 50.99 | 499 |
| 3C8-597 | 334M006P0A | 33 | 1.43 | 1.85 | . 98 | 73 |
| 3 CB-602 | 474M006P0A | 47 | 1.43 | 1.15 | . 98 | 3 |
| $3 \mathrm{CB}-607$ | 684M006POA | 68 | 1.43 | 1.15 | . 98 | 73 |
| 3 CB-612 | 105M006P0A | 1.0 | 1.43 | 1.15 | . 98 | 73 |
| 3 CB-657 | 155M006P0A | 1.5 | 1.43 | 1.15 | 98 | 73 |
| 3 CB-662 | 225M006P0A | 2.2 | 1.43 | 1.15 | 98 | 73 |
| $3 \mathrm{CB}-667$ | 335M006POA | 3.3 | 1.43 | 1.15 | . 98 | 73 |
| 3CB-672 | 475M006P0A | 4.7 | 1.43 | 1.15 | 98 | 3 |
| 3 CB-677* | 685M006POA | 6.8 | 1.43 | 1.15 | 98 | . 73 |
| 3 CB-617 | 106M006POC | 10 | 1.52 | 1.22 | 1.03 | 75 |
| 3 CB-622 | 156M006POC | 15 | 1.52 | 1.22 | 1.03 | 75 |
| $3 \mathrm{CB-627}$ | 226M006POC | 22 | 1.52 | 1.22 | 1.03 | . 75 |
| 3 CB .632 | 336M006POC | 33 | 1.52 | 1.22 | 1.03 | . 75 |
| 3С8.637* | 476M006POC | 47 | 1.52 | 1.22 | 1.03 | . 75 |
| 3 C8. 642 | 626M006P0F | 68 | 2.50 | 2.00 | 1.69 | 1.24 |
| 3 CB -647 | 107M006POF | 100 | 2.50 | 2.00 | 1.69 | 1.24 |
| 3CB-651* | 157M006POF | 150 | 2.50 | 2.00 | 1.69 | 1.24 |
| 3 CB-654 | 227M006POG | 220 | 4.64 | 3.72 | 3.14 | 2.45 |
|  | 37M006P0 | 330 | 4:64 | 3.72 | 3.1 |  |

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \& 337M006POC \& 330 \& \& \& \& \& \& TMT Type \& \& \& \& \& \& \\
\hline \& \& \& \& \& \& \& \[
3 \mathrm{CB}-564
\]
ЗСB.563 \& 2050050 POA 405U050P0A \& \& \& \& \& \& \\
\hline \& 10WVDC \& 2VDC \& \& RGE \& \& \& \[
\begin{aligned}
\& 3 C 8 \cdot 563 \\
\& 3 C 8-562
\end{aligned}
\] \& 405U050P0A 605U035POA \& \& \[
\begin{aligned}
\& 50 \\
\& 35
\end{aligned}
\] \& \[
\begin{aligned}
\& 1.24 \\
\& 1.24
\end{aligned}
\] \& . 99 \& \begin{tabular}{l}
84 \\
84 \\
\hline 8
\end{tabular} \& . 71 \\
\hline \& \& \& \& \& \& \& ЗС8.553 \& 805U050P0B \& 8 \& 50 \& 1.46 \& 1.17 \& 99 \& 84 \\
\hline \(3 \mathrm{CB}-598\) \& 334M010POA \& 33 \& 1.43 \& 1.15 \& . 98 \& . 73 \& ЗСВ-561 \& 126U015P0A \& 12 \& 15 \& 1.24 \& . 99 \& 84 \& 71 \\
\hline 3 CB .603 \& 474MO10P0A \& 47 \& 1.43 \& 1.15 \& . 98 \& .73 \& \& \& \& \& . 4 \& 1.17 \& 99 \& \\
\hline C8.608 \& 684MO1OPOA
\(105 \mathrm{MO1OPOA}\) \& 1.0 \& 1.43
1.43 \& 1.15
1.15 \& 98 \& 73
73 \& 3С8.800
3C8. 554 \& \(126 \cup 035 P 08\)
\(156 \cup 030 Р 0 \mathrm{O}\) \& 12 \& 35 \& 1.46 \& 1.17 \& 999 \& \\
\hline B-658 \& 155 \& 1.5 \& 1.43 \& 1.15 \& 98 \& 73 \& зСв. 560 \& 256U006P0A \& 25 \& 6 \& 1.24 \& . 99 \& . 84 \& 71 \\
\hline CB-663 \& 225M010 \& 2.2 \& 1.43 \& 1.15 \& 98 \& . 73 \& 3 CB \& 25640 \& \& 15 \& \& \& \& 8 \\
\hline \& \& \& \& \& \& \& 3 C \& 35640 \& 35 \& 12 \& 6 \& 1.17 \& 99 \& 84 \\
\hline 3 CB -668 \& 335M010POA \& 3.3 \& \& \& \& 73 \& з CB -55 \& 406U003POA \& 40 \& 3 \& 1.24 \& . 99 \& . 84 \& 71 \\
\hline \({ }^{3 C 8.673}\) \& 475M010POA \& 4.7 \& 1.43 \& 1.15 \& \& \& \({ }^{\text {CPB-556 }}\) \& 506U006POB \& 50 \& \& 1.46 \& 1.17 \& 99 \& 4 \\
\hline \(3 \mathrm{CB}-845\) \& 685M010P0 \& 6.8 \& 1.52 \& 1.22 \& 1.03 \& 75 \& 3CB-537 \& 806 U 033 P 0 B \& 80 \& 3 \& 1.46 \& 1.17 \& 99 \& 84 \\
\hline 3 CB .618 \& 106 M \& 10 \& 1.52 \& 1.22 \& 1.03 \& \& \& \& \& \& \& \& \& \\
\hline \({ }^{3} \mathrm{CB} \cdot 623\) \& 156MO10POC \& 15 \& 1.52 \& 1.22 \& 1.03 \& \& \& \& \& \& \& \& \& \\
\hline \& \& 22 \& \& \& \& \& \& \& \& \& \& \& \& \\
\hline 8.633- \& 336M010 \& 33 \& 1.5 \& \& \& \& \& \& \& \(v\) \& \& \& \& \\
\hline C8.638 \& \(476 \mathrm{MO10P}\) \& 47 \& 2.50 \& 2.00 \& 69 \& \& \& \& afo \& \& \& \& \& \\
\hline 3 CB-643 \& 686M010 \& 68 \& 2.50 \& 2.00 \& 1.69 \& 1.24 \& 3ct. 565 \& \(205 \cup 1090 P 0 A\) \& 2 \& 90 \& \& \& 99 \& \\
\hline 3 CB .648 \& \(107 \mathrm{MO10}\) \& 100 \& 2.50 \& 2.00 \& . 69 \& 24 \& 3 CB -5 \& 355407 \& -5 \& 75 \& \& 11 \& 99 \& 4 \\
\hline 3 CB -652 \& 157M010 \& 150 \& 4.64 \& 3.72 \& 14 \& \& \({ }^{\text {CB- }}\) \& 4054060 POA \& 4 \& 60 \& 1.4 \& 1.17 \& 99 \& 84 \\
\hline ЗСВ \(655{ }^{\circ}\) \& 227M010POG \& 220 \& 4.64 \& 3.72 \& 14 \& \& \& 505 \(0^{\text {a }}\) SOPOA \& 5 \& 50 \& 45 \& 1.17 \& 99 \& \\
\hline \& \& \& \& \& \& \& \& \& 6 \& 40 \& 1.4 \& . 1 \& 99 \& \\
\hline \& W \& VC \& \& GE \& \& \& 3 CB -5 \& 805U030 \& \& \& 1.46 \& 1.17 \& . 99 \& 4 \\
\hline \& \& \& \& \& \& \& \& 10640 \& 10 \& \& 1.46 \& 1.17 \& \& \\
\hline \& \& \& \& \& \& \& ) 8 - 202 \& \(116 \cup 090 Р 08\) \& 11 \& 90 \& 2.46 \& 1.97 \& \& \\
\hline 3 C8-599 \& 334 \& 33 \& 1.43 \& 1.15 \& \& 73 \& \(3 C 8.572\) \& 1266 \& 12 \& 20 \& 1.46 \& 1.17 \& \& \\
\hline CB. 60 \& \(474 \mathrm{M01}\) \& 47 \& 1.43 \& 1.15 \& . 98 \& 73 \& 3ce. 573 \& 156U015P0A \& 15 \& 15 \& 1.4 \& 1.17 \& 99 \& A \\
\hline 3 CB-609 \& 68am015POA \& 68 \& 1.43 \& 1.15 \& 98 \& \& 3CB-503 \& 1560075 POB \& 15 \& 75 \& 2.46 \& 1.97 \& \& 415 \\
\hline 3 CB. 614 \& 105M015POA \& 1.0 \& 1.43 \& 1.15 \& 98 \& 73 \& 3CE.574 \& 2064010 \& 20 \& 10 \& 1.46 \& 1.17 \& \& \\
\hline 3 CB.659 \& 155M0 \& 1.5 \& 1.43 \& 1.15 \& 98 \& 73 \& 3 CB \& \& 20 \& 60 \& 2.4 \& 1.97 \& \& \\
\hline C8. 664 \& 225M01 \& 2.2 \& 43 \& 1.15 \& 8 \& 73 \& 3CB. \& 256405 \& 25 \& 50 \& 2.4 \& 1.97 \& \& 15 \\
\hline \& \& \& \& \& \& \& 3CB-857 \& 306 U 9 \& \& \& 4.28 \& 3.42 \& 2.89 \& 2.46 \\
\hline \({ }^{3} \mathbf{3 C 8 . 6 6 9}{ }^{\text {c }}\) \& 335M015POA \& 3.3 \& 1.43 \& 1.15 \& \({ }^{.98}\) \& \& 3C8-858 \& 506U0 \& 40 \& 75 \& 4.28 \& 3.42 \& 2.89 \& \\
\hline 3C8.846

C8.679 \& 475M015P0 \& \& \& 1.22 \& 1.03 \& 79 \& $3 \mathrm{CB-859}$ \& 506406 \& \& 60 \& 4.28 \& 3.42 \& 2.8 \& <br>
\hline $3 C 8.679$
$3 C 8.619$ \& 685M015P
106 M 015 \& 10 \& 1.52 \& 1.22 \& 1.03 \& 79 \& ${ }^{\text {CB }}$ \& 606005 \& 60 \& 50 \& 4.2 \& 3.4 \& 2. \& <br>
\hline ${ }_{3}^{3 C 8.619}$ \& 106 M 015 \& \& \& \& \& 79 \& 3С8.861 \& 107U030 \& \& \& 4.28 \& . 4 \& \& <br>
\hline $3 C 8.624$
$3 C 8.629$ \& $156 \mathrm{MO15PO}$ \& 15 \& 1.52 \& 1.22 \& \& 75 \& $3 \mathrm{CB-662}$ \& 177001 \& 170 \& \& 4.28 \& 3.4 \& \& <br>
\hline 8. 629 \& \& 22 \& \& \& \& 75 \& ${ }^{3} \mathrm{CB}$ - \& 25700 \& 250 \& 10 \& 4.28 \& 3, \& 2.8 \& <br>
\hline \& \& \& \& \& \& \& 3CB-864 \& 3374006 \& 330 \& \& \& . 42 \& 2.89 \& <br>
\hline \& \& 43 \& \& \& \& \& \& \& \& \& \& \& \& <br>
\hline  \& 688M015POF \& 68 \& 2.50 \& 2.00 \& 1.69 \& 1.24 \& \& \& \& \& \& \& \& <br>
\hline 3 CB -649 \& 107M015POG \& 100 \& 4.64 \& 3.72 \& 3.14 \& 2.45 \& ta \& - \& \& \& \& \& \& <br>
\hline ЗС8.653 \& 157M015POG \& 50 \& \& 72 \& 3.14 \& 2.45 \& \& \& \& \& \& \& \& <br>
\hline \& W \& 3voc \& \& \& \& \& \& \& \& \& \& \& \& <br>
\hline \& \& \& \& \& \& \& \& 355805 \& 3.5 \& 50 \& 2.20 \& 1.75 \& 1.48 \& <br>
\hline \& \& \& \& \& \& 100. \& \& \& \& 30 \& 2.20 \& 1.7 \& 1.48 \& <br>
\hline \& tas \& \& \& \& \& 499 \& 3 \& 605R0 \& \& 25 \& 2.2 \& 1.75 \& 1.48 \& 1.26 <br>
\hline 3 [8.788 \& 684M020P0A \& \& \& \& \& \& 3CD-81 \& 805R020POA \& 8 \& 20 \& 20 \& 1.75 \& 1.48 \& 1.26 <br>
\hline зС8.789 \& 155M020P0A \& 1.5 \& 1.43 \& 1.15 \& . 98 \& 73 \& 3 Cl \& 106R015POA \& 10 \& \& 2.20 \& 1.75 \& 1.48 \& 1.26 <br>
\hline 3C8.790
3С8.791 \& 225 M 02 \& \& \& \& \& \& $3 \mathrm{Cl}-$ \& 116R06 \& 11 \& 60 \& 3.68 \& 2.94 \& 2.49 \& 2.12 <br>
\hline $3 C 8.791$
$3 C 8-792$ \& $475 M 120$
$685 M 020$ \& 4.7 \& 1.52 \& 1.22 \& 1.03 \& . 75 \& $3 \mathrm{CD}-13$ \& 1268013 POA \& 12 \& 13 \& 2.20 \& \& 1.48 \& <br>

\hline $3 \mathrm{CB} .793^{\text {. }}$ \& 106M020 \& 10 \& 1.52 \& 1.22 \& 1.03 \& . 75 \& ${ }^{3 C 0}$ \& an \& 15 \& 10 \& | 2.20 |
| :--- |
| 3.68 | \& 1.94 \& 1.48 \& <br>

\hline $9^{.}$ \& \& \& \& 1.22 \& \& 73 \& 3 C \& 206R007POA \& 20 \& 7 \& 2.20 \& 1.75 \& 1.48 \& 1.26 <br>
\hline ЗСв. 795 \& 226M020POF \& 22 \& 2.50 \& 2.00 \& 1.69 \& 1.24 \& $3 \mathrm{CB}-17$ \& 206R04 \& 20 \& 40 \& 3.68 \& 2.94 \& 2.49 \& 2.12 <br>
\hline \& 336M020POF \& 33 \& 2.50 \& 2.00 \& 1.69 \& 1.24 \& $3 \mathrm{Cl}-18$ \& $306 R$ \& 30 \& 4 \& 2.20 \& 1.75 \& 1.48 \& 1.26 <br>
\hline - \& 476 MO \& 47 \& 2.50 \& 2.00 \& 1.69 \& 1.24 \& $3 \mathrm{CB}-18$ \& \& 30 \& 60 \& 7.05 \& 3.65 \& 4.76 \& 4.50 <br>
\hline B-798 \& 68690 \& 8 \& 4.64 \& 3.72 \& , \& 2.45 \& ${ }^{3 C 8}-820$ \& 406R020POB \& 40 \& 20 \& 3.68 \& 4 \& 2.49 \& 2 <br>
\hline 8.799 \& 107M0 \& 100 \& . 64 \& 3.72 \& 3.14 \& 2.45 \& 3C8-821 \& 406ROSOPOC \& 40 \& 50 \& \& \& 4.76 \& <br>
\hline
\end{tabular}

## 35WVDC-4IVDC SURGE

| 35WVDC-4IVDC SURGE net each |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Stock TAS Ne. | MFD. | 1.24 | 25.49 | 50.99 | $\begin{aligned} & 100 . \\ & 499 \end{aligned}$ |
| 3 CB .601-334M035POA | 33 | 1.43 | 1.15 | 98 | 73 |
| 3CB-606-474M035POA | 47 | 1.43 | 1.15 | 98 | . 73 |
| 3CB.611* 684M035POA | 68 | 1.43 | 1.15 | 98 | 73 |
| 3C8.616" 105M035POA | 1.0 | 1.43 | 1.15 | 98 | . 73 |
| 3CB.661* 155M035POC | 1.5 | 1.52 | 1.22 | 1.03 | 75 |
| 3CE-666* 225M035POC | 2.2 | 1.52 | 1.22 | 1.03 | 75 |
| 3CE.671* $335 \mathrm{M035POC}$ | 3.3 | 1.52 | 1.22 | 1.03 | 75 |
| 3C8-676* ${ }^{\text {475M035POC }}$ | 4.7 | 1.52 | 1.22 | 1.03 | 75 |
| 3CB-681* 685M035POC | 6.8 | 1.52 | 1.2 | 1.03 | 75 |
| 3С8-621* 106M035P0F | 10 | 2.50 | 2.00 | 1.69 | 1.24 |
| 3CB. $626^{\circ}$ 156MO35POF | 15 | 2.50 | 2.00 | 1.69 | 1.24 |
| 3C8-631. $226 \mathrm{M035POF}$ | 22 | 2.50 | 2.00 | 1.69 | 1.24 |
| 3C8.636*, 336M035POG | 33 | 4.64 | 3.72 | 3.14 | 2.45 |
| 3C8.641** 476 MO 35 POG | 47 | 4.64 | 3.72 | 3.14 | 2.45 |
| 3 CB. 646 686M035POC | 68 | 4.64 | 3.72 | 3.14 | 2.45 |

## SUBMINIATURE <br> PELLET ANDDE

TNT TAP. TAH are subminiature pellet anode types, liquid elecirolyte sintered anode, with metal case and epoxy end seal. CASE SIZES: TNT. 165 dia. X (A) 350
and (B) .500 : TAP \& TAN, 238 dia. $x(A) .500$, (B) 660 , and (C) 875 length. Add 05 to prices shown for MYLAR
sleeve and use "1" as. 12 th digit. Tolerance: TNT \& TAP sleeve and use " $15 \%+75 \%$; TAH $=-12$ th digit. Tol

> T T

## MALLORY AND C-D INDUSTRIAL CAPACITORS




#### Abstract

MALLORY "HC" HIGH CAPACITY DRY ELECTROLYTIC CAPACITORS High quality, etch-plate Tolerance: up to 150 Volts $0 C-10 \%$ to $+100 \%$; above electrolytic capacitors supplied in a molsture-resistant plastic case incorporating a loss of electrolytic. Temperature range - $40^{\circ}$ to $+85^{\circ} \mathrm{C}$ 150 volts DC $-10 \%$ to $+50 \%$. All units teature screw terminals except HC1000A which has solder lug ter. minals. Supplied with VR bracket for vertical mounting. Vary in size from $1 K / 6 \times 2 \frac{1 / 4}{}{ }^{\prime \prime}$ to $2 K_{6} \times 4 \%{ }^{\prime \prime}$



"NP" NON-POLARIZED DRY ELECTROLYTIC CAPACITORS


## TAM-SOLID ELECTROLYTE

Sintered anode-sclid electrolyte plastic encapsulated Temp, range : $55^{\circ}$ to $+85^{\circ} \mathrm{C} . \pm 20 \%$ tof. Parallel leads 175 spacing. SIZE: Ko" square $\times$ K's, $^{\prime \prime}$ thick.

| Stuck Ma. |  | IAM TYPE | MFO. |  | wroe |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 3CB-682 |  | 685M025P5C | 6.8 |  | 25 |
| 3 C 8.683 |  | 106M025P5C | 10 |  | 25 |
| 3 CB -684 |  | 156M025P5C | 15 |  | 25 |
| 3 CB. 685 |  | 226M015P5C | 22 |  | 15 |
| 3 C8.686 |  | 336M010P5C | 33 |  | 10 |
| 3 C8-687 |  | 396M010P5C | 39 |  | 10 |
| 3 CB -688 |  | 566M006P5C | 56 |  | 6 |
| 1-24, EACH | 1.20 |  | 25-49 | FACH | . 96 |
| 50.99, EACH | . 82 |  | 100-499 | EACH | 69 |

## CORNELL-DUBILIER CAPACITORS

## CORNELL-OUBILIER ULTRA-SMALL <br> \section*{ALUMINUM-CASES ELECTROLYTICS}

Type NLW-Compact hermetically sealed aluminum toil electrolitic capacitors. With welded leads. Shpg. wt.,
$202 s$. Diams. vary from

NET EACH IN LOTS OF

| Stock No. | $\mu f$ | WVOC | 1.24 | 25.49 | $50-99$ | $100-249$ |
| :--- | ---: | :---: | :---: | :---: | :---: | :---: |
| CG-603 | 25 | 3 | .75 | .48 | .38 | .30 |
| CG-604 | 40 | 3 | .75 | .48 | .38 | .30 |
| CG.605 | 50 | 3 | .75 | .48 | .38 | .30 |
| CG-607 | 200 | 3 | .90 | .56 | .44 | .35 |
| CG-614 | 10 | 6 | .81 | .46 | .36 | .29 |
| CG.615 | 15 | 6 | .81 | .48 | .38 | .30 |
| CG-616 | 20 | 6 | .81 | .48 | .38 | .30 |
| CG-618 | 30 | 6 | .84 | .48 | .38 | .30 |
| CG.619 | 40 | 6 | .84 | .48 | .38 | .30 |
| CG-625 | 25 | 10 | .81 | .51 | .39 | .32 |
| CG-626 | 50 | 10 | .90 | .56 | .44 | .35 |
| CG-628 | 5 | 15 | .84 | .46 | .36 | .29 |
| CG-629 | 10 | 15 | .84 | .48 | .38 | .30 |
| CG-630 | 20 | 15 | .87 | .48 | .38 | .30 |
| CG-631 | 30 | 15 | .90 | .51 | .39 | .32 |
| CG-633 | 6 | 25 | .84 | .48 | .38 | .30 |
| CG-634 | 10 | 25 | .87 | .48 | .38 | .30 |
| CG-635 | 15 | 25 | .87 | .51 | .39 | .32 |
| CG-637 | 5 | 50 | .87 | .55 | .43 | .34 |
| CG-638 | 10 | 50 | .90 | .56 | .43 | .35 |
| CG-639 | 20 | 50 | .90 | .56 | .43 | .35 |

## C-D DEMICON TYPE TWU METAL-CASED

 UBULAR CAPACITORSHermetically sealed in uninsulated me al case with glass-to-metal seal. Minia ture space saving. Standard wire lead terminals. Dykano U ofl impregnant with $-55^{\circ}$ to $+125^{\circ} \mathrm{C}$ temperature range. Tolerance $\pm 10 \%$. Surpass performance require ments of MIL-C.25.

| Stack No. | Type <br> TWU |  |  | NET EACH IN LOTS OF |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | 25. |  |  |
|  |  | MFO |  |  | 24 | 49 |  | 499 |
|  |  | 200 VOC WORKING |  |  |  |  |  |  |
| 3C8-434 | 2P47K | 47 | . $562 \times 13 / 8$ | 2.19 | 1.64 | 1.23 | 82 | 6 |
| 3CB-435 | 2W1K | 1.0 | 670×1\% |  | 1.90 | 1.42 | . 95 | 76 |
| 400 VOC WORKING |  |  |  |  |  |  |  |  |
| 3C8-436 | 4S47 | . 047 | . $400 \times 7 / 8$ | 1.86 | 1.3 | 1.04 | . 6 | . 55 |
| 3C8-437 | 4P22K | 22 | 562×13/8 | 2.19 | 1.64 | 1.23 | 82 | 66 |
| 3C8-438 | 4P47K | 47 | $670 \times 17$ | , 5 | 1.90 | 1.42 | 95 | 76 |
| 600 VOC WORKING |  |  |  |  |  |  |  |  |
| CB-439 | 601K | . 001 | . $235 \times 1 / 4$ | 1.88 | 1.25 | . 94 | . 63 | , |
| 3C8-440 | 6047K | . 0047 | . $235 \times 1 / 4$ | 1.71 | 1.28 | . 96 | . 64 | . 51 |
| CB-441 | 6S1K | . 01 | .312x \% | 1.74 | 1.31 | . 99 | . 66 | 53 |
| C8-442 | 6547 K | . 047 | . $400 \times 11 / 8$ | 1.89 | 1.42 | 1.06 | . 71 | . 57 |
| CB-443 | 6PIK | 1 | $562 \times 11 / 6$ | 2.10 | 1.58 | 1.19 | . 79 | 63 |
| 3C8-444 | 6P22K | . 22 | $562 \times 1 \%$ | 2.34 | 1.76 | 1.32 | . 88 | 70 |
| . 445 | 6P47K | 47 | 750×21/0 | 2.76 | 2.06 | 1.55 | 1.03 | . 82 |
| CALL OUR INOUSTRIAL OIVISIONS FOR C-O |  |  |  |  |  |  |  |  |
| MIL-C-25 CAPACITORS STYLES CP-04, CP-05, CP-08, 09, 10. 11, 12 and 13 CAPÁCITORS |  |  |  |  |  |  |  |  |

## TYPE FB HIGH CAPACITY

 ELECTROLYTICSType FB capacitors in round caroboard sleeved, aluminum cans are designed for high capacity, low voltage applications. Av shpg. wt., 6 oz . Av. size: $13 / 8 \times 3 \%$

| Stock | Type |  | WV | NET EA. IN LOTS OF |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | F8 | Mfd. | OC | 1-24 | 25-49 | 50-99 | 100-U0 |
| 3C8-389 | 1520 | 2000 | 15 | 2.82 | 1.62 | 1.33 | 1.12 |
| 3 CB. 390 | 1560 | 6000 | 15 | 6.00 | 2.26 | 1.85 | 1.55 |
| 3 C8.391 | 2510 | 1000 | 25 | 2.88 | 1.57 | 1.30 | 1.07 |
| 3 CB. 392 | 2520 | 2000 | 25 | 3.45 | 1.85 | 1.52 | 1.26 |
| 3CE-393 | 2540 | 4000 | 25 | 5.70 | 2.32 | 1.91 | 1.60 |
| 3C8-394 | 2550 | 5000 | 25 | 6.60 | 3.42 | 2.81 | 2.35 |
| 3C8. 395 | 5005 | 500 | 50 | 2.34 | 1.71 | 1.51 | 1.26 |
| 3 CB-396 | 5010 | 1000 | 50 | 4.20 | 1.83 | 1.51 | 1.26 |
| 3C8-397 | 5020 | 2000 | 50 | 5.46 | 2.29 | 1.88 | 1.56 |
| 3CB-398 | 5040 | 4000 | 50 | 7.50 | 4.90 | 4.75 | 3.35 |



CRL ID 500 WVDC CERAMIC DISCS


TYPE DD 1000 WVDC CERAMIC DISCS

CRL DD-30 3000 WVDC DISC CERAMICS

Ideal for by-pass coupling in high frequency circuits. All 500 WVDC. Tolerance all $\pm 10 \%$ except $\pm 20 \%, \dagger \pm$ $.5 \mathrm{MMF} . \ddagger \mathrm{GMV}, *+80-20 \%$. Sizes range from $1 / 4=$ to \%" diam. Avg, shpg. wt. 201.

| Stock No. | $\begin{aligned} & \text { CRL } \\ & \text { No. } \end{aligned}$ | Cap. <br> MMF. | Stoch No. | $\begin{aligned} & \text { CRL } \\ & \text { No. } \end{aligned}$ | Cap. MMF. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CA. 10 | 10-3R3 $\dagger$ | 3.3 | CA. 48 | 10-391 | 390 |
| CA-11 | ID. 050 | 5 | CA-49 | 10.401 | 400 |
| CA. 12 | 10.060 | 6 | CA-50 | 1D. 471 | 470 |
| CA. 13 | 10-6R8 | 6.8 | C $\mathrm{A}-51$ | 1D.00047 $\ddagger$ | 470 |
| CA-14 | ID-7R5 | 7.5 | CA-52 | ID-501 | 500 |
| CA. 15 | 1D-080 | 8 | CA-53 | 10.511 | 510 |
| CA. 16 | 1D. 100 | 10 | CA-54 | 10.561 | 560 |
| CA-17 | 10-120 | 12 | CA-55 | 10.601 | 600 |
| CA-18 | 10-150 | 15 | CA-56 | 10-681 | 680 |
| CA. 498 | 10-180 | 18 | CA. 57 | 10.751 | 750 |
| CA-19 | 10-200 | 20 | CA-500 | 10. 0008 \$ | 800 |
| CA. 20 | 10-220 | 22 | CA-58 | 10-821 | 820 |
| CA-21 | ID-240 | 24 | CA. 59 | 10.911 | 910 |
| CA-22 | 10-250 | 25 | CA. 60 | 10-102 | 1000 |
| CA-23 | 10-270 | 27 | CA. 61 | 10-.001 | 1000 |
| CA-24 | 1D-200 | 30 | CA. 62 | 10. 122 | 1200 |
| CA-25 | 10.330 | 33 | CA-63 | 10-.0012 $\ddagger$ | 1200 |
| CA-26 | 10.390 | 39 | CA.64 | 10-132 | 1300 |
| CA-27 | 10.470 | 47 | CA. 65 | 10-152 | 1500 |
| CA-28 | 10-500 | 50 | CA-66 | 1D-.0015 $\ddagger$ | 1500 |
| CA-29 | 10.510 | 51 | CA. 67 | 1D-162 | 1600 |
| CA-30 | 1D-560 | 56 | CA-68 | 10.182 | 1800 |
| CA-499 | 10-680 | 68 | CA-69 | 1D-.002 $\ddagger$ | 2000 |
| CA-31 | 10-750 | 75 | CA-70 | 10-.0022 $\ddagger$ | 2200 |
| CA-32 | 10.820 | 82 | CA-71 | 10-.0025\% | 2500 |
| CA-33 | 10-910 | 91 | CA-72 | 10. 0027 \$ | 2700 |
| CA. 34 | 10-101 | 100 | CA .73 | 10.003 | 3000 |
| CA-35 | 10.121 | 120 | CA.74 | 1D. $0033 \ddagger$ | 3300 |
| CA.36 | 10-131 | 130 | CA.75 | 1D-.0039\$ | 3900 |
| CA.37 | 10-151 | 150 | CA. 76 | 10. $004 \pm$ | 4000 |
| CA.38 | 10.181 | 180 | CA. 77 | 10.0043i | 4300 |
| CA.39 | 10-201 | 200 | CA.78 | 1D-4722* | 4700 |
| CA.40 | 10-221 | 220 | CA-79 | 10.0047 $\ddagger$ | 4700 |
| CA-41 | 10-241 | 240 | CA-80 | 10-.005 $\ddagger$ | 5000 |
| CA-42 | 10.251 | 250 | CA.81 | 10.0056 | 5600 |
| CA-43 | 10-271 | 270 | CA-82 | 10. 0068 | 6800 |
| CA-44 | 10-301 | 300 | CA-83 | 10.0075 | 7500 |
| CA-45 | 10-331 | 330 | CA-84 | 10-0082\$ | 8200 |
| CA-46 | 1D-351 | 350 | CA-85 | 10-1032* | . 01 MFD |
| CA-47 | 1D-361 | 360 | CA.86 | 10. 01 \$ | . 01 MFD |
|  | NET EACH ANY ABOVE IN LOTS Of |  |  |  |  |
| $\begin{aligned} & 1-24 \\ & .15 \end{aligned}$ |  |  | $\begin{gathered} 25.99 \\ .119 \end{gathered}$ |  | $\begin{aligned} & 100-249 \\ & .10 \end{aligned}$ |
|  |  |  | NET EACH IN LOTS OF |  |  |
| 5tock No. | CRL No. |  | Cap. MFD. | $\begin{array}{ll} 1 . & 25 \\ 24 & 99 \end{array}$ | $\begin{aligned} & 100- \\ & 249 \end{aligned}$ |
| CA-87 | 10.015** |  | . 015 | 18.143 | 12 |
| CA.88 | 10-.02** |  | . 02 | . 18.143 | . 12 |
| CA. 89 | 10-203 $\ddagger$ |  | . 02 | $38 \quad .285$ | . 24 |
| CA.90 | 10.03*** |  | . 03 | . $36 \quad .285$ | . 24 |
| CA.91 | 10-.04** |  | . 04 | . $36 \quad .285$ | . 24 |
| CA-92 | 10.05** |  | . 05 | . 36 . 285 | . 24 |

## FEED-THRU HI KAPS TYPE FT Con

Rated 500 WVOC, 1000 VDC test. Brass cad. plated double-flatted mounting bushing with 12-28 thread and nut. Tinned copper leads, $050^{\circ \prime}$. Tolerance $\pm 20 \%$ except is $+50-20 \%$. Overall slie with leads $1 \%_{2} x \%_{6}$.
Shpg. wt., 2 oz.
Stock No. CRL No. Cap. MMF. Price Schedule

| CA-355 | FT.500 | 500 |  |  |
| :---: | :---: | :---: | :---: | :---: |
| CA.356 | FT-1000 | 1000 | 1.24 | . 75 |
| CA.357 | T-1500* | 1500 | 25-99 | . 594 |
| CA.358 | FT-1800* | 1800 | 100-249 | . 50 |

Ideal for by-pass coupling in high frequency clicults. 1000 VDC working except DD-103, DD-153, DD-203, DD-303, DD-403, DD-503 which are 600 VDC working. Tolerance all $\pm 10 \%$ except * $\pm 20 \%, \dagger \pm .5 \mathrm{MMF}_{1}$
 \& GMV, $+80-20 \%$
Avg. shpg. wt., $20 z$.

| Stock Ho. | CRL No. | Cap. MMF | Stock No. | CRL No. | Cap. MMF. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CA-93 | DD.3R3t | 3.3 | CA. 142 | DD-401 | 400 |
| CA-94 | D0.050 | 5 | CA-145 | DD-471 | 470 |
| CA.95 | DD-060 | 6 | CA.501 | DD-47161 | 470 |
| CA. 96 | DD.6R8 | 6.8 | CA. 147 | DD-501 | 500 |
| CA.97 | DO.7R5 | 7.5 | CA-150 | DD. 511 | 510 |
| CA. 98 | DD. 080 | 8 | CA-152 | DD. 561 | 560 |
| CA.99 | DD-100 | 10 | CA. 153 | DD-601 | 600 |
| CA-103 | DD-120 | 12 | CA-255 | D0-681 | 680 |
| CA-109 | DD-150 | 15 | CA-257 | D0-751 | 750 |
| CA-114 | DD-180 | 18 | CA-258 | DD-801 $\ddagger$ | 800 |
| CA-117 | DD-200 | 20 | CA. 260 | DD-821 | 820 |
| CA-121 | DD-220 | 22 | CA-262 | DD. 911 | 910 |
| CA-124 | DD. 240 | 24 | CA-101 | D0. 102 | 1000 |
| CA.504 | DD-250 | 25 | CA-502 | D0.102G $\ddagger$ | 1000 |
| CA-130 | DD-270 | 27 | CA-105 | DD-122 | 1200 |
| CA-133 | DD. 300 | 30 | CA-106 | DD-1226 | 1200 |
| CA-136 | DD. 330 | 33 | CA-108 | DD-132 | 1300 |
| CA-140 | DD. 390 | 39 | CA-111 | DD-152 | 1500 |
| CA-144 | DD-470 | 47 | CA-503 | DD-1526\# | 1500 |
| CA-146 | DD. 500 | 50 | CA. 113 | DO. 162 | 1600 |
| CA. 149 | DD. 510 | 51 | CA. 116 | DD-182 | 1800 |
| CA. 151 | DD-560 | 56 | CA.119. | DD-202* | 2000 |
| CA-154 | D0.680 | 68 | CA-123 | DD-222 | 2200 |
| CA. 256 | DD-750 | 75 | CA. 129 | DD-252 | 2500 |
| CA-259 | DD-820 | 82 | CA. 132 | DD-272 | 2700 |
| CA-261 | DD-910 | 91 | CA-127 | DD-302 $\ddagger$ | 3000 |
| CA. 100 | DD-101 | 100 | CA-505 | DD. 3324 | 3300 |
| CA-104 | DD-121 | 120 | CA-505 | DD-3924 | 3900 |
| CA-107 | DD-131 | 130 | CA-507 | DD-402 7 | 4000 |
| CA- 110 | DD-151 | 150 | CA.508 | DD-432t | 4300 |
| CA.115 | D0-181 | 180 | CA.509 | DD-472 | 4700 |
| CA-118 | DD-201 | 200 | CA.510 | DD-472G $\ddagger$ | 4700 |
| CA-122 | DD-221 | 220 | CA-511 | DD-502t | 5000 |
| CA-125 | DD. 241 | 240 | CA.247 | DD-5022* | 5000 |
| CA. 128 | DD. 251 | 250 | CA-512 | DD-562 $\ddagger$ | 5600 |
| CA-131 | DD-271 | 270 | CA.513 | DD-682\% | 6800 |
| CA-134 | DD-301 | 300 | CA-514 | DD-752 | 7500 |
| CA-137 | 00-331 | 330 | CA-515 | DD-822 | 8200 |
| CA-138 | DD-351 | 350 | CA. 102 | D0.1031 | . 01 MFD |
| $\text { CA- } 139$ | D0-361 | 360 | CA-263 | DD-1032* | . 01 MFD |
| CA-141 | DD-391 | 390 |  |  |  |
|  | NET EACH ANY ABOVE IN LOTS OF |  |  |  |  |
| 1-24 |  |  | 25-99 |  | 100-249 |
| . 15 |  |  | . 119 |  | . 10 |
|  |  |  | NET EACH IN LOTS OF |  |  |
| Stoch | CRL |  | Cap. | 1. 25. | $100-$ |
|  |  |  | MFI. | $34 \quad 49$ | 249 |
| CA-112 | DD. 153 |  | .015 | . 24.18 | . 16 |
| CA. 120 | DD.203* | - | . 02 | 24 . 24 | . 16 |
| CA-135 | DD-303* |  | . 03 | . 45 . 356 | . 30 |
| CA-143 | DD-403* |  | . 04 | .45 . 356 | . 30 |
| CA. 148 | DD-503* |  | . 05 | .45 . 356 | . 30 |

TYPE DD3 600 WVDC
DUAL SECTION
DISCS
Two Individually shielded capacitors in one small case. All 600 WVDC. Tolerance GMV. Avg. shpg. wt., 2 oz .
$\frac{\text { Stork No. CRL No. Cap. MFD. Price Schedyle }}{\text { CM.267 } 003.102} \frac{2 X}{}$


## CRL DD-16 1600 WVDC CERAMIC DISCS

All tolerance GMY except D016-153 is $+80-20 \%$. Avg shpg. wt., $20 z$.
C
$C$
$C$
$C$
$C$
$C$
$C$

Sto
No
CA-
CA

| Stock | CRL | Cap. |  |  | 100. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Ma. | MED | 1.24 | 25.99 | 249 |
| C. 236 | 0016-302 | . 003 | . 27 | 214 | 8 |
| CA-237 | D016-402 | . 004 | . 27 | . 214 | . 18 |
| CA-238 | DD16-502 | . 005 | . 27 | . 214 | 18 |
| CA-239 | DD16.602 | . 006 | . 27 | . 214 | 18 |
| CA. 240 | DD16-702 | . 007 | . 27 | . 214 | . 18 |
| CA-241 | DD16-752 | . 0075 | 27 | .214 | . 18 |
| CA-242 | D016-802 | . 008 | . 27 | . 214 | . 18 |
| CA-234 | DD16-103 | . 01 | . 27 | . 214 | . 18 |
| CA-235 | 0016.153 | . 015 | . 48 | . 38 | 32 |

## TYPE MFT

Miniature version of the FT. "/4" max. flange diameter eyefet to be inserted in $.160^{\prime \prime}$ dia. hole and soldered directly to chassis. Tolerance $\pm 10 \%$ except is $\pm$ $20 \%$ and + is G.M.V.
Stock No. CRL No. Cap. MMF. Price Schedule

|  | Cal No. | Cap. MMF | Price schedule |
| :---: | :---: | :---: | :---: |
| $\overline{C A .351}$ | MFT-50 | $50$ |  |


| CA-351 | MFT-50 | 50 |
| :--- | :--- | :--- |
| CA-352 | MFT-100 | 100 |
| CA.353 | MFT-500 | 1000 |
| CA.354 | MFT-1000 | 500 |

Tolerance $\pm 20 \%$. Avg. Shpg. Wt., 2 ors.

| Stock No. | CRL No. | $\begin{aligned} & \text { Cap. } \\ & \text { MMF. } \end{aligned}$ | steck No. | CWL <br> Ne. | Cap. MMF. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CA-243 | DD30-4R7 | 4.7 | CA-162 | DD30-101 | 100 |
| CA. 244 | DD30-6R8 | 6.8 | CA. 164 | DD30-121 | 120 |
| CA-245 | DD30-8R2 | 8.2 | CA. 165 | DD30-151 | 150 |
| CA-246 | D030-100 | 10 | CA. 166 | 0030-181 | 180 |
| CA-248 | DD30-120 | 12 | CA-187 | DD30-201 | 200 |
| CA. 249 | DD30-150 | 15 | CA-168 | D030-221 | 220 |
| CA. 250 | DD30-220 | 22 | CA.169 | DD30-251 | 250 |
| CA-251 | DD30-250 | 25 | CA-170 | DD30-271 | 270 |
| CA-252 | D030-270 | 27 | CA-171 | 0030-301 | 300 |
| CA-253 | DD30-300 | 30 | CA-172 | 0030-331 | 330 |
| CA.254 | DD30-330 | 33 | CA-173 | DD30-391 | - 390 |
| CA-155 | DD30-390 | 39 | CA-174 | DD30-401 | 400 |
| CA. 156 | DD30-470 | 47 | CA-175 | DD30-471 | 470 |
| CA. 157 | DD30-500 | 50 | CA-176 | D030-501 | 500 |
| CA-158 | DD30-560 | 56 | CA-177 | DD30-561 | 560 |
| CA-159 | DD30-680 | 68 | CA. 178 | DD30-681 | 680 |
| CA.160 | DD30-750 | 75 | CA-179 | DD30-751 | 750 |
| CA-161 | DD30-820 | 82 | CA-180 | DD30-821 | 820 |
|  | NET EACH ANY OF25.99 |  |  | LOTS |  |
| 1.24 |  |  |  | 100.249 |  |
| . 24 |  |  |  |  |  |
| Stock No. | CRL <br> No. | Cap. MMF. | Stock No. | CRL No. | Czp. MMF. |
| CA-163 | 0030-102 | 1000 | CA-188 | DD30-272 | 2700 |
| CA-181 | D030-122 | 1200 | CA-187 | 0D30-302 | 3000 |
| CA-182 | D030-152 | 1500 | CA-188 | DD30-332 | 3300 |
| CA.183 | DD30-202 | 2000 | CA-189 | DD30-392 | 3900 |
| CM-184 | DD30-222 | 2200 | CA-190 | DD30-472 | 4700 |
| C. -185 | DD30-252 | 2500 | CA. 191 | DD30-502 | 5000 |
|  | NET EACH ANY OF ABOVE IN LOTS |  |  |  |  |
| 1-24 | 25.99 |  |  | 100-249 |  |
| . 30 | . 238 |  |  | 20 |  |

Tolerance $\pm \mathbf{2 0 \%}$. Avg. shpg. wt., 20 or.

| Stock No. | CRL <br> No. | Cap. MMF. | Stock No. | CRL No. | cap. MMF |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CA-192 | DD60-4R7 | 4.7 | CA.220 | D060-101 | 100 |
| CA. 193 | DD60.6R8 | 6.8 | CA-221 | D060-121 | 120 |
| CA-204 | DD60-8R2 | 8.2 | CA-222 | DD60-151 | 150 |
| CA-205 | D060-100 | 10 | CA.223 | D060-181 | 180 |
| CA-206 | D060-120 | 12 | CA-224 | DD60-201 | 200 |
| CA-207 | DD60-150 | 15 | CA.225 | DD60-221 | 220 |
| CA-208 | D060-220 | 22 | CA. 226 | DD60-251 | 250 |
| CA. 209 | DD60-250 | 25 | CA-227 | D060-271 | 270 |
| CA-210 | DD60-270 | 27 | CA-228 | D060-301 | 300 |
| CA-211 | DD60-300 | 30 | CA-229 | DD60-331 | 330 |
| CA-212 | D060-330 | 33 | CA-230 | D060-391 | 390 |
| CA-213 | DD60-390 | 39 | CA-231 | D060-401 | 400 |
| CA-214 | D060-470 | 47 | CA-232 | D060-471 | 470 |
| CA-215 | 0060-500 | 50 | CA. 194 | D060-501 | 500 |
| CA-216 | DD60-560 | 56 | CA. 195 | D060-56: | 560 |
| CA-217 | 0060-680 | 68 | CA. 196 | DD60-681 | 680 |
| CA-218 | D060-750 | 75 | CA. 197 | D060-751 | 750 |
| CA-219 | D060-820 | 82 | CA-198 | D060-821 | 820 |
|  | ANY OF ABOVE NET EACH IN LOTS OF |  |  |  |  |
| 1.24 .35 |  | 25 |  |  | $\begin{aligned} & 249 \\ & 24 \end{aligned}$ |


| Stock No. | CRL No. |  | Price Schedule |  |
| :---: | :---: | :---: | :---: | :---: |
| CA-199 | D060-102 | 1000 |  |  |
| CA-200 | D060-122 | 1200 | 1-24 | . 60 |
| CA. 201 | 0060-152 | 1500 | 25.99 | . 475 |
| CA-202 | D060-202 | 2000 | 100-248 | . 40 |
| CA-203 | D060-222 | 2200 |  |  |

Designed primarlly for transmitter, induction heaters, X-Rays, etc. Tolerance 850 type $\pm 10 \%, 858$ type $\pm$ $20 \%$. Mounting $1 /{ }^{* 4}$ long hex studs tapped 6/32 thread. All 7500 DCWV except ${ }^{5} 5000$ v. Temp. Coefficient types ending in 2 NPO, ending in N N750. Avg. shpg. wt., 202.
Stoch No. CRL No. Cop. MMF. Price Schedule

## CENTRALAB CERAMIC CAPACITORS

## $\square$ TYPE DG TUBULAR BC HI KAPS

Small molsture-proof ceramic capacitors providing extensive operation under extremes of moisture, temperature and vibration. Compact and mechanically strong, make ideal replacements for mica and paper tubular units in bypass and coupling circuits. Radial leads $11 / 2^{\prime \prime}$ long. Rated 600 WVDC. 1500 V flash test. Tolerance $\pm 10 \%$, except $4=20 \%{ }^{\circ}=$ GMV. \# Qualify for Mil-C. 11015A. Approx. $1 / 4^{\prime \prime}$ dia. length varies from $1 / 2$ to $1 \%_{4}$ " Avg. shpg. wt., 202.

| Stoch No. | Mirs. TyPe 06 | Cap mmf | Stock No. | Mirs. <br> Type D6 | Cap mmf |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CA.272 | 030 | 3 | CW.298 | 301 | 300 |
| CA. 273 | 050 | 5 | CA. 299 | 331 \# | 330 |
| CA-274 | 100 | 10 | CA.300 | 391 | 390 |
| CA. 516 | 120 | 12 | Ca. 301 | 401 | 400 |
| CA-275 | 150 | 15 | CA. 302 | 471 " | 470 |
| CA. 276 | 180 | 18 | CA. 303 | 501 | 500 |
| CA-277 | 200 | 20 | CA. 304 | 561 | 560 |
| CA-278 | 220 | 22 | CA. 305 | 601 | 600 |
| CA. 279 | 250 | 25 | CA. 306 | 681 | 680 |
| CA. 280 | 270 | 27 | CA.307 | 7514 | 750 |
| CA-281 | 330 | 33 | CA-308 | 821 t | 820 |
| CA-282 | 390 | 39 | C. 309 | 102 t | 1000 |
| CA.283 | 400 | 40 | CA-310 | 122 t | 1200 |
| CA-284 | 470 | 47 | CA.311 | 152 | 1500 |
| CA. 285 | 500 | 50 | CA-312 | 182 | 1800 |
| CA-286 | 560 | 56 | CA-313 | 202 t | 2000 |
| CA. 287 | 680 | 68 | CA. 314 | 222 t | 2200 |
| CA-288 | 750 | 75 | CA. 315 | 252* | 2500 |
| CA-289 | 820 | 82 | CA. 316 | 272* | 2700 |
| CA. 290 | 910 | 91 | CA. 317 | 302* | 3000 |
| CA-291 | 101 \# | 101 | CA.318 | 332* | 3300 |
| CA-292 | 121 | 120 | CA-319 | 402* | 4000 |
| CA-293 | 151 | 150 | CA-320 | 472* | 4700 |
| CA.294 | 181 | 180 | CA-321 | 502* | 5000 |
| CA-517 | 201 | 200 | CA. 322 | 562* | 5600 |
| CA-295 | 221 | 220 | CA-324 | 682* | 6800 |
| CA-296 | 251 | 250 | CA. 325 | 752* | 7500 |
| CA.297 | 271 | 270 | CA-326 | 103* | . 01 |
| $1.24$ | $\begin{aligned} & \text { Net Ea } \\ & 25.99 \\ & \hline \end{aligned}$ | $\begin{gathered} \text { Any } \\ 100 \cdot 24 \\ \hline \end{gathered}$ | $\begin{array}{r} \text { ove in } 18 \\ 250 \end{array}$ | ts of | 500.999 |
| $.15$ | .12 | . 10 |  | 15 | . 056 |

High capacity low voltage ceramic capacitors for trans-


TYPE DA
PLATE CAPACITORS
Size $1 / 2 x^{1 / 2} x k_{0}$ " thick. Tolerance $-20 \%$ to $+100 \% 30$ WVDC. Shpg. wt., 2 oz.

|  |  |  | Net Price |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Stect | Mfrs. | Cap |  |  | $100-$ | $250-$ | 500 - |
| No. | Type 0A | mfd | 1.24 | 25.99 | 249 | 499 | 999 |
| CA-265 | 203 | .02 | .36 | .28 | .24 | .18 | .135 |
| CA-266 | 503 | .05 | .81 | .64 | .54 | .405 | .304 |
| CA-264 | 104 | .10 | 1.35 | 1.07 | .90 | .675 | .506 |

## (\%) TYPE DDA

\$\%" dia. $x y_{2}^{\circ \prime}$ thick; tolerance $-30 \%$ to $+80 \%, 75$
WVDC. Shpg. Wt., 2 oz.

| $\begin{aligned} & \text { Stock } \\ & \mathrm{No.} \end{aligned}$ | $\begin{gathered} \text { Mrrs. } \\ \text { Typs } 00 \mathrm{~A} \\ \hline \end{gathered}$ | Cap mfd | 1.24 | 25-99 | $\begin{aligned} & \text { t Pric } \\ & 100 \\ & 249 \end{aligned}$ | $\begin{array}{r} 250 \\ 499 \\ \hline \end{array}$ | $\begin{array}{r} 500 . \\ \mathbf{9 9 9} \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CA. 335 | 503 | . 05 | . 30 | . 24 | . 20 | . 15 | . 09 |
| CA. 336 | 104 | . 10 | . 60 | 47 | . 40 | . 30 | 225 |

(3) TYPE UK AND UK10

Miniature ceramic disc capacitors for transistor cir-
cultry. For low voltages use requiring high capacitles cuitry. For low voltages use requiring high capacities
and low power factors. Double "Durez" Insulation. UK and low power factors. Double "Durez" Insulation. UK
rated 3 WVDC. tolerance GMV, UK-10 rated lowVDC tol. $+80 \%,-20 \%$. Shpg. wt. 202 .

TYPE UK
Net Pric

| Stock Mo. | Mirs. Type | Cap <br> mfd | 1.24 | 25.99 | $\begin{aligned} & \text { det Pp } \\ & 100 \\ & 249 \end{aligned}$ | $\begin{aligned} & 250 . \\ & 499 \end{aligned}$ | $\begin{aligned} & 500- \\ & 999 \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CA-327 | UK104 | . 1 | . 54 | . 43 | . 36 | . 27 | .203 |
| CA. 328 | UK224 | . 22 | . 33 | . 26 | . 22 | . 165 | . 124 |
| CA. 329 | UK474 | .47 | . 33 | . 26 | . 22 | . 165 | . 124 |
| CA-330 | UK105 | 1.0 | . 54 | . 43 | . 36 | . 27 | 203 |
| CA. 331 | UK225 | 2.0 | . 54 | . 43 | . 36 | . 27 | . 203 | $\begin{array}{llllllll}\text { CA. } 332 & \text { UK10.503 } & .05 & .33 & .26 & .22 & .165 & .124 \\ \text { CA.333 } & \text { UK10-104 } & .1 & .33 & .26 & .22 & .165 & .124 \\ \text { CA-3.34 } & \text { UK1n-204 } & .2 & .33 & .26 & .22 & .165 & .124\end{array}$

CA.323 UK10.474

CRL TEMPERATURE COMPENSATING TUBULAR CAPACITORS
Designed especially to limit frequency drift in r.f. 1,200 volts $D C$ test; 600 volts DC working. All are circuits where temperature variations are prevalent. made to comply with the JAN.C.20A specifications. These capacitors are constructed with a ceramic body Extremely compact. Sizes: (A). $400^{\circ \prime} \times .200^{\prime \prime}$ (B) .690" which changes capacity as the temperafure varies. . $285^{\prime \prime}$. Shog. wt.. 202

## TYPE TCZ NEGATIVE-POSITIVE-ZERO

 NPO TUBULAR CAPACITORSZero temperature coefficient from $-20^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$. Tolerances: $.5 \cdot 3.3 \mathrm{mmf} \pm 25 \mathrm{mmf} ; 4.7 .10 \mathrm{mmf} \pm 5{ }^{\circ} \mathrm{C}$ $\mathrm{mmf} ; 12-100 \mathrm{mmf} . \pm 2 \% ; 110.300 \mathrm{mmf}, \pm 5 \%$

| $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | $\begin{aligned} & \text { Type } \\ & \text { TCZ- } \end{aligned}$ | Cap mmf | Sixe | 1-24 | 25-99 | $\begin{aligned} & 100 . \\ & 248 \end{aligned}$ | $\begin{array}{r} 250 . \\ 499 \end{array}$ | $\begin{aligned} & 500- \\ & \mathbf{9 9 9} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ca.409 | R5 | . 5 | A | . 30 | . 24 | . 20 | . 15 | . 11 |
| CA-410 | R68 | 68 | A | . 30 | . 24 | . 20 | . 15 | . 11 |
| CA-411 | 1 | 1.0 | A | . 30 | . 24 | . 20 | . 15 | . 11 |
| CA.412 | 125 | 1.5 | A | . 30 | . 24 | . 20 | . 15 | . 11 |
| CA-413 | 2R2 | 2.2 | A | 30 | . 24 | . 20 | . 15 | . 11 |
| CA-414 | 3R3 | 3.3 | 4 | . 30 | 24 | . 20 | . 15 | . 11 |
| CA-415 | 4R7 | 4.7 | A | . 30 | . 24 | . 20 | . 15 | 11 |
| CA.416 | 6R8 | 6.8 | A | . 30 | . 24 | . 20 | . 15 | . 11 |
| CA-417 | 10 | 10 | A | . 30 | . 24 | . 20 | . 15 | . 11 |
| CA-410 | 12 | 12 | A | . 30 | . 24 | . 20 | . 15 | . 11 |
| CA-419 | 15 | 15 | A | 30 | . 24 | . 20 | . 15 | 11 |
| CA-420 | 18 | 18 | A | . 30 | . 24 | . 20 | . 15 | .11 |
| CA-421 | 20 | 20 | A | . 30 | . 24 | 20 | . 15 | .11 |
| CA.422 | 22 | 22 | A | . 30 | . 24 | . 20 | . 15 | .11 |
| CA-423 | 24 | 24 | A | . 30 | . 24 | 20 | . 15 | .11 |
| CA-424 | 25 | 25 | A | . 30 | . 24 | . 20 | . 15 | . 11 |
| CA.425 | 27 | 27 | A | . 30 | . 24 | . 20 | . 15 | .11 |
| CA. 426 | 30 | 30 | A | . 30 | . 24 | . 20 | . 15 | .11 |
| CA. 427 | 33 | 33 | A | . 30 | 24 | . 20 | . 15 | .11 |
| CA-428 | 36 | 36 | A | . 30 | . 24 | 20 | . 15 | .11 |
| CA.429 | 39 | 39 | A | . 30 | . 24 | . 20 | . 15 | .11 |
| CA-430 | 43 | 43 | 8 | . 30 | . 24 | . 20 | . 15 | 11 |
| CA.431 | 47 | 47 | 8 | . 30 | . 24 | . 20 | . 15 | . 11 |
| CA.432 | 50 | 50 | 8 | . 30 | . 24 | . 20 | . 15 | .11 |
| CA. 433 | 51 | 51 | 8 | . 30 | . 24 | . 20 | . 15 | .11 |
| CA. 434 | 56 | 56 | 8 | . 30 | . 24 | . 20 | . 15 | 11 |
| CA-435 | 62 | 62 | 8 | . 30 | . 24 | . 20 | . 15 | .11 |
| CA. 436 | 68 | 68 | 8 | . 30 | . 24 | . 20 | . 15 | .11 |
| CA-437 | 75 | 75 | 8 | . 30 | . 24 | . 20 | . 15 | .11 |
| CA-438 | 82 | 82 | 8 | . 30 | . 24 | . 20 | . 15 | . 11 |
| CA.439 | 91 | 91 | C | . 30 | . 24 | . 20 | . 15 | . 11 |
| C4.440 | 100 | 100 | C | . 30 | . 24 | . 20 | . 15 | .11 |
| CA-441 | 110 | 110 | D | . 45 | . 36 | . 30 | . 20 | .17 |
| CA.442 | 120 | 120 | D | . 45 | . 36 | . 30 | . 20 | .17 |
| CA-443 | 130 | 130 | D | . 45 | . 36 | . 30 | . 20 | . 17 |
| CA.444 | 150 | 150 | D | 45 | . 36 | . 30 | . 20 | . 17 |
| CA-445 | 160 | 160 | D | . 45 | . 36 | . 30 | . 20 | .17 |
| CA-446 | 180 | 180 | d | . 45 | . 36 | . 30 | . 20 | .17 |
| CA-447 | 200 | 200 | D | . 45 | . 36 | . 30 | . 20 | .17 |
| CA-448 | 220 | 220 | D | . 45 | . 36 | . 30 | . 20 | . 17 |
| CA-449 | 240 | 240 | E | . 60 | 45 | . 40 | . 30 | . 22 |
| CA.518 | 270 | 270 | E | . 60 | . 45 | 40 | . 30 | . 22 |
| CA-450 | 300 | 300 | E | . 60 | 45 | . 40 | . 30 | . 22 |

11/3n $x^{3} / 2 x^{2} / 4^{" 1}$ thick; Triple Durez insulated. 150 WVDC: Tolerance: * is $+50 \%$, $-20 \%$; all other are +80 $20 \%$. Shpg. wt., 202 .

| Stock No. | Mfrs. Type | Cap mmf | 1-24 | 25.99 | $\begin{aligned} & 100- \\ & 249 \end{aligned}$ | $\begin{aligned} & 250 . \\ & 499 \end{aligned}$ | $\begin{aligned} & 500- \\ & 999 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CA-337 | DM101* | . 0001 | . 30 | 24 | . 20 | . 15 | .113 |
| CA-338 | DM201* | . 0002 | . 30 | . 24 | . 20 | . 15 | .113 |
| CA-339 | DM301* | . 0003 | . 30 | . 24 | . 20 | . 15 | . 113 |
| CA. 340 | DM501* | . 005 | . 30 | . 24 | . 20 | . 15 | . 113 |
| CA-341 | DM102* | . 001 | . 30 | 24 | . 20 | . 15 | . 113 |
| CA-342 | DM202* | . 002 | . 90 | 24 | . 20 | . 15 | . 113 |
| CA. 343 | DM3r2 | 003 | .30 | . 24 | . 20 | . 15 | . 113 |
| CA. 344 | DM502 | . 005 | . 30 | 24 | . 20 | . 15 | . 113 |
| CA-345 | DM103 | . 01 | . 60 | . 48 | . 40 | . 30 | . 225 |
| CA-346 | DM2-502 | 2X. 005 | . 75 | . 594 | . 50 | . 375 | . 281 |

7/4" dia; 150WVDC; Tolerance: $+60 \%$, $-40 \%$. Shpg. Wt." 202.

| Stock | Mfrs. | Cap |  |  | 100 | $250-$ | 500 . |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| No. | Type | mmf | 1.24 | $25-99$ | 249 | 499 | 999 |
| CA.347 | DOM203 | .02 | .54 | .43 | .36 | .27 | .206 |
| CA.348 | DDM502 | .005 | .30 | .24 | .20 | .15 | .113 |
| CA-349 | DDM103 | .01 | .30 | .24 | .20 | .15 | .113 |
| CA.350 | DDM2-103 | $2 \times .01$ | .54 | .43 | .36 | .27 | .206 |

## 4 STAGE PACKAGED AMPLIFIER

Subminiature 4 stage high-gain audio am.
plifier. Up to
t/2 mw. output; 2.5 db down at 3 kc 73 db min. gain at 1 kc Operates from a 1.34 V . mercury battery. $17 / 2^{\prime \prime}$ dla. Less battery. Shpg. wh., 4 oz

TYPE TCN NEGATIVE (N750)
Negative coefficient of 750 parts $/$ million $/{ }^{\circ} \mathrm{C}$ tempera ture rise. Tolerance: $3.3-10 \mathrm{mmf}$ are $\pm .5 \mathrm{mmf}$; 12 $100 \mathrm{mmf}, \pm 2 \% ; 110-750 \mathrm{mmf} \pm 5 \%$.

| Stock No. | Type TCN. | Cap mmf | Slze | 1-24 | 25-99 | $\begin{aligned} & 100 \\ & 249 \end{aligned}$ | $\begin{aligned} & 250- \\ & 499 \end{aligned}$ | $\begin{aligned} & 500- \\ & 999 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CA-451 | 3R3 | 3.3 | A | . 30 | . 24 | . 20 | . 15 | . 11 |
| CA-452 | 5 | 5 | A | . 30 | . 24 | . 20 | . 15 | .11 |
| CA. 453 | 11 | 10 | A | . 30 | . 24 | . 20 | . 15 | . 11 |
| CA-454 | 12 | 12 | A | . 30 | . 24 | 20 | . 15 | .11 |
| CA-455 | 15 | 15 | A | . 30 | . 24 | . 20 | . 15 | .11 |
| CA-456 | 18 | 18 | A | . 30 | . 24 | . 20 | . 15 | . 11 |
| CA-457 | 20 | 20 | A | . 30 | . 24 | . 20 | . 15 | .11 |
| CA-458 | 22 | 22 | A | . 30 | . 24 | . 20 | . 15 | .11 |
| CA-459 | 24 | 24 | A | . 30 | . 24 | . 20 | . 15 | .11 |
| CA.460 | 25 | 25 | A | . 30 | . 24 | . 20 | . 15 | .11 |
| CA-461 | 27 | 27 | A | .30 | . 24 | . 20 | . 15 | . 11 |
| CA-462 | 30 | 30 | A | . 30 | . 24 | . 20 | . 15 | .11 |
| CA-463 | 33 | 33 | A | . 30 | . 24 | . 20 | . 15 | .11 |
| CA-464 | 36 | 36 | A | .30 | . 24 | . 20 | . 15 | .11 |
| CA-465 | 39 | 38 | A | . 30 | . 24 | . 20 | . 15 | . 11 |
| CA-466 | 43 | 43 | A | . 30 | . 24 | . 20 | . 15 | .11 |
| CA-467 | 47 | 47 | A | .30 | . 24 | . 20 | . 15 | .11 |
| CA-468 | 50 | 50 | A | . 30 | . 24 | . 20 | . 15 | . 11 |
| CA-469 | 51 | 51 | A | . 30 | . 24 | . 20 | . 15 | .11 |
| CA-470 | 56 | 56 | A | . 30 | . 24 | . 20 | . 15 | . 11 |
| CA-471 | 62 | 62 | A | . 30 | . 24 | . 20 | . 15 | .11 |
| CA-472 | 68 | 68 | A | . 30 | . 24 | . 20 | .15 | .11 |
| CA-473 | 75 | 75 | A | . 30 | . 24 | . 20 | . 15 | .11 |
| CA-474 | 82 | 82 | A | . 30 | . 24 | . 20 | . 15 | .11 |
| CA-475 | 91 | 91 | A | . 30 | . 24 | . 20 | . 15 | . 11 |
| CA-476 | 110 | 100 | A | . 30 | . 24 | . 20 | . 15 | .11 |
| CA-477 | 110 | 110 | 8 | . 30 | . 24 | . 20 | . 15 | .11 |
| CA-478 | 129 | 120 | 8 | . 30 | . 24 | . 20 | . 15 | . 11 |
| CA-479 | 130 | 130 | 8 | . 30 | . 24 | . 20 | . 15 | . 11 |
| CA.480 | 150 | 150 | 8 | . 30 | . 24 | . 20 | . 15 | .11 |
| CA-481 | 160 | 160 | 8 | . 30 | . 24 | . 20 | . 15 | .11 |
| CA-482 | 180 | 180 | 8 | . 30 | . 24 | . 20 | . 15 | . 11 |
| CH-483 | 2 m | 200 | 8 | . 30 | . 24 | . 20 | 15 | .11 |
| CA-484 | 220 | 220 | C | . 30 | . 24 | . 20 | . 15 | . 11 |
| CM.485 | 240 | 240 | C | . 30 | . 24 | . 20 | . 15 | .11 |
| CA-486 | 270 | 270 | C | . 30 | . 24 | . 20 | . 15 | .11 |
| CA-487 | 300 | 300 | D | . 45 | . 35 | . 29 | . 22 | . 17 |
| CA-488 | 330 | 330 | D | . 45 | . 35 | . 29 | . 22 | . 17 |
| CA.489 | 360 | 360 | D | . 45 | . 35 | . 29 | . 22 | .17 |
| CA-490 | 390 | 390 | D | . 45 | . 35 | . 29 | . 22 | .17 |
| CA-491 | 430 | 430 | D | . 45 | . 35 | . 29 | . 22 | . 17 |
| CA-492 | 470 | 470 | D | . 45 | . 35 | . 29 | . 22 | . 17 |
| CA-493 | 510 | 510 | D | . 45 | . 35 | . 29 | .22 | .17 |
| CA-494 | 560 | 560 | D | . 60 | . 47 | . 40 | . 30 | . 22 |
| CA-495 | 620 | 620 | $E$ | . 60 | . 47 | . 40 | . 30 | . 22 |
| CA-496 | 690 | 680 | E | . 60 | . 47 | . 40 | . 30 | . 27 |
| CA-497 | 750 | 750 | E | . 60 | . 47 | . 40 | . 30 | . 22 |

Ideal for replacement of entire printed circuit sections in radio and TV sets. Complete circuits with resistors, capacitors, and inductors in printed form. Sealed against moisture, temperature and physical shock. EXcellent for replacement, research and development. Avg. shpg. $w t, 202$.

STOCK

| No. | Type | Oescription | Net |
| :---: | :---: | :---: | :---: |
| CA-520 | PC. 51 | Diode Load Filter | 1.76 |
| CA-525 | PC. 71 | Triode Couplate | 1.76 |
| CA. 526 | PC-80 | Triode Couplate | 1.78 |
| CA. 527 | PC. 81 | Triode Couplate | 1.78 |
| CA. 529 | PC. 84 | Triode Couplate | 1.78 |
| CA-531 | PC. 91 | Pentode Couplate | 1.76 |
| CA. 532 | PC-92 | Pentode Couplate | 1.76 |
| CA. 534 | PC. 101 | Vertical integrator | 1.78 |
| CA-535 | PC-104 | Vertical Integrator | 1.76 |
| CA.536 | PC. 105 | Vertical Integrator | 1.78 |
| CA. 537 | PC. 106 | Vertical Integrator | 1.76 |
| CA. 540 | PC. 150 | Audio/Det. Couplate | 1.76 |
| CA.542 | PC. 154 | Audio/Det. Couplate | 1.76 |
| CA. 543 | PC. 157 | Audio/Det. Couplate | 1.76 |
| CA.544 | PC-158 | Audio/Det. Couplate | 1.76 |
| CA. 545 | PC. 159 | Audio/Det. Couplate | 1.76 |
| CA. 546 | PC. 160 | Pentode/Det. Couplate | 1.76 |
| CA-547 | PC. 165 | Pentode/Det. Couplate | 1.76 |
| CA. 552 | PC-260 | Sync Takeoff Couplate | 1.76 |
| CA. 553 | PC-262 | Sync Takeoff Couplate | 1.76 |
| CA-554 | PC-263 | Sync Takeoff Couplate | 1.76 |
| CA-563 | PC. 314 | Retrace Suppression | 1.70 |

ARCO-ELMENCO DIPPED
MYLAR PAPER SITVERED MICA

## ELMENCO TYPE MPD DIPPED MYLAR PAPER CAPACITORS

Type MPD capacitors are dip-coated tubular mylar-paper dielectric capacitors. Type MPO capacitors are non-inductively wound and
vacuum dipped to obtain solid impregnation and a rugged, mois-ture-proof coat. Type MPD gives high reliabllity in operation at $110^{\circ} \mathrm{C}$ without derating. All $10 \%$ tolerance. $\mathrm{C}=$ case size;


ELMENCO TYPE DM-10 OIPPED SILVERED MICA CAPACITORS

Type DM-10 is a new sub-miniature dipped sllvered mica capacitor that Isets new standard In miniature reliabllity. Retains the same superior larger sizes. Assures a high order of performance in extreme miniaturizathon applications-missiles, printed circuits and all compact electronic equipment. Meets all the electrical requirements of military spec. \#MILequipment. Meets all the electrical requirements of military spec. "MIL-
C. 5 B and EIA speclfication RS.153. All are $5 \%$ tolerance except $=$ min tolerance $\pm 0.5 \mathrm{mmf}$. $\quad \pm \pm 10 \%$.

TYPE DM-10-500 VOCW. $5 \%$ Tolerance.

| Stoch C No. |  | $\begin{aligned} & \text { OM10- } \\ & \text { Type } \end{aligned}$ | 1-49 | $\begin{aligned} & \text { EACl } \\ & 50- \\ & 99 \end{aligned}$ | $\begin{aligned} & 100- \\ & 499 \\ & \hline \end{aligned}$ | Stoch No. | Cap. MMF | OM10Tyme | 1.49 | $\text { I EAC } \begin{array}{r} \text { EA- } \\ 99 \\ \hline \end{array}$ | $\begin{aligned} & 100- \\ & 499 \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 CG4 47 | 1 | $010^{\circ}$ | . 18 | . 162 | . 108 | $3 \mathrm{CG}-498$ | 62 | 620 | . 28 | . 234 | .158 |
| 3 CG-478 | 2 | 020** | . 18 | . 162 | . 108 | 3 CG 499 | 68 | 680 | . 26 | . 234 | . 158 |
| 3 C G-479 | 3 | 030 * | . 18 | . 162 | . 108 | $3 \mathrm{CC}-500$ | 75 | 750 | . 26 | . 234 | . 158 |
| 3 CG-480 | 5 | 050** | . 18 | . 162 | . 108 | 3CG.501 | 82 | 820 | . 26 | . 234 | . 158 |
| 3 CG-481 | 10 | 100 | . 20 | . 18 | . 119 | 3CG-502 | 91 | 910 | . 26 | . 234 | . 158 |
| 3 CG-482 | 12 | 120 | 23 | . 207 | . 14 | 3 CG 503 | 100 | 101 | . 26 | . 234 | . 158 |
| 3 CG-483 | 15 | 150 | . 23 | . 207 | . 14 | 3C6-504 | 110 | 111 | . 26 | . 234 | . 158 |
| 3 CG-484 | 18 | 180 | 23 | . 207 | . 14 | 3 CG 505 | 120 | 121 | . 30 | . 27 | . 18 |
| 3 C6-485 | 20 | 200 | . 23 | . 207 | . 14 | 3 C6-506 | 130 | 131 | . 30 | . 27 | . 18 |
| 3 CG-486 | 22 | 220 | . 23 | . 207 | . 14 | 3 CG-507 | 150 | 151 | . 33 | . 297 | . 198 |
| 3 CG-487 | 24 | 240 | 23 | . 207 | . 14 | 3 CG-508 | 160 | 161 | . 37 | . 333 | 22 |
| 3 CG-488 | 27 | 270 | . 23 | . 207 | .14 | 3 CG-509 | 180 | 181 | . 40 | . 36 | . 238 |
| 3 C G-489 | 30 | 300 | . 23 | . 207 | . 14 | 3 CG-510 | 200 | 201 | . 40 | . 36 | . 238 |
| 3 C G-490 | 33 | 330 | . 23 | . 207 | . 14 | 3CG-511 | 220 | 221 | . 43 | . 387 | . 259 |
| $3 \mathrm{CG}-491$ | 36 | 360 | . 23 | . 207 | . 14 | 3 CG-512 | 240 | 241 | . 46 | . 414 | . 295 |
| 3 C6. 492 | 39 | 390 | . 23 | . 207 | . 14 | 3 CG-513 | 250 | 251 | . 46 | . 414 | . 295 |
| 3 C6.493 | 43 | 430 | . 23 | . 207 | . 14 | 3 CG-514 | 270 | 271 | . 46 | . 414 | . 295 |
| 3 CG-494 | 47 | 470 | . 26 | . 234 | . 158 | 3 CG-515 | 300 | 301 | . 50 | . 45 | . 299 |
| 3 CG-495 | 50 | 500 | . 26 | . 234 | . 158 | $3 \mathrm{CG}-516$ | 330 | 331 | . 50 | . 45 | .299 |
| 3 CG-496 | 51 | 510 | . 26 | 234 | . 158 | 3CG-517 | 360 | 361 | . 53 | 477 | . 317 |
| 3 CG-497 | 56 | 560 | 26 | . 234 | . 158 |  |  |  |  |  |  |

## CENTRALAB

CERAMIC-DIELECTRIC TRIMMER CAPACITORS


820


827


TYPE 820 Conveniently mounted, wide capacity range units. Rated 600 VDCW,
test 1500 VDC. Mounting holes clear test 1500 VDC. Mounting holes clear 54 machine screws. Size: $5 / 6 \times 17 / 32^{2 \prime}$. Shpg. wt, 1
Stock
Part
Capaclty

TYPE 823 TRIMMER Steatite body trimmers. Rating 500 VDCW, 1500 VDC test. All are zero temp. coeff. except * neg


| CA-360 | $820-A$ | $2.5-6$ |  |  |
| :--- | :--- | :--- | :--- | :--- |
| CA-361 | $820-8$ | $5-20$ |  |  |
| CA-362 | $820-C$ | 7.35 | $1-9$ | .78 |
| CA 363 | $820-0$ | $1-35$ | $10-24$ | 65 |


| CA-362 | $820-C$ | $7-35$ | $1-9$ | .78 |
| :--- | :--- | :--- | :--- | :--- |
| CA-363 | $820-D$ | $1-3.5$ | $10-24$ | .65 |
| CA-364 | $820-E$ | $35-55$ | $25-99$ | .618 |
| CA-365 | $820-F$ | $55-75$ |  |  |

$\begin{array}{lll}\text { CA-366 } & 820 . \mathrm{B} & 70.80\end{array}$
TYPE 822 TRIMMER Types with N In-
dicate negative temperature coefficient; $Z$ indicates zero coefficient. Steatite base. Rated 500 VDCW. Shpg. wt., 1 oz.
Stock Part Capacity

| Stock No. | Part Mo, | Capacity MMF | NET PRICE |  |
| :---: | :---: | :---: | :---: | :---: |
| CA-367 | 822.AN | $8-50$ |  |  |
| CA.368 | 822-AZ | 4.5-25 |  |  |
| CA-369 | 822-8N | $7-45$ |  |  |
| CA-370 | 822-82 | 2.5-13 |  |  |
| CA-371 | 822-CN | 4.5-25 | 1-9 | 1.14 |
| CA-372 | 822-CZ | 2.7 .5 | 10-24 | . 95 |
| CA-373 | 822-0N | 2-6 | 25-99 | . 903 |
| CA-374 | 822-02 | 1.5-3 |  |  |
| CA-375 | 822-EN | 4-30 |  |  |
| CA-376 | 822-E2 | 1.5-7 |  |  |
| CA-377 | 822-FZ | 3-12 |  |  |
| TVPE 829 TUBULAR TRIMMER MOUnted by locknut against metal panel or chas- |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Stock. | Part | apacity |  |  |
| No. | No. | MMF | NET PRICE |  |
| CA-391 | 829-3 | .5-3 | $1-24$$25-99$ | . 30 |
| CA-392 | 829.4 | 1-4 |  |  |
| CA-393 | 829.6 | 1.6 |  |  |
| CA-394 | 829.7 | 1.7.5 |  |  |
| CA-395 | 829-10 | 1.5-10 |  |  |


 ATTACHABLE TERMINAL HI-VO-KAP KIT Kit contains terminals for TV replacement. Ideal for service calls. 500 uuf capacitor rated at 20 KV DCWV, withstands twice rated voltage. Set of terminals includes 1 each slotted-rod, short male and long male and 2 each female tap and male thread. No stripping or loose terminals. Shpg. wt., 6 oz . CA-555 TV-207 HI-VO-KAP KIT

## AEROVOX INDUSTRIAL AND MIL CAPACITORS



## P123ZNG METALLIZED PAPER TUBULARS

400 WVOC
Metallized paper tubulars hermetically sealed in metal tubes with glass end seals soldered for positive moisture seal. They are Aerolene impregnated and wifl operate from $-55^{\circ} \mathrm{C}$ to $+100^{\circ} \mathrm{C}$ at full voltage rating, and up to $125^{\circ} \mathrm{C}$ with voltage derating to $75 \%$. Case is .015 and up is $\pm 20 \%$. Shpg. WL. 2 oz.

STO

| $\begin{aligned} & \text { stock } \\ & \text { no. } \end{aligned}$ | MFD. | SIZE | NET EACH |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{gathered} 1 . \\ 24 \end{gathered}$ | $\begin{aligned} & 25- \\ & 99 \end{aligned}$ | $\begin{aligned} & 100- \\ & 999 \end{aligned}$ |
| 3CG-306 | 033 | $x_{6} \times 1 / 4{ }^{\prime \prime}$ | 1.06 | . 49 | . 42 |
| $3 \mathrm{CG}-307$ | . 04 | 才01\%** | 1.06 | . 49 | . 42 |
| 3CG-308 | . 047 | \% $\mathrm{K}^{1} 1 \%$ \% | 1.06 | . 49 | . 42 |
| 3C6. 309 | . 05 |  | 1.06 | . 49 | . 42 |
| 3CC-310 | . 068 | \% 615 | 1.16 | . 53 | . 45 |
| 3C6-311 | 1 |  | 1.18 | . 54 | 46 |
| 3CC-312 | . 22 | 1/2×1110" | 1.26 | . 58 | . 49 |
| $3 \mathrm{CC}-313$ | . 25 | 1/2 $\times 146$ | 1.43 | . 66 | . 57 |
| 3C6-314 | . 47 | $\mathrm{Y}_{6} \times 1 \%$ | 1.56 | . 72 | . 61 |
| $3 \mathrm{Cc}-315$ | . 68 |  | 1.78 | . 62 | . 70 |
| $3 \mathrm{CG.316}$ | 1.0 | "302\%6" | 1.92 | . 88 | . 76 |
| 3C6-317 | 2.0 | 101 ${ }^{130}{ }^{\prime \prime}$ | 3.10 | 1.42 | 1.22 |
|  |  | 600 wVoc |  |  |  |
| 3CG-318 | . 001 | "1/0x\%6" | 1.03 | . 47 | . 40 |
| 3C6-319 | . 002 | ${ }^{18} \times 1 / 16{ }^{\prime \prime}$ | 1.03 | . 47 | . 40 |
| 3C6-320 | . 003 |  | 1.06 | . 49 | . 42 |
| 3 CG 321 | . 005 | ${ }^{19} 0 \times 66_{6}$ | 1.08 | . 49 | . 42 |
| 3C6-322 | . 01 | 1\%x*" | 1.08 | . 49 | . 42 |
| 3C6-323 | . 02 | $x_{10} \times 1 / 4$. | 1.09 | . 50 | . 43 |
| 3C6.324 | . 033 | " $4_{2} \times 2 \times 4$ " | 1.11 | . 51 | 43 |
| $3 \mathrm{CC-325}$ | . 047 | 13, $\times$ x $4^{\prime \prime}$ " | 1.13 | . 52 | 44 |
| 3C6-326 | . 05 | ${ }^{13} 3^{2} x^{3 / 4}$ | 1.13 | . 52 | 44 |
| 3C6-327 | . 068 | 13/3811/4" | 1.20 | . 55 | . 47 |
| 3C6.320 | . 1 |  | 1.23 | . 57 | 48 |
| 3C6. 329 | . 15 | 1/20110" | 1.37 | . 63 | . 54 |
| $3 \mathrm{CG}-330$ | . 22 |  | 1.50 | . 69 | . 59 |
| 3CG-331 | . 25 |  | 1.53 | . 70 | . 60 |
| 3C6-332 | . 47 | $43^{4} \times 13_{0}{ }^{\prime \prime}$ | 1.82 | . 64 | . 71 |
| 3C6. 333 | 68 | 44, $\times 13$ \%" | 1.96 | . 90 | . 77 |
| 3C6-334 | 1.0 | 3/1 $\times 2 \%_{6}^{\prime \prime}$ | 2.10 | . 96 | . 83 |
| 3C6-335 | 2.0 | 1×2\%** | 3.13 | 1.43 | 1.23 |

4b

## AEROVOX CP7O CAPACITORS

$0 i l$ impregnated and filled, farge, rectangular, metal-cased capacitor for heavy-duty, continuous-service applications. Immersion proof, hermetically sealed. Avaliable with elther high-voltage screw-type procelain-pillar terminals with soldering lugs (Type E) or the riveted terminal (Type B). Standard tolerance $\pm 10 \%$ for all units.

| Steck No. | MFO. |  |  |  |  | 100-Up |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 01 M . | 1.24 | 25-49 | 50-99 |  |
| 3C6. 240 | 004 | A | . 20 | . 12 | . 10 | . 08 |
| 3CG-241 | . 005 | A | . 20 | . 12 | . 10 | . 08 |
| 3C6-242 | . 01 | A | . 20 | . 12 | . 10 | . 08 |
| 3CG-243 | . 02 | B | . 26 | . 16 | . 12 | . 11 |
| JCG-244 | . 04 | B | . 26 | . 16 | . 12 | . 11 |
|  | 400 WVOC |  |  |  |  |  |
| JCG-245 | . 002 | A | . 20 | . 12 | . 10 | . 08 |
| 3CC-246 | . 003 | A | 26 | . 16 | . 12 | . 11 |
| 3C6-247 | . 008 | B | . 26 | . 16 | . 12 | . 11 |
| 3CG-248 | . 01 | B | . 26 | . 16 | . 12 | .11 |
|  | 600 WVOC |  |  |  |  |  |
| 3C6. 249 | . 0005 | A | . 20 | . 12 | . 10 | . 08 |
| 3C6-250 | . 0008 | A | . 20 | . 12 | . 10 | . 08 |
| $3 \mathrm{CC}-251$ | . 001 | A | . 20 | . 12 | . 10 | . 08 |
| 3C6-252 | . 002 | 8 | . 26 | . 16 | . 12 | . 11 |
| 3C6-253 | . 0022 | 8 | . 26 | . 16 | . 12 | . 11 |
| 3CG-254 | . 0047 | $B$ | . 26 | . 16 | . 12 | . 11 |
| 3CG-255 | . 005 | 8 | . 26 | . 16 | . 12 | . 11 |

CERAFIL CERAMIC

## ULTRAMINIATURE CAPACITORS

Series 80 V -AM. Meet MIL-C. 11015 B specs. Smallest ceramics for airborne transistorized circuits. Oipped axial leads. Operating temp. $-55^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$ at full 100 W.V.O.C. derated to 50 W.V. at $125^{\circ} \mathrm{C}$. Toler ance $\pm 20 \% 11 / 2^{\prime \prime}$ axial leads. Shpg. wt., 2 oz .

| $\begin{aligned} & \text { STOCK } \\ & \text { MO. } \end{aligned}$ | CAP. <br> MFO. | $\operatorname{SIZE}_{0}$ | IN. | $\begin{aligned} & 1 . \\ & 24 \end{aligned}$ | $\begin{aligned} & \text { NET } \\ & 25- \\ & 49 \end{aligned}$ | $\begin{gathered} \text { EACH } \\ 50- \\ 99 \end{gathered}$ | $\begin{aligned} & 100 . \\ & 499 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3C. 336 | . 00001 | . 090 | . 320 | . 51 | . 43 | . 34 | . 26 |
| 3CG. 337 | . 000022 | . 090 | . 320 | . 51 | . 43 | . 34 | . 26 |
| 3CG. 338 | . 000033 | . 090 | . 320 | . 51 | . 43 | . 34 | . 26 |
| 3C6-339 | . 000047 | . 090 | . 320 | . 51 | .43 | . 34 | . 26 |
| 3CG-340 | . 0001 | . 090 | . 320 | . 51 | .43 | . 34 | . 26 |
| 3C G-341 | . 00022 | . 090 | . 320 | . 51 | . 43 | . 34 | . 26 |
| 3¢6-342 | . 00033 | . 090 | . 320 | .51 | .43 | . 34 | 26 |
| 3CC. 343 | . 00047 | . 090 | . 320 | .51 | . 43 | . 34 | . 26 |
| 3CG-344 | . 001 | . 090 | . 320 | . 45 | . 38 | . 31 | . 23 |
| 3C6-345 | . 005 | . 120 | . 500 | . 74 | . 62 | . 50 | . 38 |
| 3CG. 346 | . 01 | . 180 | . 500 | . 98 | . 88 | . 71 | . 53 |
| $3 \mathrm{CC}-347$ | . 02 | . 200 | . 500 | 1.79 | 1.50 | 1.21 | . 91 |
| 3C6-348 | . 05 | . 240 | . 650 | 2.98 | 2.48 | 2.03 | 1.52 |
| 3C6-349 | . 1 | . 310 | . 750 | 5.36 | 4.47 | 3.64 | 2.74 |
| CEROL |  |  |  |  |  |  |  |

Series CR90V-AM High capacity with low series resistance at high frequencies. plus miniature size make these ceramic caps. Ideal for computer circuits. Meet MIL-C- 110158 specs. Tolerance $\pm 20 \%$. Temp range $-55^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$ at full 100 WVDC. Derates to 50 V WOC at $125^{\circ} \mathrm{C}$. ShDg. wt., 2 oz.
STOCX CAP SIZE IN. NET EACH
NO. MFO. $0 \quad L \quad 1.24 \quad 25-49 \quad 50-99 \quad 100-499$ $\begin{array}{llllllll}\text { 3CG.826 } & 1 & .210 & .690 & 3.97 & 3.78 & 3.51 & 3.24\end{array}$ $\begin{array}{lllllllll}3 C G \cdot 827 & .25 & .260 & .690 & 5.29 & 5.04 & 4.68 & 4.32\end{array}$ $\begin{array}{lllllllll}\text { 3CG-828 } & .5 & .350 & .690 & 8.39 & 8.19 & 7.60 & 7.02\end{array}$ $\begin{array}{lllllllll}\text { 3CG- } 829 & 1.0 & .480 & .690 & 13.23 & 12.60 & 11.70 & 10.80 \\ \text { 3CG. } 830 & 2.0 & .400 & 1.44 & 19.84 & 18.90 & 17.55 & 16.20\end{array}$

TYPE XPP MINIATURIZED
METAL CASE
ELECTROLYTICS
Hermetically sealed for miniature applications. Operating temperature range $-20^{\circ}$ to $65^{\circ} \mathrm{C}$. Tolerance $-10 \%$ to $+250 \%$. Shpg. wt., 2 oz.

| STOCX | CAP |  | SIzE | INS. | NET EACH |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NO. | MFO. | WVoc | 0 | 1 | 1.24 | 25-49 | 50-99 |
| 3C6-811 | 25 | 3 | $1 / 4$ | 5 | . 73 | . 48 | . 38 |
| 3C6-832 | 100 | 3 | 36 | 3/4 | . 82 | . 56 | . 44 |
| 3CC-833 | 2 | 6 | \% | 12 | . 73 | . 46 | . 36 |
| 3CG- 34 | 3 | 6 | \% | $1 / 2$ | . 73 | . 46 | . 36 |
| $3 \mathrm{Cc}-35$ | 4 | 6 | $\%_{0}$ | 56 | . 73 | . 46 | . 36 |
| 3CG. 836 | 5 | 6 | $\%_{6}$ | 5 | . 73 | . 46 | .36 |
| 3C6- 37 | 15 | 6 | $1 / 4$ | \$/ | . 79 | . 48 | . 38 |
| 3C6-338 | 10 | 10 | 1/4 | 5 | . 79 | . 48 | . 38 |
| 3C6.839 | 20 | 10 | 1/4 | $3 / 4$ | . 79 | . 48 | . 38 |
| 3CC-840 | 50 | 10 | 36 | $5 / 8$ | . 88 | . 56 | . 44 |
| 3C6-841 | 5 | 15 | $1 / 4$ | 5/6 | . 82 | 46 | . 36 |
| 3CC-842 | 8 | 15 | 1/4 | $5 / 8$ | . 82 | 48 | . 38 |
| 3C6-843 | 30 | 15 | 3/6 | $1 / 4$ | . 8 | . 51 | . 39 |
| 3C6.844 | 6 | 25 | $1 / 4$ | $5 / 8$ | . 82 | .48 | . 38 |
| 3C6. 845 | 10 | 25 | 3/6 | 5 | . 85 | . 48 | . 38 |
| 3CG-846 | 15 | 25 | 1/6 | 1/4 | . 85 | . 51 | . 39 |
| 3CC. 847 | 20 | 25 | 3 | $1 / 4$ | . 88 | 51 | 39 |

# MINIATURE CAPACITORS FOR TRANSISTOR CIRCUITRY LAFAYETTE - SPRAGUE-baRCO 

## LAFAYETTE TRANSISTOR ULTRAMINIATURE ELECTROLYTIC CONDENSERS



## 

CF. $145 \quad 160 \mathrm{mfd} 25$ volt
Lafayette subminiature sauare

75 VOLT MICROMINIATURE CAPACITORS AS SMALL AS $1 / \mathrm{s}^{\prime \prime}$ SQUARE x K $\mathrm{Ka}^{*}$ " THICK A new series of dependable, conservatively rated ceramic capacitors designed for greatest capacitance in the smallest size. Vacuum impregnated phenolic coating. Rated 75 V , test volts three times OCWV. Power factor $2.5 \%$. Temperalure range $-55^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$. Shpg. wt., 1 oz .

| Type | Cap. $\mu \mathrm{F}$ | size Lxwx Thick. | Net Each | $\begin{aligned} & \text { Lets } \\ & \text { of } 10, \\ & \text { Each } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| C.608 | . 0005 | 11/8x 1/6x/64 | . 15 | .13 |
| C-609 | 001 | "1/4x $1 / 40 \times 1 /$ | . 15 | . 13 |
| C. 610 | . 002 | 11/411/4x\% | . 15 | .13 |
| C-611 | . 005 |  | . 15 | . 13 |
| C-612 | . 01 | $\mathrm{K}_{1} \times \mathrm{K}_{4} \times \mathrm{H}_{4}$ | 22 | . 19 |
| C-613 | . 02 | ${ }^{3} /{ }_{2} \times 1{ }^{1} \times 2 \times$ | 22 | . 19 |
| C-614 | . 05 | 21/6x $91 / 4 \times 1 / 4$ | . 30 | 27 |
| C-615 | 1 | 15,x14, $x^{1 / 2}$ | .45 | .41 |
| C-616 | 2 |  | . 56 | . 51 |

## LAFAYETTE CERAMIC DISCS rated 1000 DCWV <br> - <br> 

These Lafayette ceramic discs are ideal for bypassing, blocking and coupling applications and as cost saving replacements for paper and mica capacitors. Each disc is checked on the production line for power factor, capacity, leakage resistance and breakdown to assure dependable performance. Avallable in the following values. Shpg. wt., 202

| $\mu \mu F$ | $\mu \mu F$ | $\mu \mu F$ | $\mu \mu F$ | $\mu \mu F$ | $\mu F$ | $-\mu F$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | 22 | 50 | 150 | 330 | .001 | .0027 |
| $6 . 月$ | 25 | 56 | 180 | 390 | .0012 | .003 |
| 10 | 27 | 68 | 200 | 470 | .0015 | .0033 |
| 12 | 30 | 75 | 220 | 500 | .0018 | .004 |
| 15 | 33 | 82 | 250 | 560 | .002 | .0047 |
| 10 | 39 | 100 | 270 | 680 | .0022 | .005 |
| 20 | 47 | 120 | 300 | 750 | .0025 | .01 |

Assort any of above for quantity price
C-601
HIGH CAPACITY DISCS
C-602 . $015 \mu$ Shpg. wt., 2 oz.
C. 603.02 ut Shpg. wt., 2 oz.


- Smallest Made - Tolerance $10 \%$ - Exact Replacement For Hundreds of Thou sands of Transistor Radios

These high quatily electrolytics solve the servicing
problems of size and mounting found in small printed circuit transistor seis. Imported

| Stock No. | Cap <br> MPO. | $\begin{aligned} & \text { Work } \\ & \text { VDC } \end{aligned}$ | $\begin{gathered} \text { Size } \\ \text { Dia. IL } \end{gathered}$ | $\begin{gathered} \mathrm{Ne} \\ 1.9 \end{gathered}$ | $\begin{aligned} & \text { Each } \\ & \text { 10-Up } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CF. 161 | 2 | 6 | 72 $\times 15$ | 22 | 20 |
| CF. 162 | 4 | 6 | 720 $\times 1 / 8$ | . 22 | 20 |
| CF. 163 | 6 | 6 | \% $12 \times 10$ | . 24 | 22 |
| CF. 164 | 8 | 6 | $1 / 4 \times 1 / 4$ | . 25 | . 23 |
| CF. 165 | 10 | 6 | $1 / 4 \times 1 / 32$ | . 25 | . 23 |
| CF-166 | 20 | 6 | K0 $x_{0}$ | . 27 | 25 |
| CF. 167 | 30 | 6 | K. $\times$ Ko | . 27 | . 25 |
| CF-168 | 50 | 6 |  | . 27 | . 25 |
| CF. 169 | 100 | 6 | 16" $\times 1 / 2$ " | . 31 | . 29 |
| CF. 170 | 200 | 6 | $1 / 2 \times 1 / 2$ " | . 33 | . 31 |
| CF-171 | 4 | 12 | K2 $\times 13 / 2$ | . 24 | . 22 |
| CF. 172 | 8 | 12 | $1 / 4 \times 1 \%$ | . 24 | . 22 |
| CF. 173 | 10 | 12 | $1 / 4 \times 1 / 0$ | . 27 | . 25 |
| CFF-174 | 20 | 12 | K. $\times$ K | . 28 | . 26 |
| CF. 175 | 30 | 12 | 1\% X ${ }^{1}$ | . 29 | . 27 |
| CF-176 | 50 | 12 | $1 / 2 \times 1 / 2{ }^{\prime \prime}$ | . 31 | . 29 |
| CF. 177 | 100 | 12 | Ks "x $1 / 2$ " | . 33 | . 31 |

BARCO TRANSISTOR ULTRA-
MINIATURE ELECTROLYTIC
CONDENSERS

|  |  |  | Imported from Holland |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Hermetically | sealed | aluminum | cans. | Shpe. wt. | 02. |
| Stock No. | Type | Cap Mid. | WVDC | Dia. Lth. | Nel |
| Cc-125 | P6-1 | 1 | 6 | 1/6x3/4. | 30 |
| CG. 126 | PT6-2 | 2 | 6 | 11/6x\%6 | . 41 |
| C6. 127 | P6-251 | 25 | 6 | 1/4 $\times 1 / 0$ | . 44 |
| CG. 128 | PC6-801 | 80 | 6 | 1/4×11/4 | . 50 |
| CG. 129 | PCH6-160 | 160 | 6 | 3\%41\%. | . 73 |
| CG-130 | PT8-2 | 2 | 8 | 1/6x ${ }^{3 / 9}$ | . 59 |
| CG. 133 | PS12-31 | 3 | 12 | '60x\% | . 41 |
| CG-134 | P12-51 | 5 | 12 | 11/4x\%6 | . 50 |
| CG. 135 | P12-161 | 16 | 12 | 1/4x ${ }^{1 / 4}$ | . 44 |
| CG-136 | P12.501 | 50 | 12 | \% 4116 | . 59 |
| CG. 138 | PT50. 25 | . 25 | 50 | 1/9x ${ }^{\text {/6 }}$ | . 59 |
| CG. 140 | -P25-81 | 8 | 25 | 1/4x ${ }^{1 / 4}$ | . 59 |
| CG-141 | PC25-251 | 25 | 25 | 1/4x'1/6 | . 50 |
| CG. 142 | PCH25-501 | 50 | 25 | 26401\% | . 73 |
| CG-143 | P40.51 | 5 | 40 | 1/4x ${ }^{1 / 6}$ | . 59 |
| CG-144 | PC40.301 | 30 | 40 | 340150 | . 59 |
| CG-145 | P70-3 | 3 | 70 | $1 / 4 \times 3 / 4$ | . 44 |
| CG-146 | P70.101 | 10 | 70 | 2/4x ${ }^{1 / 6}$ | . 59 |
| CG-147 | P70.201 | 20 | 70 | 3/4x1\% | . 73 |
| C6-148 | PT150-81 | 8 | 150 | 3/6x11/6 | . 73 |

## SPRAGUE TRANSISTOR ULTRA MINIATURE ELECTROLYTIC CONDENSERS

Reliable, hermetically sealed subminiature efectrolytic capacilors. Exceltent replacement capacitors for transistorized equipment. Diams. vary from $K_{s}$ to $2 / 8$ " lengths from $1 / 2$ to $11 / 2^{\prime \prime}$. Shpg. Wt., 202.


# Quality condensers for the serviceman 

## LAFAYETTE METAL CASED OIL FILLED TUBULAR CAPACITORS



These oil-filled and oil impregnated paper capacitors are manufactured to high standards. Feature $10 \%$ tolerance. Operate efficiently from $-40^{\circ} \mathrm{C}$ to $+100^{\circ} \mathrm{C}$. Ruggedy constructed in metal case with plastic insulating outer sleeve to withstand shock, voltage surge, molsture and other adverse operating conditions. Has low dielectric leakage, low power factor and exceptional capacitance stability. Lightweight compact, made to render long servicing Ife. Ideal for replacement and original applications in radio, TV and other electronic equlpment. outside foll is clearly printed. Doubly tinned copperweld type leads are firmly attached to the case. Conservatively rated at 600 WVDC. Avg. shpg. wt., 502 . each. Imported

NET

| Type | Cap. Mfd. | $\begin{aligned} & \text { size } \\ & 0 \geq 1 \end{aligned}$ | Single | $\begin{gathered} \text { Lots of } \\ 10 \end{gathered}$ | $\begin{gathered} \text { Lots of } \\ 100 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| C.800 | . 001 | $9 / 32 \times 26 / 32^{\prime \prime}$ | . 09 | . 81 | 6.00 |
| C. 801 | . 002 | $9 / 32 \times 26 / 32^{\prime}$ | . 09 | . 81 | 6.00 |
| C-802 | . 005 | 9/32 $\times 27 / 32^{\prime \prime}$ | . 09 | . 81 | 6.00 |
| C. 803 | . 01 | 9/32 $\times 27 / 32^{\prime \prime}$ | . 10 | . 90 | 6.50 |
| C. 804 | . 02 | 10/32 $\times 27 / 32^{\prime \prime}$ | . 11 | . 99 | 7.50 |
| c. 805 | . 05 | 13/32 $\times 1$ " | . 12 | 1.08 | 9.50 |
| C-806 | . 1 | 15/32 $\times 1$ 1\%" | . 14 | 1.26 | 11.40 |



VALUE PACKED KITS

| $\underset{600 \mathrm{~V}}{\mathrm{KIT}}$ | $\begin{aligned} & F 100 \\ & \vee D C \end{aligned}$ | $\begin{aligned} & \text { KIT OF } 50 \\ & 600 \mathrm{~V} \text { W DC } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: |
| QTY. | MFD. | QTY. | MFD. |
| 10 | . 001 | 5 | . 001 |
| 10 | . 002 | 5 | . 002 |
| 10 | . 003 | 5 | . 003 |
| 20 | . 01 | 10 | . 01 |
| 20 | . 02 | 10 | . 02 |
| 20 | . 05 | 10 | . 05 |
| 10 | . 1 | 5 | . 1 |

KIT NO. KI-51
95
$2^{75}$

- Tested At 3 Times Working Voltage
- Exceptionally Resistant To High Temperatures and Moisture
- Dependable Performance

They're new, they're different, and they're better! Now, at a price far less than that of ordinary plastic molded tubulars, Lafaytte brings you, for every day service work, a condenser that was designed for critical industrial applications. The case is of durable gleaming porcelain, a ceramic known for lis high degree of imperviousness to molsture and resistance to heat. The capacitor is of finest quallity, tested at 3 times the rated voltage with much closer capacity tolerance. The leads are firmly attached and sealed - they won't twist or breah off. We've selected the most popular values and put them up in two serviceman designed kits. Each condenser is plainly marked. Each value is mounted on separate handy strips. All are conservatively rated at 600 DC working volts. See chart for contents of each hit. Imported



## LAFAYETTE MYLAR "TITANEX" 75 VOLT MICRO-MINIATURE CERAMIC CAPACITORS <br> - $\pm 10 \%$ Tolerance Tested 10 Working Voltage $\times 250 \%$

 Pressure molded, solid bloch construction. Exceptional humidity resistance, Du Pont MYLAR polyester film dielectric. Resin dip insulation. Designed for circuits requiring extremely small stable components-ideal for printed or transistor cir. cuitry. Temperature range from $-25^{\circ} \mathrm{C}$ to $85^{\circ} \mathrm{C}$ without derating. All are rated at 75 W.V. D.C. Shoz. wt., 2 oz.Imported


OIL FILLED METALLIZED PAPER CAPACITORS
等

- Excellent For Building Your Own Crossover Network
- Self-Healing Type

> These oil filled metallized paper capacitors have the advantage that they are self healing. Even many breakdowns are harmless. Capacitance tolerance is $\pm 10 \%$ of rated capacity. Dielectric loss less than $10 \%$ at $20^{\circ} \mathrm{C}$, measured at 1000 cps . Insulation resistance over 500 megohms between terminals. Overall dimension for $2 \mu f$ capacitor is $11 / 9 \times 3 / 4 \times 1 \%{ }^{\prime \prime}$. Overall dimension for 4 and $8 \mu$ f capacitors are $13 / 4 \times 3 / 8 \times 256^{\prime \prime}$ and $13 / x^{3} / 4 \times 23 / 5^{\prime \prime}$ respectively. Imported

| Stock No. | Cap. Mfd. | OCwV | Shpg. Wt. | Net Ea. |
| :--- | :---: | :---: | :---: | ---: |
| CF-114 | 2 | 150 | 302 | .59 |
| CF-115 | 4 | 150 | 302. | .79 |
| CF-116 | 8 | 150 | 802. | 1.19 |

## LAFAYETIE Tuanar ELECTROLYTICS

These new Lafayette electrolytic capacitors are specifically designed for service replacement applications. All are sealed in aluminum cans. All have wax impresnated cardboard outer in. sulating sleeves, have solid tinned copper wire leads with negative terminal grounded to can. Guaranteed for operation as high as $85^{\circ} \mathrm{C}$. Avg. $\mathbf{s h p g}$. wt., 402 ea.

## WIDE RANGE ELECTROLYTIC CAPACITOR

Compact unit which provides exact electrical replacement for 8 original standard 150 VDCW capacitors used principally in printed circuit home radio receivers. Can also be used for many combinations of capacitance within Its ratings to replace both single and dual capacitance units. 1 dia. $\times 21 / 2^{\prime \prime}$.
$1{ }^{2}$. 1 dia. $\times 21 / 2^{\prime}$
50.30 mid .

### 50.30 mfd . 70.30 mf . <br> 75.30 mfd . <br> 60.40 mfd .

80.40 mfd.
$50-50 \mathrm{mfd}$.
70.50 mfd.
80.50 mfd. Net 1.18



| Stock No. | Mrd. | W. V. | Net <br> Each | Price in lots of 10 Each |
| :---: | :---: | :---: | :---: | :---: |
| C. 128 | 10 | 25 | . 29 | 27 |
| C-129 | 25 | 25 | . 31 | 28 |
| C-100 | 20 | 150 | . 30 | . 27 |
| C. 101 | 40 | 150 | . 35 | . 32 |
| C.113 | 8 | 450 | . 35 | . 32 |
| C. 130 | 20 | 450 | . 50 | . 45 |
| C. 131 | 40 | 450 | . 61 | . 56 |
| oual section Tubular Electrolytic |  |  |  |  |
| C-127 | 20-20 | 150 | . 37 | . 33 |
| C-125 | 30-30 | 150 | . 39 | . 34 |
| C-126 | 40-40 | 150 | . 41 | . 37 |
| C. 102 | $50-30$ | 150 | . 41 | . 37 |
| C. 106 | 50-50 | 150 | . 44 | . 40 |



KIT OF 50 ASSORTED MICA CONDS.
A wit of the most popular mica capacitors for service-men. Contains 50 popular sizes. A handy assortment for any service shop or experimenter. Shpg. wt., 2 Ibs. KI-10
Lots of 3


CORNELL BLUE BEAVER
Cornell Dubliier types B8R, BR and BBRD are dry electrolyilics in compact aluminum cases. Highest quality for T.V. general replacement with extra safety for high surge voltages in power supplies. Very low leakage. Operating temperature up to $85^{\circ} \mathrm{C}$.


Mallory type TC dry electrolytic capacitors are housed n aiuminum containers. These compact units are of the highest quality and are ideal for use in T.V., radio and general replacement in electronic circultry. Low leakage and built in safety factors against high voltage
surges. Operating temperature up to $85^{\circ} \mathrm{C}$. surges. Operating temperature up to $85^{\circ} \mathrm{C}$.

## STANDARD BRANDS

Because no one manufacturer offers all sizes, we have made this integrated list more comprehensive than any other electronic distributor. Since your order will be filled with one of the 4 famous brands Illustrated, you are assured of the highest quality. We will supply any particular manufacturers brand specifled, if avallable in the size desired. Avg. shpg. wt., 5 ozs.
PLEASE SEE NEXT PAGE FOR TRIPLE ANO QUAD. UNITS.

Sprague types TVA and TV are dry electrolytics in ex- Aerovox type PKS are dry electolytic in compact alumitremely compact metal cases. They are designed to num cases. Dependable replacements for $T$. V. and all withstand high surge voltages and high ripple currents electronic equipment when a quality unit is required. making them ideal for replacements, power supplies, Feature low leakage high voltage surge protection and $85^{\circ} \mathrm{C}$.

| Stock No. | Cap. MFO. | W.V. | 1-24 | NET EACH IN LOTS OF |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 25. | $50-$ | 100. |
|  |  |  |  | 49 | 99 | 249 |
| 2.60 | 1000 | 3 | 1.00 | . 82 | . 64 | . 51 |
| 2-61 | 2000 | 4 | 1.35 | . 93 | . 72 | . 58 |
| $2 \cdot 62$ | 50 | 6 | . 56 | . 41 | . 32 | . 26 |
| 2.63 | 100 | 6 | . 70 | . 50 | . 39 | . 32 |
| 2.64 | 250 | 6 | . 79 | . 64 | . 50 | . 40 |
| 2-65 | 500 | 6 | . 91 | .73 | . 57 | .46 |
| 2.66 | 1000 | 6 | 1.11 | . 85 | . 69 | . 56 |
| 2-67 | 1500 | 6 | 1.23 | . 98 | . 76 | . 61 |
| 2-68 | 2000 | 6 | 1.35 | 1.08 | . 84 | . 67 |
| 2.69 | 100 | 12 | . 70 | . 52 | . 40 | . 32 |
| 2.70 | 250 | 12 | . 85 | . 68 | . 53 | $-43$ |
| 2-71 | 500 | 12 | 1.00 | -. 79 | . 61 | . 49 |
| 2.72 | 1000 | 12 | 1.32 | 1.05 | . 82 | . 65 |
| 2.74 | 100 | 15 | . 73 | . 52 | . 41 | . 33 |
| 2-75 | 200 | 15 | . 82 | . 68 | . 53 | . 42 |
| 2.76 | 250 | 15 | . 91 | . 74 | . 60 | . 46 |
| $2 \cdot 77$ | 500 | 15 | 1.03 | . 83 | . 64 | . 52 |
| 2.78 | 1000 | 15 | 1.35 | 1.07 | . 84 | . 67 |
| 2-79 | 2000 | 15 | 1.88 | 1.88 | 1.10 | . 88 |
| 2-80 | 2 | 25 | . 53 | . 39 | . 31 | . 25 |
| $2 \cdot 81$ | 5 | 25 | . 59 | . 42 | . 33 | . 26 |
| 2-82 | 10 | 25 | . 59 | . 42 | . 33 | . 26 |
| 2-83 | 16 | 25 | . 59 | .43 | . 35 | . 28 |
| 2-84 | 20 | 25 | . 59 | . 58 | . 34 | . 27 |
| 2.85 | 25 | 25 | . 59 | . 44 | . 37 | . 28 |
| 2.86 | 50 | 25 | . 65 | . 47 | . 37 | . 30 |
| 2-87 | 100 | 25 | . 79 | . 58 | . 45 | . 36 |
| 2.88 | 250 | 25 | 1.00 | . 79 | . 61 | . 49 |
| 2-89 | 500 | 25 | 1.35 | 1.07 | . 84 | . 67 |
| $2 \cdot 90$ | 1 | 50 | . 53 | . 39 | . 30 | . 25 |
| $2 \cdot 91$ | 2 | 50 | . 53 | . 39 | . 31 | . 25 |
| 2-92 | 5 | 50 | . 59 | . 42 | . 32 | . 26 |
| 2.93 | 10 | 50 | . 59 | . 42 | . 33 | . 27 |
| 2.94 | 20 | 50 | . 59 | . 43 | . 33 | . 27 |
| 2.95 | 25 | 50 | . 62 | . 44 | . 35 | . 28 |
| 2.96 | 50 | 50 | . 71 | . 52 | . 40 | . 32 |
| 2.97 | 100 | 50 | . 82 | . 60 | . 47 | . 40 |
| 2-98 | 150 | 50 | . 91 | . 66 | . 51 | . 41 |
| 2.99 | 250 | 50 | 1.03 | . 83 | . 64 | . 52 |
| 2.100 | 500 | 50 | 1.41 | 1.10 | . 86 | . 69 |
| 2.101 | 4 | 150 | . 59 | .42 | .33 | . 26 |
| 2-102 | 5 | 150 | . 59 | . 43 | . 33 | . 27 |
| 2-103 | 8 | 150 | . 62 | . 45 | . 35 | . 28 |
| 2.104 | 10 | 150 | . 62 | . 46 | . 36 | . 29 |
| 2.105 | 12 | 150 | . 65 | . 47 | . 37 | . 29 |
| 2.106 | 16 | 150 | . 68 | . 49 | . 38 | . 31 |
| 2-107 | 20 | 150 | . 71 | . 50 | . 39 | . 32 |
| 2.108 | 24 | 150 | . 73 | . 52 | . 41 | . 33 |
| 2-109 | 25 | 150 | . 73 | . 57 | . 45 | . 36 |
| 2.110 | 30 | 150 | . 76 | . 55 | . 43 | . 35 |
| 2.111 | 40 | 150 | . 79 | . 58 | . 45 | . 36 |
| $2 \cdot 112$ | 50 | 150 | . 82 | . 60 | . 47 | . 38 |
| 2.113 | 60 | 150 | . 88 | . 63 | . 49 | . 39 |
| 2.114 | 80 | 150 | . 94 | . 69 | . 54 | . 43 |
| L-115 | 100 | 150 | 1.03 | . 75 | . 58 | . 47 |
| 2-116 | 150 | 150 | 1.12 | . 82 | . 64 | . 48 |
| 2.117 | 200 | 150 | 1.29 | . 93 | . 73 | . 58 |
| 2.118 | 300 | 150 | 1.50 | 1.00 | . 78 | . 62 |

## STANDARD BRAND TUBULARS ELECTROLYTICS-MOLDED TUBULARS

TUBULARELECTROLYTICS
continued from facing page


NET EACH IN LOTS OF
Stock
No. 1
2.30
2.30
2.3
2.30
2.30
2.3
2.3
2.3
2.3
2.3
2.3
2.3
2.3
2.3
2.3
2.3
2.3
2.3
2.

| $\mathbf{2} \cdot \mathbf{3 2 0}$ | $40-3020$ |
| :--- | :--- |
| $\mathbf{z}$ | $\mathbf{3 2 1}$ |
| $40-40-20$ |  | 2.322 $\quad 40 \cdot 40 \cdot 100$ 2.323 $\mathbf{4 0 - 4 0 - 2 5 0}$ | $\mathbf{2} \cdot 324$ | $50 \cdot 30-20$ |
| :--- | :--- |
| $\mathbf{Z} \cdot 325$ | $50 \cdot 30 \cdot 100$ |

2-3261 50-30-200 2-327 50.30-200 | 2.328 | $50.30-250$ |
| :--- | :--- |
| $\mathbf{2} .329$ | $50.50-20$ |

2.330 80-20-100 | 2.331 | $80-40-20$ |
| :--- | :--- |
| $\mathbf{2} .332$ | $20-20.20$ | 2-333 $40 \cdot 20-20$

 | 2.336 | $40-30-40$ | $350 / 250 / 150$ |
| :---: | :---: | :---: |
| 2.337 | $12-12.20$ | $150 / 25$ | 2.338:16-16.16

| $\mathbf{2} .340$ | 30.50 .100 | $450 / 150 / 25$ | 1.88 | 1.56 | 1.21 | .97 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |



## QUADRUPLE UNITS

| Stock No. | Cap MFD. | W.V. |  | $\begin{aligned} & 25 . \\ & 49 \end{aligned}$ | $\begin{array}{c\|c} 50- & 100- \\ 99 & 249 \end{array}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-400 | 30-30-20-20 | 150/25 | \|1.71| | 1.71 | 1.141 .91 |  |
| 2-401 | 40-20-20-20 | 150,25 | 1.68 | 1.68\|1 | 1.14i . 91 |  |
| 2-402 | 50-30-20 20 | 150/25 | $1.79!$ | 1.791 | 1.17 . 93 |  |
| 2-403 | 40-40-30-20 | 150/25 | 1.77 | 1.771 | 1.18 .94 |  |
| 2.404 | 50-50-50-20 | 150/25 | 2.03 | 2.031 | 1.24 .99 |  |
| 1-405 | 20-20-20-20 | 450/25 | 2.38 | 2.38 | 1.481.19 |  |
|  | HIGH VOLTAGE MOLDED tubular capacitors |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Stock No. | Cap Mid | w.v. | 1.24 | 25-49 | 9 50.99 | $\begin{array}{r} 100- \\ 249 \end{array}$ |
| 2.675 | . 0005 | 6000 | . 650 | . 484 | . 376 | . 301 |
| 2.676 | . 001 | 6000 | . 710 | . 500 | . 389 | . 311 |
| 2.677 | . 005 | 6000 | . 730 | . 513 | . 399 | . 319 |
| 2.678 | . 0005 | 10000 | . 680 | . 513 | . 399 | . 319 |
| 2-679 | . 00025 | 12500 | . 940 | . 664 | . 516 | . 413 |

## STANDARD BRAND MOLDED TUBULAR CAPACITORS



aEROVOX

SPRAGUE DIFILM
BLACK BEAUTY
STANDARD BRANDS
Because no one manufacturer offers all sizes, we have made this integrated list more comprehensive than any
are assured of the the 4 famous brands Illustrated, you particular manufacturers brand specifled, if avallable in other electronic distributor. Since your order will be the size desired. Avg. shpg. wt., 5025.

200 VOLTS DC WORKING
600 VOLTS DC WORKING

| Stock No. | Cap, Mic. | NET EACH IN LOTS OF |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1.24 | 25-49 | 50-99 | $\begin{array}{r} 100 \\ 249 \\ \hline \end{array}$ |
| 2.500 | . 02 | . 150 | . 120 | . 090 | . 067 |
| 2.501 | . 047 | . 150 | . 130 | . 093 | . 080 |
| 2.502 | . 05 | . 150 | . 130 | . 093 | . 080 |
| 2.503 | . 1 | . 210 | . 135 | . 105 | . 090 |
| 2.504 | 15 | . 210 | . 160 | . 130 | . 095 |
| 2.505 | . 22 | . 230 | . 210 | . 160 | . 130 |
| 2-506 | . 25 | . 230 | . 210 | . 170 | . 130 |
| 2.507 | . 33 | . 290 | . 218 | . 170 | . 135 |
| 2.508 | 47 | . 350 | . 340 | . 310 | . 250 |
| 2.509 | . 5 | . 350 | . 350 | . 330 | . 270 |
| 2.510 | 1.0 | . 620 | . 540 | . 420 | . 340 |
| 400 VOLTS DC WORXING |  |  |  |  |  |
|  |  | NET EACH IN LOTS OF |  |  |  |
| Stock NO. | Cap. Mid. | 1.24 | 25-49 | 50.99 | 100 249 |
| 2.520 | . 001 | . 150 | . 106 | . 082 | . 066 |
| 2.521 | . 0068 | . 150 | . 106 | . 082 | . 066 |
| 2.522 | . 0075 | . 150 | . 106 | . 082 | . 068 |
| 2-523 | . 01 | . 150 | . 106 | . 090 | . 066 |
| 2.524 | . 015 | . 150 | . 120 | . 090 | . 067 |
| 2-525 | . 02 | . 150 | . 120 | . 088 | . 080 |
| 2.526 | . 022 | . 180 | . 120 | . 088 | . 080 |
| 2.527 | . 025 | . 180 | . 115 | . 089 | . 080 |
| 2.528 | . 03 | . 180 | . 117 | . 091 | . 080 |
| 2.529 | . 03 | . 180 | . 119 | . 093 | . 074 |
| 2.530 | . 04 | . 180 | . 130 | . 095 | . 076 |
| 2.531 | . 047 | . 180 | . 130 | . 096 | . 077 |
| 2-532 | . 05 | . 180 | . 140 | . 110 | . 090 |
| 2.533 | . 068 | . 210 | . 160 | . 110 | . 090 |
| 2-534 | . 1 | . 210 | . 160 | . 117 | . 094 |
| 2.535 | . 15 | . 230 | . 210 | . 170 | . 130 |
| 2.536 | . 2 | . 260 | . 230 | . 180 | . 140 |
| 2-537 | 22 | . 260 | . 230 | . 180 | . 140 |
| 2-538 | . 25 | . 290 | . 280 | . 260 | . 210 |
| 2-539 | . 47 | . 440 | . 400 | . 310 | . 250 |
| 2.540 | . 5 | . 440 | . 430 | . 340 | . 270 |
| 2.541 | 1.0 | . 740 | . 690 | . 620 | . 490 |

1000 VOLTS DC WORKING

| Stock No. | Cap. Mid. | 1.24 | 25.49 | 50.99 | $\begin{aligned} & 100 \\ & 249 \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2.600 | . 0005 | 290 | . 140 | . 110 | . 090 |
| 2.601 | . 001 | . 290 | . 140 | . 110 | . 090 |
| 2-602 | . 0015 | . 290 | . 140 | . 110 | . 100 |
| 2.603 | . 002 | . 290 | . 140 | . 110 | . 090 |
| 2.604 | . 0022 | . 290 | . 140 | . 110 | . 090 |
| 2.605 | . 003 | . 290 | . 140 | . 110 | . 090 |
| 2.606 | . 0033 | . 290 | . 131 | . 102 | . 081 |
| 2-607 | . 004 | . 290 | . 140 | . 110 | . 090 |
| 2.608 | . 0047 | . 290 | . 140 | . 110 | . 090 |
| 2-609 | . 005 | . 290 | . 140 | . 110 | . 090 |
| 2.610 | . 006 | . 290 | . 140 | . 109 | . 087 |
| 2-611 | . 00688 | . 290 | . 150 | . 120 | . 090 |
| 2.612 | . 0075 | . 290 | . 144 | . 112 | . 090 |
| 2.613 | . 01 | . 290 | . 160 | . 130 | . 094 |
| 2.614 | . 015 | . 290 | . 180 | . 140 | . 110 |
| 2-615 | . 02 | . 290 | . 210 | . 160 | . 130 |
| 2-616 | . 022 | . 290 | . 210 | . 160 | . 130 |
| 2-617 | . 025 | . 290 | . 178 | . 138 | . 111 |
| 2-618 | . 03 | . 290 | . 230 | . 180 | . 140 |
| 2.619 | . 033 | . 350 | . 191 | . 149 | . 119 |
| 2.620 | . 035 | . 290 | . 230 | . 180 | . 150 |
| 2-621 | . 04 | . 350 | . 203 | . 158 | . 126 |
| 2.622 | . 047 | . 350 | . 250 | . 190 | . 160 |
| 2.623 | . 05 | . 350 | . 260 | . 200 | . 160 |
| 2.624 | . 06 | . 350 | 232 | . 180 | . 144 |
| 2-625 | . 068 | . 410 | . 243 | . 189 | . 151 |
| 2.626 | . 1 | . 440 | . 410 | . 320 | . 260 |

stoct net each in lots of

| Stock No. | Cap. Mid. | 1.24 | 25.49 | 50-99 | $\left.\right\|_{249} ^{100}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2.550 | . 0001 | . 150 | . 108 | . 084 | . 067 |
| 2.551 | . 00025 | . 150 | . 108 | . 084 | . 067 |
| 2.552 | . 0004 | . 150 | . 108 | . 084 | . 067 |
| 2.553 | . 0005 | . 150 | . 108 | . 084 | . 067 |
| 2.554 | . 001 | . 150 | .108 | . 084 | .067 |
| 2.555 | . 0015 | . 150 | . 108 | . 084 | . 067 |
| 2.556 | . 002 | . 150 | . 108 | . 084 | . 067 |
| 2.557 | . 0022 | . 150 | . 110 | . 086 | . 069 |
| 2.558 | . 003 | . 150 | . 110 | . 086 | . 069 |
| 2.559 | . 0033 | . 150 | . 110 | . 086 | . 069 |
| 2.560 | . 004 | . 150 | .110 | . 086 | . 069 |
| 2.561 | . 0047 | . 150 | . 110 | . 086 | . 069 |
| 2.562 | . 005 | . 150 | . 110 | . 086 | . 069 |
| 2.563 | . 006 | . 150 | . 1110 | . 086 | . 069 |
| 2-564 | . 0068 | . 150 | .113 | . 088 | . 070 |
| 2-565 | . 007 | .180 | . 140 | . 095 | . 080 |
| 2-566 | . 0075 | . 180 | .113 | . 088 | . 070 |
| 2-567 | . 01 | . 180 | . 117 | . 091 | . 073 |
| 2.568 | . 015 | . 180 | . 122 | . 095 | . 076 |
| 2-569 | . 02 | . 180 | . 128 | . 100 | . 080 |
| 2.570 | . 022 | . 180 | . 133 | . 103 | . 083 |
| 2.571 | . 025 | . 210 | . 135 | . 105 | . 084 |
| 2-572 | . 03 | . 210 | . 142 | . 1112 | . 088 |
| 2.573 | . 033 | . 210 | . 144 | . 112 | . 109 |
| 2-574 | . 04 | . 210 | . 149 | . 116 | . 100 |
| 2.575 | . 047 | -210 | . 151 | .117 | . 094 |
| 2.576 | . 05 | . 240 | . 170 | . 130 | . 110 |
| 2.577 | . 068 | . 240 | . 173 | . 135 | . 108 |
| 2.578 $\mathbf{2}-579$ | . 068 | . 260 | . 182 | . 142 | . 113 |
| 2.580 | . 1 | . 260 | . 212 | . 165 | . 132 |
| 2-581 | . 15 | . 350 | . 254 | . 198 | . 180 |
| 2.582 | . 2 | . 380 | . 380 | .300 | . 240 |
| 2.583 | . 22 | . 410 | . 380 | . 300 | . 240 |
| 2.584 | . 25 | . 440 | . 430 | . 400 | . 320 |
| 2.585 | . 47 | . 730 | . 660 | . 520 | . 420 |
| 2-586 | . 5 | . 730 | . 670 | . 520 | . 420 |
| 2-587 | 1.0 | 4.030 | . 890 | . 690 | . 560 |

1600 VOLTS DC WORKING
net each in lots of

| stock No. | Can. Mid. | 1.24 | 25-49 | 50-99 | $\begin{aligned} & 100 . \\ & 249 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2.640 | . 0005 | . 380 | .128 | . 100 | . 080 |
| 2.641 | . 001 | . 380 | . 128 | . 100 | . 080 |
| 2.642 | . 0015 | . 380 | . 131 | . 102 | . 081 |
| 2.643 | . 002 | . 380 | . 135 | . 105 | . 084 |
| 2.644 | . 0022 | . 380 | . 135 | . 105 | . 084 |
| 2.645 | . 003 | . 380 | . 140 | . 109 | . 087 |
| 2-646 | . 0033 | . 380 | . 142 | . 110 | . 088 |
| 2.047 | . 004 | . 380 | . 146 | . 114 | . 091 |
| 2.648 | . 0047 | . 380 | 153 | . 119 | . 095 |
| 2.649 | . 005 | . 380 | . 164 | . 128 | . 102 |
| 2 -650 | . 006 | . 380 | . 164 | . 128 | . 102 |
| 2-651 | . 0068 | . 380 | . 164 | . 128 | . 102 |
| 2-652 | . 007 | .410 | . 182 | . 142 | . 113 |
| 2-653 | . 0075 | . 410 | . 182 | . 142 | . 113 |
| 2.654 | . 008 | . 410 | . 182 | . 142 | . 113 |
| 2-655 | . 01 | . 410 | . 182 | . 142 | . 113 |
| 2.656 | . 015 | . 410 | . 205 | . 159 | . 127 |
| 2.657 | . 02 | . 410 | . 233 | . 173 | . 139 |
| 2.658 | . 022 | . 410 | . 232 | . 180 | . 148 |
| 2.659 | . 025 | . 320 | . 241 | . 187 | . 150 |
| 2.660 | . 03 | . 410 | . 259 | . 201 | . 161 |
| 2-661 | . 033 | . 410 | 270 | . 210 | . 168 |
| ${ }^{2} \mathbf{2 . 6 6 2}$ | . 04 | . 410 | . 370 | . 239 | . 238 |
| 2.663 | . 05 | . 410 | . 299 | . 233 | . 186 |

## CAPACITORS SIZE CHART <br> Averaqe Shpg. wt.. 8 oz .




## SINGLE SECTION

| $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | M1d. | DCWV | Size | Net |
| :---: | :---: | :---: | :---: | :---: |
| 2.802 | 2000 | 6 | J | 1.79 |
| 2.785 | 225 | 15 | A | 1.03 |
| 2-804 | 1000 | 15 | D | 1.50 |
| 2-805 | 2000 | 15 | K | 2.03 |
| 2-806 | 3000 | 15 | $L$ | 2.50 |
| 2-786 | 4000 | 15 | M | 2.20 |
| 2-807 | 40 | 25 | A | . 79 |
| 2-809 | 500 | 25 | C | 1.50 |
| 2-810 | 1000 | 25 | J | 2.09 |
| 2-811 | 4 | 50 | A | . 91 |
| 2-812 | 100 | 50 | A | . 91 |
| 2-813 | 150 | 50 | C | 1:06 |
| 2-814 | 500 | 50 | 1 | 1:56 |
| 2-815 | 1000 | 50 | N | 2.20 |
| 2-816 | 1500 | 50 | 0 | 2.59 |
| 2-818 | 30 | 150 | A | . 91 |

Because no one manufacturer makes all sizes, we have made this integrated list, that is much more comprehensive than other electronic jobbers. Op. ders will be filled with one of the 4 famous brands listed above. Types with * are for high surge selinium circuits. Average shog. wt. 80 oz .

## dUAL SECTION

|  | DUAL SECTION |  |  |  |  | DUAL SECTION |  |  |  |  | DUAL SECTION |  |  |  | DUAL SECTION |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Stock No. | Cap. Mfd. | DCWV | Size | Net Each | Stock No. | Cap. Mid. | DCWV | Size | Net Each | Stock No. | Cap. Mfd. | DCWV | Site | Net <br> Each | Stock No. | Cao. Mfd. | OCWV | Size | Net Each |
| 2.880 | 100-150 | 250.50 | L | 2.15 | 2.899 | 80-80 | 400 | 0 | 2.91 | 2.916* | 80-40 | 150 | 0 | 1.32 | 2.955 | 40-20 | 450 | K | 1.76 |
| 2-923 | 20-20 | 250 | C | 1.12 | 2.942 | 120.40 | 400 | 0 | 3.09 | 2-872 | $80-50$ | 150 | D | 1.41 | 2-956 | 40-40 | 450 | L | 2.03 |
| 2.924* | 40-40 | 250 | E | 1.47 | 2-977 | 10.20 | 450-25 | C | 1.00 | 2-873* | 80-80 | 150 | 1 | 1.56 | 2-958. | 50-50 | 450 | $L$ | 2.26 |
| 2-881* | 200.200 | 250 | 0 | 3.59 | 2.978 | 40.100 | 450-50 | 5 | 1.76 | 2-918* | 125-100 | 150 | $k$ | 2.06 | $2-984$ | 60-20 | 450 | $L$ | 2.09 |
| 2-884 | $150 \cdot 100$ | 300-150 | N | 2.63 | 2.900 | 250.1000 | 10.6 | J | 1.69 | 2.874 | 150-80 | 150 | K | 1.79 | 2-959 | 60.40 | 450 | N | 2.32 |
| 2-885 | 40.30 | 300 | $E$ | 1.56 | 2.901 | 1000-1000 | 15 | G | 2.59 | 2-920 | $200 \cdot 5$ | 150 | L | 1.59 | 2.961 | 80-10 | 450 | $L$ | 2.14 |
| 2.930 | 80.80 | 300 | L | 2.38 | 2-866 | 1000-1000 | 15 | K | 2.59 | 2.922* | 200.200 | 150 | N | 2.35 | 2.962 | $80-20$ | 450 | N | 2.31 |
| 2.931 | $120 \cdot 20$ | 300 | 1 | 2.35 | 2-867 | $500 \cdot 100$ | 20 | C | 1.82 | 2-R76 | 60.60 | 200 | E | 2.00 | 2-963 | $80-30$ | 450 | P | 2.47 |
| 2.1418 | 120-40 | 300 | $\stackrel{1}{6}$ | 2.62 | 2-903 | $50-50$ | 50 | C | 1.00 | 2-877 | 60-60 | 200 | ) | 1.50 | 2.964 | $80-40$ | 450 | N | 2.56 |
| 2.933 | 15-15 | 350 | ${ }^{\text {c }}$ | 1.32 | 2.904 | 100-100 | 50 | C | 1.23 | 2-878* | 100-100 | 200 | L | 2.06 | 2.985 | 100.40 | 450 | 0 | 2.85 |
| 2-936 | 30-30 | 350 | E | 1.70 | 2.906* | 20-20 | 150 | C | 1.00 | 2.879* | $200 \cdot 5$ | 200 | K | 1.79 | 2-986 | 20-100 | 475-400 | 0 | 2.65 |
| 2-887 | 50.30 | 350 | K | 1.85 | 2-907 | 30-20 | 150 | c | 1.26 | 2.980 | $80-100$ | 450-50 | N | 2.20 | 2-967 | 15-15 | 475 | D | 1.38 |
| 2.888 | 60.30 | 350 | L | 1.85 | 2.908 | $30-30$ | 150 | C | 1.09 | 2-981 | 30.200 | 450-150 | L | 2.06 | 2-969 | 30-10 | 475 | j | 1.59 |
| 2.889 | 80.20 | 350 | K | 2.06 | 2-909 | 40-20 | 150 | C | 1.06 | 2-944 | 20.50 | 450-250 | E | 1.65 | 2.975 | 80.50 | 475 | 0 | 3.06 |
| 2.891 2.937 | 80-40 | 350 | L | 2.32 | 2.910 | 40-30 | 150 | C | 1.09 | 2.947 | 40.10 | 450-350 | $J$ | 1.59 | 2.987 | 10-10 | 500 | D | 1.20 |
| $2-937$ $2-893$ | $80-80$ $100 \cdot 60$ | 350 350 | N | 2.76 | 2-911* | 40.40 50 | 150 | C | 1.12 | 2-983 | 5-5 | 450 | C | 1.03 | 2-988 | 20.20 | 500 | $k$ | 1.68 |
| $2-893$ 2.894 | $100 \cdot 60$ $100 \cdot 100$ | 350 350 | 0 | 2.82 3.62 | 2-912. | $50-30$ $50-50$ | 150 150 | C | 1.18 1.26 | 2.948 2.951 | $10 \cdot 10$ 20.10 | 450 | C | 1.12 | 2.989 | 30.10 | 500 | K | 1.68 |
| 2-895 | 160-10 | 350 | N | 2.53 | 2-914* | 60-60 | 150 | E | 1.38 | 2.952 | $20-20$ | 450 | E | 1.50 | 2-991 | 40.40 | 500 | N | 1.91 2.59 |
| 2-896 | 100-30 | 400.50 | 1 | 2.29 | 2-871 | 70-30 | 150 | 0 | 1.29 | 2-953 | 30-10 | 450 | E | 1.47 | 2-992 | 60-40 | 500 | N | 2.70 |
| 2.897 | 80-80 | $400 \cdot 200$ | M | 2.32 | 2-915 | 75-75 | 150 | E | 1.53 | 2-954 | 30-30 | 450 | K | 1.79 |  |  |  |  |  |


| Stock No. | TRIP <br> Can. Mfd. | SECTION DCWV | Size | Net | Stock No. | TRIPL <br> Cav. Mfd. | SECTION DCWV | Size | Net | Stock No. | TRIPL <br> Cas. Mfd. | SECTION OCWV | Size | Net |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-1000 | 20-20-20 | 25 | C | 1.15 | 2.1140 | 140-10-200 | 300.300-150 | 0 | 3.23 | 2-1173 | 30-10-150 | 450-450.50 | K | 2.06 |
| 2.1001 | 40-40-40 | 25 | C | 1.26 | 2.1421 | 100-200-60 | 300-150-150 | $L$ | 3.00 | 2.1174 | $35 \cdot 25-100$ | 450-450.50 | $\underline{L}$ | 2.06 2.32 |
| 2-1003 | 15-15-1200 | 150-150-2 | C | 1.76 | 2-1142 | 80-40-40 | 300 | L | 2.79 | 2-1425 | 40-10-40 | $450-450.50$ | $k$ | 2.85 |
| 2-1004* | $80-30-300$ | $150.150 \cdot 10$ | J | 1.85 | 2-1142 | 80-40-40 $20-500$ | 350-100.75 | E | 2.79 1.82 | 2-1083 | 40-40-100 | $450-450-50$ | N | 2.53 |
| 2. 994* | $80-60-250$ $100-80-200$ | $150-150-10$ $150-150-10$ | K | 2.00 | 2-1145 | 60-200.30 | $350 \cdot 150-150$ | N | 2.59 | 2-1084 | 60-40-75 | 450-450-50 | N | 2.70 |
| 2.995* | $100-80-200$ $40-40-20$ | $150-150-10$ $150-150-25$ | K | 2.12 | 2-1146 | 125-5-100 | $350-200.75$ $350-300.25$ | N | 3.12 | 2.1176 2.1086 | $80-20 \cdot 100$ $40-10.80$ | $450-450-50$ $450-450.200$ | 0 | 2.82 |
| 2.1012 | 40-40-200 | $150-150-25$ $150-150-25$ | C | 1.41 1.65 | $2-1036$ 2-1039 | $30-30-20$ $15-10-20$ | $350-300 \cdot 25$ $350-350.25$ | C | 1.85 | $2-1086$ $2-1177$ | $40-10-80$ $40-40-60$ | $450-450-200$ $450-450-200$ | L | 2.29 2.62 |
| 2. 996* | 40-40-250 | 150-150-25 | E | 1.85 | 2-1041 | 20-10-20 | 350-350-25 | C | 1.50 | 2.1087 | 40-40-100 | 450-450-200 | P | 2.91 |
| 2. 997 | 50-30-20 | 150-150.25 | C | 1.47 | 2-1042 | 20-20-20 | 350-350.25 | 0 | 1.65 | $2-1178$ | 40.40-80 | 450-450.350 | 0 | 3.26 |
| 2-1013 | 50-30-100 | 150.150.25 | D | 1.59 | 2-1043 | 30-20-20 | 350-350-25 | E | 1.76 | 2.1179 | 50.5-50 | 450-450-350 | N | 2.50 |
| 2-1014 | 50.50-20 | 150-150.25 | D | 1.56 | 2.1148 | 30-30-20 | $350-350-25$ $350-350-25$ | J | 2.00 | 2.1090 | 10-10-10 | 450 | ${ }^{\text {D }}$ | 1.53 |
| 2. 9988 | 80-40-20 | 150-150.25 | 0 | 1.65 | 2-1422 | 80-40-100 | 350.350 .200 | L | 3.19 | 2.1180 2.1092 | $15-15 \cdot 15$ $20-10.10$ | 450 450 | E | 1.82 |
| 2-1015** | $80-40-300$ $20 \cdot 20.20$ | $150-150.25$ 150 | ${ }_{\text {K }}^{\text {K }}$ | 2.18 1.35 | 2-1152 | 100-60-20 | $350-350.250$ | 0 | 3.23 | 2.1093 | 20-20-20 | 450 | K | 1.73 2.12 |
| 2.1121 | 40-20-10 | 150 | C | 1.38 | 2-1047 | 10-10-10 | 350 | C | 1.41 | 2-1094 | 30-20-20 | 450 | $L$ | 2.26 |
| 2-1016* | 40-20-20 | 150 | C | 1.41 | 2-1049 | 30-20.10 | 350 | E | 1.91 | 2-1095 | 30-30-30 | 450 | L | 2.57 |
| 2-1017 | $40 \cdot 30 \cdot 20$ | 150 | C | 1.47 | 2-1051 | 80-60-60 | 350 | 0 | 3.26 | 2-1096 | 30.60-10 | 450 | N | 2.63 |
| 2.1419 | 200.100.60 | 150 | M | 2.67 | 2-1055 | 20-20-20 | 400-400-25 | E | 1.68 | 2.1097 | 40-10-10 | 450 | L | 1.97 |
| 2.1018 | 40-40.40 | 150 | D | 1.53 | 2-1420 | 100-10-20 | 400.400.50 | M | 2.65 | 2-1098 | 40-30-20 | 450 | L | 2.53 |
| 2.1122 | 50.40-10 | 150 | D | 1.50 | 2-1156 | $20-20 \cdot 10$ | 400-400-350 | E | 1.76 | 2.1099 | 40-40-10 | 450 | L | 2.47 |
| 2-1019* | 50-50-50 | 150 | E | 1.76 | 2-1157 | 60-30-20 | 400-400-350 | L | 2.67 | 2-1181 | 40-40-20 | 450 | N | 2.62 |
| 2-1020 | $60.40-20$ | 150 | D | 1.62 | 2-1158 | 80-20-10 | 400-400-350 | L | 2.53 | 2-1100 | 40-40-40 | 450 | N | 2.88 |
| 2-1021 | 80-40-20 | 150 | E | 1.70 | 2-1057 | 100-10-80 | 400-400-350 | 0 | 3.59 | 2-1424 | 50-40-30 | 450 | P | 2.88 |
| 2-1024* | 120-120-40 | 150 | $L$ | 2.38 | 2-1060 | 40.90-50 | 450-150.150 | 1 | 2.32 | 2-1101 | 60-20-20 | 450 | N | 2.70 |
| 2.1125* | 250-200-10 | 150 | 0 | 3.94 | 2-1062 | 10-40.10 | 450-300.150 | , | 1.82 | 2-1183 | 60-40-20 | 450 | N | $2.94$ |
| 2-1126* | 60-200.140 | 200-150-150 | 0 | 2.82 | 2-1167 | 30-15-40 | 450-350-25 | 1 | 1.47 | $2-1104$ $2-1108$ | $\begin{aligned} & 80-40-20 \\ & 10 \cdot 40-100 \end{aligned}$ | 450 $475-450-200$ | 0 | $\begin{aligned} & 3.17 \\ & 2.47 \end{aligned}$ |
| 2-1026 | 60-5-20 | 200-200-50 | D | 1.47 | 2-1067 | 20-40-10 | 450-350-350 | K | 2.06 | $\mathbf{2}-1108$ $\mathbf{2}-1187$ | $10 \cdot 40 \cdot 100$ $40.80-10$ | $475-450-200$ $475-450-450$ | 0 | 2.47 3.23 |
| 2.1127 | 30-20-40 | 200-200-150 | 0 | 1.59 | 2-1071 | 10-10-20 | 450-450-25 | C | 1.41 | 2-1188 | 20-10-100 | 475-475-400 | 0 | 3.09 |
| 2-1027 | 80-40-50 | 250.150.50 | K | 1.70 | 2-1074 | 20.10-20 | 450-450-25 | D | 1.59 | 2-1190 | 40-20.20 | 475 | $L$ | 2.79 |
| 2.1128 | 15-15-20 | 250.250-25 | C | 1.37 | 2-1076 | 20-20-20 | 450-450-25 | E | 1.79 | 2.1191 | 40.30 .10 | 475 | 1 | 2.65 |
| $2-1028$ | 30-30-20 | 250.250-25 | D | 1.65 | $2-1077$ | 30-30-20 | $450-450.25$ | K | 2.09 | z-1116 | 40-30-30 | 475 | N | 3.03 |
| 2-1130 Z-1030 | $20-20-20$ $40-20-20$ | 250 250 | C | 1.53 | 2-1078 | 40-40-20 | 450-450-25 | L | 2.32 | 2-1194 | 10-10-10 | 500 | $E$ | 1.59 |
| 2-1134* | +100-200-30 | 300-150-150 | E | 1.70 2.97 | $2-1171$ $z-1172$ | 40-40-40 | 450-450-25 | L | 2.32 | 2.1195 | $30-20-20$ | 500 | 1 | 2.47 |
| 2-1136** | 200-60-20 | 300-250-250 | R | 3.41 | 2-1080 | $80-10-125$ 10.10 .40 | $450-450-25$ $450.450-50$ | N 0 | 2.59 | 2-1196 | 40-10-10 | 500 | 1 | 2.29 |
| 2-1138 | 140-100-60 | 300-300-50 | 0 | 3.56 | $2 \cdot 1081$ | 20-10-50 | 450-450-50 | $E$ | 1.68 | 2.1423 | 40.40-10 | $500.500-200$ | N | 2.97 |


| Stock No. | Mfd. | DCWV | Size | Net |
| :---: | :---: | :---: | :---: | :---: |
| 2-820 | 50 | 150 | C | 97 |
| 2.821* | 80 | 150 | C | 1.09 |
| 2-822* | 100 | 150 | D | 1.17 |
| 2-823 | 120 | 150 | J | 1.20 |
| 2.787* | 120 | 150 | 0 | 1.26 |
| 2.824 | 140 | 150 | E | 1.23 |
| 2.788 | 150 | 150 | E | 1.26 |
| 2.825* | 150 | 150 | E | 1.26 |
| 2-826* | 200 | 150 | K | 1.44 |
| 2.789* | 200 | 150 | G | 1.44 |
| 2-827* | 300 | 150 | L | 1.65 |
| 2-790* | 120 | 200 | J | 1.26 |
| 2-791 | 160 | 200 | $L$ | 1.70 |
| 2.829 | 20 | 250 | A | . 94 |
| 2.831* | 40 | 250 | C | 1.06 |
| 2-835* | 100 | 250 | F | 1.59 |


| Stock No | Mfd. | OCWV | Size | Net |
| :---: | :---: | :---: | :---: | :---: |
| 2-836* | 150 | 250 | K | 1.82 |
| 2.837* | 200 | 250 | $L$ | 2.15 |
| 2-838* | 80 | 300 | E | 1.50 |
| 2.839 | 100 | 300 | $L$ | 1.70 |
| 2-792 | 100 | 300 | G | 1.70 |
| 2.793 | 125 | 300 | M | 2.06 |
| 2-1198 | 200 | 300 | K | 2.53 |
| 4.794 | 250 | 300 | P | 3.26 |
| 2.842 | 30 | 350 | C | 1.12 |
| 2-843 | 40 | 350 | D | 1.18 |
| 2-844 | 50 | 350 | E | 1.23 |
| 2-845 | 60 | 350 | E | 1.29 |
| 2-846* | 80 | 350 | K | 1.68 |
| 2-847* | 125 | 350 | L | 2.14 |
| 2.795* | 150 | 350 | N | 2.32 |
| 2-849 | 10 | 450 | C | 91 |

## ATTENTION INDUSTRIALS

 QUANTITY PRICESOn quantities of any item on this page (not assorted), you may deduct the following discounts from prices below: 25 of 1 type
50 of 1 type deduct $3343 \%$ deduct $50 \%$
deduct $60 \%$

|  |
| :---: |
|  |  |

SINGLE SECTION
SINGLE SECTION
SINGLE SECTION

| $\begin{aligned} & \text { Stoct. } \\ & \text { No. } \end{aligned}$ | Mid. | DCWV | Size | Net |
| :---: | :---: | :---: | :---: | :---: |
| 2-851 | 20 | 450 | C | 1.06 |
| 2.852 | 30 | 450 | D | 1.15 |
| 2.853 | 40 | 450 | E | 1.20 |
| 2.854 | 50 | 450 | G | 1.38 |
| 2-855 | 60 | 450 | K | 1.59 |
| 2-856 | 80 | 450 | L | 1.79 |
| 2-857 | 100 | 450 | L | 2.03 |
| 2.858 | 125 | 450 | 0 | 2.32 |
| 2.1199 | 300 | 450 |  | 1.15 |
| 2.796 | 40 | 475 | J | 1.47 |
| 2.859 | 10 | 500 | C | . 94 |
| 2-860 | 20 | 500 | 0 | 1.09 |
| 2-862* | 30 | 500 | E | 1.20 |
| 2-863 | 40 | 500 | $G$ | 1.47 |
| 2-864 | 80 | 500 | N | 2.12 |
| 2.865 | 90 | 500 | N | 2.29 |

QUADRUPLE SECTIONS
QUAORUPLE SECTIONS

| $\begin{gathered} \text { Stock } \\ \text { No. } \\ \hline \end{gathered}$ | Can．Mfd． | DCWV | Sire | Net Each | Stock No． | Cap．Mfd． | DCWY | Sire | Not <br> Each | $\begin{aligned} & \text { Stock } \\ & \text { Ne. } \end{aligned}$ | Cav．Mfd． | DCWY | Size | Net Each |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2－1201＊ | 20－20．160．40 | 150．150．25－25 | J | 1.86 | 2．1331 | 60．30－30－150 | 350－350．350－50 | 1 | 3.23 | 2－1362 |  |  |  |  |
| 2－1292 | 50－40－160－40 | 150－150－25－25 | j | 2.09 | 2．1332 | 70－40－10－50 | 350－350－350－50 | 1 | 3.09 | 2－1256 | 20－20．20－100 | $450-450-450-25$ $450-450-450.50$ | P | 3.79 2.67 |
| 2－1293 | 40－40－20－200 | 150－150－150－10 | J | 1.91 | 2－1333 | 100－10－10－20 | 350－350－350．50 | 1 | 3.03 | 2．1257 | 30．30－15．30 | $450.450-450.50$ | 1 | 2.67 2.67 |
| 2.1204 | 60－40－20－200 | 150－150－150－10 | J | 2.06 | 2．1334 | 100－20－10－20 | 350.350 .350 .50 | m | 3.17 | 2－1258 | 40－40－10－25 | $450-450-450.50$ | N | 2.67 |
| 2－1206 | 40－40－30－20 | 150－150－150－25 | J | 1.82 | 2．1337 | 30－20－5－100 | 350－350．350－200 | ， | 2.76 | 2．1384 | 40．40．10－50 | 450－450－450－50 | N | 2.76 2.82 |
| 2－1295 | 40．40－40－20 | 150－150．150－25 | 1 | 1.85 | 2.1433 | 30－10．5－100 | 350－350．350．200 | N | 2.59 | 2－1260 | 40．40－10．100 | 450－450－450－100 | N | 3.15 |
| 2－1207 | 50．20．20－200 | 150．150－150．25 | J | 3.10 | 2.1339 2.1429 | 40－40－40－40 |  | N | 3.52 | 2.1385 | 60－10－10－20 | 450．450－450－150 | L | 2.70 |
| 2－1297 | 50－30－30－100 | $150150 \cdot 150-25$ | J | 2.03 |  | 90－40－30－30 | 350 | ， | 3.91 | 2－1264 | 5－5－5－5 | 450 | J | 1.76 |
| 2.1208 | 50－50－50－20 | 150－150－150－25 | J | 2.09 | 2.1435 |  | 35 | K | 2.58 | 2．1265 | 10－10－10－10 | 450 | $j$ | 1.97 |
| 2－1210 | 80－40－40．20 | 150－150－150－25 | I | 2.09 | 2.1340 | 80－60－40－20 | 350 | P | 3.76 | 2－1266 | 20－10－10－10 | 450 | N | 2.18 |
| 2－1298 | 80－40－40－40 | 150－150－150－25 | J | 2.12 | 2.1425 | 20－80．100．25 | 400．350－200．50 | P | 3.53 | 2－1267 | 20－20－20－20 | 450 | L | 2.76 |
| 2.1211 | 80－40．40－100 | 150．150－150－25 | $k$ | 2.20 | $2 \cdot 1427$ | 40－80－100－25 | $400 \cdot 350 \cdot 200.50$ | 0 | 3.50 | 2－1268 | 30－15－15－15 | 450 |  | 2.62 |
| 2.1300 | 200－200－100－10 | 150－150－150．75 | L | 3.50 | $2 \cdot 1346$ | 100－10－30．20 | 400．400－50－50 | N | 3.00 | 2.1270 | 30－30－20－20 | 450 | N | 3.06 |
| 2.1301 | 40－40－40－30 | 150 | K | 1.97 | 2－1348 | 100．10．20．20 | $400.400 \cdot 350.50$ | J | 3.20 | 2.1272 | 35－35－10－5 | 450 | N |  |
| 2.1216 | 100－40－10－100 | 250－250－250－50 | 0 | 3.04 | $2 \cdot 1356$ | 80－40－10－20 | 400－400－400．25 | N | 3.12 | 2．1388 | 40－10－10－10 | 450 | N | 2.73 2.44 |
| 2.1431 | 10．200－200．30 | 300．150．150．150 | P | 3.15 | 2－1357 | 80－40－10－100 | 400．400．400．200 | 0 | 3.70 | 2.1273 | 40－20－10－10 | 450 | L | 2.62 |
| 2.1309 | 100－10－200－30 | 300．300－150．150 | R |  | 2－1358 | 80－40－30－40 | 400．400－400．25 | Q | 3.50 | 2.13139 | $40.35 \cdot 10 \cdot 10$ | 450 | 1 | 2.12 |
| 2.1220 | 200－20－100－20 | 300－250－50－25 | R | 3.41 | 2.1360 | 80．40－30－4 | 400－400－400．350 | P | 3.47 | 2.1390 | 40－40－4．4 | 450 | N | 2.76 |
| 2.1311 | 40－20－20－25 | 300－300－300－25 | J | 2.35 | 2.1361 | 50．40－30－20 | 400 | Q | 3.23 | 2.1274 | 40－40－20－20 | 450 | Q | 2.26 |
| 2.1312 | 60－40－2D－50 | 300－300．300－25 | l | 2.73 | $2 \cdot 1364$ | 20．80－20－50 | 450．200－200－50 | 1 | 2.44 | 2－1391 | 40－40－30－30 | 450 | 0 |  |
| 2.1313 | 120－40－40－10 | 300－300－300－250 | 0 | 3.62 | 2．1236 | 25－100－10－60 | 450－300－300．50 | L | 3.12 | 2－1392 | 40－40－40－40 | 450 |  | 3.79 |
| 2.1430 | 40－40－30－20 | 300 | 1 | 2.85 | 2.1237 | 40．40－40－20 | 450．300．300．150 | L | 2.88 | 2－1393 | 60－20－20－20 | 450 | 0 | 3.32 |
| 2.1436 | 200－20．20．20 | 300 | p | 3.62 | $2 \cdot 1240$ | 10．60－40－25 | 450－350．350－25 | N | 2.70 | 2－1395 | 80－10．10－10 | 450 |  | 2.97 |
| 2－1314 | 40．20－10－10 | 300 | J | 2.32 | 2.1368 | 80－10－40－30 | 450．400－300－300 | a | 3.41 | 2－1396 | 40－40－50．80 | 475－250－150－50 | N | 2.94 |
| 2－1315 | 40－40－20－10 | 300 | K | 2.67 | 2.1242 | 20．15．20．20 | 450－450－25－25 | J | 2.09 | 2－1275 | 20－40－100．80 | 475－300－50－25 | 1 | 2.85 |
| $2.1321^{\circ}$ | 160－60－10－4 | 350－300－300－300 | 0 | 5.41 | 2－1370 | 20－20－20－20 | 450．450－25－25 | J | 2.44 | 2－1397 | 20－80－20－10 | 475－300．3n0．300 | M | 2.94 |
| 2.1322 | 60－4．100．40 | 350－350．25－25 | K | 2.23 | $2 \cdot 1244$ | 10－10－60－100 | 450－450－200－50 | 1 | 2.26 | 2．1398 | 10－100－10．100 | 475－300－300．25 | M | 2.88 |
| $2 \cdot 1323$ | 60－100－60－40 | $350 \cdot 350 \cdot 200 \cdot 75$ | 0 | 3.24 | 2.1373 | 40－40－100－60 | 450－450－200－200 | 0 | 3.56 | 2.1434 | 10－40－4．100 | 475－400－350－50 | K | 2.38 |
| 2－1324 | 60－40－60．20 | 350－350－200－150 | M | 2.97 | 2－1246 | 40－40－30－30 | 450－450－350－350 | Q |  | 2－1277 | 10．60－30－125 | 475．450－400－50 | Q | 3.20 |
| 2－1325 | 60－40－60－20 | 350－350．250－150 | N | 3.17 | 2.1374 | 10－10－10－20 | 450－450－450－25 | J | 1.85 | $2 \cdot 1278$ | 10－50－30－30 | 475－450．450－25 | N | 2.79 |
| 2－1225 | 20－10．5－20 | 350．350－350－25 | J | 1.82 | 2.1375 | 20－20－20－20 | 450．450－450．25 | $k$ | 2.44 | 2.1279 | 15－15－80－40 | 475－475－300－50 | N | 2.82 |
| 2.1432 | 30－10－5－200 | 350．350－350．25 | j | 2.23 | $2 \cdot 1378$ | 40－20－20－20 | $450-450 \cdot 450-25$ | ， | 2.70 | 2－1281 | 20－20－10－10 | 475－475－475－300 | $k$ |  |
| 2.1328 | 40－40－30－10 | 350－350－350－25 | 1 | 2.91 | $2 \cdot 1252$ | 40．20－20－40 | 450－450－450－25 | ， | 2.73 | 2－1284 | 20－20－10－10 | 475 － | K | 2.56 |
| 2.1329 | 40－40－40－40 | 350－350．350－25 | 1 | 3.06 | 2－1253 | 40．30－10－20 | 450．450－450－25 | 1 | 2.65 | 2.1295 | 20－20－20－20 | 475 | L | 3.06 |
| 2．1330 | 90．30－5．100 $100.40 \cdot 30.50$ | $350-350 \cdot 350.75$ 350.350 .350 .50 | N | 3.61 | 2－1254 | 40－40－20－20 | 450．450．450－25 | M |  | 2．12a7 | 40－20－10－10 | 475 | 1 | 3.00 |
| 2－1420 | 100．40－30．50 | 350．350－350．50 | P | 3.85 | 2－1379 | 40－40－20－20 | 450．450－450－25 | N | 2.94 2.94 | 2.1410 | 30－10－150－30 | 500－450－50．50 | L | 2.47 |
|  |  |  |  |  | 2－1255 | 40－40－40－40 | 450．450．45n－25 | N | 3.23 | 2.1417 | 40－40－8－8 | 500 | N | 3.35 |

CORNELL．DUBILIER＂QUIETONE＂FILTERS FOR SUPPRESSION OF RF INTERFERENCE

Type IF－18．Fig．A．An efficient all－wave capacitive－inductive type filter for use with all types of electrical appliances causing severe interference．Equipped with frame connection for reduction of radiation．Rating： 110 V AC－DC， 5 amps．In bake－ lite case with cord and plug．Shpg．wt．， 5 los． CG－640
Tyoe IF－19．Fig．C．Capacitive－inductive type filter for all types of home Net 5.41 Type IF－19．Fig．C．Capacitive－inductive type filtef for all types of home appliances with severe interference．Frame connection provided for grounding．Rated 110 V AC．DC
CG． 641
CG． 641
Type IF．4．Fig．D．For use with small radio recelvers for low or moderate intensity interference．Rated at 110 V AC．DC， 5 amps．Connects to power IIne between radio plug and outlet．Shpg．wt．， 8 oz． CG． 642

Net 73 Type 1F－6．Fig．E．Plug－in iype filter for interference conditions of moderately low intensity．Installed between power line and set or appllance．Has short lead to connect binding posi and frame to reduce radiation．Rated 110 V AC－DC， 5 amps． Shpg，wt．， 8 oz．
CG－643

## CG．643

WIRED－IN TYPE
Net 1.15
IF－7A．Fig．B．Capacitive－inductive fllter for severe interference from industrial 3nd heavy duty electrical equipment．For single phase $110-220 \mathrm{~V}$ AC－DC， 5 amps． Shpg．wt．， 10 Ibs．

## CG． 644

F－24 Fig．F．FLUORESCENT NOISE FILTER DUal capacitive type fitte Net 8.0 nating fluorescent nolse．Easlly mounted and connected by means of flexible leads Fof 115 V AC－DC．Shpg．wt．， 8 oz

## CG－645

IF－54．Fig．G．Capacitive－inductive litter for general purpose use in circuits up 10 2 amperes current．Rated $110-220 \mathrm{~V}$ AC－DC．Shpg，wt． 8 oz ． CG－646


| Stock No． | MfE．No． | Mfd． | Size | Net | Stock No． | M1g．No． | Mfd． | Size | Net |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CG－647 | ETWJ－5010 | 47－58 | A | 1.23 | C6．657 | ETWJ－22510 | 216.240 | c | 2.33 |
| CG－648 | ETWJ－6510 | 59.71 | A | 1.26 | CE．658 | ETWJ－25510 | 243.270 | C | 2.76 |
| CG－649 | ETWJ－7810 | 72－88 | A | 1.35 | CG．659 | ETWJ－28510 | 270－324 | C | 2.79 |
| CG．650 | ETWJ． 9510 | 88.106 | A | 1.33 | CG－660 | ETWJ． 34010 | 324－360 | C | 3.17 |
| CG－651 | ETWJ－11010 | 107.129 | A | 1.68 | CG．651 | ETWJ－38010 | 340－408 | c | 3.26 |
| CG．652 | ETWJ－13010 | 124．138 | A | 1.73 | CG－682 | ETWJ－40010 | 378.420 | C | 3.53 |
| CG－653 | ETWJ－14510 | 130－156 | A | 1.73 | CG．653 | ETW J－44010 | 400.480 | C | 3.58 |
| CG．654 | ETWJ－15510 | 145.162 | A | 1.88 | CG．664 | ETWJ． 50010 | 460－540 | 0 | 4.09 |
| C6－655 | ETWJ． 17010 | 158－191 | B | 1.91 | C6－655 | ETWJ．57510 | 540－600 | 0 | 4.53 |
| CC－656 | ETWJ－21010 | 189－227 | B | 2.29 | CG－666 | ETWJ－65010 | $590-700$ | 0 | 4.88 |

C．D．ETWJ AC MOTOR STARTING CAPACITORS．
 $\begin{array}{lllllllllllll} & \text { ETWJ－21010 } & 189-227 & \text { B } & 2.29 & \text { CG－} 666 & \text { ETWJ－65010 } & 590-700 & 0 & 4.88\end{array}$

## AEROVOX TYPE BE

## BI－ELECTRIC MYLAR TUBULARS

Radial Lead Mounting．Dual Di－Eleciric won＇t leak or drip．Tolerance $\pm 10 \%$ Operating Temp．Range
$15.30^{\circ} \mathrm{C}$ to $+100 \% \mathrm{C}$ ．

| Stoch No． | Cap． Mfd． | Size | 1.24 | $\begin{aligned} & 25 \\ & 49 \end{aligned}$ | $\begin{aligned} & 50- \\ & 99 \end{aligned}$ | $\begin{gathered} 100 \\ 249 \end{gathered}$ | Stoch No． | Mfd． | Size | 1－24 | $\begin{aligned} & 25 . \\ & 49 \\ & \hline \end{aligned}$ | $\begin{aligned} & 50 . \\ & 99 \end{aligned}$ | $\begin{array}{r} 100 . \\ 249 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 600 V ． | DCW |  |  |  | 2－416 | 15 |  | 230 | ． 171 | 133 | 105 |
| 2.440 | .001 | 1308116 | ． 150 | .101 | ． 079 | ． 063 | $2-417$ | 2 | Stixixo | 260 | 194 | ． 151 | 120 |
| 2－441 | ． 0012 | 132 ${ }^{11} 16$ | ． 150 | ． 104 | ． 081 | ． 064 | 2.418 | 22 | \＄8x1才． | 260 | 203 | ． 158 | 126 |
| 2－442 | ． 0015 | $116 \times 16$ | ． 150 | ． 104 | ． 081 | ．064 | 2－419 | 25 | $11_{6} \times 1 \%_{6}$ | 270 | 209 | 163 | 130 |
| 2－443 | ． 0018 | Mnx ${ }^{1}$ | 150 | ． 104 | ． 081 | ． 064 | 2－420 | ． 33 | 1／4x1\％ | 290 | 241 | 187 | 150 |
| 2－444 | ． 002 | $1100 \times 10$ | ． 150 | ． 104 | ． 081 | ． 064 | 2－421 | ． 47 | $\mathrm{Y}_{4} \times 1 \%_{0}$ | ． 320 | 272 | ． 212 | 169 |
| 2.445 | ． 0022 | 1150 | ． 150 | ． 104 | ． 081 | ．064 | 2－422 | 5 | 3／41k． | ． 320 | ． 277 | ． 215 | 172 |
| 2.446 2.447 | ． .0025 | 7\％x1\％ | .150 .150 | ． 104 | ． 081 | ． 064 |  |  |  |  |  |  |  |
| 2－448 | ． 0033 | 30x＇6． | ． 150 | ． 104 | ． 081 | ． 064 | 2－423 | 01 | 301\％ | 150 | 101 | 079 | 063 |
| $2-449$ | ． 0039 | 3／4x130 | ． 150 | ． 104 | ． 081 | ． 064 | 2.424 | 015 | Kıx ${ }^{17} / 8$ | 150 | 106 | ． 082 | ． 066 |
| 2.450 | ． 004 | 13003 | ． 150 | ． 104 | ． 081 | ． 064 | 2－425 | ． 02 | $7 / 70 \times 7 / 5$ | .170 | ． 117 | 091 | 073 |
| 2－451 | ． 0047 | ${ }^{13} 8 x^{1 / 4}$ | 0 | ． 104 | ． 081 | ． 064 | 2.426 | ． 022 | $36 \times 371$ | .170 | 122 | ． 095 | 076 |
| 2.452 | ． 005 | $13 / 8{ }^{21 / 25}$ | ． 150 | ． 104 | ． 081 | ． 0654 | 2.427 | ． 025 | Kox ${ }^{2}$ | .170 | 124 | ． 096 | 077 |
| 2.453 | ． 006 | $13 \mathrm{x} \mathrm{x}^{2 \%}$ ， | ． 150 | ． 106 | ． 082 | ． 066 | 2.428 | 03 | $\mathrm{x}^{2} / 2$ | ． 170 | 128 | 100 | 080 |
| 2.454 | ． 0068 | $\left.{ }^{1} 8_{12} \times{ }^{3}\right)^{10}$ | ． 170 | ． 108 | ． 084 | ．067 |  | 04 |  | 170 | 133 | 103 | 083 |
| $2-455$ | ． 007 | 1230 ${ }^{27} / 3$ | .170 | ． 108 | ． 084 | ． 067 | $2-430$ $2-431$ | ． 047 | 1／92x14 | 200 | 142 146 | ． 1110 | 088 091 |
| 2.456 2.457 | ． 0075 | $13 / 8 x^{27 / 22}$ | 170 170 | ． 108 | ． 084 | ． 067 | 2－431 | ． 05 | 妿加x11／8 | 200 | .146 .149 | ． 1146 | ．091 |
| $2-457$ 2.458 | ． 008 | 130x $\times^{2713}$ | ． 170 | ． 108 | ． 084 | .067 .067 | 2.432 | ． 05 | \％8x | 200 | .143 | ． 116 | ． 052 |
| 2.459 | ． 01 |  | ． 170 | ． 110 | ． 086 | ． 06 | 2.433 | 068 | 1／2x11／0 | 230 | ． 160 | ． 124 | 099 |
|  |  |  | －170 | ． 110 |  |  | 2.434 | 1 | 成x1\％ | 230 | ． 176 | ． 137 | 109 |
| 2.460 | ． 015 | 1／8x＇\％ | t70 | ． 115 | ． 089 | ． 071 | 2－435 | ． 15 | Fan1\％ | 290 | ． 212 | ． 165 | 132 |
| 2.461 | ． 018 | $17 / 35 \times 78$ | 170 | ． 119 | ． 093 | ． 074 | 2.436 | 2 | 114x1\％ | 320 | 245 | ． 191 | 153 |
| 2－462 | ． 02 | $1720 \times$ | 170 | ． 124 | ． 096 | ． 077 | 2－437 | 22 | ＂170x1\％ | ． 350 | 259 | －201 | ． 161 |
| 1－463 | ． 022 | 17／nx $7 / 8$ | 170 | ． 128 | ． 100 | ． 080 | $2-438$ | ． 25 |  | ． 350 | 266 | ． 207 | 165 |
| 2－464 | ． 025 |  | 200 | 133 | ． 103 | ． 083 | 2.439 | 33 | 74x1\％． | 410 | 311 | ． 242 | 193 |
| 2－465 | ． 027 | 1513x ${ }^{1 / 4}$ | 200 | ． 137 | ． 107 | ． 085 |  |  |  |  |  |  |  |
| 2.466 | ． 03 | $150 \times 1 \%_{15}$ | 200 | ． 140 | ． 109 | ． 087 |  |  | 1000 V ． | OCW |  |  |  |
| 2.467 | ． 033 | 1591\％ | 200 | ． 142 | .110 | ．088 | 2.480 2.481 | ． 0012 | 110x ${ }^{13}$ | ． 170 | ． 115 | ． 089 | .070 .073 |
| 2.468 | ． 039 | 1519x15 | 200 | ． 146 | ． 114 | ． 091 | 2－481 | ． 0012 | $112 \times 14$ | .170 .170 | 117 | ． 0991 | .073 .073 |
| 1－469 | ． 04 | $17 / 5 \times 1 \%$ | 200 | ． 146 | .114 | ． 091 | 2－483 | ． 0015 | 1198 ${ }^{13}$ | ． 170 | ． 1117 | ． 0991 | .073 .073 |
| 2－470 | ． 047 | 18／821\％ | 230 | ． 153 | ． 119 | ． 095 | 2－484 | ． 002 | 768 ${ }^{1 \%}$ | ． 170 | .117 | ． 091 | ． 073 |
| 2－471 | ． 05 | 12，$\times 1 \times$ | 230 | ． 153 | ． 119 | ． 095 | 2.485 | ． 0022 | 7／8x16 | ． 170 | .117 | ． 091 | 073 |
| 2－472 | ． 056 | 13／nx ${ }^{\text {che }}$ | ． 230 | ． 155 | ． 121 | ． 097 | 2－486 | ． 0033 |  | ． 170 | ． 117 | ． 091 | ． 073 |
| 2－473 | ． 06 | 58x1\％ | －230 | ． 164 | ． 128 | ． 102 | 2.487 | ． 0047 | $13_{1} \mathrm{x}^{17} \chi_{2}$ | 200 | ． 117 | ． 091 | ． 073 |
| 2－474 | ． 068 | 56xl\％ | ． 260 | ． 180 | ． 140 | .112 | 2.488 | ． 0068 | 「18，${ }^{1 \%}$ | ． 200 | ． 122 | ． 095 | ． 076 |
| 2.475 | 075 | $5401 \%$ | ． 260 | ． 185 | ． 144 | ． 115 | 2.489 | ． 01 | 121487\％ | 230 | ． 126 | ．098 | ． 078 |
| $2-476$ | ． 1 | $5_{5}$ | ． 260 | ． 196 | ． 152 | ． 122 |  |  |  |  |  |  |  |
| 2－477 | ． 15 | 160x1\％ | ． 320 | ． 239 | ． 186 | ． 148 | $2-490$ | ． 018 | 1\％92x $1 \%$ | 230 | ． 135 | ． 105 | 084 |
| 2.478 | ． 2 | 7／4x1\％ | ． 350 | ． 252 | ． 196 | ． 157 | 2.491 | ． 025 | 1\％9x1\％ | 230 | ． 151 | ． 117 | 094 |
| 2－479 | ． 22 | \％1 1\％ | ． 350 | ． 272 | ． 212 | ． 169 | 2.492 | ． 027 | 1701\％ | 230 | ． 155 | ． 121 | 097 |
|  |  | 200V． | DCW |  |  |  | 2－493 | 033 | Strlk | 290 | ． 160 | ． 124 | ． 099 |
| $2-409$ | ． 01 | 110x ${ }^{110}$ | ． 150 | ． 104 | ． 081 | ． 064 | 2－494 | ． 039 | 56x1\％ | 290 | ． 167 | ． 130 | 104 |
| 2－410 | ． 015 | \％${ }^{1} \times 146$ | ． 150 | ． 105 | ． 082 | ． 066 | 2－495 | ． 047 | $5 \times 11 \%$ | ． 290 | ． 171 | ． 133 | ． 106 |
| 2－411 | ． 02 | Kıxnhe | ． 150 | ． 115 | ． 049 | ． 071 | 2－496 | ． 056 | 110x1\％ | 320 | ． 178 | ． 138 | 111 |
| 2－412 | ． 024 | $0_{0} x^{2}$ | ． 150 | ． 115 | ． 089 | ． 071 | 2－497 | ． 0675 | 110n $1 \%$ 。 | 320 | 205 | ． 159 | 127 |
| 2－414 | ． 05 | 1／6xily | ． 170 | ． 133 | ． 103 | ． 083 | 2.499 | ${ }_{1} 075$ | $11 / 4 \times 15$ $3 / 4 \times 1$ | 350 350 | 209 | ． 163 | 130 |
| $2 \cdot 415$ | ． 1 | $175 \times 1 \%$ | ． 200 | ． 149 | ． 116 | ． 092 |  |  | －4．10 | Jso | 22 |  |  |

## 

## FIG. A - "PLASTIC" <br> I.F. TRANSFORMERS

Trimmer base and coil form are moulded in one plece. Trimmers "floated" away from base with an air gap between the bottom plate and the plastic basc. Wide range frequency adjustable either side of pre-set frequency, double-tuned. Metal shield can and Litz wire. Unaffected by temperature or humidity. Size: $11 / 4^{\prime \prime}$ square by $21 / 2^{\prime \prime}$ high. Shpg. wt., 402.

| Stock <br> No. | Input <br> Type | Net | KC | Stock <br> No. | Output <br> Type | Net |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| C0.229 | $16-6649$ | 1.38 | 175 | C0.230 | $16-6651$ | 1.38 |
| C0.231 | 166652 | 1.89 | 262 | $\mathbf{C 0 . 2 3 2}$ | 16.6654 | 1.82 |
| C0.233 | 16.6658 | 1.89 | 456 | C0.234 | 16.6660 | 1.89 |

## HI-Q IRON CORE "PLASTIC" I.F.'S

| Stock |  |  | Description <br> No. |
| :---: | :---: | :---: | :---: |
| Type |  |  |  |
| c 0.235 | $16-6662$ | Input, peaked at 455 KC |  |
| C0.236 | $16-6663$ | Output, peaked at 455 KC |  |

FIG. 8 - STANDARD ANTENNA AND R.F. COILS
Designed to cover the broadcast band from 545 to 1580 KC ( $190-550$ meters) with a 365 mmfd . tuning condenser. High impedance primaries, wound with Litz wire. Shielded coils are in black crackle finish,
non magnetic can. $178^{\prime \prime}$ in diameter, $21 / 2^{\prime \prime}$ high. Shpg. wt., 402.
Stock

| No. | Type | tion |  |
| :---: | :---: | :---: | :---: |
| C0. 202 | 14.1010 | Unshielded ant. coil | 1.47 |
| CO-200 | 14-1004 | Shielded ant. coil | 1.47 |
| C0.203 | 14-1011 | Unshielded RF Coil | 77 |
| C0. 201 |  | RF Coil |  |

FIG. C - "UNIVERSAL ADJUSTABLE" UNSHIELDED COILS
Replace Broadcast band coils in most receivers, accurately track other coils when adjusted. Matches inductance of burned out coil with screwdriver adjustment. Osciliator coil adjustable from 175 to 520 kllocycles. For use with either cut plate or padding condenser circuits. Shpg. wt., $60 z$ C0.204 type 14-1026-Ant. C0-205 type 14-1027-R.F C0.206 type 14-1028-Osc.

## FIG. F - MINIATURE ADJUSTABLE broadcast oscillator coil

For Battery and 3-Way Portables
Small physical size. $1^{\prime \prime} \times 3 / \mathbf{g}^{\prime \prime}$ and wide range of in. ductance adjustment. Ideal as replacement unit in most battery and 3 -way portables. Inductance range allows use with gang condenser capacities of 108 to 180 mmfd . Allows accurate adjustment of inductance for proper calibration and tracking. Shpg. wt., 4 oz $\mathbf{C 0 - 2 1 1}$ Meissner Type 14 -1074

FIG. D - OSCILLATOR COILS
FOR 190-550 METER BC BAND
Used with 365 mmfd . cond. IF, RF, and Antenna coils. Shielded type. $13 / 4 \times 11 / 2^{\prime \prime}$. All without padders ex cept with padder. Shpg. wt., $40 z$.

| Stock No. | Meissner | J | Freg. KC | Req'd. Padde |
| :---: | :---: | :---: | :---: | :---: |
| C0.214 | 14-4242 | Shielded | 175 | 900 mmfd |
| C0.215 | 14.4243 | Shielded | 456 | 350 mmfd |
| C0-212 | 14.3732 | Unshielded | 175 | 900 mmfd |
| C0.213 | 14.4034 | Unshielded | 456 | 350 mmfd . |
| C0.207 | *14-1033 | Unshielded | 456 | 350 |
|  | FIG. E - 3/4" PERMEABILITY TUNED I.F. COILS |  |  |  |

Tuned top and bottom, powdered iron cores. Silvered mica condensers, molded plastic bases, etched aluminum cans. $3 / 4 \times 3 / 4 \times 2$ ". With mounting clip and plate. ©Spade bolt mtg. with leads. Shpg. wt., 402. Stack Meissner

Type
16-6758
Function
C0.240 16-6758
C0-241 16-6770
455 KC Input and Output
Each

C0.238 $\quad \mathbf{1 6 . 6 7 5}$
Co-239 16.6754 262 KC Output for auto receivers, diode condenser
C0-228 16.3487 10.7 MC FM Input and Output
C0-237 16-6678* 455 KC AC-DC type Input or Output

## MEISSNER COILS

55 KC Output, with
diode filter condenser
1.72
1.89
1.89
2.20
2.20


MEISSNER TRANSISTOR OSCILLATOR COILS
Popular broadcast frequency coils for replacement pur poses. C 0.220 is $1 / 2 \times 1 / 2 \times 5 / 8$


## MEISSNER TRANSISTOR

I.F. TRANSFORMERS (FIG. 0)

Permeability tuned, lug mounted miniature If transformers. All are for 455 KC except * 262 KC . All units $1 / 2{ }^{2}$ square and 5/a" high, except $\dagger 3 / 4^{\prime \prime}$ high. App: A-input, s $\rightarrow$ output, 1 interslage. Shpg. wt., 4 oz .

| Stock No. | IMPEDANCE |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Type | Pri | Sec | App. | Ne |
| C0. 242 | 16-9001* $\dagger$ | 20000 | 600 | AJS | 4.41 |
| C0.243 | 16-9002 $\dagger$ | 25000 | 600 | AJS | 2.20 |
| C0.244 | 16-9003 | 10000 | 500 | AJ | 3.77 |
| C0.245 | 16-9004 | 10000 | 1500 | S | 3.17 |
| C0-246 | 16.9007 | 80000 | 25 | A | 2.83 |
| C0. 247 | 16-9008 | 30000 | 25 | J | 2.83 |
| C0.248 | 16-9009 | 30000 | 1000 | S | 3.77 |
| C0-249 | 16-9012 | 25000 | 250 | A | 3.77 |
| C0.250 | 16.9013 | 20000 | 150 | J | 3.77 |
| co.251 | 16-9014 | 20000 | 1000 | S | 2.20 |

## MEISSNER RF CHOKES



Wound on specially treated dowels. Type with * are Fig. A shielded $7 / 8 \mathrm{Hx1} 3 / \mathrm{B}^{m}$ sq. case; " are iron
 ductance (MH) is millihenries.


| $\begin{array}{r} \text { Stack } \\ \text { No. } \end{array}$ | Type | Mh | Ma | Ohms | Net |
| :---: | :---: | :---: | :---: | :---: | :---: |
| C0.264 | 19.5584* | 5.5 | 20 | 62 | 1.25 |
| C0.265 | 19-5588* | 8.0 | 30 | 77 | 1.25 |
| C0-266 | 19-5592* | 30.0 | 20 | 165 | 1.25 |
| C0.267 | 19-5594* | 60.0 | 16 | 318 | 1.76 |
| C0.268 | 19-5596* | 80.0 | 16 | 342 | 2.20 |
| C0-258 | 19-1994 | 2.5 | 20 | 40 | . 95 |
| C0.263 | 19-4551 | 5.5 | 20 | 58 | . 73 |
| C0.276 | 19-2078 | 8.0 | 20 | 75 | 1.18 |
| C0.275 | 19-8770 | 10.0 | 20 | 83 | 1.25 |
| C0-259 | 19-1995 | 16.0 | 20 | 108 | . 95 |


| $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | Type | Mh | Ma | Ohms | Net |
| :---: | :---: | :---: | :---: | :---: | :---: |
| C0.260 | 19-2330 | 30.0 | 20 | 160 | 1.18 |
| C0.262 | 19-3247 | 60.0 | 20 | 258 | 1.25 |
| C0.261 | 19-2709 | 80.0 | 16 | 372 | 1.25 |
| C0-269 | 19.6834\# | 2.5 | 20 | 22 | . 95 |
| C0-270 | 19-6840 | 10.0 | 20 | 50 | 1.11 |
| C0.271 | 19-6842\# | 30.0 | 20 | 114 | 1.76 |
| C0.272 | 19-6844\# | 60.0 | 12.5 | 247.5 | 88 |
| C0.273 | 19-6846\# | 80.0 | 15 | 258 | 1.76 |
| C0.274 | 19-6848\# | 25.0 | 75 | 330 | 2.05 |

[^7]11905

## TYPE T101 TIME SWITCH

Turns equipment "on" and "off" once in 24 hours, or from one to twelve "on" and "off" operations a day can be obtained by use of extra trippers. Extra trippers can be added without removing dial. Min. on or off time $1 \mathrm{hr} ., \mathrm{max}$. on or off time 23 hours. Can be furned on or off manually with reset SPST switch rated at 35 amps. 4000 watt capacity. Alloy "T" contacts carry incandescent lighting loads with inrush surge of over 8 times normal rating. Almost immune to pilting, arcing, sticking. Has convenient mounting holes and knockouts. Large numbers-easy to set. Gray steel case-hinged door-can be locked or sealed. UL approved. Operates on 110 volt 60 cycle AC only. Size $73 / 4 \mathrm{Lx} 5 \mathrm{wr} 3^{\circ} \mathrm{D}$. Shpg. wt., 4 lbs .
MS-82 Lots of 6 ea. 7.17 ....................... Singly ea. 7.77 P-101 Similar to T101 except case is equipped with 6 ft . cord set for plugt in and receptacle. Capacity 1250 watts. Shpg. wt.. 6 Ibs.

Singly, ea., 9.07

## TYPE T185 TIME SWITCH

- UP TO 14 COMPLETE "ON-OFF" CYCLES
- EACH cYCLE INOIVIDUALLY ADJUSTABLE FOR 5 TO 60 MINUTE OPERATION - 4000 WATT CAPACITY Versatile timer for applications where multiple "on-off" cycles of 5 to 60 minutes are required within a 24 hr . period. A minute selector is provided on each specially designed tripper for setting the number of minutes, (5 to 60), the "on-off" cycle will operate. Up to 14 trippers can be used at the same tlme. Minimum interval between start of each cycle, $13 / 4 \mathrm{hrs}$. rated 35 amps. 125 volts, AC. Special alloy "T". contacts. High-torque slow-speed dependable preclse timing motor. Gray steel case $77 / 8 \times 5 \times 3^{\prime \prime}$. With 3 trippers (for 2 "on-off" cycles). For $110-125$ volts, 60 cycles. AC. Shpg. wi., 4 lbs. MS-143 …. lots of 6 ea. 10.77 ...... Singly ea. 11.67 Extra Trippers for above. One Tripper for each additional "on-off" cycle. Wt. 4 oz
MS-144
Net .84


TYPE 1171 "SKIPPER" TIME SWITCH

## - SKIPS OPERATIONS ON SELECTEO OAYS

 - 4000 WATT CAPACITYAn ingenious time switch that not only automatically turns equipment on or off, but will sklp operations on any selected days. Ideal where offices or factories are closed on Saturcays. Sundays or Holidays. Turns "on and off" once every 24 hours with single set of trippers supplied, but up to 11 on and off operations can be had by adding extra trippers listed below. Supplied with 3 skipping screws; more can be added. Also has 1 3. skipping screws; more can be added. Also has 1
cutout tripper which advances day dial automatically. Special alfoy "T" contacts wIll carry incandescent lighting loads with inrush surge of more than 8 times normal rating. Almost immune to pitting, arcing, stick. Ing. Min. on or off time 1 hour, maximum 23 hours. Size $77 / 0 \times 5 \times 3^{\prime \prime}$. Shpg. wt., 4 Ibs. For $110-120 \mathrm{~V} 60$ cycle AC operation S.P.S.T.-Skips "ON" Operation.
MS. 130 $\qquad$ Lots of 6, ea. 10.17
Singly ea. 11.02 Type T175-Single Pole Oouble Throw. Upens one circuit and closes another. Skips either "ON" or "OFF" operatlon. Shpg. wt., 4 los.
MS-146 ... Lots of 6, ea. 11.37. ........ Singly ea. 12.32 Type P171-Portable Plug-In version of Type T171 Switch. SPST. Capacity 1250 watts (contacts 10 amps). Shog. wt., 6 los
MS-361 Lots of 6 , ea. 11.37... Singly ea. 12.32

## TYPE T109 POULTRY TIME SWITCH

Prolongs daylight in winter and fall. Gives you additional eggs when egg prices are highest. Deslgned for morning and evening lighting or evening Ifghting alone. Provides automatic 20 -minute "dimming" perlod after bright lights go "off" enabling hens to reach roost safely. Controls one circuit for bright lights, another circuit for dim lights. Capacity: "Bright"-3000 watts ( 24 amperes at 125 volts), "Dlm" -1000 watts ( 8 amperes at 125 volts). Gray steel case $77 / 8 \times 5 \times 3^{\prime \prime}$. For 110 to 125 volts, 60 cycle, AC. Shpg. wt., 4 lbs.
MS. 145 ...... Lots of 6 , ea. 8.37. ....... Singly ea. 9.07

INTERMATIC TIMERS MODEL A211. 4 TIME-ALL

- the automatic timer with the miracle memory Makes practically everything electrical completely automatic. WIII handle load up to 1650 watts. Turns radio on and off-does not have to be reset each night. Defrosts refrigerator-turns lights on and off-controls roaster, etectric blanket, washing machine, coffee roaster, etectric blanket, washing machine, coffee
makers, vaporizers, etc. 30 min . minimum on timemakers, vaporizers, etc. 23 hours maximum. As easy to set as an electric clock. Stands on any surface-can be hung on wall. Easy-toread 24 hour "day and night" dial. Operates day after day without attention. Special alloy "T". Can be controlled manually without automatic reset. Plug-in receptacle for equipment to be controlled. For 110 volt 60 cycle AC only. Complete with 6 ft . cord and plug. 60 cycle AC only. Complete with 6 ft . cord and
Instructions included. $5 \times 4 \times 21 / 2^{\prime \prime}$. Shpg. wt., 2 lbs. MS.81 Lots of 6, ea., 7.17.

SIngly, ea., 7.97 MODEL A221-4 TIME-ALL Similar to A211 except has capacity of 875 watts. Shpg. wt., 2 lbs.
MS-359 Lots of 6 , ea., 6.57 .
Singly, ea., 7.29

## MODEL A401-4 CLOCK TIMER

Not only tells time, but turns appliances both on and off automatically for periods of 15 minutes to $51 / 2$ hours. Cooks dinner whille you're away, wakes you to music, controls electric fans, heaters, radios, TV sets, etc. No installation problem- just plug it in and set. Capacity 1650 watts. Special alloy "T". Plaskon case $43 / 4 \mathrm{~W} \times 41 / 2 \mathrm{H} \times 21 / 4$ "D. 6 ft . cord. For 110 V 60 cycle AC. Guaranteed for 1 year. Sinpg. wt., 3 lbs. Price includes excise tax.
MS. 104 Lots of 6 , ea., 7.88
.Singly, e8., 8.77


## "SKIPPER" AIR CONDITIONER TIMER TYPE P371

Portable plug-in timer to automatically turn on of of room air conditioners of 1 HP rating or less. May be set to skip any of seven days. SPST operation rated 15 amperes. For $110-125$ volt 60 cycle AC. For single phase 2 wire systems with or without grounding wire. $73 / 4 \mathrm{Hx}$ $5 \mathrm{~W} \times 3$ "D. Gray hammertone finish. With cord set, universal receptacle and 2 to 3 wire adapter. Shpg, wt., $4 \frac{12}{2} \mathrm{lbs}$.
MS-812
Lots of 6, ea. 11.97.
Singly ea. 12.97 MOOEL P372. Same as above but for $220-250$ volt 60 cycle $A C$. No adapter and 3 prong receptacle. Shpg. $\mathrm{WL} ., 41 / 2 \mathrm{lbs}$.
MS-813 ..... Lots of 6, ea. 11.97.
Singly ea. 12.97

## CYCLER TIMER TYPE C-8301-S

UD to 12 sets of ON-OFF trippers may be used to provide repeated operations. ON operations may range from 10 seconds to 11 minutes, 10 seconds, OFF operations from 50 seconds to 11 minutes, 50 seconds. Dial makes complete revolution every 12 minutes. By varying the settings of trippers a vast number of operations are possible. Ideal for ventllating fans, pumps, process timings etc. SPST, rated at 12 amp . For $110-125 \mathrm{v} .60$ cycle AC. Case $6 \mathrm{I}_{2} \times 5 \times 3^{\text {" }}$ with 2 comb. knockouts on bottom. Shpg. wt., $21 / 2 \mathrm{lbs}$.
MS.814 Lots of 6, ea. B.67......... Singly ea. 9.39 EXTRA SET ON-OFF TRIPPERS FOR C-8301-S MS-815 Shpg. wt., 2 oz.

TRIPPERS-Set of ON-OFF units (one of each) for all models excent T-185. G-8301-S, V-21003, T1101, P961 and P965, T1905 and P1971.
MS-83 per set. Shpg. wt., 2 oz
Net .26
COMB. ON-CUTOUT TRIPPER. FOr "SkIpper" types only MS-134 Shpg. wt., 202.

Net 18
SKIPPING SCREW. For "Skipper" types only
MS-133 Shpg. wt., 2 oz.
Net 04

## Sufervidar

## PROGRAM TIME SWITCH TYPE T1905

- FOR 1 to 96 ON-OFF OPERATIONS EVERY 24 HOURS An exceptionally useful program timer designed for 24 -hour control of applications requiring many ON.OFF operations in 15 -minute Increments. Can be set for as many as 48 ON and 48 OFF operations of 15 -minute duration during any 24 -hour period. Minimum "ON" or "OFF" period is 15 minutes; maximum "ON" or "OFF" period is 23 hours 45 minutes. Ideal for control of heating, air-conditioning, ventilating, programming muslc, oil-well pumping, poultry feeders, process timings, etc. To set schedule simply depress the proper perman-ently-attached trippers that slide in and out of dial for fast, accurate setting. Dial is black on yellow for full, easy visibility. Mechanism readily removable from case by pressing single spring clasp. Constructed for easy installation. Single Pole single Throw-normally open switch. Contacts rated to handle 20 amps at 125 volts 60 cycle, AC. Repeats cycie without resetting. For $105-125 \mathrm{~V}$; 60 Cycle AC. $73 / 4 \times 5 \times 3^{\prime \prime}$. Shpg. wt., 4 lbs. MS-950-Lots of 6, ea. 16.77 ........ Singly; ea. 18.17

Type P1971-Portable Plug-in version of Type T1905. Contacts rated 10 amps at 125 volts- 60 cycle AC Shpg. wt., 6 tbs
MS-951 ......Lots of 6, ea. 22.77.
Singly, ea. 24.67


## LAMP-LYTER TYPE T•1101

For automatic ON-OFF lighting control. Easily installed in wall. Combines timer and toggle switch in 1 unit. Minimum "ON" time is 30 minutes. Can also be turned on or off manually. Time cycle resumes automatically. SPST operation, rated at $15 \mathrm{amps}, 1650$ watts, $1 / 3 \mathrm{HP}$. For $110-125 \mathrm{~V}$ AC, 60 cycle. Attractive design. Cover has magnetic lock, concealed hinges. Cover is $61 / 2 \times 61 / 2^{\prime \prime}$, wall bor $5 \times 5 \times 2^{1} 3_{0}{ }^{\prime \prime}$ with comb. $1 / 2-3 / 4^{\prime \prime}$ knockouts on each side, top and bottom. Shpg. wt., 4 lbs.
MS-811
Net 14.27

## 7 DAY PROGRAM TIMER TYPE V21003

Provides automatic operation preset for each day of week. Can have different settings for each day and skip selected days. Minimum ON-OFF operation 2 hours any day or night. Black case $105 / 8 \times 5 \times 41 / 4^{N} .3 / 4^{\prime \prime}$ knockouts in sides, back and bottom plus $1^{\prime \prime}$ knockout on bottom DPST operation. Rated 20 amps per pole. For $110-125$ volt 60 cycle AC. With 7 sets trippers. Shpg. wt., $61 / 2 \mathrm{los}$. MS-816 ...... Lots of 6, ea. 22.17. Singly ea.
24.02 UNIVERSAL ON-OFF TRIPPER FOR V21003 MS-817 Shpg. wt., 2 oz

## SPECIALTIES-RELAYS-TIMERS-COUNTERS-MOTORS

-DIGIT STROKE-ACTUATED RESET COUNTER


- Registers up to 99,999
- For Machine Mounting

Complete with Arm and Spring
-asy-to-mount rusged counter for counting machine operitions. One count per stroke. Drilled mounting flange; ictuating arm and spring. May be manually or solenoid ictuated. Reads up to 99,999; side knob easily resets to ero from any number. Overall size: $21 / 2 \times 11 / 2 \times 1 \geqslant{ }^{\prime \prime}$. Shpg. vt ., $1 / 2 \mathrm{lb}$. I mported

- 190 Reset Counter

Net 2.69

## 6-DIGIT ELECTRIC COUNTER

- Registers from 1 to 999,999


Imagine a 6-digit electric counter for only 9.95 : This :ompact unit features a removable front plate for easy ranel mounting. May be acfuated by any switch, relay, atc. Operates in any position. White figures on a blach jackground read up to 999,999. Buill.in selenfum rectiiler, OC operated solenoid, chrome-plated case and panel, $3^{\prime \prime}$ leads $110 \mathrm{~V}, \mathrm{AC}, 50 / 60$ Cycles. Size: $21 / 2 \times 2 \times 17 / 4^{\prime \prime}$ Font plate $35 / \mathrm{a}^{2} 2^{\prime \prime}$. Shpg. wt., $1 / 2 \mathrm{l}$ IDs. Imported t. 553 Electric Counter

Net 9.95

## MULTI-COUNTER 5-POSITION TALLY REGISTER



Five plunger operated tally registers in a single highly polished chromium plated case. Ideal for (1) laboratory use (2) time \& motion studies (3) production control. Each nuldigit register counts up to 999 . Casy-toread 5 positions to zero simultaneously. Overall size: $51 / 4 W x$ 5 positions . H . 2 Shpg. Wt., $11 / 2$ lbs. Imported. | $17 / 3 \mathrm{HX}$ |
| :--- |
| $\mathrm{f}-934$ |

## POCKET TIMER

Set It and Forget It

## Set Timer Up <br> to 60 Minutes



## Watch Movement

Hairline Accuracy
Hundreds of Uses
the new pocket timer is an nvaluable aid for most anyone, mywhere. With its 60 minute time set, it can be used as a reminder when parking meter time runs out, for appointments, take pilis of medicines, etc. Also use as a timer on phone calls, cooking, photog. aphy, etc. Shpg. wt., $1 / 2 \mathrm{ib}$. Imported MS.888L

Net 2.95


SENSITIVE MINIATURE RELAY


ONLY \$2.95 $\mathbf{1 2}$.
Extremely small, sensitive relay - weighs only $1 / 202.1$ Oouble-pole double-throw, with silver and silver-goldplatinum alloy contacts. Contacts hande up to 100 volts at 300 ma. ( 30 watts). Coil measures 5300 ohms dc resistance-rated at 4.1 ma . dc. pull-in current, 0.95 ma dc. drop-out. Enclosed in transparent plastic dust cover; Operating time 2.8 millisecs.; release time about 1.5 msecs. Breakdown voltage ratings: coll to frame, 500 V . contacts lo frame 350 V Measures $11 \mathrm{x} \mathrm{x}^{1 \mathrm{~K}} \times 7 \mathrm{~m}^{\prime \prime}$. Ideal for model control, photocell relay, carrier-current control and dozens of other minlature applications. Shpg. wt., 4 02. Imported
F-332-DPDT Miniature DC Relay
Net 2.95
As above, but 4 pole double throwi-pulf-in current 6.3 ma. dc.; drop-oul 3.3 ma . dc. Welghs $2 / 3$ or. $3 / 4 \times 11 / 2 \times 14 \mathrm{~m}^{\prime \prime}$ Shpg. wt., 407.
F-333-4P-DT Miniature Relay
Nel 3.25


Genuine Telechron mechanism. Complete 12 hour movement. Can be set to turn on any radio. TV or simllar electrical appliance at any presei lime. Gold Iinish dial -black lettering. Timer sets from rear. On-off-auto switch in front. Size $342^{\prime \prime}$ square. $11 / 4^{\prime \prime}$ deep. Set shaft extends $542^{\prime \prime}$ to rear. SPST switch, rated 15 amps al 115 volts. For $110-120 \mathrm{~V}, 60 \mathrm{cy}$. AC only. Shpg. wt., 2 los. MS. 793

Net 3.95

## TELECHRON TIMER SWITCH



Automatically turns on radios-TV sets-tape recorders "ham" rigs-electrical appliances-at any preset time in a 12 hour period. "Sleep.Switch" allows up to 60 minutes of continuous run prior to "shut-off." Built in alarm for added convenience of "signaling." As easy to set as any electric clock. All controls on front. On-off. auto, 0 to 60 sleep switch, alarm set and time set. Gold finish dial-black lettering. $31 / 2$ square bezel. $17 /$ " $^{\circ}$ deep. SPST rated 15 amps at 115 volts, 1650 watt load capacity. For $110-120 \mathrm{~V} .60 \mathrm{cy}$. AC only. Shpg. wt., 2 lbs.
MS.794
Net 5.40


Registers 0 to 9999. Highly polished chromium plated brass case. Attached finger-ring and compact shape for comfort in holding. Plunger operated for smooth, easy action. Large, clearly read numerals. Knurled reset knob sets register to zero in one turn. Precision accuracy for lab, school and industrial users. Invaluable for inventory control - gate cheching - iraffic, etc. Small Size. tory controi - gate cheching approximately $1 \mathrm{Kon}^{x} 1 \mathrm{H}^{\mu \prime}$. permits concealed operation. Shpg. wt., $1 / 2 \mathrm{lb}$. Imported
F. 48

LITTLE "JEWEL" REMOTE CONTROL RELAY


- The Mienty Mite of the $R / \bar{C}$ field
- Weighs less than 1/2 oz.!
- Size: 3/4" H. 17/32" W. 1.1/16"

A natural for remote control recelvers, It is highly sensitive, and built to withstand severe crashes. The smallest commercial job avatiable, it weighs less than $1 / 2 \mathrm{oz}$. Factory adjusted to puli in at 1.4 MA drop out at 1.2 MA D.C. Single pole, double throw-Used in outstanding R/C receivers. 5,000 ohm coil. Imported

F-260-Relay
Net 1.95


## - Turns Appliances. On Or Off

## - Never Needs Te Be Reset

## - Handles 1650 Watts

## - Operates From 30 Minute Te 23 Hr. Cycle

Makes practically everything electrical completely automatic. Witl handle load up to 1650 watts. Turns radio on and off - does not have to be reset each night. Defrosts refrigerator - turns lights on and off - controls roaster, electric blanket, washing machine, coffee makers, vaporizers, etc. 30 min. minimum on time makers, vaporizers, etc. 30 min. minimum on time -
23 hours maximum. As easy to set as an electric clock. Easy to read 24 hour "day and night" dial. Operates day after day without attention. Can be controlled manually without automatic reset. For 110 volt 60 cycle AC only. instructions included. Easlly built into any case. $31 / 2 x$ $41 / 4 \times 2 \frac{1}{2}{ }^{\prime 2}$ D. Shpg. wt., 2 lbs.
MS- 10
Net 5.25

## 24-HOUR TELECHRON TIMER SWITCH



- Complete 24-Hour Movement - Turns on Appliance at Pre-Set Time - Famous GE Telechron Mechanism Accurate Time Control


Automatically turns on any radio. IV or similar electrical appliance at a preset time up to 24 HOURS. Genuine GE Telechron movement is safe and dependable. Gold linish dial with black letleting. On-Off. Auln switch in iront: timer sets from rear. Overall size $312^{2}$ square: 1*4: deep; set shaft extends $5 \frac{1}{2}$ " to rear. SPST switch; 15 ámps © 115 V . For $110-120$ volts, 60 cycle, AC.
MS. 918 Shpg wt, 2 lbs. Net 4.39


## TIMING MOTOR

## Self-starting synchronous motor

 with lifetime lubrication. Geared to 4 clockwise revolutions ed to 4 . Will retain constant per hour. Will retain constant speed even under the volage varlations of $25 \%$ Torque load 5 oz. In. maximum. Shaft $1 \log ^{\prime \prime} L x$ Kı," dia. For $^{\text {cycle AC. Shpg. wt., } 9 \text { oz. }} \mathrm{l}$MS. 932 Intermatic W. 160
Net 2.25

# POTTER AND BRUMFIELD RELAYS 



## POTTER AND BRUMFIELD RELAYS

## PLATE CIRCUIT AND SENSITIVE RELAYS

KCP SERHES. Plate circult relays, enclosed in polystyrene cases. Sensitivity 125 mw (single pole). Silver contacts rated at 2 amps. Mig: std. octal plugin type, 8 pin for all except KCP 14 's 11 pins. Size, $2 x l^{3} x^{\prime} x^{113} z^{n}$. Shpg. wt., oz. Specify coll.

TYPE KCPS SPDT


L85. Low cost, fast-acting units Breakdown 500 V . rms min SPDI silver ontacts rated at 5 amps. Mtg.: Two Ko $_{0}$ dia. holes, an $2^{2 / 1 z^{\prime \prime}}$ centers. Size $13 / 6 x$
$11 / 4 \times 2^{21 / 2 / 2}$. For DC only. Shpg. wt., 5 ox.
$\qquad$ Coil 9 Ma
6.3 Ma

Net Each 1-24 $25.4950-99100-999$ $\begin{array}{lllll}4.5 \mathrm{Ma} & 2.85 & 2.71 & 2.57 & 2.86\end{array}$ LM SERIES. High quality plate circuit elays with sensitivity of 100 mw . for single pole. (SP) 200 mv for DP. Adjust able pull.in. Silver contacts rated at 5 SPDT: LMIl's DPDT Mtg 2.No 6.32 tapped holes on 11 K :" centers. Size 2\% $\times 21 / 4 \times 2 \%^{\prime \prime}$. Shpg ${ }^{1} \%_{0}$ center

## TYPE LMS SPDT

| Stoch NO. | Coil Coil | Coil |  | Net Each |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Ohms | Ma. | 1-24 | 25-49 | 50.99 | 100-999 |
| 3 RY-147 | 2500 | 6.3 | 3.90 | 3.70 | 3.50 | 2.73 |
| 3 RY-148 | 5000 | 4.5 | 4.10 | 3.90 | 3.69 | 2.87 |
| 3 RY-149 | 10000 | 3.2 | 4.40 | 4.18 | 3.96 | 3.08 |
|  |  | PE | M11 | PDT |  |  |
| $3 \mathrm{RY}-150$ | 2500 | 9.0 | 5.55 | 5.27 | 5.00 | 3.89 |
| $3 \mathrm{RY}-151$ | 5000 | 6.3 | 5.75 | 5.46 | 5.18 | 4.02 |
| 3 RY-152 | 10000 | 4.5 | 6.30 | 5.99 | 5.67 | 4.41 |



Type 350070 . Clear Case with Dctal Type as used in KRP Relays Ideal for plug as used in KRP Reiays. Ideal for mounting rectiflers, resistors and smal
components. Complete with 4 screws. components. C
Shpg. wt., 4 oz.
RY-262
Net .35
Type 350072. Same as above but with 11 Pin plug.
11 RY- 263
Net .70

MS SERIES - Subminiature relephone type relay for aircraft, computer, and other applications requiring good shock and vibration characteristics. Sitver contacts rated at 2 amps. All are open except * are enclosed. Mig. 4 tapped $3-48$ holes on $3 / x^{3 / 8}{ }^{\prime \prime}$ centers. Size: 1Ksxlyanko". Shpg. wt., 6 oz
TYPE MG11D DPDT

| Stoch No. | Coif Volts | $\begin{aligned} & 1 \cdot 24 \\ & \text { each } \end{aligned}$ | $\begin{array}{r} 25.49 \\ \text { each } \end{array}$ | $\begin{gathered} 50.99 \\ \text { each } \\ \hline \end{gathered}$ | $\begin{aligned} & 100-399 \\ & \text { each } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 3 RY-245 | 6VDC | 5.20 | 4.94 | 4.68 | 3.64 |
| 3 RY-246 | 12VDC | 5.20 | 4.94 | 4.68 | 3.64 |
| 3 RY-247 | 24VDC | 5.20 | 4.94 | 4.68 | 3.64 |
| 3 RY-248 | 110VDC | 5.65 | 5.37 | 5.08 | 3.96 |
| TVPE MG17D 4PDT |  |  |  |  |  |
| 3RY-249 | 6VDC | 6.95 | 6.60 | 6.26 | 4.87 |
| 3RY-250 | 12VDC | 6.95 | 6.60 | 6.26 | 4.87 |
| 3RY-251 | 24VDC | 6.95 | 6.60 | 6.26 | 4.87 |
| 3RY-252 | 110VDC | 7.40 | 7.03 | 6.65 | 5.18 |
| TYPE MG170P*IPDT |  |  |  |  |  |
| 3 RY 253 | 6VDC | 11.55 | 10.97 | 110.40 | 8.09 |
| 3 RY-254 | 12VOC | 11.55 | 10.97 | 10.40 | 8.09 |
| 3 RY-255 | 24VOC | 11.55 | 10.97 | 10.40 | 8.09 |
| 3 RY-256 | 110VDC | 12.15 | 11.54 | 10.94 | 8.50 |



PW SERIES. Precision Hight weight hermetically sealed DC retays for aircratt and missile use. Sensitivity:: 40 mw for current actuated units, 180 mw for voltage actuated units. Withstands 10 G vibration to 500 cps. SPDT silver contacts rated at 2 amps. Mig.: std. 7 pin miniature tube socket. Size $3 / 4$ dia. $x$ 11K"". *Plate circuit type. Av. shpg. wi., 4


KRP SERIES-Versatile multicontact relays. Enciosed in cellulose acetate dust cover. Standard octal-type piug ( 8 pin) for KRP5's and KRPII's, 11 pin for KRP14's. Silver contacts rated at 10



TYPE KRPIAAG AND KRPIADG 3PDT

| 3 RY-99 | 6VAC | 7.80 | 7.41 | 7.02 | 5.46 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 3 RY-100 | 24VAC | 7.80 | 7.41 | 7.02 | 5.46 |
| 3 RY-101 | $115 V A C$ | 7.80 | 7.41 | 7.02 | 5.46 |
| $3 R Y-102$ | 6VDC | 7.75 | 7.35 | 6.98 | 5.43 |
| $3 R Y-103$ | $12 V D C$ | 7.75 | 7.36 | 6.98 | 5.43 |
| $3 R Y-104$ | $24 V D C$ | 7.75 | 7.36 | 6.98 | 5.43 |

Amphenol $146-103$ Sockets. For KRP relays except KRP14's. Barrier type octal sockets. Meets N.E.M.A. and UL requirements. Mtg. Centers. 114". Shpg, wt., 50 oz . CM-226

Net 1.44


SM SERIES. Midget, sensitive, hermetically sealed relays, for computers, model airplanes and similar uses. SPDT silver-rhodium contacts rated at $1 / 4 \mathrm{amp}$. non-inductive. Extremely long life. Mtg. std. 7-pin miniature tube socket. Size 1/4 dia. 1 $11 / \mathrm{K}_{0}$. "Current-actuated, plate circuit type. Av, shpg. wt., 3 oz .

TYPE SMSDS


| 3RY-162 | 6VDC | 80 | 6.25 | 5.94 | 5.62 | 4.38 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3 RY-163 | $24 V D C$ | 900 | 6.25 | 5.94 | 5.62 | 4.38 |

TYPE SMSLS*

| 3 RY-164 | 3.9 MA | 5000 | 6.55 | 6.22 | 5.89 | 4.59 |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| 3 RY-165 | 2.7 MA | 10,000 | $\mathbf{7 . 0 0}$ | 6.65 | 6.30 | 4.90 |



TYPE $\$ 350$. Ultra sensitive precision ma relays ideal for all low energy circuits such as instruments and bridge balancing. Dual series coils with balanced armature. Sensitivily, 10 mw . Coll ohms, 10,000 . Sllver contacts. Mtg. 2-No. 6-32 tapped holes on 8 /"' centers Size 1'Koxlyoly". Shpe. wt 802 3 月Y-166,1-24 ea. ...12.60 25-49, ea. 11.97


## HOLD DDWN SPRING

Type 9-KA-15. Durable stainless steel spring fits all KCP or KRP plug.in relays. Insures secure mounting in any position.

## TELEPHONE TYPE RELAYS

MH SERIES-Miniature type. Silver con tacts rated at 5 amps except are 3 amps. ALL 4POT except DPDT*. †Sealed. Mtg.: MH11L's No. 6-32 tapped stud plus locating boss; all other models, 4-No. 3-48 holes on $7 / x^{7} 7^{\prime \prime}$ centers except sealed models 3 No. 6-32 NC2 threaded studs on $11 / /^{-1}$ to $12^{10}$ centers
 (sealed). Shpg. wt., 5 oz. (open), 6 oz (seated). MH11 series 4.5 MA

## TYPE MH17D

| $\begin{aligned} & \text { Stock } \\ & \text { No } \end{aligned}$ | Coil Volts | $\begin{aligned} & 1.24 \\ & \text { each } \end{aligned}$ | 25.49 each | $\begin{aligned} & 50.99 \\ & \text { each } \end{aligned}$ | $\begin{gathered} 100-999 \\ \text { each } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $3 R Y-237$ | 6VDC | 5.45 | 5.18 | 4.91 | 3.82 |
| 3RY-238 | 24VDC | 5.45 | 5.18 | 4.97 | 3.82 |

## TYPE MH17AMR + AND MH17DM

3

Type MB30. Miniature DC contactors. Silver contacts rated at 60 amps ; solder terminals. All are SPST-NO-DE. Mtg: 4-No. 3.48 holes on $3 / x^{3} 4^{-1}$ centers.


| Stock No. | Volts | $\begin{aligned} & 1.24 \\ & \text { each } \end{aligned}$ | $\begin{aligned} & 25-49 \\ & \text { each } \\ & \hline \end{aligned}$ | $\begin{aligned} & 50.99 \\ & \text { each } \\ & \hline \end{aligned}$ | $\begin{gathered} 100-999 \\ \text { each } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 3RY-83 | 6VDC | 5.40 | 5.13 | 4.86 | 3.78 |
| 3RY-84 | 12VDC | 5.50 | 5.23 | 4.95 | 3.85 |
| 3 RY-85 | 24VDC | 5.50 | 5.23 | 4.95 | 3.85 |
| 3RY-86 | 110VDC | 5.90 | 5.60 | 5.31 | 4.13 |

MC SERIES. Built with ceramic contact spaces for RF switching for min. losses at high frequencies. Intercontact capacitance 1.5 mmid . max. SPDT palia acitance 1.5 mmid. max. SPor paliadium contacts rated 1 amp. Solder lus
terminals. Mounts on $3 / 8 x^{3} / \mathrm{m}^{2}$ centers. Shpg. wt., 402 oz .

| Stock <br> No. | Coil <br> Volts | $1-24$ <br> each | $25-49$ <br> each | 50.99 <br> each | 100.999 <br> each |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 3 RY-267 | 115VAC | 5.04 | 4.75 | 4.50 | 3.50 |
| 3 RY-269 | 12VDC | 4.40 | 4.18 | 3.96 | 3.08 |
| 3 RY-270 | $24 V D C$ | 4.40 | 4.18 | 3.96 | 3.08 |

## POTTER\&BRUMFIELDRELAYS Pano b Special Purpose relars

## LATCHING TYPE RELAYS

| PC SERIES Latching Relays, Single Coll impulse latching relays for on-off and current reversal switching on atternate pulses. Operates on 30 millisecond pulses to the coil. Gold-flashed sifver cadmium oxide contacts rated at 7.5 amps. Mig: $2 . \%_{2}{ }^{\prime \prime}$ dia. holes on $25{ }^{2}{ }^{\prime \prime}$ centers. Size $25 / 6 \times 21 / 10 \times 23 / z^{\prime \prime}$ Shpg. Wt., 10 oz. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Stock No. | TYPE Coil volts | A AN | PCi1d | OPDT |  |
|  |  | $\begin{aligned} & 1.24 \\ & \text { Each } \end{aligned}$ | $\begin{aligned} & 25.49 \\ & \text { Each } \end{aligned}$ | $\begin{aligned} & 50.99 \\ & \text { Each } \end{aligned}$ | $\begin{gathered} 100.999 \\ \text { Each } \end{gathered}$ |
|  | 6VAC 5.50 <br> 24VAC 5.50 <br> 115VAC 5.50 <br> 24VDC 5.35 <br> TYPE PCC17A ANO  |  | 5.23 | 4.95 | 3.85 |
|  |  |  | $\begin{aligned} & 5.23 \\ & 5.23 \end{aligned}$ | 4.95 | 3.85 |
|  |  |  | 4.9 |  |
|  |  |  | 5.06 |  |
|  |  |  | PC170 4PDT |  |
| He. | Coil | 1.24 Each |  | 25-49 | E0.98 | 100.999 Each |
| 3RY-205 | 24VAC | 7.60 | . 2 | 6.84 | 5.32 |
| 3RY-206 | 115 VAC | . 60 | 7.22 | 6.84 | 5.32 |
| 3RY-207 | 24VDC | 7.45 | 7.08 | 6.71 | 5.22 |
| RATCHET IMPULSE RELAYS <br> AP Series. Rellable compact unit requiring on-off or reversing action on alternate operations. Positive ratchet |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| operation at all speeds on impulses as short as 60 ms . Intermittent operation only. Mtg: three \$/2" dia. Holes on $33 / \mathbf{a}^{\prime \prime} \times 7 / 8^{\prime \prime}$ triangular centers. Contacts $K_{6}{ }^{\prime \prime}$ dia. sliver. Rated at 5 amps . Size: $33 / 4 \times 25 / 1{ }^{2} \times$ 2 $1 /{ }^{\prime \prime}$. Shpg. wt., $90 z$. |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | Type AP11A and AP110 DPDT |  |  |  |  |
| Stock No. | Coil volts | $1-24$ | $25-49$ | $50-99$ | $999$ |
| 3RY-601 | 6 VAC | 8.70 | 8.27 | 7.83 | 6.09 |
| 3RY-602 | 12 VAC | 8.70 | 8.27 | 7.83 | 6.09 |
| 3RY-603 | 24 VAC | 8.70 | 8.27 | 7.83 | 6.09 |
| 3RY-604 | 115 VAC | 8.70 | 8.27 | 7.83 | 6.09 |
| 3RY-605 | 230 VAC | 9.15 | 8.69 | 8.24 | 6.41 |
| 3RY-606 | 6 VDC | 8.70 | 8.27 | 7.83 | 6.09 |
| 3RY-607 | 24 VDC | 8.70 | 8.27 | 7.83 | 6.09 |
| 3RY-608 | 110 VDC | 9.35 | 8.88 | 8.41 | 6.55 |
| Type AP17A and AP170 4PDT |  |  |  |  |  |
| 3RY-610 | 24.115 VAC | 10.50 | 9.989.98 | 9.45 | 7.35 |
| 3RY-611 |  | 10.50 |  | 9.459.45 | 7.35 |
| 3RY-614 | 12 VDC | 10.50 | 9.98 |  | 7.357.357.81 |
| 3RY-615 | 24 VDC | 10.50 | $\begin{array}{r} 9.98 \\ 10.60 \end{array}$ | $\begin{array}{r} 9.47 \\ 9.45 \\ 10.04 \end{array}$ |  |
| 3RY-616 | 110 VDC | 11.15 |  |  |  |

## MERCURY-WETTED CONTACT RELAYS



Have rare long life, high speed and exceptional dependability. Hermetically sealed arrangement of contacts, reed armature and small reservoir of mercury does away with contact bounce, chatter, pits and welds Positive make or break everytime. Contacts
rated 500 volts and 5 amps. Operating time as short as 3 milliseconds for SP (JM1 4 milliseconds for DP (UM2) and 5 millis conds for 4 P (JM4) relays. Contact re sistance 25 to 50 milliohms, Coil: 2 to 25000 ohms. Temperatures: - $39^{\circ} \mathrm{C}$ (mercury freezes). $107^{\circ} \mathrm{C}$ (potting softens). All have octal bases except. have 14 pin base and + have hook solder base. In steel case. Size SP (JMi) $1.105^{\prime \prime}$ dia $x 2.636^{\prime \prime} \mathrm{H}_{\text {; }}$ DP
 $*=$ Oual Coil; $\dagger \dagger$ Pin 6 connected to base.

## Coil Characteristics

| Stock No. | Ohms PE JM | operate | Max $\left(35^{\circ} \mathrm{C}\right)$ SINGLE | $\begin{aligned} & \text { let Each } \\ & \text { } 1.9 \\ & \text { CDIL } \end{aligned}$ | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 3RY-6181 | 130 | 38.8 | 16.1 | 14.05 |  |
| 3RY-619 | 500 | 20.1 | 31.6 | 14.05 | 0. |
| 3ar-620 | 700 | 20.0 | 37.4 | 14.05 | 10.96 |
| 3RY-621† | 700 | 20.0 | 37.4 | 14.05 | 10.96 |
| RY-622 | 2500 | 10.1 | 70.7 | 14.30 | 11.15 |
| Y-623 | 4000 | 8.1 | 89.5 | 8.15 | 8.15 |
| Y-624 | 7000 | 6.0 | 117.0 | 14.80 | 1.54 |
| RY-625 | 11000 | 5.0 | 148.0 | 14.80 | 11.54 |
| 3RY-626 | 25000 | 3.6 | 224.0 | 14.80 | 11.54 |
| 3RY-627** | 700 | 32.0 | 37.4 | 16.20 | 12.64 |
|  | $\begin{aligned} & 3300 \\ & \text { E JM2 } \end{aligned}$ | $12.3$ | $810$ |  |  |
| 3RY-628 | 700 | 30.5 | 45.8 | 22.80 |  |
| 3RY-629 | 5000 | 11.3 | 122.0 | 22.80 | 17.78 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
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| MICRDMINIATURE HIGH G RELAY SL SERIES Dual coll micro-miniā̄ure magnetic latching relay for low power, high shock vibration uses. 100 g shock, 30 g vibration to 2000 cps. Temp. range $-65^{\circ}$ to $+125^{\circ}$ C. Colls may be connected in series for polar operation. DPDT goldliashed palladium contacts rated 2 amos SLIID for plug-in applications. SLIIDA has shoulder flanges with two $104^{\prime \prime} \mathrm{x} .136^{\prime \prime}$ holes on $1.062^{\prime \prime}$ center SLIIDB has welded bracket with four $.125^{\prime \prime}$ dia. hotes on $1.062^{\prime \prime} \times 281^{\prime \prime}$ centers. SLIIDC has two No. 4.40 NC2A threaded studs on $.488^{\prime \prime} x .220^{\prime \prime}$ diagonal centers: SLIIDD has plain case with hook end solder terminals: SLGIID have plug-in terminals on $.2^{\prime \prime}$ grid. Size: . $890^{\prime \prime} \mathrm{x} .795^{\prime \prime} \mathrm{x}$ .359". Shpg. wt. 3 oz.



## STEPPING SWITCH

Type SA-1N-12A. Twelve position step ping relay with printed circult strips to switch currents up to 250 ma Armature-driven pawl operates
ratchet wheel to drive the movable contacts in steps


| Stock No. | Coil <br> Volts | $1-24$ <br> Each | $25-49$ <br> Each | $50-99$ <br> Each | $100-$ <br> Eash <br> Each |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 3RY-617 | 115 VAC | 6.60 | 6.27 | 5.94 | 4.62 |

## MS MOTOR STARTING RELAYS

For capacitor start, induction-run motors. Arm gap var. to pulli-in. AC coils, 60; 5.9 VA oper. power. Silver contacts; 2 AY are SPST-NC rated $3 / 2$ HP: $4 A Y$ are SPST-NC.DB rated 3 HP, Mtg: 2 No. $\$_{32}$ dia. holes on 1 Kis" centers. $210 \times 213 / 3 \times 2334.50 z$.

| $\begin{aligned} & \text { Stock } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { P\&\& } \\ & \mathrm{MO} . \end{aligned}$ | $\begin{aligned} & \text { Coil } \\ & \text { Yopts } \end{aligned}$ | $\begin{gathered} \text { et Eacl } \\ 1.24 \end{gathered}$ | $\begin{aligned} & 25 . \\ & 49 \end{aligned}$ |  | $\begin{array}{r}100 \\ \hline 999\end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3RY-634 | MS2AY | 115 | 3.55 | 3.38 | 3.20 | 48 |
| 3RY-635 | MS2AY | 230 | 3.95 | 3.75 | 3.56 | 2.76 |
| 3RY-636 | MSAAY | 115 | 4.15 | 3.94 | 3.74 | 2.90 |
| 3RY-637 | MSAAY | 230 | 4.55 | 4.32 | 4.10 | 8 |
| PM POWER RELAYS - HEAVY DUTY 4PDT <br> Type PM17AY. Silver-cad contacts 25 amps, $115 \mathrm{~V}: 25 \mathrm{amps}$ at $230 \mathrm{~V}, 50 / 60$ cycle res. AC. 1 HP per arm 120 V 240 V AC, 1 phase. $221 / 32 \times 321 / 4 \times 24 / 4 A^{\prime \prime}$. Shpg. wt., 1 lb . |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| 3RY-638 |  | 12.35 | 11.73 |  | 11.11 | 8.65 |
| 3RY-639 | 12 | 12.35 | 11.73 |  | 11.11 | 8.65 |
| 3RY-640 | 24 | 12.35 | 11.73 |  | 11.11 | 8.65 |
| 3RY-641 | 115 | 12.35 | 11.73 |  | 11.11 | 8.65 |
| 3RY-642 | 230 | 12.75 | 12.11 |  | 11.47 |  |
| OUST COVER FOR PM RELAYS <br>  <br> 3RY-643 P \& 8 No. 350227 <br> Net 300 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |


|  | LS SERIES RELAYS <br> Short springs and light arm for fast action. St. St1. bearing for 100 million oper. Tinned, solder term. Mtg: 2 No. 632 tapped holes on $3 / 4^{\prime \prime}$ centers. Con- <br>  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Stock No. | Type | Action | Yolts | Net Each 1.20 | $21 .$ $498$ |
| 3RY-644 | LS170 | 4 PDT | 24 | 5.60 | 4.74 |
| 3RY-645 | LS170 | 4PDT | 48 | 5.75 | 4.86 |
| 3nY-646 | LS170 | 4PDT | 110 | 6.00 | 5.08 |
| 3RY-647 | LS230 | 6PDT | 24 | 6.80 | 5.75 |
| 3RY-648 | LS230 | 6POT | 48 | 6.95 | 5.88 |
| 3RY-649 | LS230 | 6PDT | 110 | 7.20 | 6.09 |

KM SERIES. Sub-Miniature Relays. Tiny 3 -pole relays weighing only $7 / 8$ oz For multiple switching. Solder lus termi. nals. Mtg: no. 2.56 tapped core and locating half-punch. Silver contacts, 2 amps. Size $8 / 2 \times 356 \times 11 / 9^{\prime \prime}$. Shpg. Wt. 1 OZ. TYPE KMSD SPDT



TYPE KTIIA ANO KTIID. Antenna Switching Relay. For switching 300 ohm lines. Glass base for minimum RF loss. DPDT silver contacts rated at 5 amps. Mtg: 1 -no. 6.32 stud. Size: $13_{2} x$ $15 / 8 \times 1$ K.". Shpg. wt., 2 o1.

| Stock $\quad$ Co |
| :--- |
| No. |


| 3RY-194 | 6VA |
| ---: | ---: |
| 3RY-195 | 115 VA |
| 3RY-196 | 6VD |
| 3RY-197 | 12VD |



## GUARDIAN SERIES 200 (UNIVERSAL)

Assorted colls, contact assem blies and contact parts sets for assembling over 70 differ ent relays. Contact assemblies come either in standard or midget sizes, both sizes can be used with standard colls. Contacts are rated at 115 volts, 60 cvele AC, with non-inductive load. Use parts sets for adding additional poles to standard contacts. Size standard relay $27 / 8 \times 11 / 6 \times 13 / 4^{\prime \prime}$, midget relay $2 K / 4 \times 11 / 6$ $11 / 2^{\prime \prime \prime}$. Av. shpg. wt., 4 oz .


## INDUSTRIAL RELAYS AND MOTORS

## BARBER-COLMAN MICROPOSITIONERS

## POLARIZED D.C RELAYS

TYPE AYLZ. Polarized d-c ultra-sensitive relays featuring high speed, long life, and close differential. Ideal for use wherever power supply is limited. For use as null detectors or differential relays in many fielos. Will operate directly from silicon or selenium photocells. Responds up to 250 cDs. Fine silver contacts are SPDT with floating neutral position. Polarity of signal deter mines which contact closes. Resists 10 G vibration. One millisecond operation. With basic sensitivity of 50 mic

SINGLE COIL (1.3 AMPERE-TURNS)

| Stock | Mfr. | Coll Ohms | Ma. | velts | ${ }^{\mathbf{w}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 3 ¢Y.500 | $7300 \cdot 100$ | 13 | 1.73 | . 023 | 39.1 |
| 3 PY 501 | 7301-100 | 54 | . 87 | . 047 | 40.6 |
| 3 RY-502 | 7302.100 | 88 | . 68 | . 062 | 41.2 |
| 3 RY. 503 | 7303-100 | 140 | . 54 | . 076 | 41.1 |
| 3 RY-504 | 7304-100 | 215 | . 46 | . 100 | 46.3 |
| 3 RY. 505 | - 7304-102 | 215 | 46 | . 100 | 46.3 |
| 3 RY-506 | 7305-100 | 350 | . 35 | . 123 | 43.2 |
| 3 RY-507 | 7306.100 | 560 | . 28 | . 155 | 42.8 |
| 3 RY-509 | 7307.100 | 900 | . 22 | . 198 | 43.7 |
| 3 RY-509 | 7308-100 | 1400 | . 17 | . 243 | 42.1 |
| 3 RY. 510 | 7309.100 | 2300 | . 14 | . 325 | 45.9 |
| 3 RY 511 | $7310 \cdot 100$ | 3550 | . 11 | . 401 | 45.3 |
| 3 RY-512 | 7311.100 | 5650 | . 093 | . 524 | 48.7 |
| 3 RY. 513 | 7312-100 | 7950 | . 076 | 604 | 45.9 | Any of above


| 3 RY. 514 | 7325.100 | 13 | 2.67 | . 035 | 92.4 | 3 RY .531 | 7375-100 | 5 | 6.67 | . 033 | 22 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 AY-515 | 7329-100 | 215 | . 71 | . 154 | 109.6 | 3 RY-532 | 7379.100 | 95 | 1.54 | . 146 | 224.7 |
| 3 RY-516 | 7331.100 | 560 | 43 | . 238 | 101.2 | 3 ¢Y. 533 | 7381-100 | 240 | 1.00 | . 240 | 240.0 |
| 3 AY.517 | 7334.100 | 2300 | 22 | . 499. | 108.3 | 3 RY-534 | 7383-100 | 940 | 53 | . 494 | 260.0 |
| 3 AY-518 | 7337-100 | 7950 | 12 | . 930 | 108.8 | 3 RY-535 | 7386-100 | 3800 | 26 | 1.00 | 263.0 |
| Any of |  | , 1 | 18 |  | 21.00 | Any of |  | ots | $19$ | sin | 22.0 |

## BARBER-COLMAN SHADED-POLE AC MOTORS <br>  <br> Any of above <br> \section*{Any of above ................Lots 10, ea. 11.90 singly, 21.00} <br>  <br> UNIDIRECTIONAL D

ro-watts, and sllver contacts handling 100 watt resistive contact load, this relay acts as a high gain $2,000,000$ to 1 amplifier, Eliminates vacuum tube, tran sistor, and magnetic amplifiers in many applications Normal tolerance on pull-in current at $75^{\circ} \mathrm{F}$. is plus or minus $25 \%$; from $-65^{\circ}$ to $+165^{\circ}$., plus or minus $60 \%$. Equipped with octal plug-in base. Weight, 601 size, $1 K_{0} \times 31 / \mathrm{m} \times 17 / \mathrm{m}^{\prime \prime}$. Shpg, wt., 10 oz . Coll ohms $\pm 10 \%$ Indicates tungsten conlacts

## DOUBLE COIL (1.3 AMPERE-TURNS)

| Stock Ne. | MIr. <br> No. | Coil Ohms | DHF. ma. | Diff. <br> velts | Diff. $K \underline{w}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 3¢Y-519 | 7350-100 | 5 | 4.33 | . 022 | 93.9 |
| 3 RY 520 | 7351.100 | 9 | 3.25 | . 029 | 95.1 |
| 3 RY .521 | 7352-100 | 39 | 1.53 | . 060 | 91.2 |
| 3 8Y. 522 | 7353-100 | 61 | 1.18 | . 072 | 85.2 |
| 3RY-523 | 7354-100 | 95 | 1.00 | . 095 | 95.0 |
| 3 RY-524 | 7355.100 | 150 | . 81 | . 122 | 99.0 |
| 3 RY-525 | 7356.100 | 240 | . 65 | . 156 | 101.4 |
| 3 MY. 526 | 7357.100 | 365 | . 52 | . 190 | 98.7 |
| 3 AY-527 | 7358.100 | 940 | . 34 | . 322 | 110.0 |
| 3 AY .528 | 7359-100 | 1450 | . 28 | 401 | 110.9 |
| 3 AY-529 | 7360.100 | 2300 | . 22 | . 507 | 111.6 |
| 3 日r-530 | 7361.100 | 3800 | . 17 | . 650 | 111.1 |
| Any of |  | 10 | 23. | sing | 26.0 |

DOUBLE COHL (2 AMPERE-TURNS)

## 3 RY. 531 7375-100

$\begin{array}{ll}\text { 3 RY-532 } & 7379.100 \\ \text { 3 RY-533 } & 7381-100 \\ \text { 3RY.534 } & 7383-100 \\ \text { 3RY.535 } & 7386-100\end{array}$

Shaded-pole a-c induction motors for driving cooling or shaft. Porous bronze alignable bearings used on all fans, appliances, displays, vending machines, pumps, movie projectors. Simple, dependable constructionno brushes, contacts, capacitors. All motors rated for unidirectional motors. 115 volt. 60 cycle field coils with class $A$ insulation and molded bakelite bobbins. Long life lubrication. Mounts with two \#10-32 tapped
continuous duty when operated at room ambients bestuds on rear of motor. Shpg. wt., $11 / 2 \mathrm{lbs}$. low $100^{\circ} \mathrm{F}$.; CW rotation viewed facing the drive hub
studs on

| Stock No. | Mir's. Type | Torque It. in. |  | Max. HP | Input Amps | Approximate Dimensions In. | $\begin{aligned} & \text { Net Each } \\ & 1.9 \quad 10-49 \\ & \hline \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$5.125 | AYAA 707.6 | . 025 | 1900 | . 0007 | . 13 | 21/39 ${ }^{21 / 4 \times 17 / 9}$ | 3.58 | 2.68 |
| SS. 126 | DYAB 569-116 | . 045 | 2400 | . 0017 | 15 | $236 \times 21 / 38 \times 121 / 2$ | 3.86 | 2.89 |
| \$5.127 | DYAF 761.1 | 10 | 2800 | . 0045 | . 27 | $2^{21} \times 2 \times 23 / 4 \times 1^{121 / 2}$ | 4.05 | 3.04 |
| \$5.128 | KYAF 764-1 | 16 | 2900 | . 007 | . 33 | $2^{21} / 4 \times 23 / 4 \times 21 / 92$ | 5.54 | 4.15 |
| 55-179 | OYAF 767.1 | 20 | 2900 | . 009 | . 39 | $235 \times 23 / 4 \times 21 / 6$ | 8.40 | 6.30 |

Unidirectional Type MZ gearheads designed for maxi- ${ }_{60}$ g cycle field coils. CW rotation. ©Drive coupling on mum of $30 \mathrm{lb} .-\mathrm{in}$., independently supported load. Type HZ gear motors is a hollow sleeve ( $\mathrm{K} / \mathrm{O}$ O.D., K. I.D.) PZ is enclosed gearnead for loads up to $100 \mathrm{it} . \mathrm{in}$. drilled for $\boldsymbol{H}_{2}{ }^{\prime \prime}$ cotter pin. Type PZ shaft dia, . $248^{\prime \prime}$ All gear trains use accurately hobbed gears. 115 volt, Shpg. wt., $21 / 4 \mathrm{lbs}$. except PZ is $41 / 2 \mathrm{lbs}$.


Fans listed below may de used witn above motors for cooling electronic tubes, projection lamps, and in deodorizers, heaters requiring air delivery against a low static head. Aluminum blades and zinc plated steet low static head. Aluminum blades and zinc plated steel
hubs. Blows air forward when mounted with hub hubs. Blows air forward when mounted with hub
fowards the motor, *Free air dellivery measured 12 inches from front of fan. Fan dia.: Type $303=3{ }^{\prime \prime}$; $403=4^{\prime \prime \prime} ; 502 \cdot 1=5^{\prime \prime}$. Hub dia.: $303=1 / 8^{\prime \prime} ; 403=1 / "^{\prime \prime}$
 Stoch Mir's. CFM* Mor Net Each Stock Mfr's. Torque Speed Max. input Net Each




## BARBER-COLMAN SYNCHRONOU5 MOTORS (Fig.F)

For chart drives, scoreboard imers, microtilm cameras, etc. Develope many times the power of ordinary clock and timing motors. Synchronize rapidly; high pull-out torque provides reserve power under fluctuating load conditions. Pull-in torque 08 lb -in. based on spring-coupled low inertia load not exceeding 005 lb -in. ${ }^{2}$ Supplied with 2 inch dia, cooling fan on rear of motor for continuous duty operation, 115 -volt, 60 -cycle field coil. CW rotation. $27 /{ }^{\prime} \times 2^{1} / 9 \times 236^{\prime \prime}$. Shaft dia, $125^{\prime \prime}$. Full load characteristics-Torque: 15 lb . in .; Speed: 3600 RPM; Max, H.P.: 0086 ; Input: .83 mps , Shpg. wt., 1 lb .

Net each 1-9. 7.56; 10-49, 5.68

## PHOTO ELECTRIC EQUPMEN - BURGLAR ALARMS - NEW LAFAYETTE PHOTO-ELECTRONIC RELAY SYSTEM

# GARAGE DOOR OPENERS <br> WORNER ELECTRONIC RECEPTIONIST 

Includes Photo Cell Receiver Plus Electronically Operated Relay Plus Exciter Lamp

## Efficient 2-Unit. 3-Element Design



- Complete-Ready to Operate-NOT A. KIT
- Operates Belis, Buzzers and Counters

- Removable Infra-Red Filter for "Invisible-Light" Operation he Lafayette Photo-Electronic Relay is your key to an inexpensive indoor warning or counting system. Consisting of a rugged exciter and relay unit and operating on $110.120 \mathrm{~V} A C$, it can be connected to signal persons entering a room, counting people or merchandise or function as an effective alarm system to warn of intruders. Effective up to 23 feet (without filter, 15 to 18 feet with Hiter). Recessed back shields red pilot light and houses on off switch, intermittent-continuous alarm switch. a.c. receptacle and variable sensitivity control. Metal cases have convenient mounting feet. Size: $41 / 4 \mathrm{Hx} 3 \mathrm{~W} \times 41 / 2^{\prime \prime} \mathrm{D}$. Imported.
PC-45 Shpg. wt., 6 Ibs.
ACCESSORIES FOR ABOVE
EL. 85 Electric Bell, 110 V AC. Shpg. wt., 2 oz.
EL. 86 Electric Buzzer, 110 V AC. Shpg. wt. 1007
F-553 6-Digit Electric Counter. Shpg, wt., 11/2 ibs


## Net 18.95 <br>  $\begin{array}{ll}\text { Net } & 1.49 \\ \text { Net } & 1.29\end{array}$

 $\begin{array}{ll}\text { Net } & 1.29 \\ \text { Net } & 9.95\end{array}$
## TRANSISTORIZED RADIO-CONTROLLED <br> GARAGE DOOR OPENER



- Hand Held Transmitter - Carry It In Pocket. Purse or Glove Compartment


## - Simple 1 Man Garage Installation

- Fits Overhead Residential Garage Doors Up to 18 Ft. Wide By 8 Ft. High.
Enjoy the convenience and safety of an automatically operated garage door with this fully guaranteed unit by Perma.Power. Eliminates night-time and ralny day hazards by raising or towering the door and operating garage light from the protection of your car's front seat. System includes the motor mechanism, radio transmitter and receiver, antennas, mounting hardware, wiring, wall switch, etc. Transmitter is crystal-controlled and operates on R/C frequency of 27.255 mc . Transistorized transmitter operates on self-contained inexpensive battery which lasts over a year in normal use. It fits in your hand, requires no installation and may be carried in pocket, purse, or stored in glove compartment. Exclusive coded channel design prevents mis-functioning. Operation is interference free. The $1 / 4 \mathrm{hp}$ motor will operate one-piece tilt-up or sectional roll-up type doors. One-man installation. Easy step-by-step instructions. Shpg. wt., 65 lbs.
MODEL G 683 Complete R/C system ML-178WX

Net 149.50
MOOEL G-340 Extra transmittter for second car
ML-179 Shpg. wl., 1 lb. Net 19.50
MODEL G. 511 Switch with 2 keys for outdoor location. ML. 180 Shpg wt., $1 / 4 \mathrm{lb}$.

## ELECTRIC ANNUNCIATORS


(A) ELECTRIC 日ELL. Ideal as a fire alarm, burglar alarm warning bell. Gives a clear, loud ring to overcome high level background noise. Gleaming chrome-plated bell on a sturdy plastic base. 110 volts: AC. Overall size, $41 / 4^{\prime \prime}$ across and $21 / 4^{\prime \prime}$ deep. Shpg. wt., 1 lb . EL. 85 Electric 8ell. Imported. titis teatic sal: mooree
(8)ELECTRIC BUZZER. Extra lou
all $31 / 4 \times 2^{\prime \prime}$. Shpg. wt. 10 ot.
all $31 / 4 \times 2{ }^{\prime \prime}$. Shpg. Wt., 10 ot.
EL. 86 Electric $8 u z z e r$. Imported.
Net 1.49
Net 1.29

## LAFAYETTE HOME FIRE ALARM



## - UL Approved Protection <br> - Loud. Clear Alarm

- Complete Signarn
- Complete Signal Unit - 6 Detectors

Sensitive thermostatic detectors-located in every po. tential fire area-react to heat Instantly. The alarm alerts you and your family before flames spread. The system does not depend on house current for operation. Long life, heavy duty battery will last at least one year. System is readily checked by means of a heat button. The push button kept within easy reach of bed, serves as an intruder alarm. Provision is made in the signal as an intruder alarm. Provision is made in the signal
unit for attaching another alarm ( 6 volt bell, buzzer or unit for attaching another alarm ( 6 volt bell, buzzer or
horn) for outside or remote locallons. The simnal unit Is completely enclosed in a chrome plated steel housing. Measuring only $41 / 2 \times 51 / 2 \times 31 / 2^{\prime \prime}$ overall-can be located In any convenient area. Detectors, only $2^{\prime \prime}$ in diameter. are unobtrusive and cover areas up to 400 sq . ft. System includes signal unit with 2 horns and provision for a $3 \mathrm{rd}, 6$ thermostatic detector switches (five $135^{\circ}$, orie $200^{\circ}$ ) 150 ft . of 18 gauge twisted pair control wire, test button, 2 boxes of staples, battery and instruction book. Shpg. wt., 8 lbs.
ML. 290

Net 29.95
$135^{\circ}$ Detector Switches. Shpg. wt., 3025.
EL-103
Net ea. 1.95
$200^{\circ}$ Detector Switches. Shpg. wt., $302 s$.
EL. 104 ......................... 1.95
Test 8utton. Shpg. wt., 302 s.
EL-
18 Guage, twisted pair control wire Shog wi... Net . 16 per 100 ft .
WR-122 100 ft .
Nat 1.65
WR-123 500 ft .
Net 7.50
Replacement battery, Eveready 509. Shpg. wt. $11 / 4$ Ibs.
BA-161


MOOEL 61 ANNOUNCER. Consists of "Fotoelectric" unit, chime and mifror. Chime rings when light beam is inter. cepted. Unit has exciter lamp which projects beam across passage, and photocell which recelves reflected beam from mirror; may be placed up to $10^{\circ}$ from mirror $81 / 4^{\prime \prime} \times 61 / 2^{\prime \prime} \times 23 / 4^{\prime \prime}$. Shpg. wt., 8 lbs. For 110 -120V 50 60 cycle A.C
PC. 20
Net 39.69
60-1130 REPLACEMENT BULB, 6 v, 32 cp.. 2000 hour. For Model 61. Shpg wt., 502. PC. 21

Net .65
EXTRA CHIME. For Model 61 , or any other 6 v. A.C. power source. Excellent warning device
PC-22 Shpg. wt., 2 lbs.
Net 4.70


MODEL $400 Q$ "WATCHMAN". Economical indoor alarm system. Consists of exciter lamp unit and matching elec. tronic relay, in attractive hammerloid cases. Exciter unlt has 2 prefocused 6 lenses for maximum light dispersion, infra-red filter to furmish invisible beam. Relay unit has toggle switch choice of intermittent or continuous alarm operation, outside light rejector, sensitivity control. Buitt-in 6V.A.C. power supply permits use of external electrical alarms. Ranges: white light $50^{\prime}$, invisible light $35^{\prime}$. Size each unit $5^{\prime \prime} \times 5^{\prime \prime} \times 512^{\prime \prime}$. Total shpg. wt., 14 los. For 110.120 V .50 .60 cycle A.C. PC. 23

Net 61.74


WORNER 5150 BURGLAR ALARM
Indoor detection system. Infra-red beam operates ampllfier up to 150 ft . Removable red filter. Both units have on-off switch. Amplifier relay unit features sensi. tivity control, extraneous light shielding and lock. Only heyholder can turn off alarm or reset trap. Steel cases. Light source $41 / 2 \times 41 / 4 \times 7$; amplifier $5 \frac{1}{3} \times 7 \times 51 / 4$ with split door, hinged bottom. For $110 / 120 \mathrm{~V} 50-60$ cycles
PC. 32 wx Shpg. wt.. 14 lbs.


Automatic electronic controls for turning lights "on" when dark "off" when light. Circuit employs selenium rectifler, b.C. relay, cadmium sulfide photo cell and electrolytic capacitor.
OUTDOOR LAMP CONTROL FIG. A
Fits single outlet box 2\%"。 or deeper. 300 Watt 117 VAC capacity. Built-in time delay. Adjustable shade shields light cefl from undesired artificial light. Our able staintess steel finish. Weather proof.
PC. 51 Shpg. wt., 2 lbs.
Net 7.50
LAMP POST CONTROL FIG. B
Easily mounted between Lantern and $3^{\prime \prime}$ lamp. post. It will control several lamps - up to 300 watts, 117 VAC. includes hardware and instructions.
PC-50 Shpg. wt., 2 lbs.

# LAFA YETIE VALUES in EleCTRICAL ACCESSORIES 

## 3-WAY POWER CONTROL

- Individually switched outlets

With Indicator LIEhts

## 249



Switchable power outlet box for wall or bench mounting. Three individually controlled outlets, each with lis own indicator light. Measures $4 \times 21 / 2 \times 15 / 0^{\prime \prime}$ - Equipped with 3 polarized receptacles, 3 toggle switches, 3 indicator lights, 6 ff . line cord. Rated 5 amps at 125 volts AC/DC Shpg. wt., 1 ib . Imported. EL-92

Net 2.49
4-WAY OUTLET


- 4 Electrical Outlets in 1
Stationary Mounting or Extension Cord Use
- Phosphor Bronze Spriag Grip Action

Use wherever outlets are limited. Accepts up to 4 appliances at one time. Easily installed on wall, floor, bench or ceiling. Can be "cord" mounted for extension uses. Rated at 20 amps at 125 volts. Molded of exceptionally tough durable plastic. Measures 4 H" $^{\prime \prime} \times 1 \%{ }^{\prime \prime} \times$ \%" overall. Shpg. wt., 5 oz. Imported.
E1. 89
Net .39
3 WAY TAP: Same as EL-89, above. Fot up to 3 applfances. $21 / 2^{\prime \prime} \times 11 / z^{\prime \prime} \times 1 / \mathrm{m}^{\prime \prime}$. Shpg. wt., 4 or. Imported. EL-88

Net 29

## ELECTROSTRIP



On baseboard, workbench, walls, counters-conducting or non-conducting surfaces, Hand forms to corners and irregularities. No need for outtet planning-the outlets move as you choose. Permanent or temporary installations. Becomes a neat, attractive part of room decor-can be palnted. Electrical connections where you want them - when you want them-along its entire length. Will not support combustion. The four ft . kit includes four ft , of strip. 3 receptacles, 2 end It. kit includes four f , of sirip.
caps, $12^{-c}$ leed in cord set and mounting screws. The caps. 12 it . kit inctudes 15 ft . of strip. Peed in (outlet type) 4 receptacles, 2 end caps, 2 wire connectors and mtg. screws. All are U.L. approved. 15 Amps 125 V . AC. EL. 674 ft . hit-Shpg. wi. 1 liz lbs. Net 2.29 EL. 6815 ft . Wit-Shpg. wt., $31 / 2$ lbs. Net 7.80 El. 69 Extra receptacle. Shpg. wt., 3 ozs.

Net .35

HANTO-TIROL THERMOSTAT

For window fans-
ventilators roll-a-rounds
You can convert any window ventilating or other electric fan to automatic-thermostatic operation-controlled by room temperature. Gives any fan the features of the latest, deluxe models. Simple, plug in Installationdone in minutes. Just set it-and forget it. Automatic cool comfort-day and night! Switches your fan on and off as the temperature demands. Completely assembled unit-ready to plug in. With instructions. UL Approved. Shps, wt., 1 lb .
Ap. 55


## Minneapolis-Honeywell TAP-LITE

- screwless terminals
- QUIES-CONVENIENTTOUCH ACTION
Clear wall plate permits using any color of material to match or contrast with any wall color. Connects in less time than old fashioned wall switches. A leatheralight touch actuates the switch. Tap-it's on, Tap-It's off. Free color inserts with each switch-can be used as is-painted-or used as a pattern. Fits standard eiectrical boxes. Rated 15 amps., $\mathbf{1 2 0 - 2 2 7}$ V.A.C. U.L. Insp. Shog. wt., 602 .
EL-49 Single Pole
EL.50 3.Way
EL-51 Singla, Pole- 2 gang
Net 1.43


## TAP-A-LINE <br> AP-A-LINE

Net 2.94 chorus of a pleasant melody. Just a press of the button activates the musical unit to play a 15 second chorus. No need to hold the button down. Play and stop is automalic once button is pressed. Easily installed, Requires no special tools. Use as door bell-announcer-page, efc. Includes push-button, chime unit and 15 ft . of wire. Includes push-button, chime unit and 15 ft . of wire.
Powered by $11 / 2 \mathrm{~V}$. battery not included. Powered by $11 / 2 \mathrm{~V}$. battery not included.




Easy to install. Replaces A.C. plug on any equipment you choose to keep "locked". Prevents accidental or unauthorized use of any electrical equipment. Use on fans, power tools, soldering equipment, hot plates; photo equipment battery chargers, even the TV-If you want it hept off! Shpg. wt.; 6 ors.

## NO-714

Net 1.39

## RESET CIRCUIT BREAKER



Prevent overload, and possible damage, to radios, TV power tools, etc. This reset, thermal switch circuit breater opens at 2.5 amps. No need to replace fuses, no fumbling in the dark-just press the button to reset the circuit. Easy to install: safest to operate. For 110 120 volts. Size: $23 / 4^{\prime \prime} \mathrm{L}, \times 5 \mathrm{~s}^{\prime \prime} \mathrm{D}$.
Sw. 106 Shpg. wt., 5075
Net .72

## ELECTRONIC DHMMER SWITCH

- Electronically Dims Light to $40 \%$
- Replaces any standard wall switch

Electronically controlled dimmer switch repiaces any ordinary light switch, lits all standard boxes, any standard switch plate. $100 \%$ of illumination in HI position, $40 \%$ in Lo pasition. Controls light mood without wiring changes. Use for night lighting, TV lighting, standby lighting, dining room, children's room. Increases lamp life up to 10 times on dim position. 300 watt capacity, 117 VAC . For incandescent lamps only. EL-101 ............ Shpa. wt.. 6 oz.

## OUTDOOR DUPLEX PLATE

## Weathersereofs

any duplex recentacie


For outdoor $A C$ outlets and swjtches. Shields against rain, snow, ice, dirt and moisture. Individual "snap" covers. Lock in open position-"snap" shut-seal tight. Rust proof brass plate with aluminum finlsh. rubber gashet and rubber "undercoat" mat. Stainless steel hinge springs. Shpg. wt. 8 oz.

1.-SINGLE SURFACE OUTLET. BTOWN bakelite. Wood mounting screw EL-15-Ea., 09
2. BAKELITE PLUG. Sturdy prongs

EL-16-Ea, 08 for 72
3. Chässis ac receptacle. Mounts from top or bottom. Mig. centers $11 / \mathrm{s}^{\prime \prime}$ UL approved. 15A. 125VAC/DC. Solder terminals.
EL-93
4. CURPENT TAP ARIIte socket with 2 plug outlets.
El. 22 Shpg. wt., 4 oz.
5. OUPLEX FLUSH RECEPTACLE

EL.23-Ea... 13
10

Type terminals, wood screw. EL-24-Ea., . 14

10 for 1.25 7. HANDLE PLUC. Of soft rubber, Shpg. wt. 102.
EL. 26 -Ez., .09
10 for .01
8. MIDGET CORO CONNECTOR. FIat two. plece Underwriters listed. EL-27-Ea., 25 for 2.25 9. INSULATEO STAPLES. No. 5. $1 / 4^{* *}$ EL-14-Paciage of 100

## IC packages for

.20
10. RUBBER CUBE TAP. 3 outlets. Un breakable one piece soft rubber construction.
EL-28
11. Cube tap extension. Trio tap, 9 It. rubber cord. AC plug. Brown
El-29-Brown Ea., 54 . 10 for 4.86 12. AC LINE CORD. 6 It. AC Jine cords. fine quality zip cord with sturdy plug. EL. 13
13. CANOPY SWITCH. Rotary type, composition top. Very shallow. Wire leads. Rated 3 amp. at 125
Sw-18-Ea, 18
10 for 1.62 14. JIFFY PUSH PULL PLUG. Attaches in 5 seconds without any lools. Spring prongs. Black.
EL-57-Ea.. 10 for .69 15. AUBEER CORO CONNECTOA. With puli handle for extension cords. $11 /{ }^{\prime \prime}$ diameter. 15 A . at 125 V .
16. PARALLEL GROUNO ADAPTER. AdaptS 3 wire tools and appliances to 2 wire AC ouflets. 15A., 125V. 334~ ground lead and lug. UL approved.
EL. 99
Net .22
17. DOUBLE GROUND ADAPTER. CONVETS any grounded 2 -wire duplex receptacle for use with 3 -wire plugs as well as standard plug. 15A., 125 V . UL approved. EL-100 Net 60
16. PERMA-PIUG. Now you can plug in up to 4 appliances in space formerly accommodating only 2. Easily installed, fits any standard 125 VAC double outlet. 15 AMP, UL approved.
El. 72 Brown
$\begin{array}{ll}\text { Net ea. } & .53 \\ \text { Net ea. } & .60\end{array}$

## LAMPS FOR INDUSTRY-LAB - OFFICE - HOME



## ALL PURPOSE LAMP

Ideal for factory benches, tables and drafting boards. Two bolts clamp base securely to any surface up to $3^{\text {" }}$ thick. Spring-controlled swivel joints and double arm action give you light in any desired position. Arm extends $36^{\prime \prime}$. Uses two $78,15 \cdot \mathrm{~W}$. lamps. For 110-125V., 60 cycles AC': Bronze finish. Fl-10 less lamps. Shpg. wt. 10 lbs


FL-24

## GOOSENECK MAGNIFYING LAMP

The perfect lamp for the hobbyist who needs plenty of light and magnification for close, precision work. The flexible, gooseneck arm adjusts and holds the lamp in the position you want. Five inch diameter magnifying glass; overall length about $21 / 2$ feet. Sturdy, clamp-mount base. Uses 22 -watt circline fluorescent lamp
FL-22 less lamp. Shpg. wt., 6 tos.
ul $13^{\prime \prime}$ focus, surrounded by a 22 watt shadow-free fluorescent twith a powerful $13^{\prime \prime}$ focus, surrounded by a 22 watt shadow-free fluorescent tube, A customengineered arm permits complete directional mobility-special adjustment knoos insure the proper tension and steadiness for any desjred position. $45^{\circ \prime \prime}$ arm reach. Ideal for assembly, laboratory, quality control and other detail work. In kit or assembled form.
Fl-32 Kit, less lamp. Shpg. wt., 8 lbs.
Fl-21 Assembled less lamp. Shipg. wt., 8 libs
Net 19.95
Perfect illumination
ouch, and stays each, and stays exactly where you put it. From a central position, the $45^{\circ \prime}$ arm reach can swing to llluminate any area on a desk or table, six feet long and four reet wide. Sleek all-metal construction with versatile $3^{\prime \prime}$ throat adge clamp. Uses 60 -watt

FL-202 T9, 22-watt, cool white tamp. $\qquad$
Net 24.30
Net ea., 2.80
bulb (not included). Avaliable in easy-to-assemble kit form or completely assembled. FL-24 Kit. Shpg. wt., 5 lbs. FL-25 Assembled
$\begin{array}{lr}\text { Net } & 9.98 \\ \text { Net } & 12.85\end{array}$

FL-19


## AMPLEX TROMBOLITE

Trombolite's unique, improved reflector design provides full use of blended incandes. cent and fluorescent light sources to give you $23 \%$ more light. Trombolite's glide action adjusts readily into any one of a thousand different positions. Comes complete with 60 Watt incandescent lamp and $\mathbf{2 2 - w a t t}$ Circline fluorescent lube. Attractively fLinished in executive grey.

Net 23.18

## ADJUSTABLE FLEXO LAMP

Designed to provide adjustment to any position or angle. No exposed wiring. Air Cooled Shade. Maximum extension $34^{\star}$. Lamp swivels around at base and at shade and swivels at each joint for universal adjustment. Shade $51 / 2^{" \prime}$ in diameter, $6^{\prime \prime}$ deep. Use standard jncandescent lamp.
FL-16 less lamp. Shpg. wt., 5 tbs. Net 8.77 fl. 26 Less Lamp. Shpg wt., 3 lbs.

## DESK LAMP

An attractive desk lamp. Fully louvered to give the best light transmission. With molded in pen and pencil holder. Separate stamp and paper elip compartment with a hing ed lid. White louvre with gleaming black hood and base; brass finished goose neck. About $14^{*}$ high. Uses standard incandescent lamp. FL-20 Less lamp. Shpg. wt., $11 / 2$ los.

Net 2.98

## ALL-PURPOSE LAMP

Smart and versatile ideal for use in shop, office, home-wherever positioned
ciose work or reading. Flexible gooseneck and swlvel shade lighting is needed permit positioning light exactly where it's wanted. Streamlined flair shade and louvers for air cooling. Concentric louver gives diffused, glare-free light. Spring clip mounting

Net 5.59

## EXTENSION WALL LAMP

 - Ertends From 15" to 24"

- Cool-Slim-Sato
- Ideal Extension Usht

A new kind of trouble-light for nome, garage, repalr men, etc. Fluorescent tube in shatterproof, clear plastic outer tube, gives cool daylight. Slim styling for placing in narrow, confined areas. Other features include glare-free shield, vinyl finger-grip handle, vinyt bumper guard. handy hanging hook convenient UL approved on-off switch, ballast, $15^{\circ}$ is-ga. U.L. approved cord. Grease and oil resistant. Overall $\mathbf{1 7 m}^{\mathbf{m}}$ long. Shpg. wt. 2 lbs.
Fl.33
FL-34 6.watt Replecement Fluores................... Net $\mathbf{6 . 6 5}$ NEW! LOUVRE NITE LITE ANO RECEPTACLE


Flush-mount, combination night lig: and receptacle. Installs in any recep. tacle box without sacrificing the con. venlence of an electrical outlet. On off rotary switch. Modern, one.piece louvered bakelite faceplate ( $41 / 2 \times 23 / 4{ }^{\circ}$ ) Ample 6 -watt lamp. U.L. and CSA approved. Shpg. wt. 4 oz.
EL-114
PL-2
Net 1.69 Net 20

## 50 ft . TROUBLE LAMP

- 2 side Oullets

The lamp of 100 uses. Perfect for patio, garden, photog. raphy, attic, workshop, and window display, $10^{\circ}$ all aluminum tarnish proof reflector mounted on double swivel clamp on oase. $6 \cdot$ rubber covered cord and rubber plug. Shpg. wt., 2 lbs.
FL. 18

## NEW! SLIM FLUORESCENT TROUBLE-LIGHT

 - Wall Bracket Swivels $180^{\circ}$

- Adjustable Shade

A smartly styled wall-tamp for use in the den, office shop, even the living room. Wall brackel swivels $180^{\circ}$ horizontally and the arm extends to 24 "-enough light in any direction over a large area. Arm closed is $15^{\prime \prime}$. Adjustable shade. Arm, wall mounting brackets and screws are brass-plated. Uses a 22 -watt Circline fluorescent lube. Shpg. wt., 4 lbs.
FL-27 Less Lamp
FL-202. 79 22-watt Cool White lamp
Net 8.40 Net 2.80

## GIANT

patio
Lamp

## 179

All rubber sheath-all copper wire! FlipLok cage ellminates removing from handle to re-lamp. Uses any standard lamp. Heavy rubber plug-push switch-rugged rubber handle. Shpg. wt., 4 lbs

## EL-41

Net 1.00

## CORDOMATIC HANDY LIGHT



- Pertatele light and power - Lecks an any length of 20 ft - Retracts automatically Provides lieht and power up to 20 feet from installation. Swivels $180^{\circ}$ when wall mounted- $360^{\circ}$ rotation when ceiling mounted. Detaches easily to change location Simply hang if up. and plug it in. Elim inates the inconvenience and hazards of tangled cords U.L. approved. Shps. wt., 5 lbs.

EL. 70 .

## NITE LAMP

Plugs into any outlet. Swivel Shade Complete with $心 7$ bulb, on off switch. U.L approved
El4-In lots of 3, ea. . 40
Singly, ea. . 45

## INDOOR-OUTDOOR EXTENSION CORDS

- 2-Wire and 3-Wire, 16 Gauge - Molded Connectors

Use indoors and out, with power tools, refrigerators, mowers, fans, etc. All are 16 -tauge, U.L. approved 3
cond cords have 3 prong plug.

1

| Ne. | length | Cond. | Eap | Shpe. Wt. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| EL-94 | 25 ft . | 2-wire | 7-amp | 2 tbs. | 5 |
| EL-95 | 50 ft . | 2-wire | 5 amp | 3 lbs . | 2.43 |
| EL-107 | 100 fl . | 2-wire | g amp | 3 lbs . | 4.49 |
| EL-108 | 25 ft . | 3-wire | 10 mp | $11 / 2$ tos. | 2.13 |
| EC-109 | 50 ft . | 3.wire | 7 amp | $21 / 4 \mathrm{lbs}$. | 3.51 |
| EL-110 | 100 tt . | 3-wire | 5 mmp | $31 / 2$ los. | 6.41 |

## LAMPS, PHOTO-CONTROLS AND DIMMERS FOR HOME, FARM \& INDUSTRY

## LAMPETTE Adjustable 2-WAY Lighting FIXTURE

195- Telescopic Arm Adjusts from $5^{\prime \prime}$ to $16^{\prime \prime} \bullet$ Shade Swivels $360^{\circ}$ - Folds to a Compact $6^{\circ}$ High - 2 Position Switch-Olm (Low), On (High)
The new Lampette offers adjustable high-intensity Hghting wherever you go, for business or pleasure. Telescopic, adjustable chrome-plated arm extends from a compact $5^{\prime \prime}$ to $16^{\prime \prime}$ and shade swiveis a full $360^{\circ}$ for the exact light angle you want. Complete lamp, cord and all, folds into a lightweight unit measuring only $31 / 4 \times 6^{\prime \prime}$. Special 2 -position switch for regular light or bright, glare.free light. Recessed base slips over nall for convenient wall hanging. Modern styling in gray with satin chrome metal trim, With bulb.
FL. 30 Shpg. wt., 5 lbs.
PL-78 Replacement 8ulb, GE \#133
Net 19.95


A complete photoelectric lamp system to provide automatic Hghting when you want it In your yard or patio. Control unit is completely weather protected. Printed elrcuit construction makes positive contacts. Can be tnstalled with or without toggle switch. External switch leg provides instantaneous control of other Jights up to 650 watts combined. Includest Std. $1 / 2^{\prime \prime}$ aluminum plpe $13^{\prime \prime}$ long, mounting bracket and photo control. Activation 3.5 foot candles on, $7-10 \mathrm{FC}$ off. Overall length $22^{\prime \prime}$ (with reflector), $14^{\prime \prime}$ wide (with reflector). For $105-130 \mathrm{~V} 50 / 60$ cycles AC. Shpg. wt. 4 lbs. WC.
PC. 52

Net 18.75


## hOMELIGHTER AUTOMATIC LIGHT COMTROL

- Turns Lights ON and OFF $\mathbf{- A u t o m a t i c a l l y}$

A completely automatic light-sensitive photoelectrlc switch which will turn lights on and off at dusk and dawn. Never needs setting and requires no wiring or installation. Plug it in and it works. Has a 1000 .watt lamp load rating which permits it to control not Just lamp load rating which permits it to control not just
one. but several fixtures. A multiple connection exone. but several fixtures. A multiple connection ex-
tension cord may be used if desired. Prowlers are discouraged, and your property is protected with "private eye" electronic control. Housed in decorative clear plastic case measuring $33 / 4 \times 11 / 2 \times 13 / 4^{\prime \prime}$. Complete with $6 . \mathrm{ft}$. flexible 3 -wire cord with adapter plug. For 110.130 volts, 50/60 cps AC. Shpg. wt., 1 lb .
PC. 54
Net 7.50


## REMOTE CONTROL DIMMER



- For Accent Lighting in any setting


## $3^{75}$

For use where controlled lighting is required. No Installation needed, just plug into any 115 volt $A C$ wall outlet. Just add triple tap or 3-way extension cord set for multiple lamp installation. 3-position (Hi, Lo, Off) swltch provides up to $50 \%$ dimming action. To be used with Incandescent lamps only, up to 300 watts. Complete with lvory switch control box, $12-\mathrm{ft}$. cord and adapter plug. Shpg. Wt., 1 tb. 802. EL-115

Net 3.75
"ADJUST-A-LITE" ELECTRONIC LIGHT DIMMER CONTROL
Replaces Ordinary Wall Switch for Variable Dimming Control

## $10^{95}$

Complete variable control from off to $50 \%$ (normal dimming range), then instant switchover to full bright. Fits into standard single gang wall box and uses same two wires as regular wall switch. Any standard wall plate can be used because knob is large enough to cover slot. Furnished with ivory plastic knob having brass-finish insert. For 120 volts, 60 CDs AC with incandescent bulbs only, up to 600 watts. Size: 156 Wx 21/6H $\times 13^{3-1}$.
EL-112. Shpg. wi., 1 lb.


## LAFAYETTE AUTOMATIC PHOTO-ELECTRIC 'LUMINATOR

\author{

- Automatic Light Switch <br> - Lights on at sunset-off at sunrise
}

Photo-electronic, IIght-sensitive switch turns Hghts on and off at dusk and dawn. Better than a clock-no setting and resetting of timer. Variance in "on-oft"' cycle adds extra protection when away from home. You need never come home to a darkened house. The controlled lamps go on as darkness falls-stay on until sufflicient day light returns or until-manually turned off. Just plug it in for protection from prowlers-to turn on night lights-illuminate outdoor areas -light up brooders-green houses-displays-show windows-any place you -light up brooders-areen houses-displays-show windows-any place you require automatic Humination, Mounts most anywhere on rubber suction cup
feet, Unobtrusive-measures only $33 / 4 \times 24 / 2 \times 21 / 4^{\prime \prime}$. Use on 117 -volt $A C$ only. feet, Unobtrusive-measures only $33 / 4 \times 21 / 2 \times 21 / a^{\prime \prime}$. Use on 117 - vo
Maximum 300 watts lamp load. Instructions included. Shpg, wt., 1 lb . Maximum 300 watt
MS. 790 imported

DYNAQUAD TOUCH CONTROL SWITCH

- Touch-It's On!
- Touch-It's Oft?


Fascinating, easy-to-use - Dynaquad electronic touch control switch can be completely concealed within the base of a lamp. Touch-il-lights! Touch-it goes outl No cilck-no snap-just silent, faultless response to the touch of a finger. Operates on $105-125$ volts, 60 cps AC and can handle up to a 100 watts. Self-contained in plastlc case measuring $3 \times 11 / 4 \times 11 / 4^{\prime \prime}$. Only six leads to connect. Also useful for appliances, burglar alarms, advertising displays, etc. Shpg. Wt., $11 / 2$ ibs.
EL-116
Net 9.75
ALLURALITE PORTABLE ELECTRONIC
DIMMER \& AUTOMATIC LIGHT CONTROL

- For Automatic or

Manual Operation


This-portable photoelectric dimmer operates manualiy to dim lights to any desired softness for dancing. dining or listening to music; operates automatically to turn light on as darkness falls, turn it off at dawn. For use with incandescecnt lamps of 60 watts or more, up to 500 watts maximum. Complete with 8 -ft. cord

and adapter plug. Size: $41 / 2 W x$
EL. 119 Shpg. Wt. $11 / 2$ lbs.
Net 24.85


LAFAYETTE ECONOMY-LINE PM SPEAKERS
All have 3.4 ohm voice coil.

- Indicates lighter weight magnet




## MODERN SPEAKER BAFFLES

Well built plywood speaker baffles for indoor public address and paging systems, intercoms, extension speakers, etc. Frieze-design grille cloth. modern walnut finish.

| Ne . | Description | Wt. Los. | Singty Each | $\text { ts of } 3$ Each |
| :---: | :---: | :---: | :---: | :---: |
| 58-10 | For 5" or $6^{\prime \prime}$ | 3 | 2.58 | 2.36 |
| S8-11 | For $8^{\prime \prime}$ | 4 | 2.94 | 2.69 |
| S8.13 | For $10^{\prime \prime}$ or $12^{\prime \prime}$ | 5 | 4.40 | 4.20 |



Frames constructed of plywood, front panels of acoustically correct particle board. Locked corners for maximum strength. Attractive recessed front. beautiful walnut wood-graln fabric covering. Complete with speaker mounting hardware.

| Stock No. | Utah No. | Fig. | For Spkr | $\begin{aligned} & \text { Size } \\ & \text { HxWxD" } \end{aligned}$ | Shp Wt | Net |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$8-63 | SS8.W | A | $8^{\prime \prime}$ | $14 \times 151 / 2 \times 81 / 8$ | 6 | 8.12 |
| S8-64 | SS12.W | A | 12" | 171/4x191/2×101/2 | 8 | 10.88 |
| S8-65 | C S8.W | 8 | $8^{\prime \prime}$ | 91/2x 91/2x $61 / 4$ | 6 | 5.06 |
| S8.66 | CS12-W | $B$ | $12^{\prime \prime}$ | $131 / 2 \times 131 / 2 \times 81 / 4$ | 9 | 6.85 |

## 4" PM SPEAKER

## IN WOOD BAFFLE

- 25-FT. SpEaKER CABLE WITH PLUG - BUILT-im Jack For use in multi-speaker low power paging systems, inter com systems, auxiliary bench speaker, etc. $4^{ \pm}$PM speaker with heavy magnet. Mounted in 2 -tone walnut and black wood baffie. The baffle has sloping-front and enclosed-back acoustic construction and has a built-in jack for plugetin connection of the $25^{\prime}$ cable and plug supplied. Speaker voice coil is $3-4$ ohms. Shpg. wt., 4 lbs. Imported SK-108


## EXACT REPLACEMENT MINIATURE SPEAKERS

- Ideal both for replacement and minia ture builders
- From $11 / 2$ to 3" diameter
- From only $11 / 6$ to $11 / 4^{\prime \prime}$ deep


Fig

Lafayette brings you this selection of fine quality Alnico PM speakers both to solve the problem of replacement in the hundreds of models of Japanese transistor portable sets now requiring service and to provide the experimenter with miniature speakers. SK-65 and SK-66 have mtg, holes on $2^{\prime \prime}$ centers; SK-61 on 1\%/2" centers. OHMS is Voice coil impedance. Dimensions given are overall. Imported

| Stock Ho. | Fig. | iam. | Depth | Onms | wt. | Net |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SK-61 | A | 11/2" | "K0" | 10 | 602. | 1.49 |
| SK-189 | C | $2 \times$ | 1\%** | 8 | 802. | 1.49 |
| SK.190 | C | $21 /{ }^{\prime \prime}$ | 140** | 8 | 802. | 1.49 |
| SK-191 | C | 24\%" | " 6 | 8 | 802. | 1.49 |
| SK. 65 | 8 | 212"' | $1{ }^{14 / 4}$ | 3.4 | 802. | 1.49 |
| SK-66 | 8 | 212", | 11/4" | 10 | 8 oz. | 1.49 |
| SK. 192 | D | 23/4" | $43 / 4$ | 8 | 8 or. | 1.49 |
| SK-183 | E | 3' | 14\%" | 8 | 10 oz . | 1.49 |

## MINIATURE OUTPUT TRANSFORMER

 $3 / 4$ " oz. Sultable for most transistor outputs. Shpg, wt., 3 oz. Imported Net 69

## uraht <br> MICROGAP PM SPEAKERS



Features famous MICROGAP precision in centering of voice coll, giving increased and uniform senstitivity. All heavily cadmium plated rust proof construction All with alnico $V$ magnets. All voice colls $3-4$ ohms except $12^{\prime \prime}$ is 8 ohms. t with transformer mounting bracket.

| Stock No. | Size-Shape | Audio <br> \|Peak-Watts | Mag. 02. | Fity | Shpg. Wt. Lbs. | Net Ea. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SK-153 | 31/2"' SQUARE | 3 | 75 | A | $3 / 4$ | 2.26 |
| SK-154 $\dagger$ | 4" SQUARE | 5 | 1.47 | A | 1 | 2.85 |
| SK-155 | $4 \times 6 \mathrm{OVAL}$ |  | 1.47 | D | 1 | 3.18 |
| SK-156 | $5^{\prime \prime}$ P.C. | 5 | 1.47 | 8 | 1 | 3.00 |
| SK-160 ${ }_{\text {Sk }}$ | $6^{* *}$ P.C. | 8 | 3.16 | 8 | $12 / 2$ | 4.41 |
| SK-161 | 6x9 OVAL | 10 | 3.16 | 0 | 2 | 5.41 |
| SK-162 | 8"' ROUND | 10 | 3.16 | c | 2 | 5.29 |
| SK-280 | 12" ROUND | 14 | 6.8 | c | $41 / 4$ | 9.35 |

## UTAH AUTO SPEAKERS

A complete line of speakers of replacement for all types of auto sets Including the new transistorized sets. Voice coil impedances where shown as "20 or $40^{\text {" }}$ are 40 ohm center-tapped useable for either impedance and are specially de signed for transistor sets. Indicates shallow type, only $2 \frac{1}{6}$ " deep.

| Stock Mo. | Size-Shape | V.C. Imp. | Peak Watts | Max 68. | Fig. | Shpe. Wt. | Net |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SK. 281 | 51/4" P.C, | 3-4 OHM | 5 | 1.00 | 8 | 1 | 2.79 |
| SK-158 | $5 \times 7$ OVAL | 3-4 | 6 | 2.15 | D | $11 / 2$ | 3.97 |
| SK-282 | $5 \times 7$ OVAL | 8-12 | 6 | 1.00 | D | $1{ }^{1}$ | 3.97 |
| SK-283 | 5x 7 OVAL | 20 or 40 | 7 | 1.47 | D | 1 | 4.41 |
| SK-221 | $4 \times 10$ OVAL | $3-4$ | 8 | 2.15 | D | 11/4 | 5.00 |
| SK-284 | $4 \times 10$ OVAL | $8-12$ | 9 | 2.15 | D | $11 / 4$ | 5.14 |
| SK-285 | $4 \times 10$ OVAL | 20 or 40 | 10 | 2.15 | D | $11 / 4$ | 5.44 |
| SK-286 | $6 \times 9$ OVAL | $8 \cdot 12$ | 7 | 1.47 | D | $11 / 4$ | 4.29 |
| SK. 287 | $6 \times 9$ OVAL | 20 or 40 | 8 | 1.47 | D | $11 / 4$ | 4.67 |
| SK-288 | $6 \times 9$ OVAL | 3.4 | 7 | 2.15 | D | 11/4 | 4.85 |

## INTERCOM SPEAKERS

High sensitivity, especiatly designed for "talk-back" circuits. Ideal for selective paging systems. Use as speaker and microphone. All 45 ohm voice coll impedance.

| Stach Mo. | Size Shape | Mag. Wt. | Peak Watts | Fig. | 0.0. |  | Shpg. | Net |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SK-289 | 31/2" SQUARE | 68 | 4 | A | $313 y_{2}{ }^{\prime \prime}$ | 136 | 1 | 2.68 |
| SK-290 | $4^{\prime \prime}$ SQUARE | . 68 | 4 | A | $43_{3}^{\prime \prime}$ | 1\% | 1 | 2.59 |
| SK.291 | 8" P.C. | 3.16 | 10 | 8 | 71/2* | $31 / 2$ | 2 | 5.67 |

## TAPE RECOROER SPEAKER

$\underset{\mathbf{S K} .220}{5 \times 3^{\prime \prime}}$ oval. Rated 3 watts peak. 3.2 onm volce coil. Shpg. wt., 1,2 lo.

## utah HIGH FIDELITY SPEAKER SYSTEMS PICTURE THIN 2.WAY SYSTEMS



THE STARLETTE

## THE POPULAR PT-2

Only $3^{\prime \prime}$ deep. This system may be hung on a wall or set anywhere. Contains an $8^{\prime \prime}$ woofer and a $3^{\prime \prime} \times 5^{\circ \prime}$ tweeter. Peak power 8 watts, electrical crossover, 8.0 hm im pedance. Ideal for extension of existing systems, or for original low power systems. Simple design, attractively finished in either walnut or mahogany. Complete with wall mounting clips. Size $12 \times 18 \times 3^{\prime \prime}$. Shpg wt., 6 lbs. 21 A 4700 Walnut finish
15.99 21 A 4701 Mahogany finish

## THE STARLETTE

Jeluxe version of the PT. 2 only slightly deeper ( $31 / 2^{*}$ ) has an $8^{\prime \prime}$ woofer/midrange with larger magnet and a $31 / 2^{\prime \prime}$ tweeter. Response to $16,500 \mathrm{cps}$. Has its own volume control. Handles 10 watts of audio power. Impedance 8 -ohms, electrical crossover. Fine low-gloss furniture finish on genuine walnut veneer. Wall mounting faclities included. Size $12 \times 30 \times 31 / 2^{\prime \prime}$. Shpg wt., 9 lbs.

## 21 A 4702 Walnut

## THIN BOOKSHELF OR WALL-MOUNT SYSTEMS

## THE SORCERER

Constructed of $1 / 2^{\prime \prime}$ plywood with walnut veneer and solid walnut trim in oiled walnut finish. Keynole slots permit vertical or horizontal mounting. Has high effl. ciency tweeter and $8^{\prime \prime}$ woofer with oversize voice coll. Frequency response $45-17,000$ cps. Handles 12 -watt Frequency response $45-17,000 \mathrm{cps}$. Handies 12 -watt
audio peaks. Bult-in crossover. Impedance 8 ohms. Size $12 \times 20 \times 4 \mathrm{~K}_{0}{ }^{\circ}$. Shpg. Wt., 11 lbs .
21 \& 4703 oiled Walnut ..................... 29.37

## THE HUNTINGTON

A 3 way speaker system with $8^{\prime \prime}$ wooter, $6^{\prime \prime}$ mid-range and $5{ }^{\prime \prime}$. tweeter in a tuned, ducted port cabinet with fibre glass acoustical lining. Response $35-17,500 \mathrm{cps}$. $1342 \times 22 \times 6^{\prime \prime}$. Low-gloss finish on genuine walnut veneer. Handes 18 -watt audio peaks. Shpg. wt., 16 lbs. 21 A 4704 Oiled Walnut

r


THE HUNTINGTON

## OUTDOOR SPEAKERS-TV REMOTE SPEAKERS



You will be amazed at the number of uses you'll find for this unit. The fine quality of the buill-in speaker makes It perfect for use as an extension speaker anywhere in your home or office. It's small size makes it an ideal personal speaker when watching TV or listening to your phonograph... The dual volume controls provide independent volume control of the main speaker from your listening or viewing position or the remole's own self contalned speaker. Attractive molded cabinet measures $4 \mathrm{~W} \times 2 \% \mathrm{Hx} 17 \mathrm{~m}^{\mathrm{D}} \mathrm{D}$. Complete with 20 ft . of 4 -conductor cable. Shpg. wt. 12/2 lbs. Imported

## TV EXTENSION SPEAKER

Full range $4 \times 6^{\prime \prime}$ auxiliary speaker in an acoustically constructed, finished wood cabinet. Two bullt.In volume controls allow use of extension speaker alone, TY speaker alone, or-both together for stereophonic sound quallty. No need to get out of your easy chair sound quality. No need to get out of your easy char
to change the volume level. Wonderfut for the hard of hearing when used as a close-up personal speaker. Mahogany finish, with gold grille. Shpg. wt., 4 lbs. SK. 76

## ALL WEATHER $8^{\prime \prime}$ SPEAKER

Designed to give dependable outdoor service, this high quality $8^{\prime \prime}$ P.M. speaker has a 10 oz . magnet. Rated at 18 peak gudio watts, it has a $1144^{\prime \prime}$ voice coil with an impedance of 8 ohms. It is cadmjum plated irridited, and fungus protected, dust protected and weather prooted. Use this speaker wherever reliable service in bad weather conditlons with good qually reproduction are required. Shos. wt., A lbs SK-227

Net 9.95
3t.... Net 3.88
-
Net 9.95


18 watt peak

COAXIAL MODEL
$8^{\prime \prime}$ Coaxial speaker with built-in iweeter and electronlc crossover. For extended range coverage of $\mathbf{7 0 - 1 2 , 0 0 0} \mathrm{cps}$. Shpg. wt., 7 lbs SK-276

Net 13.75


## OUTDOOR WEATHER-PROOF SPEAKER

- Frequency Response: 100 to 10,000 CPS
- Compact $-3 \% / \mathrm{W} \times 33 / 4 \mathrm{H} \times 21 / 20 \mathrm{D}$
- Enclosed in a Cadmium Plated 20-Gauge Steel case
- Specially Designed Plastic Impregnated Cloth Speaker Cone
Compact, Weatherproof, Dustproof. Will withstand immersion in boiling water, and is impervious to salt spray. Utilizes a plastic impregnated cloth cone, spider and dust cap material with an aluminum voice coll and zinc plated frame. Constructed of $20-\mathrm{gauge}$ cadmium-plated steed with 2 coats of baked electrostatic enamel. Equipped with an RCA type phone jach, hey slot mounting nole plus a mounting cutout to accept a volume control, on-off of push-to-talk switch. Shock Test: withsiands up to 50 G 's. Voltage: withstands up to 100 volts RMS. Temperature Extremesz from $80^{\circ}$ F $10^{\circ} 160^{\circ} \mathrm{F}$. 3.4 ohm impedance. Sk-209 Shpg. Wt., 5 lbs.


UTAH WIDE ANGLE HIGH POWER SYSTEM Contains $2-8^{* *}$ speakers in wide-dispension baffle, approaching $180^{\circ}$ at most audio trequencles. Handles 15 -watt program peaks. Impedance 8 ohms. $3 /^{\prime \prime}$ olywood throughout. Screw terminals. Size $10 \times 20 \times 4^{\prime \prime}$. Mtg. nardware included. Shpg, wt., 15 lbs.
SK-2i7 Walnut finish
SK-27a Mahogany finish

# AUTO SPEAKER KITS-ACGESSORIES 

NEW SPEAKER KITS FOR TRANSISTORIZED AUTO RADIOS - Features Multi-impedence Match For 40, 20, 8 ohms or less


- New Slim Line Construction

Lafayette offers a complete line of speaker wits for the new all transistorized automobile radios using speakers of 20 ohms and 40 ohms. Slim line in construction these speakers feature a multi-impedence match for $40,20,8$ ohms or less.

## SPEAKER KITS

Complete $6 \times 9^{\prime \prime}$ rear seat wit featuring new multiimpedence Slim line $6 \times 9^{\prime \prime}$ speaker; chrome grill, 100 ohm Fader control, 40 ohm adapter for Motorola Radios, and a 20 ohm adaptor for Automatic radios. Shpg. wt., 6 lbs.
SK-241
Net 6.25
SK-242 Same as above, with gold grill
SK-243 Same as SK-241, but with $5 \times 7$ "
speaker-Chrome Grill
Net 5.95

SK-244 Same as SK-242, but with $5 \times 7$ "
speaker gold grill
Net 6.25
Net 5.25
Special Custom Rear Speaker Kit with $6^{\prime \prime}$ Slim line multi-impedence speaker, 100 ohms Fader control, 40 ohm adapter and 20 ohm adapter for the following cars: Impala, Bonneville, Invicta, and 2 door Custom Autos equipped with 40 ohm Motorola or 20 ohm Auto. matic radios-less grill 5 tbs
SK-245
Net 5.70
Station Wagon Rear Speaker Kit-includes self-contained multi-impedence $4 \times 6^{\prime \prime}$ speaker, 40 ohm and 20 ohm adapters. Shpg. wt., 6 los. SK-246

MULTI IMPEOENCE SPEAKERS IN NEW SIIMLINE CONSTRUCTION
Stock No. Size Shpg. wt.
SK-247 $6 \times 9^{\prime \prime}$ with jumper wires $\quad 21 / 2 \mathrm{lbs}$,
SK. $258 \quad 6^{\prime \prime}$ Round with jumper wires 2 lbs.
SK-259 $4 \times 6^{\circ \prime}$ with jumper wires $\quad 11 / 2$ los.
Net

3-WAY PUSH-BUTTON SWITCH


Just push a button to select either front speaker alone, rear speaker alone or both together. Comes completely assembied on black \& silver metal plate with cable, hardware and simple instructions. Imported. Shpg. wt., $1 / 210$.
MS-890 Lots of 3, ea. ...... . 75 ......singly, each ...... . 89


## .64

 DUAL-SPEAKER FADER CONTROLControls the volume of both front and rear speakers. Gradually reduces volume on one speaker while increasing volume on the other. Control comes completely mounted on blach and silver metal plate with ivory polnter knob plus attached wiring for connections to both speakers. With mig. hardware and instructions. Shpg. Wt., $1 / 2$ ib.



Net . 64

For use with two speakers. Three-position switch gives choice of front speaker alone, rear speaker alone or both together. Comes comprately assembled on black and sliver metal plate with ivory findicator knob and attached wiring for connection to both speakers. With hardware and simple instructions. Shpg. wt., $1 / 2 \mathrm{lb}$. MS-266

## rear seat auto speaker kits



## as low as <br> 305

6" $\times \mathrm{g}^{\prime \prime}$ KIT WITH CHROME OR GOLO GRLLE Complete kit for adding second speaker in rear of your car. Includes a $69^{\prime \prime}$ PM speaker, 3 -position selector switch for cutting in front, rear, or both speakers; dial plate with mounting bracket, knob, and hardware; chrome or gold grille; wire; and wiring instructlons. simple to install. Shpg. wt., 5 lbs.
SK-54 Speaker hit chrome grille
SK-196 with gold grille
Net 3.45
Net 3.45

DELUXE $6^{\prime \prime} \mathrm{xg}^{\prime \prime}$ KIT with 2.15 2z. NLNICO Y MAGNET
Same as above but with deluxe speaker with extraheavy Alnico $V$ magnet ( 2.15 oz .). This is same speaker used in hits selling at twice the price. Shpg. wt.,
5 lbs.
SK-37 Speaker kit chrome grille
Net 4.65
SK-197 with gold gritle
Net 4.65

## $5^{\prime \prime} \times 7^{\prime \prime} \mathrm{KIT}$

Same as SK-94 but with $5 \times 7^{\prime \prime}$ speaket and grille. 5 lbs. SK-42 Chrome grille ..........................................Net 3.05 SK-198 with gold grille

Net 3.05
Net 3.05

## FAOER TYPE AUTO KITS

Rear-seat speaker kits Identical to those above except with tader-type controls to cut either speaker in or out or balance both. Shpg. wi., 5 tbs.
SK-55 547" kit. Same as SK-42 but with fader control. Chrome grille

Net 3.29
SK-199 With gold grille
SK-95 $6 \mathrm{rg}^{\mathrm{m}}$ hit. Same as
Net 3.29
control.
SK- 200 with gold grille
Net 3.69

## DELUXE $6^{\circ} \times 9^{\circ \prime}$ FADER KIT

Deluxe kit with extry-heavy-magnet $6 \times 9^{\prime \prime}$ speaker, plus fader control. Shpg. wt., 5 lbs.
SK-56 $6 \times 9^{\prime \prime}$ kit. Same as SK-37 but with fader. Chrome
SK-201 with gold grille
Net 4.89
Lafayette rear seat speaker kit


- Fits Compacts, Station Wagons Fits Foreign Cars, Sports Cars Prewired Self Contained - 3-Position Switch
Here is just the right rear seat speaker for your car. Pre-assembled, self contained, pre-wired switch. Easy to Install, it will fit any auto radio in any domestic or Foreign car including station wagons and convertibles. Finished in a gleaming chrome shock resistant case, it can be hung up or clipped on almost anywhere. Includes all necessary wire, instructions and 3-position switch for front, rear or 2 -speaker operation. Shpg. wt. 1202
SK-179


## DUAL HI-FI

REAR-SEAT SPEAKER KIT*


- Woofer-Tweeter-Crossover
"Universal" speaker kit includes two Alnico $V$ units-a $542^{\prime \prime}$ wooter and $3^{\prime \prime}$ tweeter with electronic crossover network; chrome grille and baffle which fits regular $6 \times 9^{\prime \prime}$ cut-out; plus pre-wired, pre-soldered, 3-position SK-148 Shpg. Wt., 4 ibs.

Net 9.49

- See listing below for plug in adaptors for cars with factory supplied radios


A fully assembled, easy-to-install auxiliary speaker for aif station wagons. Single $4 * 6^{\prime \prime}$ Alnico $V$ speaker chrome grille, swivel bracket, 3-position switch with dial plate and knob. Comes complete with installation instructions and wiring diagram.
Sk-149 Shpg. wt., 3 lbs.
Net 6.88
See listing below for plug in adaptors for cars with factory supplied radios.

## CHROME AND GOLD SPEAKER GRILLES



Handsome perforated metal grilles for rear-seat speaker use or other installations. Avg. shog, wi., 1 lb.
ML-17 $4 \times 6^{\circ}$ FIB
ML-69 5x7" Fig. B
ML-16 6x9" Fig. C
GOLO GRILLES
ML-14 $5 \times 7^{-1}$ Fir. 8
$6 \times 9^{\circ}$
Fig, $C$
CUSTOM PLUGIN ADAPTORS FOR ALL
CARS WITM FACTORY-SUPPLIEA RADIOS
Preassembled harnesses complete 'with required plugs, jacks and wire. Includes diagrams and instructions. Avg. shpg. wt., 3 oz.
For Buick, Chevrolet. Impala, Oldsmoblle, Pontiac and Bonneville—All 1963 Models.
MS-958
Net .59
For Ford
Net 55
MS Comet, Falcon and Rambler 1962-63. For Buich $51-58$; Chevrolets $55-58$; Chrysler 49-54;
Hudson 50.55 ; OIdsmobile 49-51; Pontiac 49-57; Yillys Hudson 50.55; Oldsmobile 49-54; Pontiac 49-57; Yillys
52.54 . 52-54.

NXCEPT
For Chevrolet $53-54$ and Automatic Radio EXCEP
Chrysler, DeSoto and Mercury $59-62$.
For Ford 46-59; Lincoln 46-49; Mercury 46-49. MS. 936

Net 48 For Chryster 55-62 936 .................................. Net . 69 For Chrysier 55-62; DeSoto 55-62; Plymouth 55-62; Dodge 55-62 and Automatic Radios for Chrysler, De. Soto and Mercury 57-62.

For Lincoln 51-56; Mercury 50-62
MS-938
MS-938
Net 29
For Buich 59-62; Oldsmobile 59 62; Pontlac 58-62; Bonneville 59.62.
MS-s39
Net .49
For Chevrolet 59-62; Impala 59-62; Lark 59-62; Stude baker 59.62.
MS. 940
Net .59
For Rambler 58-59
MS-941
Net .69
For Motorola Radios 54-62
MS-942
For Ford 60-62; Edsel 60-61; Falzon 60-62
Net .29
MS-943


## BASKET CARRIER

BASKET CARRIER - Take advantage of the low, low price Five sturdy steel siats; all metal parts finished in baked on auto enamel. Top quality web straps and gutter hooks. Four heavy-duty suction Cups. Easy-to-assemble. 374za $42 \times 6^{\prime \prime}$. Shpe. wt., 20 lbs.
ML- 214
-
BAR CARRIER

BA CARRIEA-A quality product at a bie savingl Rigid 1-piece construction with attractive, baked-on enamel finish. Suction cups assure positive srip. Completely ssembled. $42^{\prime \prime}$ tong. Shpg. wt., 5 lbs
ML-213


NYLON "BULLDOG"
10 FT. TOW CABLE

- $100 \%$ DuPont Nylon $10-\mathrm{ft}$. Long 275 - Atteches Instantly to Any Bumper

The perfect cable for towing ANTTHING UP TO 5,000 L8S. Constructed of heavy-duty, $1^{\prime \prime}$ wide, Dupont Nylon webbing that stretches $25 \%$ to take up shocks for smooth, safe towing. OII, grease and water resistant tool Dual, self-aligning clip attaches to any bumper. Shpg. wt., 3 lbs
M. 57

EXPANSION LASH-TITE


Ctan Nel 3.75


- Powerful Lashing Device For All Loads
- Eliminates need for Ropes $\&$ Lashing Straps
- Stretches Up to Twice its Longth
- Eight Tentacles For Maximam Security

This "Octopus" type device lashes down any load safely and securely in only a few minutes. The eight strands of powerfui high tensile rubber expansion cords, covered with weatherproof fabric, eliminate any need for lashing straps or other tie down ropes. Each cord will stretch up to twice lis $30^{-}$length and has - rugged steel spring fastened to its end, plastic coated to provide a positive, cushioned trip. $\mathrm{M}-\mathrm{S}, 2$

Met 2.95

## EMERGENCY FLASHING 199 <br>  <br> - Slips On Top of Auto Antenna - Stands 8 Feet High <br> - Signals Help for Miles Around <br> Here is the ideal way to safeguard your life in all highway emergencies. When trouble develops, simply slip light on top of the radio antenna and plug adapler into cigarette lighter socket. Instantly warns approach. ing drivers and protects you and your disabled car. Complete with 10 ft . cord and adapter plug. Shpg. wt., 1/2 lb. <br> Net 199

## AUTO ACCESSORIES



## CARDIO-MASTER

- Convert your Iransister Radio inte a Car Radio
- For all Makes of Cars Cabs - Trucks


## 298

Cardio master is a magnetic device designed to hold a portable transistor radio in the area of a car's wind shield to make it operate as an auto radio. Car's owner can remove a radio from the Cardio master for use as pertable or to avoid theft while the car is parked. Fits any "pocket" transistor radio. Will not come loose in the bumpiest roads. Includes magnetic base, brackets, hardware, adjustable band and com olete. Illustrated instructions.
M. 45 Shpg. wt., 2 lbs.

Net 2.98

## AUTO <br> SAFETY BELT



- Exceeds 5,000 Lhs. Protection
- Metal To Metal Buckle for Instant Release
- For all cars except Cadillac

This $2^{\prime \prime}$ wide, $100 \%$ Nylon Webbing belt provides the maximum protection needed for automobile driver and passenger. Exceeds SAE \& CSA strength specifications to provide better than 5000 lbs. protection. The metal to metal buckle eliminates slippage of webbing within the buchle and gives instant positive action without danger of accidental release. Each belt has 100 inches of easy-to-adjust nylon webbing so that one sires fits everyone. It is also equipped with single bolt tiltings for easy installation and $3^{\prime \prime}$ load distributing metal washers for cars where frame mounting is not avaliable. Shpg. Wt., 2 lbs.
M-4

## AUTO SAFETY KIT

## - Can of Instant Flat. Tire Sealant <br> - Road Flare Kit <br> - Anti-Fog Cloth <br>  <br> - Reader's Digest First Aid Handbook

Net 7.55

- must for every auto. Anti-fog Cloth is chemically treated to keep glass free of steam, fog and mist. Instant Seal seals and inflates flats- tube and tubeless tires-without jack or tools. Road Flare kit has 21 -hour llares and extinguisher for road emergency safety. Reader's Digest First Aid Handbook tells you what to do, and not to do, before medical heip arrives-can be the difference between life and death. Shpg. wt., 3 lts M-117

Net 2.99


Cold Weather Starts
Designed to keep crankcase ofl warm while your car is turned off for the night. Permits easier starts in cold weather and faster engine warm-up. Uses about the same amount of electricity as a 100 -watt light bulb Costs only pennies a night to operate. Shpg. wt., $11 / 2$ lbs. 4.152

## AUTOMOBILE ANTI-THEFT

 PROTECTOR

Protects Your Car from Being Stolen

## 698

- Protects Your Car by Sounding An Alarm
- Prevents Ifnition switch from being Sumped
- Prevents Car's Libhts and Accesseries from Werking
- Easy to Install

Here is the ideal auto protection for salesmen, servicemen, delivery vans ... all motorists. Not only will it prevent your parked car from being stolen but will also safeguard valuables in the trunk as wel as parts under the hood. Sounds an alarm in case of attempted theft and completely Immobilizes the carignition c:n't be jumped, lights and accessories will not operate. Instructions included for easy instailation Ah-111 Shpg. wt., $11 / 2$ lbs.

## EMERGENCY BLINKER 149 <br> - MAGNETIC BASE OPERATES ON 2 FLASHLIGHT BATTERIES VISIBLE FOR 1000 FEET

Every motorist needs It. Bult flashes 60 times a minute. Stands by itself on road; has hanger or mag. netic base which holds it firmly to any metal surface. Rugged plastic dome. $53 \mathrm{k}^{\prime \prime}$ diam. $\times 3 \%^{\prime \prime} \mathrm{hlgh}$. Shpg wt., 2, Jbs. With spare, non-blinking bulb for steady light less batteries.
N. 99
. Net 1.49
BA-157 12 batteries (2 needed)
ea. Net . 13

## S.O.S. Magnetic WARNING SIGNAL <br> 

- 4" TWO FACED PARABOLIC REFLECTOR - NEW SUPER REFECTOR SURFACE - NO MOVING PARTS - BUEES - WIRES

The simplest, most dependable and practical safety device to protect you in emergencies. No moving parts no wires or bulbs. Use on or off the car. Holds magnetically to car in any position at any angle? Warns traffic in both directions! Parabolic reflector is highly visible from front or rear! Ideaf for hand sis. nalling! Makes a pefect road "flare"' Stand it on the metal plate furmished and position it on curved roads? It can't tip or slide! Completely effective in case of tail-fight failure! The sway of the arm weeps it in tail-ight failure! The sway of the arm keeps continuous motion to ins
$H 0-677$ Shpg. wt. 1 lb.

Net 1.59

## PRIMETTA "FFOGGLES""



FOR SAFER DRIVING: AT NIGHT IN SNOW - INFOG - IN RAIN

A Zeiss Formulation Newly Developed Insures True Color Contrast
Night driving is safer and easier with Primetta Radar Night Glasses. Scientificaily designed to protect the eye from the glare of headights, street lights etc. without materially reduding vision. Ideal while driving at night. in the rain, fog and snow. The filter lens ex. clude all ultra violet rays. Designed for $20-20$ vision. With heavy, suede-lined leather case. Shpg. wt., 602.
AA-113
....... Net 2.69
glasses.
Mal23
4-123

## MOTOFOLA

## RADIOS for FOREIGN \& DOMESTIC CARS ALL NEW TRANSISTORIZED AUTO RADIOS <br> WITH FREE MOUNTING KIT

## 5-TRANSISTOR MANUAL CAR RADIO

## - FOR 12-VOLT SYSTEMS

A tremendous value in an alf-transistor car radio. Hand. full variable tone control, cool chassis operation, band wired chassis with 5 transistors, 2 oiodes, 1 thermistor. Built-in, Goiden. Voice hi.fi speaker. Set plays as soon as you turn it on-no warm-up lime required. Custom fits most cars, sport cars, trucks and boats-in-dash or under-dash installation. Low battery drain. Features CR-12am Model 323 T

## 6-TRANSISTOR MANUAL CAR RADIO

## - FOR 12-VOLT SYSTEMS - PUSH/PULL AUDIO SYSTEM FOR HI-FI

A flexible car radio with movable control shatts to tures Golden-Voice hi-fi speaker., full varrable tone accommodate the most difficult. fo.fit cars. Push/Pull control, automatic gain control. Plays as soon as you audio system gives smooth high.fidelity sound and delivers a full 12 watts of peah power output. Employs 6 transistors, 2 diodes and 1 thermistor in a hand wired chassis. Low battery drain of only .5 amp . Featurn it on-no warm.up needed. 12 -volt cars, negative ground. Size: $75 / \mathrm{gW} \times 2 \mathrm{H} \times 5^{\circ} \mathrm{D}$. Shpg. wt. 7 ibs.
CR-129M Model 3MT

## 5-TRANSISTOR PUSHBUTTON CAR RADIO

## - FOR 12-VOLT SYSTEMS

Simple, pushbutton convenience with all-transistor pass circuit, plus the exclusive Golden-voice hi-fi power and dependability. Hand-wired, transistor chassis means instant play withoul warm-up, cool chassis operation, and $64 \%$ less battery drain, only .7 amp. Full variable tone control. automatic gain control, band $67 / 8 W \times 21 / 2 H \times 71 / 44^{\circ} D$. Shpg. wt., 8 los
CR-130M Model 520 T
Net 54.55

## 6-TRANSISTOR PUSHBUTTON CAR RADIO <br> - FOR 12-VOLT SYSTEMS

A new; all-transistor car radio designed to custom fit most domestic cars on the road. The push/pull audio principle results in smooth, uninterrupted sound. Delivers 12 watts of peah power output. Features $30 \%$ cooler chassis operation; $64 \%$ less
battery drain; instant play . . . no warm-up; full variable tone control; automatic raim control. Exclusive Golden Voice $6 \mathrm{xa}^{\prime \prime}$ speather. Size $91 / 4 \mathrm{Wx}$ 3 Ha7"D for 12 volt cars, negative ground
CR-131M, Model 12AT-3 ( $6 \times 9$ speaker)
CA.132M Model 12AT-3-15 ( $5 \times 7$ speaker)

## ALL-TRANSISTOR MANUAL CAR RADIO

## - FOR 6-VOLT SYSTEMS

Compact, universal set designed to fit -6-volt sports drain, automatic gain control, antenna band pass filter, cars, trucks, boats and older cars. Hand-wired, all- thumbscrew antenna trimmer, "Instant Play" -No warmtransistor chassis with 7 transistors, 2 diodes, 1 , up necessary. Reversible polarity. size: $67 / 2 \mathrm{Wx} 21 / 2 \mathrm{Hx}$ thermistor provides 2 watts undistorted output to built- 71/4"D. Shpg. wt., 6 los In $\mathbf{5}^{\prime \prime}$ Golden-Voice speaker. Features low 1-amp battery CR-210M Model 4 13T

Net 39.95
Full 2-year warranty on all parts and labor. Manulacturer's guarantee covers-free
exchange or repair of any component proven defective in normal use.
NO MONEY OOWN

Consult This Chart To Determine Which Sets Fit American Cars. Sports Cars and Foreign Cars.
The below chart shows the make and model of cars which use the above Molorola
Car Radios. The "ollse-Set" column indicates the stoch number of the radio or

Buich '58-63 Buick Special
(Cmpct) ' $61 \cdot{ }^{\prime} 63$ Cherrolet ' 58 -' 63 Citreen 10-19, DS-19 6 V. citreen ' 58 -' 6312 V . Comet '60-'63 Cervalr '60' 63 Dodge Dart '58-'63 Dodze Lancer '61-'62 Entlish Ford' '58.' 63

## USE SET

 CR. 128 M CR-128M, CR-129M CR-128M, CR-129M, CR-131M CR-128M,CR-128M
CR-128M ${ }^{\text {CR-128M, }}$ CR-129M CR-128M, CR
CR-128M CR-128M, CR-129M, CR-132M CR-128M, CR-129M CR-129M, CR-131M CR-128M, CR-129M, CR-128M, CR-130m

MAKE, MDDEL ANO YEAN Falcen ' 60 - 63 Fiat $600-1100 \cdot 58 \cdot 163$ Ford ' 58 .' 63
Millman minx '58.'63
Karmann-6hia N.W.) '58-'63
Mercedas Denz'58-63 M.C. Mannette, McA '58-'63 Morris Minor " 58 -. 63
Oldsmoblie F.85 '61-63 Opel '58-'63
Peuget '58-63
Pontiac Tempest ' $61 \cdot 63$
Porsche '58-63
radios which can be used with the difterent types of automobiles. Use this stock number when ordering. Also list make, madel and year of your car.

## USE SET MAKE, MODEL AMD YEAR USE SET

CR-128M, CR-129M, CR-132M CR-128M'
CR-128M, CR-131M
CR-128M
CR-210M
CR-128M, CR-130M
CR-128M, CR-130M
CR-128M, CR-130M
CR-128M, CR-129M, CR-131M
CR-210M
CR-128M, CR-130M
CR-128M, CR-129M, CR-131M
CR-210m

Piymouth ' 58 - 63 Piymouth '58-'63
Rambler '59-'63
Rambler. American '60. 63 Renaut Dauphine 6 V.'55-'58 Renaut oauphine 12 V. ' 58 -'63 Studehaker Lart '59-63 Sunbeam Rapier '58.63 Taunus '58.963 Triumph TR-3 '58-63 Valiant ' 60 - 63 Volkswaten ' 58 -' 63
 Volksumgen sus '58':63
Volvo PV-44, PV-544 '58-63 Volve PV-A
Volve 12 V .

CR-128M, CR-129M, CR-131M CR-128M, CR-129M, CR-128M, CR-129M CR-128M, CR-129M, CR-132M CR-210m CR-128M
CR-128M, CR-129M, CR-131M CR-128M
CR-210m
CR-128M, CR-130M
CR-128M, CR-132M
CR-210w
CR-210m
CR-210m CR-128M

## NEW-DRAMATIC MOTOROLA R-200 VIBRASONIC REVERBERATION SOUND SYSTEM

- Re-Creates Concert Hall Listening In Your Car
- Can Be Used With Any 12-Volt, Negative Ground Car Radio-AM or FM

> - COMPIETE VIBRASONIC SYSTEM INCIUDES: Transducer Unit With Amplifier Control Mounting 6x9" Speaker and Grilie Cable and Instaliation Instructions

> Now you can listen to the most dramatic sound of music ever heard inside a car with the Motorola R-200 vibrasonic reverberation sound system, The R-200 transducer unit compensates for the absence of reflected, sound waves in autos. These reflected sound waves give concert hall music depth and dimension. The R-200 compensates for. the absence of these reflected waves in a car by reproducing a second set-of sound waves irom a second speaker and acoustically mixing both sets of sound waves to dellver this new dimension in sound reproduction in a car. Can be added to any 12 volt negative ground radio-AM or FM. Shpg. wt. 6 lbs. CR.200

# LAFAYETTE-For The Finest In Car Radio Listening 



NO MONEY DOWN
$\$ 5$ monthly
A fine quality AM radio that utilizes "solld state" construction in a Superheterodyne circult for trouble. free operation. Finger-tip tone control to adjust tone as you desire. Also contained is a electronic automatic volume control to keep signals strong and steady. This unit is exclustvely hand wired for ruggedness-no printed circultry. Fits under-dash or In-dash utllizing standard trim plates. Avallable for 12 -volt negative ground installations. Neutral gray-tan baked enamel finish. Overall size: $51 / 2^{\prime \prime}$ deep $\times 61 / 2^{\prime \prime}$ wide $\times 2^{\prime \prime}$ high. Shpg. wt., 41/2 lbs
CR-237M

## NEW BLAUPUNKT

ALL-TRANSISTOR FM, AM, SW and MB AUTO PORTABLE

- Use It As a Portable-Install it in Your Car
- 4 Bands-FM, AM, Shortwave and Marine Band - Ten Transistors. Four Diodes

NO MONEY DOWN
$\$ 5$ monthly
9950

Carry It as a portable or install It in your car using an optional easy-to-install adapter that disappears under the dash when not in use. Plays for approx: 300 hours on 6 trexpenslve $1 \frac{1}{2}$-volt flashlight batteries (not supplied). A built-In ferrite antenna is used for AM reception; a retractable, pivoting telescopic antenna for shortwave/FM reception. Has push/pull output stase and sockets for earohone tape recorder and tecord player Also has arpiable tone control for true hi.fi music reproduction. Attractively housed in black athersic reproduction. Attractively housed in a black Imported.
CR-239wx Blaupunkt Auto-Portablo ................. Net 99.50
Universal Mounting Bracket, with lock, for auto use ( 6 of 12 volts-peverse polarity)

## CR-234

Net 19.00
" 0 " size flashiltght battery ( 6 reg.) for portable use.

Net ea.

## WORLD FAMOUS MOTOROLA MODEL FMC62 AUTO FM TUNER

- Add an FM Tuner to your present car radio and experience the thrill of FM entertainment as you travel.
- Automatic frequency control
- Quick underdash installation
- For 12-volt negative ground installations


6495
NO MONEY DOWN $\$ 5$ monthly
The model FMC62 is available for those who prefer an FM tuner which operates through the AM radio. Compact underdash installation made quickly. Specs: 7 tubes; battery drain is 1.4 amps ; tuning range is 88 . 108 MC ; sensitivily - $3 \mu \mathrm{v}$ (avg); for 12 volt negative ground. Automatic gain and Frequency controls for "one setting" listening pleasure. Size: $61 / 4$ " wide, $21 / 4^{\prime \prime}$ high, $63 \mathrm{H}^{\prime \prime}$ deep. Shpg. wh., 8 lbs.
CR-235
Net 84.95

CONTINENTAL SINGLE SIDE MOUNT (1)
Continental single side mount for foreign cars. The only aerial that fits a Volkswagen. Flexible adjustment with unique vertical locking. 3 section. Extends to $.56^{\prime \prime}$. Shpg, wt., 1 lb .
(A)-135

## TOP COWL MOUNT (2)

3 section antenna measures $23^{\prime \prime}$ coliapsed, and ex. tends to $58^{\prime \prime}$. Mounts on polyethyléne insulator. Shpg. Wt., $11 / 4 \mathrm{lbs}$.
AA-21

## UNIVERSAL MOUNT AERIAL (3)

Can be mounted anywhere on car. Adjusts to any angle. 3 section, measures $24^{\prime \prime}$ collapsed, extends to $58^{\prime \prime}$ Complete with $54^{\prime \prime}$ lead. Shpg. wt., $11 / 4$ lbs. AA-22

## DISAPPEARING ANTENNA (4)

For concealed instaltations. Extends to 53". Fully col-lapsible-only mounting protrudes. $54^{\prime \prime}$ permanent lead. Shpg. wt., 2 lbs.
AA-24

## LO-BOY DISAPPEARING ANTENNA (5)

For shallow installations, foreign and sports cars Takes only $91 / 2^{\circ}$ below fender or deck. Extends to 25 ${ }^{\sim}$ collapses to $31 / 2^{\circ "} .36^{\prime \prime}$ permanent lead. Shpg. wt., 1 lb . AA. 47

Slides completely into mounting base. Locks with key rendering the antenna theft proof. $161 / 2^{\prime \prime}$ below fender, ext. 42". Shpg. wt., 1 lb .
NA-136
Net 2.55

## ELECTENNA (7)

Replacement antenna and coil. Measures only $17^{\prime \prime}$ long. Increase gain over standard 54" antenna by up to $100 \%$. Installs quickly and simply. Shpg. wt., $11 / 2 \mathrm{lbs}$. AA-31 ................................................................... Net 3.23

## REPLACEMENT ANTENNA STAFF (8)

3 section $50^{\circ}$ replacement staff. Telescoping staff replaces antenna lost through accident or vandalism. Mounts on stub of broken antenna. Simple hex nist screw mount. Shpg. wt., 8 oz
AA. 30


SPRING BACK REPLACEMENT STAFF (9)
One piece, stainless steel, spring mounted replacement staff. $281 / 2^{\prime \prime}$ long overall. Mounts over stub of old an tenna. Fits all cars. Simple set screw installation. Shpg. wt., 8 ozs.
4A. 40
"FLEX-O-MATIC" UNIVERSAL ANTENNA (10)
Heavy-duty, bounce-back; spring mount: Fully adjust-able-mounts anywhere. 3 sectlons, $56^{\prime \prime}$ extended, $24^{\prime \prime}$ collapsed. 54" detachable lead. Shpg. wt., 2 lbs. AA-48

Net 2.79

FM "HALO" ANTENNA (11)
Doubles reception power of FM signals; gives superior AM reception. $16^{\circ \prime}$ diameter loop of aluminum flat wire. $29^{\prime \prime}$ high-chrome plated brass. Shpg. Wt., $11 / 2$ lbs.

Net 4.95
COILTENNA (12)
Boost performance of present antenna up to $400 \%$. Quickly and easily installed. Fits all cars. Shpg. wt., 602.
A. 32

Net 2.37


# SPARK PLUGS - TUNE UP KITS - CONVERTERS Ignition TUNE UP KITS <br> Peints Preambled-Matched - Ventilated 

- Precisier made replacement for all ordinary SPARK PLUCS
- Reacts AuTOMAFICALIY te all engine temperature changes
- For the higther horsepower, compression and voltage of mode


## $100 \%$ AUTOMATIC SPARM PLUGS

Check chart below for correct rype for your cas

These amaring Thermostatically con- and carbon deposits. At higher speeds the trolled spart plugs are olfferent both in Thermo-Disk again Automatically moves construction and in performance, Built to back to the etectrode preventing powerdeliver up to $40 \%$ more voltage to the robbing pre-ignition! The exclusive Monipoints, they produce more power, and tor-type Venthated Brass cap prevents teater gas savings! Special chamber sets up a combustion turbulence each time the plug fires, heeping the insulator and points always clean of carton lead and oll deposits! At low speed stop-and go driving the Thermo-Dish Automatically moves away from the electrode producing a spark so hot that it completely burns away all lead
overheating. Equlpped with OH * non-pitting, non-burning electrode that assures Longer Gap Life and Instant starting! Insulators are of a specially designed heat dis sipating type. Has special bullt-In double locking gaskets. No compression leakagel Shpg. Wt., per set of $6 ; 11 / 2 \mathrm{lbs}$ : per set of $8 ; 2 \mathrm{lbs}$.

Use This Chart To Select Proper Type for Your Car


## REPLACEMENT LEADS \& SUPPRESSORS



- Easier, Quicker, Surer Starts in All Weather
- Seals Out Oirt, Dampress,


## 279

## fain, Saw

Eliminate car starting problems in any weather. Ideal for marine use too. Keeps the moisture out, the spart in. 8 -cylinder sel consists of 2712 -ft. ignition wire, 8 angle spark plug terminals, 8 straight spark plug terminals, 10 distributor wire terminals, 8 spark plug profectors (plastic drycaps), 9 distributor nipples. 1 ignition coil nipple (plastic hydra-caps). Shpg. wt., 2 ibs. M. 130
$4 \&$-CYLINOED SET. As above but with $20-\mathrm{ft}$, ignition wire; 8 distributor wire terminals; 7 distributor nipples; 6 each angle spark plug terminals, straight spark plug 6 each angle spark plug terminals, straight spark plug
terminals, spart plug protectors; I ignition coil nipple. terminals, spark plug protectors; 1 ignition coil nipple.
Net 2.131 AA. 131

## AUTO LAMP



REPLACEMENT KIT

- Grizinal Equipment leplacements

Complete set of lamps to replace burned out auto lamps except headights. Contalns 2 stoplight, Signa!, Lalt and parhing tamps; 1 ea. Courtesy lamp, Dome lamp, Signal lamp. Dash lamp, Glove compartment lamp. 2 license plate lamps. 2 small dash lamps. Shpg. wt. 8 ors.
PL-110 G.M. and Chrysler Prod. $5 V$
L-111 G.M. and Chryster Prod. 12 V
R. 112 ford Products $5 V$

A-113 Ford Products 12 V

Net 2.25 Net 2.00
Net 2.10
Net 2.15


Replacement lead (c) 54* Universal. Shpt. wt., Ib M-37 ............................................................. Net 1.28 M-3 Universal extension lead, 24 inches ... Net . 5 M. 35 Universal extension lead, 36 inches .... Net . 75 Moise suppresser xits (N). For all 6-cylinder cars. Includes sparkplug suppressors, distributor suppressor generator and light or ammeter capacitors. With in structions. Shpg. wt., 602.
ms-418 for 8 -cylinder cars


Net 2.08
AOAPTERS-JACKS-PUGS-CONNECTORS

$\Longrightarrow$
Ms-411-(A) Adapter converts Motorola to Delco fitting
MS-412-(B) Motorola lack
WS-413-(C) Motorola plus
Net 09
Net .13
Net 18
Antenna cennector (
in and auto radio.


AUTO BUTLER-SWING-AWAY LITTER CONTANER

- Fits Every Ca
- Swings Away Out of Sight
- Remevable Washable Plastic Container
Keep your car clean with this easy-to-install auto Butler. Swings under the dash, keeps litter out of sight. Washable, heavy-duty vinyl container has 125 $A A-81$ Shpg. wt. 12 oz.

ago AUTO BUTIEP

UNIVERSAL $6: 12$ VOLT VIBRATORS
All types may be assorted for
as Low As
quantity prices
Direct replacements for most papu lariy-used types. All brand new tactoryfresh stock. Made by teading national manufacturers. Fully guaranteed. Shpe. $w t ., 1 / 2 \mathrm{lb}$.

STOCK NO. MS. 14 6-VDLT 4-PRONG
Repisces mallory $294,859,901 \mathrm{M}$, Madiart 5300,5301 ; and many others.

## STOCK NO. MS-127 12-VOLT 3-PRONC

Replaces Buick, olls, Pentiac and em part no. 122. 0155: Mallery 6874,60 6330, Dete 8550; and Vela 3129.

STOCR NO. MS-126 12-VOLT A-PRONC
Replaces Mallery G859. Metserels 48522000. Phice and Ment 83-0025-1, 4il 1340, Veker 4124; and most later 12 -volt car-radio vibrators.

| Luts ${ }^{\text {d }}$ | 14 | $3-3$ | -24 | 25-3 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Nel ea. | 1.2 | 1.18 | 1.09 | . | . 9 |

## MALLORY REPLACEMENT VIBRATORS

Replacements for all popular sets. Consult "Mallory
Vibrator Guide" for correct replacement unit.
Mallory Vibrator Guide. Free with order for wallory Vibrators
VIb-5s
Net .15
Stech Ne.
Tru 解. Not en

V-25
4 voers พ1601/W859 2.es
294 VoLTS
294
716
1601/859
1604/1100
1701
1802/245
12 VOLTS
G 294
G1501/G4501
61601/6859
G1602/6883
61801/G4549

Met,


$$
\begin{aligned}
& 1.35 \\
& 1.55 \\
& 1.10 \\
& 1.35
\end{aligned}
$$

Page 216

# CIEMI Lafayette ELECTRONIC TUNE UP LAB 



Complete

Tune-Up Lab
with Case.

## 6250 <br> No Money Down

Save $\$ 15.70$

## From Individual Prices

Now you can tune your engine scientifically without a big Investment in costly, heavy test equipment. Precise, compact hand-held testers with easy-foread $212^{2}$ meter movements. Rugged phenolic case with long alligator ciip leads. Buy the com plete "lab" or the instrument you need first. Add other units later. Complete instructions included. Overall dimensions approx. $4 \times 21 / 2 \times 11 / 2^{\prime \prime}$. Complete tune-up Lab with tions included. Overal
case. Shpg. wt., 8 lbs. case. Shpg. wt., 8 lds.

Net 62.50

## SINGLE TEST UNITS

COIL TESTER. Tests coils on or off engine. Also checks shorted condensers. Shps. wt., 1.5 los.
$A A-167$
Net 14.95 REGULATOR-GENERATOR TESTEA. $0.8,0-16$ V. DC ranges
for 6812 volt systems with external $1 / 4$ ohm resistor. for 6812 volt s
Shpg. wt., 1.5 los.
AA. 168
Net 10.88
TACHOMETER. Checks engine rpm, cylinder balance. 2 ranges: $0-1200 \mathrm{rpm}, 0-1600 \mathrm{rpm}$. For 4, 6 and 8 cylin der cars. No Jitter. Color coded sçale. Shpg. wt., 1.5 lbs. MA-169. .............................................................. 21.80

OWELL METER. Accurately measures cam angle at all engine speeds. 2 scates. For 4, 6, 8 cylinder engines; 6 or 12 volt. Uses solid state circuitry. Shpg. wt., 1.5 lbs A $\mathrm{A}-170$

Net 14.95
ALTERMATOR DIODE ANO IGNITION WIRE TESTER. TEStS diodes in and out of alternator. Checks windings and ignition wire. Simple to use. Shpg. wt., 1.5 ths.
ignition wire. Simple to use. Shpg. wt., 1.5 ibs
$\mathbf{M} .171$
AA-172 Case only Shpg. wt., i/2 Ib, ........... Net 3.95


## (A) MOTOR ANALYZER

All the advantages of a well-equipped service shop in a light, hand-held package. Ideal for do-it-yourselfers, sports cal Rallyers, etc. The Analyzer enables you to test ignition coil output, spark plugs, Insulation break. downs; locates poorly adjusted carburetor, sticky or burnt valves, weah valve springs; checks valve timing, burnt valves, weak valve springs; checks valve timing,
chotre, muffler, vacuum tank, manifold, fuel pump chore, murfiler, vacuum tank, maniford, fequipump $14 W \times 73 / 4 \mathrm{H} 331 / 2^{* D}$. Shpg. wt., $51 / 2 \mathrm{lbs}$.
AA-49
(B) REMOTE STARTER SWITCH

Eliminates the need of a second man when malting compression, fuel pump, generator, starter, and electrical tesis. Permits the mechanic to crank the engine from any position. Shpg. wt., $1 / 2 \mathrm{lb}$. 4.50

## CAM-DWELL INDICATOR

 His ffy 395A high quality instrument for solving all CAM-DWELL problems. Checks the number of degrees a distributor can rotate while the breaker points remain closed. Too much rotation means points are set too close, too littie means breaker points are not closed long enough for adequate build up of the magnetic field in primary coil, permitting arcing across points. Requires no electrical outlet. Distributor need not be removed. Compact, portable. Complete with case and includes chart showing specifications for all popular cars. AA-98 Shpg. wt., 2 lbs.

## NON-THERMO BATTERY HYDROMETER



Perfect for testing small batteries and batteries mounted in close quarters. Three-color float scale mounted tip will not damage battery plates. Float calibration: tip will not damage battery p A. 140

Net 1.29


The Hansen Model 12 Tests battery cells under load simply, accurately! Special alloy shunt between adjustatle legs places 200 amp laad on battery during test. Eliminates guesswork of unloaded testing. 3-color dial reads bad, weah, and good battery condition. Rug. ged molded grip design. fits all batteries. Indicates ability of battery to delivery power. Locates corroded cables, loose connections, etc,
AA-139 Shpg. wt., $12 / 2-16$.
Net 4.79

## THE AUTO BARO-ALTIMETER

- Shows Changes in
Altitude While Driving 595 - Forecasts Weather

Forecasts weather and indicates your exact altitude. Meter reads altitude from 400 to 10,000 feet above sea level, housed In durable vibration-proof plastic case. Com plete with mounting bracket, installation and operation instructions.
F. 483 (imported)


(E) STANDARD TIMING LIGHT

Employs the stroboscopic principle of light synchronized with motion for adjustment and setting of ignition timing under actual operating conditions. Shpg. wt. 1 lb.
M. 53

Net 2.79

## (F) TACHOMETER

Here's the instrument for the most important check of an engine's performance: the RPM test. Tests 4,6 and 8 cylinder engines with both 6 and 12 volt systems. Operated by two inexpensive penllght batteries which last about a year. Large dial reads 0.1000 and $0-5000$ RPM. Shpg. Wt., $21 / 2$ lbs.
AM. 54
Net 20.50

(A) Use this tester on any low voltage system from 3 to 24 volts. One can quickly find broken wires, loose connections, bad fuses, faulty sockets, etc. This tester is ideal for boat owners or anyone who tinkers around with his automobite.
$\mathbf{M . 1 3 7}$ Shpg. wt. 302.
Net 1.35
(B) SPARK-PLUG TESTER. The new Marfree "Spark-Plug Tester" will quickly find a shorted plug by just placing the tester ovet the insulator or the distributor cable. Also doubles as a screw driver.
AA. 138 Shpg. wt., 3 oz.
Net . 89
GLENN'S NEW AUTO REPAIR MANUAL '51.'62
Bigger and more comprehensive than ever! More than 1.200 large $61 / 2^{\prime \prime} \times 10^{\prime \prime}$ pages; 3.000 how-to-do-it pictures: 250,000 car repair facts. Covers every essential repair process carried on in the service field. The book is logically arranged by topics, starting with a comprehensive chapter on trouble shooting to assist the me. chanic in locating the defectlve unit. The new 1962 Appendix contains all specifications required to service Amertcan automobiles and also over 100 current production models of the 35 largest foreign car manufacturers. Also contained is argest foreign car manufacturers. Also contained
BK-40 Postpald in U.S.A.

Net 7.60

## NEW! LAFAYETTE TRANSISTORIZED TACHOMETER

- Accurate 0-8,000 RPM Scale
- Adjustable Shift Point Indicator
- Economy Range-Finder
- Easy to Install


## ONLY 1995



Here is the modern electronic guide to big gas savings, full power and longer engine life. The Lafayette Tach helps you shift right...t tune right...drive right. Features an "Adjustable speed Shift Indicator" that shows exact shift points for fastest exceleration and "Economy Range.FInder" that indicates engine's safest, most economical operating range. Handsome 3 -color ilfuminated dial has accurate 0 to $8,000 \mathrm{RPM}$ scale. Dependable transistor design; self-contalned with chrome head. Easy 5 -minute installation on any car. Shpg. wit., 1 ib AA-114 For all 8-cyl., 12 -volt, neg. ground cars.
AA-115 For all 6 -cyl., 12 -volt, neg. ground cars.
AA-116 For all 4 -cyl., 6 -volt, neg. ground cars.

## NEW DWELL TACHOMETER

- Tunes up electronically, any car ever made No MONEY OOWN


## 2935

$\$ 5$ monthly

## Completely Wired-Not a Kit!

A complete ready-to-use Dwell Meter and Tachometer which will operate on any car ever made. Tests cam Dwell angle and engine RPM on 4, 6 or 8 cyłinder cars 6 or 12 volt right on the engine. Giant, $61 / 2$ easy-to-read meter makes it simpie for anyone to adjust points which are slightly worn or pltted. Adlusts carburetors to insure maximum gas economy and quiet engine running. RPM readings are also essential to properly service automatic transmissions. Three dwell angle scales are provided: 0 to 45 degrees, $0-60$ degrees, and 0 to 90 degrees. This instrument is suitable for dwell angle adjustment on alf foreign and domestic cars. Dual range tachometer 0 to 1000 rpm for precise carburetor adjustments. 0 to 5000 rpm suitable for making all other tests at high engine speeds. Operates on 2 inex. pensive "C" cells. Shpg. wt., 4 los
AA. 165
BA. 156 Extra "C" Batteries, 2 Required
Net 29.35

ea. Net | Net |
| :--- |



## CAM-DWELL TESTER

- Compact, Portable. Rugged
- For 6 and 12 -Volt Systems
- For 4, 6 and 8 . Cylinder Engines $19^{50}$
A completely self-contained transistorized unit that is essential for precise setting of cam-dwell angte on 4, 6 or 8 -cylinder cars. It measures the average number of degrees the points are closed on an easy-to-read two-scale meter. Operates on either 6 or 12-volt ignition systems. Inexpensive internal battery (not supalied) provides long operating life. Accuracy is maintained within one degree regardless of breaker point condition or coll resistance. High impact black phenolic case measures $61 / 4 \times 3 \neq 21 / 21 / 2$. Shpg. wt., 242 tbs
2M. 152
an-152
Net 15.50


## ILLUMINATED VOLTMETER

 649 KIT - Replaces Auto ped. light Indicator

- Indicates Battery Voltage - Large 2" Illuminated Meter Designed for the car owner who desires more than a red light to indicate electrical system performance. May be installed on any generator equipped auto having either a 12 -volt positive or negative ground system. Complete with bracket for under-the-dash mounting, $6 / 12$-volt illuminating kit, hardware and instructions. IA. 154 Shpg. wt., 1 ib.

NEW! AUTOMOTIVE TOGGLE SWITCH


- Paddie Handle-Flick Action

Rated 6 Amp 125 V or 3 Amps 250 V . Max. Designed for "dash board or instrument instaliation. Measures $1 K_{0}^{\prime \prime}$ long $x$ "Ko" W. mounting shaft Ko" L. Ki" Diam. ${ }^{1 \%}{ }^{\circ \prime \prime}$ Toggle. Shpg. wt., 3 oz. Imported.
SW. 84 .......Net, ea. . 99 In lots of 10 , ea. .95

## LAFAYETTE ILLUMINATED AMMETER \& OIL PRESSURE GUAGES <br>  <br> - Complete with Cable and All standard Fittings <br> 

Keep a constant check on the condition and perform ance of your car's electrical and oil pressure systems The ammeter calibrated in a $60-0 \cdot 60$ scale measures the actual rate of current flow.helps prevent generators from burning out and overcharging or discharging the battery. Exact oil pressure from 0 to 80 lbs. is indicated. Easiy installs in any 6 or 12 volt car below the dash, without drilling or can be mounted right in the dash. Both meters are mounted in an attractive chrome panel. Easy to read meters feature 13 "̈" diam. black dial faces with calibrations in white. Size: $51 / 3 W \times 27 / 6 \mathrm{H} \times 21 / 40 \mathrm{O}$. Supplied with 6 and 12 volt bulos and wire, all necessary ilftings plus full instructions
AA-105 Imported. Shpg. wt., $11 / 2$ lbs.
Net 4.99 MS.912 Tee Fitting

Net .49

## "VOLT-TEST" ILLUMINATED VISUAL INDICATING VOLTMETER

## ELECTRONIC MPG COMPUTER



- Measures Engine SPEED
- Computes Relative GAS CONSUMPTION!
- Easily Installed

NO Gas Line Connections!
An all-electronic instrument engineered to be you guide to fuel economy. Measures relative miles per gallon at all speeds. Gives a visual indication of optimum operating efficiency. Guides you to the economy of smooth acceleration, proper cruising speed, the best gas for your car. Pays for itself in gas savings. Easy-to-read, illuminated indicator mounts above dash. Sim. ple installation-no gas line connection-only three wires to connect. Requires no automotive knowledge for installation. Complete unit includes illuminated indicator head. transducer, cable and instruction man. ual. For 12 volt, negative ground systems. Shpg. wt. 3 lbs.

Net 24.50


May be installed on all $\mathbf{1 2}$-volt automobiles having either a positive or negative ground system (NOT for Alternator equipped cars). Voltmeter is mounted in colorful lithographed panel. Meter calibrations are extended in matching colors to panel on which complete explanation of meter reading is printed. Includes 12 -volt bulb and socket, wire and complete installa. 12 volt bulb and socket, wire and complete instalia tion instructions. Shpg. wt., 1 lb .
-

## ILLUMINATED WATER TEMPERATURE GAUGE KIT

- Range $100-220^{\circ}$ f
- 2" Diameter Dlal
- Hermetically Sealed


Heavy-duty vapor tension thermometer which indicates from 100 to 220 degrees fahrenhelt on a 2 " diameter dial. Has $72^{\prime \prime}$ of armored capillary tubing with $1 / 2^{\prime \prime}$ male pipe thread adapter plus hose adapter for instal latton direct to radiator hose or motor block. Includes under-the-dash mounting bracket, 6/12-volt lliuminat ing kit, hardware and instructions. ShDg. wi., 2 libs AA- 163


- Starts Wet or Cold Moters Instantly
- Saves Battery and Gasoline
- Installs Easily and Quickly
- 6 and 12 Volt Cars

Avold excess wear and tear on your motor and battery -install Lałayette's Hot Car-Go. Provides 5 times the normal spafk for fast starting in any weather, and automatically disconnects when engine is running. Will not damage plugs or distributor. Simple to Installinstructions included. Shps. wt., 1 lb. Imported MS.784

Net 2.95


## TIMING \& OCTANE

SELECTOR
Increases Gas Mileage $\&$ Horsepower

- Advances or Retards Spark As You Drive - Spark Indicator Light Shaws Engine Load

Recover the gas mileage and power your car is now wasting with this Timing and Octane Selector. Enables you to dial-in the most effective spark timing from the dash, as you drive. Harmful ping and spark knock are eflminated-you get premium performance from regulaf gas. Will not interfere with your distributor's advance mechanism. Mounts on your dash. Simple, do-it-yourself installation instructions-no tools needed. AA-112 Shpg. wt., $11 / 4 \mathrm{lbs}$.

Net 4.54

## UNBREAKABLE PLASTIC "JERRY CAN"

- For Gas, Water, Juice, Oil-

Car, Boat, Barbecue, Lawn Mower

- Will Not Rust, Corrode.

Break or Shatter

- Reversible, Self-storage Spout Lightweight, unbreakable plastic can ideal for carrying any liquid, for any use, Improved spout for easy pouring, reverses for self storage. inert not affected by oil, acid, etc. Won't dent or breaky Built-in acid, eic. Won't dent or break. Built-in carry. ing handie.
frigerator.


AA. 121 One-Gal, Size; Shpg. wt., $11 / 2$ Ibs
Net 1.10 AA-122 Three-Gal. Size; Shpg. wt., 2 ibs. Ne1 2.15


Standard equipment for starting stalled cars, charging batteries, etc. Made with heavy duty, flexible rubber-covered cable. Augged copper-clad positive action grips identified by Elact and Red heavy vinyl covered handles. Shpg. wt., 3 lbs.
MS-766 8 ft . long, set of 2
Net 1.49
MS. 76712 ft . long, set of 2 ....................... Net 1.98 MS.491 12 ft . Iong, 6 gauge copper cable Net 2:95 MS-492 Baftery Boostér Clip only (specify Red or Black)

NEW LAFAYETTE - HAMILTON Illuminated Electronic Auto Clock

## 3-TON JACK STAND

539
each
2 for

ONLY

## 195

- Use any Voltage


From 4 to 16 VDC!

- Swivel-Lock Mount - any Position!
- Precision Time Keeper - Accurate - Dependable
- Runs Continuously - NO Winding, NO Resetting "Custom" designed, exceptionally handsome electric clock for auto, aircraft or marine use. High-quality Hamiliton movement assures accuracy and dependabil. ity. Electronic movement requires no resetting in normal use. Runs continuously but draws so ilttle current it can not pun your batfery down. swivel-lock ball and socket mounting permits placing most anywhere on or above dash. Simple, one wire connection Operates on any voltage from 4 VDC to 16 VDC . Hands set from front. Sleek, modern face-sweep second hand. Vinyl case cover to match your car's decor. Shpg. wt., $21 / 2$ tbs.
AM-141 Red Vinyl Cover
AA-142 Beige Vinyl Cover
AA. 143 Black Vinyl Cover


## AUTOMATIC SIPHON

- Outboards - Generators 39 - Autos Power Mowers Automatic - safe - simple pump for transfer of gasoline or any liquid. Pump-type siphon works without puting tube to mouth. Just squezze the buld to start the flow. Iransparent inserts pergine equipment. Handy ing. Use for any gas engine equipment. Handy in camp-for plumbers -chemical plants-industrials. Shipg. wt., 802.
HD. 725 Net 1.39


## LEAD-COATED GAS CANS



- Completely Rustproef and Fiakeproef
- Sturdy Flexible steal Hose
- Convenient Carrylns Mandie
- Compact Space-Saving Size

A convenlent, compact gas can constructed of rugqed lead-coated steel .. completely rustproof and flakeproot. Sturdy flexibie steel hose hooks into handiedoes not have to be removed. Extra large opening for filling can. Built-in expansion chamber, Can be used as a utility boat seat for more leg room.
AA.178 $11 / 4$ Gal. Size; shpg. wt., $21 / 2$ lbs.
Net 2.59
AA. $1792^{212}$ Gal. Size; shpg. wt., $31 / 2$ lbs.
Net 3.39

## Mogneicic utulury usht



- Powerful Magnet Holds Answhere on

The Car Leaves Both Hands Free To Work
High intensity trouble lamp for cap or boat. Powerful magnetic base holds easily to metal surface. Double ball joint for use at every possible angle. Heavy chrome plate over brass plated steef. 15 ff . cord. Includes red filter, lighter plug and vinyl case. For 12 V . OC only. Shpg, wt., 1 lb. Imported.
F. 831

Net 3.77
F. 632 Spare Bulb for F. 631 Shpg. wt., 2 oz. ... Net 28

- 4 Reinforced Legs
- Heavy-Duty Steel Construction
- Fully Adjustable From 121/4" to 181/2"

An extra safe, all-steel pin-type jack stand with full 3-ton capacity. Welded construction gives longer lasting support. 4 reinforced legs provide greater stablility. Fully adjustable from $127 / 4^{\prime \prime}$ to $181 / 2^{\prime \prime}$ in 3 positions. Self-locking. Supplied in colorful baked enamel finish, Shpg. wt., 8 lbs.
A.157W

Net ea. 5.39
2 for 9.75

## AUTO PROTECTOR MATS

## ONLY

## 179

- Door-to-Door

- Over the Hump
- All Rubber

All rubber protector mats. Front mat measures $6342^{\prime \prime}$ $\times 26^{\prime \prime}$. Fits the front of any car. Provides protection of floor board, toe board and over the hump. Easy to install easy to remove for cleaning. Rear protector mat measures $6312^{\prime \prime} \times 19^{\prime \prime}$. Fits over the hump and into the floor wells. Avallable in Black only. Shpg. wt., Front mat $51 / 2$ lbs. Rear mat 5 lbs.
MA-148 Front Mat
Net 1.79 Ah-147 Rear Mat

Net 1.89


- Made of Sturdy Rust-Resistant Galvanized Steel

Keeps all floors free of unsightly oll and grease stains. Useful for garages. driveways, car ports and workshops. Size: $171 / 2 \times 25 \frac{1}{2} 2^{\prime \prime}$. Shpg wt., 2 lbs.
AA-156
Net 1.39

## ADJUSTABLE AUTO HEADREST <br> I



- Fits Any Car Seat
- Comfortable Foam Pillow Cushion
- Washable Zippered Cover

Avold auto fatigue with thle adjustable headrest. Used by driver or passenger to relleve neck strain-Ideal for long or short trips. Completely adjustable for any car or position. Comfortable foam pillow cushions with removabie, washable zippered covers. Strong chrome frame fits any car seat. Hold-on-bars are Latex coated. A. 90 Shpg. wt., 3 lbs.

Net 5.45

## INJECTO-LUBE

"Throw Away" Pressure Lube Gun

- Contalns All-Purpose Lubricant
- Fits All Standard Fitting

Ideal for lawn mowers, automoblles, tools, appliances, outboard motors, farm implements, etc. Designed to provide clean, fast, efficient, fitting lubrication. Preloaded, ready to use. No replacement-parts worry, simply discard entire gun when empty. Shpg. wt., 8 ozs. AA-177

## LAFAYETTE VALUES IN AUTO ACCESSORIES



Mirror-bright chrome plastic moulding instalis easily and firmly. Will not fall off, rust, chip or peet. Completely flexible for use on any straight edge or curve. Adds an extra touch of beavity to any car. Comes in 25 ft . length-wse any cutting tool for exact sire fitting. Shpg. wt., 1 lb AA-188 25 ft . cóll

Net 2.59


10-PIECE IGNITION WRENCH SET

Set consists of 8 of the most popular small sizes. All 8 wrenches are fastened in one integral unit. Also included are 1-screwdriver and one-Feeler Gauge. MD-843 Shpg. wt., 3 oz. imported

Net .39

## 20-PC. AUTO SOCKET SET



Ideal for auto or home. Contains $\%$ regu lar 12-polnt sockets— $K_{6}{ }^{\prime \prime}, 1 / 2^{\prime \prime} K_{4}{ }^{\prime \prime}, 5 / 6^{\prime \prime}$
 L handle, 1 ratchet handle, I screwdriver adapter; also 7 ignition sockets- $1 / 4$ "
 ternal knurled socket: $1 / 4^{\prime \prime}$ drive hex. L handle. All parts are properiy heat treated and nickel-plated. Mounted in red wall oracket. Shpg. wt., 3 los.Imported HD-446

Net 2.79


SPEEDY! TIGHTENS LOOSENS!
Ever have trouble loosening a tightly turned, rusty screw, or a screw with the groove deformed? With this device, a small hammer rap is all that is required to loosen any corroded or rusty fastener. The driver will not damage the screw. Can be used to tighten screws also. Complete set consists of the driver tool, an adapter, Ko" bit, '1/39" bit, No. 2 and No. 3 bit and cam. Comes complete with necessary instructions for use and metal tool case. Shpg. wt., 2 lbs.Imported HD-971

## MAGNACLOCK with ALARM <br> 550



- Powerful Magnet in Base for Sure-Grip Attachment To Dash
- Clock Piroted and Suspended to Swing to Any Posi-tion-Even on $190^{\circ}$ Surface
- Accurate, Dependable $\mathbf{3 0}$. Mour Movement with Alarm A beautifully styled car clock that is equipped with built-In, powerful magnet in the base for sureagrip attachment to any steel surface. Clock is fitted into a contour-molded plastic case and has a convex glass front framed in a beveled, gold-finish metal band Colorful base is a matchmate to the clock and all hands and numerals are luminous. Imported 30 hour movement with alarm is precision-made and is not affected by magnet in the base. Clock can be easily removed and used whenever you go. Avallable in a choice of 3 colors. Shpg. wt., $1 / 2 \mathrm{lb}$.
AA-185 (Sllver) incl. F.E.T
Net 5.50
AA-185 (Silver) incl. F.E.T
Net 5.50
ROCKER PANEL MOULDING


Mirror-Bright-Chrome Finish-Has the Appearance of Expensive Ribbed-Type Moulding Found on Late-Model Cars.
Chrome-like flexible plastic easily shaped to any contour on car. Completely weather resistant-always retains its mirror-bright finish. Ideal for rocker panels, ower body and fender panets. Instalis in minutes with chrome-plated self-tapping screws supplied. Comes in 16 ft . coil-cuts to size with scissors
AA-189 $21 / 2^{\prime \prime}$ width. Shpg. wt., $21 / 2$ Ibs. per coil.... 4.50


A steel chest built to last. Removable tote-away Double lock seamed construction, reinforced corners continuous hinge, steel handle, regular key lock plus hartware. Baked enamel interlor, Steel gray outside finish. Size $16^{\prime \prime} \times 7^{\prime \prime} \times 7^{\prime \prime}$. Shpg. wt., 8 Jbs.

Net 5.50

new type of lock that performs multiple service lugkage, auto, house, bike. sports equipment, etc. Just pull out the flexible cable (lested for strength at 2000 bos., stop, and lock it at the rength required as it conJorms with the shape of the obrect. Stainless steel con struction locking mechanism cannot rust. Compact in sire. weighs only $5 \frac{1}{3}$ ols
HD-997 Shpp. wt. 1 ib
Net 3.39

## ILLUMINATED alternator gauge

- 100.0.100 Charge, Ols. charge Rating
- For Heavy-Duty Alternator Equipped Vehicles
A precision gauge for use in trucks, tractors and other heavy vehicles equipped with heavy-duty alternators. $2^{\prime \prime}$ diameter illuminated dial in diamond stripe chrome bracket. Mounts below or in dash. Gauge is magnetically shielded and pointer specially dampened against severe vibration from vehicle. For 12 volt electric systems. Complete with instructions, but no wire inciuded. Shpg. wt., 1 lb.
AA-191
Net 5.49


## CHILD'S SEAT BELT HARNESS


"Sit and Stand" Model for Maximum Freedom of Move. ment. Safety-Tested to Exceed 2000 lbs. Easily Installed In Any Car.
Scientifically designed seat beft harness for children up to 6 years of age. Complies with Society of Auto motive Engineers' standards. Shoulder harness sup ports upper torso; leg straps give pelvic support to child whether sitting of standing -offers complete protection to active children. Has quick-release air craft-type metal-to-metal buckles, strong all-nyion webbing. Fully adjustable for size to give child maximum freedom and comfort. Complete with patented floor hardware for firm anchoring. Shpg. wt., $11 / 2$ los AA-192

Net 6.89


FIBERGLASS REPAIR KIT

- Plastic Fiberglass Stronger Than Steel - Self Bashing in Minutes - Sculps like Modeling Clay - Fixes Fast to Last For quick, easy, low cost per manent repairs to wood, metal, plastic, concrete, fiber glass, ceramic. almost any material . . whether cracked, dented, holed or rusted. Features a newly perfected, easily-worked material which hardens quickly to a tough, durable waterproof plastic that is stronger than steel. Alsc included glass cloth, hardening agent and fast cure agent. EEasy to use. Shpg. Wt., $11 / 2$ los.
MO-418
Net 1.36


Foerglass insulation 9 sq. ft. thick, with glue and applicator. used for lining car hood, firewall, floor inside fender panels or trunk. Cuts easily to any shape, oresses into place with shape, presses inio place wand merous other uses - lining speaker cabinets, insulating pipes, etc
SB-40 9 sq. ft. Shpg. wt., 1 lb .
SB-55 20 sa: ft. Shipg. wt., 21 tbs
Net 1.49

## RUBBER

 MALLETS

Use if for home fixit jobs, automoblle body work, dozens of other uses. Oilproof and waterproof head, won't flare or chip. Hardwood handle securely set in head.
large: 2 lo. head; face $-21 / 2^{\prime \prime}$ diam. $41 / 4^{\prime \prime} \mathrm{L}: 12 \frac{3}{}{ }^{\prime \prime}$ handle. Shpg. wt., 2 lbs., 9 ozs. Imported. HD-868

## Page 220

## Lafayette offers more value-more variety

## GLARE GUARD VISOR

- Molded from Acrylic Plexiglass ${ }^{\circledR}$
- Built in "Diffusion Band" 269
- Fits All Cars and Trucks


First major improvement in sun visors in 30 years! Sclentifically designed to filter out $87 \%$ of the sun's rays. Optically clear, "Dawn Blue" fliter lets you see road signs, signal lights and traflic hazards in their natural color and clarity. Simultaneously protects your eyes from glare, squint, fatigue and eye strain. Provides eye ease and comfort-safe, clear vislon. Fits all cars and trucks. Non-slip, heavy duty spring cllps, snap on regular visor. A "flick" of the finger positions it. Adaptable to sports cars with no original visor. A year "round necessity. Overall size $16 \times 43 / 4$ ". AA. 46 Shpg. wt., 1 ib

## FIRST AID KIT

220

- Includes First Aid Booklet

- For Cars-Trucks-Boats-Momes

The perfect first aid kit for the car-boal-camp-and home. Contains all the essential first aid needs. 1 Ad. hesive Tape-3 way, 3 , \$h $1^{1 " x}$ yd. each; 10 plastic Strips; 1 Tincture of Merthiolate, $1 / 4$ ol. (Lilly) 1 Unguentine Antiseptic; 1 Roll Gaure Bandage, USP ${ }^{12} \times 6$ yards; ${ }^{1}$ Scissors; 1 Roll Gauze Bandage USP $2 " x 6$ yards; 2 Paper Cups; 2 Gauze Sponges. USp $4 \times 4^{\prime \prime}$ 16 ply: 1 Ampoule Ammonia Inhalant; 2 Gauze Com. presses, USP $3 \times 3^{* *}-12$ ply; 1 Absorbent Cotton, $1 / 4 \mathrm{oz}$. USP; 1 First Aid Booklet. Shpg. wt., 1 it. AA. 60

Net 2.20
"OU-OL"-PENETRATING
 ALL-PURPOSE LIQUID TOOL - Frees Frozen and Rusted Parts

- Stainless, Odoriess.

Non-Flammabie

- For Car, Home, Beat
as low as 145
A new, all-purpose penetrating liquid tool that saves you labor, time and money. Penetrates below the surface, eliminating rubber-to-metal squeaks, frees all frozen and rusted parts. ADsolutely safe-odorless, non-toxic, stainless, non-flammable, harmiess to the skin. Effective on hot of cold surfaces. For use in the home, car, Doat. Available in handy 12-02. spray or 1 -pint oiler-fype spout can.
p-418 Spray; shpg. wt., 1 ib.
Net 1.69
p. 419 Can; shpg. wt., $11 / 2$ lbs.

Net 1.45

## Amazing New

 CHEMTRONCAR SHAMPOO
Contains Caroaula Wax
Non-Streak - No Wiping Needed you'll be amazed with the results of this new wash and wax car shampoo. Removes grease, road film, insect stains, etc. Spectal formula contains Carnauba-Wax. Provides your car with an amazing show-room finish. Contains 16 ors. Shpg. wt., $12 / 2$ los.
AA-133
Net .88

##  <br> SAMPSON DELUXE SHOCK SPRINGS <br> 695

Eliminate drag, sag and car bottoming with these shock springs. Can be installed on your present shock absorber-no replacement needed. Provides a level, cushioned ride. Fits rear of cars listed below.

| Car | Year | Car | Year |
| :---: | :---: | :---: | :---: |
| BuIck | 1956.62 | MERCURY | 194962 |
| CADILLAC | 1950-62 | (Except '55 | and '56 |
| CHEVROLET | 1949.62 | Series and P | Park Lane) |
| DART | 1960 | METROPOLITAN | N ... 1954.62 |
| DeSOTO | 1938.62 | OLDSMOBILE | 1951-57 |
| DODGE | 1939-62 | PACKARD | 1940.56 |
| FALCON | 1960 | (Except '55 | 5 Series |
| FORD <br> (Except Thunde | $1947.62$ <br> bird) | 60-80-88 and $40 \cdot 60 \cdot 80$ | $\begin{aligned} & 56 \text { Serles } \\ & 0-88 \text { ) } \end{aligned}$ |
| HUDSON | 1940-54 | PLYMOUTH | 1939.62 |
| IMPERIAL | 1955-62 | PONTIAC | 1937.62 |
| KAISER, HENRY J. | 1947.54 | RAMBLER L | Late 1952.62 |
| LINCOLN | 1949-51 | STUDEBAKER | 1950-62 |
|  | 1956-58 | VALIANT | 1960 |
|  |  | WILIYS | 1941.62 |
| AA.89 |  |  | et pair 6.95 |

## HYDRAULIC PUMP OILER

LIGHTWEIGMT
handy translucent tenite
Gives fine, pressurized stream that lubricates hard to get at places. Seamless construction of durable tenite, Finger tio plunger. Holds 4 ozs. of oll. Lubricates all types of machinery - hand and power fools - appliances - fixtures - toys - conveyances. Removable base for easy filling. Shps. wt., $2 / 2 \mathrm{ib}$. HO. 265

Net ea., 69


## ALL PURPOSE

## GREASE GUN

- 3,000 LBS. PRESSURE

PER SQ. IHCH

- $3^{\prime \prime}$ straight mozzle



## SAMPSOM JR. LOAD-HELPER SPRINGS

## 585

- increases Lead Capacity $750-1000$ lbs.

Assemblet-Easy-te-Install in Only 15 Minutes - Heavy-Duty Base-Special Tempered Steel Cerd - Fits Most Cars 1940-59 with Elliptical springs


Ah- Sh Shpg, wt., 7 ibs.
Net pair 5.05

## MOTO-MOP <br> Clean \& Polish Your Car in Minutes Without Dirtying Your Hands

## ONLY <br> 

- No Water, Soap, Polish or Wax Needed
- Polishes as It Cleans
- Silicone-Treated Soft Cotton Tufts


The new way to clean and polish your car in minutes without getting your hands or clothes dirty. You use no water, no soap, no polish, no wax, no hard work. Just whisk Moto-Mop over the car and dust and dirt are pulled away by molecular attraction. As it cleans it pulled away by molecular atiraction. As polishes and coats the finish with a protective also polishes and coats table-grip rubber handle. Ships.
compound. Has a comfortable $w t .2 \mathrm{lbs}$.
Ah-181
Net 2.50

## DIMMER SWITCH EXTENSION

- Desizned with Yau in Mind -

No Installation Necessary

- Locales Dimmer 5 witch where You Want it

Eliminate danger and acci-
dents due to bright lights with the new dimmer switch extension. No more groping for that tiny dimmer switch. Easy-to-install, fits most cars since 1940. Ideal
Develops up to 3,000 tbs pressure per square inch The 3 inch straight norzie makes easy work of those hard-to-reach grease fittings. The ideal lubricator for maintaining powered lawn mowers, workshop tools, automobiles, outboard motors, tractors, chain saws, efc. Amber translucent body with a yellow base. Made of lough tenite, stands by itself. Shpg. wt., i/2 it.


## DRY CHEMICAL

 FIRE EXTINGUISHER- A Most Efficient Fire Extinguisher
- 6 B:C-Highest U.L.

Rating for ITS SIZE

- Exceeds I.C.C. \& U.S. Coast Guard Requirements
- More Effective Than a $\mathrm{CO}_{2}$ Extinguisher of Comparable Size
The most powerful, efficient tire extinguisher of its size. Dry chemical extinguisher utilizing a specially developed non-toxic, non-corrosive, dry chemical powder rated 6 B:D by U.L., extremely last rate of damp in spraying chemical, non-clogging valve insures perfect closure without leaking. Safety Zone Pressure Gauge shows instantly whether extinguisher is ready for use. Forged brass valve body equipped with vehicle mount. ing bracket, locking clamp.
ND. 987 Shpg. wt., 7 lbs.
Net 9.95
DO-IT-YOURSELF RECHARGE KIT. Contains $23 / 4 \mathrm{lbs}$. of Ory-Kerm-S dry chemical powder. Shpg. wt., 5 lbs. HD-988

Net 1.47

# ALL CHANNEL ELECTRONIC ROTATING TV ANTENNAS 

ALL CHANNEL'S "RIVIERA" WORLD'S MOST POWERFUL ULTRA-FRINGE VHF-UHF-FM ANTENNA guaranteed 200 mile vhf reception or your money back - Broadband UHF.VHF and FM, motoriess all direction reception -

Receives channel 2.83 from all directions without a rotor All aluminum flip-out assembly
Field tests reception on VHF of up to 200 miles has made possible this unprecedented guarantee. Here is an antenna with one transmission line for all UHF, VHF and FM stations in all directions without the use of a rotator. The nine position selector switch connected at the set electronically rotates antenna beam instantly without physically moving the antenna. Gain on channels 2-6 comparable to 4 -bay conicals; on channeis $7-13$ comparable to stacked 10 -element single channel yagis; on 14.83 comparable to bow.tie reflector, $161 / 2^{\prime \prime}$ doweled aluminum
elements are 60 inches long. Complete with switch, coupler, 45" stacking bars and 2-71/2" angle type mast insulators for Polymicalene line listed below. Shpg. wt., 10 lbs. AN-I35wX Less Mast

Net 19.65
"U.Install-It" kit: Includes Riviera antenna, chimney mount, two five ft . masts, 100 ft . of Polymicalene 4 -conductor lead-in wire, 8 stand off insulators and complete instructions, AN-42WXM Shpg, wt., 16 lbs.

NEW! ALL CHANNEL'S "ATLAS KIT" Everything Included For Complete Installation


| MONEY BACK GUARANTEE |
| :--- |
| If not completely satisfied |
| wlth any ALL CHANNEL pro- |
| duct, return in 30 days for |
| full refund, Jess only trans- |
| portation charges. |

Pre-wired and pre-assembled
for do-lt-yourself installation.

- Money Back Guarantee - Offers All the Advantages of An Expensive Rotor Motor Directional Tuning 12-Position Electronic Rotating I witch Eliminates Ghosts External Interference

12-position Electronic Orientation Switch instantly and automatically beams TV set to the best possible signal does more than a rotor motor without the large expense and headaches. Very simple to install. The antenna is of preassembled fip out construction with the center of gravity on the mast itself. Picture quality is improved by eliminating ghosts, reflections and interference in difficult reception areas. Has no moving parts, requires no filters, uses no electric current and no motor
the riviera must be useo witn the low LOSS LEAO IN WIRE LISTEO BELOW Special 4 conductors, matched Impedance transmission line. Low loss mica-filled Polymicalene copperweld conductors. WR-8w 50 ft . length WR-9w 75 ft . length WR-9W 75 ft . length
WR-I8W 100 ft . length

Net 5.00
Net 7.50
Net 8.90
control wire. Oiamond embossed $45^{\circ \prime}$ elements. Complete kit includes stacked "Atias," electronic rotating switch, switch to set coupler, 70 ft . 4 -conductor polymicalene flat lead in wire, 4 stand-off' insulators, mounting bracket, two $5 . \mathrm{ft}$. mast sections, instructions. Completely pre-assembled, and pre-wlred. Shpg. wt. 14 lbs.
AN. 136 wX
Net 22.45

## New! Rembrandy "880" TV/FM OUTDOOR ANTENNA

- Operates Both FM Stereo and TV
- 12.Position Station Direction Control
- Eight 60" Elements
- Pulls in Best Signal from any Direction
- Gold Permadized


## Comparable to 9 Powerful Full Wave Length FM Antennas Plus 9 Highly Directional TV Antennas

Now an outdoor antenna for both FM stereo and TV. Eight $60^{\prime \prime}$ long, $12^{\prime \prime}$ dia, quilted aluminum etements can be compared to 9 powerful full wave length FM antennas plus 9 TV antennas all facing in different directions. 12-position station direction control electronically offers all the advantages of a rotomotor unit without moving parts. It's the only antenna that compensates for changing signal directions caused by changing weather conditions. Also ideal for color TV reception. Elements are preassembled for fast lifp.out Instaliation.
AN-142wX Shpg. wt, $81 / 2 \mathrm{lbs}$
Special 4 -cond. lead-in wire, tinned and plugged
WR-168 70-ft. length
Net 9.95

168 70-ft. length

## Rembrandt TV DIRECTION FINDER

- Receives Signals From All Directions -Without a Rotator! - Supercharges Any IV Antenna-Boosts The Pick-up Power! - Filters Out InterierenceTunes Out Ghosts! - Rejuvenates "Old" TV Antennas - Amplifies The TV Signal - No Installation Problem

Electrically rotates the polar-feceiving pattern of your existing antenna and phases the ground wave picked up by the electrical wiring system with the sky wave picked up by the antenna. Improves any existing antenna: indoor, outdoor, master or built-in. Boosts plck-up power of any antenna-old or new. Just a flick-of the selector control funes out ghosts-filters out interference-tunes in those "hard-to-get" problem channels. Automatically amplifies TV signal strength for "snow" free, brighter, clearer pictures. Works on every channel-in any location-with any antenna-for any TV set. No installation problem-simply attach to antenna terminals in back of TV sefand plug into 110 V AC/OC socket. Complete satisfaction guaranteed or your money back.
AN-140 Shpg. wt., 2 lbs.
Net, ea. 5.95
in lots of 6 ea


A powerful indoor antenna utilizing $46^{\prime \prime}$ long arms to provide efficient reception to 35 miles, 12 -position switch heips eliminate ghosts and snow. A real beauty to grace any decor-Brass plated coll and 4 section telescoolng arms. Includes 6 -foot transmis. sion line. Available in Mahogany, Walnut and Ivory. Shpg. wt. 3 lbs.
AN-143 Mahogany ...................................... Net 6.95
AN-144 Walnut ….............................................. 8.95 AN-145 Ivory

20 ELEMENT STACKED SNAP OPEN CONICAL

- ALL ALUMINUM
- NO LOOSE PARTS
- FASTEST INSTALLATIONS


## GOLD ANODIZED

Best antenna deal yet for servicemen dealer-and Installation spectalists. All the most wanted features. Quickest. easiest installation possible. No loose hardware All elements snap open and lock in with. out tools. Most efficlent conical design out tools. Most efficient conical design
for all reception areas. Two complete for all reception areas. Two complete bays
8 lbs.
AN-28wx Singly, ea.
5.25 Lots of 3 ea
 Mounts. Includes AN. 28 antenna and installation. kIf AM-1IWM with two 5 ft . masts. As shown below.
AN-32WXM Shpg. Wt., 18 lbs. Net 7.95 "U-INSTALL-IT" KIT with Chimney Mount. Same antenna and accessories but includes chimney mount instead of roof
mount.
AN-43WXM Shpg. wt., 18 lbs. Net 8.75

## LAFAYETTE

 FRINGE-PROBER
## $13^{95}$

Up to 125 miles of Power Fringe Reception

- 19 Electrical Elements Engineered for Superior Color Black And white Reception - High Gain On All VHF Channels Completely Pre-assembled

Twin-driven elements work with carefully tuned. phased and spaced directors and reflectors to extend flat high gain response actoss entire VHF band. Cuts out ghost's and unwanted signals. Rugged reinforced aluminum elements and brackets stand up under severest wind and lice loading. $100 \%$ preassembled for easy installation. Less mast. Iead.in. shpg. wit., 7 lbs.

## AN-51wX

AN-5iwX 13.95 POW'R KIT AK.54WXM. Includes AN. 51 WX Color 'Tenna, TL. 75 POW'R PAK booster and AM- 12 mounting kit (as shown elsewhere on this page). Shpg. wt., 16 fos.

## MAXIMUM PERFORMANCE FRINGE ANTENNA

## $11^{88}$

Field proven design for fringe reception. Gold anodized to combat corrosion. Com. pound yagi array to "sock-in" signals where other designs fall. "Tension-lok" hardware. Heavy wall lubing throughout. Less Mast. Shpg. wt., $81 / 2$ lbs. AN. 57 WX Gold Anodized ...............et 11.88 "U.INSTALL.IT" KIT with chimney mount. Includes AN. 67 WX antenna and Installation kit AM-12WM as shown below. Shpg. Wt., 15 lbs. AK. 60 WXM
AK-38WXM. Includes AN. 67 WX antenna, 20 ft . Telescoping mast and accessories. Shown in kit "A" copling mast at 39 libs on page 224. Shpg. Wt, 39 los
AK. 38 WM ....................... 22.50 AK-39WXM. includes AN-67WX antenna, Alliance K .22 rotator 20 ft . Telescoping mast and accessorles. Shown in Kit "B" on page 224. Shpg. wt., 50 libs.
RK. 39 wxM

Net 45.79

## LAFAYETTE DEEP FRINGE.PROBER

Up to 150 miles of Extra Power Fringe Reception

## - 27 Electrical Elements - Inline twin driven yagi design - Deep Fringe Gain on all VHF channels - Completely pre-assembled <br> Delivers the extra picture power needed for crisp, clear pictures in remote areas. Inline twin driven yagi design provides more gain and higher front-toback ratio. Result: More TV stations, more pleture power. Factory preassembled for snap-out assembly. Reinforced gold anodized aluminum construction. Less mast and twin lead. Shpg. wt., 10 tbs <br> AN-215WX <br> 17.98 <br> POW'R KIT AK-61WXM. Includes AN-215WX, TL.75.

Complete אit of AN-51 antenna plus AM-12WM mig. kit as shown elsewhere on this page. Shpg. wt., 15 'bs.
AN.52WX
Net 16.30
"TECHNI-POWER" DEEP

## FRINGE ANTENNA

- 20 Active Elements
- Range to $\mathbf{1 5 0}$ miles
- Broadband (VHF Channels)

TV antenna obtains maximum front-to-bach ratio without sacrifice of gain on either low or high band! Folded dipole impedance matching on low band, and extra high gain three-element colinear operation on high band! Multiple reflectors and directors, combined with the colinear elements, sharply increase the directlvity. Double fidelity phasing is used on the high band drive-plus four (4) extra high band elements. Broad banded for all VHF Channels 2 through 13. Alf aluminum screws and nuts to eliminate rusting at vital contacts; tagged connec tion points; "molded-in"" lead line connection screw and lifetime high impact polystyrene insulators and end caps to prevent whistle and icing! Shpg. wt. $91 / 2$ lbs.
AN-68WX (Silver aluminum)
Net 17.11
AN-69WX (Gold corodized)
Net 19.05
POW'R KIT AK-56WXM. Includes AN-68WX "Techni-Power" Antenna, TL-75 POW'R PAK Booster, 20 ft . Telescoping mast and accessorles shown in Kit "A" on page 224 . Shpg, wt., 31 lbs
AK.56WXM

POW'R PAK Booster; 20 ft . Telescoping mast and accessories shown in Kit "A" on page 224. Shpg. wt., 35 lbs. AK.61WXM

Net 34.99

## LAFAYETTE UNI-TENNA

- RANGE TO 75 MILES
- ONE ARRAY FOR FM \& TV - A MUST FOR MULTIPLEX

Fig. $B$
Fig. A
Fig. A, a high quallty antenna designed for operation in semi-fringe areas. Excel. lent pattern and high gain provide lop reception of color and black.white TV and is loeal for stereo FM multiplex; Uses combination TV and FM antenna on one boom with separate transmission lines. The $5 \geqslant / 4 \mathrm{ft}$, boom has square cross sections for added strength and maintains parallel alignment of elements. 4 Element yagi is used for TV, 3 elements yagi for FM, 10 Elements operating on high band as patented colinear yagi. Shpg. we., 6 lbs.
AN-211WX
Net 10.55
Fic. B, similar to AN-211WX but with less elements and use of omnidirectional FM halo. Designed for local and suburban use. Provides full response operation for TV, FM and Multiplex. Shpg. wt., $31 / 2$ lbs.
AN.212WX
Net 5.85

# LAFAYETTE has MORE antennas-LOW prices 

## VECTORLOG ${ }^{\text {¹ }}$ ANTENNA

TECHNI-TENNA ${ }^{\text {m }}$

## 10.0



- Features the Log Periodic System Developed by Armed Forces Engineers - The Most Efficient System Yet for Top Gain in Problem Areas - Achieves Maximum in-Phase Current Distribution - DirectionalExceptionally High Front-to-Back Ratio
Engineered to obtain maximum gain, directivity and front-to-back ratio and maintain peak broad band characteristics. Lafayette's new, 12 element VECTOR-LOG antenna uses the log period in principle-most recent development In receiving antennas. Low wind resistance, maximum strength insulations and snap-lock assembly for rugged strength and durability. Wrap around U-Bolt saddle for "No-Tift" mast connection. Less mast and lead-in. Shpg. wt., 81/2 lbs

Net 10.50

- FIBERGLASS INSULATORS
- LOW WIND RESISTANCE
- SNAP-IN CONSTRUCTION

A superior all-channel 5 -element VHF design. Excellent reception for both black and white and color. Colinear design eliminating ghosts and other in terference while high frontto-back ratio delivers a wide band response and high directionality so necessary for coior and fringe area reception. Snap-in construction-assembles easily and quickly. Fiberglass insulators are used for maximum strength and all-weather protection.
AN-208WX Shpg. wt., 7 los.
Net 8.59

## 8 ELEMENT VEF CONIGAL

## - Range to $\mathbf{4 0}$ miles

- Aluminum Construction
- Rugged, Trouble-Free Design

All aluminum 8 element conical. Provides top quality reception on channels 2 to 13. Fuli sized. Rugged insulator block. Designed for rapid assembly. Fan front of 6 full length elements. Easy to assemble. Real value. Shpg. wt. 4 lbs .
AN-11w
Singly ea. Net 2.60 Lots of 3 ea . Net 2.40 "U Install It" Kit. Includes AN-11 and roof-mount kit AM. 10 as shown below. Shog we., 11 lbs.
AN-33WM
Net 4.95
"U Install It" Mit. With chimney mount kht. AM-12 as below. Shpg. wt., 11 lbs. AN-44WM

Net 5.50


## VEE-BEAM VHF ANTENHA

- Excellent for Metropolitan Areas Rugged Aluminum Construction

Popular primary area antenna-covers channels 2 to 13 within a range of 40 miles; to 60 miles when stacked. Pro vides excellent gain, especially on the high band. Sharply directional pick-up pattern gives steady, clear pictures. Utilizes rugged aluminum construction. Lightweight, very easy to install. Less mast and 300 ohm twin line. Shpg. wt., 4 los.

Net 2.25 AN-21w

Net 2.2
AN-20W 2 bays stacked ......... Net 4.59 "U Install It" Kit. Includes AN-21W and roof mount kit AM-10. Shpg. wt., 11 lbs.
AN-45WM
"U Install it" Kit. With Chimney mount
AN-45WM kit, AM-12. Shpg. wt., 11 lbs.
AN-46WM

## GONIGAL WINDOW ANTENAA

- More Antenna for Less Space
- All Aluminum Construction


Contains 4 full-sized elements plus 2 high trequency dipoles. Ideal for apartment buildings, hotels efc., or wherever roof-top installations are impractical but necessary for the greater gain which is provided by a good outdoor antenna. Complete with all mounting hardware, less 300 ohm twin lead. Installs by placing ends of base against window frame and lightening nuts. Base spans up to $44^{\prime \prime \prime}$ to fit all standard window frames. Antenna can be positioned for optimum reception. Shpg. wt. 3 lbs.

Net 5.71
AN-23 Extension bar to 60"
Net 1.35
AN-24 Extension bar to 72'

## Leader IN-LINE ANTENHA KIT

- Gold Anodized
- Complete-Ready To Install
- Time-proven Design

Ideal metropolitàn and suburban antenna kit. Efficient folded dipole design. Broad band, uni-directional re. sponse. Perfect impedance match on high and low sponse. Perfect mpedance match on high and low bands results in reduced stray reflections and ghosts

- no studs or transformers needed. Designed for maximum in phase currents on both high and low bands. Shpg, wt., 4 lbs.
AN-154W
Net 3.79
"U-Instali-1t" Kit. Includes AN- 154 and roof mount kit, AM-10, as below. Shpg. wt., 10 lbs. AN-152WM

Net 6.29
"U-Install-It" Kit. Includes AN- 154 and Chimney mount kit, AM-12, as below. Shpg. wt., 11 Ibs. AN. 153 Wm

Nef 6.49


## SPECIAL FRINGE AREA ANTENNA

- Excellent Directivity and Sensitivity
- Perfect $300 \Omega$ Match on Each Channel


Extremely high gain and front to back ratio. Utilizes 5 dipole eiements in an advanced design. Phasing relationship assures equal gain on all VHF channels. advanced design. Phasing relationship assures equal gain on all. VHF channeis. Styrene plastic insulators. Automatic brackets lock and secure all elements. Completely preassembled. Dual insulators prevent waver, slip and iwist of elements. All aluminum construction. Single bay. Less mast. Shpg. wt., 12 lbs.
AN-37WX
Net 13.95

## NEW LAFAYETTE ULTRA-LITE <br> ALL DIRECTIONAL FM ANTENNA

## $2^{10}$

- Perfect for Indoor Concealed Installations
- Solid Rod Elements.

Here is the FM antenna you have been walting for. Designed for elther outdoor mast or indoor closet/attic installation. Easy to install-no holes to drill. Provides excellent gain for areas up to 35 miles from station. Perfect for multiplex reception. Brings in all stations clearly. Gold corodized finish for weather and corosium protection. Strong, yet lightweight design. Shpg. wt., 1 ib.
AN- 213
Net 2.10
FM Antenna Kit
Same as above, but with kit containing 50 ft ., 300 ohm line, $3.311 / 2^{\sim}$ standoffs; $1.71 / 2^{\prime \prime}$ stand-off and 1 mast wrap around stand-off. Shpg. wt., 3 lbs. AN- 214

# LAFAYETTE FRINGE AREA "TECHNI-KIT" ANTENNAS 

## "BEST BUY" KITS! NOTHING ELSE TO BUY!

## - 20.30-40 F. MAST - WITH OR WITHOUT FAMOUS ALIIANCE ROTATORS - FINEST COMPONENTS Available on Lafayette's Easy Payment Plan.

## DEEP FRINGE ANTENNA KITS UP TO 150 MILES WITH LAFAYETTE AN-68WX



Kit AK-40wXM. Includes the "Lafayette Techni-Power Deep Fringe AN-68WX. Twin driven-high gaın-ex ceptionally directive. Top design efficiency. Includes 20 ft . telescoping mast and accessories in kit " $A$ " Shpg. wt., 30 lbs .
AK-40wXM
Net 26.95
Kit AK- 41 WXM . As above, including Alliance U-98 rotator and accessories in Kit " $B$ ". Shpg. wt., 50 lbs . AK-41wxM

Net 59.70
Kit $A K-42 w x M$. Same as $A K-40$, but with 30 ft . mast. Shpg. wt., 45 lbs.

## AK-42WXM

Net 29.29
Kit AK-43WXM. As above, including Alliance U-98 rotafor and accessories in Kit "B". Shpg. wt., 65 lbs. AK-43WXM Net 62.40 Kit AK-44WXM. Same as AK-40, but with 40 ft . mast. Shpg. wt., 52 lbs.
AK.44wxM
Net 31.95
Kit AK-45wXM. As above, including Alliance U. 98 rotator and accessories in Kit "R". Shpg. wt., 75 lbs. AK-45WXM

Net 65.18

INSTALLATION ACCESSORIES


Take your pick of Lafayette deluxe antenna kits-chosen by experts to meet the most demanding reception problems. Each kit contains a rugged, high-graln, preselected antenna, a telescoping mast of heavy gauge galvanized steel, plus (Kit " $A$ ") a universal base mount, guy wire, 100 ft . of twin lead, ground rod, ground wire, lightning arrester, hook-eyes, standoff insulators, turnbuckles. Rotator kits include Alliance rotators, plus (Kit " $B$ ") all the accessories shown in Kit " $A$ " above and an Alliance thrust bearing, $10-\mathrm{ft}$. antenna mast, 100 ft . an
of rotor cable and 4 -wire lightning arrester. Shipped complete-ready for top quality installation. These kits may be shipped by express only.

## FRINGE PROBER KITS UP TO 125 MILES WITH LAFAYETTE AN-51WX



Kit AK-46WXM. Includes the Lafayette Color 'Tenna AN. $51 w X$. Gold anodized for corrosion resistance. Highly directional, Yagl type performance. Dynamically balanced, compact design. 20 ft . telescoping mast and accessories in Kit "A". Shpg. wt., 26 lbs.
AK-46WXM
Net 24.95
Kit AK-4TWXM. As above, including Alliance T- 12 rotator and accessories in Kit " $B$ ". Shpg. wt., 48 lbs.
AK.47wXM
Net 43.66
Kit AK-4BWXM. Same as AK-46, but with 30 ft . mast. Shpg. wt., 43 lbs.
AK-48WXM
Net 47.59
Kit AK-49wXM. As above, but with Alliance T-12 rotator and accessorles in Kit "B" Shpg. Wt., 64 Ibs. Net $\mathbf{5 6 . 3 5}$
AK-49WXM KIt AK-50WXM. Same as AK-46, but with 40 ft. mast. Shpg. wt., 51 lbs
Ah-50WXM Net 30.39
Kit AK-51wxM. As above, including Alliance T-12 rotator and accessories in Kit " $B$ ". Shpg. wt., 74 lbs AK-51wXM

Net 59.29

## ELECTRO POWERED ANTENNAS

## WINEGARD "SUPER COLORTRON" ELECTRONIC TV ANTENNA

## Winegard

- Built-In 2-Nuvistor Amplifier
- 30-Element All-Channel (2-13) VHF Yagi
- Ideal for Deep Fringe Color or Black and White Reception
- Maximum Front-to-Back Ratio

Gold Anodized

## $61^{68}$

FOR BUDGET TERMS SEE PAGE 412


This super powerful antenna with built-in 2 -Nuvistor amplifier provides the finest long distance color or black and white IV reception in any area-city, subur. ban, fringe, deep fringe. Strong signals can't overload It-will take up to 400,000 microvolts of signal input. Can be located up to $\mathrm{y} / 4$-mile away from recelver. It will easily drive 6 to 10 TV sets. Ruggedly constructed of heavy-duty gold anodized aluminum. Completely preassembled for fast, easy installation. Less mast and lead-in wire. Installed size: $110 \mathrm{~W} \times 185^{\circ} \mathrm{L}$. Shpg. Wt., 17 lbs .
AN-163WX


Taco's most powerful antenna-Gets pletures and sound where others fall. This matched antenna-transistor amplifier system amplifies up to $10 x$ the signal power transmitted. May be remotely located from the receiver to $1 / 4 \mathrm{mile}$ without additional boosters. Perfect for color TV-Built-in outiets feed 2 TV or FM sets simultaneously without interference. Other sets may be added. The power packed performance of this matctied antenna-amplifier system enables lower, neater installations, reducing height as much as $50 \%$. T-Bird will eliminate interference, ghosts and snow, for movie quality reception. Lightweight assembly is $100 \%$ rustproof, gold anodized for beauty and strength. Ideal for rotor installations. Shpg. wt., 14 lbs.

## AN-202WX

Net 63.03
MODEL 990-6 Similar to above except has 6 elements and one crossarm. Shpg. wt., 10 lbs.
AN-203WX
Net 53.01
MODEL G990.5 similar to above except has 5 elements and one crossarm.
AN-204WX
Net 45.33

JFD ELECTRONIC TRANSIS-TENNAS


- Attractive, Anti-Corrosive, Alodized
- 31 Working Elements
- Transistorized Amplification for Far Fringe Reception
- Up to 200 mile Reception
- Powers up to 4 TV and FM Sets


An extremely powerful antenna using transistor ampli. fication. Precision-tuned multi-function elements deliver pinpoint directıvity and amazing broad band response on channels 2 to 13. Work together with built-in ACpowered transistorized amplifier to give up to 25 db gain on single set, or 9.13 db gain on each of 2,3 or 4 sets. Heavy-duty all-aluminum boom-braced construc. tion with gleaming, protective AAA Gold B and Alodized Iinish plus many other deluxe features. Complete with antenna, TNT103 amplifier and AC-powered supply. Less mast, lead-in. Shpg. wt., 16 lbs.
AN-107WX

## Winegard ANTENNA SYSTEMS




## MODEL SF-8 STEREOTRON

 FM ANTENNA- 8.Element FM Yagi Cut to 88-108 MC
- Flat Frequency Response Across

Entire FM Band

- Average Gain of 8 db
- High Front-to-Back Ratio

For the ultimate in long-distance FM and FM Stereo reception. Deluxe construction throughout-gold anodized aluminum boom and elements (all other metal parts are iridized) make entire antenna $100 \%$ corrosion-proof, reinforced reflectors, automatic lock-light efement brackets. Completely pre-assembled for fast, easy installation. Less mast and lead-in wire, Installed size: $672 / 2^{\prime \prime} \mathrm{W} \times 90^{\prime \prime} \mathrm{L}$. Shpg. wt., 8 lbs.
AN-258WX
Net 13.90
MODEL G-41S SUPER POWER SUPER POWER
BEAM ANTENNA Shpg. wt. 6 lbs.


## - Lightweight 9-Element Yagi - All-Channel (2.13) VHF Reception - High Uniform Gain and Front-to-Back Ratio <br> For fringe and near-fringe TV reception areas. Replaces two-bay conicals, conyagis, etc. Incorporates "Electro-Lens" director system with "Hi-Q" loading coils for outstanding performance on both high band (7.13) and low band (2.6) channels. Gold anodizing makes all aluminum parts $100 \%$ corrosion-proof. Com. pletely factory pre-assembled. Less mast and lead-In wire. Size. $110 \mathrm{Wx} 66^{1 / 2} \mathbf{2}^{\prime 2} \mathrm{~L}$. <br> $\qquad$ <br> 1173

## MODEL 283 "TWILIGHT" VHF/FM/UHF ANTENNA

- Covers TV Channels 2 to 83 Plus FM
- Beautiful-Low Silhouette Design
- Powerful-Blocks Ghost Images, Filters Out 173 Annoying Interferences


For super-clear black and white or color TV pictures and FM sound in the diffl. cult "Twillight" Zone ( 5 to 35 mites). Ends "just fair" reception from hard to adjust top-of-set and out-of-date outdoor antennas. All heavy-gauge aluminum construction, permanently gold anodized. Wind tested to 100 MPH . Less mast and lead-in wire. Factory pre-assembled-easy to install. Only 87" wide. Shpg. wt. 4 tbs. AN-261WX

Net 11.73

MODEL K-42

## POWER PIX

## VHF ANTENNA

- All-Channel VHF Reception
- Low in Price-High in Performance
- Easy to Install-Ruggedly Constructed
- Non-Anodized


## 764

For city; suburb and near-fringe areas. Electrically and mechanically superior to conicals and con-yagis. Full power performance on all VHF channels. Directive polar pattern. Has "Lock-Tight" reflector support brackets, "Wrap-Around" mast clamp, dual moisture barrler insulators on driven elements. Accurate $\mathbf{3 0 0}$ - hm impedance match. Rugged construction for long life. Shpg. Wt., 6 lbs.
impedance match. Rugged construction for long life. Shpg. Wt., 6 lbs .
AN-260WK

## MODEL AN-22ON TV ANTENNA

 BOOSTER AMPLIFIER
## $23^{44}$

- Uses 2 Long Life Nuvistors
- Can't overload on Strong Signals
- Works on Any Antenna

Amplifles weak signals from distant TV stations. Strong local signals can't overload it-will take up to 400,000 microvolts input. Has an ultra-low noise circuit, high amplification, flat frequency response. Weather-sealed, corrosion-proof polystyrene case. Comes with AC Dower supply with built-in 2 -set coupler. Shpg. wt., 3 lbs. rL-105 Nef 23.44
MOOEL AP-230. Similar to above but for FM. Takes up to 200,000 microvolts input.


MODEL A-400 DISTRIBUTION AMPLIFIER

## $47^{97}$

- For Up to 30 Sets
- Minimum of 26 db Gain

- Ideal for Color as well as Blaci and White

For use in small master antenna systems ( 30 TV/FM sets or less), such as small motels, apartment buildings, schools or homes. Gain: low TV band, FM band, high IV band- 26 db min . Frequency Response: flat, $\pm .25$ db over any 6 MC channel. Input: 300 -ohm twin lead, 75 -ohm coaxial. Output: 275 -ohm coax connectors for RG-59/U or RG-11/U, 1 no-strip 300 -ohm disconnect plug. Tubes: $4-6 \mathrm{~F} 5$. Requires 117 volts, $60 \operatorname{cDs} A C$. TL. 187 Shpg. wt., 8 Ibs.

## Finco

## The World's Finest TV and FM ANTENNAS



MODEL 8-8, TWIN DRIVEN-Absolute maximum front-to back fatio for the elimination of venetian blinds, back ghosts, efc. with no sacrifice of gain on either low.band or high-band. Accomplished by twin-driving of two fidetity phased elements "Quad-Tri-Quad" orive-true quadrature twin-dive on low-band and tri-quadrature twin-drive on high-band; and "Interleaved Elements." These are added to Fidellty Phasing-combining the proved superiority of driven folded dipole impedance matching on low-band with the acknowledged extra high gain of three-element colinear operation on high-band. Oversize, exira-heavy gauge scuare aluminum tube boom. Shpg. wt., $91 / 2 \mathrm{lbs}$ AN-110wK

Net 22.93
MODEL B-7. Range up to 150 miles. Similar to B-8 but with eight elements, one reflector. Shpg. wt., $61 / 2 \mathrm{ibs}$. AN-11iwx

Net 15.23
MODEL B-6. Range up to 100 miles. Similar to B- 8 but with six elements, one reflector, one director. Shpg. wt. $51 / 2 \mathrm{lbs}$.
AN-126WX ............................................................ 11.55 MODEL "A" STACKING KIT favors high-band. Shpg. wt., $3 / 4 \mathrm{lb}$.
AM-120w ..................................... 1.23
MODEL "C" STACKING KIT favors low-band. Shpg. wt., 1/2 Ib.
AN-122W ............................................ 1.82


RANCE UP 10200 MILES

## MODEL A420G DUO-TWIN-DRIVE <br> 

## MODEL <br> FM-5

New FM super-deluxe twin drive antenna is designed on
 Finco ultpa high geomatic TV antenna principles, using a specially engineered twin drive element having imped ance control "T" match stubs. Allows maximum gain to be realized over the full 88 to 108 m.c. band. Superig front-to-back ratio is made possible through Finco patent ed fidelity phasing. Designed for maximum protection against weather deterioration and short-out due to cor rosion-with all brackets and complete elements double corodized. Heavy duty square aluminum boom, exclusive "Lock-Tite-No-Tilt" saddle mounting, and "box girder" snap out self-aligning bracket are completely pre-assem Bled. Shpg. wt., $81 / 2$ Ibs
AN-124WX
Net 21.37


FINCO FM SUPER DELUXE' ANTENNA-Geometrically de signed for ultra-high gain, this antenna uses a twin drive element with impedance control stubs. Extra wide spacing of elements gives substantially greater signal than stand ard 8 to 10 element designs. Strong square aluminum boom for extra rigldity. Exclusive "lock-fite-no-tilt" sad de mounting. "Box girder" snap-out self-aligning brack ets. Antenna is pre-assembled with a!l aluminum rein forced elements. Shpg. wit. $61 / 2$ lbs.
AN-119WX
Net 14.64 AN-119WX
MODEL FM MODEL FMS STACKING KIT to stack 2 Model FM-4. Shpg $\mathrm{WH} .1 / 2 \mathrm{lb}$
$\mathrm{AN}-123 \mathrm{~W}$

Net 1.97
MODEL 8-5, MAXIMUM FRINGE AREA -Oversize heavy gauge square aluminum tube boom. All element

FOR DEEP FRINGE AREA OF 150 MILES OR MORE-Where extra high gain and sharp directivity are a necessity. Includes low-band reflector 3-element high-band reflec tor, low-band full $1 / 2$-wave director, and two 3 -element colinear high-band directors. (CH. 2-13). Shpg. wt., 6 lbs AN-113WX
MODEL "A" STACKING KIT to stack Model B-4. Shpg. wt., $3 / 4 \mathrm{lb}$.

## AN.120W

Net 1.23
MODEL B-3. Same as above Dut fewer elements fol range of 75 miles or more. Uses model A stacking kl listed above. Shpg. wt., 5 lbs
AN-114WX
brackets are of "Box Girder" aluminum construction Exclusive "FIDELITY PHASING" combines the proved su periority of driven folded dipole impedance matching on low band together with the acknowleoged extra high gain of three element colinear operation on high band. Multi ple low band reflectors and directors, high band colinear reflectors and directors, as well as combination eie ments. Ultra High Gain and sensitive directivity previously found only in twelve (12) element Yagis cut to single channel. This makes possible reception and pic ture clarlty herefofore considered impossible in maximum fringe areas up to 200 miles. Shpg. wt., $91 / 2$ lbs. M-112WK
MODEL "A" STACKING KIT favors high-band. AN-120W Shpg. wt. $7 / 4 \mathrm{lb}$.
MODEL " 8 " STACKING KIT favors low band
AN.121W Shpg. wt., $7 / 4 \mathrm{lb}$.
Net 1.23
Net 1.53

## FRINGE COMBINE \#3 TV/FM ANTENNA



## MODEL FM-3



FINCO 4-ELEMENT BROAD BAND FM YAGI-A broad banded 4-element Yagi for high gain on FM band, 88 to 108 MC All-aluminum construction with square boom; special "Lock-Tite-No-Tilt" saddle bracket for permanent hori zontal alignment. Reinforced elements are preassembled with snap-out brackets: "Impedance step-up" design fo maximum energy transfer. Shpg. wt., 5 lbs.
AN-118WX
Net 7.64
MODEL FMS STACKING Kif to stack Model FM-3. Shpg wt. $1 / 2$ Ib

Net 1.97

## MODEL <br> FMT-1



An all-direction FM antenna kit, designed for reception over the full FM band, 88 to 108 MC, without necessity of rotation. The two-folded dipoles are matched with a special quarter wave phasing stub for optimum gain and approximate circular, all-direction radiation pickup patapproximate circular, all-direction radiation pickup pat-
tern. Supplied with 50 ft . of 300 ohm twin line, 5 ft tern. Supplied with 50 ft . of 300 ohm twin line, 5 ft .
mast. mounting base, two mast stand-off insulators, mast. mounting base, two mast stand-of
three wood screw eye stand-off insulators.
AN-116WX Shpg. wt., 6 lbs
Net 8.53
MODEL FMT-A. Same as above but with double mast mount, "side arm" mast. Shpg. wt., $31 / 2$ tbs.
AM-125W

# lafayette has more uhf antenwas-More Values 

## POWRSCOPE UHF ANTENNA

True Parabolic Focal De-sign-The Most Powerful UHF Fringe Antenna

- Single Dipole Eliminates Need for inefficient Phasing Harnesses
- Positive 日ig Screen Ghost Rejection
- 18 db Gain at Translator Frequencies
- 13 db Gain over UHF Spectrum
- Quick, Strong Installation

The most powerful UHF fringe antenna-proven by per. formance in the toughest fringe and translator UHF areas. Unique parabolic design exceeds the capture area of 12 and 16 bay car's whisker type arrays. single dipole provides maximum signal without phas. ing harness. All metal construction reduces signal loss due to weather deterioration: Pre-assembled screen and dipole are instalfed in minutes for maximum performance and reliablity. Shpg. wt., 10 lbs. AN-251WX

## BOW FLECTOR UHF ANTENNA

## $3^{18}$



Provides very high gain in primary signal areas. One array averages 6.5 db galn across the entire UHF band. When stacked 9 of gain can be achleved. Its large rigid grid reflector, bowtie and hardware are all specially treated to be corrosion resistant. Shpg. wt. $21 / 2 \mathrm{lbs}$.
AN. 172
Net 3.18

## UHF-VHF ANTENNA COUPLER

- For 2.Set UHF/VHF
- No Wire Stripping

An efficlent 2 -set coupler for
UHF/VHF Channels 2.83. Features a straight forward reststive circuit and provides a full
 15 db interset isolation. Insertion loss less than $1 / 2$ db. Stripless screws are used for rapid secure installation with 300 ohm twin lead. Input has low VSWR over channels 2-13. Sturdy non-breakable, weather. proof plastic case. For wall, celiling or TV mast mount. ng. Hardware supplied. Shog. wt., $1 / 2 \mathrm{lb}$. T5.373

Net 2.89


When more than one antenna is required several down leads to the receiver become a problem. With the Selectronic Antenna Switch instant antenna selection is possible and only one down-lead is necessary. 3 . positlons. Low loss. With instructions. Shpg. wt., 602 TS-374

## "TRAP EASE" TUNEABLE

## TV ANTENNA TRAPS

- Ellminates Adjacent

Channel Interference

- Easy to Install on Any TV Set

Tuneable antenna trap suppresses adjacent sound car rier by more than 50 db leaving a strong clear pic ture. Permits good reception from weak distant sta tions normally blocked out by adjacent channel inter. ference. Does not affect reception of local stations Works with any TV receiver and any antenna that would normally bring in pictures from the distant stations if the Interfering adjacent channel was not on the air. Simple to install and operate. Just turn end cap until interference is eliminated. 300 ohm end cap until interference is eliminated. 300 isput and output impeda TS-370 For Channels 7.13

Net 11.97 Net 11.97


## COLINEAR

 UHF ANTENNA- For All UHF TV Reception Areas $6^{41}$
An outstanding Ulira-High Frequency antenna operative on the entire band. Single bay with colinear design has more gain than 4-bay bow tie type. When two are stacked horizontally you get a $40 \%$ power galn. 13 antenna elements constructed of sturdy aluminum tubing. Factory pre-assembled with heavy duty construction throughout. Giant wing nuts can be tightened by hand. Rigid one.inch off-set mounting boom keeps antenna away from mast to eliminate detuning effect. Shpg. wt., 4 lbs.
AN-184
Net 6.41


## TRIPLE DRIVEN UHF YAGI



Advanced design provides high gain necessary in fringe area instaliations. 12
aluminum elemeflector Each model ing a screen reflector. Each model covers the portion of the UHF spectrum. High-front to back ratio glves excellent directivity. Can be stacked. Electronically welded construction insures stability and long life. Ready to Install, fully factory assembled, Be sure to order model which includes UHF channeis available in your area,
AN-240 Channels 14 to 46
Net ea, 5.59
AN-241 Channels 16 to 73
AN-242 Translator Ch. 47 to 83
AN- 243 Stacked Ch. 14 to 86 AN-244 Stacked Ch. 16 to 73

Net ea. 5.59
Net ea. 5.59

AN-245 Stacked Ch. 47 to 83
Net ea. 10.52
Net ea. 10.52

UHF/VHF MIXER-SPLITTER
NETWORK

- Mix or Separate

VHF and UHF
Signals
-

- Low Ins


Precision engineered bandpass filters with low inser tion loss and a high degree of isolation befween channels. Can be used individually or in combination to mix of separate VHF and UHF signals, Low VSWR characteristics. Eliminates need for rotators and switches. Enclosed in weatherproof polystyrene case switches. Enclosed in weatherproof polystyrene case
for indoor or outdoor use. Complete with all hardware Shpg. wt., 602.

## TS-372

Net 3.50


## TV LINE VOLTAGE REGULATOR

A protective unit designed to keep line surges from damaging TV or radios. Surges reduced from max. 140 V . down to 110 V . Saves tubes, fuses, efc. Plug into outlet and recelver into unit. Shpg. wt., 1 lb.
Vo-382 200 to 300 watts
Net 2.05
vo-383 300 to 375 wafts
Net 2.35


## ACME T8394M VARIABLE

 VOLTAGE ADJUSTER300 W. continuous duty variable transformer. Adjusted by rotary tap sw. Used as step up or step down. Voltmeter shows sec voltage. Pri. $95 / 100 / 105 / 110 / 115 / 120 / 125$ volts at $50 / 60$ cps. Sec. out 115 V. $8^{\circ}$ cord and plug. Size $47 / 4 \times 4 \times 5^{\circ \prime}$. Shpg. wt., out 11
9 lbs.
Th. 14
Net 11.32

## ECONOMY UHF ANTENNA

- Highest Gain on 70 UHF Channels
- Completely Preassembled
- Excellent Directivity
- Flat Response Across Each

Channel


Four bay, UHF bowtie antenna. Exceptionally high (12db) galn - relatively llat across the entire spectrum. Fully factory assembled. Quickest and easlest to install. High efficiency screen grid reflector boosts front to back ratio. Unique "cross-over" phasing bars-open $V$ elements. Rugged-rigid-corrosion resistant construction. Shpg. wt., 5 lbs.
AN-200WK
Net 4.79

## UHF "TRANSLATOR" 4BAY ANTENNA

Four bay bow-tie and screen reflector-luned to the UHF, translator frequencies. Average 16 db gain on channels 70-83. Completely pre-assembled. AN-201wx Shpg. wt., 5 lbs.

Net 4.79
UHF CORNER REFLECTOR MODEL CRB 426
For quality UHF reception even in fringe areas. High gain in iringe areas. horizontal and vertical directivity eliminates "ghosts" and "snow." Rugged construc tion, large reflector screen made of highest grade aluminum tubing. "Fold-open" as sembly. Ulghtweight.
AN. 130
Shpg. wt., 5 lbs..... Net 4.26


TACO UHF/VHF MAGI MIX COUPLER

## 241

A mast-mounted, weatherproof unit which combines the signals from separate VHF and UHF an tennas into a single UHF transmission line. Bifflar coil circuit is engineered to provide maximum signal transference and extremely low insertion loss Shog. wt., $1 / 2 \mathrm{lb}$.
TS.375
Net 2.41

## AUTOMATIC TV VOLTAGE REGULATOR-



- RETURNS FULL HEIGHT AND WIDTH OF PICTURE WNEN LOW LINE VOLTAGE CAUSES DISTORTION OF PICTURE
- ELIMINATES INTERMITTENT SYNC AND OSCILLATOR DRIFT - AUTOMATICALIY BOOSTS 10 VOLTS
Returns fult height and width of TV picture affected by low line voltage. This 300 watt model will handle most requirements from 90 to 135 volts. Boosts 10 volts automatically when line is below 110 volts. Increase set sensitivity. Reduces low line hazards. Simple plug in installation. Turns on and off with the TV set. Shps wt., $21 / 2$ lbs.
TR-108 PERMA.POWER MODEL D-200 ...... Net ea. 5.85 PERMA.POWER MOOEL D-101-Manual model, can atso be switched for high line voltage adjustments.
TR-20


## JFO VOLTAGE REGULATOR

Maintains steady TV Pix by keeping AC/DC line voltage constant. Automatic regulating protects TV set. Plue TV into regulator, and regulator Into outlet. Shpg. wt. 1 ib .
15.115 200 watts

Net 2.35
TS. 116250 watts
T5-117 300 watts
Net 2.35
Net 2.35
Net 2.35

# JFD GOLD BOND ALODIZED 

a new high-gain all-channel antenna that is comparable in performance to a tuned yagi cut to that channel (FROM THE LOWEST TO THE HIGHEST TY CHANNEL AND INCLUDING THE FM BAND).

VKIIITG MIFI SATELLUTE

PX911G HI-FI POWER HELIX


Triple-driven collector system joins powerful Satellite folded and straight dipole sec. tlons for Yagl-quallty performance. Front-to-back ratios of up to 22 db on channels 2 to 6 and 28 db on channels 7 to 13 reject noise and signals from rear and side. Rugged aluminum construction elements lock into new "Perma-lok" brackets. Less mast and $300-\mathrm{hm}$ twin line. Shpg. wt., 8 lbs. AN-7IWX Gold Bond Alodized

Net 17.94
JX311G HI-FI JUNIOR-HELIX


The perfect answer to alf VHF B/W, and color reception problems in metropolitan and suburban areas. Outperforms and outlasts the finest 2 -bay conlcal. Utilizes the basic fringe-proved Satellite-Helix design of expensive fringe antennas completely preassembled all-aluminum construction. $l^{\text {" }}$ square crossarm with capped ends. Less mast and $300-0 h m$ twin line. Shpg. wi., 5 lbs. AN-s3wX Gold Bpnd Alodized

Net 11.02


For Deep Fringe Areas Up To 125 Miles 26 Working Elements for Extra Sensitivity

- Gold Bond Alodized Extra-high sensitivity for crisp, clear, snow-free picture in $8 / \mathrm{W}$ or color, out in deep tringes. Triple-driven collector system combines famous Satelilte straight and folded dipole sections into single co-active antenna for Yagl-quality performance. High front-to-back ratios of up to 22 db on low band and up to 28 db on high band screen out ghosts. Entire $1^{\prime \prime}$ square boom rigidized by two $1^{\prime \prime}$ tubular supports. Less mast and $300-\mathrm{hm}$ twin line. Shpg. wt., 10 lbs . AM-75WX Gold Bond Alodized

Net 22.05

FB520G HIFI TRIPLE DRIVEN FIREBALL


- For Fringe Areas

Up to 125 Miles

- 24 Working Elements
$22^{05}$
- Gold Bond Alodized

Charge weak deep-fringe VHF signals with brilliant picture detail. Individual reverse phase iwin-driven low band and high band collectors, reflectors, and directors. Extremely high signal-to-noise level. Sharpened directivity, interference-free pictures, rich, deep condirectivity, interference-free pirtures, rich, deep con-
irast. Ultra-modern inline contruction. Completely pretrast. Ultra-modern inline contruction completely pre-
assembled. Less mast and $300-0 \mathrm{hm}$ twin line. Shpg. wt., 10 lbs .
AH-100wX Gold Bond Alodized
Net 22.05

FB510G HI-FI TWIN DRIVEN FIREBALL


- Fringe Reception Up To 100 Miles
- 14 Working Elements
- Gold Bond Alodized to look better and work better
14 working elements for higher gain and sensitivity. Combined Satellite and Fireball designs, with broadband cut oirectors and reflectors develop exceptional directivitly and power on all VHF channels. High front-to-back ratio punes out ghosts, snow and interfer. ence. Trim inline design, reinforced construction for storm-proof performance. Less mast and 300 -ohm iwin line. Shpg. wt., 8 tbs.
AN-102WX Gold Bond Alodized
Net 16.17

FB500G HI-FI FIREBALL


- For Local and Suburban Areas Up To 75 Miles
- 9 Multi-Purpose Elements
- Gold Bond Alodized
offers flat, uniform response and acute directivitiy on channels 2 to 13 in town and country. Twin-driven low band and high band dipoles working with phased reflectors and directors step-up sensitivity, and suppress ghosts and undesirable signals. All-aluminum through. out. $100 \%$ "Quick-Rig" factory-preassembled for fast set-up. $1^{\prime \prime}$ square crossarm, reinforced elements. Less mast and 300 -ohm twin line. Shpg. wt., 6 lbs. AN-79wK Gold Bond Alodized


# OUTSTANDING FM ANTENNA VALUES 

## NEW "HI-5 FM YAGI"



High gain antenna designed for the audiophile who seers perfection in FM reception. Extra elements on this antenna serve to pull in stations where others fall. Trouble -free operation even under severe weather conditions. The fully automatic snap-lock brackets insure easy, rapid and secure installation. AN-49wX Shpg. wt., 3 lbs.

Net ea. 5.95

## NEW! FM ANTENNA KIT <br>  <br> ALL-DIRECTIONAL <br> - Ready To Install <br> 

Provides excellent gain for areas up to 35 miles from the station. Use on existing masts-new instaltationor as an attic installation. Gold anodized aluminum for years of trouble Iree operation. Exceptionally light -sturdy design. Capable of receiving FM signals from practically all olrections with equal efficiency. Complete with 50 ft . of 300 - ohm iwin lead, mast standoff. screw eye standoffs, mast mount. AK-53 Shpg. wt., 5 Ibs.

Net 3.98 FM AMTENMA ONLY. Shpg. wt., 3 Ibs. Net 2.85


- 200 Mile Range
- Deep-Fringe Multiplexed Stereo Hi-Fi FM
- AAA Gold Bond Alodized

Combines the power and sensitivity of transistorized amplification with a powerful twin-driven wide-spaced 6 element FM yagi. Offers so much power it can drive 2,3 or 4 FIM sets anywhere in the home. One inch 2, 3 or 4 min sets anywhere in the home. One inch Beautifully gold alodized. Completely preassembled. AN-171wX

Net 36.81
Same antenna as above, less transistorized amplifier and power supply. AN-sawx Gold Bond Alodized

Net 15.75

Ideally sulted to Multiplex FM reception. Stereo (Multiplex) FM signals, for the average tuner, have a range of approximately half that of ordinary (monaural) FM signals. This 10 -element, double-odriven, yagi array has the necessary added gain, sensitivity and directivity to compensate for the lack of signal strength. Assures full-fidelity reception and highest signal/noise ratio. All-aluminum gold anodized constroction. Fiberglas insulators. Torsion lock hardware, sure-lock mast clamp. Board banded to cover the entire 88 to 108 MC band. Shpg. wt., 7 IDs.
AN-250WX
Net 9.88

## JFh ,im <br> HI-FI FM ANTENNAS



## FM

## STEREO-PLEX <br> ANTENNA

The Model FM-88 Seven-Element Stereo-Plex FM antenna is the first antenna designed specifically for Multiplex Stereo FM. An omni-directional antenna with triple the power of crossed dipoles ... and four times the power of "S" shaped FM antennas. All-aluminum construction. Receives from any direction at distances up to 40 miles from the station. Shpg. wt., 4 lbs. AN-216w

Net 8.25


ORE EFFECTIVE THAN BUILT-IN ANTENNAS
The Model FM1000 features $1 / 4$-wave 4 -section precision arms; $3 / 4$-wave induction coil. 12-position station lifection control and a special noise filtering circuit for extremely effective performance. Weak stations are strengthened and reflected signals and background noise are blocked out. Low silhouette slim-line styling. Shpg. wt 3 lbs.
AN-224 Mahogany ............................................................. 6.95
AN-225 Ivory
Net 6.95
AN-226 Wainut
Net 6.95

## OMNI-DIRECTIONAL FM TURNSTILE ANTENNA



Ellminates the need for two masts on your roof. Alt direction reception-no rotators needed. Double mast mount-rugged, rigid parallel mounting. For use on all masts. Shpg. wt., 3 lbs.
AN-249W
Net 3.75
FM TURNSTYLE KIT: Antenna above plus angle roof mount-ilghtning arrestor- 75 feet of 300 ohm twin lead-screws eyes-mast standoffs and $5 \mathrm{ft} .11 / 40.0$. steel mast. Shpg. wt., 10 lbs.
AK-64WM
Net 6.69


A broad-band, low-noise FM amplifier designed to incroase strength of all FM signals before they enter your tuner or radio. Will not overload on strong loca signats while making it possibie to receive weak distant stations. Overall Gain: 18 db average. Impedance: 300 ohms balanced, input and output. For 117 volts, 60 cps ohms balanced. input and output. For 117
Size: $61 / 4 \times 33 / 4 \times 21 / 2{ }^{200}$. Shpg. wt., 2 lbs.
AC. Size: $61 / 4 \times 37 / 4 \times 21 / 2^{20}$. Shpg. wt., 2 Ibs.

# FAMOUS INDOOR IV ANTINNAS 


(G)

(A) UHFIVHF INDOOR ANTENNA New, modernistically styled. ebony and gold. 4-section all brass elements. Receives all 82 UHF channels when tilted in horizontal position. Shpg. wt., 3 los. AN-218.
(B) SWITCH-TYPE

INDODR ANTENNA

- 4.Section Dlpoles-Brass
- 6-position switch

Features fine-tuning eiectronic switch for maximum brightness and sharpness on desired VHF channel. Brass dipoles adjust easily for best picture and sound. Tipproof felt padded base prevents tipping. Finely styled and crafted to match any decor. Complete with 300 -ohm twin line Shpg. wt., 2 lbs.
Shpg.
(C) PORTA-TENNA

A universal antenna for portable and stationary TV sets. When not in use dipoles disappear. Can be placed on back of any TV set. 4 section, plated, tele. scoping dipoles. Complete with instruc. tions, mounting hardware and lead-in. Shpg. wt., 2 lbs.
AN-35
(D) FM TWIN LINE ANTENNA

Folded oipole type for indoor use. Has six foot lead-in equipped with spade lugs which permits it to be installed behind cabinet, under rug, or any out of the way place. Antenna designed to the center of the FM Band. Shpg. Wt., $11 / 2$ los.
(E) JFO MERLIN

Efficient indoor TV antenna. Mounts on the back of any TV set. Ball swivel mount permits placement at best reception angle. Gold numbered station selector dial utilizes best of 12 electronic cir. cuits. Includes 300 -ohm twin lead with spade lugs. Shpg. wt., 1 lo.
AN-90 L10 Ivory
AN. 91 L20 Mahogany Net 4.95
(F) RMS FDCUS F38K

Produces the gain of three separate switch type indoor antennas slacked ogether. Low slihouette base finished in a rich mahogany crackletone with gold ace plate and felt bottom pad to prevent marring furniture. Shpg. wt., 4 lbs.
(G) SNYDER SUPER S3.0

Features the new Directonic 12-position beam selector switch. Triangular phasing element gives a great selection of circuit arrangements. Has patented 4 -section gold tone brass shafts molded into a bakelite ball housing which sits on an extra heavy duty topple proof base. Shpg. wt., 3 los.
AN- 160
0 . $\qquad$ …....................... 2.66
(H) HIDE AWAY ANTENNA

All New Hide Away, back-ot-set antenna Elements telescoue completely into hous-ing-out of sight. Deluxe brass tarnish proof elements.
Shpg. wt., 1 lb.
AN-217
Net 2.99
4-SECTION DIPOLE ANTENNA


Performs as well as it looks. 4.section aluminum dipoles adjust for best picture on any VHF channel. Handsome mahogany base. Tip-proof felt padded base design safeguards TV cabinet. Complete with $300-\mathrm{ohm}$ twin line. Shpg. wt.. 2 los . 3M-12
6 to 11
12 to 49

Net ea. 99 Net ea. . 85 Net ea. . 77

## UHF INDOOR ANTENNA <br> 325 <br> 

Decorator designed to blend perfectly with any interior. Black "bow ties" are sharply set off by the attractive golden grid. Provides exceilent UHF reception: minimizes snow and ghosts; attaches to the back of any TV set; uses $300-0 h m$ lead-in wire. Shpg. Wt., 2 Ibs. AN-220

Net 3.25

## EXACT RFPLAGEMENT ANTENNAS

Exact replacement TV antennas for portable and tote-able TV receivers. Avg. Shpg. wt., 3/4 lbs.


# TV BOOSTERS-FM BOOSTERS-UHF CONVERTERS 

## HEW! LAFAYETTE TRANSISTORIZED 4SET TV/FM BOOSTER

- Amplifies Signals for Top Reception on Up to 4 Sets
- Easy to Connect and Economical to Operate
- Can Be Mounted in any Location, in any Position


## $14^{98}$



If your antenna isn't pulling in signals of sufficient strength then the Lafayette TL-85 Booster Amplifier is just what you need. Screw-on terminals make wire connections easy, no cutting is necessary. Transistor circuit runs cool, draws little current. Signal strength is boosted 3 to 5 times. Will operate up to 4 TV and or FM sets on the same antenna. Input impedance is matched to antenna impedance. Needs no adjustment. Isolated outputs insure maximum set separation. can be mounted in any convenient location where adequate ventilation is provided. Size $43 / 4 W \times 11 / 4 H \times 34 / 2^{\omega \prime} D$. For 117 volts, $60 \mathrm{cps} A C$. Shpg. wt., 1 lb . TL. 85

Imported
Net 14.98

## LAFAYETTE TV/FM 4-SET POWER BOOSTER

- Boest signal for Up Te 4 TV Sets
- Ideal for Master "Home" Installation - Equally Useful In Primary and Fringe Areas
- Electro-Matched to Lafayette TV.FM Antennas
- Updates and improves any TV/FM Antenna installation
Provides a stronger TV or FM signal for up to 4 sets anywhere in the home. LowNoise, High-Output amplifier boosts and distributes the signal over ordinary twin lead. Special Isolation circuitry prevents interaction and interference between sets. Provides as much as 7 to 10 db gain on all channels 2 through 13 when used with one TV set. From 2.5 to 5 db when used with 2 sets. Will often supply more gain when used with an indoor antenna than elaborate, unboosted outdoor antenna supply. Requires no tuning. Installs with just a screwdriver. Uses ordinary twin lead to "antenna-matched" terminals. Mounts behind set-or in any conventent location. Measures $53 / 4 \times 37 / 4 \times 11 / 4$ ". For 117 volts, 60 cDS AC . ML.75 Shpg. wt., 2 lbs

Imported
Net 9.95

## MODEL G-4d UHF CONVERTER

- Powerful Dual Muvistor Clicuit
- Vernier Channel Selector
- AC Outlet for TV Set

- Ments FCC Requirements

Adds all 70 UHF channels to your TV set. For use in difficult signal and translator areas. Operates thru elther Channel 5 or 6 , whichever one is not used in your area. Features include powerful 2 -Nuvistor circult, new low-nolse diode, no-drift tuner section: Shock hazard is eliminated by use of isolation transformer to provide section: Shock hazard is eliminated by use of isolation transformer to provide FCC radiation requirements. Channel selector dlal is Illuminated for easy reading. FCC radiation requirements. Channel selector dial is illuminated for easy reading.
Housed in brown metal case wlth attractive walnut finished front panel. For $110-125$
 volts, 5 Net 26.90 MOOEL G-3c. SImilar to Model G-4d except single Nuvistor circuit and no AC' outiet. Tl.181 .......................................................................................................... Net 18.95

## Winegard

MODEL RD-300
"RED-HEAD"

## TV/FM ANTENNA <br> BOOSTER AMPLIFIER

- Uses Low-Nolse, High-Gain Transistor Circuit
- For Use With Any Nen-Electronic VHF TV or FM Antenna
- AC Isolation Transformer-No Shock Hazard


A reliable "add-on" type amplifler which boosts signals an average of 18 db on the low VHF TV and FM bands; an average of 14 db on the high VHF TV band. Fully protected against damage due to lightning flashes, static discharges or power line surges. For use in areas recelving up to 20,000 microvolts of signal input. Has built-in high-pass interference fliter, mounts easily and is weather-proof and trouble-free. Supplied with AC power supply with butit-in 2-set coupler. Shpg. wt., 3 los.
TL. 188


LafayEtte ALL-CHANNEL UHF CONVERTER $17^{98}$

- Makes Your TV Set - Modern 82.Channel Recelver - For Use with Any VHF set

The compact Lafayette low-nolse UHF converter will add all UHF channels 14.83 to channel 5 or 6 of your present TV set. Precise tuning with dual-knob Vernier selector. UHF/OFF knob for Instant selection of UHF or VHF receptlion. Pllot light indicator shows when UHF is on. Maximum signal power with precise 300 ohm input and output impedance. Uses 6024 oscllator, mixer diode, selenium rectifier Highly styled, durable metal cabinet matches every home decor. Overall size $8 \mathrm{~W} \times 4 \mathrm{H} \times 41 / 2^{\prime \prime} \mathrm{D}$. For $110-120$ volts, 60 cps AC. Shpg. wt., 6 lbs .
TL-176
Net 17.98

## SPECIAL HIGH-GAIN UHF RECEPTION PACKAGE

Consists of Lafayette Converter; completely pre-assembled, 4 -bay UHF antenna UHF/VHF antenna coupler. Shpg. wt., 11 los.

## standard hollsman MODEL "A" UHF CONVERTER



- 2.Speed Planetary Vernier Tunlng
- Nuvistor IF Amplifier
- Covers All UHF Channels (14.83)
- Built.in tiov ac outlet for TY Plug

A deluxe UHF to VHF TV converter featuring more picture power (Nuvistor amplifier) reliability and safety. Only a screwdriver is needed for fast, easy hook-up. Easy tuning. is accomplished by use of 2 -speed planetary drive (not a string drive) Ideal for fringe area reception because of high sensitivity and signal-to-noise ratio. Isolation transformer provides sate "cold" chassis--no shock hazard. Conforms isolation transformer provides sate "cold chassis--no shock hazard. Conforms
to FCC radiation specs. Attractively styled low silhouette plastic/metal cabinet to FCC radiation specs. Attractively styled low sji/houette plastic/metal cabinet
measures $111 / 4 W \times 3 H \times 5 \% / 4{ }^{\circ} \mathrm{D}$. For $110-125$ volts, $50 / 60 \mathrm{CDS}$ AC. Shpg. wt., 6 los.
 MODEL " $B$ ". SImilar to Model " $A$ " less Nuvistor if amplifier and $A C$ outlet. TL-196

Net 21.96

## JRRPOLI MODEL SVC-560 "SUPER-VISTA" UHF CONVERTER



Provides excellent reception on all UHF channels (14.83), from metropolitan to fringe areas, through Channel 5 or 6 of TV set. Features a buitt-in oscillator and diode test point plus an AC convenience outlet. Exact 300 ohm output and ir.out impedance match assures full signal conversion. The 10 to 1 ratio slide rule dial makes setecting another UHF channel as easy as tuning an AM radio. Power supply is isolated to eliminate possible shock hazard. Housed in an attractive, low silhouette, high-impact plastic cabinet. For 117 volts, 60 cps AC. Size: low s.
$11 \mathrm{~W} \times 4 \mathrm{H} \times 6^{\prime \prime} \mathrm{D}$. Shpg. wt., 6 los.
TL-88
Net 29.95
MODEL VC-100 "VISTA". Simllar to "Super-Vista" less transistor amplifier and AC outlet.
TL. 89
Net 20.95


## Winegard

 MODEL WBC4. "BOOSTER.COUPLER"- Incorporates Lew.Nolse, Frame-Grid Tube Circuitry
- Can Operate Up To Four TV/FM Sets at a time
Cuts Snow and Interference, Incraases Contrast
Boosts signal up to 12 db when used as an amplifier for one TV or FM set; up to 6 do on each of four TV/FM sets when used as an amplifier coupler. Linear frequency response is flat +25 do on any 6 MC channel (ideal for color $T V$ reception). Has one 300 -ohm input with disconnect plug and four 300 -ohm outputs with no. strip terminals. Shock hazard is eliminated by use of AC isolation transformer in power supply. Easy to install. Shpg. Wt., 2 los.
TL-189
Net 16.17



## MODEL HAB

## TV/FM AMPLIFIER

The HAB provides high gain on chanhels 2 to 13 , including the FM band Can be used as an amplifier for small distribution systems, or as a preamplifier for larger master TV systems. FEATURES: Premium Frame-Grid Circultry for low noise and high gain; Low cost operation; Separate high and low band mplification for wide-band response; Easy installation highilghted by solderless 75 and 300 ohm terminals; GAIN$23 \pm 1 \mathrm{db}$; Noise figure- $54-108 \mathrm{mc}$ $\pm 1 \mathrm{db}, 174-216 \mathrm{mc} \ldots \pm 1.3 \mathrm{db}$; Inpuit and output impedances 75 or 300 ohms; Cross modulation 1\%; TUBES-1 6088/ECC88, 2-6EW6. Size: 6x43/ex$534^{*}$ For 117 volts. 60 cps. AC. Shpg. $53 / 4$ for 117 Volts $60{ }^{\text {ch }}$ Tl. 105

Net 42.15

## MODEL ABLE-2 TV/FM BOOSTER

Powerful mast-mounted 2-transistor booster ampliffes weak antenna signals. Dellvers sharp, clear reception to as many as 3 TV or FM sets. Signal voltage from antenna is increased up to 8 times for one set. Remote power supply assures isolation between sets and exact impedance match for interference free reception. Ideal for Stereo FM. "Miracle mount" snaps on any antenna mount in seconds-no bolts or straps. Stripless 300 ohm terminals assure simple post. tive connection. For $105-130 \mathrm{~V}, 50 / 60$ cycles AC. Size: $27 / \mathrm{W}^{2} \times 4 \mathrm{~L} \times 15 \%{ }^{\circ} \mathrm{H}$. Shpg. wt. $11 / 4$ lbs.
Th. 163
Net 28.42

## MODEL BTC-99S

UHF CONVERTER


Offers drift and distortion free perfor mance within 20 miles of the TV station. Dual speed channel selector makes it easy to pinpoint any UHF channel from 14-83. Precise impedance match gives maximum signal conversion-no ghosts -no picture smear. 300 ohm stripless terminals make installation a cinch. Output on channels 5 or 6 . Handsome decorator-styled cabinet in beige en hances the appearance in any room Size: $63 / 4 \times 5 \times 4 \% / 4^{\omega}$. For 117 V 60 cycies AC. Shpg. wt., $31 / 2$ bs. Complete with Instructions U.L. approved. TL.100


MODEL
AB. 2

MODEL ABLE. 2

## MODEL AB-2

## VHF/TV BOOSTER

Enjoy brilliant, clear TV reception in even the most difficult 'weak' signal or fringe areas. Powerful broadband amplifier provides more than 10 db gain on all VHF (2-13) channels. The amplifier, housed in a weatherproof case with mast mounting brackets, may be located up to 500 feet from the remote cantrol unit. No separate power line control unit. No separate power line booster turns off and on at remote conbooster turns off and on at remote con-
trol. Uses 300 -ohm stripiess terminals. trol. Uses 300 -ohm stripless terminals.
The remote control unit may be located at any place convenient to the set. Shpg. wt., 2 lbs.
TL-103
Net 34.25

## AB-3 BROADBANO TV/FM AMPLIFIER

- can be used up to a mile away FROM AC POWER SOURCE
A deluxe mast mounted amplifier which provides a gain of 22 db on all VHF-TV channels and FM stations. Remote power supply permits amplifier location up to a mile from it. Uses 300 ohm input on stripless terminals. Output is matched to either 300 ohm iwinlead or 75 ohm cook. Automatic on-off switch. AC power carried to Amp. on ordinary twin lead. Size: $73 / 4 \times 53 / 4 \times 51 / 4$ "; power supply $63 / 431 / 4 \times 41 / 4{ }^{\prime \prime}$. For 117 VAC, 60 cycles. Shpg. wt., 7 lbs.
TL. 169 ....No Money Down Net 64.68


A combination antenna booster and home distribution system. Amplifies the signal of any antenna and distributes signal of any antenna and distributes
it to up to 3 TV and/or FM sets. Used it to up to 3 TV and/or FM sets. Used on one set the $8 \cdot 33$ more than
doubles antenna signal voltage, Easy doubles antenna signal voltage. Easy
to install "stripless" terminals make solid electrical connection with the turn of a screw. No soldering is necessary - SPECS: Average galn 7db for one set; input and output Impedances match standard 300 ohm twin lead; Power $117 \mathrm{~V}, 60$ cycles AC. 6 W . Size: $61 / 4 \times 33 / 4 \times 21 / 2^{\prime \prime}$. Shing. wt. 2 lbs. TL. 167

## NEW! MODEL AB-4 MAST MOUNTEO TRANSISTORIZED TV/FM BOOSTER

A complete, compact amplifier - distribution system for up to 4 TV or FM sets. Reliable transistor circult provides low noise and high gain. Stripless 300 ohm terminals on booster, and remote power supply for fast, positlve instal. lation. Requires four 1.5 volts flashlight batterles for power. Nolse Figure: 4 db avg. High TV gain from 2.17 db and FM 12 db avg. depending on number of sets connected. Shpg. wt., $11 / 2$ lbs. Size: AB-4 $24 / 4 \mathrm{Wx} 3$ (xlizs"H. RPu 3 (power supply included.) $3 W \times 7 \mathrm{WLx} 1 \%{ }^{*} \mathrm{H}$.
TL-165 Net 19.55 8A-157 1.5 volt Battery (4
reoulred) Shpg. wt., 15 02. Net . 13 MODEL AB-4AC. As above, with AC power supply.
Shpg. wt., 1.5 bs.
Net 22.34

## DAB-B DISTRIBUTIDN SYSTEM

Powerful all-channel amplifier provides 8 isalated $T$ outlets with 10 db gain to each on all VHF channels from one antenna. 75 or 300 ohm inputs-All triode circuitry assures low notse performance. Overload prevented by use of a $10: 1$ gain control range. Over 22db isolation between outlets. Requires no tuning or special accessories. Uses 4616 Tubes. Comes complete for easy Installation, including power supply, grounding clamps, solder lugs and ter. minating load resistors. for 117 volts, 60 cps AC. Size: $9 \times 5 \times 51 / 2^{\prime \prime}$. 6 lbs TL-108 U.L. APPROVED ......... Net 81.74

## MODEL- UB UHF BOOSTER

Mast mounted to take advantage of the maximum sig. nal-to-noise ratio, it increases signal voltage by 14 db . May be used in mations and for
 single sets in ools and homes. Delivers sharp clear pictures in difficult areas. Uses standard 3 CO ohm twinlead and weatherstandard $3 C 0$ ohm twinlead and weather.
proof housing. Remote power supply. Six models are listed, each covering a speclfic portion of the VHF spectrum For 117 volts, 60 CPS AC. Size: $7 \times 51 / 1 \times 41 / 2^{* \prime H}$. Shpg. wt., 5 lbs.
TL-170 (14-29 MC)
Net 60.76
TL-171 (25-40 MC)
TL-172 (41-55 MC) TL.173 (56.69 MC) Net 00.76 1-174 (70.83 MC)
TL. 175 ( 72.76 MC )

Net 80.76
Net 60.78 Net 60.7 s

## MOOEL B-24C

## MOOEL IT- TRANSISTORIZEO

## 4-SET TV/FM BOOSTER

The highest gain of any home TV booster. Boosts antenna signal up to five times. More power for up to 4 TV or FM sets. The perfect basic unit for a home master TVfM system. Draws so little current it need never be furmed off-no tubes to replace. Engineered to provide an excellent impedance match and maintain necessary isolation between sets. Can aiso be used to boost amplificatior from most mounted boosters of in master systems. Solid electrical contact with the turn of a screw. Size: $27 / 1 \times 4 \times 15 / 8^{\prime \prime}$. For 117 volts 60 cy . A.C., 01 amp. Shpg. wt., 1 lb.
TL-166

## Net 19.60

MODEL B-24C 4SET
TV/FM POWER BOOSTER
Positive improvement in picture and sound quality, even in deep fringe areas, enjoy new channels and new programs in many cases. The $8-24$ puts new life into older sets. A 8.24 with an indoor antenna will often outperform elaborate outdoor antennas. SPECIFICATIONSGAIN: For one set ("straight-thru"): 11 db on low TV band; high TV band: 8 db. For two set ("couple-two"); 6 db on ow TV band and 3.5db on high TV band BANOWIOTH: 54.103 mc and 174-216 me, flat within $1 / 2 \mathrm{db}$. NOISE FIGURE: 4 db on low TV band and 7 db on high TV band. INPUT: For 300 ohm balanced antenna. ISOLATION: 60 do between sets. POWER REQLIREMENTS: 117 v 60 cycles; 0.1 amp . SIZE: $61 / 4333 \times 24 / 2^{2 A}$. Shpg, wt; 2 lbs
TL. 102
Net 18.32
MODEL BTU-2T DELUXE
UHF-TV CONVERTER


Adds all UHF channels (primary, satelIfte, and translator) to standard TV sets Insures finest pix even in weak areas Features dual-speed channel selection with direct and fife tuning controls. stable, shielded oscillator. Maz signal transfer to channed 5 or 6 of TV; Precise 300 ohm match and irlode amplification: mproved funer design meets new FCC standards; UL. approved; Tunes channels $14-83(470.890 \mathrm{mc})$; Tubes: 6AF4A and 6ER5; Power: 117 volts at $60 \mathrm{cps} A C$ 20 w . Size $61 / 4 \times 5 \times 43 / 4{ }^{\mathrm{m}}$. Shpg. wt., 4 lbs. 1L-101 U.L. anproved..............Net 26.66

## ROTATORS - RANGE EXTENDERS

## Alliance antenna rotators

Rotator redesigned and restyled to provide faster, smoother, better efficiency. Rota tion speed is IR.P.M. and thus has the fastest change from station to station. Magnetic brake affords instantaneous stop without drift. There is full $360^{\circ}$ motation. Factory lubricated for life. Contacts are self wiping thus preventing aricing, loss of contact or interference in pix. A reinforced zinc die cast housing affords all weather protection.
Model U-100(1 \& 2)-Fully automatic, just set control knob and antenna rotates to desired position and stops automatically. Indicator shows position of antenna. Has positive mechanical stop at the end of rotation. Size; Rotator $73 / 4^{\prime \prime} \times 51 / 4^{\prime \prime} \times 8^{\prime \prime}$ Control Case $7 \times 4 \sqrt[3]{2} \times 4^{\text {re }}$. $110 \mathrm{~V}, 60 \mathrm{cps}$ AC at 65 watts. Shpg. wt., 12 lbs. TL.71W


3


T-20 (1-2 3)-Manually operated with direction indicator. Needle indicates position of antenna on controt panel. Has clockwise and counterclockwise revolution. Highly styled decorator case. Slze: Rotator $71 / 4^{\prime \prime} \times 514^{\circ} \times 8^{\prime \prime \prime}$. Control Case $61 / 2^{\prime \prime} \times 21 / 2^{\prime \prime} \times$ $41 / 2^{m}$. Operates on $110 \mathrm{~V} 60 \mathrm{cps} A C$ at 30 watts. Shpg. wt., 12 lbs
TL-72W
Net 23.55
Model K-22 (1 \& 4)-Economy model-Provides positive instant finger tip control of rotation. Push on on end of bar apd antenna turns clockwise. Push down on other end and antenna lurns counterclockwise. Center disc automatic signal light Indicates when limit of 'travel in elther direction has been reached. Size: Rotator $73 / 4^{\prime \prime} \times 51 / 4^{\prime \prime}$ $\times 8^{\prime \prime}$. Case $5^{\prime \prime} \times 5^{\prime \prime} \times 4^{\prime \prime}$. Shpg. wt., 12 tbs,
TL.73W
Nei 18.98
TBE THRUST BEARING BRACKET increases stress capacity of Tenna-Rotors up to 300 lbs. Withstands winds up to 90 M.P.H. Prevents buchiling and bending. Shpg. wt. 3 lbs .
IL. 74
Net 2.91
WRC-104-4 conductor flat cable for above-per ft. 03; WR-151 per C ft . 2.50

## 2


N.E.S. of W. $110.120 \mathrm{~V} 50-60$ cycle AC.

## CDR ROTOR W/COMPASS CONTROL UNIT

- Controlled Directional Reception for color TV.FM Mutijplex-UMF
- Illuminated Cumpass Pattern Dial Press the bar lever on the TR-2A com pass-type control unit and you start the antenna rotating, reverse the direction or stop. As antenna rotates, one of the letters on the dial will light up to show the direction the antenna is facingRotor handies loads to 150 lbs . Weather-groof construction, life-time lubrication 12 heavy-duty bearings in two $61 / 2^{\prime \prime}$ ball-bearings races. Motor reverses instantly Clamps handle masts of $T_{\mathrm{B}^{\prime \prime}}$ to $2^{\prime \prime}$. Heavy-duty precision gears; magnefically released mechanical brake; 3 guy-wire lugs; mounts on mast, tower or platform. TL-160 Shpg. wt. 16 lbs. 8-CONDUCTOR CABLE. For use with TR-2A Rotor above. Shpg wt., per 100-ft. 4 lbs. Wr.446 Per 100-ft. length Net 4.20


## CDR AR-22 AUTOMATIC ROTOR

- Controlled Directional Reception for Color TV-FM Mustiplex-UMF

This heavy-duty rotor unit will hande antennas up to 150 lbs. Simply set the control unit pointer to the desired direction, and the antenna will automatically rotate to this position and stop. Perfect for TV, Ham or Citizen Band application. Rotor unit employs 12 heavy duty ball bearings in two $61 / 2^{\prime \prime}$ races. Weatherphoof motor reverses instantly and is factory lubricated for life. Reversible clamps on rotor will take masts from $7 / s^{\prime \prime}$ to $2^{\prime \prime}$. O.D. Control unit is marked in compass points. N.S.E.W. NW, NE, SW, and SE. Housed in at tractive brown plastic cabinet with rubber feet. Complete with rotor, control unit and instructions. For $110-120$ volts, 50.60 cPS AC. Requires 4 conductor cable. ME.476WX Net 31.31 WRC.104 4 conductor flat cable for above-per ft. .03:


## JERROLD "FMX" FM <br> RANGE EXTENDER

- Improves Sound of inexpen sive FM Tuners and Recelv. ers
- Brings in More FM Stations
- Ideally Suited for Multiplex Reception
A high gain ( 20 db ) signal preamp complete with buitt-In power supply and on-off switch. Novel 60J8 frame grid tube ellminates unwanted background noise. Printed circultry for stable performance. Designed for quick, easy mounting anywhere in the home, between antenna and receiver. Light-alloy cabinet with "no-strip" trim lead connectors. Input and output impedance: 300 ohms ; signal input: 1.2 microvolts; power requirements: 10 W at $117 \mathrm{~V} A C$, $60 \mathrm{cps} .41 / 2 \times 41 / 2 \times 3^{\prime \prime}$.
Th. 96 ...... Shpg. wt., $11 / 4$ lbs. ......... Net 18.95


## JERROLD TX.FM SPECIAL TV.FM COUPLER

## - No Signal Loss



The new TV.FM coupler splits TV and FM signals frequency-wlise and without loss to either signal from a common antenna. Gives complete isolation between TV and FM sets. Equipped with 'No-Strip' serrated washers. Indoor mounting on baseboard in attic or basement; bracket supplied for outdoor mounting to antenna mast. Shpg. wt., $1 / 4 \mathrm{lb}$. TS-352

Net 3.87

## MILLER HI PASS FILTER

Reduce nterterenctic tromipment Also commercial and medical equipment. Also Ham signals below 40 MC. No practi cal attenuation of TV signals above 40 Mc. Simple installation. Connect to IV
set antenna terminals. Size $1 / 2 \times 1 \% \mathrm{~m}$ $31 / 2 "$. Shpg wt., $1 / 2 \mathrm{lb}$.
Ts 321300 Onm Line
Ea. 3.23

## JERROLD HSA-44 4-SET AMPLIFIED COUPLER

## $18^{95}$

- Operates 4 TV/FM Sets from One Antenna


This new amplified coupler allows the use of up to 4 FM or TV sets, in any combination, from a single antenna with a minimum of $1 / 2 \mathrm{db}$ gain at each out put. Operates on an input as low as 100 microvalts and has an excellent noise figure. Input and output impedance of 300 ohms permit use of twin-lead in installation without stripping. Uses 6DJ8 tube. $41 / 2 x$ $41 / 2 \times 3^{\circ \prime}$. For 117 AC, 60 cycles. Shpg. wt.0 3 Jbs. TL.97

Net 18.95

## JERROLD TV-FM HOME SYSTEM ACCESSORIES

HS.135. Surface mounting outlet assembly with press-on male plug. Shipg. wt., ${ }^{2}$ oz. TS. 353

Net . 88

HS-140. Flush mounting outlet; mounting ring: ivory cover plate; press-on plug. Shpg. wt., $1 / 4 \mathrm{lb}$

Net 1.13


HS-24. Press-on male plug. No soldering
required. Shog. wt., requlred. Shpg. wt., 1 oz.
TS.355 TS.355

## ALL CHANNEL <br> UHF-TV CONVERTER

- For Clear Sparkling Pictures
- Class A Signal Areas
- Adds UHF Channels
14.83 to Your IV Set


Enjoy all the new programs on UHF channels 14.83 on your present TV set with this UHF converter. Simple one-knob tuning with single on-off knob. Easy to install to terminals of your TV set and is easily attached to rear or side of cabinet. Gold, unbreakable metal housing. Power: 117 V AC, 60 cycles, Size: $5 \times 33 / 4 \times 27 / 8$ ". TL-98 Shpg. wt., 3 lbs.

Net 13.44

## B-T CABLEMATCH



Matches 75.0 hm Coax to $300-0 \mathrm{hm}$ TV Sets

- No Grounding Problem with Hot Chassis
- Easy to Use and Economical por use in Master TV or Community TV system instal. lations. Every TV set in such systems requires one matching transformer. The Cablematch is the easiest, safest and most economical method of matching 75 -ohm coaxial cable to the 300 -ohm input of a TV set. Input: 75 - hm soldertess Autoplug. Output: heavy-duty leac's with spade lugs. Transmission Loss: 1.5 db maximum. High impact polystyrene case. Size: $21 / 2 L \times 11 / 2 W^{\prime} K_{6}{ }^{\prime \prime} H$. Shpg. Wt., 602.

Net 1.85

## FINE TUNING SHAFT

- For Standare coll tuners

Replaces Standard Coil part number 31T-243-180. The most often needed replacement shaft for tuners Extra long, all aluminum shaft. Full $10^{\circ}$ length easily cut to size. Continuous tuning type - no bumper sirap to break off. Fits all models. Shpg. wi., 3 ois TS. 343

## TV TOWERS－MASTS－ACCESSORIES

## （1）\％＂PLATEO GROUNO RODS

For use where pipe ground is not avail able．Heavy steel yoke for head ri－15w4 ft．Shpg．wt．， $14 / 216$ ． TL－16 W 6 it．Shps．wi．， $21 / 4$ ib．

## （2）STEEL TURNBUCKLES

Takes up guy－wire slack．Rustproof gal－ vanized steel．Size：7\％＂open， $51 / 2^{\prime \prime}$ closed．Shpg．wt．， 8 oz
TS． 72
10 for

## （3）＂GRIP＂GROUNO CLAMP

Makes visellike grip on plpe，Sharp point－ ed screw makes perfect contact TS． 21 Shpg．Wt．， 4 ot．

## GUY WIRE FASTENER ल⿵冂⿱一口䒑寸

Simply draw guy wire through the＂grip－ IIte＂：100p wire back，and twist once． Used extensively in armed service com－ munication installaflons T\＄．320 Shpg．wt．， 402 ．

Mel .69

## UNDER－EAVE MOUNT



Permits mounting antenna to the under side of over－hanging eave．Can also be used as a sturdy self supporting flat roof mount．Heavy gauge steel and Hol－ Dip galvanized for maximum corrosion resistance．One piece mounting of welded construction with a heavy gauge embossed steel dlagonal support．Com． embossed steel diagonal support．Com．
plete with installation hardware．Shpg． plete with
wt． 6 lbs． wt． 6 lb
TL．

## NO－GUY ROOF MOUNT

－For F
－Stael and Cast－Iron Base

Net 3.47


Legs adjust to the angle of roof for mounting on flat or peaked roof．Steel and cast iron base will support average antenna on a mast up to lo－feet，up to $142^{\prime \prime}$ diam．No guy wires needed．All－ weather finish．Shpg．wt．， 5 lbs． TS．356

ALL ANGLE BASE and ROOF MOUNT

All Angle Base and Roof Mount．Most popular swivel base mounf in use today Works on any surface＿flat，slant，peak or wall．Heavy gauge weatherproofed steet．Takes any mast up to $21 / 4^{\prime \prime} 0.0$ Complete with hardware．Wt．， 2 lbs． TS． 37

Net .99

## （4）CDLLAR

Universally adapted to masts up to $1 \%{ }^{\prime \prime}$ Hardened cone polnts．Permits mast ori－ entation when ustag guy wires．
rS－78 Shpg．wt． 2 oz．
Net .30
（5）GUY WIRE RING \＆COLLAR
Cast aluminum floating guy wire ring and collar permits complete orientation of the mast．Will fit masts up to $11 /{ }^{\sim}{ }^{\sim}$ of the mast．W
Shpg．wt．， 1 lb
IS． 79
IS－60 Same as above but will take masts
1.06
up to $134^{\prime \prime}$ ．
（6）FLDATING GUY RING
Free－Floaling．Will not bind．Retains guy wire securely．Galvanized steel．Shipg． wt．，per pkg． 5025
TS－66 For $11 / 4^{\prime \prime}$ mast．Pkg．of 2
TS－67 For $11 / 2 "$ mast．Pkg．of 2
.15
GOLO ANODIZEO ALUMINUM MAST

This Golden Anodized aluminum mast will ouflast any antenna．Made of a lough，exira strong，drawn aluminum alloy．Two or more masts may be tele－ scoped logether．
TL－115w 5 ft Wi
l1／s lbs．Nef 1.25

ALUMINUM MASTS． 19 gauge－heavy wall－ high tensile strength．Rust and corrosion proot．Swaged for stacking．
TL－66W 5 ff ．Wt．， $11 / 2 \mathrm{lbs}$ ．
TL－17wX 10 ft ．Wt．， $21 / 2$ lbs． 1.69
10 Ft ．Mast shipped via express only．
STEEL MASTS．New corrosion－resistant 5 ft ．steel mast made to fit all antennas． One end is tapered．＂Jam Fit＂construc． tion with locking key． $11 / 4^{\prime \prime} \mathbf{O}$ ．D．
Tl－12W 5 ft．Wt．， $21 / 2 \mathrm{lbs}$ ．
TL－13WX 10 ft ．Wt．， $41 / 2 \mathrm{lbs}$ ．
Th．14wx $10 \mathrm{ft} ., 16$ gauge．Wt．， 8 lis．

## 4＂STAINLESS STEEL

 WALL BRACKET

All stainless steel construction for ex－ tremely long life．Pro vides $4^{\prime \prime}$ clearance from wall，with spe． cial shaped U－boll to hold masts up to $11 / 2^{\prime \prime}$
D．O．Shpg．wt．， 2 lbs
TS－367

（A）CLOSEO EYE BOLT．For anchoring guy wires．Size： $1 / 4 \times 5^{\prime \prime}$ ．Shpg．wt．， 10 02．per pkg．of 5 ．

## TS－368 Pkg．of 5

（B）CABLE CLAMP．Strong aluminum alloy body construction with plated steel U． bolf．Fits cables up to Ko＂dia．Provides solderless and spliceless cablefoop termination．Shpg．wt．， 402
TS－369

## 3 LB．DRILLING HAMMER

 ALL STEELDouble Faced

One plece，all steel construction． Double faced drilling hammer，well bal－ anced，polished finish．Heavy rubber cushion grip．Non－slip，comfortable，ful size handle．Forged steel for rugged use －shaped to reduce shock．Shpg．wt． 4 los．Imported．
HO－930

## （7）MOUNTING ACCESSORIES

Lag screw expansion shield． $100 \%$ rus proof．Shpg．wt．，10， 202.
TS－50 ．．．．．．．．．．．．．．．．．Net ． 09 ea． 10 for ． 11 Lag bolts， $1 / 4^{\prime \prime}$ diam．shank $142^{\prime \prime}$ long． TS－51

Net ． 04 ea． 10 for .36
Star drill． $1 / 2 \times 8^{\prime \prime}$ for drilling in concrete， brick or stone．Shpg．wt．， 12 oz.
TS． 52
Net .49
E CLAMP
Fits masts up to $21 / 2^{\prime \prime}$ diameter．Made of heavy gauge steel．Shpg．wt．， 3 oz．

## S． 89

Net ． 29

## （9）MAST GUY CLAMP

Has 6 guying points．A handy thing to keep in the tool kit．Will accommodate masts up to one and one－half inches in diameter．Shpg．Wt．，1／2 lb． TS． 76
（10）STEEL GUY WIRE
Sir strands of No． 20 high tensll strength galvanized steel wire． Wh－20 50 ft ．rett．Wt．， $11 / 2 \mathrm{lbs}$ Wh－2t 100 ft ．roll．Wt．， 2 los． whis 500 ft．roll．Wt．， 12 lbs．

## ALUMINUM GUY WIRE

7．18 gauge stranded wires．Breaking strenth 500 lbs．
Wh－ 25100 ft ．roll．Wt．， 2 lbs ： 1.98
Lots of 5 ea．

ALUMINUM GROUNO WIRE Wh－ 2750 ft ．coil．Wt．， $11 / 2 \mathrm{lb}$ ．
Wh． 31100 ft ．coil．Wi．， $21 / 4 \mathrm{ib}$ Wh． 31100 ft ．coil．Wi，． $21 / \mathrm{it}$
Wh． 32500 ft ．coll．Wt．， 13 ib. 1.20

## TOWERS－MAST SECTIONS

.89
.68
1.25

Net 1.35

B．

Net .23

Net ea．． 14

## （A）SPAULDING <br> <br> ＂STRATO－TOWERS＂

 <br> <br> ＂STRATO－TOWERS＂}High quality beaded channel construc tion．All riveted．no welds to rust．Rug． ced，zinc plated steel．More strength－ lessi mind resistance at tower top．ToD sections eccept any rotator．All sections factory assembled．Each tower consists of one or more $8^{\circ}$ sections plus an mast，base plate and mast kit assemoly．may be＂house＂bracketed oc root mounted．Free standing in－ staliations reoutre guying every $16^{\prime \prime}$ ． hoof mount，＂house＂bracket and guy stetions are extra．

## steet

| ne． | Mrt． | Secs， | Wet． | Net |
| :---: | :---: | :---: | :---: | :---: |
| T．123x | $8^{\prime}$ | 1 | 25 | 15.76 |
| TR．124x | $16^{\prime}$ | 2 | 41 | 23.22 |
| T－125x | 24＊ | 3 | 56 | 29.22 |
| T－12x | $32^{\prime}$ | 4 | 72 | 36.52 |
| T．127x | $40^{\circ}$ | 5 | 88 | 43.83 |

## House Bracket，Shpg．Wt．， 5 lbs．

TL．128X
Net 3.87 Roof Mount Base，Shpg．wt．， 2 tbs
TL－129X Net 2.80
Guy Station，Shpg．wt．， 4 lbs
TL－130x
Nel 3.25
Shipped F．O．B．Frankiort，Ind．No C．D．D． Send full remittance to Lafayefte with order．Shipping charges collected on delivery．

## （B）TELESCOPING TV MASTS

Heavy－duty telescoping masts，ideal for any TV antenna array．Hot－dip zinc galva－ nizing Inside and oulside provides un－ usual ruggedness and impenetrable cor rosion resistance．Designed for easy in－ stallation and assembly．Husky bolts Tock sections automatically．
slipping，no twisting．Precision fitting assures lasting service． 18 and 20 gaure walls．Supplied complete with all guy rings，clamps and necessary hardware． Total 5 10－ft．sections for height up to $50 \mathrm{ft}: 0.0 .=1\left(11 /{ }^{\prime \prime}\right)=2$（ $11 / 2^{\circ}$ ） ＂3（11／4）． $4\left(\mathbf{2}^{\prime \prime}\right)$ ．$\$ 5\left(21 / 4^{\circ \prime}\right)$ Shipping express only
$50 . \mathrm{FT}$ ．MAST－Consists of all． 5 sec tions listed above：Nos．1，2，3， 4 and 5 Height 50 feet．Shpg．wt．， 39 ibs
TLG3wx
40．FT．MAST．Consists of 4 Nections 1299 Nos．1，2， 3 and 4．Height 40 feet．Shpg． wt．． 28 tbs
TL．62wX
30－FT MAST Consists of 3 Net 9.49 30－FT．MAST．Consists of 3 sections．Nos， 1， 2 and 3．Height 30 feet．Shpg，wt．， 21 lbs．

Net 6．98
20．FT．MAST．Consists of 2 sections． Nos． 1 and 2．Height 20 feet．Shpg．wt． 14 lbs．
TL－60WX
Net 2.29

（A）
（C）BANTAM TV TOWERS New Bantam TV lowers designed for convenient mounting on all peah or flat roof lops．Eliminates cumbersome guy wires．Antenna lower is self supporting Hot－dip galvanized steel tubing insures strength and corrosion－proof service Provided with special，hardened，screw nails for strong and rigid fastening．
Adiustable feet．Compietely pre－assembl ed．Less mast

7 Foot Installation．Use with $11 / 4^{\prime \prime} 0.0$ $\times 5^{\prime}$ mast．
TL－64WX Wt．， $51 / 2$ lbs
Net 3.24
9 Foot Installation use with $14 /^{\prime \prime} 0.0$ X $5^{\prime \prime}$ mast ${ }^{\circ}$ For 13 Foot Installations，use with $11 / 40.0, x 10^{\prime}$ mast．
T．．65wx Wt．， 7 lbs．
Net 5.05

## NEW＂BI－MOUNT＂ <br> ANTENNA MOUNTING KIT

Dees not use guy wires－is
strong，easy to install．

## 182

＂BI－MOUNT＂kit used to mount and support any 5 ft ． $11 / 4$＂mast．Includes collar，support legs，base mount and screws．Shpg．wl．， $11 / 2 \mathrm{lbs}$ ．
TL－136
UPER ini MOUNT．．．．．．．．．．．．．．．．．．．．．Net 1.82
hid used to mount and support any 10 ft ． $11 / 4^{\prime \prime}$ mast．In cludes $1^{\prime \prime}$ dia．support legs，collar djustable mast mount and all screws Shpg．wt．， $21 / 2$ lbs．
TL． 137

## POPULAR PRICED TV ACCESSORIES

## SOUTH RIVER SUPER MOUNT <br> A super heavy parir made of aluminum alloy. Extra strong and durable Will

 withstand the most severe weather conditions. Two 12 1t. stainless steel straps and stainless steel seals. Six aluminum corner brackets to protect chimney bricks. The most ideal and permanent installation for those who want ouality and durability. Will hold masts up to 2"0.D. Shpg. wi.. 5 lbs$2 " 0.0$
TS. 91


ECONOMY MOUNT 99 c

Can be erected in minutes: without special tools or drliling. Adjust able. Iwo-section design permits unlimited spacing be tween brachets for maximum support of masts $1 / 2^{" \prime}$ to $11 / 2^{" \prime} 0.0$. Complete with two $12 \cdot \mathrm{ft}$. lengths of $1 / 4 \mathrm{c}$ galvanized stee bands and hard

ALL STAINLESS STEEL
CHIMNEY MOUNT

Made entirely a
stainiess steel
the mount
straps - clips - rivets nuts - every piece is stainless steel Everlasting -rust prool-non corrosive Will take masts from $\$ \mathrm{~s}^{\prime \prime}$ to $11 \%^{\prime \prime} 0.0$ Never needs replacing - do it once and forget it! Complete with 2- 12 ft . stain less steel straps and all hardware. Shpg wi. 4 I 16 s
TS. 245
TS. 245
Lots of 3 Each 4.13


NO RUST BARGAIN MOUNT
$\sin _{\substack{\text { singly } \\ \text { fach } \\ \hline}} 1.98$
The ideal chimney mount for life-long satisfactory service under the most severe conditions. Hot dip galvanized steel "Y" mount. Two 10 ft . staintess steel straps and staintess steel seats. And at Lafayette's bargain prices. Shpr wi. 4 lbs. IS. 90 Net Each 1.98


## STRAPLESS CHIMNEY MOUNT

Can be installed in seconds with hambrich, stone or cement block chim neys of any size, on the corner almost any building Mount is capable o up to 1500 los. 125 clamping pressure and cannot rust awa
ibs.

## RATCHET TYPE CHIMNEY MOUNT

Designed for easy, rapid installation. Simply pull the
banding around the chimney, thread the single loose
end through the slotted shatt and tighten the ratchet. ideally suited for cold weather instaliations. Constructed of heavy-gauge steel and embossed for extra strength. Zinc plated, with a gold Iridite linish for rust protection. Special serrated " $U$ " bolts prevent mast from turning. Two $12-\mathrm{ft}$. lengths of galvanized banding.
TS. 357 Shpg. wt., S lbs. ..........Net 2.59


Completely constructed of steet, using Cutra heavy gauge steel tubing which will not bind. Prolected against corcosion by the AlCOTE finish Special sure grip" U-bolts. Holds mast up to $11,2^{\prime \prime}$ O.D. Tripod leg for one section. Shpr. Wt. 3 lbs
is-250
Singly Each 2.19
TS. 88

## AOJUSTABLE 18 " WALL MOUNT

$\begin{array}{ll}\text { Net Each } 3.37 \\ & \text { Lots of } 3 \text { Each } 3.06\end{array}$


## 31/2'

.49

## WALL BRACKET

One of the most popular and practical antenna mounts. Se. curely grips all masts from 1 sistant steel. Supplied with hardware. Shpr. wt., 2 los Cois of 6 ea. 39

## 6" ALUMINUM WALL BRACKET

Heavy gauge aluminum. Carriage bolts throughout. Full thread hex head lag screws. Masts just "snap-1n" for easy handling. Tripod legs. Shipg. wi. 3 libs. $31 / 2^{-1}$ ALUMINUM BRACKET similap to above. Takes masts up 11/2". Shpg. wt., 1 to
T5-288
.


Lots of 3 , each 1.05

## PEAK <br> ROOF 110

 MOUNTA heavy gaure
steel peah roof mount Heavily plated to resist corrosion. Will accommodate mast. up to $2^{\prime \prime}$ in diameter. Fuliv adjustable can be easity rotated. Complete with all necessary hardware. Shpe. wt. 5 lbs.
TS.41 TS. 41


STAINLESS STEEL STRAP KIT singly, each 1.49 Replacement hit. Consists of 212.11 . stainless steel straps. stainless steel seals. triangutar eyebolts, tochwashers, hexnuts. Puts an end to rust and corrosion. Shpr. wt., 2 lbs. TS.53

STANLESS STEEL 1.4
 Net each 1.49 Lots of 3 each 134


Mast snaps into bracket. Snap in teature eliminates hoiding of mast while applying hardware. Singte front loching carrage bolt for easy one hand tightening Sturdier mast held close to vent pipe. Heavy gauge steel-bright zinc finish Shpg. wt.. 2 lbs. TS. 289


Net Each 1.39
UHF VHF LIGHTNING ARRESTER

Special saw-looth washers grip transmission line securely without stripping or cutting wire Oesigned for flat. Iubular, oval or open trpes. Constructed of lowloss material that assures less capacity and inductance. resulting in less line loading on UHF. With mounting screw and steel strap. U/L approved. Shpg. wt., 10 oz
TS. 11
Each 35
JFO "LITTLE GIANT" TWIN LEAD LIGHTNING ARRESTER
For Regular or Oval Jumbo Iwin Lead. Underwriters Laboratories Approved. No wire stripping or spresding of tine necessary. Small size permits easy mount ing anywhere - inside or outside. Com plete with ground lug and screws for wall or window sill mounting. Special high dielectric, flame-retarding plastic construction does not valy line imped construction does nioum signat transfer ance. Insures maximum signal transiep
TS-58 Singly Shpg. wt 902 . Each 73 TS-58 Singly Shpg. Wh.. 9 o2. ${ }^{2}$ Each 1.73


UHF-VHF JFO AT103 LIGHTNING ARRESTER
atio3. For tubular and oval Jumbo twinlead. Underwriters Laboratories Approv. ed. Waterproot porcelain with i"" $^{\prime \prime}$ aluminum ground wire and stainless steel strap. Shpg. wt., 902.
TS.27


IFO 3.IN. 1 LIGHTNING ARRESTER UHF VHF

3 ways better! Special compensating coils for maximum signal transmissionexclusive strain-reliet lips - mounts on mast wall or window sill. Discharges anterna and lead.In static. Nickel-plated brass hardware never corrodes. AT110S has stainless steel strap. 902 TS-16 Screw Type
is-17 for pipe mounting
Net . 88


## 4. WIRE ARRESTER

Chisel point contact elimınates stripping: lightening wing nut completes installa. lion bow-loss polystyrene case. Also usable with standard TV.FM ribbon. Shpr. wt.. itt
TS. 59 singly
Each 1.32

Lots of 6 Each 1.19 CO.

AMPHENOL UNIVERSAL ARRESTERS

Takes flat, tubulap or open wire line. For UHF, VHF or FM. Guards both the set and the signal. Lowest measurable loss-only $1 / 2 \mathrm{dt}$ at 825 MC . Shpg. wt. 6 O.
CM .187

Net .90

## RCA LIGHTNING

Especiallv designed for the protection of IV and FM receivers. Attaches to the $300 \cdot \mathrm{hm}$ twin lead without cutting or stripping. Easily mounted on any mast or pipe from $1 / 2$ to $2^{\prime \prime}$ diameter. Shpg.
wt. 530 .
is.
TS-336 Screw Type
Net .73

## ANTENNA MATCHING "BALUN" COILS


Automatically maten antenna to input circuit impedance. Impedance raflo $4: 1$ replacement for RCA. Phitco, Motorola, etc. Used to construct the finest set couplers and matching transformers. Set of 2 complete with instructions. Shpg. wt. 602
IS. 269
Net per pair . 86
SIGNAL ATTENUATOR
with all iv sets iroubled with excessive sig. nal. Eliminates poor symc., mul. iple images bunz. beats in
when caused by signal overloading. Produces 1000 to 1 change in sig mal reaching set. Reduces most cross. modulation eflects. Adjustable for all signal areas. Simple to mount-simple to install. Shpr. wt. 807
TS 218 Singly, each
1.94

Net each in lots of 3


## CRL TV ATTENUATDR

Permits proper attenuation required for best TV peception through use of $H$ pads. Eliminates tearing of image due to nearby, high-powered stations. Six switching positions from regula antenna to 60 db loss. Complete with knob, leads, dial plate, container. Shpg.

VD. 296
Net 5.88

## HORIZONTAL

BAR GENERATOR

## Provides Horizontal Lines

 On Any T.V. Set-Quick-Accurate Allanment
Generates a series of eoualiy spaced horizontal lines to indicate picture line. afity. Simplifies precise setting of yoke. Makes possible accurate positioning of locus coil or magnet. Quich adpustment of vertical linearity, height and centering. No buthy. expensive equipment needed. Plugs onto picture tube Completely self-contained
TS.12s ShDg. w1.. 8 oz. Net 1.12


Adjuslable between 32 and 55 gauss Takes the place of most single-magnel ion traps in use. Thumb-screw adjust ment permits selection of any strength within its range Reduces serviceman's within its range. Reduces servicemans Inventory. Permits easy replacemen where original value is unknown of in
correct. Shpg. wt., 8 oz.


STANDOFF INSULATORS
Latest polyethylene insert will accommodate twin-lead, open line, hollow and tubular lines, round lines, oval lines double lines, etc.

1. SCREW-EYE STANOOFF. First choice for fast secure anchoring. Av. shpg. wt. 1002
T1. 10 34/2
5 for . 13
T1.115
5 for .20
T1. $1271 / 2^{*}$
5 for 24
2. DRIVE-IN STANOOFF. Made of galva nized steel. Av. shpg. wi., 302.
Tl.20 $31 / 2^{\prime \prime}$
3. adjustable strap.type stanooff. Fits any size mast. Av. shpg. wf., 10 oz
11.1771/2" Stainiess Steel 2 for . 23 $11-25$ Stainless Steel, $31 / 2^{\prime \prime} \ldots 2$ for . 17
4. "CLIP.ON" STANDOFF. Attach to mast instantly- "Click" and they're on. $31 / 2^{2}$ long. Av. shpg. wt., 602 T1-22 For $11 / 4^{n t}$ mast

2 for . 15
5. SUPER NAIL INSULATOR. Takes flat iwin-lead or coaxial cables. Easily drives in brick, mortar, wood and even most concrete. Secure connection. Av. shpg. wt.. 402
15.36 $356^{\prime \prime}$ long

2 for 17

## DUPLEX TV RECEPTACLE

SCREW-EYE INSULATORS
$31 / 2^{\prime \prime}$ wood-screw type
with genuine polyeth. ylene unlversal inserts or TV line. Shpg. wt. $11 / 2 \mathrm{lb}$.
T1.10 Box of 50 .... 98 Box of 500. Shpg. wi., 15 lb .

## OUTDOOR DUPLEX PLATE



- Weatherproots any duplex receptacle
For outdoor outtets and switches. Shields against rain, snow, ice, dirt and mois. ture. Indlyidual "snap" covers. Lock in open position-"snap" shut-seal tight. Rust proof brass plate with aluminum finish, rubber gasket and rubber "undercoat" mat. Stainless steel hinge springs. Shpg. wt., 802
EL. 102
Net 1.42
"CHEATER" EXTENSION 3
A 6 ft . extension for RCA, Philco, G.E., Admiral and other interlock type sets. Handy for service kit and work bench. TS. 107 Shpg. wt., 10 or.


## INTERLOCK LINE CORD

## INTERLOCK LINE CORD-A

Replacement cord for RCA, Philco, GE, Admiral, and others. It has regular molded plug on one end and special rubber plug on the other to fit TV sets. Under. priter's Laboratories approved. A very writer's Lhaboratories approved. A very
handy thing to have in your service kit handy in the to have in your service kit
or on the workbench. Shit.
its.
it TS. 1056 ft . brown cord

## INTERLOCK TV SOCKET-B

Conventional male interlock socket, Standard type used on all television receivers. Heavily plated contact pins. $11 / 4^{\prime \prime}$ mounting centers. Shpg. wt., 6 oz .


DELUXE TV SERVICE LITE
Keep your hands free. Spring clamp with rubber covered ends attaches anywhere in T.V. cabinet. $41 / 4^{" \prime}$ highly polished aluminum reflector uses standard 25 watt bulb. Complete with 6 ft . cord and plug, less bulb. Shpg. wi., $11 / 2$ lbs. MS.63


WALL PLATE

Neat, convenient, efficient installation Use for 2 TV sets or TV and FM. Fits standard outlet box. Ivory only. Shpg. wt ${ }_{3}$ 4.02s.
TS-249
Net 1.16
Molded 2 contact plug for 300 ohm lead. TS-247 Net . 18 ROTOR COMBINATION PLATE. Similar to above except one oullet for 4 conductor rotator lead and one for antenna lead. Ivory only, Shpg, wt., $40 z 5$.
TS-295
Net 1.26
Molded 4 contact plug for rotator lead. TS-296


Duplex AC receptacle and duplex TV receptacle on one 2 gang wall -plate. Puts both outlets In one location. Use with standard wall box, Ivory only. Shpg. Wt. 640 ols

Net 1.39

## MULTI-TV SOCKET

Compact 300 ohm, low.
loss socket for all appli cations. Constant imped. cations. Constant imped-
ance termination. ance termination.
Mounts on any surface. Mounts on any surface.
High impact polystyrene. Solderless. Ivory only. Shpg. wt., $20 z$.
TS. 298
Lots of 3


TV MAG-PLUG
Ideal for hotels, motels homes and all multi-sel installations. This new plug contains an isolator circult that can supply TV signal to 25 or 50 TV recelvers from one antenna, depending on signal strength. Shpg. Wt. 202. TS. 297
Lots of 3
Net ea. . 46


MOSLEY ANTENNA CONNECTOR
For quick. solderless connection of lead-in to TV antenna terminal. Fits TS-330 socket. Lowloss polystyrene and ton-ferrous met l Standard $1 / 2^{\prime \prime}$ spacing. Shpg. wt., 2 oz
.18
6. GUY WIRE HOOX EYE. Strong and permanent anchoring. Made of galvanized steel.
15-71 402.
3 for .13
7. HOLLOW WALL SCREW ANCHORS $21 / 2^{N}$ long "8" body. \%" sleeve. With 10.24
TS-207 Shogg. wt., 602
602.

Net .12
Lots of 10 .
ACCESSORIES

Lots of 10 ................................... 95
8. "TAPPEE" STANOOFF INSULATOR. DEsigned especially for use with open line transmission wire installations. Ideal for use as anchor point, spacer and etc Polystyrene block and galvanized steel hardware. Av. rshpg. wt., 5 or
TS-291 $5^{\text {n/ wood screw }} 5$ for .55
TS. $29271 / 2^{\prime \prime}$ wood screw ….... 5 for .60
T\$-293 5" strao type
TS-294 71/2" strap type
9. MAST CLAMP. Notched retaining clamp holds 2 masts firmly in sturdy U-holt. Galvanized steel. Wt., 3.02.

TS. 96
Net ea. . 17
10. U-BOLT. Made of galvanized steel. Supplied with nuts and washers in place. TS-70 4 02. (2/pkg.)

## 11. ALL-ANELE MOUNT. Permits setting

 of $1 / 2$ to $11 / 4^{\prime \prime}$ masts at most suitable angle for maximum reception. Rust-resistant steel. With mounting hardware. TS-83 3 oz.12. QUICK CIIP tavick ClIP. For speedy, simple attachment of antenna lead-in to TV set. Can't short out. Shpg. wt., 2 oz. TS. 10

UNIVERSAL TWIN-LEAO

## CONNECTORS

The plug with one thousand uses. Fits all transmission line sockets as well as $1 / 2$ crystal holder and octal tube sock. ets. Solderless. Shpg. wt., 202.

TS. 329


Net, ea. in lots of $5, \quad .14$ Solderless socket for above. Shpg. wt., 2 oz.

30 ....... Net ea. 16 Net, ea. in tots of $5, .14$


## TWIN LEAD SPLICE

Speeds splicing without need for twisting or soldering. TS.104 Wt., 2 oz. .... 11 ea. 10 for . 99

## BAKELITE KNIFE SWITCH



Quantity limited. Excelient for TV antenna switching. Heavy metal parts mounted on bakellte base. Double pole, double throw. Shpg. wt., 4 oz.

## double

.19


## WINDOW FEED-THRU

- NO DRILIING


At last a feed-thru that passes your TV signal without drilling, breaking or digging and without signal loss. Just use ging and without signal loss. Just use adhesive supplied to attach units one
to each slde of window pane and attach your wires, Quick, easy and effective. Shpg. wt., 602. TS. 155 per set
.58

> UNIVERSAL BUSHING


Fits all types of coaxial or twin-lead wires. Fits walls up to $14^{\prime \prime}$ thick. Requires $3 / 4^{\prime \prime}$ hole.


ALL
PURPOSE ANCHOR KITS
Permanent-rustproof installations. An chors of noncorroding Territe Buterate and pulverized a'uminum. Ideal for use indoors or outdoors. Hang shplvesblinds - awnings - mirrors - ilxtures _fasten key boad to walls-signs. ploe straps-Use in concrete. Ille plaster board us in concrete- lileplaster board-brick. Complete kit in cludes 36 expansion shield anchors and 36 assorted screws, $\$ 6$ to $\# 10$. Shpg. wt. 602

## TS. 341

Net .74
Heavy Duty Kit: Contain 22 expansion shleld anchors and 22 assorted screws, shleld anchors and 22 assorted
$\# 10$ to 14 . Shpg. wt., 802 .
\# 10 10
T $\$ 342$
Net 74


## TRIO NO

## STRIP CONNECTOR

safest-most positive-
LEAD IN CONNECTOR.
No stripping - no exposed wire - no sol-dering-no broken leads at the set. Your TV set unplugs with ease-in electrical storms-for moving and cleaning -to add accessories. Safe, positive installation. Stronger than the lead in wire. Fast-easy--just insert the lead in-tighten a single knob.
TS-339 ... Shpg. wt., 2 01. ...... Net . 59


## BAKELITE <br> WALL BOX

Necessary for terminating TV lines in old or new work. pottom, Sturdy construction with plastic ears. Black standard size: U.L. approved. Shpg. Wi., $602 s$.
is. 365
Net .75

"OPEN-HOLE"
WALL BRACKET
Permits attaching any wall plate to wall openings without the use of a wall box in up to $3 \mathrm{~s}^{\prime \prime}$ wall board or plaster. Shpg. wt., 4 ozs.

Net . 39


HOW TO
INSTALL TV ANTENNAS

This book describes in simple layman's language, how to install an antenna and the various factors involved. It also tells how to repalr TV antennas. No technical how to repair TV antennas. No technical knowledge required. 32 pages. knowledg
$\mathrm{Bx}-1519$

## fusible resistors <br>  <br> Replacements for Motorola. Crosley <br> 

Emerson, Ravthe on, Philco, Hoffman, Hal licrafters, Trutone, Sears, Montgomery Ward, Sentinel, Arvin and many others. Shpg. wi., 502.
TS-253-Kit of 4. 5.6 Ohms
$\begin{array}{lll}\text { TS. } 254 \text {-Kit of 4. } & 7.5 \text { Ohms } & \text { Net } \\ \text { TS.255-Kit of 4. } & 9.0 \text { Ohms } & .76\end{array}$ TS.256-Kit of 4. $\quad 220 \mathrm{hms}$ Each KIt TS-322-Kit of 4. 4.7 Ohms TS.323-Kit 1 each of 5 values Net .95

2 MEG. 2 WATT $1 \%$ H.F. RESISTOR Popular replacement in H.F. circult of almost all TV sets. Shpg. wi., 202 TS-145

## NEW <br> REPLACEMENT CHEMICAL FUSES

Used in primary and high voltage cir. cults, these fuses protect against injurious overloads but pass instantaneous surges of up 105 times the circuits to prevent tailures due to lube "flash overs." Shpg. wt., 3 oz.
Replacement for RCA Part 945392.1 Stock No. 109079; Emerson 808232; Olympic FU28146 (Color Code-8LACK TS. 348
Replacement for RCA Part 945932-2 Stock No. 109588 (Color Code-8LUE) TS. 349
Replacement for RCA Part 945932.3 Stock No. 109860 (Color Code-RED) TS. 350

Net . 35
EXACT REPLACEMENT SHAFTS FIT EYERY TV SET MADE Extends and insulates all standard con rol shafts. Fits half round-flatted-splined-split and full round shafts 21 internal ribs hold any shaft securely $19^{\prime \prime}$ length is easily cut to any size re. quired. Puts the shaft where you can get at it. Shpg. wh., 2 oz. TS. 340

$$
\text { Lots of } 3 \text {, ea. }{ }^{\text {Net } .32} .36
$$

CENTERING DEVICE

## Repiace the yoke Cap in

the TV Set
The Centering Device is a mechanical means of centering the picture on any TV set. Compact in size, centering is simplified by conventent tabs - easy to hold and rotate. Made to replace the yohe cap, the centering device becomes an integral part of the receiver. Shpg. wt. 4 oz.
TS. 361 For $90^{\circ}$ Sets
TS. 362 For $110^{\circ}$ Sets
Net .50
COLOR GUN KILLER
Operates Red, Green or Blue Guns Individrally or in Com binations to Make Purity Adjustments
Enables each gun of the three-gun kinescope to te operated singlv or in combination. Avoids culting or disconnecting leads to make color purity adjustments ShDe. Wt., 802.
TS. 301


COLOR KINE ADAPTER

## TEST COLOR PICTURE

 TUBES ON BLACK ANO WHITE TUBE TESTERSEnables each gun of a three-gun color picture tube to be indivldually tested on tube testers designed for black and white picture tubes. Shpg. wt., 80 oz . TS-302

Ideal for taking measurements of voltage resistance and video from the base of the picture tube. Just insert between CR tube base and socket. All connections readily accessible. Saves time and in creases sesvicing efficiency. Shpg. wt. 8 02. NS. 43

Net .94

## EBY TEST

POINT
ADAPTERS
Designed to fit any type of miniature 7,9 and the standard octal socket. The contact tabs are long enough for con nections with test prohe or alligator clip. Ideal for in-circuit measurements from top of equipment.
Shor. wt., 802
MS 23 -for 7 pin miniature Net ea. 1.32 Ms-24-For 8 pin octal type socket

MS-25-For 9 pin noval type socket
Net ea. 1.47

$\square$
TEST POINT ADAPTER FOR $110^{\circ}$ AND COLOR PICTURE TUBES

For Sylvania type $110^{\circ}$ lubes. Ideal for incircuit voltage and current tests MS-464

Net 1.91
For RCA type $110^{\circ}$ tuhe. Ideal f
clrcuit voltage and current tests
MS-465-
Net 2.32
For color cathode ray tubes. Test tubes in the circuit under actual operating conditions.
TS. 360
. Net $5 . \mathrm{H}_{8}$
Shipg. wt., 802.


MOLDEO: New all molded duo-decal sock. et for std. CRT's. Complete with back plate, contacts, hardware. Less leads TS-270-Shpg. wt., $602 . \quad$ Net .18 LAMINATED: Duo-decal IV socket with plastic cover. Pins 1, 2, 10, 11 and 12 wired. $18^{\prime \prime}$ leads.
TS.271-Shpg. wt., 8 oz. Net .41
Same as above wired for electrostatic and magnefic tubes.
TS-272-Shpg. wt., 8 22. Net . 47
$110^{\circ}$ sYivania cat socxet. Wired for easy replacement, with 18 inch leads. IS.306-Shps. wt., 6 oz. Net .59
$110^{\circ}$ RCA CRT SOCKET. Wired for easy
replacement, with 18 inch leads
-TS-305-Shpg, wt., 602.


NEW! $110^{\circ}$ CRT EXTENSION LEADS
$110^{\circ}$ CRT extension leads for general service work. 3 ft . lead with $110^{\circ}$ sockel and $110^{\circ}$ base. Shpg. wt., 1 lb .
TS-285-SYLVANIA TYPE
Extension Lead ........ Net 1.32
TS-286-RCA TYPE
Extension Lead ....... Net 1.32
$110^{\circ}$ CRT SOCKET ADAPTER
Permits the testing of the $110^{\circ}$ CRI on all existing tube checkers, overall length 3 ft , Shpg. wt. 1 tb .
TS-307-Sylvanla Type
Net 1.47 TS-308-RCA Type

Net 1.47

Permits testing of picture tube outside of chassls. Fits any duodecal based tube 5 color coded leads. $36^{\prime \prime}$ long Male and Female bakelite sections with full socket and 6 leads for electrostatic as well as magnetic tubes.
TS-138-Shpg. wt., 1 tb. ...... Net 1.25


UNIVERSAL YOKE EXTENSION HARNESS
Used in conjunction with the tube harness and the anode harness to facillate servicing. Provides extension from yoke and coil Assembly to chassis. For any make or model using ocial plug and sockets as extension. Shpg. wt., 807 TS-137

## ANODE EXTENSION

For connecting picfure tube while out side of set when testing. $30^{\circ}$ long for glass tubes. Shpg. wt., 302. TS-46


For TV picture tubes Silver plated snap button. $11 / 2$ " diameter rubber protected cap. Supplied with $12^{* \prime}$ wire leads. Shpg. $w t . .{ }^{3} \mathrm{oz}$.
TS-47 Lots of 6, ea.
.26
.29


Convert any tube tester into a CRT tester. No need to remove tube from cabinet. Tests any picture tube for shorts, emission. 48 lead. Shpg. wt., 1202.

IS. 158
Net 3.38


## UNIVERSAL

 TV TESTING
## KIT

Makes possible testing sets with picture tube electrically connected in circuil, but removed from chassis. Reduces danger of contact with high voltage terminals and tube breakage. Consists of anode extension harness, yoke extension har. ness, tube socket extension harness and sturdy plastic carrying case. CRT extension is for both electrostatic and electromagnetic tubes.
TS. 141 Shpg. wt., 2 Ibs. ............ Net 3.18

## $\operatorname{rin}_{2 \rightarrow 0}$

TUNER

## CLEANER

## - Injector Type

- Cleans e Lubricates - Eliminates Noise - Lang Lasting Protec. tion
New, wax-free lubricant Contains no carbon tet Non-toxic, non-inflamma ble. Hypo-style injector neede prevents drift and drip. Retards Corrosion-keeps tuners cleaner longer Corrity reaches hardoto-get at spots casily reaches hard-lo-get ot spots Ooes not affect electrical properties harmless to insulation and soldered
joints. Easy-to-use-miong lasting. Shpg wt. 12 o2. With Injector


## TS.324

## TUNER LUBRICANT

A new, detergent-action lubricant with sillcone oll added. Re-cleans and re lubricates with each rotation of tuner or control. Easy to use, just apply, and rotate shaft with free injector Shos wt. 12 oz .
wt. 12
TS. 325


Join any combination of VHF, or VHFUHF antennas to use one transmission line. Stable circults separate all channels automatically and assure almost $100 \%$ signal iranster. Highest isolation between separate inputs eliminates interaction. Weatherproof. Complete with mast clamp. Shpg. wt., 1 tb

Stock No. To Couple Antennas Net TS.15 - VHF (2-6) and VHF(7-13) 2.32 TS.160-VHF(2.13), UHF (14.83)

## JFD OUTDOOR SET COUPLERS

- NO MESSY INDOOR WIRING
- NO LONG "LOSSY" LEADS


> New outdoor sel coup- lers - encapsulated in col-plast for maximum weather proofing. Minimum Insertion loss due to network of bifilaf coils. Optimum Isolation and impedance match between sets. All ele ments sealed in air tight case mounted in a butyrate housing. Shpg. wt. $1 / 2$ lt.
TS.232 AC. 402 set $300 \mathrm{hm} . . . . . .2 .40$
TS. 233 AC-60 3 set 300 ohm
TS-234 AC. 704 set 300 ohm

## 3-SET TELEVISION

COUPLER


Divides television signal from one an. tenna equally to feed three separate receivers. Eliminates the need for separate antenna for the second or third television set. Simple installation is effected using only a screwdriver. Long trouble free performance is assured by using special coil forms and wide spac. ing of all wiring connections. Isolation between set terminals is in excess of between set terminals
30 db . Shpg. wt., 802.
TS.345
Net 1.92
2-Set Coupler. Features the same quality engineering, however, designed for use with one antenna and 2 sets. Shpg. wt 802.

TS. 344
Net 1.71

## RCA 240A1 TV SET COUPLER

Operates two or more sets
from a single antenna. Easy to install - self-contained wood screw. There's no need to cut or splice the lead be cause connections are automatically made when the screw caps are tightened. Shpg. wt. 802
TS.334


## JFD MATCHING TRANSFORMER

Matches any 72 ohm TV set to any 300 ohm anm tenna. Permits use of noisefree 72 ohm coax line with 300 ohm with 300 onm sure U-bolt mast sure mounting. Transfers highest pos stble signal trength. Shpg

Net Ea. 2.31


IS. 236


UNIVERSAL TV TUBE 129 "BRITENER"

Restores brightness to dim $\mathbf{T V}$ picture tubes. Operates on ail types-magnetic or electrostatic-and in all circuitsparallel or series. Shpg. wt., 10 oz. Ea.
TS-170 In lots of 6
each 1.29 Singly
each 1.39

## UNIVERSAL $110^{\circ}$ CRT REJUVENATOR <br> A single heavy-duty unit which

 performs four ways. A simple adjustment adapts it for either series or parallel wired fila-ments and it can be used on electromagnetic or electrostatic focus tubes. Shpg. wt., 1 lb.
TS.283 For Sylvania Type $110^{\circ}$ Tubes TS-284 For RCA Type $110^{\circ}$ Tubes


## JFD <br> 

Gets rid of all interference below 50 megs ham diathermy Industrial. etc. No effect on signal strength. No ground needed. Mounts on back of set. For 300 ohm lines. Shpg. wt., $1 / 2 \mathrm{lb}$.
TS-235 HP. 50
Net Ea, 2.65

## WUERTH TUBE SAVER

Lengthens tube life - In.
CLUDING PICTURE TUBE!
PRDTECTS T.V. - HI.FI - P.A.
Any Electronic Equipment Up to 450 Watts!
Protects components and tubes from destructive initial surge currents by "Thermal Cushion Action." Completely automatic. No complicated installation needed, just plug the "Tube Saver" into the wall, and appliances into it. Protects T.V.-Hi Fi Home equipment, etc. RATED: 300 watts, $110-120 \mathrm{~V}$ AC/DC. Measures only $21 / 2 \times 13 / 4^{-}$. Shpg. wt., 8 oz .
IS. 315 (Type 150)
Net 2.91
Same as above except for electronic equipment draw. Ing up to 450 watts. Suitable for color television. Shpg. Wt. 8102
TS.316
WUERTH SURGISTOR
COMBINES FUNCTIONS OF RESISTOR and RELAY
A Surgistor is connected directly into the power line circuit of any electrical device. It's function is to limit the inrush current until the tube heaters are warmed sufficiently to accept the full voltage without damage. Starting resistance 100 ohms, circuit resistance 0.2 ohms. Power range 320 watts maximum. Self mounting.
Shpg. wt., 602.
TS.317 (4100-2)

## in 1 iots <br> FOR COLOR

 Same as, above, but for Color TV., handles up to 400watts. 117 volts AC.DC watts. 117 volts AC.DC
TS-318 (8050.4)

## TV TUBE GUARD

## ADOS LIFETO.RADIO

The "Tube Guard" will pay for itself many times over by greatly reducing costly vacuum tube replacements The Tube Guard chechs surge of current, reduces fila ment damages and increases tube life. Just plug "Tube Guard" into outlet, and appliance into It. Shpg. wt 8 oz . TS. 319

## itself many times ove uum tube replacements of current, reduces flla be life. Just plug "Tube

Net .3

## LIGHT AND TELEVISION CLOCK

Placed on top of TV cabinet the \#700 Lite Clock provides proper amount of bacigiound light for tele viewing. Accurate, lotating numera type clock. Walnut finish plastic case. For 110 V 60 cycte AC only. Size, $5 \times 5 \% \times 3 \%$. Shpg. wt., 242 lbs. ML-11 .............incl. excise tax 0.14


## TWO SET COUPLER

30 in lots of 3
Uses one antenna for two sets. Compact electronic set coupler assures performance of two TV sets on one Instaliation. Easy to connect. Nothing to go wrong. Shpg. 'wt., 1 lb. Imported
TS-326
In lots of 3, Each . 39


TRI-SET COUPLER 29
Highly efficient 3 set coupler. For coupling 2 or 3 rv or FM sets to one antenna of any type. No interaction -less than 6 do insertion loss. 40 to 50 ob rejection ratio. Shpg. wt. 11 lb
TS. 332

## UNIVERSAL TV-FM

 PLUG \& SOCKETCompact-low loss- 300 ohm plug and socket. Surface mounting sockel-low loss polystyrene plug. Solderless screw terminals. Includes hardware and instructions. Shpg. wt., 2 02: Imported
TS.328 Plug \& Socket
Net .35

## TV-FM HI-PASS FILTER

| HIGH PASS | Eliminates inter <br> ference <br> antenna circuits |  |
| :---: | :---: | :---: |
|  |  |  |

Hi-pass filter passes all frequencies above 40 mc . Rejects all frequencies below 40 mc . Automatically eliminates electrical disturbances in the antenna circult. Clears disturbances caused by neon, X-Ray, ignition. appliances, diathermy, short wave, etc. Shpg. wt. 1 lb . Imported
TS-331
Net 2.39


Exceptionally efficient line noise eliminator. Utilizing dual ferrite core colls, heavily wound. Eliminates line noises caused by motors, industrial RF, neons, applinoises caused by motors, industrial RF, neons, appli-
ances, etc. Particularly useful on TV and FM sets, ances, etc. Particularly useful on TV and FM sets,
radios, tuners, record piayers. Automatic attenuation of unwanted disturbances. Shpg. wt., $11 / 4 \mathrm{lbs}$. Imported
TS-327 Line Filter
Net 2.49
NEW! TRANSCEPTOR ${ }^{\text {™ }}$ TV/FM SET COUPLER


- Ados More TV and/or FM to Your Present Antenna
- Automatically Matches Impedance
- Snaps-on in Secends Without Tools

Now you can rum any combination of TV and FM setstwo or more, one at time or all at once-from vone antenna without amplification in normal slgnal areas. Easy-to-install, slides on wire without use of tools. No wires need be cut - uses electromagnetic pich-up principle which cuts signal losses and results in better set-to-set isolation. Shpg. wt., 402.
TS.363
Net 1.19


TV PICTURE TUBE SHORT ELIMINATOR

- Burns off Picture Tube sherts
- Lengtheas Picture Tube Life
Eliminates expensive picture tube repairs. No elaborate equipment needed. Repairs grid and cathode shorts in two minutes-without pulling the chassis! Easy to use - decontaminates cathodes - restores operation of brightness control. Can be used as often as needed Simple "plug in, switch-on" operation. Works with any IV picture tube. Shpg. wt., $1 / 2 \mathrm{lb}$
Ts-282 in lots of 6, each 75
Net 99



## STANDARD COIL "GUIDED GRID" TUNERS

Roplacements for over 1500 different tuners.

Latest, neutralized - triode, circuit provides more gain - better-signal to noise ratio- overall improved performance. Factory preset IF, adjustable to fit particular set. Replaces virtually all older tuners. Universal shaft - easily cut to needed size. Uses 6ER5 or 2ER5 amplifier tube and 6CG8A or 5CG8 oscIIlator mixer. Improved shielding and filter circurts. Complete with tubes and instructions. Shpe. wt., 3 los.

## Stech Mo.

Ho. Heater I.F. Detent Net Th-119 Parallel, 6.3V. 21 mc 13 pos 21.07 TL-120 TL-12 Series, 600 ma . $7 \mathrm{TL}-140$ Peries, 600 ma . 41 mc 13 Pos. TL.140 Parallef, $6.3 \mathrm{~V}, \quad 21 \mathrm{mc} 12$ Pos. TL- 141 Parallel, 6.3V. 41 mc 12 Pos. TL-142 Series, 600 ma . 21 mc 12 Pos. 21.07 21.07 21.07 21.07 Series, 600 ma . 41 mc 12 Pos. 21.07 SOUNO TAME-OFF COIL - for older sets which require coll connected to tuner converter plate. Stand ard Coil No. XM752. Shpg. wt., 2 oz.

## (2) <br> TV TUBE RESTORER <br> - The Most Versatile "Booster" Made <br> - 120 Different Combinations <br> - Corrects Open Cathede-Meater to Cathode Shori-Open Control Grid-Contrel Grid to Cathode Short-Lew Emission

One simple unit provides the cure for most ailing picture tubes Latest model features slide switches not pin plugs as older units do. Rugged, well made sochet-compact, single unit design. Works on electrostatic or electromagnetic focusing tubes, in series or parallel circuits. Inctudes instructions.
TS-333 .... Shpg, wt., 1 tb., 4 02s.....
TS-358 For RCA Type $110^{\circ}$ Tubes
TS. 359 For Sylvania Type $110^{\circ}$ Tubes
Net 3.23

$$
\text { Net } 9.08
$$



## TV TUBE

## 'BRITENER

 magnetic the instructions. For magnetic tubes and PARALLEL CIRCUITS only. Renews birghtness contrast. Wt., 8 oz. Ea. TS-12Net 59
PRECISION CLARIFIER


Easily adjusted to remove any antenna-fed interference causing picture distortion: FM, diathermy, SW ignition, amateur, adjacent channel, etc. Does not attenuate signal. Actually tunes out unwanted signal. Matches any antenna. Metal case, finished in brown enamel. Easily installed. With instructions. Size, $4 \times 3 y / 4 \times 11 / 2^{\prime \prime}$. Shpg wt. 702.
TS. 123
Net 4.41

MODEL 667K OYNAMIC CDNDUCTANCE TUBE AND TRANSISTOR TESTER KIT

The new 667 K kit combines a mutual conductance test with a peak emission test to glive a single reading of tube quality. Also checks transistors for leakage and beta. Read directly off the meter. Also checks 5 and 7-pin nuvisfor; 9 -pin novars; 12 -pin compactrons; 7.9 and new 10 -pin miniatures; $5,6,7$, and 8 -pln subminiatures, octals and loctals... aimost every domestic or foreign tube made. It will also check many tow-power transmitting and special purpose tubes, voltage regulators, cold-cathode regulators, electronray indicators ballast tubes and CRTS with optional adapter, Good-Bad test of pilot lamps. Extensive roll chart revised periodically. Multi-circult level switch check individual tube sections and 13 push-button switches test leakage rapidly. Sensitive $4 \frac{1}{2^{\prime \prime}}$ 2CO.ma $0^{\prime}$ Arsonval meter able to read fow cathode current. for 105-130V AC, 60 cycles. Fused. Steel case, 12x15x $41 / 2{ }^{2}$. Shog. wt., 20 lbs .
TE. 757 WX Model 667 Kit
TE.75 WX Model 667 Wired
$\begin{array}{lr}\text { Net } \\ \text { Net } & 129.95 \\ \text { Ne }\end{array}$

## NEW! MODEL 628K TUBE TESTER KIT

Cathode conductance type of tube tester features 13 individual lever switches for complete flexibility. Tests 7, 9 and 10 pin miniatures, octal, loctal, 5 and 7 pin nuvistors, novars and compactrons. Pilot light test socket, and VR'S and "eye" tubes. Tests for short and open elements. Also tests all color and black and white CRT's with optional adaptor. Protective overload lamp shows transformer overloads and acts as fuse. 3 -column roll chart frequently revised for up-todate data. $44 / 2^{\prime \prime}$ meter. With all parts and instructions. for $105-125 \mathrm{~V} 60$ cycles AC. Size: $121 / 2 \mathrm{~W} \times 9 / 2 \mathrm{H} \times 41 / 2{ }^{20 \mathrm{D}}$. Shog. wt., 11 lbs
TE.759 Model 628 Kit
Net 44.95
TE.760 Model 628 Wired
Net 59.95

## NEW! MODEL 632K CRT <br> TESTER AND REJUVENATOR KIT

A CRT tester and rejuvenator in a portatle carrying case containing line cord and a universal multl-socket cable that accommodates any black and white or color CRT. Use a transformer-operated 1000 volt d.c. supply. a 150 volt nepative d.c. supply plus a 25 -watt rheostai and 3 -range fllament voltage selector $(0-5,5-10,10-15$ volt). Grid cut-off voltage and filament voltage read on $41 / 2^{\prime \prime}$ meter, also beam current on a 3 -color BAD-? 6000 scale. Neondamp circuit used for short-open testing. 6 push-buttons enable instantaneous measurement without danger of CRT damage. Spring-return repair push-button is used to apply $1000 \mathrm{~V} d \mathrm{c}$. for re juvenate process. For $105-130$ volts AC, 60 cDS . Fused. Size: $12 \mathrm{~W} \times 91 / 4 \mathrm{Hx} 5^{\circ} \mathrm{O}$. Shpg. wt., 8 lbs
TE. 762 Madel 632 Kit
Net 54.55 TE.T63 Model 632 Wired

Net 78.95

## NEW! MODEL CRU UNIVERSAL CRT TEST ADAPTER

For EICO models 667 and 628 tube and transistor testers. Permits testing of all color and black and white CRT'S. Wt. 1 lb. (Not Illustrated).
TE-761 Wired only
Net 9.95

## MDDEL 232K PEAK-TO-PEAK VACUUM TUBE VDLTMETER KIT

A precision unit with advanced engineering features. 11 megs input impedance. $1 \%$ preclsion ceramic multiplier resistors used. Measures directly peak-to-peak voltage $0.4,14,42,140,420,1400,4200$. DC/RMS sine volts: $0-1.5,5,15,50,150,500,1500$ (up to 30,000 volts with HVP probe, and 250 mc with PRF probe) Ohms: 0.2 ohms to 1000 megs in 7 ranges. Easy calibration. $41 / 2^{\prime \prime}$ meter, can't-burn-out circult. Zero center With new AC /OC Uni-Prope-half turn to select OC or AC/ohms. Exceptional stability and accuracy. All components and instructions supplied. For operation of $105-125$ 50/60 cps AC. Size: $81 / 2 \times 5 \times 5^{\prime \prime}$. Shpg. wt. 7 lbs
TE-176 Kit
Net 29.85
Model 232. As above, but factory wired and tested.
TE-177
Net 48.95

## MODEL 249K DELUXE P-P VTVM KIT

Same as Model 232 except it uses $71 / 2^{\circ *}$ meter, $81 / 2 \times$ $13 \times 5^{* \prime}$. Shpg. wt., 9 lbs.
TE-178 Kit
Net 39.85 Model 249. As above, but factory wired and tested. TE-179

Net 59.85

## MODEL 250K AC VTVM \& AMPLIFIER KIT

A highly sensitive, wide-band AC VTVM \& Amplifier for laboratory accuracy and ouallty. It measures AC voltage from 100 microvolts to 300 volts in 12 ranges. A front panel function selection switch converts the instrument to a wide-band amplifier with a gain of 60 db on the 1 mv range, and a maximum output of 5 volts RMS. The $0-1,0.3$ voltage scales are linear, on decibel scale, $0 \mathrm{db}=1 \mathrm{~mm}$ in 600 ohms , with $10^{\circ}$ do Interval between ranges. Amplifier Frea. response: $+0,-3$ db 8 C to 800 KC . 10 meg Input impedance on both VTVM and Amplifier. Includes all parts and instructions. 105-125v., $50 / 60 \mathrm{c}, 81 / 2 \mathrm{Hx} 53 / \mathrm{WWx7} \mathrm{~F}$. Shpg. Wi.. 7 lbs . TE-256 Kit Model 250. As above, but factory wired and tested. TE-257

Net 79.85

## MODEL 255 AC VTVM KIT

A precision AC VTVM: Same as model 250 without the amplifier. $105 \cdot 125$ V. AC 50/60C. Shpg, wt., 7 lbs.

## TE-258 Kit

Net 44.55
TE-25 Wired
Net 12.95

## OTHER EICO VTVM'S

TE- 180 221K VTVM Kit with $41 / 2^{\prime \prime}$ Meter
Net 25.95 TE-181 221 As above, but factory wired Net 36.95 Te.1a2 214k same as 221 with 71/2 Meter TE-183 214 As above. but factory wired TE-260WX-261K AC Volt-Watt Meter Net 34.95 TE-260w-261K AC Volt-Watt Meter Net 49.95 TE-26Iwx-261 as above, but factory wired... Net 79.95

## MODEL 610 TUBE TESTER ADAPTER KIT

A tube tester adapter kit to be used with EICO Model 625 and Model 666 Tube Testers. Tests nuvisters, 5 pin and 7 pin; novars; 10 pin miniature and 12 pin compactrons. Simply plugs into 9 pin socket of tube lester. Roll chart supplements for both the 625 and tester. Roll chart supplements for both the 625 and
666 tube testers are included covering the new tubes 666 tube testers are included cover
listed above. Size: $11 / 4 \mathrm{H} \times 21 / 2 \mathrm{~W} \times 6^{\circ} \mathrm{O}$.
TE. 139610 Kit. Shpg. wi., 1.5 lbs.
Net 5.95
TE. 740610 Wired

## MODEL 540K UTILITY TESTER KIT

An all-in-one Multi-Range ac/oc voltmeter, ammeter, ohmmeter, wattmeter and leakage checker. Indispensable in home repairs of electrical appliances, and in automotive trouble-shooting of batteries, generators, distributors, etc, $31 / 2^{\prime \prime}$ meter, ranges: Voits $A C / O C \quad 0$ -7.5-15-150.300. AC/OC current: 0.15 amps. Ohms 0.100 ohms. Capacitor leakage test. All components and in structions supplied. $33 / 4 \times 64 / 2 \times 31 / 2^{\prime \prime}$ Shpg. wt., 3 lbs. TE-473 Ktt .............................. 12.95 Model 540. As above, but factory wired and tested. TE-174

Net 15.95

## MODEL 566K MULTIMETER KIT

Large $42 / 2^{\prime \prime}$ meter features: $A C / O C$ sensitivity of 1 K ohm/v. totals 38 ranges; $A C / O C /$ volts: $0-1-5-10-100$ -$500-5000 \mathrm{AC} / \mathrm{DC}$. Current: $0-1 \cdot 10 \mathrm{~m} . \mathrm{a}, 0-0.1-1 \mathrm{amps}$ Ohms: 0.5 K - 100 K .1 meg . OB: -20 to +69 in 6 ranges All components and instructions supplied. $63 / 4 \times 51 / 4 \times$ 3". Shpg. wt., 4 lbs.
TE. 165 Kit
Net 16.95
Model 566. As above, but factory wired and tested.
TE-165 Net 22.95 Model 556 K . Same as 566 K but with $1 \%$ resistors. TE-167 ................... 18.95 Model 556. As above, but factory wired and tested TE.168 Net 25.95

## MODEL 536K MULTIMETER KIT

Outstanding value. $3^{\prime \prime \prime}$ meter features $A C / O C$ sensitivity of $1 \mathrm{~K} \mathrm{ohm} / v$. 31 ranges - AC/OC volts: $0-1 \cdot 5-10.50$ 100-500-5000. AC/OC current: $0-1 \cdot 10 \mathrm{ma}$, , $0-0.1 \cdot 1 \mathrm{amp}$. Ohms: $0-5 \mathrm{~K} 100 \mathrm{~K}-1$ meg. $08-20+69$ in 6 ranges. Al components and instructions supplied. $61 / 2 \times 33 / 4 \times 23 / "^{\prime \prime}$ Shpg. wt., 2 lbs.
TE. 169 nit
Net 14.95
Model 536. As above, but factory wired and tested TE-170 ................................. 18 Model 526K. Same as 536 , but with $1 \%$ resistors. TE. 171 Net 15.95 Model 526. As above, but factory wired and tested
TE. 172
Net 19.85

## OTHER EICO MULTIMETER KITS

TE. 161 565K Multimeter Kit with $42 / 2^{\prime \prime}$ Meter Net 24.95 TE-162 565 As above, but factory wired ...... Net 29.95 TE. 163 555K Same as 565 K , but with $1 \%$ Resistors
TE-164 555 As above, but factory wired

## VTVM PROBE-KITS

FOR 11 MEGOHM VTVM
TE-184 PTPIIK. p-p probe kit TE. 185 PTPII. As above, but factory wired TE-186 PRFIIK. RF probe kit
TE-181 PRF11. As above, but factory wired FOR 25 MEGOHM VTVM
TE-188 PTP25K. p-p probe kit TE-189 PTP25. As above, but factory wired TE.190 PRF25K. RF prove kit
TE-191 PRF25 As above, but factory wired Net 4.95 HVP2 740 megohm. High Voltage Probe OC for 221 K and 214 K VTVM's wired and tested.
TE-192
HVP2 1090 megohm High Voltage Probe wired and tested for 232 K and 249 K VTVM TE-268
Average Shpg. wt. for the above units- 1 lb

Net 6.95
Net 3.95

Net 4.95
Net 4.95
Net 6.95 Net $\mathbf{3 . 9 5}$ Net 3.95
Net 4.95 Net 4.85


Net 4.95


## MODEL 460K WIDE BAND SCOPE KIT

## - 5" Screen

Excellent Lab precision scope featuring Push-pull direct coupled vertical amplifier with high sensitlvity: 25 $\mathrm{my} / \mathrm{in}$. Response flat from DC to 4.5 MC . useful to 10 MC, ideal for reproduction of 3.58 MC color TV sync burst. 4 -step freq. compensated attenuator in both AC DC positions. Also Internal voltage calibration. Automatic sync. limiter and amplitier. 2 X -full screen horizontal positioning. Sweep-freg: 10 to 100 K cps with external capacitor for lo-freq. sweeps. Preset TV $v$ \& H sweep positions ( 30 and 7875 cps ). Variably lit graphed $5^{\prime \prime}$ screen. Very hi-input impedance. Complete wraphed components and instructions for easy assembly. $13 \times 81 / 2 x$ $16^{\prime \prime}$. For 105-125 VAC, $50-60$ cycles. Shpg. wt., 30 lbs . TE-222WX Kit

Net 89.95 Model 460. As above, but factory wired and tested TE-223WX

Net 129.50

## MODEL 427K GENERAL PURPOSE 5" OSCILLOSCOPE KIT

A general purpose oscllloscope employing advanced circuitry. Features direct-coupled, push-pull vertical amplifier. Response flat from DC to $500 \mathrm{KC}-6$ do @ 1 MC. 4 -step plus CAL vertical attenuator. Sensitivity $10 \mathrm{mv} p-\mathrm{p}$ or 3.5 mv rms per cm . Horizontal a mplifier response flat from 2 cps to 450 KC . Sensitivity 0.5 V $\mathrm{p-p}$ or 0.18 v rms per cm . Intensity, Focus and Astigmatism controls on the front panel. Voltage calibrator for peak-to-peak measurements. Sweeps 10 cps to 100 KC ; minimum ratio of forward sweep time to retrace time $15: 1$. Gun of CRT is mumetal shielded. With tubes. For $105-125 \mathrm{~V}, 60 \mathrm{cps}$ AC. Size: $81 / 2 \times 121 / 2 \times 16 \% \mathrm{~K}_{0}{ }^{\circ}$. Shipg. wt., 30 lbs.
TE-305WX Kit
Net 69.95 Model 427. As above, but factory wired and tested. TE-306WK

Net 109.95

## MOOEL 430K GENERAL PURPOSE $3^{*}$ OSCILLOSCOPE KIT

Compact and lightweight $3^{\prime \prime \prime}$ oscilloscope with mumetal CRT neck shield. Features direct connection to vertical deflection plates-no shorting links or wires to remove or replace. Vertical amplifier response is flat from 2 cps 10500 MC . 2-position (Lo-Hi) vertical attenuator. Sensitivity $\mathbf{2 5} \mathrm{mv} / \mathrm{cm}$. Cathode follower Input. Horizontal amplifier response flat from 2 cDs to 300 KC . Sensitivity $.25 \mathrm{v} \mathrm{ms} / \mathrm{cm}$. Cathode follower input with fine attenua tor in output. Sweeps 10 cos to 100 KC in four over lapping ranges; synchronization is fully automatic on all ranges. With tubes. For $105-125 \mathrm{~V}, 60 \mathrm{CDS}$ AC. Slze: $5 \% \mathrm{kx}$ $81 / 2 \times 111 / 4^{* \prime}$. Shpg. wt., 11 bs
TE.755WX Kit
Net 65.95
Model 430. As above, but factory wired and tested.
TE.756WX

## MODEL 324K <br> RF SIGNAL GENERATOR KIT

For IF-RF alignment, signal tracing and trouble-shooting of TV, FM, AM sets all on fundamentals; marker genera tor for alignment of new h -1 and oider l-f TV IF's. Range: $150 \mathrm{kc}-145 \mathrm{MC}$ on fundamental: $111-435 \mathrm{MC}$ on call. brated harmonics - $\pm 1.5 \%$ frequency accuracy. In ternal 400 cps sine-wave modulation variable from $0.50 \%$. Colpitts osciliator. Variable gain external modulation amplifier; Turret-mounted, slug-tuned coils. RF output 100,000 microvolts. AF output up to 10 volts. Output impedance is 50 ohms. For $105-125 \mathrm{~V}$. AC $50 / 60$ cps. Size: $8 \times 10 \times 43 / 4^{\prime \prime}$. Shpg. wt., 10 lbs.
TE- 242 Kit
Model 324. As and 28.95 TE-243 tested Net 39.95

## NEW MODEL 369K NEW TV-FM SWEEP MARKER GENERATOR KIT

Features post injection marker and increductor sweep circuit. Sweep gen. is independent of marker gen. and feeds sweep signal only to if strip being aligned. 5 ranges, from 3.5 MC to 216 MC . Output Impedance. 50 ohms. Variable Frequency Marker: 4 ranges, 2-225 MC-2-75 MC In Fundamentals, to 225 MC in Harmonics. Fixed Frequency Marker: 4.5 MC crystal included with $k i t$, other crystals can be used. With tubes. For 105 $125 \mathrm{~V}, 60 \mathrm{CDS}$ AC. Slize: $121 / 2 \times 81 / 2 \times 71 / 4^{\sim}$. Shpg. wt., 16 lbs.
TE.742WX KtI
Net 89.95 Model 369. As above, but factory wired and tested. TE.743wX

Net 139.95

## MOOEL 488K ELECTRONIC SWITCH KIT

Simultaneous observation of 2 patterns on a single
scope screen Amplitudes scope screen. Amplitudes of the 2 patterns are individually adjustable. Control for varlable phase relation between the 2 patterns. Switching rate: continuously variable $10-2000 \mathrm{cps}$. Frequency response (sinusoidual); DC to $30,000 \mathrm{cps}$ ( -2 db ); Useful to $300,000 \mathrm{cps}$. Maximum gain: 10 times (continuously variable gain control); Input Impedance: 100,000 ohms; Output Impedance 50,000 ohms. All components and instructions supplied. For $105-125 \mathrm{~V}, 50-60 \mathrm{cps}$ AC. Size: $6 \times 8 \times 6^{\prime \prime}$. Shpg. wt., 7 lbs.
TE-206 Kit
Net 23.95
Model 488. As above, but factory wired and tested.
TE-207
Net 39.95

## SCOPE ACCESSORY PROBES

Features: fully shielded rugged terminal board mounting of all parts. Shock-mounted floating construction, with swivel action and color-coded for easy identification. Shpg, wt., 502.
TE-228 PSD-K. -Demodulator Probe KIt
Net 3.95
TE-229 PSD. -As above, but factory wired
TE-230 PD.K. -Dlrect Probe Kit
TE-231 PO. -As above, but factory wired
TE-232 PLC.K. -Low Capacity Probe Kit
TE. 233 PLC. -As above, but factory wired

Net 5.95
Net 2.95
Net 3.95
Net 3.95
Net 3.95
Net 5.95

## MOOEL 352K BAR GENERATOR KIT

Reliable, accurate, portable, easy-to-use; a wonderful time-saver! Operates on chamels $3,4,5$, when con nected to the antenna terminals. It produces 16 vertical bars to check HOR linearity. 12 horizontal bars to check VERT IInearity. Shows picture size and V\& H sync. circuit stability. Output: $100,000 \mu \mathrm{v}$. Very useful for TV service work when all stations are off the air. Size: $71 / 2 \times 5 \times 41 / 2^{\prime \prime}$. Shpg. wt., 6 lbs.
TE-244 Kit
Net 19.95
Model 352. As above, but factory wired and tested
TE-245
Net 29.95

## MODEL 36CK TV-FM

## SWEEP SIGNAL GENERATOR KIT

Complete, accurate alignment of VHF-UHF TV and FM receivers. Frequency Range: 500 KC to 228 MC on fundamentals. Sweep width variable from 0-30 MC Crystal marker oscillator with variable amplitude. Provision for exfernal marker. Phasing control incfuded. " $81 / 2^{\prime \prime}$ vernier dial calibrated in frequencies. TV channels marked on front panel. Tubes: 1-6X5GT, 1-12AU7, 2-6C4. For 110 . 120 V ., 60 cycles $A C$. Size: $10 \times 8 \times 63 / 4^{\prime \prime}$. Complete with tubes; steel case, etched panels, parts, schematic and pictorial diagrams. Less crystal. Shpg. wt., 12 lbs. TE. 246 KH

Net 39.95
Modet 360. As above, but factory wired and tested. TE-247

Net 59.95

## MOOEL 315K

## DELUXE SIGNAL GENERATOR KIT

Range 75 KC to 150 MC on 7 catibrated bands. Accuracy better than $1 \%$, stabilized by VR power supply circuit Provision for external modulation or internal 400 -cycle sine.wave modulation. Output $100,000 \mathrm{kV}$. Attenuator provided. Bandspread vernier luning. Tubes: 6C4, 7F7 $6 \times 5$, VR-150. For $105-130 \mathrm{~V} 60$ cycles. Size: $12 \times 13 \times 7^{\prime \prime}$ AtI components and instructions supplied. Shpg. wt. 20 tbs.
TE-24awX Kit
Net 49.95
Model 315. As above, but factory wired and tested
TE-249WX
Net 69.95

## MDDEL 377K AUDIO GENERATOR KIT

Wien Bridge-type oscillator providing both sine and square wave: $1 \%$ resistors and 4 .gang condenser used. Frequency range: Sine wave, $20-20,000$ cps; square wave, $60.50,000 \mathrm{cps}$. Response $\pm 1.5 \mathrm{db}, 60.150,000$ cps, Distortion less than $1 \%$. Hum less than $0.4 \%$ Accuracy $\pm 3 \%$. K.follower ouiput of 10 V across 1000 ohms rated load ( 100 mw ). Size $71 / \mathrm{ax} 111 / 9 \times 7^{\circ}$ )/8". Shpg. wt., 14 lbs.
TE- 250 KHt
Net 37.95
Model 377. As above, but factory wired and tested.
Net 54.95
5MC AND 4.5 MC CRYSTALS
Precision crystals, fit-sto. socket (including EICO \#360). Shpg. wt., 502
TE. 252 C-5, 5 MC Crystal
TE-253 C-4.5, 4.5 MC Crystal

# FICD KITS AND WIRED TEST EQUIPMENT EIGD  

## MODEL 147AK

DELUXE SIGNAL TRACER KIT
A deluxe instrument with unsurpassed testing facilities, englneered for high sensitivity as well as good audio quality. Features high gain RF and low gain audio channels. Both visual and aural monitors. With shielded RF crystal demodulator, valuable noise locator circuit, built in callbrated wattmeter, substitute test speaker, ampllfier and output transformer. Dutput for VIVM or scope. Triode input circuit for extreme low noise. Hum free operation. Complete with all components and instructions with probes. For $105.125 \mathrm{vac} 50 / 60$ cycles. $8 \times 10 \times 43 / 4^{\prime \prime}$. Shpg. wt., 11 lbs.
TE-216 Kit
Net 29.95 Model 147A. As above, but factory wired and tested. TE-217

Net 44.95

## NEW! MODEL 902

## DELUXE AUDIO ANALYZER

A complete audlo tool combining IM and harmonic disportion meter. sensitive AC VTVM and db meter in one compact instrument. Constructed to rigid lab standards, it offers extreme stability and accuracy for critical measurements in audio design and development. $41 / 2^{\prime \prime}$ meter provides full-scale pointer deflection at $.1 \%$ distortion a 10 mv AC rms voltage. Highly legible linear distortion a 10 mv AC rms voltage. Highly legible linear
scale permits preclse distortion readings to as low as scale permits preclse distortion readings to as low as
$.01 \%$ and to tow as 1 mv AC .6 full-scale IM ranges to $30 \%$ distortion, 7 for harmonic distortion to $100 \%$, and 10 for AC voltage to 300 v ms , with $\pm 5 \%$ accuracy on distortion and $\pm 4 \%$ on AC voltage. Incorporates low and high frequency test signal sources for im distortion measurements, and permits selection of elther $4: 1$ or $1: 1$ LF to HF ratios. $105-130 \mathrm{~V}$ AC, $50 / 60$ cps. Size: $121 / 2 \mathrm{~W} \times 81 / 2 \mathrm{H} \times 101 / 8 \mathrm{O}$. Shpg. wt. 21 lbs.

Net $\mathbf{2 5 0 . 0 0}$ TE.741wx wired

## MODEL 320K

## SIGNAL GENERATOR KIT

Highly stable Hartley oscillator has range of 150 kc to 102 mc with fundamentals to 34 mc . 400 -cycle AM modulation bands. Vernier tuning condenser complete with all components and instructions for easy assembly. Size: $10 \times 8 \times 43 / 4$ ". For $110 \cdot 120 \mathrm{~V}$. 60 cycles AC. Shpg. wt., 10 tbs.

## TE-238 Kit

$\qquad$ Tedel 320 . As above, but factory wired and TE-239 ....................................................... Net 33.95 Model 322 K . Sinsilar kit to Model 320 K except with individual calibration of each of the 5 bands.
TE-240
Model 322. As above, but factory wired and tested. TE-241

## MODEL 944K FLYBACK

## TRANSFORMER \& YOKE TESTER KIT

 Positlive chech of all type flybacks and yokes, in or out of set - in just seconds! Dperates on the extremely sensitive grid-dip principle - shows up even 1 shorted turn! Exclusive separate calibration for air core and iron core flybacks for accurate testing of all types. checks any inductance when impedance is not too low. Large $41 / 2^{\prime \prime}$ meter. 3 separate colored scales. Tests continuity of yokes, colls, speakers, switches, ete. New compact sizes for extra-easy portability - Kit comes complete with instructions. Tube complement $1-6 K 6$. Size $7 \times 5 \times 4^{\prime \prime}$. For $105-125$ volts AC $50 / 60$ cps. Shpg. wt., 5 lbs.TE. 202 Kit
Net 23.95
Model 944. As above, but factory wired and tested. TE-203 Net 34.95

MODEL 1171K RESISTANCE DECADE KIT Ideal for general design and development work. Exceptionally accurate wide-range versatile instrument $0-99,999$ ohms in 1 -ohm steps with 5 decades. Com parator position permits instant substitution of actual egulvalent component of the resistance value indicated on the box. All $1 / 2 \%$ accurate 1 watt resistors. Quality switches. Rugged, trouble-free constructlons. Smart professional styling - satin finish deep-etched alumi num panel, grey wrinkled steel case. Size $12^{\prime \prime} \mathrm{L}, 3 \mathrm{z} \mathbf{2}^{\prime \prime}$ W, $3^{\prime \prime} 0$. Shpg. wt., 3 lbs
TE-204 Kit
Net 24.95
Model 1171. As above, but factory wired and tested. TE-205

Net 29.95

## MODEL 1180 CAPACITANCE DECADE KIT

 Precislon sllver-mica capacitors $( \pm 1 \%$ accuracy rated 350 VDC continuous, 500 VOC intermittent, 1000 VOC test) arranged in 3 decades for extremely wide rande of 100 MMF to 0.111 MF in steps of 100 MMF. With all switches at zero. approximately 7 uuf Insulation resistance of capacitors used, none under 50,000 megohms, most well over 250,000 megohms Satin-finish deep-etched aluminum panel, gray wrinkled steel case, Size: $9[x 31 / 2 W \times 31 / 2 " O$. Shpg. wi 3 tos.Net 17.95
Model 1180. As above, but factory wired and tested TE-221 Net 24.95

## MODEL 1100K RETMA RESISTANCE SUBSTITUTION BOX KIT

A time-saving instrument with wide variety of applica tions. Ideal for general design or development, also service work. Enables rapid substitution of wide range of RETMA resistance values from 15 ohms to 10 mes. ohms in decade multiples of $15,22,33,47,68,100$ ohms. Uses standard 1 watt, $\pm 10 \%$ RETMA resistors. Handy 5 -way jack-top binding posts. Satin aluminum front panel. Size: $31 / 4 \times 61 / 2 \times 31 / 2^{\prime \prime}$. Shpg. wt., 2 lbs. TE-208 Kit
Model 1100. As above, but factory wired and tested. TE-209

## MODEL 1120K RETMA

CAPACITANCE SUBSTITUTION BOX KIT
Ideal equlpment for development, designing, servicing work. Enables rapid substitution of wide range of RETMA capacitance values from 0.0001 to 0.22 MFO in an operating circuit to determine value needed for best performance and to find value of badly damaged or Hiegible capacitors. Minimum accuracy $\pm 10 \%$. Uses silver-mica and molded plastic (or selaed in plastic) capacitors, rated approx. 600 volts. Size: $33 / 4 \times 61 / 2$ x $31 / 2$ ". Shpg. wt., 2 lbs.
TE. 218 KIt
Net 6.95
Model 1120. As above, but factory wired and tested TE. 219 Net 10.95

## MODEL I140K SERIES-PARALLEL

 RC COMBINATIONS BOX KITAn extremely valuable combination of the model 1100 K Resistance 80x and the Model 1120K capacitance Box with additional switching facllities that permit selection of any resistance alone, any capacitance alone, or any combination of resistance and capacifance in either series or parallel. Also open circuit and short circuit positions. Same specs as $\pm 1100$ and $=1120$. With convenient jack-top binding posts. Shpg. wt., 4 lbs.
TE-212 Kit
Model 1140. As above, but factory wired and tested. TE-213

## MODEL 950K R.C.

## BRIDGE \& R-C-L COMPARATOR KIT

Latest bridge-type professional Instrument featuring the valuable Comparator Range for measuring unknown capacitance, resistance and inductance with a complementary component as a standard. Transformer operated assures safe operation. Direct scale on panel reads 0.5 hms - 500 megs resistance ( 4 ranges). 10 mmid - 5000 mfd capacitance ( 4 ranges), and power factor. KIt includes precision calibrating resistor. Unique comparator range has ratio from 0.05 to $20(400$ to 1). Learage testing of all capacitors at rated dc working voltage with internal (variable) 0.500 vdc source. Electron-ray tube as both bridge balance and capacifor indicator. Attractive, durable case, neat easy-to-read characters. Size: $8^{\prime \prime} \times 10^{\prime \prime} \times 43 / 4^{\prime \prime}$. Shipg. $w t ., 8 \mathrm{lbs}$.

Net 23.95
Model 950. As above, but factory wired and tested. TE-215

Net 29.95

## MODEL 680K TRANSISTOR and CIRCUIT TESTER KIT

Provides accurate measurements of diodes and ICBO and ICED. The VOM includes 5 OC current ranges. 2 OC volts ranges at $20,000 \mathrm{ohm} /$ volt, and 3 resistance ranges $31 / 2^{\prime \prime} 0^{\prime}$ Arsonval meter has $2 \%$ accuracy. Self-powered. uses 4 -size $A A$ and 1 "C" battery. Includes 3 perma: nently connected clip-on test leads on a panel socket for transistor connectlons; 2 banana jacks. Housed in a sturdy bakelite case. Size: $63 / 4 \mathrm{H} \times 5 \mathrm{~V} / 4 \mathrm{~W} \times 3$ " 0 . Shpg. wt. 3 lbs.
TE-735 680K Kit
t
ry wired and tested
Net 25.95
TE-736 680 Factory wired and tested
Net 39.95

## MOOEL 955K IN-CIRCUIT CAPACITOR TESTOR KIT

Checks for shorts (even in the presence of as little as 1 ohm shunt resistance). Checks for opens: capacitors as small as 15 mmf . In or out of circuit: Wien bridge clrcult measures capacitance with $\pm 10 \%$ accuracy between 0.1 mf and 50 mf , at any point on the $4^{\prime \prime}$ lucite dial-product, convertible irito dissipation or power factor. indications visible on electron ray tube. includes line adjust control. For $105-130$ VAC. Size: $81 / 2 \mathrm{H} \times 53 / 4 \mathrm{~W} \times 6^{\circ} \mathrm{O}$. Shpg. wt. 4 lbs.
TE.737 955 Kit
Net 19.95 E.738 955 Wired

Net 39.95

## MODEL 584K BATTERY TESTER KIT

Accurately tests all $A$ and 8 portable radio batteries in or out of recelver. Tests lantern batteries and may be adapted to other types. Provides true dynamic tests by checking battery terminal volfage, simulating conditions of actual operation. Test positions: volts - 1.5 . $4.5,6.0,7.5,9.0,27.5,45,67.5,75,90$, plus spare position. Test leads provided. $61 / 4 \times 33 / 4 \times 2^{\prime \prime}$. Shpg. wt., 2 los .
Wt., 2
TE-200 Kit (NOT ILLUSTRATEO)
Net 9.95 Model 584. As above, but factory wired "and tested. TE- 201

Net 12.95
OTHER EICO TEST EQUIPMENT
TE-236 495K Voltage Callbrator Kit (Not Illus.) Net 19.95
TE-237 495 Same as above, but factory wired Net 24.95
TE-210 145AK Signal Tracer Kit . .......... Net 23.95
TE-211 145A Same as above, but factory wired Net 32.95

## Simpson QUALITY TEST EQUPITIENT



## NEW MODEL 260-IV 20,000 OHMS/VOLT VOM

 6 NEW FEATURES:- New Self-Shielded Movement
- New Higher Accuracy: $2 \%$ OC, $3 \%$ AC
- New Ruggedness From Spring-Backed Jewels
- Greater Repeatability
- Increased Linearity and Stabilitr
- *Mirror Scale (optional for 260, Series 4M)

Now the famous 260 volt-ohm milliammeter has 6 new features to make it befter than ever. Sensitivity- $20,000 \mathrm{ohms} / \mathrm{V} . \mathrm{D} . \mathrm{C} ., 5,000 \mathrm{ohms} / \mathrm{V} . A . C$. Ranges: DC: 0.25 V , $2.5 \mathrm{~V}, 10 \mathrm{~V}, 50 \mathrm{~V}, 250 \mathrm{~V}, 1000 \mathrm{~V}, 5000 \mathrm{~V}$; AC: $0.25 \mathrm{~V}, 10 \mathrm{~V}, 50 \mathrm{~V}, 250 \mathrm{~V}, 1000 \mathrm{~V}, 5000 \mathrm{~V}$; A.F.: $0.2 .5 \mathrm{~V}, 10 \mathrm{~V}, 50 \mathrm{~V}, 250 \mathrm{~V} ; \mathrm{DB} ; 20$ to $+10 \mathrm{db} ;-8$ to $+22 \mathrm{db} ;+6$ to $36 \mathrm{db} ;$ 20 to +50 db . DC current ranges from $0-50$ uamps, $0.1,-10,-100,-500 \mathrm{ma}$; $0-10$ amps. DC resistance from 0.2000 ohms, $0-200,000$ ohms, $0-20$ megohms. Accuracies. DC volts, $\pm 2 \%$ F.S.; AC volts $\pm 3 \%$ F.S. Meter noused in Bakelite case. measures $51 / 4 \times 7 \times 31 / \mathrm{s}^{\prime \prime}$. Comes with battery and test leads. Shpg. wt., 6 lbs . TE•310

Net 47.97
MODEL 260 RT. As above, but in "roll lop" safety case. Shpg. wt., 9 lbs. TE-311 Net 53.85 MODEL $260-\mathrm{IV}$ M-same as model 260 -IV but with mirrored scale. Shpg. wt. 6 lbs. TE-688
wét 6 bs.
Nét 49.85
MODEL 270 VOM. Includes all of the features of the 260 (above) plus a mirror scale knife edge pointer, extra high voltage stability and $11 / 2 \%$ accuracy. Size: $51 / 4 \times 7 \times 31 / \mathrm{e}^{\prime \prime}$. Furnished complete with case, batteries and instructions. Shpg. wi., $51 / a \times 7 \times 3$
5 lbs.
5 los.
TE-353
TE-353 Mo Money Down
TE-354 MODEL 270RT same as 270 but with safety
MODEL 270 RT same as 270 but with safety roll-top case $9 \times 6 \frac{1}{6} \times 43 / 4^{2}$. Shpg. wt., 9 lbs.

Net 58.75

ACCESSDRIES FOR MODELS 260 and 270

| Stock No | Simp. No | Description | Lbs. | Net |
| :--- | :---: | :--- | :--- | :---: | ---: |
| TE-313 | 1818 | Leather carrying case | 2 | 8.37 |
| TE.689 | 7500 | Leads, banana Dlugs \& alligator clip | 1 | 2.06 |
| TE.690 | 0509 | HV Probe-50KV range | 1 | 12.24 |
| TE-691 | 0508 | HV Probe-25KV range | 1 | $\mathbf{1 8 . 2 6}$ |

PLUG-IN ADAPTERS FOR 260 and 270
Now add unlimited versatility to your present 260 VOM. Simpson "Add-a-tester" adaptors (units listed below) literally turn your 260 into 3 whole array of testers. Each adaptor fits easily into any 260 or 270 meter produced since 1947. Simpson 260 Adaptors provide for normal 260 usage without disconnecting the adaptor. TE. 314 MODEL 650 Transistor Testor. TE-315 MODEL 651 DC VTVM.
TE. 316 MODEL 652 Temperature Tester
TE-317 MODEL 653 AC Ammeter
TE-318 MODEL 654 Audio Wattmeter
TE-319 MODEL 655 Microvolt Attenuator TE-320 MODEL 656 Battery Tester.
TE-6B1 NEW MODEL 657 Milliohmmeter TE-680 NEW MODEL 661 DC Ammeter. Shpg. wt., 2 tbs

Net 26.41 Shpg. wt., 2 lbs. Net 32.29 Shpg. wt., 2 lbs. Net 32.29 $\begin{array}{ll}\text { Shpg. wt., } 2 \mathrm{lbs} & \text { Net } 38.17 \\ \text { Shpg wt. } 2 \mathrm{lbs} & \text { Net } 18.57\end{array}$ Shpg. wt., 2 lbs $\quad$ Net 18.57 Shpg. wi.. 2 lbs. ...... Net 18.57 Shpg. wt., 2 lbs. Net 18.57 Shpg. wt.. 2 lbs Net 19.55 Shpg. wt., 2 lbs. Shpg. wt., 2 lbs
Net 17.59

## MODEL 466 HANOISCOPE

- Portable Oscilliscope with 5" Screen

Rugged, compact $5^{\prime \prime}$ general-purpose oscilloscope. For TV, FM or AM servicing. Vertical amplifier frequency response: $\pm 1 \mathrm{db}$ from 15 CPS to 100 KC ; 6 db down at 250 KC ; usable to 1 MC Max. vertical deflection sensitivity: $30 \mathrm{mv} \mathrm{rms} /$ inch. Horizontal Frequency response: $\pm 1$ db from 15 CPS 20 KC : 6 db down at 100 KC. Horizontal deflection sensitivity: 0.7 volt rms/inch, max, sawtooth sweed range: 15 CPS to 80 KC. Max. input voltage: 400 volts peak. Operates on $100-120 \mathrm{~V}$. AC 60 cycles, size: $121 / 4 \mathrm{Hx} 8 \mathrm{~W} \times 161 / \mathrm{A}^{\prime \prime} \mathrm{D}$. Complete with test leads and operators manual. TE-348wX Shpg. wt., 24 lbs. Net 146.95 MOOEL $4587^{\prime \prime}$ COLORSCOPE. Dual bandwidth for Blk. \& Wh., Color TV. Freq. response Flat $\pm 1.0$ to 4.5 MC . Size: $11 \times 161 / 2 \times 141 / 2$. For $105 / 125$ V $50 / 60 \mathrm{CPS}$. AC. Shpg. wt., 38 los.
TE-347wX
MODEL 458 (Not Iltustrated)
Net 244.95

## MODEL 383 A IN-CIRCUIT CAPACOHMETER

- Measures leakage Resistance of Defective Paper, Mica, or Ceramic Capacitors
- Indicates Oirectly the capacitance of Good Paper, Mica or Ceramic Capacitors over a Range of 10.0 mmf to 10.0 mf

Pulse technique quickly detects "borderline" capacitors. All measurements are made under load condltions. No adjusting of a bridge circuit and balancing controis. Also measures leakage. For $105 / 125$ volts 60 cycles only. Complete with test lecads and operators manual. Size: $83 / 8 \times 113 / 8 \times 81 / 2{ }^{\prime \prime \prime}$. Shpg. wt., 12 lbs. TE-326WX

## DELUXE MODEL 311 VTVM

Sensitive VTVM. Ranges: DC/AC V. 0-1.5-150-500-1500V; P.P 0-4-14-40-140-400-1400-4000V. Will measure RFVolfages at frequencies from 50 CPS. Resistance: $\mathrm{X}, \mathrm{X} 10, \mathrm{X} 100, \mathrm{X1X}, \mathrm{X} 10 \mathrm{~K}, \mathrm{X1M}$, Zero center D.C. $-75,0,1.75$. With D.C./A.C./Ohms probe; Shpg. wt $61 / 2 \mathrm{lbs}$.
TE-321
No Money Down
Net 68.55
NO. 0731 RF PROBE. For 311 VTVM Ship. Wt., 1 lb.
NO. O732 HV PROBE. For 311 VIVM Shpg. Wt. 11 lb NO. 0732 HV PROBE. For 311 VTVM Shpg. Wt., 1 lb.
TE-323 Shpg. wt., 1 lb .

Net 11.51


## DELUXE 7" SCALE VOLT-OHM MILLIAMMETERS

## 269



Specifications: 20,000 ohm/volt multitester. Large $7^{\circ}$ dial. Ranges $A C / O C$ volts: $0-3 \cdot 12 \cdot 60-600-1200$. DC Micraamps: $0-60$, DC milliamps: $0-1.2-12-120$ and $0-12$ amps. Output volts: to 300 VAC, $O B$ scale. Ohms: $R \times 1, \times 100, \times 10 \mathrm{~K}$. Size: $6 \times 7 \mathrm{M} \times 3 \mathrm{y} \mathrm{m}^{\mathrm{m}}$. Complete with test leads. Shpg. wt., 5 lbs.

## TE-685

Net 53.85
Model 267 - Similar to 268 except: AC voltage ranges to 250 V . Ampere ranges for 0.50 ua, 0.500 MA and 0.10 A .
TE. 684
Net 53.85
No 5262 Carrying Case For 2688267 VOM's. Shpg. wt., 2 los.
$\qquad$ No. 7538 Test Prods, Elbow Banana Plugs, For 268 and 267 vom's. Shpg. Wt., 1 lb.
TE. 686 TE.686

## MODEL 269 V-O-MICROAMMETER

$100.000 \mathrm{ohms} / \mathrm{volt}$ multitester with $7^{\prime \prime \prime}$ dial. 33 ranges: DC current $0-16.160 \mu \mathrm{a}$ $0-160 \mathrm{ma}: ~ 0-16$ amps. DC volts: $0-1.6-8-40-160-400-1600-41 \mathrm{OO}$. AC: $3-8-40-160-800 \mathrm{~V}$.
 AF: $0-160 \mathrm{~V}$ i Omms
probe. Wt. 6 lbs .
TE-324 ...................................... Money Down
Net 88.15
No. D181 HI-VOLTAGE PROBE. 40KV range. For 269 Shpg. we. 2 lbs.
TE-325
Net 13.23

## MODEL 715 AC VTVM

High input impedance, multi-voltage ranges plus wide frequency response combine to make the 715 an ideal general purpose instrument. Meter scale provides $O B$ markings on both voltage range positions. Employs $\pm 1 \%$ precision resistors. Sensitivity is 10 millivolts full scale on lowest range. Accuracy: $\pm 5 \%$ of full scale. Frequency Response: 10 cDs to $400 \mathrm{KC} \pm 10 \mathrm{~B}$. Ranges: Volts: 0 to 300 rms ; Decible Range: -52 to +52 DBM Scale Markings: - 12 to +2 DB. Supplied with test eads and instructions. Operates on $110-125 \mathrm{~V} 50 / 60 \mathrm{cps}$. eads and instruc
Shpg.
TE-358
Net 68.55


MOOEL 430 COLOR BAR GENERATOR
$100 \%$ saturated NTSC signals. Exceptionally wide range of control includes G-Y at $90^{\circ}$ Output pictured on a Single Master Control. Color bar dis. Dlay pattern, Ift. to rt; red, yellow, green, cyan, diay pattern, Ift. to rt.; red, yellow, green, cyan,
white, magenta, blue, black. Complete with leads and white, magenta, blue, black. Complete with leads and
manual. $105 / 125 v, 60$ cycles. Slie: $19 \mathrm{y} \times 171 / 2 \times 14^{\prime \prime}$. manual. 105/125v
Shpg. wt., 26 lbs
TE.692WX
Net 387.10


OTHER SELECTED SIMPSON TEST EQUIPNENT
TE. 327 MODEL 355 Midjetester
TE-333 MODEL 240 AC/DC VOM Hammeter
2 lbs.
TE. 336 MODEL 372 Ohmmeter
lbs.
Net 34.25
Net 31.31
Net 29.35

#  

## 200,000 <br> DHMS PER VDLT moeit 630-NS

## - 5ua SUSPENSION METER MOVEMENT <br> - 62 RANGES <br> $9751 \begin{gathered}\text { No Money } \\ \text { Down } \\ \text { Dow }\end{gathered}$

 Highly accurate. Temperature compensated. 1200V DC @ 100,000 ohms/V, to 600V DC @ 200,000 ohms/V $20,000 \mathrm{ohm} /$ volt on AC. Features: $08:-20$ to +77 . DC Micro amps: $0-600 @ 150 \mathrm{MV} ; 0-120 @ 300 \mathrm{MV}$. DC milliamps: $0-600 @ 150 \mathrm{MV}$; D-1200 300 MV . DC
 $0-100$ Megohms. Mirror Scale. With leads, batteries. $311 / 251 / 2 \times 71 / 2^{\prime \prime}$


MDOEL 630


MODEL 630-PL

## MODEL 630 VOM

A popular VOM with a large $51 / 2^{\prime \prime}$ meter for easy visibility and greater accuracy. Sensitivity 20,000 ohms per volt OC, 5,000 ohms per volt AC. Ranges: $0-3-12-$ 60-300-1200-6000 volts. Ohms: 0-1K-10K-1 meg-100 meg, OC milliamperes: 0 . $06-1.2-12-120$ at 250 millivolts. OC amperes: $0-12$. DB: $-2010+70$ ( 0 OB $=1 \mathrm{mw}$. in 600 ohms.) Meter has a molded, fully insulated case, measures $3 \% \times 51 / 2 \times 71 / 2^{\prime \prime}$. Complete with leads. clips, batteries and instruction book. Shpg. wt., 6 lbs TE-368

Net 48.51

TE-410wX Shps. wt., 6 lbs.


Net 97.51

MINIATURE VOM. DC volts: $0.3 \cdot 12 \cdot 60-300 \cdot 1200 @ 20 \mathrm{~K}$ ohms/v. AC volts: 0-3-12-60-300-1200@ $@ \mathrm{~K}$ ohms/v. DC ma: 0.600 ; MA, 0.600 ; ohms to 200K. With batterles, leads. Size: $41 / 4 \times 23 / 4 \times 1 K^{\circ}$

Net 36.75

## 666.R POCKET VOM

OC/AC V. 0 to 5000 ohms per volt. Ohms $0-300,000$ ME/AC 0.3 DC MA 0.100 ; AMPS: 0.1 . Output volts Megs: 0.3. DC MA $0.100:$ AMPS:
$0.1,000$. Battery, leads. $3 \mathrm{~K}_{0} \times 57 / 8 \times 2 \%_{6}$
$0.1,000$. Battery, leads. 3 Mo $\times 578 \times 21_{6}$
TE. 389 Shpg. wi., 4 lbs. No Money Dow
Net 33.81

## MODEL 10 CLAMP ON AC AMMETER

Clamp on type ammeter, plugs Into 310 VOM. Jaws clamp around single conductor to measure 0.6-12-30-$60-120-300$ amps AC. Shpg. wt., $34 / 2 \mathrm{lbs}$. TE-361
MODEL 379-Black leather case for model 10.
Net 15.19
TE. 363 Shpg wi 8 oz
MODEL 101 LINE SEPARATOR - Divides two conductor
cords, increases sensitivity 10 X and 20X.
TE-364 Shpg. wt., 2 lbs.
Net 5.88 MODEL 100. Complete set includes Models 310 and 10. 101, 379, 311. Shpg. wt., 5 tbs.
TE-365
Net 63.21
No. 611 . Leads adapt model 10 for use with any Vom having 3 volt AC scale at 5000 ohms per volt, such as Triplett 630,631 series.
FE-366 Shpg. wt., 1 tb.
Net 2.06 No. 311 leads sep
cramped locations. 1 lb.
TE.367 Shpe. wt. 1 lb. Net 2.06 MOOEL $369^{\circ}$ blach leather case for model 310
TE-362 Shpg. wt., 8 oz.
Net 3.14

## VOM AND VTVM ACCESSORIES

No. T-79 A-145 R-F. probe for model 631 to extend TE.373

## TE-373

 PL, 630APL . Carrying case forCover flap snaps back allowing full access to meter without removing case. Black Cowhide.
TE-377 Shpg. wt., 2 lbs.
9.70 rubber lining
TE. 399 Shpg. wt., 2 lbs. ............ Net 14.60 No. T. $79-70$ 0-30,000V DC Hi-Vott Probe for 630 and 631 Series. Shpg. wt., 8 oz.
TE-400
Net 14.21
No. T-79-127 Replacement leads for 630 Series voM's. TE. 405 Shpo wt l to leads 630 Ser Net 205 No. T-225-A33 stand for 630, 631. Shpg. wt., 1 th.
TE-402 Net 98 Model 7B8-196-High Volt Probe DC to 50 KV . For 850. TE. 408 Shpp. wt. i lb. Model 859.0 P Black Leather 13.59 rubber padding for Model 850 .
TE 409 Shpg. wt., 2 lbs.

Model 630A VOM - Laboratory type VOM similar to 630 but features $1 / 2 \%$ resistors and more accurate movement for greater accuracy - complete with leads, clips, batteries and instruction book. Shpg. wt., 6 lbs. clips, batteries and instruction book. Shpg. Wt., 6 Ibs.
TE. 369 TE-369

NEW MODEL 630-L VOM - Low Milliwaft ohmmeter - 2 Low Power ohms fianges cenductor Circuitry
A new VOM featuring special low power ohmmeter circultifor safe semi. conductor testing. Large 51/2" metep has exclusive shielded Bar-Ring movement. Sensitivity: 20,000 ohms pep volt $D C ; 5,000$ ohms per volt AC . Accuracy: $\pm 3 \%$ on $\mathrm{DC} ; \pm 4 \%$ on AC . Color-coded range switch and dial. Polarity reversing switch. Uses Mercury batteries for stable voltage and long life. Ranges: 0-2.5-10-50-250-1000-5000 DC Volts: $0-3-10.50-250-1000-5000 \mathrm{AC}$ Volts; $-2010+11,+21$, +35. +49, +61, $\pm 75$ 08; $0-100$ OC Microamps; $0.10 \cdot 100-1000$ DC Milliamps; 0.10 DC Amps; 0.1000 . 10,000 Ohms; 0.100 Megohms; $3 \cdot 10 \cdot 50-250 \cdot 1000 \mathrm{AC}$ Output Volts. Black molded case is fully insulated. Size: $3^{\prime} \mathrm{K}_{2} \times 54 / 2 \times 74^{\prime \prime}$. Complete with leads, alligator clips, rubber feet, batteries and instruction manual. Shpg. wt., 5 lbs
TE. 412

Net 53.41


## NEW MODEL 310-C MINIATURE VOM

- Hand Size And Lightweight, But with Features of Full Size Vom - 20,000 Onms Per Volt OC: 15.000 Ohms Per Voit AC Complete miniature VOM featuring polarliy reversing switch for $D C$ measurements and single selector switch-one switch selects any range. Self-shielded Bar-Ring meter movement Ranges: $0.3-12-60-300-600$ DC \& AC Volts; 0.600 DC Microamps; 0-6-60-600 DC Milliamps. Fully insulated black molded case measures $23 / 4 \times 41 / 4 \times 1 K_{10}$. Complete with leads, battery and instruction nianual. Shpg. wt.,
$11 / 4 \mathrm{jbs}$.


MODE TRANSISTOR TESTER 5831

NO MONEY OOWN
Tests shorts, leak age, BETA, ICBO ICBO. ICEO for both powep and signal type transistors. Also checks leakage and forward currents on diodes. Operation is slmple-roll charts urrents on charts or special fechnical data are eliminated. The only information needed 10 make a test is the fransistor type. Finished in durable gray leatherette with uggage style handle and attractive aluminum panel. Size: $115 / 4 \times 85 / 4 \times 51 /{ }^{-1}$
TE-398 Snp. wt., 9 lbs


MOOEL 630A


MODEL 630-APL

## MODEL 630-PL VDM

A compact VOM of modern design. Features streamlined design. AC frequency response $5-500,000$ cycles per second, DC Polarlty reversing switch. High sensitivity 5000 ohmes per volt AC, 20,000 ohms per volt DC. DC Volts: $0-2.5-10-50-250-1,000-5.000$. AC Volts: $0-3-10-50$ $250-1000-5000$. Decibels: -20 to +75 . DC millam $250-1000-5000$. Decibels: -20 to +75 . DC millam
peres: $0-1-10-100-1000$ at 250 millivolts. DC Amperes peres: $0-.1-10-100-1000$ at 250 millivolts. DC Amperes
$0-10$ ohms: $0-1 \mathrm{~K}-10 \mathrm{~K}-1$ meg. 100 meg. Molded, fuily insulated case, $31 / 1, x 51 / 2 \times 71 / 2^{\circ \prime}$. Complete with leads alligator clips, batteries and instruction manual TE- 370 Shpg. wt., 6 tbs.

Net 48.51
MODEL 630 APL VOM Laboratory type VOM featuping $1 / 2 \%$ resistors and more accurate movement for greater accuracy-RANCES and other features same as Model 630 PL . Shpg. wt., 7 lbs.
TE. 374
No Money Down
Net 58.31

## MODEL 3414 TUBE TESTER



A fast, a versatile, easy-to use test instrument. Burned out tubes are refected instantly upon insertion of tube The neon indicator detects shorts quickly and accurately. Filament voltage of 0.65 to 117 volts is provided Roll chart lists all poputap radio, TV and Hi-Fi tubes Large, three-color meter. Counter -. Portable dark grey leatherette covered case is included. $157 / 8 \times 111 / 2 x$ grey
$61 / 2{ }^{\circ}$. Shpg. wt., 10 lbs.
TE.378WX
Net 107.3
TV PICTURE TUBE AOAPTER
Check picture tubes right in set or carton. Can be used with Triplet models 3413-8, 3423 and 3441 TE-376 BV Adapter. Shpg. wt., 3 lbs. ......... Net 7.06


## MODEL 631 VTVM-VOM

VTVM sensitivity 9 meg/volt. $D C$ : $0-120 \mathrm{~V}$; VOM; $0-3-12$ 30-300-12K @ 20K ohms/V; AC: 0-3-12-60-300-12K a 5 K ohms/V. DC $\mu \mathrm{a}: 0.60$ @ $250 \mathrm{MV} ;$ DC MA: 0-1.2.12 120-1200 © 250 mv : DC amps, 0.12 (ค) 250 mv D8 - $20^{\circ}+63$; ohms $0.1500-15 K_{\text {; Megs: }}$ 0-1.5-150. Molded case with batteries and leads. Size: $3^{11 / 3 \times 51 / 2 \times 71 / 2^{\circ}}$ case with batter
Shpg. wt., 6 lbs.
$\operatorname{Shpg}_{\mathrm{E}-372}$ wt., 6 lbs

## MODEL 850 ELECTRONIC VOLT-OHMMETER

Large $7^{\text {". }}$ scale plus protection against burnout are featured. Single probe. 11 Meg. input impedance, OC Ohms to 1000 Meg., P.P voltage to 4000 V . Size: $75 / 8$ $6 \% \times 33 / 4^{10}$. Shpg. wi., 7 lbs
TE-407
Net 77.91
MODEL 800 VOM Mirrored scale. 20,000 ohms/volf DC 70 ranges. Size: $71 / 2 \times 61 / 4 \times 37 / \mathrm{s}^{\mathrm{m}}$.
TE-404WX Shpg. wt., 6 Jbs
Net 87.71

## BYK PROFESSIONAL TEST EQUIPMENT

 ACCURATE AND RELIABLE INSTRUMENTS FOR SERVICEMEN OR ENGINEERS
## DELUXE MODEL 1076 TELEVISION ANALYST

- A Complete TV Signal-Generating Source - Checks All Circuits with Ease-Cuts Servicing Time in Half
A miniature T.V. Transmitter for TV trouble. shooting. Injects RF, IF, video, or audio sig. nal Into TV set for rapid and easy isolation of defective stages. Supplied with slide transparencles which provide standard Test patterns for adjustment of Linearity, Sensi. tivity, AGC, Bandwidth, Resolution, Size, and Aspect Ratio; White-Dot and Crosshateh patterns for adjustment of color convergence, color demodulator. RF \& IF signals are video and audio-modulated. Separate horiz. and vert. drive pulses, 4.5 MC sound channel, 400 cycle tone generator. If range $25-45 \mathrm{MC}$. Injects horiz. and vert. syne pulses, grid and plate orive signals directly into output ransformers. Checks Fly-Backs, yokes for opens, leakage, and shorted turns. Automatic $8+$ Boost and HV indicators. Vert. Yoke test signal. Many other features. For 110.120 volts, 60 cycles AC. $17 \times 101 / 4 \times 10$. Shpg. wt. 341038 . TE-645wx


## NEW MODEL 1074 TELEVISION ANALYST



A new and versatile TV Signal/Color Generating Device which simplifies any servicing or installing job. Injects RF, IF, Video. Audio signal directly Into any stage of black and white or color TV sets. Also provides high-level test signal for direct picture tube modulating. Generates dot pattern, crosshatch, vertical lines, horizontal lines, burst signal, individual colors (one at a burst, signat, individual colors (one at a time, switch-selected). Produces Green,
Blue, B.Y, R.Y, Red. All colors are crystalcontrolled. Burst outpit and high-ievel Chroma output are adjustable. Provides $15,750 \mathrm{cps}$ demodulator signal. Checks for shorted turns, leakage, ppens, short circuits and continulty in fly-backs and yokes. High voltage indicator lights reveal hard-to-find troubles in the horizontal output transformer or high voltage network. For 117 volts, $50 / 60 \mathrm{cps} A C$. Size: $144 / 2 W \times 7 \mathrm{H} \times 11^{\prime \prime} \mathrm{D}$. Shpg. wt., 15 lbs. TE-690wx

Net 244.95
MODEL 850 coLon aNALYST. Produces dot pattern, cross-hatch, vertical lines, horizontal lines, burst pulse and individual colors for accurate color TV servicing. AC only. Slze: $9 \times 121 / 4 \times 81 / z^{\prime \prime}$. Shpg. Wt., 14 lbs
TE.695wx
Net 195.96
NEW MODEL 230 SUBSTITUTION MASTER
 Permits rapid, on the-spot substitution of complete range of carbon and wire-wound resistors, capacitors, electrolytics and rectifiers. Contains: CARBON RESIS-TORS- 12 resistors, 1 -watt from 10 ohms to 5600 ohms. 12 resistors, $1 / 2$-watt from 10 K ohms to 5.6 megohms. POWER RESISTORS- 20 wire-wound, 20 -watt from 2.5 ohms to 15,000 ohms. CAPACITORS- 10 at 600 volts from 100 mmifd to .5 mfd . RECTIFIERS-Universal Selenium; .5 amps, 800 PIV. Universal Silicon; .5 amps, 800 PIV. ELECTROLYTICS- 20 combinations, all at 450 volts DC. Complete with four test leads. Size: $81 / 2 \times 61 / 4 \times 31 / 2^{\prime \prime}$. TE-694 Shpg. wt., $31 / 2 \mathrm{lbs}$.


## VOMATIC 360 AUTOMATIC VOLT- OHM-MILLIAMMETER

First real vom advance in 20 years, the Model 360 speeds testing in a great variety of measurement applications. Features Burn-out proof meter and Individual direct reading, full-size scales. onty one scale is visibld at any one time, automatically. Once the range switch is set, it is impossibie to read the wrong seate. Mirrored scale and knife-edge pointer further facilltate precise readings. DC volts In 6 ranges at 20,000 ohms per volt. Sensitivity and AC volts in 6 ranges at 5,000 ohms per volt sensitivity. Polar. ty reversing switch. Accuracy $\pm 3 \%$ DC $\pm 5 \%$ AC (full scale). Also measures capacitance in 3 ranges, watts in 7 ranges and DBM in 5 ranges. Complete with capacitance in 3 ranges, watts in 7 ranges and DBM in 5 ra
batteries and test leads. Size: $64 / 483 / 3 \times 41 / 4^{*}$. Shpg. wt., 5 los.
TE.648
Net 58.75
TE-649 LG-8 leather carrying case for above
Net 11.71
OYNAMATIC 375 AUTOMATIC VACUUM.TUBE VOLTMETER


This professional automatic VTVM simplifles true reading of peak-to-peak voltage of complex wave forms. All scales are direct reading and only one scale is visable at any one time. It utilizes a single DC-AC ohms probe and anti-parallex mirror. Range; 0.1500 $D C$ volts, $A C$ volts (rms) and $A C$ volts (peak-to-peak). DC current: $0-500 \mathrm{ma}$. Ohms: $0-1000$ meg. $\pm 3 \%$ Accuracy Full scale AC and DC. Includes $11 / 2 \mathrm{~V}$ battery and sturdy metal case with combination swivel stand and handle. 117 volts AC $50 / 60 \mathrm{cps}$. Size: $103 / 4 \mathrm{~W} \times 1 / 4 / \mathrm{H} 4^{\prime \prime} \mathrm{D}$. Shpg. wt. 12 lbs.
TE. 65 IWX
Net 87.15

## MODEL 600 TUBE TESTER



- Tests the Nuvistors, the new 10 -pin tubes and 12 -pin Compactrons
- Tests voltage regulators, thyratrons auto radio hybrid tubes, European hi fi tubes, and most industrial types. A B \& K professional quality tube tester at a low cost in adolition to all standard $\pi$ rit and radio tube types, the model 600 tests Nuvistors, the new 10 -pin tubes and 12 -pin compactrons. The Model 600 also tests voltage regulators. thyrations, many industrial types and European \# Hi-Fi tubes. Checks for all shorts, grid emission, leakage and gas and tube qualititundero dynamic load condilions. Tests each section of multi-section tubes separately. Provides exciusive adiustable erid emission test. Sensitivity to over 100 megohms. Phospherbronze socket contacts. Complete tube listing in handy reference index. Extremely compact in handsome, sturdy leatherefte-covered carrying case. Size $84 / 2 x 11 \times 41 / 2^{\prime \prime}$. TE. 647 Shpe. wt., 7 lbs.

Net 73.35
MODEL 700 OYNAMIC MUTUAL CONDUCTANCE TUBE TESTER
 Multiple-Socket Speed with Gm Accuracy Plus
Obsolescence Protection The "To0" measures true dynamic mutual
conductance in seconds. Tests all new tyoe conductance in seate sns. Trests all new type tubess and provides for fouture new socketes.
thecks for all shorts.
Crid emission leakage and gas.. Large $41 / 2$, meter with easy-10. read "Replace-Gooc" scale for autick life tests. Lead Repiae-Goo seo scale for duick pe tesish complete listing on cover reference chart: Includes 7 , 9 , and 10 pin tube stral ghteneris and handsome teatherette-covered carrying case. $117 \mathrm{~N} 50 / 60 \mathrm{cps} \mathrm{AC}$. Size: $164 / \times \times 153 \times \times 5 \% / \mathrm{s}$. Shpg. w1., 21 los.

Net 166.55
MDOEL 960 TRANSISTOR RAOIO ANALYST


The Analyst gives you a complete signal
generating soufce for point-to-point signal injection to troubleshoot any transistor radio. Signal trace all circults stage-by-stage in minutes. Built-in metered power supply provides from 1 to 12 volts in $11 / 2$ volt steps. Unique single point probe needs only one contact to transistor under test. Includes built-in VTVM and ohmmeter. Also tests all transistors out of circuit. Meter has direct reading Beta scale, Automatically determines NPN or PNP transistors. For $110-120$ $V 50 / 60 \mathrm{cDs} A C$. Size: $121 / 2 \times 7 \mathrm{y} / \mathrm{x} 47 \mathrm{~m}$ Shpg. wt. 7 los.
TE.697 Wx.....No Money Down
Net 97.96

## NEW AND IMPROVED MODEL 445 CRT TESTER



The new deluxe 445 is completely self-contained and simple to use. Quickly checks and corrects black and white, color TV picture tube troubles In a few minutes without removing tube from set. Tests and rejuvenates all plicture tubes at correct fllament voltages from 1 to 12 volts, including new $110^{\circ}$ tubes. Checks and corrects each gun of color tube separately. Includes socket to test new 23E622-new $90^{\circ} 23^{\circ}$ cotor tube. Restores emission and brightness. Grid cut-off reading indicates the picture quality. Uses $D C$ on all tests-for more accurate check on control and capabilities. Has large $4 y / 2$-inch plastic meter. Easily portable in leatherette. covered carrying case. For 105-125 volts, $50 / 60$ cps AC. Size: $14 \times 8 \times 4{ }^{1 / 4 \%}$. Shpg. Wt., 12 los. TE-699


## MODEL 1070 DYNA-SWEEP

## CIRCUIT ANALYZER

Clrcuit analyzer for trouble shooting horizontal, vertical sync and high voltage sections of TV sets. Provides horiz. plate driving signal to drive TV output transformer circuit; checks for shorted turns, leakage, opens, shorts and continuity. Tests for yoke troubles. Provides unique high voltage indicator. Completely self-contained. Operates in $110-120 \mathrm{~V}, 50 / 60$ cycle $A C$. Size $91 / 2 x 7 \times 5$. Shpg. wt., 10 lbs. TE-576 ..........No Money Down..........Net 73.45

## World Famous Test Pquipment by

 JUNIOR VOLTOHMYST KIT RCA MODELWV-77EK
2995 43.95 WITED

This kit makes possible substantial savings in a high quality vacuum-tube voltmeter. Its 28 ranges include 7 DC voltages: $0.1 .5 .5,15,50,150,500,1500$, with $\pm 3 \%$ of full scale accuracy and input resistance of 11 megohms; $7 \mathrm{rms} A C$ voltages: $0.1 .5,5,15,50,150$, 500,1500 , with $\pm 5 \%$ of full sca!e accuracy; 7 peak. to-peak AC voltages: $0-4,14,40,140,400,1400,4000$ volts, with $5 \%$ accuracy; 7 overlapping ohms ranges from 0.2 ohms to 1000 megohms with center-scale values of $10,100,1000,10 \mathrm{~K}, 100 \mathrm{~K}, 1 \mathrm{meg}$. and 10 meg. ohms. Other important features include zerocenter for discriminator alignment; frequency response of 40 cDs to 5 mc . flat to wlthin $\pm 5 \%$ on the 1.5 to 15 volt rms and 4 to 40 volt $p$-to-p ranges; $1 \%$ deposited-carbon resistors; meter electronically prodected against burnout. Power requirement is 5 watts at $105-125$ v. $50-60 \mathrm{cps}$ AC and VSO35 battery. Supplied complete with DC and AC/ohms probes and cables and ground leads battery, and instruction book. TE-141 Shpg. wt., $51 / 2$ lbs. ...................... 29.95 WV-77E Same, completely wired and factory-calibrated. TE- 142


## RCA ACCESSORIES

WG-2990, DC/AC-OHMS Probe with shielded cable and coaxial connector for use with Volt-Ohmysts. Shipping wt. 11 lb
TE-1 26
Net 7.95
WG.3008. Direct/Lo-Cap Probe © Cable for use with oscilloscopes. Shipping wt., 1 lb.
TE. 127
Net 9.95
WG-301A. CRYSTAL DIODE PROBE to extend range of Volt-Ohmysts to 250 Mc . Slip.on type. Shipping wt., 8 oz.

Net 7.75
WG-302A. RF/IF/AF/SIGNAL TRACING PROBE for use with WO-91A probe. Shipping wt., 8 oz .
TE. 129
Net 8.50
WG.289. HIGH VOLTAGE PROBE extenós VTVM's \& VOM's range to 50,000 volts. Shipping wt., 1 lb .
TE.135 .............................. 11.95
WG-206. 1090 MEGOHM MULTIPLIER for WG-289. Ship ing wt., 2 oz
TE-136 Net 3.50
WG-270A CARRYING CASE for WV-38A (K) Shpg. Wt., 2 lbs.

Net 4.95


## WV-38A (K) VOLT-OHM-MILLIAMETER KIT

Here is a VOM by RCA that you can get either as a kit or as a factory wired instrument. A must for any kind of electronic servicing. DC voltage has 8 ranges: $0-0.25,1.0,2.5,10,50,250,1000,5000$ volts, with $\pm 3 \%$ of full scale accuracy. OC input resistance is 20,000 ohms per volt. AC voitage has 6 ranges: 2.5 , $10,50,250,1000,5000$ volts, with $\pm 5 \%$ full scale accuracy. Input resistance is 5000 ohms-per-volt. Frequency response, measured with reference at 1000 cos is flat within $1 / 2$ ob from 10 cos to 50 KC

## WO-33A (K) 3

The new, extremely portable and compact wo-33A 3 -inch Oscilloscope is available as a kit or as a factory-wired instrument. It will handle any black-and-white of color-TV servicing job. Lots of gain and bandwidth. Vertical amplifier has two positions On wide band position, sensitivity is 100 rms $\mathrm{mv} / \mathrm{in}$. and bandwidth within 3 do from 5.5 cPs to 5.5 Mc . On narrow band position, sensitivity is 3 rms $\mathrm{mv} / \mathrm{ln}$. and bandwith within 3 ob from 20 cps to 150 KC . Has external and $\pm$ internal sync. Syne to 150 KC . Has external and $\pm$ internal sync. Sync
range to 4.5 Mc . Sawtooth range from 15 cps to
for 2.5, 10, 50 -volt ranges. Resistance from 0-2,000 -200,000-20,000,000 ohms in three ranges. DC current has 6 ranges: $0-1-10-100-500$ milliamperes. and 0.10 amps , with full scale accuracy of $\pm 3 \%$. Complete with batteries, ground lead and instruction booklet. Size $54 / 4 \times 31 / 5 \times 67 / 9^{m}$
TE. 139 Shpg. wt., 4 lbs. ...........................Net 29.95
WV-38A Completely wired and factory tested. TE-140

Net 43.95

## SCOPE KIT

75 Kc . Line sweep can be adjusted $160^{\circ}$ phase vertical circult input impedance at lo-cap cable input is 10 merohms and 10 microfarads approximately. Complete with direct/lo-cap probe and cable, and instruction booklet. Assembly instruction sheet provided with the kit. Power requirement is 50 watt at $105-125$ volts. $50 / 60 \mathrm{cDs}$. Size $61 / 2 x$ $101 / 4 \times 83 / 4$
TE-137WX Shpg. wt.. 15 los. ............... 79.95
wo-33A Completely wired and factory tested. TE-138wX

## WA-44C SINE SQUARE WAVE AUDIO GENERATOR

An Audio Generator, engineered for hi-fi servicemen. With the WA-44C, you can quickly locate de fects in public address systems, hiffi systems, and in the audio stages of radio and TV receivers. Features an extra-wide frequency range of 20-200,000 tures an extra-wide frequency range of $20-200,000$
CPS. Simple one-scale dial for easy operation. CPS. Simple one-scale dial for easy operation.
Squarewaves are clean with less than $5 \%$ tilt. Squarewaves are clean with less than $5 \%$ tilt.
Separate 60 cos. output for intermodulation oistortion measurements. Output voltage (at 100 K ohm
and $75 \mu \mu$ f. Ioad). Sine Wave, up to 8 volts RMS; Souare wave, 10 volts P-P. Amplitude variation of output voltage at 30 cps to $100 \mathrm{Kcs}: \pm 1.5 \mathrm{db}$ Frequency stabllity: $\pm \mathbf{2 \%}$. Dial calibration accuracy: $\pm 5 \%$. Maximum total harmonic distortion: $0.25 \%$ from 30 cps to 15 Kcs. Maximum hum less than $0.1 \%$. Case: $101 / 2 \times 61 / 2 \times 77^{\prime}$. Shps. wt., $101 / 2$ lbs TE-143WX

Net 98.50


WR-50A RF SIGNAL GENERATOR
Designed for aligning and trouble shooting AM, FM, and Citizens Band receivers. Provides accurate CW on amplitude-modulated signals in the fundamental range of 85 KC to 40 MC . Dial calibration accuracy within $1 \%$. Shielded outputs. For $110-125 \mathrm{~V}, 50 / 60$ eycles AC. Size: $7 \times 10 \times 5^{\prime \prime}$. Shpg. Wt., 10 los. Factory wired. TE.766

## WV.76A AC VTVM

Ideal for Hi-fi and other audio work. Measures AC voltages from 10 millivalts to 100 volts in 9 overlapping ranges. DB ranges: -40 do to +40 db . Amplifier response 20 cps to $500 \mathrm{KC} \pm 1 / 2 \mathrm{db}$. Includes shielded direct/low capacitance probe and cable. For $105-125 \mathrm{~V}$ 50/60 cycles AC. Size: $77 / 4 \mathrm{~K}$ 5\% 1 x $43 / 4$
TE.767wx Shpg. wt., 5 lbs. ..............Net 79.95
COLOR AND BLACK AND WHITE
TV SERVICE EQUIPMENT (Not Illustrated) Model wD-25: TV ISOTAP - Adjustable Isolation Transformer.
TE-768 Shpg. wt., 15 lbs. Net 22.00
MODEI WR-G4A COLOR BAR/DOT/CROSS HATCH GEN.
ERATOR-A must for servicing color TV.
TE-146wX Shps. wt., 16 lbs.
Net 189.50
Model WG-295C VIOEO MULTIMARKER-provides 7
simultaneous absorption type-markers at preset fre.
guencies.
TE. 769 Shpg. wt., 1 lo.
Net $\mathbf{3 2 . 5 0}$

# ACCURATE MODEL 157 MODERN, STREAMLINED TUBE TESTER 

SELECTED TEST EQUIPMENT VALUES

## from Leading Manufacturers

## NEW INSTRUMENTS FOR THE SERVICING OF STEREO MULTIPLEX TUNERS, RECEIVERS AND ADAPTERS



Tests All Modern Tubes Including The New
Novars 10 Pins Nuvistors Magnovals Compactrons
no money down
Net a Kh-Completely whed \& Calibrated Makes all necessary tests on over 1000 tube types. Checks for shorts and leakages between all elements tests for flament continulty; indicates the quality (emission) of all tubes. Checks all 7 -pin Miniatures ${ }_{i}$ Octals; Lock-ins; 9-pin Noval Miniatures; new T-9 types, Novars; Nuvistors; Compactrons; 10 Dins; Magnovals New single rotary-type selector switch instead of slide switches assures fast operation. Has front-panel 7 and 9 pin tube straighteners. Employs a rugged. accurate, highly damped meter movement with sealed air-damping chamber. Supplied with attractive portable carrying case. For $110-120$ volts, 60 cps AC . Slze: $9 \times 101 / 2 \times 31 / 2^{*}$. Shpg. wt., 6 lbs .
TE. 731
Net 27.82

## EMC MODEL 212

 TRANSISTOR ANALYZER KIT

Battery powered, checks all tran sistors for beta in 3 ranges to 200; leakage on 3 -color scale. Tests al transistors in circuit without re. moving them. Can be used to signal trace AF, If or RF circults. Also measures batterles voltage on $0-12$ molt peak and DC current drain on $0-80$ milliampere scale. Checks condition of diodes. Supplied with test leads and instructions. Size: $33 / 4 \mathrm{Wx}$ $61 / 4 \times 2^{\prime \prime} 0$. Shpg. wt., 2 ibs.
E-631 Model 212 kit TE-832 As above, but factory wired

Net 13.23

## NEW EMC TEST EQUIPMENT



EMC MODEL 801 RESISTANCECAPACITANCE, COMPARATOR \& CAPACITY CHECKER KIT
Measures condensers for actual value, leakage, and power factor. Detects in-circult opens above 50 mmfd , shorts, up to 20 mfd , and condensers that are intermittent in operation. Checks capacity values in 4 ranges from 10 mmfd to 5000 mmfd ; resistance in 4 ranges from .5 ohms to 500 megs. Also checks capacitor, inductance or resistance ratio, or transformer windings with a ratio of $20: 1$ or less. Tests power factor and leakage at rated voltages between $0-500$ VOC. Size: $10 \times 7 \times 5^{\circ} 0$ Shpg. wt. 7 lbs .
TE. 745 Model 801 Kit
Net 24.45

## TE. 748 Model 801 Wired

Net 38.17

## MODEL 213 TUBE TESTER KIT

Checks all new Compactrons, Nuvistors, Novars and 10. prong tubes In addition to Octals, Loctals, Miniatures and 9 -prong lubes. Tests for shorts, leakages, intermittents and quality, Quallty is indicated directiy on 3 -color metal dial. Each section of multi-purpose tubes is checked separately. Also tests Magic Eye, Voltage Regulator and Hi-Fi tubes. Supplied complete with high-impact bakelite case and strap, instructions and tube charts in ring bound manual. Size: $81 / 2 \times 71 / 2 \times 4^{4 \prime \prime}$ Shpg. wt., 51/2 lbs.
TE. 749 Model 213 KIt
TE-750 As above, but factory wired
Net 18.52
Net 28.42


NEW FISHER MODEL 300 MULTIPLEX SIGNAL GENERATOR

- Built-In FM Signal Generator
- Completely Self-Contained and Portable

Compact, portable FM Multiplex Generator with bulit In FM Signal Generator, for servicing FM Multiplex equipment In home or shop. Only oscilloscope needed for complete stereo testing and alignment. Features bulit-in swlíchable pre-emphasis network and frontpanel peak-to-peak output meter. CONTROLS: 7.Position Selector Switch; composite Output Level; Left Input Level; Right Input Level; 19 KC Amplitude Callbration; 19 KC Phase Calibration; Pre-emphasis On-Off; Power On-Off; FM Generator Carrier Frea. Adj. (in rear). OUTPUTS: 100 MC FM.MPX signal (tunable from 97 to 103 MC); MPX Composite signal; 19 KC Pilot-carrier signad; 1 KC 4 KC Audio Osclilator output (In rear). INPUTS: External Modulation (left, right); SCA (in rear). Non-switched Auxiliary AC Outlets (in rear). For 105.125

wt., 19 Jbs. 16 Jbs.
Net 495.00 TE.770wx


## NEW RCA MODEL WR-51A <br> STEREO FM SIGNAL SIMULATOR

- Generates Complete Range of FM Test Signals - Compact, Lightweight and Portable

Generates all the signals necessary for complete servicing and maintenance of Stereo Multiplex FM receivers and adapter. CONTROLS: 8-Position Frequency Selector: 5-Position Function Selector: Center RF Freq. Adj.i RF Deviation/Sweep Width-Audio Level/ Comp. Sig. Level; 19 KC Subcarrier Level/Power On-Off. OUTPUTS: Composite Stereo slgnal (left or right) and "Phase Test" signal (a \& R in phase); Variable Level 19 KC Crystat.Controlied Subcarrier signal; 28, 38, 48 and 67 KC Sine-Wave signals; 100 MC Carrier signal, adjustable $\pm 0.8 \mathrm{MC}$ (may be swept over adjustable range from 0 to 700 KC @ 60 cDs for over-all RF/If alignment checks); Crystal-Controlled 5.35 MC signal (provides 10.7 MC IF marker and 90.95, 96.30. 101.65, 107 MC harmonic markers for receiver RF alignment) Supplied complete with connerting cables. For $105-125$ voits, $50 / 60 \mathrm{cps} \mathrm{AC}$. Size: $131 / 2 \times 10 \mathrm{H} \times 8^{\prime \prime} \mathrm{D}$. Shpg. wt.,

Net 249.50

## SENCORE TEST EQUIPMENT <br>  <br> NEW CG126 STANDARD COLOR BAR GENERATOR <br> sM. 112 <br> 

Small, portable standard color bar, white dot, crosshatch generator made especlally for field service on color TV. Outstanding Features: Crystal-Controlled Pat. terns; Simplifled Operation (ust dial pattern desired); Adjustable White Dot Size; Pre.Tuned Channel 4 RF Output (simple slug adjustment for other low channels); Injects Patterns Directly into Antenna Terminals; Reserved Output on Color Bars. For 105-125 volts, 50/60 cDs AC. Size; 11 Wr $8 H \times 6^{\circ}{ }^{\circ}$. Shpg. wt., 10 lbs. TE-748WX

$$
\text { Net } 97.51
$$

SM112 COMBINATION VTVM-VOM
SIx AC and DC ranges from 0 to 1000 volts on both VTVM and VOM. VTVM has 6 peak-to-peak ranges and 6 resistance ranges, from 6 to 1000 meg ohms; constitutes 10 -megohm load. VOM has 2 resistance ranges stitutes 10 -megohm load. VOM has 2 resistance ranges
from 0 to 1 megohm, plus a current scale from 0 to from 0 to 1000 ma OC; constitutes 15,000 -ohm load on low range, $5-m e g o h m$ load on high range. Size: $71 / 2 \times 8 \times 31 / 2^{\prime \prime}$ Shpg. Wt., 8 lbs .
TE.655
Net 78.35

## PS-120 PROFESSIONAL

## WIDE-BAND $3^{\prime \prime}$ OSCILLOSCOPE

For all alignment work and a must for color TV servicing -3.58 MC Color Burst signals can be seen individualiy Vertical Amplifier Frequency Response: Flat within $1 / 2 \mathrm{db}$ from 20 cps to 5.5 MC . Horizontal Amplifier Frequency Responsez Flat within - -3 db from 45 to 330 KC. Sweep Circult Characteristics: 4 ranges, 15 cps to 150 KC . Sync Range: 15 cps to 8 MC . 1000 volts peak-to-peak maximum AC input voltage. For $105-125$ volts, $50 / 60 \mathrm{cps}$ AC. Size: $7 W^{2} 9 H x 11 y / 4{ }^{\prime D}$. 105-125 volts,
Shpg. wt. 12 lbs.
Shpg. Wt
TE. 659 WXX
Net 121.91

RC 121


RC121 COMPONENT SUBSTITUTOR
Provides a complete range of carbon resistors, power resistors, capacitors, electrolytics and rectlfiers for on the spot substltution. Each component can be used independently of the other. Over 25 combinations of capacitor values can be substituted by using the electrolytics as duals. singles or paralleling them to double capacity. Exclusive Surge Protector prevents any arc, spark, or heating of capacitors being bridged. Automatically discharges both electrolytics when released. Complete with four test leads. $10 \times 5 \times 4^{\prime \prime}$ "hen released Complete with four test leads. $10 \times 5 \times 4^{\prime \prime}$
TE-658 .................... Shpg. Wt., 5 lbs.......

Net 39.15

## TC114 "MIGHTY MITE II" TUBE TESTER

## Tests all the latest tubes, including Compactrons,

 Sylvania Ten Pins. RCA Novars and 5 pin Nuvistors, olus picture tubes. Checks shorts, leakage and emission for nearly all tubes on the market today. Dimensions: $101 / 4 \times 94 / 2 \times 342^{\prime \prime}$. Shpg. Wt., 9 lbs .TE. 568

# Precision $\mathbf{P}] \mathbf{A} \mid \mathbf{C}$ - Versatile \& Reliable Test Equipment 

## KIT SERIES -Kit \& Factory Wired


V. 70


M-40


C-25


## MODEL C- 25 IN CIRCUIT CAPACITOR TESTER KIT

A rime saving trouble-shooting instrument for the service bench. Quickly detects open or shorted by-pass, coupling, and blocking capacitors without removing them from the circuit. The PACO Capacity Dial makes possible a direct in-circuit test of eiectrolytic capacitors by reading the capacitance right from the instru ment dial. Tests electrolytics from 2 to 400 mfd in two ranges. Rugged ripple-finish steel cablnet with attractive two-color panel. Dimensions $71 / 2^{\prime \prime} \times 53 / /^{\prime \prime} \times 41 / 4^{\prime \prime}$ Shpg. wt., 6 lbs.
TE-453 Kit
Model C-25w, as above, but factory wired.
$\mathbf{T E}$-454
Net 19.75

## MODEL S-55

## WIOE BANO OSCILLOSCOPE KIT

A deluxe, laboratory-type instrument covering the entire range between DC and 5MC. Ideal for color TV Vertical channel. Sensitivity $70 \mathrm{mv} / \mathrm{in}$ for $D C$ and 25 mv RMS/in for AC. Frequency response within 3 db to 4.5 Mc for DC and AC. Horizontal channel: Sensitivity 0.6 V RMS/in. Frequency response within 3 db to 400 Kc. Cathode follower horizontal input circuit. Linear time base, automatic positive and negative sync, bullt in peak-to-peak voltage calibrator. In louvred steel cabinet with two-color easy reading panel. For 117 V . $50 / 60$ cps. Size 133 a $883 / 4 \times 17 / 4^{\prime \prime}$ Snpg. wt., 30 los. TE-478W
Model S-55W, as above, but factory wired TE-479WX

Net 97.95

AS. 1 Scope Probe Set includes $10 / 1$ LO.Cap 152.75 demodulator, shielded direct probes. Shpg wt 2 lbs TE.477

## MODEL Z. 80 RF-AF SIGNAL TRACER KIT

 A sienal tracer kit of exceptional value. Designed for use with $A M$, FM, TV and audio circuitry, its extra-high galn enables direct tracing of the actual signal at the receiver antenna input terminals. Has both visual and aural indicators plus out-put terminals for use with VTVM or scope. Other features include: noise test circuit; waltmeter circuit; test amplifier; substitute speaker and output transformer; fine and coarse attenuators; also 2-way AF-RF shielded probe with bullt-in selector switch. Complete with detailed instruction manual for easy assembly. In attractive steel cabinet. Size: $111 / 2^{\prime \prime} \times 7$ " $\times 5^{\prime \prime}$. For $117 \mathrm{v}, 50 / 60 \mathrm{cps}$. TE-473 Shpg, wt., 10 lbs. .............. Net 32.29 Model Z.80W, as above, but factory wired. TE-474 … ..... Shpg. wt. 12 lbs............... Net 58.75MODEL G-30 RF SIGNAL GENERATOR KIT A deluxe unit in every respect but price. Conservative engineering and the use of high quality components throughout assure stable and accurate performance. Ideal for all TV, FM, AM, audlo testing and servicing work. Frequency range: 160 kc to 240 mc in 8 bands; to 120 mc on fundamentals. Outputs-Over $100,000 \mu \mathrm{v}$ RF: Up to $15 \mathrm{v}, 400 \mathrm{cps}$ audio; Modulated RF. Front panel control for variable modulation. 2 -step attenuator. Supplied with complete instruction manual for easy assembly. In attractive steel cabinet. Size $7 \times 111 / 2 \times 5^{\prime \prime}$ For 117v, 50/60 cps. Shps. wt., 9 lbs.
TE-470
Net 32.29
Model G-30.PC. Same as above, but with the entire "front end" tuned circult pre-calibrated and pre-wired. TE 472

Net 39.15
Model G.30W. As above, but factory wired.
TE-471

## DELUXE WIRED SERIES



## MOOEL E200.C OELUXE

## SIGNAL MARKER GENERATOR

A deluxe professional instrument for reliable TV, FM. AM alignment use. Covers frequency range of 88 kc to 240 mc in 9 bands. $61 / 2^{\prime \prime}$ direct-reading tuning dial with 0.100 vernier drive assures accurate and easy operatlon. Accuracy $1 \%$ on all bands and exceptional fre cuency stability. $0-100 \%$ variable internal modulation. Dutputs: unmodulated RF; 400-cycle modulated RF; and 400 -cycle sine wave. With built-in AVC-AGC substitution voltage (variable $0-50^{\circ} \vee O C$ ). In deluxe steel cabinet tion voltage (variable $0-50$ voc
supplied with coax output cable and illustrated manual "Servicing by Signal Substitution," $111 / 2 \times 13 \times 65 /{ }^{2}$ ". For $110-120$ V $50-60 \mathrm{CDs}$. Shpg. wt., 17 los .

## TE-520WX

## MODEL 120 MULTI-RANGE TESTER

Lab type, compact VOM provides a large $54 \mathrm{~s}^{\prime \prime}$ meter of $50 \mu$ a sensltivity and $\pm 2 \%$ accuracy. Ranges: $A C / D C$ output volts 0-1.2-3-12-60-300-600-1200-6000; sensitivity - $20 \mathrm{k} 0 \mathrm{hm} / \mathrm{v}$ on $D C, 5 \mathrm{khm} / \mathrm{v}$ on $A C$; OC current. $0.60-300 \mu \mathrm{a}, 0-1.2 \cdot 12-120-600 \mathrm{ma}, 0-12$ amps; ohms, $0-200-2 \mathrm{~K}-200 \mathrm{~K}$ ohms, $0-2-20$ megs; $\mathrm{DB},-20$ to +77 in 8 ranges. $1 \%$ multipliers. In custom-molded phenolic 8 ranges. $1 \%$ multipliers.

TE.525
Net 46.99

## MODEL E-450 COLOR BAR

 AND WHITE OOT GENERATORA must for efficient color TV servicing. The E. 450 combines the facllities to test and adjust the color phasing, matrixing, linearliy and convergence circuits in all color receivers. Produces color bars, white dots, vertical bars, horizontal bars, cross hatch. Just one simple connection direct to antenna input terminals of receiver under test. RF output and sound carrier avallable on ether channel 3 or 4 . No external sync signals required. Master voltage-regulated oscillator crystal controlled. Output impedance, 300 ohms. Color bars R.Y, G-Y, B.Y, I and O signals. For $117 \mathrm{~V} 50 / 60$ cycles A.C. Size: $13 \times 12 \times 8^{\prime \prime}$ Shpg. wt., 14 lbs.

oesigned where ufmost accuracy is required. Uses $1 / 2 \%$ multipliers. $1 \%$ mirror-scale meter. Has polarity reversal switch. All other physical and electrical specs are same as Model 120.
TE.526
Net 55.81
Accessories for 120 and 120 M
LC. 3 Leather case, ever ready type. Shpg. wt., 3 los.
TE-527 Net 10.29
TV-28 HV safety probe up to 30 KVDC. Shpg. wt., 2 lbs. TE-529

Net 15.63

## MOOEL 10-60 ELECTRONAMIC TUBE ANO TRANSISTOR TESTER

An advanced industrial-type instrument that tests tubes over complete path of operation. Tests all modern tubes including sub-miniatures; filament voltages from 0.75 to 117 volts low voltage short-check circuit guards against damage to tubes; 5-window geared roll chart. Checks TV picture tubes. Transistor and crystal diode testing in accordance with leading semi-conductor manufacturers- 0.5 VOC 10160 VOC in 22 steps; wide. spread Icbo ranges. $20 \times 15 \times 7^{\prime \prime}$. 110.120 VAC, 50.60 cycle.
TE.521wx
Shpg. wt., 25 lbs.
Net 234.15

## MOOEL E-310 WIOE-RANGE

SINE ANO SQUARE WAVE GENERATOR outstanding stablity and reliability. Offers both sine and square wave coverage from 5 cps to 600 KC in 5 decimal bands; $\pm 2 \%$ reading accuracy (or 1 cycle). Other features include: Output characteristics within $\pm 1$ do band-to-band; less than $1 \%$ distortion from 5 CPS to 600 KC ; Sine wave level, ior RMS Into 600 ohms: Square wave level, 10 V P.P. 0.2 microsecond rise time; 4 position step attenuator and continuous amplitude control. Front panel metering terminals for external VTVM, VOM or VU meter. $6^{\prime \prime}$ dia. tuning dial with 12:1 drive ratio. Meavy gauge steel case. For 117V $50 / 60$ cycles AC. Size: $111 / 2 \times 9 \times 111 / 4^{\prime \prime}$
TE. 724 WX Shpg. wt. 24 lbs .
.Net 195.95

## EICO MODEL 1020K TRANSISTORIZED POWER \& BIAS SUPPLY KIT

Highly versatile, stable and rellable. Inclues a powee transtormer, full:wave silicon diode rectitier R-C filtering plus 2 power transistors in a cascaded filter circuit. Maximum ripple ( 120 cps ) at full load is only $0.005 \%$. Continuously variable output voltage to 30 volts monitored by a dual range voltmeter ( $0.6,0.30 \mathrm{~V}$ DC). The maximum permissible load current varies from 150 ma . in the 0.12 V range to 200 ma 12.24 V range and 300 ma in the 2430 V range. $1 / 2$ amp. fuse in case of short circult to protect unit. Housed in rugged steel case, $4 \mathrm{~W} \times 5 \mathrm{H} \times$ $51 / 2^{\prime \prime} \mathrm{D}$. For $105 \cdot 120 \mathrm{~V} 50 / 60$ cycles AC. Shpg. wt. 5 lbs.
TE-224 Model 1020 KIt
TE. 225 Model 1020 wired
Net 23.95
Net 29.95

## EICO MODEL 1073K METERED VARIABLE AC BENCH SUPPLY KIT



A deluxe bench supply which is invaluable for production line testing, quality control, and service work. Adjustable linear output voltage, 0.140 VAC from 120 VAC power line input. 2 current ranges: $0.1,0.3$ amperes. Range may be switched under load. For 120 VAC 60 cps . Size: $81 / 2 \mathrm{Hx} 53 / 4 \mathrm{~W} \times 7^{\prime \prime} \mathrm{D}$. TE-264 Kit............................... 95.95 Model 1073. As above, but factory wired and tested. TE-265 EICO Model 1078 similar to Model 1073 with these 47.95 characteristics. Operates on $50 / 60 \mathrm{cps}$. Current range: $0-2 \frac{1}{2}$, $0-71 / 2$ amps.
TE-266 KIt
Model 1078, as above, but factory wired \& tested TE-267

## ELECTRO MODEL EC-3 TRANSISTOR

 PORTABLE RADIO RECEIVER POWER SUPPLYAn outstanding selentum rectifier type power supply for servicing all transistor portable radios. Outstanding features include: a rated output voltage of $0-20$ volts, filtered and adjustable with a continuous output current of 150 milli. amperes; can deliver voltages up to 24 volts at 100 ma . A 0.6 V fully adjustable bias tap permits operation and servicing of any transistor radio Including center-tap (nontransformer) types. Handy edge-wise meter reads either out put voltage or output current. Includes color-coded output leads for fool-proof operation; attractive enameled steel cabinet with rubber mounting feet and carrying handle. IE. 752 Shpg. wt., 3 lbs.


## Lafayette lab STANDARD VARIABLE VOLTAGE SUPPLY

- 0 to 140 V.A.C. at 500 Watt - Linear Output Voltage Up ti $123 \%$ of Line Voltage
- Illuminated 0.150 Voltmeter Accurate to $\pm 1 \%$ of Ful Scale
Regulation $\pm 0.6 \%$ at 7 Watts, $3.0 \%$ at 500 Watts

An exceptionally accurate, highly efficient, smooth variable voltage control. Con
tinuously adjustable voltage from 0 to 140 Volts from A.C. power line. Ruggedl) ncased for front-panel behind-panel wall or bench mounting Illuminated mete reads $0-150 \mathrm{~V}$ with an accuracy of $1 \%$ of full-scale. Output under maximum loas is linear uo to $123 \%$ of line voltage. Regulation $\pm 0.6 \%$ at 75 watts, $3.0 \%$ a ind
maximum. Ideally suited to laboratory, inspection, classroom, servicing, moto control, soldering, light dummy, any application where a source of variable voltage
 load, 142 V RMS. Operates from 117 V., $50-60$ cycle line. Fused at 5 amps. Duplex ? prong output receptacles. 6 ft ., 2 wire iline cord. Shpg. wit., 13 lbs . Imported TR-114

## ELECTRO MODEL EC-1 DC POWER SUPPLY



A versatite, compact bench-type power supply only $43 / 4$ Inches wide. Features: 12V DC output (adjustable) ripple, only $0.5 \%$ RMS at 5A, regulation 1.4 volts-amp (no load to full load); Impedance; 1.4 ohms. Pane
components include 3 -position voltage adjust plus components include 3 -position voltage adjust plus
"off" switch, pilot light, wing nut output terminals. "off" switch, pilot light, wing nut output terminals. for 117 V , $50 / 60 \mathrm{cps}$. Size: $43 / \mathrm{W} \times 10^{3} / 4 \mathrm{H} \times 6^{2 / 2} \mathrm{D}$. Shpr. wt., 11 lbs.

ELECTRO MODEL EC-2 POWER SUPPL Same as EC-1 except with 0-20V/0.10A edge-type meter and function switch. Specs: OC output $0-16$ OC (adjustable). Impedance 1.8 ohms and 1.8 volts amp (no-load to full load). On-off switch. Insulated binding posts. Size: $43 / 4 \mathrm{~W} \times 103 / 4 \mathrm{H} \times 61 / 2^{\circ \circ} \mathrm{D}$. For 117
$50 / 60 \mathrm{cps}$. Shpg. wt. 10 lbs . $50 / 60 \mathrm{cps}$. Shpg. Wt. 10 lbs .
TE-673

Net 39.9 ?

## DON BOSCO TEST EQUIPMENT

## "MOSQUITO" SIGNAL INJECTOR

## -

Amazing AF and RF transistorized signal injector has the size of an ordinary fountain pen. Ideal for fleld, bench and laboratory troubleshooting. Excellent for servicing radios, TV, hearing aids, amplifiers, telephones, ear phones, tape recorders, cartridges, speakers, etc. Periect for continulty checks of resistors, capacitors, etc. Provides a 2000 cps test lone and generates radio frequencies on harmonics. Has one penlight battery with average llfe of about 1 year. Just $6^{\circ}$ long. Shpg. wt.. $30 \mathrm{oz}_{2}$ TE-498

## NEW! DON BOSCO STETHOTRACER



A pen size, transistorized, self-contained signal tracer. Lightweight-weighs only $12 / 2$ ounces including 1.5 volt battery. Frequency range 60 cps to 200 mc ; gain 60 db ; input impedance 3.5 K at 0 attenuation; Harmonic distor. tion, $5 \%$ max.; $A C, 1 \mu v ;$ DC volts 250 V max. Output voltage 0.3 V p-p across 600 ohm load. With earphone cord, plug, 3 interchangeable attenuator probes, R defector-demodulator crystal diode probe, ground lead and battery. Size: $5 \frac{5}{6} \mathrm{Lx} \mathrm{K}^{1 / 2}$ dia. Shpg. wi., 3 oz .
 VIBROTRACER. Detects minute mechanical vibrations with stethotracer. Frequency range: 200 cps to ultrasonic. Shpg. wt. 302
TE-663
NO MONEY DOWN
Net 59.95


A must in eiectronic work when dealing with known or unknown resistances. Provides a permanent source of resistors in exactly the right value. Consists of 6 resistance decades identically operated in 1 ohm increments to provide readings from 1-999,999 ohms Determines known or unknown resistances. Tolerance $2 \%$ for all decades but No. 1 - $5 \%$. Max. power dissipation: 1000 V DC or 660 V AC per decade. Max. current rating from 0.005 amp to 5.0 amps . Uses Clarostat GREEHOHM wire-wound ceramic resistors supplied with 2 -sets of terminals for banana-plug, spade-lug or plain wire connections. Specially designed cabinet provides adequate ventilation. Size: $13 L \times 81 / 20 \times 53 /{ }^{\prime \prime} \mathrm{H}$. Shpg. wt., 14 lbs
TE.678WX
No Money Down
Net 110.00
CHEK-IT ELECTRICAL CIRCUIT TESTER

## Model 825



Checks Appliances, Fuses
Switches, with Power Of
Here is a handy pocket size tester which is Ideal for servicemen, schools, electricians and hobbylsts. Completely portable and simple to use, it checks efectrical continulty of line cords, switches, coils etc. A glow light indicates "opens". Its a cinch to check out buzzers, chimes and various electrical appliances with Cheh-It. Uses 2 Inexpensive Penlight cells Shpg. wt. 302
TE- 754 Chek-lt.Less oatteries.
TE-754 Chek-lt-Less oatteries,
Battery for "Chek-It" 2 required
Battery
BA. 155
Net 1.49
Net ea. . 13

## BENDIX RADIATION MEASUREMENT SET

Certified by Bendix to Meet or Exceed Office of Civil Defense Mobilization Specifications


- Simple To Use
- Pocket size

Rugged-
Reliable- Portable
1995
1795
Each
ots of 3 Write For Special Pric
On Larger Quantitles Bendix CO V-736 Ratemeter ( $0-120 \mathrm{r} / \mathrm{hr}$ )-Indicates precisely how much radiation is present at a given moment cisely how much radiation is present at a given moment
Bendix CD $V-746$ Dosimeter ( $0-600 \mathrm{r} / \mathrm{hr}$ ) Records total radiation exposure
BENDIX VO V. 756 Charger-Charges and retests the Ratemeter and Dosimeter to zero
The Bendix Radiation Measurement Set is extremety simple to use. To read the calibrated scales just hold them up to a light source. The Charger is used to reset the hairline indicators to zero before new readings are taken. The Ratemeter measures the amount of radiation at a given moment. There are two scales: one calibrated from $0-120 \mathrm{r} / \mathrm{hr}$ for reading one minute after exposure; the second calibrated from $0.12 \mathrm{r} / \mathrm{hr}$ for reading 10 minutes after esposure should the first reading be below $10 \mathrm{r} / \mathrm{hr}$. The Ratemeter may also be used in industry for determioing protection in any isotope program. The Dosimeter records total radiation exposure and is calibrated from 0.600 roentgens.
TE-666 Complete Set. Shpg. wt., 5. Ibs. ...... Net . 19.95
Lots of 3, ea. 17.95

# SELECTED TEST EQUIPMENT VALUES 

## GENERATOR AND SIGNAL TRACER

- Signal Generator: 250 KC to 120 MC
- Signal Tracer: Front Panel Output
for VTVM, Scope or Probes
- Separate R.F. Audio Signal Probes
- Uses Rugged Industrial Type Tubes


A remarkable value-two service units which can be used separately or in conjunction with each other. Signal generator functions as a full service unit with stable electron coupled R.F. oscillator and has an attenuator for both RF and Audio circuits. All popular frequencies are marked in color. The signal Tracer uses a high gain cascode preamplifier with front panel
outputs for use with VTVM, scope or phones, Low disoutputs for use with VTVM, scope or phones, Low dis. tortion trlode output stage with attenuator. Powerful $41 / 2$ PM speaker. Separate probes for R.F. and Audio TE-504


## PARALAN IN-CIRCUIT TRANSISTOR TESTER

This amazing instroment can check all types of transistors (including power types), while they are still soldered in their respective circuits! Checks for shorts, open circuits, leakage, oscillation and comparative galn. will lest diodes and rectiflers of all types, and indicate whether a transistor is a PNP or NPN type. The in-circult transistor checker comes complete wlih insulated test leads marked "emitter", penlight cells (included). Ready to operate-test leads are connected to their respective transistor elements, and condition of the transistor is shown by neon indicators on front panel. Unit is extremely compactonly $61 / 4 \times 33 / 4 \times 23 / 4$
TE-502 Shpg. wt., iv/ ibs.
Replacement batteries for above (2 required)

## BA-155

Net 15.95


## $29^{95}$

 NO DOWEYTube Checker Checks approximately 2000 Tubes

- Handy VDM For Circuit Testing
Satisfy your every need. Checks approximately 2000 tubes for emission, shorts and leakage Front panel function switich converts it to a handy volt ohm meter for circuit lesting Three voltage ranges for fast circuit testing, either AC or DC - 0 to 1200 volts. self-contalied. Easy to follow set-up booklet included. clips on back of unit. Measures $71 / 2 \times 9 \times 3$ ". Shpg. wt., clips

Net 29.95

## KINGSTON PROBEMASTER



A unique test instrument combining the features of a highly versatile probe with a neon checker. Its builtin capacitive network permits bypassing stages, check. ing open capacitors, isolating defective stages without external signal generator, and elimination of
suming capacitor substitution. Shpg. wt., 1 ib. fE-497

Net 4.95

## 20,000 OHMS-PER-VOLT V.O.M. GIANT 61/2" METER



NO MONEY DOWN


A V.O.M. with laboratory quality features such as a mirrored scale and use of selected resistors to assure accurate reading on all ranges. SPECS: 6 D.C. Voltage ranges $0-3000$ volts @ 20,000 ohms per-volt; 6 A.C. voltage ranges, $0-3000 \mathrm{v}$ @ 5,000 ohms-per-volt; 5 resistance ranges, $0-200,000$ ohms, 0 to $2 / 20$ megohms; 5 D.C. current ranges $0-7.5$ amperes; 3 D8 ranges: -6 db to +52 db . Complete. Fully wired and tested with operating instructions and test leads. Size: $41 / 2 \times 61 / 2 \times 734^{*}$. Shpg. wt., 4 lbs.
TE-503
Net 29.35

## I. H. 8" TELE-CHECK <br> - Check TV Yokes \& CRTS



Model CR-118 is a portable CRT substitution unit ideally suited for home or service shop use. Quickly locates and Identifies CRT and Yoke troubles. Completely selffocusing: no ion rap needed. Complete with $8 \times P 4,90^{\circ}$ yoke, 6-foot CRT socket extension leads and anode-yoke connecting leads. For electrostatic or electromagnetic Con recelvers. Size $9 \times 91 / 2 \times 12^{1 / 2^{\prime \prime} .}$ Shpg. wt., $111 / 2$ lbs.
TE. 501 TE-501 No Money Down................... 44.95 versal yoke. Shpg. wt., 12 lbs.
versal yoke. Shpg. Wt., 12 lbs.
TE. 725
Net 54.50
Model CR-168S same as CR-168 plus unlversal test speaker. Shpg. wt., 13 los.
TE.726 ..............No Money Down
Net 64.50

## EBY POCKET TESTER



Measures only $3 \times 4 \times 11 / 4$, yet this amar. ing unit is 8 instruments in 1 . Measures $\mathrm{AC}-\mathrm{DC}$ volts from $0-1000$ on low range. High ( 50 kV ) Range makes it ideal for measuring high voltage. Uses include:
T.V. signal tracer, a condenser tester, T. V . slgnal tracer, a condenser tester. a variable frequency audio oscillator
AGC substitute voltage supoly, a visual output subsitute voltage supply, a visual continuity tester. Complete with instructions. Shpg. wt., 3 Ibs. TE-626

Net 5.95
EMICO PLUG.IN LINE VOLTAGE TESTER
Pocket-sized low cost AC line voltage tester. Eliminates guesswork. Permits accurate instantaneous check of line voltage AT THE RECEPTACLE Easy to read black-on-white scale has 5 -volt graduations between 50 and 150 volts. Swluel head rotates $90^{\circ}$ for ease of reading in any position. 2 meter has $5 \%$ at full scale. Rugged black steel case. Shpg. wt. 802.
TE. 627
TE-627
Neł 3.37


SPRAGUE
TO-5 TELOHMIKE CAPACITOR ANALYZER

A moderately priced instrument for complete analysis of all types of capacitors at a guaranteed accuracy of $\pm 3 \%$ for values to 200 mfd , and $\pm 5 \%$ from 200 mfd . up. Capacitance bridge measures capacity in five ranges from 1 mmf to 2000 mfd , with pushbutton range selection. Large meter directiy indicates insulation resistance up to 20,000 megohms for paper, ceramic and mica capacitors. Wien bridge measures power factor of electropacitors. Wien ridge measures power factor of litors from 0 to $55 \%$ in three ranges. Leakage current of electrolytic capacitors measured directly on meter. with continuously variable test voltage up to 600 volts. In addition. this unlt measures turns ratio of transformers. $87 / 0 \times 145 / 6 \times 61 / 2^{\prime \prime}$. With manual and test leads for 115 V AC/ $50-60$ cycles.
TE-490wx Shpg. Wt., 18 los
Net 92.50
T0-5x. for 115-230VAC/25-60 cycles.
E-491wx Shpg. Wt.0 18 los
Net 98.75
T0.5RM, same as 10.5 . for rack mounts.
TE-492WX Shpg. wt., 18 lbs.
Net 102.50


TEST EQUIPMENT


GCT-9S GRID CIRCUIT TUBE TESTER Easy to operate - tests for Grid Emission, leakage, shorts and gas in one operation. Checks all TV tubes. For $105 \cdot 120 \mathrm{~V}$ 60 cycie AC. Size $61 / 2 \mathrm{~W} \times 61 / 2 \mathrm{H} \times 21 / 2^{\prime \prime} \mathrm{D}$. Shpg. wt., 4 lbs.

Net 34.25
MODEL 100 DYNAMIC TRANSISTOR CHECKER
Tests PNP and NPN transistors in or out of circuit. Provides positive check for "opens," shorts and gain
using indicator Size: $31 / 4 \times 61 / 4 \times 21 / 4 \cdots$. Shpg. wt., $11 / 2$ lbs.
TE-495
MODEL HC-G IN.CIRCUIT CURRENT CHECKER

- On The Spot Check of Horizontal Output CIrcuit
- Compact Size

Net 19.55

A "must" in all TV horizontal tube, transformer, of yoke replacement jobs. Built-in $0-300$ milliammeter reads cathode current of horizontal output tubes. Two adapiers are supplied for testing all currently used horizontal output tubes. Front panel lists tubes that can be checked by each adapter. Prevent premature failure by quickly detecting very high cathode current due to defective components or poor drive and linearlity adjustments. Compact, easy to use. Size: 5 Wx
TE.731 Shpg. wt., 2 tbs.
Net 12.69

## SECO VARI-VOLT

Controls Speed of all AC-DC
Motors up to $1 / 3$ Horsepower

- Controls Illumination of any light Source up to 1000 Watts


The Seco Vari-Volt has countless applications in your home or shop. Simple to operate, this voltage control is a complete self-contained unit with separate on-off switch, fuse and control dial. Controls speed of all AC-DC motors up to $1 / 3$ horsepower. Dial controls illumination of any light source to 1000 watts for any desirable il fumination. Has standard 3 -wire $6-\mathrm{ft}$. cord and plug-in receptacle with ground terminal. Size: $61 / 4 \times 33 / 4 \times 2$
TE-732 Shpg. wt. $11 / 2$ lbs
Net 19.55


## NEW MINIATURE AMPROBE RECORDERS

The new miniature Amprobe Recorders provide a continuous, permanent record of variations in voltage, current, power, temperature, or pressure as they happen on a pressure-sensitive paper chart. Can be used as either a portable monitoring. and-recording device, or as a built-in component of an instrument system. 2 basic types of meter movements to measure a wide range of OC and AC electrical quantities-internal-core $0^{\prime}$ arsonval and rectifled $0^{\prime}$ arsonval. Paper size: 21/2" wide by $30^{\circ}$ long. Paper speed- $12^{\prime \prime}$ per hour. Complete with hook-up leads, and 1 strip-chart ready for use. For 115 V AC-60 cycles. Shpg. wt., $12 / 4 \mathrm{lbs}$.

| Stock No. | Model | Description | Range | Net ea. <br> 1-4 $5+$ |
| :---: | :---: | :---: | :---: | :---: |
| 3TE.780 | DC100 | Microammeter | 1/100 $/$ a DC | 74.8567 .35 |
| 3TE. 781 | DC500 | Microammeter | 0/500 1 a DC | 69.8562 .87 |
| 3 TE-782 | DB1 | Milliameter | $0 / 1 \mathrm{ma} \mathrm{DC}$ | 69.8562 .87 |
| 3TE-783 | AA1 | Ammeter with A-70 | 0/10/50/250/500/amp AC | 94.8585 .37 |
| 3TE.784 | AA2 | Ammeter with A-60 | 0/5/25/100/250/amp AC | 89.8580 .87 |
| 3TE. 785 | AVIX | Voltmeter | 95-130-190-260VAC | 84.8576 .37 |
| 3 3E-786 | T100 | Temperature Recorder* | $.50^{\circ} /+100^{\circ} \mathrm{F},+50^{\circ} /+250^{\circ} \mathrm{F}$ | 98.8588 .97 |
| 3TE-787 | P600 | Pyrometer '* | $0 \% 600 \mathrm{~F}$ | 79.8571 .87 |
| 3TE. 788 | P1000 | Pyrometer** | $0 \% / 1000 \mathrm{~F}$ | 79.8571 .87 |
| 3TE-789 | P2000 | Pyrometer** | $0 \% / 2000 \mathrm{~F}$ | 79.8571 .87 |

# SHURITE PANEL METERS-METER RECTIFIERS 



Econony model panel nielels with last response, excellent torque. 10 ant dio, long scales, and accuracy well within standard $5 \%$. AC are double-vane repulsion type with jeweled bearing. DC are polarized vane sotenoid type of moving magnel construction. Require a $\mathbf{2 k}^{2}$ hole. " H " indicates high resistance. L Low Internal Resisiance.
 polystyrene front for exceptional visibility and protection. Frosted linish interior. GLASS-FRONT: Sturdy metal case, glass-fioni meters. Round model is clamp-mounted; square model is flange-mounted. Average Shpg. wt., $3 / 4 \mathrm{lb}$. Sensilive Irpe, 500 ohms resistance

## CLASS RRONT

GLASS FRONT LESS ZERO AOJUST | GLASS FRONT LESS 2ERO AOJUST |
| :---: |
| Type |
| Range |
| Rype |

## METER SPECIFICATIONS

The panel meter with the quality of distinction Accurate to within $2 \%$ of full scale. DC meters employ D'Arsonval moving coll movements; AC types use double-iron repulsion movements. Finest alloy-steel permanent magnets. Jeweled service. Cushioned ceramic bumpers protect polnter against Overtravel. Easy-to-read black scales on white enamel meial dial faces. Molded black bakelite case. Av. shpg. wt., $11 / 2 \mathrm{lbs}$.

$21 / 2^{\prime \prime}, 3^{\prime \prime}$ GLASS-FRONT PANEL METERS
LAFAYETTE CAN SUPPLY THE COMPLETE LINE OF TRIPLETT METERS

ATTENTION-INDUSTRIAL BUYERS! SPECIAL QUANTITY DISCOUNTS ON TRIPLETT METERS LOTS OF 10-24 DEDUCT 10\% LOTS OF 25-49 DEDUCT 15\% LOTS OF 50 \& UP DEDUCT $20 \%$

|  | DC MICROAMMETERS |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rango | $21 y_{2}^{221 T n d}$ | ${ }_{21 y_{2} \mathrm{Re}}^{2277}$ | $\begin{aligned} & 1 \text { to } 9 \\ & t \text { Each } \end{aligned}$ | $313212_{2} \mathrm{Rnd}$ | ${ }^{3}{ }^{327}$ Rect |  | $41 / 2^{\prime \prime}$ Re | Each |
| -0.20 | ${ }^{\text {MT }} \mathbf{4} 485$ | MT/46 | 19.40 | $\mathrm{Mr}_{4} \mathbf{4 7 7}$ | ${ }^{\text {MT. } 478}$ | 20.00 | MT 4 49 | ${ }^{21.20}$ |
| 0.50 0.100 0 | MT. ${ }^{\text {Mr }}$ M 48 | $\mathrm{Mr}_{\text {M }} \mathbf{4} 81$ | ${ }^{16.40}$ | $\mathrm{MT}^{\text {M }}$-482 | MT 483 | 16.90 | MT-484 | 18.20 |
| ${ }_{0}^{0.200}$ | MT-490 | MT-491 | ${ }_{12.20}^{14.30}$ | $\mathrm{MT}_{\mathrm{MT}-492}$ | ${ }_{\text {MTF }}^{\text {M } 493}$ | 12.90 | ${ }_{\text {MT-494 }}$ | 14.10 |
| O-500 50.0 .50 |  | ${ }_{\text {MT }}^{\text {Mr. } 5096}$ | ${ }_{14.70}^{11.70}$ | ${ }^{\text {Mr }}$ T-597 | MT.498 | ${ }^{12.20}$ | ${ }_{\text {Mr }}^{\text {Mr }}$ - 599 | 10 |
|  | MTT-505 | M1.501 | ${ }_{12}^{14.30}$ |  | M7.503 | 14.90 | MT. 504 |  |
| 500.0.500 | MT-510 | MT-511 | ${ }_{10} 120$ | MT-512 | ${ }_{\text {MT } 7.513}$ | 12.60 | Mr ${ }_{\text {MT } 514}$ | ${ }_{12.80}^{14.10}$ |

## dC MILLIAMMETERS

| Range | 21/2" Rnd 21/3" Reet Ea |  |  | $\begin{aligned} & 31 / 211_{2} \\ & 31 / 2 \end{aligned}$ | $\begin{gathered} 3277 \\ \mathbf{J}^{32} \text { Rect } \\ \substack{\text { tog } \\ \text { Each }} \end{gathered}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0.1 | Mr. 515 |  | 10.90 |  |  |  |  |  |
| ${ }_{0}^{0.3}$ |  | ${ }_{\text {Mr }} \mathrm{M}$. | 10.90 |  |  |  |  |  |
| - 0.5 |  |  | ${ }^{10.9}$ |  |  |  |  |  |
| 0.15 | MT-540 | MT.541 | 10.9 | MT. | ${ }_{\text {MT-543 }}$ | 11.60 |  |  |
| - 0.25 | Mr. ${ }_{\text {M } 5 \text { S } 550}$ | M1.546 | 11.30 | MT7.547 | Mr | 12.00 | ${ }^{\text {m- }} \mathrm{T}$-549 |  |
|  |  |  |  |  |  | 12.00 |  |  |
| 0.100 |  | MT. 5 | 11 | ${ }_{M}$ | MT. | 12.00 |  |  |
| (e.150 $\begin{aligned} & 0.150 \\ & 0.200\end{aligned}$ | 570 | MT | ${ }_{11}^{11.30}$ |  | MT-5 | 12.00 | mr-5 |  |
| 0.250 |  |  |  | 59 | M7. 578 |  |  |  |
|  |  |  |  |  | MT-5 | 12 |  |  |
| 0-500 |  |  |  |  |  |  |  |  |
|  |  |  | 11. |  |  |  |  |  |
|  |  |  |  |  | Mr. 603 |  |  |  |

SELF-CONTAINED UP TO AND INCLUOING 50 AMPERES. METERS FOR 75 AMPERES ( 50 MILLIVOLTS) AND HIGHER HAVE SWITCHBOARD OR CURVE TYPE SHUNTS.




| Range | 21/2" Rnd $212^{\prime \prime}$ Rect Each |  |  | 31 |
| :---: | :---: | :---: | :---: | :---: |
| O-10 | MT-755 | M1.756 | 11.40 | MT |
| 0-15 | MT-760 | MT-761 | 11.40 | MT |
| 0.25 | MT. 765 | MT. 766 | 11.40 | Mr |
| 0-50 | MT-770 | MT-771 | 11.40 | MT |
| 0-100 | MT-775 | MT-776 | 11.40 | Mr |
| 0.200 | MT. 780 | MT. 781 | 11.40 |  |
| 0.250 | MT 785 | MT-786 | 11.40 | M |
| 0.500 | MT.790 | MT-791 | 11.40 | MT |

, $1 / 2^{\prime \prime}$ Rnd $3^{\prime \prime}$ Rect Each 41/2" Rect Each



## have external resistors.



JBT MODEL 31-EX

## ELAPSED TIME METER

Records operating time of AC equipment. Registers in $1 / 10$ th hour steps to $9,999.9$ hours, then automatically resets. Highly accurate, even where voltage or temperatures vary widely. Flange $31 / 2^{\prime \prime}$, mounts In $211 / \%$ hole, overall depth 3 K ". For 110 $120 \mathrm{v} ., 60$ cycle AC. Shps. wt., $14 / 4$ Ibs.

NEWI MODEL 31.EXM ELAPSEO TIME METER short run applications or readings at closer intervals than $31-\mathrm{EX}$. Registers in $1 / 10$ minute steps from $0-9,999.9$ minutes. Size and dimensions identical with 31-EX.
MT-953

Vibrating reed meters for measuring frequency of AC power sources * in 5 -cycle steps; tin 1 -cycle steps. $\pm$ $0.3 \%$ at 77 F Flange $312^{\prime \prime}$. mounts in $2 \mathrm{Kin}^{\circ \prime}$ hole. overall depth $34 \mathrm{y}^{\circ}$. For $100-130$ volts. Shpg. wt., 1202.

MT-951. Model 34-Fx. 56-64 cyciest ......... Net 26.70
MT-952. Model 33-Fx.380-420 cycles*...... Net 33.42


Net 15.63 MT-952. Model 33-Fx. $380-420$ cycles*

## Round flush Mounting Body

| Mod. | Flange | Body Dia. | - Depth | Scale |
| :---: | :---: | :---: | :---: | :---: |
| 221.T | 2110" | 23\% | $15 / 8^{\prime \prime}$ | $1.76^{\prime \prime}$ |
| 231.5 | 211/6" | 21/3" | 1'K4* | 1.58 ${ }^{\prime \prime}$ |
| 321-T | $34 / 2^{\prime \prime}$ | 23" | 15/8' | 2.49** |
| 331.5 | 31/2" | 2\%" | 1'K0" | 2.22" |



## TRIPLETT TYPE PL PLASTIC-FRONT METERS

TRIPLET TYPE PL PLASTIC-FRONT METERS
Attractive panel meters with unbreakable plastic fronts featuring extra scale length, greatly Improved visibillty and maximum protection of meter face. Ac. curacy within $2 \%$ of full scale. DC types employ sensltive D'Arsonval movements; AC types use double-iron repulsion movements. Can withstand severe vibration. Avg. shpg. wt., $11 / 2$ lbs. Include range and modef no. when ordering.

this is a partial listing. pl panel meters are available in all glass-front panel meter ranges. QUANTITY PRICES LOTS OF $\mathbf{1 0}-\mathbf{2 4}$ DEDUCT $10 \%$ LOTS OF 25-49 DEDUCT 15\% LOTS OF 50-UP DEUUCT 20\%

| OC MICROAMMETERS |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Range | $\begin{gathered} 221-\mathrm{PL} \\ 21 / z^{\prime \prime} \\ \text { Round } \end{gathered}$ | $\begin{gathered} 227-\mathrm{PL} \\ 21 /_{/^{\prime \prime}} \\ \text { Rect. } \end{gathered}$ | 1109 Each | $\begin{aligned} & 321-\mathrm{PL} \\ & 31 / 2^{\prime \prime} \\ & \text { Round } \end{aligned}$ | $\begin{gathered} \text { 327-PL } \\ 3^{\prime \prime} \\ \text { Rect. } \end{gathered}$ | 1 to 9 Each | $\begin{aligned} & 420-P! \\ & 41 / 2^{\prime \prime} \\ & \text { Rect. } \end{aligned}$ | $\begin{aligned} & 1 \text { to } 9 \\ & \text { Each } \end{aligned}$ |
| 0.50 | MT-915 | MT-916 | 18.40 | MT-917 | MT-918 | 16.90 | WT. 915 | 18.20 |
| 0.100 | MT. 920 | MT-921 | 14.30 | MT-922 | MT-923 | 14.90 | MT-924 | 16.10 |
| 0-200 | MT. 925 | MT-926 | 12.20 | MT-927 | MT-928 | 12.50 | MT-929 | 14.10 |
| DC MILLIAMMETERS |  |  |  |  |  |  |  |  |
| 0.1 | MT-930 | MT-931 | 10.90 | MT. 932 | MT-933 | 11.60 | MT-934 | 12.80 |
| 0-25 | MT-935 | MT-936 | 11.30 | MT. 937 | MT-938 | 12.00 | MT-939 | 13.20 |
| 0.50 | MT-940 | MT-941 | 11.30 | MT-942 | MT-943 | 12.00 | MT-944 | 13.20 |
| 0.100 | MT-945 | MT-946 | 11.30 | MT-947 | MT-948 | 12.00 | MT-949 | 13.20 |
| 0-150 | MT-955 | MT-956 | 11.30 | MT-957 | MT-958 | 12.00 | MT-959 | 13.20 |
| 0-200 | MT-960 | MT-961 | 11.30 | MT-962 | MT-963 | 12.00 | MT-964 | 13.20 |
| 0.300 | MT-965 | MT-966 | 11.30 | MT-967 | MT-968 | 12.00 | MT-969 | 13.20 |
| 0.500 | MT-970 | MT-971 | 11.30 | MT-972 | MT. 973 | 12.00 | MT-974 | 13.20 |
| OC AMMETERS |  |  |  |  |  |  |  |  |
| 0-5 | MT-975 | MT-976 | 11.80 | MT-977 | MT-978 | 12.30 | MT-979 | 13.50 |
| 0.10 | MT-980 | MT-981 | 11.80 | MT-982 | MT-983 | 12.30 | MT-984 | 13.50 |
| 0.25 | MT. 985 | MT-986 | 11.80 | MT-987 | MT-988 | 12.30 | MT-989 | 13.50 |
| 0.50 | MT. 990 | MT-991 | 11.80 | MT-992 | MT-993 | 12.30 |  |  |



| Range | $\begin{gathered} \text { 231-PL } \\ 21 / 2^{\prime \prime} \\ \text { Round } \end{gathered}$ | $\begin{gathered} 237 . \mathrm{PL}_{1} \\ 21 / 2^{\prime \prime} \\ \text { Rect. } \\ \hline \end{gathered}$ | $\begin{aligned} & 1 \text { to } \\ & \text { Each } \\ & \hline \end{aligned}$ | $\begin{aligned} & 331 . \mathrm{PL} \\ & 31 / 2^{\prime \prime} \\ & \text { Round } \end{aligned}$ | $\begin{gathered} 337-\mathrm{PL} \\ 31 / 2^{\prime \prime} \\ \text { Rect. } \end{gathered}$ | $\begin{aligned} & 1 \text { to } 9 \\ & \text { Each } \end{aligned}$ | $\begin{gathered} 430-\mathrm{PL} \\ 41 / \mathbf{z}^{\prime \prime} \\ \text { Rect. } \end{gathered}$ | $\begin{aligned} & 1 \text { to } 9 \\ & \text { Each } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0.100 | MT-999 | MU-10 | 11.49 | MU-11 | MU-12 | 12.10 | Mu-13 | 12.80 |
| AC AMMETERS |  |  |  |  |  |  |  |  |
| 0.5 | MU-14 | MU-15 | 11.40 | MU-16 | MU-17 | 12.10 | MU-18 | 12.80 |
| 0.10 | MU-19 | MU-20 | 11.40 | MU-21 | MU-22 | 12.10 | MU-23 | 12.80 |
| 0.25 | MU-24 | MU 25 | 11.46 | MU-25 | MU-27 | 12.10 | MU-28 | 12.80 |
| 0.50 | MU-28 | MU. 30 | 11.40 | MU-31 | MU. 32 | 12.10 | Mu. 33 | 12.80 |


|  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0.150 | Mu-39 | MU-40 | 12.50 | MU. 41 | MU-42 | 13.10 | MU-43 | 13.80 |
| 0.3 | MU-44 | MU-45 | 13.60 | Mu-46 | M 1 -47 | 14.30 | MU-4 | 15.0 |



## SIMPSON WIDE-VUE PANEL METERS






## DC MILLIAMMETERS

| MU-163 | 12.64 | MU-166 | 13.23 | MU-167 | 18.56 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| M U.168 | 12.64 | M U. 169 | 13.23 | M U. 170 | 13.96 |
| MU.171 | 12.64 | MU. 172 | 13.23 | MU-173 | 13.96 |
| MU-174 | 12.93 | MU. 175 | 13.52 | MU. 176 | 14.70 |
| MU.177 | 12.93 | MU. 178 | 13.52 | mU. 179 | 14.70 |
| mu-ian | 12.93 | MU-181 | 13.52 | MU.182 | 11.70 |
| MU-183 | 12.93 | MU.184 | 13.52 | MU.185 | 14.70 |
| MU-186 | 12.93 | MU-187 | 13.52 | MU.18A | 14.70 |
|  |  | MU-189 | 13.52 | MU. 190 | 14.70 |
| MU-191 |  | MU-192 | 13.52 | MU. 193 | 14.70 |
| MU. 194 | 12.93 | MU. 195 | 13.52 | MU. 196 | 14.70 |

DC MULUYOLTMEIER

## SIMPSON EDGEWISE PANEL METERS

Modern design saves space and weight-perfect
where panel design calls for making every square inch count-these meters require only $1 / 2$ the panel area required by a conventional meter. Features $D C$ accuracy of $2 \%$ full scale, $170^{\prime \prime}$ scale length. Has a dustproof, molded lucite case, back numbers on white scale. Panel size $5 / \mathbf{m}^{\prime \prime} \mathrm{h} / \mathrm{gh} .24 / 2^{\prime \prime}$ wide. Depth $31 / 2^{\prime \prime}$, overall height (behind panel) $13 / 4^{\prime \prime}$. Shipping wt., 1 ib . State range and model number on all orders


## Page 254

# LAFAYETIE QUALITY PANEL METERS SQUARE PANEL METERS 



- High Quality D'Arsonval Movements
- Accuracy $2 \%$ of Full Scale
- $31 / \mathrm{s}^{\prime \prime}$ sq., only 1 Kic" $_{6}$ Overall Behind Panel
- Bakelite Cases
- Jewelled Bearings

GENERAL SPECIFICATIONS


High quality. precislon built meters with better than $2 \%$ of full scale accuracy. $3 \mu^{\prime \prime}$ square, $2 \%_{4} \times 133^{\prime \prime}$ dial faces $11 \%^{\prime \prime}$ overall depth, $1 \%_{0}{ }^{\prime \prime}$ behind panel including terminals. Require $2 \%$ "diameter mounting hole. $1 / 4$ " screw terminals plus solder lugs. 4 threaded mounting studs in corners. Zero adjust screw. Shpg. wt., 1 lb. Imported.

## ILLUMINATED SCALE VU METER (FIG. A)

CLEAR PLASTIC FRONT METER - Standard 3900 ohm "A" scale volume indlcator calibrated and damped in accordance with standard Vu meter practical lower scale reads $0.100 \%$ modulation, Upper scale reads -20 to to $j$ ( 0 VU corresponds to $100 \%$ ) Accurate to $\pm 0.2$ VU from 35 10.000 cps , $\pm 0.5 \mathrm{VU}$ from $30-15.000 \mathrm{cps}$. With suddenly applied sine wave signal, meter will reach $99 \%$ of correct reading within 0.3 seconds; overshoot beyond correct reading is 1 to $11 / 2 \%$. A root-mean-square instrument with full wave bridge rectifier, includes built-In $6-8$ volt bulb. Complete with instructlons. Imported.
TM-80
Net 6.75

## O-50 DC MICROAMMETER (FIG. B)

O.50 DC MICRDAMMETER - Highly damped, sensitive movement, calibrated in 50 one-microamp linear scale divisions, Cushioned ceramic bumpers protect pointer against overtravel and damage with moderate overloads. Red pointer. Black Bakelite Front. Imported.
TM. 70

### 0.1 DC MILLIAMMETER (FIG. B)

0-1 DC MILLIAMMETER - Sensitive, quick-acting basic movement. Linear calibrations in .02 ma . divisions. Black scale, red pointer. Black, Bakelite Front. Imported

Net 3.25

## O-150 AC VOLTMETER (FIG. B)

0.150 AC VOLTMETER - Full-wave bridge rectifier type. 1000 ohms per volt. With precision carbon-fitm multiplier resistor. S volts per division, linear scale. Black Bakelite Front. Imported
TM. 50
Net 3.55

## ULTRA-MINIATURE TUNING AND BATTERY METER



This ultra-miniature meter can be installed easily in a $K_{0}$ " diameter hole. Its total length (front to back, including lugs for connections) is $7 /^{\prime \prime}$ and its reading face is circular, $1 / 2^{\prime \prime}$ in diameter (taking up an area of less than $1 / \mathrm{s}$ square inch!) Current sensitivity: 200 Ma . Internal resistance: 320 ohms $\pm 10 \%$. Shpg. wt., 3 oz. Imported.
ONLY $1 / 0_{0}{ }^{\prime \prime}$ IN DIA ${ }^{\circ}$, $3 / 4 "$ IN LENGTH
TM-27

## EDGE-WISE <br> PANEL METERS

- 2\% FULL SCALE accuracy
- precision d'arsonval movements
- front panel area only $31 / 4 \times 1^{\prime \prime}$
vu meter


For use where panel space is Ilmited. Reouires about is the panel area of conventional $21 y^{\prime \prime}$ meters. Lightweight; only 10 ozs. Has precision D'Arsonval meters with $2 \%$ or better full scale accuracy. Front panel dimension is $31 / 4 \times 1^{\prime \prime}$. Overall depth is $31 / 2^{\prime \prime}$ behind panel including terminals. Has stud-type solder terminals and zero adjustment screw. Shpg. wt., $3 / 4 \mathrm{Ibs}$. Imported

## VU METER

VU METER-Calibrated and damped in accordance with standard VU meter practice. Upper scale reads - 20 to +3 VU. Lower scale reads $0-100 \%$ modulation. Accurate to $\pm 0.5 \mathrm{VU}$ from $30 \cdot 15,000 \mathrm{cps}$. Imported

## TM-23

### 0.150 AC VOLTMETER

0.150 AC VOLTMETER-Full-wave bridge rectifier type. 1000 ohms per volt. 5 volts per division, llnear scale. TM-22 Imported.

Net 4.75

### 0.1 DC MILLIAMMETER

0.1 -DC MILLIAMMFTER-CALIBRATED from 0.1 ma in 0.02 ma. divisions. Black scale, red pointer. Imported TM-21

Net 4.75

- d’arsonval movements
- BAKELITE CASES - JEWELLED BEARINGS
- $1 \%$ ano $15 \%^{\prime \prime}$ SQ. FACES, $1 \mathrm{~V}_{4}{ }^{\prime \prime}$ OVERALL

BEHIND PANEL - ACCURACY $2 \%$ OF FULL SCALE

Ruggedly built miniature panel meters with excellent accuracy. Silvered dials and black numerals and pointers. Accuracy $2 \%$ of full scale. $1 \%$ " square fronts. $14 / 2^{\prime \prime}$ overall front-to-back. with $11 / 4^{\prime \prime}$ behind panel including $1 / 4^{\prime \prime}$ terminals. Require $122^{\prime \prime}$ diameter round hole in panel, 4 corner holes with $11 / 4^{\prime \prime}$ center. Terminal polarity on DC models clearly marked, Zero adjustment screw on front of panel. Screw terminals. All have cleap plastic front except * which have black Bakelite. Clear plastic meters have $15 \mathrm{sh}^{\prime \prime}$ dial faces supplied with mounted screws. Black Bakelite have $11 / 4^{\prime \prime}$ faces. Shpg. wi., 8 oz. Imporied

## ILLUMINATED VU METER

VU METER - Illuminated dial for easy, wide-angle readability at all times. Volume level Indicator, calibrated in standard -20 to +3 VU and $0.100 \%$ ranges. Uses precision carbon film multipller resistor and full wave rectifier. Damped in accordance with standard VU meter reauirements. Reference level 1 mw in 600 ohm line. 3,900 ohms internal resistance. " 0 " VU ohm line. 3,900 ohms internal resistance. connected is 1.228 volts surce with 600 ohm load. May be used with to 60 G ohm source with 600 ohm loas. May be used with
T -pad attenuator. $0-100 \%$ scale used to indicate percont use of transmitter output. Imported TM-10

Net 3.95

DC MILLIAMMETERS

| TM-400 0.1 DC MILLIAMPERES Net 2.95 |  |  |  |
| :---: | :---: | :---: | :---: |
| TM-401 | 0.50 C | MILLIAMPERES | Net 2.95 |
| TM. 402 | 0.50 DC | MILLIAMPERES | Net 2.95 |
| TM-403 | $0-100$ DC | MILLIAMPERES | Net 2.95 |
| DC MICROAMMETER |  |  |  |
| TM. 200 | 0-50 DC | MICROAMPERES | Net 4.45 |
| AMMETERS |  |  |  |
| TM-510 | 50-0.50 DC | AMPERES | Net 3.45 |
| TM.511 | 0.10 DC | AMPERES | Net 2.75 |
| VOLTMETERS |  |  |  |
| TM-100 | $0-15$ DC | VOLTS | Net 2.75 |
| TM-101* | $0-200$ DC | VOLTS | Net 2.75 |
| TM-300 | 0.150 AC | VOLTS | Net 2.75 |
| TM-309 | 0.300 AC | VOLTS | Net 2.75 |

## MINIATURE FM \& AM TUNING METERS

## TM-24 EDGEWISE

## BALANCE \& TUNING METER

## - Mounts Anywhere-2\%"Wxi\%o"DxT/4"H Overall.

Use these precision moving coll DC Ammeter meter movements as stereo balance indicators or as tuning indicators for FM tuners. Pointer at center of the scale indicates zero or null position. Current Sensitivity: $\pm 100 \mu \mathrm{a}$. Complete with Installation schematics. Shpg. wt., 1 lb. Imported
TM-24

## - galvanometer movemen

- 50 aA SENSITIVITY
- front panel area only $7 / 8 \mathrm{y} / 4^{*}$

Miniature $F M$ and $A M$ tuning meters can be easily installed on any tuners. The remarkable sensitivity enables you to tune in stations with surprising ease. Galvanometer movement of the indicator assures complete accuracy. Despite its miniature size, the funing meter is ruggedly bulit. Insulation resistance between case and terminals: 20 megohms $/ 500 \mathrm{~V}$. Solder lugs are provided at the back. Plastic case cover. Complete with Instruction sheets. Size: $7 / \mathrm{B}^{3 / 3} \times \mathrm{l}^{14}$. Shpg. wt., 4 ozs.

## FM TUNING METER

FM TUNING METER. Can be connected between radio detector and AF amplifier. The indicator will rest in the center when station is tuned in. Current sensitivity $\pm 50$ microamps DC. Internal resistance about 430 ohms. TM-13

Imported
Net 2.50

## AM TUNING METER

AM TUNING METER. Can be connected into the second If stage of $A M$ radio. Graduated scale with maximum deflection of pointer indicating station being tuned In. TM. 12

## L A F A Y E T T E Factory wired

## and calibrated TEST INSTRUMENTS for dependable electronic servicing.

Perfect for Engineers, Servicemen, Students and Experimenters



- factori calibrated and tested - low distortidn - frequen. CY RANGE - SINE: 20 cPS- 200 KC IN 4 BANDS; SQUARE WAVE RANGE: $20-25$ KC (Vernier Tuned) - ETCHED CIRCULAR dIAL - FREQUENCY RESPONSE $\pm 1.50 \mathrm{~B}, 60 \mathrm{CPS}$ - $150 \mathrm{KC} 41 / 2^{\prime \prime}$ VERMIER DIAL

The Lafayette TE. 22 is especially designed for radio.TV servicemen, HI-Fi fans and students who require a dependable sine and square wave generator at low prices. An outstanding instrument ... factory wired, tested and callbrated. Among its many applications are square wave testing of audio amplifiers, determining the frequency and transient response of loudspeakers, TV audio circuit testing and many other uses. Quality features and specifications consist of a frequency range of 20 cps to 200,000 cycles in 4 bands. A large easy-to-read and set etched dial (vernier tuned) adds a professional quallity touch. Variable attenuator adjusts amplitude of output signal. A full wave power supply is incorporated to provide low distortion and constant output. Factory wiring and calloration insure accuracy of $\pm 3 \%$. Output voltage is 7 volts across a 1 megohm load. Rugged steel cabinet and shock-proof mountings protect components. Complete with instructions and test leads. For 117 V $50 / 60 \mathrm{cDS} A C$. Size: $101 / 2 \mathrm{~W} \times 7 / 2 \mathrm{Hx} 53 / \mathrm{A}^{\prime \prime} \mathrm{D}$. Shpg. wt.g 10 lbs . Imported. TE-22

Net $\mathbf{3 2 . 5 0}$

## SPECIFICATIONS

Frequency range: Sine wave; $\mathbf{2 0 - 2 0 0 , 0 0 0} \mathrm{cps}$ in 4 bands.
Square wave- $60-30,000 \mathrm{cps}$.
Output Voltage-Sine: IV RMS, Square 7V P.P. Output Impedance- 0.5000 Ohms. Frequency Accuracy: $\pm 3 \%$. Oistortion: Less than $2 \%$.
Tube Complement: 1-6BM8, 1-12AT7, 1-6X4. Power requirements: $117 \mathrm{~V} 50 / 60 \mathrm{cps}, 19 \mathrm{~W}$. Gray wrinkle steel case with leather carrying handle. Complete with a pair of test leads. size: $7 \mathrm{H} \times 101 / 2 \mathrm{~W} \times 5 \%$ "D. Shpg. wt., 10 lbs .


- factory calibrated and tested - six bands: 120 KC - 260 mC - dual output rf terminals - separate variable audio output - dial calibration $\pm \mathbf{2 \%}$ - Etcheo circular dial. (Vernier Tuned)

An outstanding instrument ....factory wired, tested and calibrated. The TE-20 is a stable, wide-range signal generator engineered to fill the need for an accurate low cost service instrument. The delicate oscillator coils and tuning assembly are factory mounted and adjusted for optimum performance. This topflight unit can be used for IF-RF alignment, audio signal tracing of TV, FM and AM sets. TV linearlty checks and 400 cycle audio testing. In addition, it can serve as a marker generator when used with a suitable sweep generator. Incorporates a large $41 / 4^{\prime \prime}$ etched circular dial for easy, accurate frequency adjustments. Provides a fundamental frequency output of 120 KC to 130 MC in 6 bands plus a calibrated harmonic output of 120 mc to $\mathbf{2 6 0} \mathrm{MC}$. The built-in audio oscillator operates at 400 KC with adjustable output to 8 volts. Continuously variable RF aftenuator for proper signal aftenuation and two plug-in RF output terminals provide a choice of high and low outputs for maximum flexibility. High output and tuning dial callbration of $\pm 2 \%$. Imported

TE-20 .a......
Net 27.95

## SPECIFICATIONS

Full frequency range: 6 Fundamental bands- $\mathbf{1 2 0 - 3 2 0} \mathrm{Kc} 320-1000 \mathrm{Kc}$ 1-3.4 MC, 3.2-11 MC, 11-38 MC, 36.130 MC ; One harmonic band $120-260 \mathrm{MC}$ Frequency Accuracy: $\pm 2 \%$. Audio Output: to 8 volts.

Large 4 $4 /{ }^{\prime \prime}$ Etched Circular Dial (Vernier tuned) High-Low RF Output Terminals. Tube Complement: 128H7A, 6AR5, Selenium Rectifier. Power Requirements: 105-125VAC $50 / 60$ CPS, 12 Watts. Attractive gray wrinkle steel case with leather carrying hande. Complete with test leads. Size: $7 \mathrm{H} \times 104 / 2 \mathrm{~W} \times 53 / 3^{\circ} \mathrm{O}$. Shpg. wt., 9 lbs .


MADE IN U.S.A.

# LAFAYETTE COMBINATION SIGNAL GENERATOR AND SIGNAL TRACER KIT 

## Another Outstanding Áchievement by Lafayette Test Equipment Engineers

## SEMI-KIT CONSTRUCTION!!!

This unit uses proven semi-kit construction with all major components premounted and tested at the factory.

## NO MONEY DOWN $\$ 5$ monthly <br> $22^{95}$ <br> LAFAYETTE MODEL KT-223 TRANSISTOR ANALYZER KIT

# Famous LAFAYMWH 

 THST HQULPMHNT RIIS
#### Abstract

\section*{SIGNAL GENERATOR} - Covers from 2SO KC to 120 MC in 5 aands - High Stability Electron Coupled Oscillator - Attenuator For Both RF and Audio Circuits - Most Used Frequencies Marked on Panel in Color - Utilizes New Ruggedized Industrial Types Tubes

Two test instruments in or e! And available in easy-to-bulid kit form. The Signal Generator will serve as a full service instrument and the Signal Tracer will follow any signal whether generated by a broadcasting station or injected by the Signal Generator section of the Model KT-208. When used in combination, with no dependence on outside signals, the compatibility of Model KT-208 provides ideal service, for unlike any standard signal tracer, it first injects its own signal then traces that controllable signal to locate the source by standard signal tracing technique. Designed for use with AM, FM, TV and audio circuitry. Features 5 frequency ranges and an audio circuitry, Features 5 frequency ranges and attenuator switch to control both the R.F. signal (elther modulated or unmodulated) and the 400 cycle audio tone. Front panel output jacks which can be used for oscilloscope, VTVM or earphone connections.




Lafayette's 6-in-1 Transistor Analyzer KT-223 is a highly useful tester capable of testing transistors of all types including power types. The in-circuit test couples the transistor to an oscillator circult within the tester for an actual performance check. Externally the transistor is checked for leakage on a multicotored scale and for beta gain in 3 ranges up to 200. The KT-223 terminals makes trouble shooting transistor radios easy by supplying a 5 kc test signal with harmonics for checking the RF. IF, and AF circuits. This signal can also be coupled to an oscilloscope for a visual circuit function test. This analyzer also checks the condition of diades and rectifiers.
The KT-223 features a voltmeter which can check up to 12 volts DC and is excellent for testing transistor radio batteries. In addition, thls analyzer is capable of checking current drain up to 80 milliamperes.
Complete with test leads and step-by-step lllustrated instructions to make bullding this kit a pleasure. Attractlve black case with anodized aluminum front panel. $67 / 8 \times 5 \% \times 2 K_{6}{ }^{\prime \prime}$. Shpg. wt., $31 / 2 \mathrm{lbs}$.
KT-223 Complete Kit
BA. 156 Extra Batteries $11 / 2$ volt Battery ( 2 required)
and Entra Batteries iyz volt Battery (2 required)
$\qquad$ Net 13.50 Net ea. .13

## 20,000 OHMS PER VOLT SEMI-KIT MULTITESTER



This unit uses proven semi-kit construction with all major components pre. mounted and tested at the factory.

## Signal tracer

- Hi-zain Cascode Pre-amplifier
- Front Panel Output For VTVM, Scope or Phones
- Low Oistortion Triode Output Stage
- Separate R,F. and Audio Signal Probes

Famous Lafayette kit building manual with large pictorials wlll make it a pleasure to build. Housed in a beautiful crackie finish steel cablinet with a deep etched aluminum panel. Dimensions: $74 / 2 \times 94 / 2 \times 53 / 4 \mathrm{~m}$. Complete with 2 probes. Sh2g, wi., 9 ibs.
This unit uses proven sem-kit. construction with all major components premounted and tested at the factory. All you have to do is wire it up? KT-200 Kit

Net 22.85

## SPECIFICATIONS

RANGE: Band A: 250KC to 350 KC ; B: $850 \mathrm{KC}-3000 \mathrm{KC}$; C: 3.0MC to 11 MC ; $D: 11 \mathrm{MC}$ to $45 \mathrm{MC} \mathrm{E}_{\mathrm{E}}$ : 35 MC to 120MC: 400 cps audio signa; modulation slide switch, RF/AF attenuator and power switch; Signal output jack; Af input jack. 2 Preamp. output jacks. $42 / 2$ alnico 5 speaker. Tubes: $3965,5687,6350,6 A G 5$.

The semi-kit is a new concept in test equipment klts. All the Important or difficult parts are already mounted. All that rematns to be cone is to mount and wire in a few small parts-a job so simple you'll finish before you realize it, and best of all, you'll have one of the finest high sensitivity multitesters on the market. When used in circuit, the high input resistance on all DC and AC ranges does away with the highly inaccurate readings common to low resistance testers which load the circult. Ranges: DC Volts, 0-10-50-250-500-1000; AC Volts, $0-10-50-250-500-1000$; DC CURRENT, $0-500 \mu \mathrm{a}, \mathrm{O} 10-250 \mathrm{ma}$; OHMS, 0.10 K 100K-1 meg; OECIBELS. - 20 to +36 ; PLUS 0.5000 herries and 250 mmf . to .02 mfd. Black case $53 / a \times 33 / a \times 17 / 8^{\prime \prime}$. Complete with test leals, all parts, and instructions and battery. Shpg. wt., 3 lbs. Imported.
TK-10 KIT

- 20,000 ohms Per Volt DC10,000 ohris Per Volt AC
- 40-Microampere $3^{\prime \prime}$ D'Arsonval Meter Movement
- Most Parts Already Mounted



## EXCEPTIONAL VALUE <br> ——

# Lafayetite MODEL TE-19 



# - Checks and Corrects Each Gun of Color Tube Separately 

- Rejuvenates All TV Picture Tubes Including Color and $110^{\circ}$ Types

\author{

- Factory Wired \& Tested
}

\author{

- Locates TV Tube Defects
}

The fabulous TE-19 is a "must" for every TV service shop. It will quickly pay for itself in time saved and money earned. Light in weight, completely portable, The TE-19 is Ideal for "in the home" service calls. Solves most picture tube problems usually encountered without any fuss. Cuts service operating costs, makes your home visits more profitable. This quality factory wired and tested instrument rapidly checks and corrects black and white and color TV picture tubes including $110^{\circ}$ types without removing them from the set. All controls are functional and clearly marked. Factory assembled,
hand wired circult assures long, trouble-free service. Needs only seconds to warm up and short test may be made without warm-up. Restores brightness and emission to old CRTS. Rejuvenates all cathode ray tubes. Lens type neon lamp lights when tube filaments are shorted. Nothing could be simpler, Determines quallty of CRTS by means of an emission test. Large $4 \mathrm{th} \mathrm{m}^{\prime \prime}$ meter gives legible readings at a glance with colored Good.Bad scale. Neon tube provides positive leakage indication. Selector switch provides a choice of dual filament voltages of 6.3 V and 12.6 V . Checks and corrects each gun of color tube separately. Repairs interelement shorts and open circuits. Includes 3 additional tube socket adaptors for $110^{\circ}$ deflection type tubes. Cperates on $105-125 \mathrm{~V} 60$ cycle AC. Handsome portable leatherette covered gray case with detachable lop. size: $43 / 4 \times 71 / 2 \times 131 / 2^{\prime \prime}$. Shpg, wt., 9 lbs. Imported. covered gray case with detachable lop. Size: $43 / 4 \times 7 / 2 \times 132 / 2^{2}$. Shpg. wt., 9 lbs. Imported.


# LAFAYETTE MODEL TE-46 

## CAPACIT ANCE-RESISTANCE ANALYZER

## Laboratory-Quality

3950<br>NO MONEY OOWN

SUPERBPERFORMANCE<br>\section*{See Budget} Plan Page 412

- Factory Wired and Tested - Capacitance Bridge Circuit
- Direct Reading Scales for Capacitance and Resistance
- "Magic-Eye" Null Indicator and Meter
- Checks Opens, Shorts, Leakage and Intermittents
- Determines Power Factor of Electrolytics
- 2 Turns Ratio Scales - Measures Impedance

A real service value which has a number of time saving applications in your shop or lab. The TE-46 tests capacitors of all types for value, leakage, shorts and power factor and also measures resistance from 2 ohms to 200 megohms in four ranges. Measures capacity in 4 ranges from 20 mmf to 2000 mf . All readings are made directly without complex time wasting calculations on a large etched circular metal scale. You will find it an invaluable tool to test for the following: capacity of paper, mica, ceramic and electrolytic capacitors; resistance; power factor of efectrolytics from $0-55 \%$; shorts opens and teaky capacitors. Wide range leakage test ( $0-600 \mathrm{~V}$ ) permit leakage tests of capacitors at their rated voltage. You can also determine the turns and impedance
radio of audio and power transformers and read Insulation resistance of paper, mica and ceramic capacitors directly on the meter to 300 megohms. Eliminates guessing with neon lamps. The impedance and turns ratio scales have 2 ranges: $10: 1$ and 200:1. "Magic-eye" tube indicates capacitance "null" clearly and opens shorts for electrolytics. A calibrated power factor control is provided to check overall capacitor efficiency. No service shop or lab should be without one. Complete with instructions and test leads. For 117V 50/60 cycles, AC. Grey wrinkle finish steel case with leather carrying hande. $101 / 2 \mathrm{~W} \times 7 \mathrm{Hx} 51 / 4^{\text {" }} \mathrm{D}$. Shpg. wt., 12 lbs. Imported.
TE. 46

## LAFAYETTE TE-50 TUBE TESTER

## for HOME, SHOP BENCH or LABORATORY

An Unbelievable Value-Compare With Any Similar Tube TesterWe Have Never Offered So Many Features At Such a Low, Low Price.

## Supert Low Cost



- Checks New Compactrons, Nuvistors, New T-9 Types 7 . Pin Miniatures, Octals, Lock-in's, and 9-Pin Minlatures
- 12 Fast-Setting Slide Switches Covering All Elements of 12-Pin Compactron Tubes
- Accurately Checks Over 1600 Different Tubes
- Tests for Cathode Emission, Leakage and Shorts plus Filament Continuity
- Completely Portable-Weighs Only $\mathbf{j}$ Ibs.
- Highly Accurate Easy-to Read Meter with Replace-Good Scale - Slide-Out Tube Chart

FULL
SIZE
$93 / 4^{\prime \prime} W \times 81 / 8^{\prime \prime} \mathrm{D} \times 21 / 2^{\prime \prime} H$
NOT A KIT COMPLETELY WIRED

A modern, dependable tube checker equipped to test most of the tube types employed in Radio, HI.Fi, Monochrome, Color tV including the new 12 -pin compactrons, nuvistors, T.9's and 7 . and 9 -pin miniatures. A special alligator cip lead is furnished for testing tubes with top caps. Slide switches are employed to connect the various tube elements to their respective test circuits A 3 -position tube slide switch adjust for checking shorted elements, cathode emission and filament continuity. A leakage indicator light glows when an inter-element short or leakage is present in a tube. A power switch turns the unit on and additionally serves to adjust for various AC line voltages. Large easy-to-read meter callbrated $0-100$ has a red-green "Replace-Good" scale, plus a special scale for checking diodes.
A handy silde out metal tray contains tube charts which facilitate rapid selection of test settings. Metal case is attractlvely finished in cream and steel gray. Completely portable-welghs only 610 s . and measures $81 / 60 \times 93 / 4 \mathrm{~W} \times 2 \mathrm{~V}_{2}$ "H. Supplied with car rying case. For $105-125$ volts, 60 cycle AC. Shpg. wt., 7 lbs. Imported. rying case. For 105 -
TE-50 Tube Checker

Net 19.95

An accurate, versatile, precision instrument that actually tests over 1600 different tubes. The low cost and superior performance of the Lafayette TE-50 Tube Tester combine to make it the outstanding test instrument value today ...the ideal tube tester for any radio-TV serviceman experimenter, technician, etc.

# LAFAYETTE TE-10 10,000 OHMS PER VOLT MULTITESTER ON BOTH AC AND DC 

## LOOK AT LAFAYETTE'S FINE VALUE AT SUCH A LOW, LOW PRICE

- EXTRA LARGE $31 / 2^{\prime \prime}$ METER FACE
- COMPLETELY WIRED (NOT A KIT)
- ALL ACCESSORIES INCLUDED


## FULL SCALE RANGES

DC VOLTS: $0.6 ; 0.30 ; 0-120 ; 0.600 ; 0-1200 ;$ AC VOLTS: $0.6 ; 0.30 ; 0.120 ; 0.600$; $0-1200$; DC CURRENT: $0.120 \mu \mathrm{~A} ; 0.3 \mathrm{M}$; 0.300 M RESISTANCE: $0.30 \mathrm{~K} ; 0.3$ MEG DECIBELS - 20 to +63 in 5 scales: Capacity $50 \mu \mu \mathrm{~F}$ to $.01 \mu \mathrm{~F}$; and $.001 \mu \mathrm{~F}$ to 15 U ; OUTPUT RANGES $0-6 ; 0.30 ; 0-120 ; 0-600 ; 0-1200$.

Unbellevable value. Lafayette's new muttitester is a complete factory wired and tested instrument (not a kit). It can be conveniently carried in the pocket, and features unusually sensitive 10,000 ohms-per-volt AC-DC neter, $1 \%$ precision resistors, and the largest meter ever placed on an Instument of this size. resistors, and to largest meter ever placed on an instaument of this size.
single easy-to-use range selector switch can be appreclated by the novice -and the engineer alike. Case and panel are made of durable baselite. First capacity range requires 120 volts $A C$, second range requires 6 volts AC. Probes and flexible leads are plastic coated and color coded. Size $41 / 2 \times 31 / 2 \times 11 / 8$. Complete with leads and battery. Shpg. Wt., $11 / 2 \mathrm{lbs}$. Imported.
TE-10
Net 8.59
Pigskin carrying case for TE-10. Shpg. wt., 8 ozs.
TE. 14
Net 1.95

## SENSATIONAL VALUES IN MULTITESTERS

## NEW! LAFAYETTE TE-60 30,000 OHMS PER VOLT MULTITESTER FOR PRECISION MEASUREMENTS

## men 1795 <br> Factory Wired

SPECIFICATIONS
Sensittvity: $\mathbf{3 0 , 0 0 0}$ ohms/volt $D C$ 15,000 ohms/volt AC. Range: DC volts: $0-25,1,2.5,10,25,100$, $250,500,1000 ;$ AC volts: $0-2.5$, 10, 25, 100, 250,500, 1000. Direct Current: $0.0 .05,5,50,500 \mathrm{ma}$; 0 12 amps ohmmeter: $0-60 \mathrm{~K}, 6 \mathrm{M}, 60$ Megohms, Oecibels: -20 to +56 db. Short Test: Internal Buzzer. Audio Output Jack. Controls: Range Switch, Ohms Adjust. Batteries: 1 type $Z$ cell, 115 -volt.

- SENSITIVE 33 MICROAMPERE $4^{\prime \prime}$ METER
- $1 \%$ PRECISION RESISTORS FOR HIGH ACCURACY
- UNIQUE "BUZZER" FOR FAST SHORT TESTS
- 27 METER RANGES ON 2-COLOR SCALE
- RUGGED MOLDED CASE, MODERN STYLING
- COMPLETE WITH TEST LEADS AND BATTERIES


#### Abstract

The Lafayette TE-60 is a deluxe portable Volt-Ohm-Milliammeter with a high order of accuracy. Completely wired and portable, it provides wide voltage. current, resistance and ob ranges clearly visible on a big $4^{*}$ meter with 2 color calibrations. Sensitivity is 30,000 ohms-per-volt DC and $\mathbf{1 5 , 0 0 0}$ ohms-per-volt AC. All multipliers used are $1 \%$ precision resistors for maximum accuracy and years of dependable service. Sensitive 33 -microamp meter provides full scale readings down to $1 / 4$ volt on DC and 0.05 mllliamps. Features a unique selfcontained buzzer to give you fast in-circult checks on opens, shorts. Audio output jack with DC blocking capacitor. DB scale range of -20 to +56 db referred to 1 -milliwatt on a 600 ohm line. Handsome, dust proof black plastic case. Complete with leads, batteries. Size: $3 \mathrm{~K}_{6} W \times 6 \%_{6} \mathrm{H} \times 23_{4} \% \mathrm{O}$. Shpg. wt., 2 lbs. Imported.

Net 17.95


## NEW! LAFAYETTE TE-58 20,000 OHMS PER VOLT MULTHESTER

## LAFAYETE TE. 1220,000 OHWS PER VOLT HIGK SEASITIVITY MULTITESTER

- 20,000 OHMS PER VOLT DC-10,000 OHMS PER VOLT AC
- RESISTANCE RANGE 0-10 MEGOHMS
- 40- A MOVEMENT 311/2" METER
- MEASURES

CAPACITY TO 0.2 MF color scales. The 40 -microampere D'Arsonval meter movement permits a high input resistance on all ranges: 20,000 ohms per volt on DC; 10,000 ohms per volt on AC. This, plus $1 \%$ tolerance resistors permits the measuring of voltages without unduly loading the circuit, thus preserving accuracy of readings. In addition the extreme sensitivity and superior versatility of this instrument. it features a capacitance measurement range. Measures $0-0.6,6,30,120,600$, 1200 DC volts, $1-6,30,120,600,1200 \mathrm{AC}$ volts, $0-10 \mathrm{~K}, 100 \mathrm{~K}, 1 \mathrm{M}, 10 \mathrm{Megohms}$. $0-60$ microamperes, $0.6,60,600$ milliamperes, -20 to +63 decibels. PLUS one special range, 200 mmf to 0.2 mfd capacity. Employs 2 standard $14 / 2 \mathrm{v}$ penlight batterles. Complete with batterles, test leads and operating instructions. Size $51 / 6 \times 3 K, 1 \times 17 / 90 \mathrm{D}$. Shpg. wt., $11 / 2 \mathrm{lbs}$. Imported
TE-58 Multitester
Net 12.50

A new high-quality. low-priced multitester. Its light weight makes it a perfect


- 20,000 OHMS PER VOLT DC
- 10,000 OHMS PER VOLT AC
- RESISTANCE RANGE 0.60 MEGOHMS
- 40- $\mu \mathrm{A}$ MOVEMENT
- $1 \%$ RESISTORS
- 0-0.6 VOLT DC RANGE FOR AUDIO AND TRANSISTOR WORK
- COMPLETELY WIRED - 28 RANGES

SO MANY OUTSTANDING features AT ONLY
 portable instrument for technicians, servicemen, etc. Rugged design withstands hard use. Features large easy-to-read meter and sensitive 40 microamp meter movement. 1\% tolerance resistors provide extreme accuracy of measurements Housed in rugged bakelite case. Single knob selector and clearly marked positlons permit easy operation. Recessed $2 e r o-0 \mathrm{hms}$ knob adjustment provided. Features sensitivity of 20.000 ohms volt DC, and 10,000 ohms/volt AC. RangesOC volts: $0.0 .6,0.6,0.30,0-120,0.600,0.1200,0.3000,0.6000$ volts ac volts $0.6,0.30,0.120,0.600,0.1200$ volts. Resistance: $0.6 \mathrm{~K}, \quad 3.60 \mathrm{~K}, 0.6 \mathrm{M}, 0.60 \mathrm{M}$ DC current: $0.0 .06,0-6,0-60,0.600 \mathrm{ma}$. Decibels: -20 to +17 ( $0 \mathrm{db}-0.774 \mathrm{~V}$ ). Capacity: $.0001-.01, .005-.20$ mfd. Output ranges: $0.6,0-30,0.120,0.600$, $0-1200$ volts
Complete with heavy duty test probes and battery. Size $6 \times 3 \% \times 13 / 4{ }^{\prime \prime}$. Imported TE. 12 Shpg. wt., $1^{1 / 4}$ lbs. TE-37 Felt-lined carrying case for above instrument. Imported

## SENIOR V.t.V.M. With GIANT $6^{1 / 2 \prime 2}$ METER 2935 NO DOWN <br> ACCURACY- $\pm 3 \%$ OF FULL SCAL <br> - GIANT $61 /{ }^{\prime \prime}$ <br> - olrect reading DB SCALE <br> Not A KitFully Wired!

LAFAYETTE OFFERS OUTSTANDING VALUES IN TEST EQUIPMENT

## MADE IN U.S.A.

A modern, streamlined, accurate VIVM, featuring a giant $612{ }^{\prime \prime}$ meter completely wired and calibrated. D.C. VOLTMETER. Ranges: 0 to 3, 30, $150,300,1500$ volts. $\pm 3 \%$ accuracy of full scale. Input resistance, 11 megohms. ZÉRO CENTER VOLTMETER (for discriminator alignment). Ranges: $0.1 .5,15,75,150,750$ volts. Accuracy $\pm 3 \%$ of full scale. Input resistance, 11 megohms. AC VOLTMETER, rms ranges- 0 to $3,30,150,300,1500$ volts. Peak-to-peak ranges: 0 to 8 , rms ranges -0 to $3,30,150,300,1500$ volts. Peak-to-peak ranges: 0 to 8 ,
$80,400,800$ volts. Accuracy $\pm 3 \%$ of fult scate. OHMMETER: ranges. 0 to 1000 $80,400,800$ volts. Accuracy $\pm 3 \%$ of full scale. OHMMETER: ranges, 0 to 1000
megohms in 5 overlapping ranges. Center scale values- $10,100,1000,100,000$ megohms in 5 overlapping ranges. Center scaie values- $10,100,1000,100,000$
ohms, 10 megohms, DECIBAL METER (for all audio measurements). Ranges: - 10 ohms, 10 megohms, DECIBAL METER (for all audio measurements). Ranges: -10
to $+5,+6$ to $+25,+26$ to +45 decibels. All bases on zero db at 1.73 volts on 500 ohm line. Pilot light indicates when- unit is "on". Complete with D.C. V.T.V.M. probe and cable, pair of standard test leads for ail other services and detalied instructions. Housed in a rugged high-impact case, with color matched etched aluminum panel and portable handle, Size: $5 \times 61 / 2 \times 71 / 2^{\prime \prime}$. Shpg. wt., 6 lbs. TE. 500

## SUPERTESTER

- COMBINATION VOLT-OHM-MILLIAMMETER

- Accurate Measurements of capacity, Reactance, Inductance ONLY $27^{39}$ No Money Down Decibels Also Tests Selenium and Silicon Rectifiers, Silicon and Germanium Diodes
- Giant 61/2" Meter

A versatile and reliable vOM for the engineer, serviceman or technician featur. ing a giant $62 / 2$ inch meter which in addition to the standard volt-ohm readings provides 2 separate BAD-GOOD scales for direct quallty test readings on: all electrolytic condensers from 1 mfd . to 1000 mfd , all selenlum rectifiers; all silicon rectifiers; all germanium dlodes and all silicon dlodes. Also measures capacity, reactance, inductance and decibels. Look at these specifications and you'll see why you need one for your bench. D.C. volts: 0 to $7.5,15,75,150$, $750,1,500$. A.C. volts: 0 to 15, 30, 150,300, 1,500, 3000, D.C. Current: 0 to 1.5, 15, $150 \mathrm{MA}, 0$ to $1.5,15$ amperes. Resistance: 0 to 2,000 ohms, 200,000 ohms; 0 to 20 megohms. Capacitys .001 to 1 mfd ; ; 1 to 20 mfd . Reactance: 130 to 2,600 ohms; 2,600 ohms to 2.6 megohms. Inductance: .35 to 7 Menries; 7 to 7,000 henries. Decibels: 10 to +18 , +10 to $+38,+30$ to +58 db . This superb instrument comes complete with instructions and test leads. Size: $61 / 4 \mathrm{Wx} 71 / 2 \mathrm{Hx}$ $434^{\prime \prime} \mathrm{D}$. Shpg. wt., 5 los.
TE-711
Net 27.83

## CAPACITANCE SUBSTITUTION BOX <br> ONLY <br> 295

- $36^{\prime \prime}$ Color Coded Test Leads \& Clips
- 9 Ranges from . 0001 to . 22 MFD
A must for the serviceman, experimenter or student. Fast accurate selection of any
one of 9 capacitor values from .0001 to 22 MFD . Condensers are porcelain cased one of 9 capacitor values from .0001 to .22 MFD . Condensers are porcelain cased tubular type impervious to moisture and are rated at 600 volts working capacity. 9 capacitance ranges are $.0001,0010, .0022, .0047, .01, .022, .047,1$ plus, 22 MFD. Complete with $36^{\prime \prime \prime}$ red and black test leads and alligator clips. Size: $4 \% / 4 \times 2 \% \times x$ $15 \mathrm{~m}^{\prime \prime}$. Shpg. wt., $11 / 2 \mathrm{lbs}$. Imported
TE16
Net 2.95


## MODEL TE-44 IN-CIRCUIT

 man CAPACIIOR CHECKER
## ONLY $14^{95}$

- CHECKE CAPACITORS IN CIRCUITS WITHOUT DISCONNECTING LEADS - MAGIC-EYE INDICATOR WIDE RANGE-10 MMF TO 2000 MF NOT A KIT - COMPLETELY WIRED ANO TESTID

The TE- 44 allows you to check most capacitors from 10 mmf to 2000 mmf for open or shorted conditions without unsoldering-no teads to disconnect. Just connect the test leads across the component you wish to test, press the switch and note the eye tube's face for an open or short conditien. Checks coupling, by-pass, filter and blocking capacitors. Accurate readings are made in secondsan Important factor in today's complex electronic equipment. In addition the TE. 44 also indicates capacitor leakage. Tests for opens on capacitors of 10 mmf . or more; for shorts up to $2,000 \mathrm{mf}$. Shunted by not less than 10 ohms . If capacitor is intermittent, "magic eye" indicator will flicker Contains a Hartley osclliator circuit. Complete with test leads and instructions. For 117 VAC. Size: 7\% ${ }^{6} \mathrm{~W} \times 5 \mathrm{H} \times 4 \mathrm{~K}_{6}$ "D. Shpg. wt., 5 lbs . Imported. $\qquad$ d. TE. 44

Net 14.95

## DELUXE SIGNAL GENERATOR

- Genometer-7 Signal Generators in one
- RF Signal Generator for AM
- RF Slgnal Generator for FM
- Audio Frequency Generator
- Bar Generator
- Cross Hatch Generator
- Color Dot Pattern Generator - Marker Generator


## ONLY $1773 \begin{aligned} & \text { NO } \\ & \text { MONEY } \\ & \text { DOWN }\end{aligned}$



A versatile alloincluslve Generator which provides all the MADE IN U.S.A. Ing: AM Radio. FM Radio. Amplifiers, Black and White TV Color TV. SPECI. FICATIONS: RF Signal Generator-Provides complete coverage for AM and FM alignment. Generates radio frequencies from 250 KC to 45 MC on funda. mentats and from 35 MC to 120 MC on powerful harmonics. Cross Hatch Generator-Will project a cross-hatch pattern on any TV picture tube. The pattern will consist of non-shifting, horizontal and vertical lines interlaced to provide a stable cross-hatch effect. Variable AF Generator-Provides a fixed 400 cycle sine-wave or a varlable $300-20,000$ cycle peaked wave audlo signal. Dot Pattern Generator-w The dot pattern projected on any Color TV picture tube enables you to adjust for proper color convargence. Bar cen. picture tube enabies you to adjust for proper color convargence. erator-Projects an actual bar pattern of $4-16$ horizontal ba's or $7-20$ vertical needed marker points $1262 \mathrm{KC}, 456 \mathrm{KC}, 600 \mathrm{KC}, 1000 \mathrm{KC},-600 \mathrm{KC}, 2500 \mathrm{KC}$, $3.579 \mathrm{MC}, 4.5 \mathrm{MC}, 10.7 \mathrm{MC}$ ). Complete with shielded leads and operating instructions. Size: $10 \mathrm{~W} \times 7 \mathrm{H} \times 5 \% / 4 \mathrm{D}$. Shpg. wt., 7 Ibs.
TE. 710
Net 37.73

## RESISTANCE SUBSTITUTION



- 24 Resis:ance Ratings
- Two Ranges-Low 15-10K Ohms. High 15K-10 Meg. ohms.
- $36^{\prime \prime}$ Red \& Black Test Leads wi-h Alligator Clips ldeal for laboratory or service application. Substltute res stance values fast and accurately in trouble shooting circuits where values may have changed. Easy to find bias resistance in experimental vacuum tube on transistor circuifs. Slide switch selects two ranges-Low: $15 \mathrm{ohm}-10 \mathrm{~K}$ ohn ( 1 watt reststors) High: 15 K ohm - 10 Megohms ( $1 / 2$ watt resistors). Two rotary switches (12 steps each selects 24 separate resistances. Size $43 / 4 \times 25 \times 15 /{ }^{5 \prime \prime}$. Shpg. wt., $11 / 2$ lbs. Imported
TE-17
Net 3.95


In Every Respect A Professional Test Instrument-Engineered to meet and exceed the rugged standards, accuracy plus required sensitivity demanded in laboratory, industrial and service applications. The KT-174 ofters in this remarkabiy easy-tobulld kit form, a Vacuum Tube Volt Meter that achieves a level of performance and versatility when completed rivaling quatity factory wired and tested equipment. Construction, Circuitry and Components utilized in this kit are of the finest quality extreme accuracy is furnished by the 200 micro-ampere meter movement with balanced-bridge push-pull circuitry. Heart of this circult is a $12 A U 7$ twin triode tube, utilized as a DC amplifier and bridge, with inverse cross-coupled feedback applied to each section. Since the meter movement Is extremely sensitive, the tube is not required to perform outside of its linear capabilities. Operating conditions are regulated to insure accuracy with respect to changes in line voltage -a circuit design feature found only in the most costly laboratory instruments. In addition, high input impedance of 11 megohms is incorporated, preventing the KT-174 from loading down the circuit being tested. Further accuracy is assured by use of precision deposited carbon film $1 \%$ multiplier resistors plus the finest low-leakage type swltches.
Versatility plus ease of operation and construction were the guiding principles in the design of the KT-174... the $41 / 2^{\prime \prime}$ meter is calibrated in an easy-to-read, two color scale incorporating a direct decibel scale plus a zero-center scate-ideal for TV.FM discriminator alignment. Scope terminals are provided at the rear panel for simultaneous wave form observation while making AC measurements; these same monitor terminals also allow the KT- 174 to monitor the output of a signal generator while utilizing the VTVM probe as a signal injector, (a prime example of the versatility designed into the KT-174). Unlike other VTM's. Calibration Controls (AC, Low
$A C, D C-, D C+$ and $A C B a l$ ) are readily accessible at the rear panel withour removing the cover. Front panel controls include function switch ( $O \mathrm{ff}, \mathrm{AC}, \mathrm{DC}-\mathrm{DC}+0 \mathrm{hms}$ ); Range Switch $(.05 \mathrm{v}, .15 \mathrm{v}, .5 \mathrm{v}, 1.5 \mathrm{v}$-RX1, 5 v RX10, $15 \mathrm{v}-\mathrm{RX} 100,50 \mathrm{v}$-RX1000, 150 v RXIUK, 500 V -RX100K, 1500 V -RX1M); Zero Adjust and Ohms Adjust. The meter movement is shorted in the OFF position to prevent possible damage to the pointer during transit. In addition to utlizing the KT-174 as an Electronic Onmmeter, DC Voltmeter and $A C$ Voltmeter, special Low AC ranges are incorporated providing noise and gain measurements as low as 1 mv for audio and high-fidelity applications-previously these measurements would normally have required a separate instrument. A specially designed Lafayette Omni-Probe with shielded low loss cable performs all functionsfast trouble free push-button selection for AC or OC ohms.
Unquestionably The Finest VIVM we have ever offered, the KT-174 is an even greater value because you save by building it yourself. Utilizing a printed clrcuit board, this is an amazingly simple kit to build, with most of the wiring completed for you. Lałayette's famous step-by-step instructions and huge pictorial diagrams assure ease of assembly. Attractive dark grey front panel is set in a contrasting textured light grey metal case. Complete with tubes, battery and special Lafayette omniProbe. An RF probe in easy-to-build kit form (KT-205), designed for the KT-174 or any 11 meg ohm impedance V.T.V.M. is avallable at additional cost. Size $81 / 2 \times 6 \mathrm{~W} \times$ $5^{\prime \prime} \mathrm{D}$. For $105-125$ volts, 60 cycles AC. Shpg. wt., 8 lbs.
KT-174 Kit Form
Net 44.50
TE. 31 Same as above, wired and tested
KT-205 RF Probe Kit For KT-174 and any other 11 megohm Impedance VIVM

Net 57.00
Net 3.74

OC VOLTMETER
Ranges: $0-1.5,5,15,50,150,500,1500 \mathrm{~V}$ Input Resistance: All ranges- 11 Megohms Sensitivity:-1.5V Range: 7.3 Megohms/Volt Accuracy: $\pm 2 \%$ of full scale at 117 VAC -deviation due to line voltage variation between $105-125$ volts Is negligible

Low AC
AC VOLTMETER
Ranges: RMS. 0 to $50 \mathrm{mv}, 0-150 \mathrm{mv}, 0.500 \mathrm{mv}$ Peak-To.Peak: $0-140 \mathrm{mv}, 0-420 \mathrm{mv}, 0.1400 \mathrm{mv}$ Accuracy: $\pm 5 \%$ of full scale

## COMPARE THESE SPECIFICATIONS

Input Impedance: 1 megohm at 1 KC
Freq. Response: $\pm 1$ do from 20 to $300,000 \mathrm{cps}$ from 600 -ohm source
Regular AC Ranges: RMS-0.1.5, 5, 15, 50, 150, 500, 1500 volts
Peak-To-Peak: $0.4 .2,14.0,42,140,420,1400,4200 \mathrm{~V}$ Accuracy: $3 \%$ on all ranges except $5 \%$ on 0 to 5 V Oecibels: -10 to +5
Freq. Response: $\pm 1$ db 20 cps to 4 mc from 600. ohm source
Input Impedance at IKC: $0.1 .5 \mathrm{v}, 5 \mathrm{v}, 15,50.83 \mathrm{Meg}$. $0.150 \mathrm{v}, 1.3$ meg. $0-500 \mathrm{v}, 1500 \mathrm{v}-1.5 \mathrm{meg}$.

## OHMMETER

7 RANGES: $0-1000$ RX1, RX10, RX100, RX1000, RX10K, RX100K, RX1M using precision $1 \%$ dividing resistors. Metef Movemient: 200 - $\mu$ a for full scale deflection

## TUBES:

1-6BN8 AC full-wave peak rectifler and low AC amplifier; 1-12AU7 iwin triode meter OC amplifier and balanced bridge. Incorporates Half Wave Selenium Rectifier and Well filtered fused Power Supply.


An indispensable test instrument for the service technician experimenter or hobbyist. The KT-202 is a high quality V.T.V.M. in easy-to-build kif form which olfers features unusual at this low price. It is a highly accurate DC voltmeter, AC voltmeter and ohmmeter empioying a giant $6^{\prime \prime}, 400^{\prime \prime} \mu$ a meter with clear black and red scales.
With a high input impedance of 11 megohms, this V.T.V.M. can accurately measure DC voltages up to 1500 volts while presenting a negligible load to the clrcuit under test. This is especially important in circuits involving high resistances (such as audio circuits) since any appreciable current drawn by the meter would cause voltage drops which would Invalidate the readings obtained. As a wide band AC voltmeter, this unit is one of the most versatile test instruments the techniclan or hobbyist can own. It will measure AC peak-to-peak voltages up to 2,000 volts on any waveform, be it sinusoidal. sawtooth, square or of other complex form; all this from 30 cycles to above 5 Mc -without any accessory probes! AC RMS voltages may be read directiy up to 1.500 volts if the waveform is sinusoidal. The wide frequency response makes this meter ideal in audio, radio and TV applications. Resistances can be read directly on the ohms scale from 0.2 ohms to 1,000 megohms. A direct reading decibel scale is callbrated from - 10 to +18 db (reference 1.73 volts. 6 mw into 500 ohm line). Can be used to obtain

## KT-202 Lafayetir V.T.V.M. KIT

 with ${ }^{6 "}$ MeterMOOEL KT. 202
$26^{95}$

NO MONEY DOWN
buy dN tIme see page 412

- Wide Band-AC Measurements on any Waveform from 30 Cycles to Dver 5 MC. Without Additional Probes or Accessories
- 11 Megohm input Resistance-Negligible Loading Effects on DC Circuits
- Direct Reading DB Scale
- Balanced Push.Pull Amplifier-Isolates and Protects Veter
- Etched Eircuit Design Simplifies Construction
- Selected $1 \%$ Zero Temperature Coefficient Multiplier Resistors for Dependable, Accurate Readings
- Selenium Rectifier in Power Supply Reduces Effects of Heat on Component Values


## - accurately measures ac peak-to.peak voltage, aC RMS VOLTAGE, DC VOLTAGE AND RESISTANCE <br> - GIANT G" FULL-VIEW METER WITH EASY-TO-READ TWO-COLOR SCALES

readings up to +58 db . In addition, zero center measurements can be made, for the alignment of FM and TV detector circuits
The KT-202 utilizes a $12 A U 7$ balanced push-pult DC amplifier and two 9006 tubes as peak-topeak voltage rectifiers. The meter is lsolated from the measuring circuits by the DC amplifier, making it virtually imposslble to burn it out. Multipller resistors are $1 \%$ zero temperature coefficient types, to assure maximum accuracy and minimum variation due to heat. Front panel conlrols: Function Selec. tor-selects Pwr. 01f. A.C.V./P.PV, D.C.V. Neg., D.C.V. Pos., Ohms; Range Selector - for 7 voltage and resistance ranges; Ohms Adjustment; Balance (zero) Adjustment. There are 3 probes: Common, A.C.V. OOhms, and a shielded D.C.V. probe with 1 megohm isolating resistor.
printed circuitry makes construction of this kit easy. Selenium rectifier trans former-operated power supply for $110-120$ VAC, 60 cps. Dimensions: $71 / 2 \mathrm{H} \times 61 / 2 \mathrm{~W}$ $\times 5^{\prime \prime D}$ overall. Kit comes with $11 / 2$ volt battery for onmmeter circult and complete instructions. Shpg. wt., 7 lbs.
KT-202
Net 26.95
Accessory RF probe for KT-202 or other 11 megohm V.T.V.M. KT-205
Carrying case for KT-202, complete with hande.
KT-203 Shpg. wt., 1 ib
Net 3.75
Net 2.95

## SPECIFICATIONS

DC VOLTMETER RANGES: $0.3,15,75,150,300,750,1500$ volts. Input resistance: 11 megohms ( 1 megohm in probe) on all ranges.

AC VOLTMETER RMS RANGES: $0-3,15,75,150,300,750,1500$ volts. PEAK-TO-PEAK RANGES: $0-8,40,200,400,800,2000$ volts. DECIBEL RANGES: -10 to $+18 \mathrm{db},+10$ to $+38 \mathrm{db},+30$ to +58 db . Response: 30 cycles to above 5 Mc .

OHMMETER RANGES: $0-1000,10,000,100,000$ ohms; $0.1,10,100$, 1000 , megohms. CENTER SCALES: $10,100,1000,10,000,100,000$ ohms, 1 megohm, 10 megohms.

TUBES: 1-12AU7 twin triode balanced meter bridge, 2-9006 peak-to-peak rectifiers, 1 power supply selenium rectifier. POWER: 110.120 VAC, 60 cycles.

# Lafayette Deluxe HE-40 4-Band Shortwave Broadcast Receiver 

4-BAND Power Packed Superheterodyne Circuit Covering the Broadcast Band (5501600 KC ) and Shortwave. From 1600KC to 30MC (1.6-4.4MC, 4.5-11MC, 11-30MC).

## HE-40 Factory Wired and Assembled

Built-in "S" Meter

WHEADSET and PHONE PLUG

- Absolutely Free with purchase of HE-40 Receiver


## 4995

 NO MONEY DOWN $\$ 5$ monthlyFull details, Pg. 412

Made in U.S.A.


- Improved Sensitivity - Electrical Bandspread - Bullt-jn "S" Meter - AVC - Noise Limiter • BFO - Phone Jack - Big 5" Speaker


## SMARTLY STYLED DURABLE METAL CABINET

Now, you can tune in the world with the fabulous Lafayette HE-40 BC-SW receiver. Keep up to date with on the spot news coverage. Power packed superheterodyne circuit covers the broadcast band ( 550.1600 KC ) and shortwave from 1600 KC to 30 MC in four bands. The perfect radio for shortwave listeners. Features a precision electrical bandspread with stide rule bandspread dial, 0 - 100 logging scale for easy self-calibration. Separate bandspread tuning condenser and calibrated "' $\$$ " meter for accurate tuning. Meter can be electrically adjusted by rear panel control. Sensitive circuit features AVC (Automatic Volume Control) to minimize blasting and/or fade out; Automatic noise limiter to reduce annoying interference. includes convenient front panel B.F.O./selectivity control to allow for reception of (telegraphy). Also has convenient front panel headphone jack which automatically disconnects speaker. Jack can be used to drive an external speaker. Bulti-in $5^{\prime \prime}$ PM speaker provides big, clear sound on all stations. Useful tone switch is included to vary sound to suit conditions, or taste. Three antennas (ferfite loop for broadcast band, adjustable $58^{\circ \prime}$ whip for short wave and wire antenna) provide high sensitivity and flexibility for best reception. Low impedance phones are recommended for use with this unit. Attractively styled steel cabinet with silver trim. Powered by 4 tubes plus a selenium rectifier. 1 -12BE6; Converter, 1-12BA6; if Amplifier, B.F.0., 1-12AV6; Audlo Amplifier AVC detector: 1-50C5; Audio output. Operates on $105 \cdot 125 ; 50 / 60$ cycle $\mathrm{AC} / \mathrm{DC}$. Size $131 / 2 \mathrm{~W} \times 57 / \mathrm{BH} \times 8 \frac{1}{4} \mathrm{~A}^{\prime \prime} \mathrm{D}$. Audio output. loperate
Shpg. wt., 12 los. Imp.
Lafayette Deluxe ME-40 4-Band Shortwave Receiver plus free Headset \& Phone Plug. HE.78M

# New Lafayette Deluxe FM Communications 

 5995 Receivers
## NO MONEY DOWN

 $\$ 5$ monthlyFor State, County and Municipal Police-Fire Departments, Trucking, Railroads, Highway Maintenance, Forestry Conservation, Petroleum and Industrial Activities.
Lafayette presents a truly unbeatable value in these two deluxe tuneable police recelvers. Choose the model with the band you are most interested in monltoring the 30.50 or the 152.174 MC bands - whatever you want to monitor in the way of emergency, commercial or industrial communications. Powerful 8 -tube performance with a 3 -gang tuned $n$ stage really pults in stations. Other quality features are: transformer type power supply, excellent sensitivity, ( $4 \mu v$ or less for 20db of quieting), reliable, bullt-in ati-electronic squelch for absolute quieting (adjustable from the front panel), built-in $5^{\prime \prime}$ speaker for clear voice prolection, and as an added convenience, an illuminated slide rute dial for night operation, An external speaker may be added if desired. Housed in an attractive metal cabinet... mukes a handsome addition to any home or office. Requires 105-125 volts. 60 cycies $A C$ only. Size: $111 / 4 W \times 77 / 6 \mathrm{H} \times 61 / 2^{\prime \prime} \mathrm{D}$
H8-75WX $30-50 \mathrm{MC}$ Shpg. wt., 14 lbs

## ANTENNAS FOR LAFAYETTE FM COMMUNICATIONS RECEIVERS

## Window Mount Antenna, 30-50 MC.

 Shipg. wt., 3 lbs. HE.959WNet 7.35
HE. 960

# LAFAYETTE Professional-Quality 8-TUBE AMATEUR COMMUNICATIONS RECEIVER 

# 4 bands 

- $550 \mathrm{kc}-1600 \mathrm{ke}$ - $4.8 \mathrm{mc}-14.5 \cdot \mathrm{mc}$ - $1.6 \mathrm{mc}-4.8 \mathrm{mc}$ • $10.5 \mathrm{mc}-30 \mathrm{mc}$


Outstanding Bandspread, Selectivity with a built-in 0 -multiplier, and sensitivity combine to make the HE-30 one of the "hottest" general coverage bandspread receivers we have ever offered. For the crowded amateur bands-illuminated Sllde Rule Dial, bandspread with markings every 5 KCS on 80 and 40 meters (IT TAKÉS 16 REVOLUTIONS OF THE BAND.SPREAD DIAL TO COVER EACH OF THESE BANOS), Every 20 KCS on BAND.SPREAD DIAL TO COVER EACH KO THESE BANDS), every 20 KCS on
20 and 15 meters, and every 50 KCS on 10 meters, plus an edgewise S-meter. For the swi-a 0.100 logging scale for "instant reset" to a desired station plus a husky 5 Y 3 Rectifier) circuit provides an RF stage with an antenna trimmer for peak pefformance PLUS 2 IF stages for improved selectivity. The HE 30 utilizes a 5 Y 3 tube in a transformer Full Wave rectifier power supply for performance with a minimum of hum. Recelver sensitivity- 1.0 microvolts for 10 db Signal-to-Noise Ratio. The Bullt-in BFO can be used to separate CW stations by means of the pitch control, while the Q-multiplier adds the selectivity needed for crowded phone band operation. Front panel controls: FUNCTION SWITCH, AUOIO GAIN. SELECTIVITY (Q-MuItiplier). FREQUENCY (BFO). BANO SELECTOR. IF GAIN. TRIMMER, AVC-MVC SWITCH, ANL SWITCH, MAIN TUNING BANOSPREAD TUNING, and headphone Jack. Selectivity60 db at $10 \mathrm{KC}, 0.8 \mathrm{KC}$ @ 6 db (with Q -multiplier), IF - 455 KCS . Speaker External PM type (not supplied). 4 or 8 ohms Impedance, Audio Output-1.5 Watts. Tubes-68A6-RF Amplifier, 6BE6 Mixer, 68 E6Oscillator, 6AV6 - Q-Multipller-BFO, 2-6BA6 - IF Amplifier. 6AV6 -

Detector, AF Amplifier, ANL, 6AQ5-Audio Output, 5Y3-Rectifier, Slze$7 \mathrm{H} \times 15 \mathrm{~W} \times 10^{\circ \circ} \mathrm{D}$. For $105-120,60 \mathrm{cDS}$ AC, 50 watts. Imported. HE-30WX Shpg. wt., 25 lbs.
Lafayette Professional-Quallity 8 -tube Communications Receiver HE-30, Whred. plus Matching HE-48 Speaker.
HE. 79WXM
Net 79.96

## KT-320 SEMI.KIT

This receiver is also available in kit form with all major components and front end premounted and pre-calibrated. All other components supplied for easy mounting. Imported
KT-320 Semi-Kit
Net 64.55
Lafayette professional quality Communications Receiver, semi-kit KT-320, plus HE-48 matched speaker.
KT-321wXM
Net 64.96

## RECEIVER SPEAKER MATE

MATCHING $3 \times 5$ speaker in handsomely styled cabinet to match HE-30 Gives clean audio response. 8 ohm impedance. Size, $73 / 4 \mathrm{H} \times 31 / 2 \mathrm{~W} \times 5^{\prime \prime} \mathrm{O}$ Shpg. wt., 4 los. Imported.

# Teul deluXe Lafayetit PROFESSIONAL-QUALITY 14-TUBE AMATEUR COMMUNICATIONS RECEIVER 

550-1600 Kc 5 BANDS 1.6-4.8 Mc 10.5-30 Mc 4.8-14.5 Mc

48-54 Mc

NO MONEY OOWN

## Dual Conversion on 6 Meters

Lafayette's Newest Professional-Type Communications Recelver, the HE-80 features outstanding sensitivity, Q-Multiplier seiectivity and electrical baridspread. Sensitivity is 1.0 Microvalt for $10 \mathrm{db} \mathrm{s} / \mathrm{n}$ ratio. Selectivity is variable from 60 db to 93 db in Q-Multiplier operation with $\pm 10 \mathrm{KC}$ detuning. Calibrated electrical bandspread on amateur bands 80 thru 10 meters ( 6 meters is tuned with main tuning control). Dual conversion on 6 meters provides average of 50 do image rejection. Other features include $0-100$ logging scale for "instant do image rejection. Other features include $0-100$ logging scale for "instant
Reset" to desired station, antenna trimmer for optimum performance on all Reset" to desired station, antena trimmer for optimum performance on all
bands, built-in edgewise " S " meter, special recording jack in rear permits easy connection to tape recorder, remote control socket on the back allows simultaneous control of HE-80 with a transmitter. Front Panel Controls: AF Gain, RF Gain, 5-Position Function Switch, 8F0 Frequency, Band Selector, Q-Multiplier Selectivity, Q-Multiplier Frequency, Band Spread Tuning. Main Tuning, Antenna

Trimmer, Power On-Off Switch, Mvf-AVC Switch, Rec-Send Switch and Headphone Jack. If - 455 KC . Audlo Output - 1.5 Watts. Dutput Impedance -8 and 500 ohms (speaker not supplied). Tubes: 4-6AQ8, 3-6BA6, 2-68E6, 1-6BL8, 1-6AL5, 1-6A05, 1-6CA4, 1-0A2. SIze: $17 W \times 7 / 2 \mathrm{H} \times 10^{\circ} \mathrm{D}$. Shpg. Wt., 28 l0s. imported HE-80WX Less Calibrator Crystal
HE-81L Optlonal Calibrator Crystal, 100 KC , Type HC/13U HE-195wXM Lafayette Professional-Quality

Communications Recelver HE-80 plus Matching HE-48 Speaker
MATCHING $3 \times 5^{\circ}$ speaker RECEIVER SPEAKER MATE
matching $3 \times 5^{\circ}$ speaker in handsomely styled cabinet to match HE-80. Gives clean audlo response. $8=0 \mathrm{hm}$ impedance. Size: $77 / \mathrm{H} \times 31 / 2 \mathrm{~W} \times 5^{\prime \prime} \mathrm{D}$. Imported, Shpg. wt., 4 los. HE-48

Net 129.50

- 14-Tube Superheterodyne Circuit
- Extra RF Stage, Mixer/Osc For Dual Conversion On 6 Meters
- 1 RF Plus 2 IF Stages For High Gain Reception On All Other Bands
- New Product Detector Circuit For Improved SSB Reception

- Separate BFO And Q-Multiplier Circuits (Can Be Used Simultaneously)
- Crystal Calibrator For Checking Receiver Calibration Markings - Improved Automatic Noise Limiter
- Voltage Regulated Power Supply


## Designed for Today's

## Congested Amateur Bands

## LAFAYETTE MODEL TE-18 GRID DIP METER

## COMPLETE WITH ALL COILS FOR ALL FREQUENCY RANGES FROM 360 KC TO 220 MC

- Compact-True One-Hand Operation
- Covers 360 Kc to 220 Mc
- Functions as a Grid Dip Oscillator, Absorption Wavemeter and Oscillating Oetector
- Completely Wired - Not A Kit

The most versatile and indispensable plece of test equipment an amateur can own. Used as a grid dip oscilititor, the TE-18 can determine the resonant frequencies of tuned circuits, detect stray resonances in transmitters, check neutralization, etc. If coils are being wound for home-built equipment, the TE-18 can check their frequencies in tuned circults. As an absorption wavemeter the unit will determine the fresorption wavemeter the unit will determine the fre-
quencles that are being radiated by the transmitter; will detect harmonics. parasitic osclliations and their

Frequencles, etc. Frequency range 360 Kc to 220 Mc , in 8 accurately calibrated ranges. Coils are color-coded and marked in Mc by frequency range, for easy identification. Smooth planetary drive tuning mechanism with $4: 1$ reduction. Grid current meter has a $500 \mu \mathrm{a}$ movement. Uses a GAF4A tube, powered by a built-in, transformer-operated power supply with selenium rectifier. For 117 V . AC, 50.60 cps . Dimensions: $71 / 4 \mathrm{Hx}$ $2 y_{4} W \times 2^{\prime \prime} \mathrm{D}$. Shpg. wt., 3 lbs. Imported
TE-18

## Page 266

## LAFAYETTE Deluxe 6-Meter TRANSCEIVER HE•45•B

HIGH EFFICIENCY-UP TO 100\% MODULATION! NEW MODULATION and POWER TRANSFORM. ERS plus 7868 POWER PENTODE!
NEW HEAYY-DUTY COMMUNICATIONS VIBRA. TOR!
front panel antewna loading controls! NEW! STANDBY SWITCH. VFO POWER JACK!
This deluxe tatayette 6 -meter transceiver provides maximum conventence and flexibility in elther mobile or fixed operation. The supepheterodyne receiver section employs an RF stage with peaking control located on the front panel, and two I.F. stages at 1650 KC for $1 \mu \mathrm{~V}$ panel, and two 1.F. stages at senty and 45 db image rejection. A calibrated llluminated vernier tuning dial tunes the entire 6 meter band from 50 to 54 Mc . Features high efficiency $100 \%$ modulation; adjustable series gate nolse limiter; built-in speaker; llluminateo panel meter which serves as an " s " meter, or as direct relative power output meter. Transmitter section employs a 608 oscillator and buffer/multiplier, driving a 2 E26 final with a plate input of approximateiy 14 watts on AM. Has PI-network coaxial output, and front panel antenna loading controls; sockets for 8 Me fundamental crystals plus an input for external VFO on the front panel selected by 3 . position selector switch. A spotting switch is provided for zero-beating or for locating receiver frequency. VFO power jack on the rear of unit accepts Lafayette NE-61A VFO. Pull-out Standby switch for added frequency stability. A built-in dual supply for 117 VAC and 12 VDC with a heavy-duty communications vibrator makes the HE-45B excellent for mobile as well as for fixed station operation. Tube complement: 12BA6 RF amplifier, 6U8/6EA8 osc/mixer, 12BA6 1st IF amp, 6U8/EA8 2nd IF amp./1st audio, 6CN7 detector/noise limitef, 7868 audio output and transmitter modulator, 6U8/6EA8 transmitter oscillator and buffer/muitiplier, and 2 E26 transmitter final amplifier. Housed in a rugged. low-sithouetted case with attractive front metal panel, the HE-458 comes complete with a dependable push-to-talk ceramic microphone, crystal for 50.12 Mc , detachable mounting bracket, and all power cables. Only $12 \times 5 \times$ $81 / 2^{\text {"D }}$. Shpg, wt., 15 lbs. For 117 VAC/ 12 VDC HE-45-BWX

Net 119.95


- Highly Sensitive Superheterodyne Receiver Section for 50-54 Mc - Minimum Drift Circuitry - 3-Stage, 14 -Watt Transmitter with 2E26 Final - Spotting Switch for Zero-Beating and for Positive Receiver Frequency Location - Pi-Network Transmitter Output - Illuminated Panel Meter for " $S$ " Readings and Direct Indicator of Relative RF Power Output - Effective Series Gate Noise Limiter - Built-In 117 VAC and 12 VDC Power Supplies


## $119^{95}$ <br> NO MONEY OOWN



NEW! LAFAYETTE 6-METER VFO MODEL HE-61A Now... with Shield and Ceramic Coil Forms for Minimum Drift

- NOT A KIT-FULLY WIRED
- HIGHLY STABLE OSCILLATOR CIRCUIT


A deluxe 6-meter Frequency Oscillator designed for high stability and versatility. A High-Q Clapp oscillator circuit assures maximum performance. An OA2 VR tube further eliminates any effects due to line voltage variation. Operating in the 4 to $41 / 2$ Megacycle range, the output frequency is 8 MC . Ferrite tuned coll output is ap proximately 10 volts. The HE-61A can be used with any proximately 10 voits. The he-61A can be used with any transceiver which has a standard 8 MC crystal. Cable
with 5 -prong power plug. Instructions supplied for units not equipped with 5 -prong VFO jack. Also supplied with
cable and standard crystal plug for VFo input. The dial is calibrated from $50-54$ megacycles and is illuminated for your tuning convenience. Precision planetary drive mechanism with single knob contro of $180^{\circ}$ rotation. Tube complement consists of one 12BA6 oscillator and an OA2 Voltage regulator. Furnished complete with cable and instructions. Size: $33 / 4 \mathrm{~W}>43 / 4 \mathrm{H} \times 41 / 4^{\prime \prime} \mathrm{D}$, Shpg. cable and
wt. 3 los.
HE.61A
Net 19.95

## DELUXE LAFAYETTE 6-METER GROUND PLANE ANTENNA

- The Ideal Antenna for Your 6-Meter Base Station
- Solid Aluminum Radials Ko" Diameter, 58" Long
- Accepts PL-259 Connector


An outstanding deluxe 6 meter base station antenna covering the 50-54 MC Band. Solid aluminum radial $\&$ radiatop with \% diameter - radials are $58^{\prime \prime}$ long radiator is $554 \mathrm{~m}^{\prime \prime}$ long. Radials have a $45^{\circ}$ droop. Ac. cepts $12 / 4^{\prime \prime}$ tubing. RG-58/U cable and PL-259 Con. nector. Shpg, wt., 4 lbs.
HE-987WX
Net 9.95

LAFAYETTE NEW UNIVERSAL 6-METER AND BROADCAST MOBILE ANTENNA


## LAFAYETTE ALL STAINLESS STEEL 6-meter mobile antenna

- 58 in. Stainless Steel Whip For Optimam 6 -Meter Performance - Heavy-Duty Chrame Plated Stainless Steel Spring and Swivel
Ball Jointed Mount Base

Chrome swivel ball mount base designed to be mounted on aly surface. Stainless steel spring holds rod in properly ad justed position and prevents rod damage from shocks and bljws. Staintess steel whip for maximum resiliency and strength. Shpg, wt., 4 lbs. Imported NE.49W

# SUPERB LAFAYETTE STARFLITE 90-WATT TRANSMITTER KIT <br> <br> FOR GENERAL AM PHONE OR CW 

 <br> <br> FOR GENERAL AM PHONE OR CW}


MADE IN U.S.A.


## SPECIAL BONUS FOR ic

With purchase of KT-390wx re ceive a Wen "100K" Soldering Gun Kit including 100 watt gun plus extra plastic tile cutting tip and 5 feet of rosin core solder, Reg. Cat. Price 5.83
13 MAGAIINE, NOVEMBER 1962
"On the air rests proved |"It makes a swall rig for the ham who'll want this liftle transmitter to be extremely safisfactory.
"It makes a swall rig far the ham who'll want
to keep it around as a sandby rig, or who'll
use it portable on Field Day or vecation."

## SPECIFICATIONS

POWER INPUT: 90 watts peak; OPERATION: CW, AM phone-crystal or VFO control; BANO COVERAGE: 80 thru 10 meters; ANTENMA COUPLING: Pi-network into low-pass filter; JUBES: 6146, (2) 6CL6, 12AX7, 60E7, POWER REQUIREMENTS: $105-125$ volts, $50-60 \mathrm{cPS}$ AC @ 225 watts.
The new Lafayette Starflite Transmitter kit was designed to megt the needs of the greatest number of amateurs-General AM Phone or CW. Easy to build, its many quality design features offer superior engineering and premium quality components.
The Starflite operates on a power Input of 90 watts. Single.knob band. switching provides instant coverage of 80 through 10 meters. Front Panel Controls include: Final Tuning: Final Leading: 6.Position Crystat/VF0 Selector Switch; 5-Position Mode Switch; Drlve Level; Grid/Plate Meter Switch. Controlled-carrier modulator permits almost $100 \%$ of the CW Input to be used on AM peaks, Grid-block keying provides chirp-free operation; a rugged, efficlent full-wave sillicon diode power supply effects extremely low output ripple for cleaner CW transmission. Other quality features include an electron-coupled plerce oscillator, capacitance bridge neutrall. zation of the 6146 final and a three-stage low-pass filter. An Iltuminated edgewise D'Arsonval panel meter indicates final grid or plate current for easy tune-up. Pi-network output provides the proper impedance match between the plate circult and any 50.72 ohm coaxial antenna. When VFO operation is desired, the output of any external VFO may be connected to the VFO input jack in the rear. Tube Complement: 1-6CL6 Crystal Osclilator; 1-6CL6 Driver, 1.12AX7/ECC83 Speech amplifier; 1-6DE7 Modulator; 1.6146 Final Amplifier, Clearly written, profusely Illustrated Instruction manual simplifies assembly. Size: $131 / 6 \mathrm{~W}^{\prime} \times 1 / 4 \mathrm{H} \times 12^{\prime \prime} \mathrm{D}$.
KT-390wX Shpg. Wt., 28 lbs.
Net 79.50
WE.194WXM Lafayette Starflite 90 -Watt Transmitter KIt plus Wen ${ }^{\prime} 100 \mathrm{~K}$ " Soldering Gun Kit

Net 79.51
"Eighty dollars, ninety watts, Phone and CW. Those are the things that make the new lafayette Startlite KT-390 Transmitter a really desirable piece of gear for the ham shack."

# NEW! LAFAYETTE "PRECON" 

## AMATEUR PRESELECTOR CONVERTER ONLY <br> 

NO MONEY DOWN Converts Your Receiver to Dual Conversion Operation - Crystal-Controlied - For 80-40-20-15-10 Meter Bands - As a Converter-Converts Your Receiver to Dual Conversion Operation - Improves Selectivity - Widens Band Spread - High Signal-to-Noise Ratio - Improved Image Rejection Self-Powered Modern Styling

## SPEC|F|CATIONS

80, 40 meters preselector only. 20, 15, 10 meters preselector and convertor. GAIN: Preselector, 36 db @ 80 meters; Convertor, 22 db @ 20 meters. OUTPUT FREQUENCY: $\mathbf{3 . 5 0 - 3 . 8 5 \mathrm { MC }}$ on 20 M band, $3.50-3.95 \mathrm{MC}$ on 15 M band, 3.50-5.20MC on 10 M band. TUBES: 2-6BAG, 1.68LB. CONTROLS: Antenna Trim Function, Band Switch and Gain.
Now Lafayette offers you an opportunity to improve your receiver at littie additional cost. The "Precon" is a crystal-controlled dual function unlt for the price of one. As a preselector, it can be used ahead of any recelver to greatly imprcve gain, mage rejection, and sensitivity Covers the often used $80,40,20,15$ and 10 .meter mage rejection, and sensinita covers and 2 , ises and amateur bands. Tuned interstage circuits and 2 stages of RF amplif.cation assures a high signal-to-noise ration...pulls in weak stations like they were around the
cornerl A signal boost of several S-units will be immediately noticed. As a converter, your receiver's range can be extended to 30 MC . Complete band coverage is avallable with simple bandswitch. Sensitivity and stability are excellent. Antenna trimmer on front panel. 3 crystals are included for 20, 15 and 10 meter bands. installation is simple. $52-0 \mathrm{hm}$ antenna co-axial connector is bultt-in. PL-259 connector required for output cable. Attractive, modern steel cabinet with 4 rubber feet. Operates on 117 V $50 / 50$ cycles. AC. Size: $10 W \times 6 \mathrm{H} \times 8^{\prime \prime} \mathrm{D}$.
ME.73 Shpg. Wh. 10 bs Imported

# NEW! LAFAYETTE "STARCHIEF" VFO 

 440NO MONEY DOWN Buy on Time see page 412

- Highly Stable
- Uses Clapp Oscillator
- Self.Powered
- Calibrated 80 thru 6 Meters
- Completely Wired and Tested
- Attractive Styling


## SPECIFICATIONS

FREQUENCY COVERAGE: $80 \mathrm{~m}(3.5 \mathrm{MC}-4.0 \mathrm{MC}$ ), 40 m ( $7.0 \mathrm{MC}-7.3 \mathrm{MC}$ ), 20 m ( 14.0 MC 14.35 MC ) 15 m ( $21.0 \mathrm{MC} \cdot 21.45 \mathrm{MC}$ ), 10 m ( $28 . \mathrm{CMC}-29.7 \mathrm{MC}$ ), 6 m ( $50.0 \mathrm{MC} \cdot 54.0 \mathrm{MC}$ ). OUTPUT FREOUENCY: 3.5 MC and 7 MC for $80-10$ Meters, 8.5 MC for 6 Meters. OUTPUT POWER: 2.5W max.
A rugged, high quality variable frequency oscillator which is exceptionally stable The "Starchlef" VFO features a Clapp oscillator noted for its drift-free characteristics. All heat producing components are mounted away from the osclllator which is also completely shielded. Frequency stability after a short warmup is insured by quality temperature compensated oscillator components. Preclsion dial drive glves you precise tuning control over the 6 amateur bands. . . 80, 40, 20, 15, 10 and 6 meters. The crystal oscillator may be calibrated with a 3.5 MC calibrating crystal from the front panel This front panel crystal socket allows instant arystal crystal from the front panel. This front panel crvstal socket allows instant erystai selection without changing transmitter connections. The built-in power supply with an OA2 voltage regulator tube further assures the excellent low-drift performance. Ouput voltage to 20 volts on 80 meters makes this unit adaptable to many transmitters. Tube complement: 6BA6 oscillator, 6BA6 buffer, 6AQ5 power amplifier, OA2 voltage stabilizer. Housed in an attractive steet cablinet for maximum mechanical stability. For 117 volts $50 / 60$ cycles AC . Size: $83 / 4 \mathrm{Wx} 73 / 4 \mathrm{Hx} 10^{\circ} \mathrm{D}$. HE-74 Shpg wL. $131 / 4$ lbs. Imported

Net 44.50

## LAFAYETTE TM-59'er "S" LAFAYETTE RADIO FIELD METER INDICATOR



- Now For Hams. SWL's and CB'ers-A Signal Strength Meter Using VTVM Principles
- Easy To Install and Operate
- Magnetic Feet For Mobile Dashboard Mounting
- Sensitivity and Zero Adjust Controls

Designed for use with any superheterouyne repedance high ingut circuit which produces no detrimental loading effect upon the receiver. Meter is calibrated in " 5 " units from 1 to 9 , and in db up to 30 db over $\$ 9$. Includes zero adjust and sensitivity controls. Partial peak clipping is provided for noise limiting. Installation is simple-only 5 leads to connect for input, $B+$, fllament and ground. The use of a 12AU7 tube makes the TM-59'er adaptable to either 6 or 12 volt equipment, and to receivers using 150 ma or 300 ma series string filament systems. Requires 150-200 VDC for B+ which can be "stolen" from most receiver power supplies. Complete with $12 \mathrm{Au7}$ and installation instructions. Imported. $12 \mathrm{AU7}$ and installation inst
TM.59A Shpg. wt., 2 bs.

695

A MUST FOR ALL HAM AND CB OPERATORS

- Continuously indicates transmitter output
- Rugged 200 ma meter movement
- Requires no Electricity, Batteries, or Transmitter Connection
- Powerful Magnet on Bottom Plate for Mounting on Dashboard or Other Metal Surface
With this rugged, radio field indicator you can check performance of your marlne, moblle or fixed trans. mitter. Features a $200 \mu \mathrm{a}$ meter movement with varlable sensitivity control. Earphones can be plugged in for an aural check of output. Antenna extends from $31 / 4^{\prime \prime}$ to $101 / 4^{\prime \prime}$. Powerful magnet on bottom plate allows easy mounting on car dashboard or metal surfaces. Use anywhere . .. requires no electricity or batteries. Dimensions: (less antenna) $32 / 8 \mathrm{~W} \times 2 \mathrm{H} / 4 \mathrm{Hx}$ $2^{2} D$ Imported.
TM- 14 Shpg. wt.. 7 oz. Net 6.95
High output crystal earpiece for use with TM. 14
High output crystal earpiece for use with TM. 14.
MS.949


## LAFAYETTE TRANSISTORIZED FIELD STRENGTH METER

1595

- Permits Easy Tune-Up For Maximum Transmitter Output
- Earphone Jack to Monitor Audio
- Tuned Input from 2.53 to 57 MC

A transistorized, tuned field strength meter covering 2.530 Mc to 57.000 Mc in 3 bands. Ideal for use with ham, Clitizens Band or other transmitters within this frequency range. Enables user t) tune his transmitter and antenna for maximum RF output. The RF is sampled by a plug-in telescoping antenna (supplied) sampled relative field strength is read on a 200 ua meter and relative field strength is ref on on $200 \mu$ meter
calibrated from o to 10 . Earphone jack provided for calibrated from of monitoring of any audio on the signal. Electrical and mechanical zero adjustments on front panel. Other controls: gain/on-off switch, tun ng, and band selector switch. Powered by single small $11 / 2$ volt battery with Ilfetime approaching "shelf.life"-can be operated anvwhere. In attractive metal cabinet with telescoping antenna and batterv. Imported.
TM-16A Shpg. wt., 2 lbs.
High output earplece for use with TM-16A.
MS-439
Net 15.95

BA. 155 Replacement battery for above
NEW! LAFAYETTE HE-72 SWR and FIELD STRENGTH METER


## SPECIFICATIONS

- SWR: 1:1 to 3.1; Accuracy: $\pm 5 \mathrm{db}, 2$ to 30 MC ; Impedance: 52 Ohms; Antenna: $\mathbf{5}$-section, collapsible The Model HE- 72 is a handy $2 \cdot \mathrm{in}-$ : meter for use in the amateur radio station to check transmitters for SWR measurements. The HE-72 uses the bridge method of comparing the power supplied o 0 and reflected from the antenna system. Can be lef: continuously in the circuit for monitoring transmitter outputs. The HE-72 has been designed so that comparatlve RF fleld strengths can be determined. By fastening the collapsible pickuo antenna to the instrument and extending it fuil lensth you have a quality meter to check performances of marine, mobile o flxed transmitters. Sensitive 100 microammeter mosement with easy to Sensitive 100 microammeter mosement with easy to Ilnes. Attractive grey hammertone aluminum case. Size: $134 \mathrm{~W} \times 5 \% \mathrm{H} \times 2 \mathrm{y} \mathrm{a}^{\prime \prime}$. Imported.
HE. 72 Shpg. wt., 1 it.
Net 12.95


# VALUES in AMATEUR and SHORTWAVE EQUIPMENT 

## LAFAYETTE 2 AND 6 METER CONVERTERS

## LAFAYETTE MODEL TM-15A

WAVE-METER

## TM-58 SWR BRIDGE AND RF POWER METER



## HE-56 LAFAYETTE 6-METER CONVERTER

- SELF-POWERED - PRINTED CIRCUIT - 7.11 mC OUTPUT

A deluxe 6 -meter converter designed to respond to the weakest signals with very low noise. The HE-56 will convert any shortwave receiver that tunes 7.11 Mc to cover 50.54 Mc . Easy to install between main antenna and receiver's antenna terminals. When the converter's control switch is in the OFF position, signals from the main antenna will be led around the converter circuit into the recelver thus the receiver will receive both the original frequencies and the 6 -meter band. Rugged printed circuit and heavy gauge steel chassis make this unit as durable as the recelver it's connected to. SPECS: Freq. range- 50.54 Mc. Crystal freq.-43 Mc. Sensitivity-better than 1 microvolt for $10 \mathrm{do} \mathrm{s} / \mathrm{n}$ ratio. Image Rejection-In excess of 40 db . Antenna input impedance- 52 ohms. Tubes: $6 A 08$. 6818 . For 117 VAC .50 .60 cps . Size:

##  <br> HE. 56 Shpg. Wt., 6 lbs. Imported

NEW! HE-71 LAFAYETTE 2-METER CONVERTER
Similar to HE-56 Except Covers 144.148 MC 2-Meter Band. Tubes: $2-6408,1$ 1-6AU6. Shpg. wt., 6 lbs. $\underset{\mathrm{HE}-71}{\text { Band }}$ Imported


The Transicheck is a test instrument to check power output and antenna efficiency of Citizens Band Transmitters. Incorporates a sensitive Indicat-
ing meter with dual scales: Upper ing meter with dual scale indicates match or mis-match of sline to antenna; lower scale indicates power output. Dim. $41 / 3 L \times 21 / 8 \mathrm{~W} \times 14 / 2^{\prime \prime} \mathrm{D}$. Model CB-52-C. With Coax Connector. HE-190 Shpg. wt., 3 lbs. Net 19.95 Model CB-52-S with auto spade connector
HE-191 Shpg. wt., 3 lbs. ... Net 18.95

- For Amateur and CB Use
- Instant Readings of Transmitter RF Output
- Requires No Power
- Compact, Portable, Accurate

A miniature wavemeter for checking transmitter output. Determines relative strength of fundamental fre. quency and any harmonic or parasitic radiation, and in so doing aids in ellmination of these unwanted emissions. Complete and self contained, the TM-15A requires no power source. Telescoping antenna is included. Merely choose proper band and turn tunling knob untll meter reading is obtained. $3 / /^{\mathrm{m}}$ panel meter Indicates the presence of RF. If indications occur at several points within the range of the wavemeter, the transmitter is probably radiating spurious frequencies. Tunes 1.6 to 150 mc in four calibrated bands. Only $31 / 8 \mathrm{~W} \times 2 \mathrm{~K}_{0} \mathrm{H} \times 12 / 2^{\prime \prime} \mathrm{D}$. Antenna is $103 / 4^{\prime \prime}$ extended. $31 / 4^{\prime \prime}$ telescoped, is screw in type and is removable. Imported. Total shpg. wt., 8 oz.
TM-15A


## - Measures RF output Power Into Built-in 52 Ohm Dummy Load, Up to 15 Watts <br> - Mzasures SWR and Refative Powar UD To 1 KW <br> - Can be Used in 52 and 75 Ohm Coaxial Lines

Here is a quality instrument which will give highly accurate SWR and direct power readings up to S0Mc. The unit may be permanently inserted in the transmission line for SWR and relative power monitoring. When the 3 -position selector switch is set to POWER, the meter will indicate the RF power up to 15 watts, into a built-in 52 ohm resistive load employing quality non-inductive resistors. Full scale accuracy is $10 \%$. The selector switch is set to SWR SET to read relative forward power up to 1 kW and to adjust the sensitivity control for SWR measurements. For direct SWR measurements from 1:1 to $4: 1$ with powers up 10 a kllowatt, the selector switch is set to SWR. Unit is inserted into the transmission line by means of two standard coax connectors, and 2 slide switches are set to 52 or 75 to correspond with line impedances of 52 or 75 ohms, respectively. Insertion loss is neg. ligible. Meter has 50 ma movement: calibrated directly in watts from 0-15, and in SWR froml to 10 IF(reads infinity at full scale). Housed in an attractive grey metal cabinet, $31 / 8 x 71 / 4 \times 233^{\prime \prime}$. Sits on 4 rubber feet. Imported.
TM. 58 Shpg. wt., 2 lbs.

## LAFAYETTE HYBRID PHONE PATCH

Enjoy the pleasure of handling phone patch traffic with this deluxe hybrid patch. Hybrid circuit permits use of AM or SSB with voice control by effectively isolat. ing the recelver audio output from the transmitter audio input. Provides an accurate balance between 500 ohm line and station equipment-with negHgible insertion loss. Four connections on rear for receiver output (voice coll, $3-4$ ohms). inansmitter input, Station microphone, and telephone. Easy to operate after a few preliminary adjustments, all from the front panel. Null and balance controls are adjusted, with the aid of readings on the edgewise panel VU meter, for balance and maximum receiver-transmitter isolation. Thus the recelver audio signat, which would ordinarily trip the vox circuit. is balanced out from the transmitter audio section. The gain controt is adjusted for proper transmitter and receiver audio level. Vu meter continuously monitors line level. The patch can be switched in and out by means of a front panel switch, so that it may be permanently installed. Compact, sloping cabinet will fit into any station arrange. ment. Sits on 4 non-silip rubber feet. Size; $34 / 2 \mathrm{Hx} 51 / 2 \mathrm{Wx} 4^{\prime \prime} \mathrm{D}$. Imported. HE-26 Shpg. wt., 3 lbs


A quality instrument for continuous measurement of standing waves on transmission lines. For continuous line Insertion at powers from 25 to 1000 watts, 3 to 2000 megacycles. Requires only 10 watts output above $7 \mathrm{mc}, 5$ watts above 100 mc . SWR observed immediately at all times without ad. justment of Reflectometer. Line insertion loss less than 1 db at 30 mc . Gray hammertone aluminum case measures $5 \mathrm{~V} / 4 \mathrm{~L} \times 3 \mathrm{~W} \times 2 \mathrm{~L} / \mathrm{s}^{\prime 2} \mathrm{D}$. For 52 ohm line. HE-193 Shpg. wt., 3 lbs. .... Net 29.95


B \& W
MODEL 600 GRID-DIP METER

4861
NO MONEY
Versatile test instrument for shop or ham shack. Tunes 1.75 to 260 mc . in five ranges, uses color-coded dial and plug-in coils. used as grid-dip meter signal generator or wave-meter. Complete with colls and rack. For 110 120 volts $A C$. Size $3 \times 3 \times 7^{\text {". }}$. Shpg, wt., 3 los. Grid-Dip Meter. HE 300

Net 48.51

SECO MODEL 500
ALL TRANSISTORIZED 2-WAY RADIO TEST SET


- A Portable Crystal Checker, RF Sig. nal and Field Strength meter in one compact unit.

Loaded with unique features, the Seco Model 500 Test Set cuts servicing and installation time on Citizen's Band and other crystal controlled two-way and other crystal controlled two-way
radio equipment; checks activity on third overtone transmitter crystals third overtone iransmitter crystals
with a visual indication on output with a visual indication on outpur
meter scale-checks fundamental types meter scale-checks fundamental types
and third overtone receiver crystals at fundamental frequency. Completely self-contained and portable, the Model 500 is powered by a 1.5 volt " $C$ " battery-use anywhere-the 15 ft . re mote cable lets you check equipment in a car. boat or plane by simply plac. ing the tester in any convenient location. Model 500 complete with 15 ft . remote cable and "C" battery. HE-765

Lafayette's new CB value sensation consists of an attractive compact transceiver with exceptional performance on Class " $D$ " Citizens Band. Two or more HB-115's will supply you with reliable communications over distances of up to 20 miles or more depending on antenna height and terrain.
The H8-115 features 8 crystal-controlled transmitting channels operating at the maximum legal input power of 5 watts fully modulated; a pi-network output which matches $30-100$ ohm antennas for maximum output; RF stage in transmit and receive sections. The super-heterodyne receiver is tunable on all 23 channels with over 2 watts audio output, has Automatic Volume Control and a very effective fullwave variable Noise Limiter. This "hot" CB transceiver also features Electronic Switching with efficient push-to-talk Ceramic microphone; a front panel speaker/ earphone jack for an extra external speaker or for an earphone or headset for quiet listening; a separate on-off power switch for trouble-free economy of aperation. The HB-115 has accurate planetarv vernier tuning. Controls: Tuning, Volume, Variable Nolse Limiter, 8-position Crystal Selector and Power Indicator. Power receptacle in rear for 115 -volt $A C$ line cord and 6 or 12 -volt external mobile power supply.

Supplied complete with Channel 15 transmitting crystal, efficient push-to-talk ceramic microphone, and mounting brackets. Tubes 2-6AUQA/6EA8, 6AL5, 6AQ5, 12AX7, 6AW8 plus 1 crystal diode and 2 silicon rectiffers. 6 of 12 -volt power supply cptional (see below). Size $111 / 2 \mathrm{~W} \times 5 \mathrm{Hx} 63 / \mathrm{a}^{* D}$. Shpg. wt., 13 ibs HB-115WX

Net 59.95
POWER SUPPLY: Adapts HB-115 for mobile operation. Complete with cable and mounting flanges. Size $6 \mathrm{~W} \times 4 \mathrm{H} \times 41 / 4 \times \mathrm{D}$; Shpg. wt., 4 lbs.
HE. 16 W for 12 Volts
Net 10.95
HE-18W For 6 Volts
Net 10.95
IRANSMITTING CRYSTALS: For any of the 23 channels. Specify channel or frequency. HE-830C

Net 2.25
ANTENNA: Base-loaded telescoping whip antenna with PL-25¢ coax connector. For stort distance operation. Mounts directly on rear of cabine:. Telescopes to only 15". Shpg. wt., 2 lbs.
HE. 19
Net 3.95

## LAFAYETTE HE-90 CITIZENS BAND TRANSCEIVER


$\$ 5$ monthly
Now-Wired to Accept Lafayette HA-100 PRIVACOM Selective Call Unit!


- 6-Channel Crystal Controlled Transmit/Receive - 23 Channel Variable Tuning Receiver - 5-Watt Transmitter - Nuvistor RF Amplifier Electronic Switching - Automatic Nise Limiter, Adjustable Squelch, Full AVC - Dependable Push-to-Talk Ceramic Microphone - Illaminated " $\varsigma$ " Meter For Direct Relative RF Power and " $\varsigma$ " Readings - Spotting 5 witch for Positive Channel Location On Tunable Receive - With Channel 9 Transmit and Receive Crystals - Headphone Jack

Here it is-a deluxe CB transceiver. For 2-way moblle or base station use-All at a sensational low price. Permits up to 6 crystal-controlled transmitting and receive channels and a full 23 -channel variable tuned receiver with liluminated dial and planetary tuning mechanism for accurate tuning. 3-transformer If circuit provides razor sharp selectivity. Nuvistor RF amplifier in receiver gives $1 \mu v$ sensitivity. Other features include a sensitive adjustable squelch circult, automatic volume control which does not reduce sensitivity, electronic push-to-talk switching and effective automatic noise limiter. Transmitter features 5 -watt input power, Pinetwork output matches $30-100$ ohm antennas and TVI filter. Controls: On/Of Volume, Squelch, Tunling, Spot Switch, Channel Selector, Meter Switch. Tune-Fixed selector, Headphone jack. Built-in $3^{\prime \prime}$ Speaker. For $117 \mathrm{~V} A C$, 15 -tube function.

Tubes: 60S4 (Nuvistor), (2) 6EA8/6U8A, 6AU6, 6T8, 6AQ5A, JAW8A. IN34A silicon diode doubler. Includes set of crystals for Channel 9 , Push-b-Talk highly dependable ceramic mike and coiled cord with plug. $111 / 2 \times 5 \times 65 / 8^{\circ}$ Shpg. wt., 14 lbs. HE-90WX Less Mobile Power Supply.... Net 89.95 HE.91w 12 -Volt Mobile Power Supply for HE-90WX. Shpg. wt., 4 lbs, Net 11.50 HE-830C Transmit Crystal (Specify Channel or Frequency) ................Net 2.25 HE-22C Receive Crystal (Specify Channel) ......................................... Net 2.25

NEW! SELECTIVE CALL PACKAGE
HE-90 plus HA-100 PRIVA-COM Selective Call Unit. HE-474WXM

# IE LVY:TTE HE 200 Delluxe citizens BAND TRANSCEIVER 

Not A Kit! COMPLETELY WIRED!

Operating within the limits prescribed by the FCC, the popular Lafayette HE-20C supplies you with a highly efficient 2 -way radio-telephone communications system. Two or more will supply effectlve communications over a distance of up to 20 miles or more, depending on the terrain and the height of the antenna. 3 dual-function tubes, 1 -Quadri-purpose tube, 3 tubes, and 2 silicon rectifiers give 14-tube performance. The transmitter section features precision engineering to insure powerpacked communications. The 5 -watt input, crystal-controlled transmitter may be operated on any 8 of the 23 channels assigned by the FCC. The receiver circuits provide for 8 crystal controlled recelving channels plus a tuneable superheterodyne receiver that covers all 23 assigned channels, with a sensitivity of 1 microvolt. Effective built-in Squelch circuit qulets the receiver when no signal is being received. Series Gate Noise Limiter materially reduces ignition noise and other unwanted interference. An illuminated dial with planetary vernier tuning is clearly marked with channel numbers and lights up when tuned to any channel. New tunable or fixed receiver switch permits selection of tuneable and fixed receive operation. The receiver terminates in $4^{\prime \prime}$ speaker amply supplled by over 2 watts of audio power.

The unit comes complete with a push-to-talk ceramic microphone that is conveniently mounted to the transceiver. Push-to-talk operation is accomplished by dependable relay switching. An illuminated " $S$ " meter calibrated in S unlts $1-9$ and 1030 db, above $\$ .9$, allows measurement of incoming signal strength. The meter is wired with a switch to enable monltoring of final ampliffer relative wattage output and as Indicator of transmitter efficiency. Features spotting switch for positive frequency location on tuneable recelve. Incorporates Pi-network for optomum matching to $30-100 \mathrm{ohm}$ antenna for high signal output. A low-loss antenna jack is mounted at the rear of the cabinet to accept the popular PL-259 connector used with dipole, ground plane, rod, and direct mounting (Lafayette HE-19) antennas. Incorporates selective call wiring plus input socket on rear of chassis for silent communications between calls when used with Lałayette HA-100 PRIVA-COM Selective Call Unit. Rugged, low silhouetted case with a bracket handle for installation at any location and in any position. Tube IIne up 1.6AW8A, Oscillator/Amplifier: I.6BA6, RF Amplifler; 1-6AU6A 1st If Amplifier, 1-6EA8/6U8A, mixer/rec. osc. 1.6U8A/6EA8, 2nd IF Amplifier and ist Audio Amplifier; 1-6AQ5A Audio Output/Modulator: 1-6T8, ANL, Detector, AGC. Squelch Clamp and 2nd Audio Amplifier. Size: $12 \times 5 \times 81 / 2^{\prime \prime} \mathrm{D}$. With 115 Volts AC/ 12 Volts DC or 115 Volts AC/6 Volts DC Power supply. HE 20CWX 115 AC/ 12 Volts DC. Shpg. wt., 14 Ibs. HE-43CWX 115 Volts AC/ 6 Volts DC
HE 830 Transmit Crystal (Specify Channel or Frequency)
HE. 22 Recelve Crystal (Specify Channel)
HE. 19 Direct plug in antenna (for short distances) Shpg. wt., 1 lb.

Net 109.50 Net 109.50 Net 2.25 Net 2.25 Net 3.95

## NeWI SElective call Package



EXCELLENT FOR BUSINESS, FARM, INDUSTRY, CAR, BOAT, PERSONAL AND SPORTS USE

## APPROVED FOR USE IN



By Canadian Dept. of Transport Type Approval No. 169361029


14-Tube Performance, 2 Diodes, 3 Rectifiers
2 \{ 8 Crystal-Controlled Transmit Positions
2 Crystal-Controlled Receive Positions
3 Tuneable Receiver over all 23 channels
4 Illuminated Direct Reading " S " Meter for Relative RF Power Output, Receiver " $S$ " Readings, and Transmitter and Antenna Efficiency
5 Dependable Push-To-Talk Ceramic Microphone
6 Adjustable Squelch Control
7 Receive Tuneable or Fixed Crystal Selector Switch Illuminated Dial
9 Spotting Switch for Positive Frequency Location on Tuneable Receive
10 Highly Effective Automatic Series Gate Noise Limiter
11 Built-in 12 or 6-volt Power Supply for Mobile Use
12 Complete with channel 9 Transmit \& Receive Crystals
13 Built-In Selective Call Circuitry For Lafayette HA-100 PRIVA-COM Selective Call Unit
14 Dependable Relay Switching

Peser 27 NEW ! LAFAYETTE 23-CHANNEL CRYSTAL CONTROLLED CITIZENS BAND TRANSCEIVER Model HB-222

Lafayetle's amazing new HB-222 23-Channel Crystal Controlled Citizens band Transceiver combines all the best features of crystal control transmit and receive and tuneable receive. You no longer have to worry about the accuracy of a tuneable receiver! In effect you have a tuneable receiver with crystal accuracy on every shannel! The $H 3-222$ feaures a 23 channel crystal controlled dual conversion superheterodyne reselver using a $1650 \mathrm{KC} \& 262 \mathrm{KC}$ IF system for excellent selectivity \& sensitivity, and a 23 chanmel crystal cortrolled transmitter with all necessary crystals supplied. Channel fine tuning is supplied to compensate for crystal tolerance. In cddition it features a sensitlve Illuminated panel meter with a 3 -position switch that indicates relative RF power output and modulation, and serves as an "S" meter callbrated in S units $1-9$ and to 30 db above S-9 for reading strength of receired signal: Push-to-talk dependable Relay Switching using an efficient noise cancelting ceramic microphone; Art adjustable squelch control with automatic series gate noise limiter with on-off switch: A unique Illuminated channel Selector Dlal; Pl-network output for optimum matching to 30 to 100 ohm antennas, Earphone jack on front panel for optional quiet listening. The transceiver has full $100 \%$ modulation. The recelver has 3 sensitivity of better than 1 micrevolt, with an audic output of 3 watts to a high quality P.M. speaker. Its signal to noise ratio is better than 1 micr $2 v o l t$ for a $10: 1 \mathrm{~S} / \mathrm{N}$ ratio. Wired to accept $1 \mathrm{~A} \cdot 100$ PRIVA-COM selectiv caller.
ube Complement: 6AZ8 RE Amplifler, Low Frequency Osc; 6AZ8 1 st Mizer, Conversion osc.; 12AT 2nd Conversion osc. and Audio Amplifier; 68A6 IF Amplifier; 6837 Detector, Limiter, and Squelch; EL84/6BOS Modulator, AF Power Amplifien 6AV6 Audio Driver; 6BA6 RF Oriver; GOS5 RF Power Out. put; 6EE6 2nd Mixer. Conplete with bracket handle for underdash mount; built-in 117 Volt AC Power Supply and 12 Volt DC mobile Transistorized Power Supply with appropriate AC \& DC Power Plugs. Equipment protectively fused for AC \& DC. Attractive sturdy pinel and case with chrome plated bezel. Size Approx $12 \times 5 \times 81 / 2^{\circ} \mathrm{D}$.
HB.222WX Shpg. wt., 15 lbs.
SB. $\mathrm{SELECTIVE} \mathrm{CAL} \mathrm{PACKACE} \mathrm{HB-222} \mathrm{C.3} .\mathrm{Transceiver} \mathrm{plus} \mathrm{HA-100} \mathrm{Selective} \mathrm{Call} \mathrm{Unit}$.
C.3. Transceiver plus HA-100 Selective
HB-225WXM Shpg. wt., 182,2 bs.

Net 159.50
Net 190.73

## Made in U.S.A.

## DELIVERY OCTOBER 1963

- 23-Chanael Crystal Controlled Receiver - All Crystals Supplied!
- 23 -Channel Crystal Con. trolled Transmitter - All Crystals Supplied!
- A Flip of The Channel Selector Switch Gets You Any one of 23 Active Channels With Crystal Accuracy.
- Dual Conversion Superheterodyne Receiver Using 1650 KC and 262 KC IF's For High Selectivity and Sensitivity
- Push-to-Talk Relay Switch. ing Using Noise Cancelling Ceamic Microphone
- 10 Tubes plus 3 Silicon Power Rectifiers For 17 Tube Performance


## NEW! LAFAYETTE "PRIVA-COM" "' SELECTIVE CALLER <br> MODEL HA-100

- Excellent performer with Lafayette HE-20, HE-90, HE-15, HB-111, HB-115. HB-222 as well as with any push-to-talk CB Transceiver! "PRIVA-COM" Selective Caller is truly a must for all CB and commercial stations!

The tone sounds and the signal light goes on. Your recelver's speaker is automatically activated and you can speaz and listen to your calling station. The light stays on until manually reset. If you are away from vehicle or station an activated light indicates that you have been called by your base or mobile station. Each "PRIVA-COM" can transmit 6 different combinations of dual tone frequencies for even greater privacy. A simple step enables you to change frequencles. The breakthrough calr signal has greater range than the speech signal alerting you for incoming calls. Both Base station and Moblle can initiate calls. By placing lever in NORMAL position, base station and moblle can monitor alr at anytime. The front panel has a lever switch with STANDB*. NORMAL and CALL positions; a volume control; and an indicating light. Comes complets ' with bracket for mounting to transceiver; plus detailed instructions for wiring "PRIVA-CJM" to Lafayette HE-20, HE-90, ${ }_{5}$ polytronics, as well as to any other set with pushoto-talk operation. Size $358{ }_{3} \mathbf{W} \times 3 x_{3} H x$ $518^{\prime \prime} \mathrm{D}$. Shpg. wt., $31 / 2 \mathrm{lbs}$.
HA-100
4. Illuminated Chamel Selector Dial
5. Earphone Jack
6. Channel Fine Tuning Control

1. Built-In 117 V AC Power Supply and 12 Volts DC Mobile Transistorized Power Supply.
2. Wired to Aecept HA-100 PRIVA-COM
 <br> \title{
Page 274
} <br> \title{
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}

- Crystal Controlled Superheterodyne Receiver with RF Stage, AVC - Separate Microphone and Speaker For Better Modulation \& Increased Range - $1 \mu \vee$ Sensitivity For 10 DB S/N Ratio - 10 Transistors, Diode, Thermistor Crystal Controlled Transmitter - Uses Economical Penlight Batteries - Range 1.3 Miles - No License, Tests or Age Limits (FCC PT. 15)
Beautifully designed for both ease of operation and powerful performance. Ideal for use in business, industry or personal use. Features include $10-$ transistor circuit, crystal control highly sensitive superheterodyne receiver with RF amplifier. Automatic volume control and push-pull audio. Separate speaker and microphone provides maximum signal efficiency even under difficult conditions. Use of a separate microphone facilitates aven under impedance match for better modulation and improved trans. mission range. Input power to transmitter 100 milliwatts. Effective communications is possible from 1 to 3 miles depending on terrain. Simple operation is made possible with sturdy push-to-talk switch and volume control. Earphone is provided for private reception. 44" $^{\text {" }}$ whip antenna collapses fully when not used. Power is supplied by 8 in expensive penlight batteries. To conserve battery power, a 117V AC power converter is available as an optional plug-in accessory-housed in rugged hi-impact plastic case. Complete with leather case, earphone, antenna, batteries and crystal for channel 10 . Size: $3 \mathrm{~W} \times 9 \mathrm{H} \times 23 / 4$ " D . Imported. HA. 60 L 2 lbs .

2 for $\ldots \ldots \ldots . . . . . . . . . . .$. CRYSTALS FOR HA-6O Matched crystals for above. Specify frequency HE-892C Pair ac power pack for ha. 60
Heavy duty 117 V 60 cycle AC power supply to 9 VOC . Replaces 8 " 2 " cells. wt. 1 lb .
HE-97
HA-61L Same as HA-60 but specify channel other than 10 (2.23)

Net 33.95


OTHER CHANNELS ARE AVAILABLE if desired with any channel other than channel 10 order HA-61 and specify channel (2.23).
New! Lafayette 4-TRANSISTOR SUPERHETERODYNE


Operates With Built-in Batteries Or 117VAC Power Supply

## 1995 <br> NO MONEY DOWN <br> 2 for 38.95

- Sensitive Superheterodyne Circuit
- Crystal-Controlled Receive and Transmit
- Personal Size Quick-Acting Push-To-Talk Switch
- Range Up to 1 Mile - Rugged Metal Case

The fun set for the whole family. Perfect for short-range indoor or outdoor communications-sportsmen, farmers, construction work, boating, anywhere group activities are to be coordinated. Powered by built-in batteries, or it may be run on house current by simple plug.jn epnnection to 117 VAC converter (below). Not a toy but a true Superheterodyne transceiver which provides exact crystal frequency control for both receive and transmit channels on the 27 MC Citizens Band. The sensitive circuit has a range of up to 1 mile under average conditions. High speed operation is possible with fingertip push-to-talk switch and on/off volume control. Nothing could be simpler. No license is required when used under Article 15 of FCC CB regulations. Reliable 4 -transistor plus diode circult delivers 85 milliwatts of power to a 10 section antenna 50 Inches long, Complete in attractive blue and black metal case with leather carrying case, crystals, batteries, and crystals for channel 10 . Size: $21 / 2 \mathrm{~W} \times 6 \mathrm{H} \times 11 / 2^{\prime \prime} \mathrm{O}$. Shpg. wt., 1 lb. Imported.
HE.82L
Net 19.95
Set of 2 Net 38.95 Replacement batteries for HE-82 "Walkie Talkie" 6 required. BA-155 ' 2 " cells

Net ea. . 13

## AC TO DC <br> POWER SUPPIY CONVERTERS

- Safe Fused Cirsait
- Provide Sturdy Base
For HA-60 and
HE-B2
- Conserves and Refuvenates


HE- 82 or HA- 60 walkie-talkie fits firestly into slot. Permits $F$ Jme AC operation. Converts 117 VAC E 9 VDC . Inported $53 / 4 W \times 31 / 4 H \times 5^{\prime \prime} 0$. Shpes, wt, 2 lbs.
HE-84 For HE-8: ................. 6.95 HE. 97 For HA- $6 C$

Net 7.45


Designed to meet the need of modern business and personal communications in 27 mc class $D$ service. No license is required to operate this unit when used according to part 15 FCC rules. Uses plug-in crystals for simple channel change-over. Contains 9 transistors, 1 diode and thermistor. Sensitivity 1 microvolt. Crystalcontrolled transmit and recelve. Bullt-in antenna extends to 55 inches. Operates on 8 penlight batteries with 50 hour battery life. Sturdy metal construction. Only 8 Hx $6 \mathrm{~W} \times 23 / 4$ "D. Comes complete with genuine leather carrying case, earphone for prlvafe listening, case shoulder strap and crystals for channel 11. Shipg. Wt., 21/4 lbs. HA-166L Model CB-6 less batteries ...........Net 59.95 BA. 155 Batteries for CB-6 (8 rea.) ........ Net ea., . 13


## NEW RCA

 PERSONAL-COM 300 90-MW CITIZEN BAND TRANSCEIVER- Buitt-in Rechargeable Battery
- Compact Size-Lightweight
- Quality $2^{\prime \prime}$ Speaker
- With Leather Case and Strap

Light weight and completely transistorized, the PersonatCom 300 operates from a self-contained heavy-duty rechargeable battery. No license Is required when operated with similar units-(Part 15 FCC rules). Under normat use, the 300 will operate continuously for approximately 14 hours before the battery must be recharged. Crystal-controlled transmit and receive. Power input 90 mw ; Sensitivity, $1 \mu \mathrm{~V}$ for 10 db signal-to-nolse ratio. 2" speaker provides excellent voice reproduction. Comes complete with $401 / 2^{\prime \prime}$ lelescopic antenna, battery, battery charger, leather carrying case with strap, earphone jack and crystals for channel 7. High Impact plas. tic case only $7 \% \mathrm{H} \times 27 / 0 \mathrm{~W} \times 17 / 0^{\prime 0} \mathrm{D}$. Shpg. wt., $11 / 2 \mathrm{lbs}$. HE. 634 L

No Money Down


## E. F.J円 i N 3 N

 1.5.WATT PERSONAL MESSENGER 2-WAY TRANSCEIVER- 11 Transistors, 4 Diodes
- Noise Limiter, Variable Squelch - Automatic Volume Control
- Push-Pull Audio Output The 1.5 -watt Personal Messenger doubles your effective operating range over 100 mw units. Hand held circuit features 11 transissuperhet receiver with high gain RF stage, molstureproof speaker, push-pull audio. Also has squelch control, on-off volume control, silver plated push-to-talk swlich and earphone jack. Plug-in case uses 8 penlight batterles on optional rechargeable battery (below). Battery saver circuitry provides the maximum possible use from your batteries before recharge or replacement. Effective noise limiter reduces ignition and electrical nolse. Rugged plastic case has elastic hand-strap for easy one hand operation. Complete with telescoping antenna and crystals for channel 11. with telescoping antenna and
Less batteries. Shpg. wt., 2 lbs.
HE-623L No Money Down Net 129.50
Leather Carrying Case for Personal Messengers.
HE-753L Shpg. wt., 1 lb.
Net 8.50
BA-155 Type $z$ penlight cells (8 rea.)
Shpg. wt., 6 oz.
Rechargeable nickel cadmium battery Net ea. . 13 sealed plug-in compartment for recharging at 115 VAC , $50-60$ CPS



## OSBORNE DUO-COM

 120 TRANSCEIVERMere is a portable, pocket sized Citizens Band transceiver with 10 times the power of more conventional unlts (requires easy to obtain IIcense). Powered by a rechargeable battery with life of over 18 hours before recharge this transceiver employs 11 transistors plus 2 diodes to offer deluxe features unusual in pocket size equipment. Transmitter Is composed of a crystal oscillator driving a high efficiency, powe modulated RF amplifier, with a full input as compared to the 100 mw maximum input of unlicensed transcetvers. Range is mile under adverse conditions. up to 5 miles under average conditions and up to 25 miles under optimum conditions The recetver is a double conversion superheterodyne, with both local oscillators crystal-controlled. Sensitivity better than 1 microvolt for $10 \mathrm{db} \$ / \mathrm{N}$ ratio.

Built in squelch control. Audlo amplifier operates class B push-pull at 750 mHill -watts. Sealed speaker/ mike transducer. Jacks provided for external antenna and earphones. Plug.in crystals supplied for channel 10 . Less battery. $1 \% \times 4 \times 73 / 4^{\prime \prime}$. Shpg. wt., $2 \frac{1}{2} 16 \mathrm{~s}$. HE.B39L ................................................... 149.50 Model 880 rechargeable battery for above HE-835L MODEL 900 Battery Charger For Duo-Com $120{ }^{\text {Net }} 12.50$ HE-785


## E. F. JOHNSON 100-MILLIWATT PERSONAL MESSENGER 2. WAY TRANSCEIVER

A superbly engineered, two-way crys-tal-controlled transcelver which employs 11 transistors and 4 diodes and is small enough to be hand. carried. Sensitive superheterodyne recelver with tuned RF stage features automatlc nolse limiter, AVC. squelch. push-pull audio output. Powerful, efficient two-stage transmitter. Other highlights include: battery saver circultry, silver-plated push-to-talk switch, moisture resistant speaker/microphone and rugged hi-Impact plastic case. Includes penlight cell battery compartment. Battery compartment with rechargeable nickel.cadmium .batteries - can be plugged into 115 VAC Ilne to charge batteries avallable as an accessory. Bullt-in telescoping antenna. avallable as an accessory. Built-in telescopin
HE-752L Shpg. wt., 2 lbs
Net 109.50
Leather Carrying Case for Personal Messengers.
HE-753L Shpg. wt., 1 tb. .................................. 8.50
BA- 155 Type $Z$ penlight cells ( 8 req.) Shpg. wt., 6 oz.

Net ea. . 13
Rechargeable nickel cadmlum battery mounted in sealed plug-in compartment for recharging at 115 VAC, 50.60 CPS. Shpg. wt., $80 z$
HE-754L
Net 19.55


## MODEL <br> 740 CITIZENS BAND TRANSCEIVER

Avaltable in KIt or Wired Form - 9 Transistors, 1 Diode - Buitt-In Rechargeable Battery - Volume Control

Lightweight and pocket-sized, this transceiver requires no technical skill in lts operation. Simply press button to talk, release to listen; volume control adjusts listening level. Employs 9 transistors and 1 diode, powered by a nichel-cadmium rechargeable battery. includes charger which operates from any 115 volt outlet. One battery charge provides $10-12$ hours of intermittent use and battery can be recharged $\mathbf{3 0 0} \mathbf{- 5 0 0}$ times! Transmitter input is 100 mw (FCC limit for unlicensed CB units)range up to 10 milles under optimum condtions, $11 / 2$ miles under average conditions. Superhet receiver with crystal-controlled local oscillator has sensitivity of 1-2 microvolts for 10 db signal/noise ratio. A $21 / \mathrm{a}^{*} \mathrm{PM}$ speaker serves as both speaker and microphone. Built-In $41^{\prime \prime}$ telescoping antenna. In aluminum case, $74 / 8 x{ }^{25 / 6 x}$ $15 \mathbf{m}^{\prime \prime}$. With crystals for channel 16. Shpg. wt., $11 / 2$ lbs HE-335L Kit ...With nickel cadmium battery ... Net 54.95 HE-335L Kit...With nickel cadmium battery.... Net $\mathbf{5 4 . 9 5}$
HE-336L Wired ... With nickel cadmium battery Net $\mathbf{7 9 . 9 5}$

## NEW CADRE MODEL C-75 CB TRANSCEIVER

\author{

- 1.5 Watt-2 Channel Crystal-Con- Automatic Gain Control and Noise trolled For Receive And Transmit <br> - Built-in Rechargeable Battery <br> Limiter <br> - Adjustable Squelch
}


## - High Impact Plastic Case

Superbly engineered-Ideal for business or personal communications. Completely portable and reliable over a range of more than five miles. Transmitter power exceeds 1.5 watts in full compliance with FCC license regulations parts 15 and 19. it uses twelve hour rechargeable nickel-cadmium batteries. Advanced plug-in modular construction utilizes 11 transistors and 2 diodes. Olther deluxe features include: switch selection of 2 crystal controlled channels; adjustable squelch and variable volume control; automatic gain control and automatic noise limiting. Efficient retractable whip antenna. Jacks for external speaker, antenna and microphone. Sensitivity $1 \mu \mathrm{~V}$ for $10 \mathrm{do} \mathrm{S} / \mathrm{N}$ ratio. High impact plastic case. Supplied with 1 pair of matched crystals for channel 11. Shpg. wt., 2 los.
pair or matched crystas Model C.75
Net 109.50

## ACCESSORIES FOR C. 75

ME-s18 Extra 6 -volt rechargeable nik-cad batt, 2 req.
HE-898 C-75-101 Battery charger
Net ea 10.95
HE. 899 C.75-3 Shoulder Strap
Net 9.95
Net 1.95
HE-893 Extra Matched Receive/Transmit crystals (Specify Channel)
SEEPAGES 402 AND 403 FOR ADDITIONAL LAFAYETTE CITIZENS BAND EQUIPMENT

## SELECTED FAMOUS NAME CB TRANSCEIVERS

# ©.).CII. COURIER MODEL IM DELUXE CITIZENS BAND transceiver 



Easy to use-anyone can operate the Courier 1M. RECEIVER is triple conversion superhef with better than $25 \mathrm{\mu v}$ sensitivity, super efficient series gate noise limiter. " $S$ " meter and frequency spotter, adjustable squelch and AVC. Audlo output is $4 \frac{1}{2}$ watts max. to 3.2 -ohm heavy-duty speaker. TRANSMITTER has power output of 3.4 watts with $100 \%$ high level plate modulation ( 5 watts input), frequency stability of $\pm .005 \%$ $0^{\circ}$ to $125^{\circ} \mathrm{F}$, output impedance 50 to 75 ohms. Utilizes 10 Tubes. I Nuvistor and 1 Diode, Heavy-duty power supply uses sllicon rectifiers. Supplied with 1 Channel 8 transmit crystal, high impedance ceramic mike and 110 VAC power cable. Size: $14 K_{0} W_{x} 4 \%_{4} H x 7 K_{6}$ "D. Shpg. Wt. 18 lbs.
HE-986 Chrome Plated Mobile
Mounting Bracket for 1M
HE-979 12 VOC Power Cable for 1 M
HE.984C Extra Transmit Crystal for IM (Specify Channel)

Net 299.50
Net
5.95


Select 1 of the 2 famous Antenna Specialist antennas and receive this antenna free with the purchase of any CB transceiver listed on thls page.
ANTENNA SPECIALISTS


## NEW teqency RANGE GAIN

 CB TRANSCEIVER

The Regency Range Gain transceiver can give you up to 4 times more coverage with excluslive double sideband reduced carrier modulation. This system increases sideband power and is compatible with all existing CB transmitters and receivers without the use of any auxlliary equipment. Other features include 23 channels crystal controlled on both receive \& transmit (no additional crystals are required); delta tuning $\pm 3.5$ KC of center channel frequency; 0.5 microvolt sensitivity; primary image rejection, more than 90 db : noise limiter and squelch. Easy-to-read " $S$ " meter glows red on transmit. 9 watts audio output. Includes push-to-talk mike and coll cord, for 117V AC and 12 V DC, $111 / 2 \times 51 / 4 \times 93 / 4$. Shpg. wt., 15 lbs.
HE-493wX Range Gain CB Iransceiver. Net 269.95 HE-494 Mobile Mounting Bracket for above Net 9.95

## CAD叩E 510A PORTABLE TRANSISTORIZED CB TRANSCEIVER



A compact all-transistor transceiver and optlonal portable pack that is ideal for base station, mobile or portable use. Operates up to 8 hours on its own rechargeable batteries, or from $110-120 \mathrm{VAC}$. Advanced dual conver. batteries, or from $110-120$ vac. Advanced dual conver. tivity. Has adjustable squelch, automatic nolse limiter. tivity. Has adjustable squelch, automatic nolse limiter. earphones or external speaker. Transceiver supplied with crystals for channel 11, push-to-talk dynamic mike. mtg , bracket and $A C$ and $O C$ power cords. Size: $111 / \mathrm{W} \times 31 / 8 \mathrm{H} \times 53 / \mathrm{m}^{\prime 0} 0$. Shpg. wt.. 10 lbs.
HE-916WX Cadre 510A iransceiver.
Net 189.95
NE-917 Cadre 500-1 portable power pack Net 29.95
HE-918 Extra 6-Volt Rechargeable Batteries (2 Req.)
HE-919C Extra Matched Transmit/Receive Crystals (Spec. Channel)

Net ea. 10.95

NEW HAMMARLUND CB-23 CRYSTAL-CONTROLLED CB TRANSCEIVER


Featuring crys tal-controlled 23 channel transmit and receive operation. the CB23 utilizes a special crystal synthesizer clr cuit which provides crystal
control on alt channels. All necessapy crystals are supplied for operation on 23 channels. Can be used for mobile and base station use with bulit-in power supplies for 115 VAC or 12 VOC. Other features include $1 \mu \mathrm{~V}$ sensitivity, noise limiter, squelch, $\pm 3 \mathrm{Kc}$ vernier tuning control on receive. 10 tubes plus 2 silicon rectifiers and vibrator for 12 VOC supply. Complete with push-to-talk microphone, "S" meter, cables and easy-mount bracket for under dash installation. Size: $81 / 4 \mathrm{~W} \times 51 / 2 \mathrm{H} \times 10^{\prime \prime} \mathrm{O}$. Shpg W. 14 libs.

No Money Down
Net 249.50

## JOHNSON VIKING "MESSENGER"

CB TRANSCEIVER


Designed for refiabll. Ity and easy installa. tion in your home. business location, car truck or boat. Exce!. lent receiver sensitiv. ity and selectivity. Features 5 crystal. controlled recelving and transmitting chan. nels. Transceiver has 10 tubes (Including rectifier Compact modern styling- $5 \% / \mathrm{Hx} 7 \mathrm{Wx} 11 \%$ " D . Shpg. Wt. $151 / 2 \mathrm{lbs}$
HE-447WX Model 242-128 115VAC/12VOC Net 139.95 HE-448WX Model 242-127 115VAC/6VDC

Net 139.95 HE-45iwx Model 242.126 115VAC Net 129.95 Universal Dash Mounting Kit for HE-447WX, HE-448WX HE-451WX.
HE-407 Model 251-828. Shpg. wt., 2 lbs. Net 2.50 Extra transmit type crystal for above.
NE-830C Specify frequency
Extra recelver type crystal for above.
ME-833C (Specify Frequency)
Net 2.2 5

## JOHNSON "MESSENGER TWO" CB TRANSCEIVER

A superbly engineered 10 -tube (including rectlfier) crystal-controlled transceiver. Features include highly selective and sensitive superheterodyne re ceiver, automatic volume control, improved high-efficeiver, automatic volume control, improved high-effi-
ciency noise Imiter, and diject plug-in provislons for ciency noise limiter, and dizect plug-in provisions for
Tone Alert selective calling system. Complete with Tone Alert selective calling system. Complete with
push-to-talk microphone and cord, crystals for one channel and necessary power cords. Slze: 7 W 555 hHx $11 \% 0^{* 0}$. Shpg. wt., 17 los.
HB-100WX Model 242-162 115VAC/6VOC. Net 169.95 HB-101WX Model 242-163 115VAC/12VDC Net 169.95 HE.830C Transmit Xtal for the "II"

HE-407 (specify channel) 2.25
NEW POLY-COMM PC-8 CB TRANSCEIVER


Nuvistor front end, provides sensitivity 0
uy for 6 db S/N Eouipoed with alt-electronic trans mit/recelve switching and 8 crystat controlled mit/recelve switching and 8 crystal-controlled transmit/receive channels. Dual conversion superheterodyne receiver with adjustable squelch circult and floating series gate type noise limiter, bullt-in carrier and modulation indicator, 4 full watts audio output. Adjustable antenne matching for 52 or 72 ohms. Weather-proof $4^{\prime \prime}$ PM speaker, 11 tubes. Complete with crystais for one channel, push-to-talk Mic and mtg, brackets. $11 \times 71 / 2=5^{\circ \circ}$. Shpg. wt., 18 lbs . HE-288WX $115 \mathrm{VAC} / 12 \mathrm{VDC}$

Net 199.50 HE-289WX $115 \mathrm{VAC} / 6 \mathrm{VDC}$

Net 199.50 Extra matched crystals (Receive/Transmit) for Poly.
Com PC-8.
NE-297C
Net 4.50
(RCA) MARK VII CITIZENS BAND

## TRANSCEIVER



Designed to provide dependable short-range communications for business or personal use. Receiver is highly selective superhet with 0.4 iv sensitivity, adjustable squelch, automatic nolse liniter and AVC. Pl-network output assures maximum antenna coupling Has bulti-in AC power supply for base station operation. Supplled with crystals for channel 7 , push-to-talk ceramic microwith crystals for channel 7, push-to-talk ceramic micro-
phone. AC power cord, instructions and FCC IIcense phone, AC power cord, instructions and FCC Iicense
application form 505 . Size; $111 / 4 W \times 31 / 2 \mathrm{Hx} 8^{\prime 2} \mathrm{D}$. Shpg, application

## Wt. 11 tbs.

HE-640WX Mark VIII-115 VAC ........ Net 149.50 HE-642 12 VOC Power Sup.jly for Mark VIII Net 19.95 HE-641 6 VOC Power Supply for Mark Vill Net 19.95 HE-643C Extra Matched Transmit/Receive He-6A3C Extra matcer for Mark VIII (Specify

Crystals for Channel)
(





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## OUTSTANDING LAFAYETTE CB ANTENNAS

## LAFAYETTE

## ALL STAINLESS STEEL CITIZENS BAND MOBILE ANTENNA OUTSTANDING FEATURES

- 102 $1 / 2^{\prime \prime}$ Stainless Steel Whip For Optimum 11-Meter Per. formance
- Heavy-Duty Chrome Plated Stainless Steel Spring
- Chrome Plated Swivel Ball Jointed Mount Base


## 695

Chrome plated swivel ball mount base designed to be mounted on any surface. Stainless steel spring holds rod in properly adjusted position and prevents rod damage from shocks and blows. Staintess steel whip for maximum resiliency and strength. Shpg. wt., 4 lbs. Has lug terminals for HP-52 HE-800WX

DELUXE LAFAYETTE GROUND PLANE ANTENNA

- The Ideal Antenna For Your CB Base Station
- High Efficlency Ground Plane Antenna
- All Aluminum Construc. tlon
- Aecepts PL-259 Connec.
 Aece
tor
Solid aluminum 108 inch heat. treated radials and radiator Elements supplied in two 54 Inch lengths joined by thread ed coupling nuts. Radials droop for 50 -ohm match. ACcepts $14 / 4$ inch lubing RG-58/U cable and PL-259 connector HE-B90w. ${ }^{\text {W }}$. Net 11.95

LAFAYETTE TELESCOPIC CITIZENS BAND WHIP ANTENNA sensational value IN A DIRECT mOUNTING CITIZENS

## 395

## ANTENNA

Sturdy, attractive chrome plated whip antenna that telescopes from approx. $45^{\circ}$ fully extended to only $15^{\prime \prime}$ to fa . cilitate portability and storage, Ideal for shorter distances up to several miles. Has enclosed base laading coil for proper impedance matching. Complete with removable PL- 259 connector that permits direct top, side or rear mounting to transceiver. Imported
HE.19. Shpg. wt., I lb. Net 3.95


## LAFAYETTE'S NEW "STAR-FIRE"TM 3-ELEMENT VERTICAL bEAM AMTENNA

## - Multiplies Power 8 Times

- Completely Precision Tuned and Ready to Assemble and Install
- Steel Parts Irridite Treated to MIL Specs

New 3 -element vertical beam is an exceptionally high gain, directional antenna system for CItizen's Band communications. It develops a forward gain of 8 db , works equally well for transmitting and recelving. Front-to back ratio is $25 \mathrm{db}_{\text {; }}$ front-to-side, 40 db . Precision tuned for perfect 50 ohm feedline match for maximum efficiency. Comes with bracket for vertical or horizontal mounting. The $11 / 4^{\prime \prime} 0.0$. aluminum boom is 8 feet
 All steet hardware is irridite treated to M1L specs. Insulators are of high impact plastlc. Total net welght is only 10 lbs ., may be rotated by any TV rotor. Completely factory pretuned, the "Siar-Fire" is furnished with complete instructions for quick and easy assembly. Shpg. Wt., 12 los. He-50wx

Net 16.9 .

## LAFAYETTE'S EXCLUSIVE NEW CB BASE STATION ANTENNA

## Superb Performance from Omni-Directional Vertically Polarized Antenna

\author{

- oelivers Up to do gain
}
- Steel Parts Irridite Treated to MIL Specs

A high performance, vertically polarized, omni-directional base station antenna that develops a transmitting gain of 3.4 db through pattern compression and lowering the angle of radiation. It is voltage fed through a $1 / 4$ wave length shorted coaxial matching stub eliminating the need for loose-matching transformers and coils. The matching stub places the antenna at DC ground potential thus substantlally lowering the residual noise level and delivering an actual operating gain of up to 8 db . Constructed of heavy wall aluminum tubing with a base diameter of $1 \mathrm{~V} 4^{" \prime}$. radials are $1 / a^{\prime \prime}$ solid aluminum, all-steel parts of the antenna are irridite treated to MIL Specs and the entire antenna and matching coaxial stub are fully weather protected for many years of outstanding. maintenance-free performance. Shpg. wt., 10 lbs . outstandi
$H 8-55 \mathrm{WX}$

Net 18.95
Superb Lafayette Fiberglass CB Antenna!

## 48" CENTER LOADED CITIZENS BAND COWL MOUNT ANTENHA

- Rugged Fiberglass Construction
- Easily Mounts On Cowl or Rear Deck

Lafayette makes antenna news with this new center loaded fiberglass antenna - Only $48^{\circ}$ high but performs tike $102^{\circ}$ antennas. Designed for cowi mounting, this latest development in mobile antennas provides an excellent radiation pattern. Substitutes for conventional $1 / 4$ wave whips as well as
base-loaded antennas in the 27 mc band. The four foot whip ellminates the base-loaded antennas in the 27 mc band. The four foot whip ellminates the possibility of striking overhead objects. A black plastic covering of whip insures aupinst shorting. Specially designed rocker support assures 8-point grounding and permits mounting up 10 35 angle on fender. cowl or rear deck-Fits any is." to $1 H_{4}{ }^{* *}$ mounting hole. Complete with 5 f . of RG-58/U cable
HE.57w Shpg. wt., 3 lbs.

| NOTHER OUTSTANDING LAFAYETTE CITIZENS |  |
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|  |  |
|  |  |
|  |  |
| 895 |  |

## LAFAYETTE CITIZENS BAND 27MC. COLLAPSIBLE ANTENNA

Ideal for mobile or fixed transceivers, minlature portable and pocket transistor radlos, and a host of simitar applications. The 4 section antenna is made of chromeplated brass and plugs into a jack. Measures $48^{\prime \prime}$ fully extended and retracted is $11^{\sim}$ to facilitate carrying in pocket. Complete with a flexible plastic case and slip. under protecting flap. Shpg. Wi., 8 0z Imported f-440

## LOW COST ECONOMY CITIZENS BAND GROUND

 PLANE ANTENNALightweight Tubular Aluminum Elements

Here's rugged performance in a Citizens-Band base station antenna at a truly economical price. Incorporating a special "drooping radial" design for improved impedance characteristics, this excellent ground plane antenna utllizes a $360^{\circ}$ polar pattern to provide complete coverage in any direction. Made-to-last construction features a rugged 1 inch diameter radiating element. A double U.bolt arrangement radiating element. A double U-bolt arrangement
provides the strongest possible mount under provides the strongest po
the most severe conditions. HE-694WX

LAFAYETTE 27MC WALKIE TALKIE TELESCOPING ANTENNA
Attractive and highly efficient 12 Section chrome plated brass tele. scoping antenna for "watkle talkie" transceivers. Measures $52^{\prime \prime}$ fully extended and $5 \%$ " retracted. Has $\$ 8$ 32 threaded stud and nut at bottom for easy mounting, and soldering lug for electrical connection. Shpg. Wg. 10 ez. Imported.

# C B ACCESSORIES FOR ADDED PERFORMANGE AND PROTECTION 

LAFAYETTE CHROME PLATED MOBILE BUMPER MOUNT WITH STAINLESS STEEL STRAP

- Completely Adjustabte For Use With Most Types of Automobile Bumpers
- Highly Reliable and Durable!


## 395

An outstanding new Lafayette mobile Bumper Mount featuring chrome plated mount and stain. less steel strap which is com. pletely adjustable for vertical mounting on most types of automoblle bumpers. Ellminates need of cumbersome link type chain mounts. Shpg. wt., $11 / 2$ lbs. HE-33 Imported. Net 3.95

20 FT. RF COAXIAL CABLE ASSEMBLIES FOR CITIZENS BAND EQUIPMENT


These cable assemblies are necessary for connection between Citizens Band Transceiver and Antenna. TYPE A-Consists of 20 ft . RG.58/U cable with PL. 259 plus UG.175/U on both ends. Required for Ground Piane and Coaxial and Mobile Coaxial jack. Shpg. Wi. 8 ol ${ }^{8}$
HP- 51 Type A 20 it. length
TYPE B-Same as type A except one end is terminated with PL. 259 plus UG.175/U and other end with universal ring type terminal luas for mobile antennas. Shpg. wt.. 8 OZ RECOMMENDED FOR USE WITH HE-8OOWX MOBILE ANTENNA
HP-52 Type B 20 ff . length
Net 2.15

## $2-\frac{5}{2}$

## BLITZ BUG

LIGHTNING PROTECTOR
Designed to fit any standard coaxial cable, the "ellitz Bug' employs the spark gap principle to eliminate static bulld up on coaxial cables. Provides a constan drain off, reducing chances of a direct lightning strike and in many cases ellminating noise problems. Con structed of $3 / 4^{\prime \prime} 0.0$. brass by $21 / 4^{\prime \prime}$ long. Employs one PL-259 plug and one OKCe connector (takes PL. 259 plug.) Shpg. wt., 1 lb .
HP-50
LAFAYETTE GENERATOR NOISE FILTER

- Frequency 月ange 3.30 mcs
- Maximum Current 25 Amps
- Adjustable
- Simple to install

Eliminates whining and grinding noises created from generator brushes. Enables quiet receiver operation for Citizens Band, Amateur and Industrial Irequencies. Standard frequency range $3-30$ mcs. Maximum current 25 amps. Installs quickly and easily. Imported C.5.135

Net 2.49

## LAFAYETTE

## AUTO.MARINE

ENGINE NOISE

## SUPPRESSOR KIT

## amome

 signed to improve reception and reliability in mos superheterodyne transceivers or receivers other than hose using semi-conductor diode detectors, Recom mended for the Lafayette HE-20A, ME-208, HE-20C HE-30, HE-45, HE-458, HE-90 and KT-320. Reduces nolse from ignition systems and other sources. Quiets

## UNIVERSAL LAFAYETTE CITIZENS BAND AMATEUR SPRING \& SWIVEL BALL.MOUNT BASE Chrome plated



## Swivel

 all Jointed Mount BaseUnlversal Lafayette ME-53 chrome plated swivel ball mount base with lug terminals for use with mobile antennas. Can be mounted vertically or horizontally on any surface. With 195 lug terminals for use with mobile antennas. Imported.
HE-53 Shpg. wt., 3 lbs. .... Net 1.95

## Heavy-Outy Chrome Plated

 Stalnless Steel SpringUniversal Lafayette HE-54 Heavy duty chrome plated stainless steel sprine. Provide maximum support for long whlos and heavy center-loaded whips. Im298 ported
HE-54 Shpg. wt., 2 ths.
Net 2.98

## LAFAYETTE <br> 'OUMMY'" ANTENNA LOAO

 FOR CB TRANSCEIVERSA 52 ohm non-Inductive load for testing and tuning-up Citizens 日and transmitters up to 5 watts. It permits tune-up Into a non-radiating element inctaad of into antenna - in compliance with F.C.C. regulations. 8ulltin PL-259 coaxial plug is easily connected and discon. nected from equipment. Shpg. Wt., 1 ib
HP-203

## B\&W424

LOW PASS FILTER
Designed to effectively reduce
TVI - Radiated spurious and other undesireable signals high other undesirable signals high
er than 35 MC are attenuated by at least 60 db -power rating: 100 watts max. Frequency Range; 1.5 to 30 MC , Impedance: $50 / 75$ ohms (reversible) Size: $5 \times 2 \times 13 / 4{ }^{*}$ HE-304

## GENERATOR/REGULATOR

## FEED.THRU NOISE SUPPRESSORS

.95
These 3-terminal networh leed-thru capacitors act as extremely effective R.F. filters above 2 MC
Eliminates and suppresses the majority of noises due to regulators and generators interfering with 27 MC citizens bend frequencies. Aated : $1 \mathrm{MFO} / 600$ volts $O C$ 20 Amps.

> Feed-Thru Suppressor (Screw Terminals) K, Olam, $x$ l'Ks length. Shpg wt., 402. 5 - 221 Net . 3 s Feed-Thru Suppressor 'Ks Diamex l'\%. length. Shpg. wi.. 4 oz .
SP-212
Net .ts
HY-GAIN UNIVERSAL STATIC ARRESTOR

- A Must For Mobile CB Ham Operators
- 14 Components Plus Hook-Up Wire

This easily installed kit will effectively suporess Igni. tion, generator and voltage regulator nolse. Consists of 8 spark plug suppressors; 1 distributor suppressor, 1 voltage regulator suppressor: 4 coaxlal capacitors: shielded cable and braid for wiring filter system. All necessary hardware and Instructions for installation are included. Shpg. wt., 2 lbs.
HP-204

# Selected Citizens Band Accessories 

## POPULAR CITIZEN BAND TRANSCEIVER CRYSTALS

- Matched Pairs, Transmit Types, Receive Types as Low As 495
- Extremely Accurate 3rd Overione Crystals meet F.C.C. Tolerance Requirements of $.005 \%$

Matcheo Crystals-Channels 1 thru 23 consists of matched receive/ransmit crystais of the same channel. When ordering specify channel desired.
FOR TRANSCEIVER
Cadre 510
Poly-Comm. PC-4, PC-8
RCA Mart VII
Lafayette ME-75
Lafayette ME-100
RECEIVE CRYSTALS-Channel 1 thru 23. When ordering specify channel desired.
FOR TRANSCEIVER
Lafayette $\mathrm{HE}-20, \mathrm{~A}, \mathrm{~B}, \mathrm{C}$
Lafayette HE-29; A, B Lafayette HE-90 Lafayette ME-02 Johnson Messenger 2 lohns on Vixins Messenger EICO 772 Sertes

| STOCX MO. | NET |
| :--- | :--- |
| HE-22C | 2.25 |
| HE.75AC | 2.25 |
| HE-22C | 2.25 |
| HE.75AC | 2.25 |
| HE.-33C | 2.25 |
| HE.833C | 2.25 |
| HE-943C | 2.25 |

## TRANSMIT CRYSTALS-Chan

 FOR TRANSCEIVER Lafayette HE-15A, B C Lafryette HE-20, A, B, C Lafayette ME-29, A, B Lafayette HE-82 Lafayotte HE-90 Johnson Messenger 2 Johnson Vixing Messenger ECI-1MEICO 772 series
Globe CB-100, 1001
Gloes, CB-100, MC-1, MC-2, MC-3
Heath CB-1, 6W-10
Sonar model 6
SPECIAL MATCHEO CRYSTALS (Recelve transmit of the same channel) FOR TRANSCEIVERS NOT LISTEDDELIVERY 3.4 WEEKS-SPECIFY MAKE MODEL NO 8 CHANNEL.

Net 5.95

## 

"SPEAKEASY" AUDIO COMPRESSOR AMPLIFIER for ROTOR FOR CITIZENS BEAM

This heavy-duty rotor unit will handle antennas up to 150 tbs. Simply set the control unit polnter to the desired direction, and the antenna will automatically rotate to this position and stop. Perfect for TV, Ham or Citizen Band application. Rotor unit employs 12 heavy duty ball bearings in two $61 / 2^{2 \prime}$ races. Reversible clamps on rotor will take masts from $7 / s^{\prime \prime}$ to $2^{\prime \prime}$. O.D. Control unit is marked in com. pass points. N.S.E.W. NW, NE, SW, and SE. Housed in attractive brown plastic cabinet with rubber feet. For $\mathbf{1 1 0 - 1 2 0}$ volts $50.60 \mathrm{cps} A C$. Requlres 4 conductor cable for HE-476WX rotor. HE-476wX

Net 31.31
Wh-151 100' coll Net 2.30 WRC-104 less than 100., Der foot .03; over $100^{\prime}$ per foot $.02 s^{\prime}$

## CITIZEN BAND TRANSCEIVERS

## - For Moblle

 and Base Transceivers - Built-in Modulation Moter Automatically and effectively increases average modulation volce, readability, and therefore distance without over modulation. Speak Easy is suitable for mobile or base use, and is avallable for $115 / 12$ or $115 / 6$ volts. Final power input to transmitter remains within legal 5 watt limit. but effective voice power is increased many times. Easily attaches to your CB transceiver, requires practically no power for operation. Complete operational and instaliation instructlons are provided. $21 / 4 \mathrm{H} \times 5 \mathrm{~L} \times 4^{\prime \prime} \mathrm{D}$. Shpg. wt., 3 lbs. HE-905 ... "Speak Easy" 115VAC/12DC ... Net 34.75 HE-906 . . "Speak Easy" 115VAC/60C ...... Net 34.75
## E F JOHNSON

 TONE ALERT - Selective Calling System for Two-Way Radio - Uses High "a" Frequency Selective Resonant Relay Johnson "Tone Alert" is a selective calling system which attaches to most twoway radio equipment and permits calling your own mobite unlt, or being called by It, without the annoyance of having to isten to other transmissions. Your own recelver is operative $100 \%$ of the "time while your own. units operative $100 \%$ of the time while your own. Unitswill be absolutely auiet until signaled by your own calling tone. Important too-your receiver is operathe regardless of where your volume and squelch controls are set. Comes completely wired and tested. Includes connecting cable and mounting hardware. Can be easily installed in a few minutes. For 115 V AC and 6 or 12 V DC. Dim. $11 / 2 \mathrm{~W} \times 4 \mathrm{HX}$ For 115 V AC and 6 or
$7 y^{n}{ }^{\circ}$. Shpg. wt., 2 bs.
$73 / 4$ "D. Shpg. Wt. 2 lbs.
HE-626 $250-810$ Tone Alert $115 \mathrm{VAC} / 6 \mathrm{VOC}$ Net 59.95 HE-626 $250-810$ Tone Alert $115 \mathrm{VAC} / 6 \mathrm{VOC}$ Net 59.95

## 1963 CITIZENS BAND

 CALL BOOK
## any other CB Transcelver

Now you can select a clear CB channel fast - with precision accuracy. Mounts easily to convert the bulit-in transmitter to 8 -crystal, 8 -channel selectable frequency. Design permits affixing this unit to the top or side of a transmitter. Push-button design eliminates going through busy channels with a Ive eliminates going through busy channels with a lime plug in construction permits instantaneous crystal replacement. Shpg. wt., 2 lbs.
HE-938


# - Standing Wave Ratlo 

- Rr Power (true) to 50-wa
- Modulation distortion by Monitor
- Relative Fiold Strength

For amateur and technician alike-a completely portable lab for RF measurements in base or field locathons. Reads SWR from 1 to 30 ; reads true RF power on ${ }^{-} 24 \mathrm{mc}$; reads percentage of modulation to $100 \%$. It can also check for modulation distortion aurally. Relative fleld strength can be read to check antenna radiation patterns or peak transmitters. Utilizes sensitive 100 ma meter with easy-to-read scales. Size: 8 Wx 6Hx342"D. Shpg. wt., 6 lbs.
HE-349
Net 44.95
NEW! e.c. TRANSISTORIZED C-B POWER SUPPLY


Features increased power output and B+ while re ducing current drain. The annoying vibrator with its associated hash noises and fallures are eliminated. Instead you plug in this transistor power supply in the old vibrator socket for more durable operating power. Completely assembled. For 6 or 12 volts. Fits Lafayette HE-15, HE-20, Sonar E, G, Globe 100, RCA "Radio-Phone" and many others. Has heavy-duty aluminum heat sink. Slze: $81 / / L \times 21 / 3 H \times 2$ "D . Shpg. wt. minum heat sink. size: 8yalx2HHx2 D. Shps. Wt. 2 HE. 908

Net 21.90

## new! Relin sollo state

## SUBMINIATURE NOISE LIMITER



- For Hams, CB'ers, - Suppresses Nolse from Any Type Ignition system, Motors, Atmosphero
The Kolin solid state noise limiter is an extremely offective self-adjusting device, which suppresses Im pulse noise in your recelver when receiving $A M$. Small enough to mount directly inside most re ceivers, It wlll work on supply voltages of 6 to 220 volts AC or DC. Only 3 connections are required. A switch is used to disable unit in normat quiet areas. Works on all recefvers employing a dlode detector. All necessary instructions and mounting hardware is supplied. Size: $13 / 8 \times 11 / 4 x^{2} / 2^{\prime \prime}$. Shpg. Wt., 802. HE-907

Net 7.95

## NEW!



PORT-0.GEN

Completely Self-Contained Transistorized, Modulated Crystal Controlled Generator For Citizen Band-Marine Band-Aviation Band


By inserting a crystal in the Port-o-Gen you'll have a rellable signal source to check if your recelver is properly tuned. Can be used as an alignment generator for tuning receiver front end thru the If strip. Operates between 2 and 27MC. Includes battery. HA-145 Shpg. wt., 1 lb.

Up-to-date list of "Q" calls special do-it-yourself sections and 16 page CB equipment directory. Aiso lists CB clubs in U.S. and includes a log sec. tion.
BK-i324
postpaid in U.S.A. Net 4.50

CAIL-BOOS

1963

## SELECTED CITIZENS BAND and AMATEUR ANTENNAS

## NEW-TRONICS HU FOR 10-15-20-40-75 METERS


#### Abstract

An outstanding antenna assembly permitting multi-band mobise operation with exceptional results. Buy only one mast and select the resonators for the bands you operate. No need for matching devices, use any feed line length of 52 -ohm cable. Each of the five resonators has a col specially designed for maximum radlation for a particular band. Center frequency tuning is by means of an adjustable stainless steel rod in the resonator assembly. The 54 . Inch fold-over, heat treated, $1 / 2^{*}$ afuminum mast permits instantaneous interchange of resonators for the desired band. SWR is less than 2 to 1 for any center frequency within each band. Power Rating: AM input 75 watts; SSB input 250 watts PEP. Mast has 7 H" -24 base stud to fit all standard mounts. Watts PEP. Mast has $\mathbf{3 H}^{\prime \prime}-24$ base stud to HB-171WX Model MO-1 $54^{*}$ Mast Fender Mount. Shpg. wt., 2 lbs.

Not 7.95 HB-172wx Model MO-2 54" Mast Bumper Mount. Shpg. wt.. 2 lbs. 10 Meter Resonator. Shpg. wt., 10 02. Net 5.95 Model RM-15 15 Meter Resonator. Shpg. wt, 1 Ib. .. Not 6.95 MA-153 Model RM-20 20 Meter Resonator. Shpg. Wt., 1 lb. Net 7.95 $\begin{array}{llll}\text { HA-154 Model RM-40 } & \text { 40 Meter Resonator. Shpg. wt., } 11 / 2 \mathrm{lbs} \text {. Net } 8.95 \\ \text { HA-155 Model RM-75 } & 75 \text { Meter Resonator. ShDg. wt., } 2 \text { los. Net } 11.95\end{array}$


## MARK MOBILE ANTENNAS <br> FIBERGLAS "HELIWHIPS"

The "Heliwhip" is a fiberglas molded, continuously loaded whip antenna designed to replace conventional stalnless steel whips. The "Hellwhip" can be positioned on the upper portion of the vehicle such as trunk lid, cowl, fender or hood mounts without danger of shorting to power lines. Offers superlor performance. Shpg. wt., 3 lbs. HE-895W Model HW-4 For 11 Meters

Net 9.95 HE-739W Model HW-10 For 10 Meters HE-740W Model HW. 6 For 6 Meters MODEL HWM-1. Molded Antenna Mount for "Heliwhips" HE-896 .............................. Shpg. wt., 2 Ibs.

Net 9.95
Net 9.95
MODEL CBB. 1 "BEACON" BASE STATION ANTENNA
Consists of half-wave 2 -section aluminum radiator 17 ft . long and quarter-wave matching stub section of RG.8/U cable; radiator is Insulated and supported by fiberglas mount section. Wide bandwith of 26.28 MC. VSWR is below 1.511 from 26.5 to 27.5 MC and is almost Unity over the entire Citizens Band. For UHF coax connector SO-239. Accepts RG-58/U or RG-8/U 50-ohm cables with PL- 259 connectors. Complete except for standard TV antenna mounting hardware. Shpg. wt., 8 lbs.

## CBB. 1 HE-894WX

## WARD WCA.LC-1 27MC L-COIL CITIZENS BAND ANTENNA

The new Ward L-Coll Clitizens Band antenna is designed around famous Ward " 8 " ball and replaces long steel whip. Makes neat and trim appearance on your car. Improves car radio performance - less fading, less directional. Use car radio and CB radio from same antenna by switching from one to the other. Telescopes from $42^{\circ}$ to $63^{\prime \prime}$. Easy to instali. Shpg. wt., 2 lbs HE-985W

Net 0.25

## TENNA C-BAM AUTOMATIC MOBILE CB ANTENNA

## - Operates Electrically At The Touch Of A Switc

Automatic cowl mount antenna that operates electrically at the touch of a switch. Sturdy, compact and resistant, extends to $55^{\prime \prime}$-collapses to $191 / 2^{\prime \prime}$, Top mounted coll completely disappears into antenna. Includes; switch w/bracket. $72^{\prime \prime}$ electric harness, $60^{\circ \prime}$ RG-58/L cable plus a PL-259 plug and UG-175 adaptor, $54^{\prime \prime}$ radar type copper shielded cable and hardware. For 12 volts only.
HE.92Tw Shpg. wt., 6 lbs
Net 23.02

## MOSLEY

## A-311 3-ELEMENT CITIZEN'S BAND BEAM ANTENNA

## 3395

- Durable Light Weight Aluminum
- Oelivers the Equivalent Power Input of 40 -Watts from your 5 -Watt Citizens Band Transmitter
Unequaled poinf-to-point communications for Citizens Band operators. 9.3 db gain over dipole means the effective radiated power is multiplied by 8 . This means your 5 watt cltizens Band Transmitter can actually achieve a legal effecfive power input of 40 watts. Boom is $12^{\circ}$ long with maximum turning radius of 9.5 ft . Requires $114^{\prime \prime}$ mast and RG-8/U or R9-58/U Cable. Lugs are supplied for the other end. Shpg. wt., 30 lbs.
AN-57wX


## Master Mabile

citizen band antennas
New Q-11 Giant Cubical Quad CB Fixed Antenna

Designed specifically for Citizens Band use, the Q-11 is extremely effective in increasing communications range. Beam elements are constructed of rigld aluminum and fiberglas tubing for naximum service-clamps are made of heaw-duty cadmlum plated steel for corrosion resistance. Can be used with most TV-type rotors. It is lightwelght and rugged enough to withstand high winds. Can be easily assembled on the ground or on the tower. Forward Gains 8 db . Front-To-Back Ratio: up to 40 db . For use with 52 -0hm caax cable. Shpg. wt., 13 Jbs.
HE-741 WX
Net 39.15
811

## MASTER MAGIC WAND MODEL 811 11-METER ANTENNA

New Magic-Wand Top-Loaded Moblle Antenna mounts on iny standard base mount. Designed for moblle use on the 27 MC Citizens Band. Compact and neat appearing plus provides maximum radiation over all Clitizens Band channels. Antenna wound over tapered fiberglas whip for maximum strength. Shpg. wt., 3 lbs.
HE.719WX
Net 8.77

## FG103 103" FIBERGLAS WHIP FOR 11 METERS CITIZENS BAND

Completely weatherproof, permanent and rust-resistant corrosion-proof. Speciaily designed flexibility prevents fallure due to fatigue or breakage. Safe, permanent insulation prevents burns. \%o"-24 tread base fitting with male brass chrome plated fittings. Unique construction makes it extremely flexible while retaining its shape. Shpg. wt., 4 lbs.
HE-729WX
Net 6.81 FP10?
Master Malile communications Antennas


MODEL 613. VHF ROOFTOP ANTENNA FOR $140-165 \mathrm{MC}$. Stainless steel wire, 10 ft . coax, deluxe fittings. Shpg wt., 5 lbs.
HE-700
Net 4.85
MODEL 81080 ALL-BAND BASE-LOADING ANT. COIL FOR 80-40-20-15-10 METERS. $96^{*}$ whip included. Positive locking action whip provides tight and accurate contact. slide in or out to final loading point and lock whip in place.
HE-709WX Shpg. wt., 6 lbs.
Net 17.59
MODEL GP-4 GROUND PLANE with 4 radials for match to 52 -ohm coax. Complete 2 meter band coverage. Attaches to mast with U-bolts (boits and mount brackets supplled). Special alloy construction withstands corrosion and weather. HE-728 Shpg. wt., 6 lbs.
. Net 5.83 MODEL MGP. 6 SIX METER GROUND PLANE, "Orooping" type. Aluminum alloy tubing and sleeve. Ceramic top insulator, and coax cable connector. For medium or fow powered transmitters.
HE-731w Shpg. wt. 5 lbs.
Not 14.65
MODEL 300 "MASTERPLANE" 2-METER GROUND PLANE AMTENNA, "DroopIng" type plus 4 straight radials to give a low angle of radiation. Stralght radials adjustable to eliminate standing waves on transmission line. Finest aluminum alloys. With $3 / 4^{\prime \prime}$ pipe for mounting and coaxlal cable connector
pipe for mounting and coaxla
HE-732W Shpg. Wt., 20 lbs .

"'HI-Q'
CG. 275 MMM-75
E-2-295
"ULTRA-HI-Q" CENTER LOADING COILS. PrecIsion made, for 1 band use with 2. section whip. "Q" over 515. Av. shpg. wt., 4 lbs.
HE-188 80 Meters $21 / 2 \times 8^{\circ}$
Net 5.14
HE-184 40 Meters 21/2x5*
HE-188 20 Meters 21/2x3"
Net 5.14
MODEL E.Z-295 E.Z-OFF ANTENNA CONNECTORS. COnnect or remove your loading colls, whips or mounts in a jlify. No tools needed. Stalnless steel construction.
HE-725 Shpg. Wt., 1 th. ..........................................................
MODEL $10 H$ TENNAHOLD. Protects antenna, prevents whipping.
MODEL 10 H TENNAHOLD.
HE-724 Shpg. Wt., 1 lb .
Net 2.89
NEW MODEL CG-275 RETRACTABLE CB ANTENNA GUTTER MOUNT............................................... 98 HE-187 Shpg. wt.t 1 lb. CW MODEL MMM-75 UNIVERSAL MOUNT. For trunk lid, gutter, cowl mounting. Equipped with coax connector.
HE-186 Shpg. wt., 1 lb.

## NEW MOOEL M. 37 VERTICAL DIRECTIONAL ANTENNA ( 27 MC )

A new vertical direction beam antenna. 7 db forward gain over ground plane with $5 x$ power gain. 13.5 db front-toback ratio. All-alluminum, $\mathbf{1 8}^{\prime}$ high, 11' wide. Operates with 52 ohm cable. Shpg. wt., 15 lbs.
HB-151wx
Net 44.10

## MODEL MC27 11-METER GROUND

 PLANE ANTENNASolld aluminum 108 -inch heat-treated radials and radiator. Elements supplied in two 54 -inch lengths joined by threading, coupling nuts. Radials droop for 50.0 hm match. Ac. cepts $12 / 4$-inch tubing. RG-58/U cable and PL. 259 connector. Shpg. wt., 4 lbs. HE-661W

Net 15.63
MODEL M-38 ANTENNA ISOLATING SKIRT - Improves Performance of All Citizens Band Ground Plane Antennas
Isolating skirt for use with Clitizens Band Ground Plane Antennas. Mounts 9 feet ( $1 / 4$ wave length @ 27 MC ) below ground plane. Lowers angle of radiatlon and minimizes effect of mounting structure. Improves performance of ground plane. Clamps to Improves periormance of ground plane. Clamps
$11 / 4$-inch tubling or 1 -inch pipe. Shpg. Wt., 4 lbs . 11/4-Inch tub
HE-6BiWX

MODEL M-36 1/2-WAVE COAXIAL ANTENNA (27MC)

Antenna is comprised of a $1 / 4$-wave length, 9 -fost jointed, solid aluminum vertical radiator, bolted to a 9 -foot long, 2 -inch diameter, $1 / 4$-wave length alumi. num shirt.
Omnidirectional, low standing wave ra. tio. Built for operation with $52-0 \mathrm{hm}$ cable. HE-683WX S7pg. Wt., 8 lbs .... Net 19.55

## MOOEL M-71 11-METER MARINE ANTENNA

 A complete antenna system for Marine Citizens Band communications. Included are supporting tube, universal "Lay-down" mounting and 15 ft . of coaxial cable with PL-259 connector, All parts of anodized aluminum, chrome plated brass and stain. less steel. Overall height $107^{\prime \prime}$, reduceable to 71". No g ound plate necessary. Shpg. wt., 6 lbs.HE-480WX

## ANT

## Lafayette Mode <br> stock No. No.

HE. 686 M.8A
HE. 654 M.9A
Heavy-duty standard spriag. Shpg. wt., 4 lbs. 3.58

HE. 655 M. 3 Heavy-duty spring. Cad. plated. Shpg. wt., 3 lbs. Aluminum base with black Polyester Fiberglas one-plece Insulator. Hardware included. Shipg. wt., 2 lbs.
HE. 656 M-13 Same as M-3 (above) Dut with coax fitting. Shpg. Same as
wt., 2 lbs.
HE-65 M-25 Min-Spring. Reduces shock to coll if whip strikes object. Shpg. Wt., 1 lb.
HE. 669 ASP. 143 Double Chain Bumper Mount. Cadmium plated alloy steel interlocking " $Z$ " links assure a secure mounting for spring, extension, coil and whip. Mount accepts $3 / 8$ "-24 thread of spring or whip. Shps. wt., 2 lbs.
HE-868 M-4
HE-484 M-10 Ruboer hole plug. Fills 1 Kot hole. Shpg wt., 1 ll .

NEW MODEL MR77 VERTICAL HORIZONTAL BEAM ANTENNA (27 MC)

All-aluminum construction Forward gain: 6 db horizontal, 7 db vertical. Front-to-back ratio: 15 db horizontal or vertical. VSWR: 1.5 or less. Turning radius: $8^{\prime} \cdot 6^{\prime \prime}$. Wind rating: 60 MPH wind. Impedance: 50 ohms, Gamms matched. Re qulres separate coax cable transmission line to vertical and horizontal elements (cable not supplled). Clamps to $13 / 8$-inch tubing or 1 -inch plpe. Shpg. wt., 24 lbc HB.154WX

MOOEL M-81 "MAGNUM-27" 1/2-WAVE 27MC ANTENNA


Compact vertical radiator with an actual 6 DB gain over any single element om. nidirectional antenna. Constructed of rigid aluminum and cadmium plated steel. It is corrosion resistant, waterproof and easy to in. stall. Low angle of radiation Intensifles signal pattern. Very low noise pick-up. DI. rect ground lightning protection 50 -ohm feed Total height is only $18^{\prime} 2^{\prime \prime},\left(17^{\prime} 3^{\prime \prime}\right.$ radiator) $4.54^{\prime \prime}$ radia/s. Shpg. wt., 12 lbs .
HE-487WX
Net 24.37
MODEL M-103 CB/BROADCAST ANTENNA

A center-loaded, cowl mount antenna eliminating the need of 2 antennas. Fits easily in the $7 / 0^{\prime \prime}$ to $1 K_{0}{ }^{"}$ hole left by the auto antenna. $46^{\prime \prime}$ long in operating position. Collapses to 31". Incorporates a new automatic dividing harness which allows for a 1 ft . low loss cable to an AM set, 2 ft . cable to $C B$ set and 5 ft . cable to antenna with a PL-254 connector attached. Shpg. wt., 4 lbs. HE-340WX

Net 14.64


For use with 27MC Citizens. Band transceivers. Will handle up to 5 watts power and will attenuate output harmonics as follows: 2 nd harmonic, down $31 \mathrm{db} ; 3$ rd and $\$ 0-239$ receptacle on other end. Shpg. wt., 6 oz. MA-140


NEW MODEL M-74 COWL MOUNT ANTENNA (27 MC)

For cowl, fender or deck mounting. Only $44^{\prime \prime}$ high with professional-type swivel mount, allowing vertical positloning up to $35^{\circ}$. 12' RG. $58 / \mathrm{U}$ cable with PL. 259 connector on both ends. Shpg. Wt., 2 lbs.
HB.152W
Net 15.35

## MODEL MR49 MOBILE CENTER LOADED CB ANTENNA ( 27 MC )

Center loaded cowl mount antenna provides best omnidirectional pattern. Low VSWR. Extended length $46^{\prime \prime}, 31^{\prime \prime}$ collapsed chrome tubes. Rocker support assures positive ground and up to $35^{\circ}$ mounting angle. $5^{\prime}$ RG-58/U lead with PL-259 connectors. Shpg. wt., 2.5 lbs. HE. 684

Net 9.96

## MOOELS MR52 AND MR53 CB FIBERGLAS ANTENNAS (27MC)

Complete cowl/fender mount antenna. Swivel mount allows vertical position ing up to $35^{\circ}$. Fits Ko" to $11 / 4^{\prime \prime}$ hole $5^{\prime}$ of RG-58/U cable with PL-259 connector. Shpg. wt., 2.5 lbs . HE-685W

Net 7.98
Black Fiberglas whip only for MR52. Chrome peated brass ferrule. $3 / \mathrm{g}^{\prime \prime}-24$ male thread. Shpg. wt., 1.5 lbs. HE.686W

Net 5.00
MODEL M-67 11-METER ROOF TOP ANTENNA ( 27 MC )

Base loaded rooftop antenna. Omndirec. tional pattern. Only $44^{\text {" }}$ long with waterproof mount, loading coll. $20^{\circ}$ of RG-58/U cable has PL-259 connector at set end, and solderless connection at antenna. Mounts in $3 / 4^{m}$ hole. Shpg. wt., 2.5 lbs. HE-479WX

## MODEL M-23 MOBILE REAR COWL MDUNT ANTENNA ( 27 MC )

Complete moblle swivel base assem. bly for rear deck or side mountling. Coaxial connector on base completely shields terminal connection. Consists of cadmium plated base, special alloy cadmlum plated spring, $102^{\prime \prime}$ stainless steel whip, cable and gutter clip. Furnished with 20 ft . RG-58/U cable, having PL. 259 connectors on both ends. Shps. wt., 6 fbs.
HE-674WX
Net 18.52

## MODEL M-20 CB WINOOW

 MOUNTING ANTENNA (27 MC)For apartment installation where other outdoor antennas can not be used. Jointed, 9 ft . aluminum radiator is supported by adjustable heavy-duty cadmium bracket. WIII accept elther twin or coaxial feed line. As with all antennas, performance will Improve with' helght above ground. Shpg. wt., 4 lbs. HE-649W

Net 7.35

# He Aq-qin Amateur and Citizen's Band Communications Antennas 

## Model 1BHT HY-TOWER

 World famous Hy-Towe operates on 10 thru 80 meters. Completely trap less. Uses unique stub decoupling system for high efficiency band switching. Works well on 6 meters and on 160 meters by use of base loading coil. SWR less than 2:1. Completely self-supporting. Overall height, 55 it. Tower section hot dipped galvanized steel. Hardware iridite treated to MIL specs. Takes maximum legal powerShpg. wt., 105 los

## H8-117wX ... Net 139.50

## WORLD FAMOUS 14 AVS TRAP VERTICAL

Self-supporting multi-band trap vertical for 10 thru 40 meters. Solid State Traps. Roof or ground mounted. Low angle DX radlation pattern. SWR less than 2:1. Only $21^{\prime}$ high.
HA- 171 Shpg. wt., 10 tbs. RODF MOUNTING KIT for 14 AVS Includes $5^{\circ}$ mast, roof mount, ground plane radial wires, Insulators and all necessary hardware.
HA-172 Shpg. wt., 9 lbs.

## Model 18JR NEW HY-TOWER JUNIOR

New low cost ver. slon of the Hy-Gain Hy-Towep. Works 10 thru 80 meters with out the use of traps. Lightweight, easy to install. 38 ft. high, Ground mounts on 13/" O.D. steel pipe. SWR less than 211. Takes maximum legal power. Shpg. wt., 35 los. HB. 118

Net 29.95
HY-GAN'S NEW HF "TOPPER" MOBILE ANTENNAS for

## 10, 15, 20, $40 \& 75$ Meters

Proven top laded, high efficiency single band mobile antennas featuring stabl-fold mast for low garaging and unique spring loaded quick disconnect for interchanz.ng Topper radiators capsules) to operate on various bands. The $3^{\prime}$ mast of $1 / 2^{\prime \prime}$ chrome plated steel with a $3 /{ }^{\prime \prime}$ " 24 stud at sottom fits any standard mount-includes stabl-fold fitting and accepts unique "quick-disconnect" attached to topper capsules. Topper capsules are $6^{\prime \prime} x^{3 / 0^{\prime \prime}}$ diameter iberglas rod with encapsutated coll section and a "quick-disconnect" fused to the bottom portion. Telescoping stainiess steel tuner rod at tod of capsule permits quick, simple adjust. ment to resinant frequency. Overall height approx. 102". Rated: 100 W AM, 300W P.E.P.

|  |  | Quick | Stock No. | Model | Description | Shpg. wt. | Net |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| fold |  |  | HA. 170 | 7.10 | 10 M Capsule | 1 lb . | 7.95 |
|  |  |  | HA. 173 | TL. 15 | 15 M Capsule | 1 lb. | 7.95 |
|  |  |  | HA-174 | 7.20 | 20 M Capsule | 1 ib . | 7.95 |
|  |  |  | HA-175 | T.40 | 40 M Capsule | $11 / 2 \mathrm{ibs}$. | 9.95 |
|  |  |  | HA. 176 | TL-75 | 75 M Capsule | 11/2 los. | 11.95 |

3 ft . MAST SECTION for use with all Topper Capsules:
Ha-177 Model TM.36, Shpg. wt., 2 los.

## HYGAIN <br> MODEL SWO <br> FOR OUTDOOR USE

Model swo is a high efficiency doublet antenna for outdoor use Peaker for top performance on the important 11, 13, 16, 19, 24, 31 and 49 meter short wave bands. Includes elght trap assemblies, end insulators, 100 ft . of lead-In cable with complete Instructions for rapid assembly. Mounts easily under eaves, in attic space, from window to tree etc. Overall length, 40 ft . Model swo Shpg $w t ., 21 / 2 \mathrm{lbs}$
HE. 972
Net 14.75

Convenient Indoor Model SWI improves the performance of any shortwave receiver Covers 5-30 Mc. Easy to install and operate Six-foot cable (Included) is attached to re ceiver, the telescoping "rabbit ears" ex.
tended, and the "match" and "tune" controls set for maximum signal strength. Attractively housed in unbreakable plastic with chrome-plated antennas. Model SWI. Shpg. wt., $21 / 2$ lbs.
HE.973

## TH-4 4-Element

 THUNDERBIRDHF EEAMS THUNDERBIRD TRIBANDERS

Deluxe three band beam for 10 , 15 and 20 meters. Slim Line Traps delliver true full-size performance. Beta Match assures maximum gain and $F / B$ ratio without compromise. Factory pretuned. SWR less than $\mathbf{2 : 1}$. Longest element, 34 ft . Boom length, 16 ft . Takes maximum legal power. Shpg. wt., 32 lbs ME-97IWX

TH-3JR NEW

VHF BEAMS

## hyqain Citizen's Band Antennas

NEW Mark II COLINEAR GROUND PLANE
All new version of Delivers
the world famous the world famous model CLR Collinear. Rugged new base insures survival in winds up to 100 MPH Maximum 20 ft .) aperture develops greatest possible gain. 3.4db in strength intensity plus improvement in signal/noise ratio resulting from vertical element being at DC ground. fotal circuit galn in excess of 80 b DC ground feature protects antenna and equipment from lightning damase. Element material coD quallity aluminum tubing $11 / a^{" \prime}$ to $7 \mathbf{c o}^{\prime \prime}$. All seamless tub ing. Mount on mast $1^{\prime \prime}$ to $13{ }^{\prime \prime}$ SWR less than 1.2:1. Fed with 52 ohm coax Unconditionally guaranteed to outper form any omni-directional base station antenna legaliy installed (except HyGain GCLR) regardiess of claims. Shpg W8.18 10 lbs

Net 29.95

MODEL
TLWR OMNI-TOPPER

New moblle antenna de signed for roof top or deck mounting - the highest part of your highest part of your
automablie where sig. automoblle where sig.
nals can be radated nals can be radiated
with top efficiency in all with top efficiency in al Hy-Gain top loading Matches perfectly to 5 ohm coax feed line. Made of stainless steel Only 24 inches high. Complete with chrome plated miniature spring plated miniatue spring for easy garaging. New
ly designed roof mount ly designed roof mount
is strong and easy to is stro.
install.
Shpg. wt
HE-977w

## Model TH-3 3-Element THUNDERBIRD

Standard three band beam for 10, 15 and 20 meters. Slim Line Traps. SWR less than 2:1. Longest element, 28 ft . Boom length, 14 ft . Takes maximum legal power
ME.T73W Shpg wt. 36 lbs
Net 99.75

MODEL TLWT-M TOP-LOADED TELESCOPING WHIP

- Stainless Steel - Matches 52 -0hm Coax
- With Base Mount

3-section stainless stee telescoping whip (50) to $28^{\prime \prime}$ ) for easy garag ing. Uses top loading to raise the radiating portion of the whip to its highest point and Improves matching to 52 ohm coar Polyethy tene enclosed coll cap. tene enciosed coil cap sule is sealed perma-
nently to whio and is nently to whip and is
virtually impervious to any climatle condition With chrome plated body mount and coax fitting Shpg. Wt., 1 lb. HE-976W

Model 6386 METER 3-ELEMENT BEAN Ruggedly constructed. Elements optimum spaced on 8 ft boom. Exclusive Beta Match provides icw SWR using 52 ohm coax. Longest element, $9^{\prime \prime} 8^{\prime \prime}$
HB-128W Shpg. Wt. 5 los. Net 16.95
Model 668 6 METER 6.ELEMEMT BEAM Elements optimum spaced on 24 ft . boom. 150b of forward gain. Beta Matched for 52 ohm coax. Longest element, $9^{\prime} 8$ HB-129W Shpg, Wt, 17 lbs
Model 232 METER 3-ELEMENT BEAM Elements optimum spaced on 3 ft . boom 10db of forward gain. Beta Matched for 52 ohm coax. Low SWP
HB-126w Shpg wt, 2 lbs
Model 28 METER Net 6.95 Develops 16 sato fef oranment aeam Deverns 16.50 db of forward gain using $O D$ timum spaced elements on a 14 ft . Doom Beta Match provides low SWR using 52 ohm coax
H8.127w Shpg. wt., 5 lbs.
Net 16.50

NEW 5-ELEMENT
CITIZEN'S BAND BEAM Model 115B

Develops tremendous forward gain of 12.7 db . Designed for vertical or horl. zontal mounting. Works equally well base station to mobile or point to base station to mobile or point to polnt. Heavy duty, all-aluminum con-
struction. 2 in. 0.0 . boom with Beta struction. 2 in. 0.0 . boom with Beta
Match for 52 ohm coax. Multiplies Match for 52 ohm coax. Multiplies
transmitter power more than 10 times. transmitter power more than 10 times.
C.B. transceiver has effective radlating C.B. transceiver has effective radlating
power of a 50 to 75 watt transmitter. Easy to assemble and install. HB-181wK Shpg. wt., 30 los. Net 69.95 MARINE CB ANTENNA Model TLMA For large or small boats. Requires no grounding system. Top toading coll capsule for highest efflciency. All stain less steel construction including hard ware for maximum weatherability. Ov erall height, 5 feet. Complete with heavy duty molded cycolac mount, 12 feet of RG-58/U coaxial cable with a $\mathrm{PL}-259$ connector. Special stainless steel quick disconnect allows quick and easy removal of antenna for boat storage. Mounts on deck of smaller boats or on cabin of larger boats. HB-182WX Shpg. Wt., 2 lbs. Net 19.95

## NEW LAFAYETTE MODEL HE-95 ALL-BAND VERTICAL TUNEABLE 10 TO 80 METERS ANTENNA

- 10 To 80 Meters
- For Fixed Operatior - Omni-Directional. Vertically Polarized
- Irridite Treated To Mil Specs


## Sensationally Priced At

A best buy multl-band antenna, the HE-95 can be tuned to any amateur band 10 thmough 80 meters by a single ad usiment. Has amazing efficlenc: for $0 x$ or local contacts. Cai be installed in minutes. Place it on a short $156^{\prime \prime}$ mast dr ven Into the round or roof top or tower instalation. Car survive winds in excess of 50 mph . Overall tolght ${ }^{\prime} 8^{\prime}$ jues knocks $342^{\prime \prime}$
down to only $5^{\prime}$. U.es diameter alr wound coll as matching inductor. All steel parts Irridite treated to MII Specs. Impedance 50 ohms. Maximum power 1000 watts AM or CW- 2 KW PE 3 . Omni. directional, vertically folarized. directional, verticall Shpg. Wt
HE.95wX

Net 14.85


## $\Rightarrow$ Hi-Par 

A compast, horizontally potarized mobile antenna for 6 maters. Since most fixed 6 meter stations have adopted horizonial polacization, the "Saturn 6" offers d dlstinel advantage over the vertical whip. It is essentially as end-ioaded folded olpole with 3 ring design, approximately $20^{\prime \prime}$ In diameter, $5^{\circ \prime}$ hish. Oesign center is 50.5 NC but resenant frequency may oesign center is 50.5 NC but resenant requency math be varied beiween 50.5 and 53.0 mC. Easily fed with RG58/U coax through a simple " $0^{\prime \prime}$ section. Strons and rigid aluminum construction; net weight und Easily supported on plpe tubing or stif rod.
Model S-1-"Saturn 6 " entenna, 2 -piece adjustable alu minum mast mast brachet universat bumper hitch No minum mast, mast braciet, universat bumper hitch No holes to drill. Less coax feed line. Shpg. wt., 3 lbs ME-05W.

Net 18.59

## ROHN MODEL 25

 'FOLD-OVER' TOWER
## 50 FEET IN HEIGHT

Permits service and interchange of Deams and rotators in perfect safety, entirely at ground level! in minutes, the tower can be folded over so that the antenna and rolator are completely accessible. Completely hor-dipped golvanized after fabrication. Dasigned to handle the equlvalent of 2 full-sized 3.element 20 meter beans, plus rovator. Accepts the CDR rotator model HAM.M. Cross section is $121 / 2^{\prime \prime}$ equllateral tri angle with solid steel, ${ }^{\prime \prime}$ zigzag" ${ }^{\prime \prime}$, electric welded cross bracing. Gaying necessary at hinged area. Includet $40^{\prime \prime}$ base section for concrete mourting. Corrplete with boom, windlass and cable and all haroware. for ground installation.

## HE 846wx .

Rohn Gpound Guy Kit-simplifies installation of Model 25 tower. Contains all mecessary equipment for guying tower at ringe.
HE-845WXY
Net 32.75
The Model 25 Rohn 'Fold-over' Tower and Ground Guy Kit will be shipped frelght prepald in the continental llmits of U.S.h.

FINCO 2 \& 6 METER BEAM

Model A.62 is an advanced antenna for both 6 and 2 meters. Provides up to 20.5 db front to back gain on 2 meters and up to 17 db gain on 6 melers. Heavyduty aluminum construction with 10 ft . boom. All elements are sleeve reinforced and completely preassembled with "snap-out" brackets. Consists of a folded dipole, reflector and 2 directors on 6 meters; folded dipole, with phasing stub, 3 element colinear reflector and 43 .element collinear difectors on 2 meters. Turning radfus 6 ft . $11^{\prime \prime}$. Uses one transmission line for both 6 and 2 meter band. HE.692wx Shpg. wt., 11 lbs. Model AS-62. Stacking Kit. For stacking abov $\mathbf{3 2} .34$ antenna. Shpg. wt., $1 / 2 \mathrm{lb}$. HE. 693
ush
2 AND 6 METER
10 ELEMENT

## BEAM

 Model A-26-9 A combination 4 element 6 meter beam and 6 element 2 meter beam on one 12'x $1144^{\prime \prime} 0.058$ wall aluminum beam. The ldeal beam for city and suburban VHF operators. 2 metef elements are pre-assembled on the booms 6 meter elements are marked for quick neat assembly. Forward Gain greater than $9 \mathrm{db}_{i} \mathrm{~F} / 8$ Ratio -25 db ; Turning radius $7^{\prime \prime} 6^{\circ}$ Comes complete with all instructions. Uses two separate 52 or 72 ohm feedilines for optimum performance. Shpg. wt., 16 lbs.ME.747wX
Net 27.50
MODEL A-50-5 5-ELEMENT G-METER BEAM
A rugged, full slze 6 meter
beam constructed of $33^{\prime \prime}$
0.050 wall aluminum tubing with hardwood dowling at high stress points. Boom is 0.058 wall drawn alumb num. Driven element is con-
centric gamma matched for direct coax feed. Light enough for any heavy duty TV rotator. Turning radius $-76^{\prime \prime}$; Forward Gain- 9.5 db ; $F / 8$ ratio- 29 db . Comes with all parts marked for quick, neat assembly Comes with all parts marked for quick, neat assembly
and center band operation. Shipg. Wt., 15 lbs. HE. 746 WX

Net 19.50
MODEL A-1447 7 ELEMENT 2-METER BEAM
Full size 2 meter beam. Aluminum tubing. Forward gain 11 db F/B ratlo, 20 db . Shpg. wt., 6 lbs.
HE.743WX
Net 8.85

## Cush

## Crafi MOBILE HALOS

 6 METERS $48-56 \mathrm{mc}$ meter Single halo but for 6 meterweighs $i \mathrm{ib}$. Concentric
$2 \mathrm{I}^{\circ}$ weighs 1 ib. Concentric gam
$m s$ match. The UNIQUE STREAMLINED tuning vane permits extreme broad band coverage without bulky traps. SWR 1.1 at fre ouency, from 5 to 15 DB galin. Supplied with 3 section, $9^{\prime}$ telescoping aluminum mast to fit any standard mobile mount. Shpg. wt., 4 lbs.
MODEL AM-6M Single 6 Meter Halo with mast.

## HE-748W

 Hodel AM-2M-Single 2 meter Halo w/mast: 144.148 Mc . HE-744W Shpg. Wi., $31 / 3$ lbs. Model AM-22-Stacked 2 meter Halo w/mast. HE-749w Shpg. wt., 4 libs.6 meter Halo w/mast Model AM-26-Dual 2 and 6 m
ME-745W Shpg. Wt. $41 / 2$ lbs.

Net 14.95
Net 17,45

## P) <br> CORNELL-DUBILIER MOOEL HAM-M HAM ANTENNA ROTATOR

WIIl support and rotate the heaviest beams commercially ayaitable. Heavy duty stainless steel motor gears and pinions. solenoid brake release electrical end-of-rota pinions; solenold brace relese, electic unit with large lion protection. Attractive inasiy control unit with large direction indicator. Rotor easily mounted on all standard towers. Complete, ready to install. Shpe wt. 15 los.



Model TA-33-Three element beam providing up to 8 do gain on the 10, 15, and 20 meter bands Trap deslgn provides broadband performance and stabillity - beam easily handles a full kilowatt of AM signal. 25 db front-to-back ratio, SWR 1.1/1, or less, at resenance. Beam length 14 ft ., element length 28 ft . Shpg. ut., 53 lbs. AH.53WX

Net 102.65
MOSLEY TA. 33 " Junlor," similar to above, but only 300 watts AM. Turning radius $143 / 4 \mathrm{ft}$. Shpg. wt., 28 fbs .

## AN-54 WX

Net 11.52
Model TA-32-Two element version of TA-33, with 5.5 db forward gain, 20 db front to back ratio. SWR 1.1/1 or better. Handles to a full kllowatt. Shpg. wt., 32 lbs . 4N.55WX

Net 11.52
MOSLEY TA-32 "Junior," Simliar to TA-32, tut 300 watts AM. Shpg. wt., 22 lbs. AH-56WX

Net 50.85

## MOSLEY "TRAP-MASTER" 10 THRU 40 METER VERTICAL

An excellent low-cord antenna for DX . Covers 10 thru 40 meters without bandswitch. ing. An electrical quarter wavelength on each band with low-angle radation. Low SWR with response flat acress full band width. Weatherproof traps and base loading coll are of "HI-Q" design, wound on grooved polystyrene forms. Maintains resonance points under wide varlations of temperature and humidity. Rated to 1 kw . Lightwelght 61ST6 aluminum tubing telescopes to 20 ft . Pre-tuned, pre-drilled. color-coded for fast assembly. Comes with aluminum mounting plate, ceramic base Insulator, nylon guy rope, hardware and instructions. Requires four 30 ft . radials. MODEL V-4-6 $10-40$ meter vertical antenna. AN-61 WX Shpg. wt., 12 tbs. ...... Net 27.93

Mosiey vertical "Trap-mastef" 3 band antennas for 10-15-20 meters.
MODEL V-3 Vertical (rated at 1 kw ). Size 11'6". Shpg. wt., 6 lbs.
AN-59WX
Net 23.62
MODEL V-3 JR. Vertical (rated at 300 w .
AM.) Size: 11'9". Shpg. wt., 6 lbs.
AM-60WX
Mosley "Trap-mobile" 3-band whip antenna for 10-15-20 meters.
MODEL MA-3 "Trap-moblle" 3-band whip. AN-62WX Shpg. Wt., 6 lbs.

## ANTENNA SPECIALS

COMMUNICATIONS ANTENNAS

- For 30-50 MC and $130-174$ MC


## BASE STATION ANTENNAS

Heavy duty Ground Plane Base Station antennas for $30-50 \mathrm{MC}$, and $130-174 \mathrm{NC}$ frequency bands. Mount easily on $11 / 4^{\prime \prime}$ IPS pipe (not supplied). WIII handle Lp to 3000 watts. Include built-In lightning protection.
protection. Mol Freq. Shpe. wh. Het
Stock Ho. Madel
 $\begin{array}{llllll}\text { HE. } 478 \mathrm{WX} & \text { GB3 } & 130.174 \mathrm{MC} & 5 \mathrm{lbs} . & 25.05\end{array}$

## MOBILE ANTENNAS

ASP-144 Disguise antenna for $\mathbf{3 0 - 5 0} \mathrm{MC}$. with stepped rod. Simpltied one-hoe mounting. Replaceable $59^{\circ}$ chrome plated whip. Supplied with 16 RG-58/U cable and connector, Specify an exact freq. Allow 3 weeks delivery.
HE-485WY
Net 17.64
ASP- 146 Disguise antenna, similar to ASP. 144, but designed to operate between 130 and 174 MC Supplled with 16 ft . of RG58/U cable and connector. Chrome plated $59^{\prime \prime}$ whip is replaceable. Mounts in $7 / 8^{\prime \prime}$ $59^{\circ}$ whip is replaceable
hole. Shpg. wt., 3 lbs.
HE. 485 W
BAND EQUIPMENT


## AN OUTSTANDING COMPLETE SSB-AM-CW STATION

- Professional Performancé at Amateur Prices
- Full Facilities for SSB, AM, FM, CW, RTTY Operation on 10 Through 80 Meters


## MODEL HX-500 SSB TRANSMITTER

100 watt SSB transmitter for 80 thru 10 mater opeiation. Bullt-in Vfo may be read to within 200 cDs or better. Can be used as an SSB exciter/transmitter plus CW, FM, OSB, and FSK transmilter. Convenienuly located VOX and anti-VOX controls. Features. Carrier Suppression in excess of 50 dD . Unwanted sideband down 50 do or better. TVI proofed. VFO employs separate scale on each band. Complete with all necessary crystals. Built-in antenna change over relay. 50 ohm pl-network output. Power output 100 watts PEP; 100 watts CW; 25 watts AM.FM.FSK. Uses 16 tubes plus 4 rectifiers and voitage regulator, size $191 / 4 \mathrm{~W} \times 111 / 2 \mathrm{H} \times 161 / \mathrm{c}^{0}$
 HE. 172 wX Net 695.00 HX-500 and HQ-180 as well as all Hammarlund equipment avaliable for $115-230 \mathrm{~V}$ $50-60$ cycles. Please write for price.


A highly senstive and selective rejesigned version of the famous HQ-100, contInsously tunable from 540 Kc to 30 in four bands. Accurately calibrated electrical bandspread on the $80,40,20,15$ and 10 meter bands. Sensitivity: 1.75 microvolts for $10-1$ signal-tonolse ratio, One r.f., 2 lif. stages. Temperature compensation, voltage regulation and rugged construction in the separate high-frequency ascillator section result in high stability. Other features: Q-multiplier for variin high stabilty. Other features: Q-multiplier for vari-
able selectivity. AVC, variabie BFO, effective series noise selectivity. "AVC, variable Bano, effective series compensator. "Auto-Response pane-controlled antenna adjusts audio bandwidth to fit recelving conditions. For $105-125 \mathrm{~V}$. $50 / 60 \mathrm{cps}$. Dimensions: $161 / 4^{\prime \prime} \mathrm{W}$ x $9 K_{4}$ " H $\times 91 / \mathrm{a}^{*} \mathrm{O}$. Shpg. wt., 33 lbs .

## HE-175WX

MODEL HQ-100 AC Receiver w/clock
HE-174 WX Shpg. wt., 33 lbs .
…..............Net 189.00 MODEL $\$ .100$. Matching speaker HE-152 Shpg. wt., 10 ibs. Net 199.00 MODEL XC-100, 100 KC . $\begin{array}{r}199.00 \\ \hline\end{array}$ HE-153 Shpg. Wt., 3 lbs. Net 15.95


RECEIVER
MODEL
HQ-110A

- SSB/CW and AR 160 to 6 Meters Dual Conversion

A 12 tube superhet receiver with dual conversion for excellent image rejection. Full dial coverage of 6 , excellent image rejection. Fult dial coverage of 6 .
$10,15,20,40,80$, and 160 meter bands. New expanded 10, $15,20,40,80$, and 160 meter bands. New expanded converters. Features IIghter mechanical and electric? stability; accessory socket for preamps or converter. and separate 6 meter coax input for rapid shift from VHF to LF operation. AVC operates on RF and IF. Q multiplier continuously variable from 100 cps to 3 KCs . Separate stabilized BFO and linear detector for SSB and CW reception. Antenna compensator for loading effects of various antennas or balanced transmission line. Calibrated "SI" meter. New series type noise limiter. Bullt-in 100 KC crystal calibrator. For 105-125
 Cps. Ac.
WEXX HE-937wX 110 AC Receiver W/clock. Shpg. wt., 34 lbs. MODEL S-100. Matching speaker in cabinet. HE-152 Shpg. wt., 10 lbs .

Net 14.95

## HXL-1 LINEAR AMPLIFIER



## - 1500-Watts, PEP, I KW CW Input

Covers 80-10 Meters - 3-Element Pi-Network
A top quality 5 -band Ilnear amplifier which will give you years of service. An Ideal mate for the HX.50, the HXL- 1 gives power packed performance on SSB, CW and AM covering the 80 to 10 meter ham bands. Features 1500 -watts PEP input and 1 KW CW input. Efflclent grounded-grid circult uses high dissipation triodes and an adjustable 3 element pi-network. Bullt-In panel meter includes linearity test. Husky, sef-contained silicon rectifier power supply. Relays provided for "exciter only" or amplifier operation. Control circultry compatible with most transmitters and receivers. For $115-230 V 50 / 60$ cycles AC. See $171 / 2 W \times 91 / 4 \times 91_{2}{ }^{2} D$ Shpg. wt., 105 lbs.

## MODEL HQ-180ARECEIVER

The $\mathrm{HQ}-180$ is an 18 tube, triple conversion, general coverage receiver for SSB AM-CW reception. Coverage .54 - 30.0 MCS with callbrated bandspread on the $80,40,20,15$, and 10 meter amateur bands. High selectivity with Crystal Filter ( 3035 Kcs ) and a Slot Depth Filter. Selectivity variable with 7 steps. Selectable sideband. Variable atiack AVC. Automatic Noise Umiter. Adjustable calibration of frequency dial checked by the bullt-In 100 kc crystal calforator. 1 watt undistorted audio output. Calibration every $5 \mathrm{kc} 80-15$ meters. every 10 KC on 10 meters. For $105-125$ volts, $50-60 \mathrm{cps} A C$. Size $19 \mathrm{~W} \times 101 / 2 \mathrm{Hx} \times 3^{\circ} \mathrm{D}$. Shpg. Wh., 45 lbs . Model HO-180C. Same as above plus clock timer. HB-141wx Net 439.00 Net 449.00 Model S-200. Matching Speaker In Cablinet

Shpg. wt.: 10 lbs Net 19.95

An example of excellent engineering, the $H X-50$ of fers the latest design features and convenlences. Covers all ham bands from 80 to 10 meters plus MARS frequencies. Frequency ranges (MC): 3.5-4 $\quad 7.7 .3, \quad 14-14.35, \quad 21.0-21.45, \quad 28-28.55, \quad 28.55-29.1$, 29.1-29.65. Power output 130 watts P.E.P. SSB, 50 watts CW, and 12-15 watts AM. Fixed pl network output with 50 ohm Impedance. VFO stability better than 250 cycles after warmup, with all other osclilators crystal conafter warmup, with all other osclilators crystal con-
trolled. Vernier tuning dial calibrated every 10 K.C. trolled. Vernier tuning dial calibrated every 10 K.C.
readable to 2 KC . Slide rule dial. Carrler, unwanted sldeband and spurious frequencies down 50 db or better. Third and fifth order distortion down 30 db or better. Includes all crystals, built-In antenna change. over. Vox, and keying relay. Operational controls on front panel. For $105-125 \mathrm{~V}$. $50 / 60 \mathrm{cps}$. Dimensions: $171 / 2 \mathrm{~W} \times 1 / 2 \mathrm{Dx} 91 / \mathrm{M}{ }^{\prime \prime} \mathrm{H}$. Snpe. Wt. 50 lbs . HE-17swx No Money Down

SEE PAGES 402 AND

## HX-50 COMPACT FILTER-TYPE

 TRANSMITTER FOR SSB, AM, OR CW- 130W PEP Input
- 80.10 Meters
- $80-10$ Meters


Offers a practically endless combination of tuning techniques for optimum reception of SSB/CW and AM/ MCW. Tunes $6,10,15,20,4080$ and 160 meter bands plus 2 meter calibration. Triple conversion 17 tube circuit; separate vernier tuning; BFO control, bullt-in 100 KC crystal calibrator. For 115 V AC. Size: 19 Wx $101 / 2 \mathrm{H} \times 13^{\prime \prime} \mathrm{D}$. Shpg. wt., 45 lbs.

## HE-574WX HQ-170A <br> Net 369.00

HE-575WX HQ-170AC Receiver w/clock
Net 379.00
Model S-200-Matching Speaker for HQ-170A
HE- 159 Shpg, wt., 10 Ibs.
Net 19.95

## HQ-145X RECEIVER

An 11 tube superhet (not illustrated) for 540 Kc to 30 Mc. Dual conversion from 10 MC to 30 MC Crystal filter and 60 db slot filter for high selectivity. 10 Hx 19W×13"D.
HE.176WX Shpg. wt., 42 lbs $\qquad$ HE-177WX HQ-145XC (as above but w/clock Net 289.00 Model S-200 Matching speaker in cabinet for above. HE- 159
above.
Net


## HAMMARLUND

## HK-1B ELECTRONIC KEYER

A compact, fully transistorized code generator that combines all of the desirable features of electronic sending with distinctive dot/dash control to give messages your "personal touch." Uses simplified transistorized circuitry and operates on standard $221 / 2$ volt battery. Keying relay prevents polarity reversal and itransistor damage. Less battery.
Ne.147 ....................... 39.9

## MODEL MR-50-X TWO-WAY RAOIO <br> COMMUNICATIONS MONITOR

An extremely sensitive double conversion FM recelver for remote monitoring of comanuications. Comes pre tuned and crystal controlled to a flxed channel within the range from 147 MC to 174 MC . For $117 \mathrm{~V}, 60 \mathrm{cps} \mathrm{AC}$. 75 watts. Size: $13 \mathrm{~W} \times 7 \mathrm{Hx} 7 \mathrm{HB}_{6} \mathrm{D}$. Shpg. wt., 21 ibs.

## National 1 - Communications Receivers

## NEW NC-77X SHORTWAVE RECEIVER

## - Covers 540 KC to 31 MC In Four Bands

- AC.Transformer Operated
- Built-in $5^{\prime \prime}$ Speaker

A deluxe shortwave superhat receiver. Offers the beginning shortwave listener or novice radio amateur maximum reliability and performance. Features $A C$ transformer operation eliminating hum and ground problems and shock hazards. Covers 540 KC to 31 MC in 4 bands, with electrical band. spread on all frequencles. Giant, easy-to-read dial has standard AM broadcast, marine, alreraft, clitizens band, CD, ww, amateur and foreinn shortwave broadcast bands cleariy marked. Also has b jilt-in $5^{\prime \prime}$ PM speaker, front panel headphone jach, BFO for code reception. Brushed aluminum front panel. Steel cabinet $131 / 2 \mathrm{Wx} 7 / 4 / \mathrm{H} \times 9^{\prime \prime} \mathrm{D}$. For 117 V 60 cycles AC. Shpg. wt., 18 lbs . HA-180 NC-77X MODEL NC. 77 XW . Above, in oiled walnut cabinet. For living room or den

## NEW NC. 121 GENERAL COVERAGE RECEIVER <br> Covers 550 KC to 30 MC In Four Bands <br> - Q-Multiplier For Optimum Selectivity



NATIONAL NC-303 DUAL CONVERSLON
AMATEUR COMMUNICATIONS RECEIVER

## - Improved 0 multiplier - $1 \mu \mathrm{v}$ sensitivity

NC-140 GENERAL COVERAGE RECEIVER

- Dual Conversion
- 1uv Sensilivity
- Q.Multiplier


A high quallty general coverage receiver tuning 540 KC to 31 MC in five bands with 1 microvolt sensitivity Bandspread scale is calibrated for 80 through 10 meter amateur bands and five popular foreign BC bands. Featuring double conversion above 4 MC ; an active peaking Q multiplier usable with BFO; on RF stage and SSB CW product detector. Finished in National Blue and Silver-Gray. For $105-125$ 50/60 cycle AC. Size: $85 / \mathrm{BH}$ 15\%Wx9"0. Shpg. wt., 28 lbs.
HE.226WX... No Money Down
NTS-3B Matching speaker for NC. 140
HE- 220 Shpg. wl., 6 lbs.
Net 19.95

## NC-190 GENERAL COVERAGE RECEIVER

- Double conversion
- High Frequency Stability

A double conversion general coverage receiver for 530 Kc through 30 Mc . Unique Ferrite Filter at the second l.f. ( 230 KC ) provides selectivity variable from 5 Kc to

Covers 160-10 meters. Provision is made for 6,2 , and $11 / a$ meter converters. Features include an improved " $Q$ " multiplier with 60 db rejection notch and a 5 position If band-width selector with selectable sideband for wide choice of bandwidth/selectivity combinations. Iso included are duat noise limiters (ANL for AM , double-ended manual ilmiter for CW and SSB), exclusive WWV converter provision, high-speed 40-1 luning knod with vernier drlve and a "fast attack. slow release" AGC to eliminate momentary overload from AGC lag and background noise during speech pauses. Sensitivity better than $1 \mathrm{\mu v}$ @ $10 \mathrm{db} \mathrm{S} / \mathrm{N}$. Giant slide-rule dial readable to 2 kc without inter. polation to 21.5 mc . 15 tubes including rectifier. Power requirements: $105 \cdot 125$ VAC, $50.60 \operatorname{cDS}, 912 \mathrm{~W}$ $\times 111 / 4 H \times 15^{\circ} \mathrm{D}$. Shpg. wt., 64 lbs $\begin{array}{llll}\text { HE-208wX } \\ \text { HE-209 NTS. } 2 \text { Table Speaker for NC. } 303 \text {....... Net } & \text { Net } & 49.00 \\ 21.95\end{array}$ | ME-208WX |  |  |
| :--- | :--- | :--- |
| HE-209 NTS-2 Table Speaker for NC. 303 | ....... Net | Net |
| 249.00 |  |  |

600 cycles at 6 db down. Senslitivity is better than 1 microvolt for $1 \mathrm{adb} \mathrm{S} / \mathrm{N}$ ratio. Choice of calibrated elec. trical bandspread. Bandspread vernier provides $60: 1$ tuning ratio. Front end employs a low nolse 6BZ6 r.t. amplifier with antenna trimmer. Other features: separate product detector for SSB, callibrated USB/LSE BFO control, AVC and edge-reading " S " meter which operate on all reception modes. Noise limiters: automatic series gate for AM, l,f. limiting for SSB/CW. Accessory crystal calibiator provides 1 Mc markers throughout the tuning range. Audio output: 1 walt at $10 \%$ distortion, 3.2 ohms. Headphone jack on front panel. For 105.125 VAC, 50.60 cps . Dimensions: $153 / 4 \mathrm{~W} \times 83 / 4+4 \times 9^{\prime \prime} \mathrm{D}$. Shpg. wt., 28 lbs
HE.22iwX
Net 219.50
NTS 38 Matching speaker for NC-190
HE- 220 Shpg. wt., 6 lbs.

A handsome, feature-pacied general coverage receiver for the amateur, shortwave listener and hi-fi enthusiast. ffers continuous coverage from 550 KC to 30 MC in 4 ands, illuminated " 5 " meter and peaking Q -multiplier Tuner output allows use of NC. 121 with hi-fl equipment. Built in $5^{\prime \prime}$ PM Speaker. front panel headphone jack. Separate RF and audio gain control: separate product detector/BFO. AGC; noise limiter. Brushed aluminum panel. Steel cabinet. $131 / 2 \mathrm{~W} \times 7 \$_{8} \mathrm{H} \times 9^{\prime \prime} \mathrm{O}$. For $105-120 \mathrm{~V}$, 60 cycles AC. Shpg. wt., 23 l los. HB. 190wX NC. 121 No Maney Down NC. 121W Above, in oled walnut enclosure or living room or den.

## SELECTED PACKAGES ON NATIONAL RECEIVERS

| HA-181M National MC-77X Receiver plus clock, antenna, \& headset | 14.95 |
| :--- | :--- | ---: |
| HB-194WXM National NC-121 Receiver plus cloch, antenna, \& headset | 134.95 |
| HB.193WXM National NC-270 Receiver plus cloch, antenna, \& headset | 284.95 |

## MOSLEY CM-1 SSB-AM-CW COMMUNICATIONS RECEIVER

This compact communications receiver provides fine recelver performance at an unusually low price. Performance and features include: Double conversion with crystal controlled first oscilla. tor: Diode detector for AM and product detector for SB and CW: Covers 80 meters through 10 meters; S -meter functions on AM , CW or SB , with or wirlout BFO; Setectivity - 2.5 KC at - 6 db : Sensitivity: $1 / 2$ microvolt for 10 db signal-to-noise ratio on 10 meters: Stability: less than 500 cycles compensated and voltage regulated; Image \& IF Rejection: 35 db minimum: Audio Output: 1/2 watt at $6 \%$ distortion: Steel enctosure finished in grey and black. Size: $101 / 2 \times 71 / 2 \times 8^{\circ "}$ Deep. For $117 \mathrm{~V} 50 / 60$ cycles AC oper-
HE-796 WX ShDs. wt., 24 lbs. NO MONEY DOWN Net 182.70 MODEL CMS. 1 Matching Speaker for above. ShDg. wt., 3 lbs. HE. 797


- $1 / 2 \mu \vee$ Sensitlvity on 10 Meters

NC. 270 OOUBLE CONVERSION AMATEUR BANO RECEIVER


- SSB/CW/AM on 80 Thru 6 Maters
- Sensitivity over 1.5 microvolts

A deluxe double conversion receiver for the amateur bands from 6 to 80 meters. Sensitivity is better than 1.5 microvolt for 1 watt output. 10 db signal to noise ratlo. Double conversion, with if frequencies of 2215 kc and 230 kc , insures optimum image rejection. Selectivity: in addition to a special patented ferrite filter, a 5-position IF switch provides bandwidths of 5.0 Kc (Broad) 3.0 kc (Medium) 2.5 kc (USB), 2.5 kc (SB) and 600 cycles (Very sharp). "Bifilar T Notch" rejection clicuit providing more than 50 db interference rejection, separale heterodyne detector for SSB and CW, automatic noise limiter, 5 -meter, a full 3 watts audio output, inertia-type tuning knob, large dial, and a unique "Flip Foof" on both receiver and matching speaker for operating convenience. Requires 75 watts at 105.125 VAC, $50-60$ cycles. $8 \% / 4 \times 15 \% \mathrm{~m} \times$ $9^{\prime \prime} \mathrm{D}$. Shps. Wt., 28 lbs.
HE-219WX
Net 279.95 HE-220 Matching Speaker, Shpg. wi., 6 lbs. Net 19.95

## OTHER NATIONAL EQUIPMENT

NC-400 Double Conversion general coverage receiver covers 540 KC to 31 MC in 7 bands.
HE 216 WX Shog. wt., 72 lbs.
Net 895.00 VFO.62 Precision variable frequency oscillator for 6 and 2 meters. Size: $51 / 4 H \times 61 / 2 W \times 51 / 2^{\prime \prime} D$.
HE-213


## S-118 GENERAL COVERAGE RECEIVER

General coverage superhet receiver with extended low frequency tuning. Covers the broadcast, amateur and international short wave bands, plus consolan, aeronautical, mobile and international distress frequencies. Frequency range is 185 Kc to 31 Mc in 5 bands: 185 Kc to $420 \mathrm{Kc}, 495 \mathrm{Kc}$ to $1.620 \mathrm{Mc}, 1.600 \mathrm{Mc}$ to 4.950 Mc , 4.850 Mc to 15.000 Mc , and 14.800 Kc to 31.000 Mc . Features include electrical bandspread, BFO, noise limiter separate sensitivity control headphone jack and buift-in speaker. Antenna: toopstick for two lowest and bulit-in speaker. Antenna: loopstick for two lowest
bands with provisions for external antenna on all bands with provisions for external antenna on all
bands. The upper three bands have an antenna input bands. The upper three oands have an antenna input
Impedance of 50.75 ohms. Tube complement: 6818 impedance of $50-75$ ohms. Tube complement: 68L8
mixer (oscillator, 12 BAG 1 st .f. ( 455 Kc ), 6 BLs 2 nd mixer (oscillator, 12 AAG 1 st l.f. (455 Kc), 6BL8 2nd
i.f./BFO, 678 detector-ANL-AVC-ist audio, 6 AQ5 audio output. 'Power supply contalns 2 silicon' diode recti. fiers. For $105-125$ VAC $50 / 60$ cps. $133 / 4^{\prime \prime W} W 6 \%{ }^{\circ} \mathrm{Hx}$ $81 / 2^{\circ} \mathrm{D}$. Shpg. wt., 19 tos.
HE-131 WX $\qquad$
HE.131 WX .................................................................... 99.9


## MODEL SX- 110 HAM-SWL RECEIVER

- CRYSTAL FILTER.80, 40, 20, 15, AND 10 METER BANDS Superheterodyne receiver covers 540 KC (broadcast band) to 34 MC In four bands. Features slide rule type dial and electrical bandspread over the 10, 15, 20, 40 and 80 meter amateur bands. Separate bandspread tuning condenser. Switchable crystal filter and built-in "S" meter. All controls are on front panel. Output: 2 watts. Grey steel cabinet with chrome trim. Size $183 / 4 \mathrm{~W} \times 8 \mathrm{Hx}$ $101 / 4$ "D. 117 AC. Shpg. wt., 32 lbs.
HE.108WX
Net 169.95


## MODEL S. 108 RECEIVER

Same as $\$ \mathrm{X} .110$ less S -meter, antenna trimmer, and crystal filter, but includes a bultt-in speaker. HE-107WX

Net 139.95


A most complete communications receiver, the SX-62A will give top pefformance on any wave band, has every modern refinement known. Six ranges: $\mathbf{5 4 0 - 1 6 2 0} \mathrm{Kc}$ broadcast, $1620 \mathrm{Kc}-4.9 \mathrm{Mc}, 4.9-15 \mathrm{MC}, 15-32 \mathrm{Mc}, 27-56$ broadcast, $1620 \mathrm{Kc}-4.9 \mathrm{Mc}, 4.9-15 \mathrm{MC}, 15-32 \mathrm{Mc}, 27.56$
$\mathrm{Mc}(A M-F M), 54-109 \mathrm{Mc}(A M-F M)$. Audio is of hi -fl qual. Mc (AM-FM), $54-109$ Mc (AM-FM). Audio is of hi-fi qual-
ity up to 10 watts, with 4 position tone control. Red dots identify AM and SW controls, green dots for FM controls. Wide vision slide-rule dial; one band lights at a time. Clrcuits are temperature compensaled, voltage regulated; has six position selectivity control, front panel phone jack. Has separate RF and AF gain controls, $60-1$ ratio tuning knob for fine tuning, and AVC. ANL on BFO switches. Ccmplement of 14 tubes plus one rectifler and one valtage regulator. Size: $20 \times 10 \frac{1}{2} \times 16^{\prime \prime}$. Shpg. wt., 67 los 117 VAC.
HE-105WX less speaker
Net 430.00


Covers Broadcast Band $550-1600$ KC plus 3 Short Wave Bands 1600 Kc to 30 Mc . 3 Antennas, Sllde Rule Bandspread Dial, New Compact Styling.
This new precision built receiver features electrical bandspread with slide rule bandspread dial and separate bandspread tuning condenser. Front panel headphone jack which automatically disconnects self-contained speaker may be used to drive remote 8 ohm speaker. Has 3 antennas (ferrite loop for broadcast band; adjustable whip for short wave wire antenna).
Tube complement: $128 E 6$ Converter, $128 A 6 ~ I . F$ amp. Tube complement: $128 E 6$ Converter, 12BA6 I-F amp$50 C 5$ Audio, plus Selenium Rectifier. 455 KC IF Attractive gray steel cabinet with silver trim. $131 / 2 W x$ $5 \% / 8 \mathrm{Hx8} 314^{\prime 2} \mathrm{D}$. (U/L Approved). Operates on $\mathbf{1 0 5}-125 \mathrm{~V}$ $50 / 60$ cycles. AC/DC. Shpg. wt., 12 los.
HE-127 S-120 RECEIVER.......................... 69.95

LOOK WHAT YOU GET for only $\$ 5.00$ when purchased with any of these 3 fine Hallicrafters Receivers.


## HALLI-KITS FROM HALLICRAFTERS A complete 80 through 6 Meters AM/CW Station in Kit Form



## MODEL HT-40K TRANSMITTER KIT

## - Excellent CW and AM Performance

- Full Band Switching, 80 through 6 meters

Specifications: Power Input: 75 watts. Power output: 35 watts CW, 30 watts peak AM phone. Bands: $80,40,20,15,10$ and 6 meters. Tubes: 6005 power output; $6 \mathrm{CX8}$ crystal oscillator-Multiplier-Buffer; 12AX7 speech amplifier; 6DE7 audio amplifierModulator; sllicon rectifiers. Controls-Front Panel Function: Band Selector; Drive Control; Plate tuning; plate loading; Crystal-VFO; Grid current: Meter; AC light; RF output. Rear Chassis: Microphone galn; antenna co-ax connector; remate control terminals: AC power cord. Gray steel cabinet $133 / 4 \mathrm{~W} \times 81 / 8 \mathrm{D} \times 6 \% /{ }^{\circ} \mathrm{H}$. Shpg. Wt. 20 Jbs. HE-123WX HT-40K Kit HE-124WX HT-40 Factory Wired \& Tested

Net 89.95
Net 109.95

## MODEL SX-140K RECEIVER KIT

## - Complete coverage of 80 through 6 meter Amateur Bands

Receiver has high sensitivity and sharp selectivily; RF stage; S.meter; antenna trimmer and crystal calibrator. Tuning rate 25 to 1. Controls: Tuning, Antenna Trimmer; Cal. Reset; Function (AC off, standby, AM, CW.SSB); Band Selecior; Cal on/off; RF Gain on/off; Selectivity/BFO; Audio Gain; phone jack; S-meter Adj. Tubes: 6AZ8 tuned RF amplifier and crystal calibrator; 6U8 oscillator mixer; 6BA6 IF and BFO, 6T8A 2nd detector, A.V.C., ANL and 1st audio; 6AW8A audio power and $\$$-meter amplifier;
 HE-125WX SX-140K Receiver Kit

Net 114.95 HE-126WX SX-140 Factory Wired \& Tested

## COMPLETE SSB-AM-CW STATION



HT. 37

- All Amateur Bands from 80 to 10 Meters
- 70-100 Watts PEP Transmitter Output
- Sensitive and Selective Double Conversion Receiver
- Both Units Designed for Maximum Operating Convenience


## HT-37 SSB EXCITER/TRANSMITTER

## - AM-CW-SSB OPERATION - 70.100 Watts PEP OUTPUT

The HT-37 is a completely self-contained 70.100 watt transmitter that may be operated "barefoot" or used as an exciter for most high-power linear amplifiers. Features a highly stable VFO employing double reduction disc drive, calibrated on all amateur bands, making operation a pleasure. Utilizing 2-6146 tubes in the final stage, the H - 37 is rated at $70-100$ watts PEP output for SSB/CW and $17-25$ watts carrier on AM phone. Sideband suppression is 40 db at 1000 cPs for clear sounding signals. Provision is made for an instant CW CAL signal from any transmitting mode. Utilizes the same voice control circuitry as found in the HT-32A Transmitter for ease-of-operation. Final stage operates at low power in standby position for optimum cooling and troublefree performance. Size, $91 / 2 \mathrm{H} \times 181 / 4 \mathrm{~W} \times 163 / 4 \sim \mathrm{D}$. For $105-125$ volts, $50-60 \mathrm{cps}$ AC. Shpg. wt., 86 lbs. HE-120WK

## SX-117 TRIPLE CONVERSION

## HETERODYNE COMMUNICATION RECEIVER

## - Sensitivity less than 1 micro-volt

- Crystal controlled 1st and 3rd conversion oscillators An exceptional communications recelver with a high order of electrical and mechanical stability. Can operate on most frequencies from 150 KC to 30 MC with use of proper crystal. For AM/CW/SSB reception. Features transmitter type VFO which can be used as crystal locked oscillator. 1st and 3rd con. verters are crystal controlled for top performance. "T" notch for up to 50 db attenuation. Back-lash free tuning mechanism-selectable side bands. Selec. tivity variable in 3 -steps from 500 to 5000 cycles. The $S X-117$ is shipped with crystals to cover $3.5-4.0,7.0-7.5 ; 14.0-14.5,21.0-21.5$, and $28.5-29.0$ Meg. For $105-125 V 50 / 60$ cycles $A C$. Size: $15 \mathrm{~W} \times 71 /$ H H 13"D. Shpg. wt., 21 bs. HE.145wx ............................. Money Down

Net 379.50


## HT-41 LINEAR AMPLIFIER

Input 1000 watts on SSB through 20 meters (slightly less on higher bands). 450 watts on AM and 800 watts CW. Can be driven by any SS8 exciter with 20.100 watts. Ideal companion to HT-37. Adjustable pl-network coax output. $40-75$ ohms. All important circuits are metered. Input impedance 30.75 ohms. Use Class 8 grounded grid circuitry. Self-contained power supply with two 866 A rectifiers. $191 / 4 \mathrm{~W} \times 9 \mathrm{Hx}$ 154/2"D. Shpg. wt., 97 lbs.
HE-138WX .......... No Money Down ............ Net 395.00

## HA-5 DELUXE VFO

Heterodyne VFO with outputs on 3.5-4.0 Mc, 7.0-7.5 Mc 7.8.8.3 Mc and 8.333-8.833 Mc. Illuminated dial calibrated on all amateur bands from 80 to 2 meters. Variable oscillator operates only in the $5.0-5.5 \mathrm{Mc}$ range. Break-in keying in mixer cathode. Built-in, voltage regulated power supply. For $105 / 125$ VAC, voltage regulated power supply. For $105 / 125$ VAC,
60 cps . $7 \mathrm{~W} \times 5 \mathrm{H} \times 81 / 2^{\prime \prime} \mathrm{D}$. Shpg. wt., 8 fbs. 60 cps. $7 \mathrm{Wx} 5 \mathrm{H} \times 81 / 2^{\prime \prime} \mathrm{D}$. Shpg. Wt., 8 Ibs. Net 79.95
HE-139

## hallicrafters

## SX-115 RECEIVER

A new "Front end" utilizes bandpass couplès with the advantage of 4 tuned circults, for better "out of band rejection." All spurious and image signals are down 60 db . Deluxe features include: Accurate Frequency readout, IKC calibration marks, built-in 100 KC crystal calibrator, crystal controlled ist and 3rd conversion oscillators. HT-32 VFO two AVC loops. Sensitivity less than 1 microvolt. Selectivity variable in five steps from 500 to 5000 cycles. Covers nine 500 KC segments from $3.5-30 \mathrm{MC}$ to include WWV/ WWVH reception. For $105 \cdot 125$ volts $50 / 60 \mathrm{cps}$. AC. Size: $16 \mathrm{~W} \times 101 / 2 \mathrm{~K} \times 16^{\prime \prime} \mathrm{D}$. Shpg. wt., 47 Ibs. HE-129WX No Money Down ................Net 599.95 EASY BUDGET PLAN SEE PAGE 412

## COMPLETE 6-BAND MOBILE/PORTABLE/FIXED STATION

## MELTI-



PMR-8 RECEIVER MOBILE OR FIXED
Highly sensitive and selective double conversion receiver for mobile or fixed stations, covering $80,40,20,15,10$, and 6 meters ( $50-52 \mathrm{MC}$ ), plus the standard broadcast band Ideal companion to the AF-68. Sensitivity: 0.5 microvolt for 10 db quieting. Selectivity: 3 KC at 6 db down, 12 KC at 60 db down. Second conversion oscillator crystal controlled: first conversion (variable) oscillator temperature compensated, with regulated voltages on plate and filament. Other features: tuned RF stage, delayed AVC, ffective nolse limiter, calibrated BFO. Antenna input 52 or 72 ohms. Filaments operate on 6 or 12 volts. Headphone jack ntenna ingut 52 or 72 ohms. Fhaments operate on 6 or 12 vols. headphone jack included. External speaker and power supply required. Size: $41 / 2 \times 91 / 2 x 7$ ". Shpg. wt., 11 lbs.
HE-941wX
NO MONEY DOWN
Net ${ }^{189.50}$
M-1070 Power supply for AF- 68 and PMR-8. (Not illus.)
For 6 or 12 volts $D C$, or 115 volts, $50 / 60$ cps AC. Shpg. wt., 15 lbs. HE.942W

## AF-68 TRANS-CITER

Covering the $80,40,20,15,10$ and 6 meter amateur bands on CW and AM, the AF-68 can be used as a VFO or crystal controlled exciter, speech amplifier driver, or complete low powered transmitter. Input, 60 watts to a 6146 final. with pl network coaxial output matching a wide range of impedances. Single control bandswitching. Five circuit illuminated panel meter indicates grid current P.A. off, grid current P.A. on, plate voltage, modulator plate current, and final plate current. Built-In temperature compensated VFO has output on 3.5-4.0 MC. 7.0.7.5 MC, or 12.5-13.5 MC. VFO spolting switch provided. Crystal socket holds two crystals. Audio output of 30 watts at 600 ohms avallable, as well as various combinations of RF output Filaments operate on 6 or 12 volts. External power supply and microphone required. Size: $131 / 2 W \times 61 / 2 \mathrm{H} \times 71 / 2 " \mathrm{D}$. Shpg. wt., 21 lbs.



## "VALIANT II" TRANSMITTER

The Valiant il gives you outstanding flexibility and performance. Complete band switching on all amateur bands 160 to 10 meters-delivering 275 watts on CW and SSB (with auxiliary SSB exciter or adaptor) and 200 watts on AM. Can be used either crystal controlled or with bulttin temperature compensated VFO. VFO operates in the 1.75102 Mc and 7.0 to 7.45 MC ranges. Features: Complete TVI suppression: timed sequence (grid block) keying; push-to-talk audio system for use with high impedance crystal or dynamic mikes; low level audio cllpping, built-in low pass audio filter and self-contained power supplies. Three 6146 tubes are used in the final amplifier. For $105-120$ VAC, $50 / 60 \mathrm{cDs}$. 600 watts. Size: $21 \mathrm{~W} \times 111 / 2 \mathrm{H} \times 14^{\prime \prime} \mathrm{D}$. Shpg. wt., 83 lbs.
 HE.624WX 240-105.1 Kit Net 375.00

## "CHALLENGER" TRANSMITTER 120 WATTS CW, 80 THRU 10 METERS 85 WATTS ON 6 METERS

The viking "Challenger" is Ideal for the novice or ex. perienced amateur. Instant bandswitching 80 through 6 meters- 70 watts phone input- 120 watts CW input 80 through 10 meters and 85 watts CW input on 6 meters! Straight through final amplifier operation even on 6 meters provides excellent efficiency and modulation characteristles. Size: $131 / 4 \times 10 K_{s} \times 91 / 8^{\prime \prime}$. Shpg. Wt. 28 lbs.
Model 240-182-2. Above wired and tested.
HE. 425WK
Model 240-182. HE-424WX ..... Net 124.75

## "ADVENTURER" TRANSMITTER

50 WATTS CW INPUT, 80 THRU 10 METERS Completely self-conlained transmitter in kit form. Features crystal or external VFO control, single-knob band. switching, clean break-in keying. 6AG7 oscillator/multiswiter drives 807 final. Effectively TVI suppressed. $10^{3 / 6 \mathrm{a}}$ plier drives 807 final. Effec
$81 / 8 \times 73^{3 / 2}=$. Shpg. wt., 19 lbs .
HE-423WX
HE-423WX
MODEL $240-181$ 1. Above in Kit Form, with tubet 69.95 HE-444

1. Above in kit form. With tubes MODEL 250.40 speech 12.25 amolifier/modulator kit for Adventurer. With fubes. Shig. wt., 1 ib .

## "6N2" VHF TRANSMITTER

A compact VHF transmitter which offers instant bandswitching coverage of both 5 and 2 meters. Power input is rated at 150 watts CW and 100 watts AM phone. May be operated by external VFO or bullt-in crystal control. Critical adjustments are avoided by using 8.9 MC crystals in a pentode oscillator.
Requires 6.3 V at $3.5 \mathrm{amps}, 300 \mathrm{VDC}$ at 70 ma and $300-$ 750 V DC at 200 ma . Capable of 30 watts or more of audio. 5894 dual tetrode final. 150 watts input on CW or FM; 100 watts on AM phone. Uses silver plated balanced tank circuits. TVI suppressed, $8-9 \mathrm{MC}$ output. LC keying circuit. Avalable completely wired and tested or as an easy-to-assemble hit, with tubes. less crystals, key and microphone. Size: $1341 / 8 W \times 83 / 6 \mathrm{H} \times 8^{2} 1 / 2^{\prime \prime} \mathrm{D}$ crystals, key and
Shpg. wt. 14 lbs.
ME.445WX 240.201-1 Kit HE-446W× 240-201-1 Wired

Net 149.50 Net 194.50

"MATCHBOX" ANTENNA COUPLER
For $80,40,20,15$ and 10 meters. Matches balanced lines ranging from 25 to 1500 ohms and unbalanced lines from 3.5 to 30 Mc . Features built-in directional coupler indicator and provides continuous reading of SWR and relative power in transmission line. Speeds up
antenna funing and matching. 52 ohm coaxial input. antenna tuning and matching. 52 ohm coaxial input.
Receive-transmit relay. Maximum power input, 275 watts.
 Size: $97 / 8 \mathrm{~W} 7 \mathrm{FHx101/2"D}$. Shpg. wt., 11 lbs.
Model 250.23 .3 Mateh box w/dir. coupler \& Indicator. HE.430WX Net 94.95 Model 250-23-1 Similar to above but less directional coupler and Indicator.
HE-431wX
HE-43iwX

## "6N2" VFO

Net 64.95
(A) DIRECTIONAL COUPLER AND INDICATOR Provides a continuous reading of SWR and relative trans mission line power. For use with multimeter or indica. tor. Indicator consists of $0-100$ microammeter for monitoring power, with coaxial fittings. Size: $61 / 2 L \times 2 K_{4}$, Dia. Shpg. Wt., 2 lbs. Indicator size: $4 \mathrm{Wr43/4} \times 41 / 4^{\prime \prime} \mathrm{D}$. Shpg. wt., 4 lbs.
HE-459 250.37 Dir. Coupler
Net 11.75 (B)

## T-R SWITCH

Provides instantaneous high-efliciency electronic antenna switching. Max. gain: $6 \mathrm{db} @ 3.5 \mathrm{Mc}$, Rated at 4 KW peak power. Instant break-in on SSB. DSB, CW or AM. Coax fittings. Size: $41 / 4 \mathrm{Wx} 43 / 3 \mathrm{HK} 5 \% /{ }^{\circ}{ }^{\circ} \mathrm{D}$. Shpg. wt. ${ }^{\text {AMbs. }} \mathrm{Cb}$
"RANGER II" AM.CW TRANSMITTER


## Single.Knob Bandswitchigg

- 65.75 Watts on AM/CW - 160 Thru 6 Meters

Popular AM/CW bandswitched transmitter/excitep for 6 through 160 meters with crystals or built-in VFO. 6146 final handles 75 -watt CW input or 65 watt phone operation. Pi-network coupling system matches antenna loads from 50 to 500 ohms. Uses timed sequence (grid block) keying for sharp "break-in" and clear sig. nals. Stable temperature compensated built-in VFO is for each of the 7 bands. Planetary drive mechanism results in smooth accurate tuning. Uses high imped ance microphone. $100 \%$ modulation. Completely IVI suppressed. Audio response: 250.3000 cDS . Full meter switching. For $105-120 \mathrm{~V}$ AC, $50 / 60$ cycles. Less crystal
 mike
HE-621WX Model 240-162.2 Wired
Net 359.50 HE-622WX Model 240.162.1 Kit

Net 249.50

## FILTER-TYPE

 SSB ADAPTER- Instant Bandswitched Coverage of 80.10 Meter Bands
- Adapts EM/CW Rig's 10 SSB

Superbly engineered with many outstanding features. Ideal mate 10 "Valiant II". . . places 275 watts P.E.P at your command! Conslsts of 2 compact units and cables. The RF unit may be placed on your desk. Features built-in multiplier which requires VFO input only; positive acting vox and anti-trip circuits with anti-trip matching transformer and adjustable vox time-delay. Balanced audio response; crystal filter for $45-50$ db carrier and sideband subpression. Fixed 50
 Size: RCC unit, 8Wx111/2Hx14"D.; Power Supply, $3^{1 / 1 / 46}$ Wx

HE-286WX Model $240.305-2$
Net 369.50
INVADER AND INVADER 2000
2000
WATTS
P.E.P.

SSB*


NO MONEY DOWN EASY PAY PLAN SEE PAGE 412
Performance engineered for lop quality amateur communications. Fhter-type transmiltar/exciter dellivers a solid 200 watts P.E.P. SSB input and CW input. 90 watts input on AM. Addition of optional linear amplifler gives 2000 watts P.E.P. 1000 watts CW input and 800 watts AM. Specs, inchude instant bandswitching,
stable VFO. VOX. PTT and chiroless, mixer-type Stable VFO. VOX. PTT and chirpless, mixer-type heying. For $105-125$ volts $50 / 60$ cycles AC. Size: 21 Wx $113 / \mathrm{Hx}$ $171 / 2{ }^{\prime \prime}{ }^{\circ} \mathrm{D}$ Shpg. Wt., 67 lbs
HE-455WX .......... Model 240-302.2 .........Net 619.50
INVADER-2000: includes all features of the INVADER plus an integral linear amplifier and remote' power Supply. POWER REQUIREMENTS: $105 \cdot 125$ volts 2 wire or $210-250$ volt 3 wire, $50 / 60 \mathrm{cos}$, 1600 watts. SIZE and WEIGHT: same as INVADER. POWER SUPPLY SIZE: $111 / 4 \mathrm{~Hz}$ $193 / 4 \mathrm{Wx} 141 / 2^{\prime \prime} \mathrm{D}$. Total shog. Wt., 181 lbs HE-456WX Model 240-304-2

Net 1229.90
INVADER HI-POWER CONVERSION COmplete wired and tested assembly including new front panel, cables, additlonal meter, tubes, remote power supply, etc. to convert INVADER to INVADER-2000. Shpg. Wi., 115 lbs.
HE-408WX Model 240-303-2
Net 619.95
DTHER OUTSTANDING JOHNSON EQUIPMENT
Stock No. Mfr. No. Description
Lbs. Net
HE-457WX 250-43-32 "6N2" Conv 14-i8 Mc
$5 \quad 89.95$
$\begin{array}{ll}\text { HE } & 458 \\ 250-28 & \text { Crystal Calibrator }\end{array}$
1818.95
322.00

## NEW AMATEUR SSB TRANSCEIVERS

## R. L. DRAKE MODEL TR-3 SIDEBAND TRANSCEIVER



- Full Frequency Coverage 10-80 Meters
- 300 Watts P.E.P. on SSB
- 2 Special 9 MC Crystal SSB Filters

Deluxe SSB recelver with optimum performance on upper or lower sideband, with AM and CW included. Compact and light weight design make it ldeal for mobile or portable operation. Less than $1 / 2$ microvolt for $10 \mathrm{db} \mathrm{S} / \mathrm{N}$; Solectivity: 2.1 KC @ $6 \mathrm{db}, 7.5 \mathrm{KC}$ @ 60 db . Ranges: 3.5 to $4.1 \mathrm{MC}, 7.0$ to $7.6 \mathrm{MC}, 13.9$ to 14.5 MC , 21 to $21.6 \mathrm{MC}, 28$ to $28.6 \mathrm{MC}, 28.5$ to $29.1 \mathrm{MC}, 29.1$ to 29.7 MC -all ham bands from 10 through 80 meters. Has Inear permeability tuned VFO which tunes 4.9 to 5.5 MC for all ranges. Drift is less than 100 cps after warm-up. Separate recelver S -meter and transmitter plate ammeter. Main tuning diat tunes VFO and main dial. 300 -watts P.E.P. input power. VOX or PTT. Two special 9 MC crystal filters provide sideband selection. 260 watts P.E.P. Input on AM and 260 watts input on CW. 20 fubes including voltage regulator; 6 dlodes; bullt-in 100 KC crystal calibrator, moblle mtg. bracket. $103 / 4$ Wx $51 / 2 \mathrm{H} \times 143 / 6^{\prime D}$. Wt., $131 / 2 \mathrm{Jbs}$ HE-262WX Model TR-3

Net 495.00 HE-262WX Model TR-3
HE-263 MS-3 Matching Speaker $51 / 2$ lbs.
HE-264WX AC-3 AC Power Supply for TR-3, 19 lbs. HE-265WX DC-3 DC Power Supply for TR-3

HALLICRAFTERS SR-150 AMATEUR BAND SSB TRANSCEIVER


- Covers 80 Through 10 Meters
- With Exclusive R.I.T.
- SSB, VOX, PTT, CW

A rugged, lightweight transcelver designed for years of high performance and flexible fixed or mobile operation. Features, R.I.T.* (receiver incremental tuning). Permits $\pm 2$ KC tuning adjustment of receiver frequency independent of transmitter for round-table net or CW operation. Exclusive AALC (Amplified Automatic LeveI Control). RF inverse feedback corrects screen "knee" distortions in small beam power pentodes. Dial calitration $5 \mathrm{KC}, 100 \mathrm{KC}$ crystal cal. VFO tunes 500 KC . Full frequency coverage on $80,40,20$ and 15 meters. 10 M crystals furnished for 28.5 to 29.0 MC . Crystals can be added for full 10 meter operation. 150 W P.E.P. Input on SS8; 125 W . CW. Sensitivity: tess than $1 \mu \mathrm{v}$ for $20 \mathrm{db} \mathrm{S} / \mathrm{N}$ ratlo.
125W/ CW. Sensitivity: tess than $1 \mu \mathrm{~V}$ for 20 db $\mathrm{S} / \mathrm{N}$ ratio. Shpg. wt. 25 lbs.
HB-130wx Model SR-150 ................................. Not 650.00 HB-131wX P-150-AC AC power supply for SR-150 wt. 22 Ibs. ............et 99.50 HB-134WX P-150-DC, DC Power Supply for SR-150 Wh, 51/2 Ibs. .............Net 109.50 HB.135WX MR. 150 Moblle mtg. Rack for SR- 150

## Nationak $1->$ NCX-3 TRIBAND TRANSCEIVER

Complete SSB, AM and CW Coverage of 80,40 and 20 Meter Bands

- Full 200 watts PEP


The model NCX-3 brings you the three most popular amateur bands on a single compact unit. Designed for efficient use in sutos or ham shack, the NCX-3 features a solid 200 watts of SSB punch, vox or push-to-talk, CW break-in, SSB/CW AGC s-meter and a separate AM detector. Two conservatively rated transistorized power supply/speakers are avaliable (optionaliy) for AC or DC operation. SPECIFICATIONS: Frequency Range- $3.5,7.0 \quad 14.0 \mathrm{Mc}$ amateur bands; Power input- 200 watts SSB PEP 180 watts CW, 100 watts AM; RF Power Output- 120 watts SSB PEP, 108 watts $\mathrm{CW}, 30$ watts AM; SSB generation- 5200 Ke crystal filter; bandwidth 2.5 Kc at 6 db
 Tubes- 18 tubes, 6 diodes; power requirements; 700 V.D.C. @ 300 ma, 280 V.D.C.
 wt., 20 fbs
HE.230WX Model NCX 3
Net 369.00
HE-231WX 115 VAC power supply/speaker for NCX-3
Net 110.00 HE-232WX 12 VDC power suppiy for NCX-3

Net 119.95

## SWAN MODEL SW-240 THREE BAND SSB TRANSCEIVER

- Covers 20-40-75 Meters
- 240-watts P.E.P. on SSB


The SW-240 will transmit and receive on 20-40 and 75 meter amateur bands. Power Input is 240 watts P.E.P. on SSB; 200 watts on CW; 60 watts carrier input on AM, Lower Sideband emission on 75 and 40 meters, upper sideband on 20 meters. Special swan crystaf lattice bandpass filter has 3 KC bandwidth, 6 db down. Precision capacitor and frictlon drive tuning assembly with $33: 1$ ratio. Illuminated meter measures cathode current $0-400 \mathrm{ma}$. Separate audio and RF gain. control with AGC. Receiver sensitivity is less than $1 \mu \mathrm{v}$ for $10 \mathrm{db} \$ / \mathrm{N}$ ratio. Carrier suppression down 50 db , unwanted sideband down 40 db . Circuits fully compensated for wide variation in temperature, supply voltage and mechanical shock or vibration. For fixed or mobile operation. 18 tubes. Includes moblle mig. bracket and hardware. All a luminum. Slze: $13 \mathrm{~W} \times 5 \frac{1}{2} \mathrm{H} \times 11^{\circ} \mathrm{C}$. Shpg, wt., $131 / 2 \mathrm{lbs}$. HB-174WX SW-240 SSB Transcelver SW-12 DC. 12 -v Transistorized DC Power Supply for SW-240. HB-175wx Shog. wt. 9 lbs.

Net 320.00
Net 115.00
SW-117AC. 117 V AC Power-Supply with matching cabinet and speaker for SW-240. Shpg. wt. 17 lbs.
HB. 176wX
Net 95.00

## SELECTED AMATEUR EQUIPMENT

POLYCOMM 6 METER rancenvir


- "Miniload" VFO
- Nuvistor RF Amp-. $2 \mu V$ Sensitivity
- 10 Watts RF Output

Rugged construction, covers entire 6 meter band. Features "Miniload" VFO with adjustable differential capac. Hor which maintains virtually zero drift. 1 microvolt sensitivity @ 6 db S/N using 1 -60S4 \& 1-6CW4 Nuvistor RF amps. Recelver is a dual conversion superheterodyne. Frequency range: 49.750 to 54.250 MC . Selectivity: - 6 do bandwidth $8 \mathrm{KC} \pm 2 \mathrm{KC}$. Features: 6.1 tuning ratlo; AGC; adjustable squelch, series gate notse limiter. 5 watts max. audio output. Hum and noise better than 40 db down. Freq. response $250-3000 \mathrm{cps}$. AC power consumption: 90 watts rec., 140 watts trans. DC currenti 10 A rec., 16A trans. @ 12.6 V . For 117 V 60 cycles AC 12 V DC. Complete with mounting bracket, microphone. Size: $11 \mathrm{~W} \times 5 \mathrm{H} \times 10^{\circ} \mathrm{D}$. Shpg, wt., 23 lbs. HE-291WX

No Money Down
Net 329.50 POLYCOMM 2 METER TRANSCEIVER as above but tunes to 143.750 to 148.250 MC HE-287WX

## P\&H LA-400C LINEAR AMPLIFIER

MODEL 6100 SSB TRANSMITTER

- SSB CW
AM - 80 thru 10 and most MARS


A completely new design - there are no free running oscillators. A military type crystal synthesizer unlt generator uses a crystal fattice filter. Ends drift problems. Operates on SSB, linear AM and CW. Frequency is set on 3 digital dials for "hundreds," "tens," and "unlts" of kilocycles. "Units" dial is continuously variable. Distortion, 40 db below peak signal; upper and lower sideband suppression 50 db below peak output. Carrier suppression 50 do below peak. Spurious mixture signals over 50 db down. Freq. coverage (MCS) $3.5-4.1,7.0-8.0,14.0-15.0,21.0-22.0,28.0$ - 29.0, 29.0-30.0 Power output: 70-100 Watts SS8, CW: 20 watts AM. Tunable bandswltched pi-network. Output 2: $30-100$ ohms. Parallel 6146 output tubes. Push-to-talk operation. Phone patch terminals. Silicon rectifiers used on ail power supplies. For 105.125 V 60 cps. AC. Size: $183 / 3 W \times 91 / 2 \mathrm{H} \times 16^{\circ} \mathrm{D}$. Shpg. wt.o 65 lbs . HE-305wx ...........No Money Down

## SUPERB R.L.DRAKE 2B RECEIVER FOR SSB AM \& CW



## - Triple Conversion with 60 AB Image Rejection

- Crystal control stability
- Continuous side-band selection without retuning

Top performance on SSB, AM and CW. The $2 B$ is a highly sensitive, fole conversion recelver with 60 db Image rejection. Covers $3.5-4.1 \mathrm{Mc}, 6.9-7.5 \mathrm{Mc}, 13.9 .14 .5 \mathrm{Mc} .20 .9-21.5 \mathrm{Mc}$, 28.5 - 29.1 Mc , with a crystal controlled high frequency oscillator (cystals supplied). Highly stable variable oscillator. Sensitivity: 0.5 microvolt for $10 \mathrm{db} \mathrm{S} / \mathrm{N}$ ratio. 50 Kc last l.f.selectivity of 2.4 Kc at 6 db down. Receiver has $7^{\prime \prime}$ slide-rule diat with markings every 10 Kc and a vernier with markings every 1 Kc . Additional features: slow or fast AVC action, accurate "S" meter, distortion-free product detector. For $110-120$ V., 60 cps. Size: $12 \mathrm{Wx} 7 \mathrm{Hx9}$ "D. HE-180WX Shpg. wt., 15 lbs.

Net 279.95 Model 280 Q-multiplier and deluxe speaker. For 28 receivers. HE-181
NE-182-2AC crystal callbrator for 28 (not illus.)

## MODEL TX-86K <br> AMESO 80 THRU 6 METER

TRANSMITTER

## KIT

- 90 Watts On CW,

90 Watts Peak on
Phont

- Final operates

Strajght-thrt
on All Bands
Pi Network Out-

versatile phone and CW transtitter kit for the novice technician, and experfenced amateur. The TX-86 covers 80 thru 6 meters with a powerfal 90 watts CW and 90 watts peak input on phone. Features includer
Audio Gain Control; Potentiometar drive control; push to-talk microphone Jack; and a pi-network output to match antennas from 3510600 ohms. The 6146 Final Amplifier works "straight-thru" on all bands, ellm inating troublesome doubling in the final. Swlith alfows choice of transmitter'; crystal controlled osclllator or an external VFO. Comes less power supplv. (See below). Size $5 \mathrm{Hx} 7 \mathrm{Wr} \mathrm{F}^{\circ} \mathrm{D}$. Shpg. wt., 6 lbs. HE-388WX Kit. For 12 -volt fllament ....... Net 89.95 MODEL TX-86. Completely wired and tested. For 12 -volt flament.
HE-389WK
Net 119.95
AMECO POWER SUPPLY, MODEL P-3. An AC power sup-ply-that provides all the power requirements for the TX-86. Provides- 12.6 volts at E amps; 300 volts at 100 ma ; and 600 volts at 150 ma . Silicon rectlfiers for excellent voltage regulation. Can je used to power the excellent voltage regulation. Can se used to power the
$\mathrm{X}-86$ in addition to other accessories. Size 7 Hx 4 Wx Tx-86 in addition to 9"D. Shpg. wl., 14 lbs
For 12 volt filament.
For 12 -volt filament.
HE- 390 Factory Wired
\& Tested
Net 44.05

## AMECO AC-1T AMATEUR

TRANSMITTER KIT

- IOEAL FOR NOVICE
- SELF CONTAINED

The ideal unlt for be.
ginner or novice. Con.
tains transformer powered AC prwer supply. Uses a Pl-network output circuit to load random length wire antenna. No antenna tuner required. Has full 15 -watt input on 40 and 80 meters. Easy to build and operate Complete with punched chassis, all parts, tubes. (6V6 and $6 \times 5$ ) and instructions. Shpg. wt, 8 lbs.
HE-394 Transmitter Kit
Net 19.55
HE-395 CKl extra coll hit

| Net 19.53 |
| :--- | ---: |
| Net |

## P \& H MODEL AR-1 TRANSCEIVER TR SWITCH

Transfers the antenna to the recelver while recelving and provides the necessary switching tc connect the exclter to the amplifler, and the ampllfier to the antenna when transmitting.
 conventional antenna relay where quiet operation is desired. S0-239 connectors are provided for $50 / 70$-ohm desired, So-239 connectors are provided for $50 / 70$-ohm
coax lines. Relay coil requires 6.3 VAC © 675 MA . coax lines. Relay coil requires 6.3 VAC @ 675 MA.
Relay contacts rated at 1500 wate R (Max.). In. sertion loss is negliglble. Size $3 \times 4 \times 4$. Shpg. wt., 3 lbs. HE-914

# Special Purpose RECEIVERS 

## MODEL CRX-2 151-174MC BASE STATION RECEIVER

similiar to CRX-1 but receives 151 -174MC split channel NBFM communications. Triple conversion; adjustable squelch. Manual tuning or 2 crystal channels (less crystals). Sensitivity: 1.5 uv to open squelch, 2 uv for quieting. Bullitin speaker. 10 tubes, 2 dlades. $131 / 2 \mathrm{~W} \times 57 / 4 \mathrm{H} \times 83 / 4$ "0 . For $105-125 \mathrm{~V} .50 / 60 \mathrm{cps}$. shpg. wt., 15 lbs
HE-133wx Budget terms on page 412
Net 109.95

## MODEL CRX-3 VHF AIRCRAFT MONITOR RECEIVER

The CRX-1 is a triple conversion, split channel, narrow band FM receiver for 30.50 Mc . Manual 2 -speed vernier tuning or 2 crystal-controlled channels. Incorporates adjustable squelch. Sensitivity: one microvolt to open squelch, two microvolts for quieting. Receiver includes built-in speaker and transformeroperated power supply. For $105-125 \mathrm{~V}$. $.50 / 60 \mathrm{cps}$. Gray steel cabinet with silver trim. $131 / 2 \mathrm{~W} \times 57 / \mathrm{dHx}$ 37. "D. Shpg. wt., 15 lts HE-132WX

# hallicrafters 

## MODEL CRX-1 30-50MC BASE STATION RECEIVER

A dependable high quality VHF receiver which receives 108-135 MC AM communications. Features electronic squelch high gain frame grid RF stage, 2 microvolt sensitivity, provision for 2 crystal-con. trolled frequencles. built-in speaker, 7 tubes, 3 diodes. For $105-125 v$ 50/60 cycles AC. Size: $131 / 2 \mathrm{Wx}$ $84 \times 53 / 40$. Shpg. wt., 15 lbs

- triple conversidn - adustable sauelch - SPLIT CHANNEL. NARROW BAND FM OPERATION - MANUAL TUNING DR 2 FIXED CHANNELS


## monitoradio FM <br>  <br> MODEL DR-200 <br> TWO-BAND TUNABLE and FIXED <br> MOBILE -FM RECEIVERS

 FM RECEIVER- 14-TUBE, dual conversion
- CDVERS ${ }^{2} 0-50 \mathrm{MC}$ ANO 152.174 MC
- tunable and crystal cinntrolleo
- built-in souelch circuit
- high sensitivity
- ILLUMINATED SLIDE RULE DIAL

Use this quafty FM receiver to tune in exciting Police and Fire calls. Taxi and Radio telephone calls, and important Civil Defense calls. You'll hear them all with this sensitive FM receiver ... keeps you alert to emergencles at all times. Features Include provision for crystal-controlled operation-the receiver can be fixed-tuned to a single frequency on each band using crystals avaliable separatelv (see below). Specifications: Frequency Range: 30.50 MC . $152-174 \mathrm{Mc}$. Sensitivity for 20 do quietink: 1 MV . on low band. 2 uv on high band. Image Reiection: 65 db (low band), 30 do (high bandl. Selectivity: $\pm$ 65 db (low band), 30 db (high bandi. Selectivity: $\pm$
20 Kc at $-3 \mathrm{db} . \pm 30 \mathrm{Kc}$ at -80 db . Tubes: 14 , 20 Kc at $-3 \mathrm{db} . \pm 30 \mathrm{Kc}$ at -80 db . Tubes: 14 , $8^{\prime \prime} \times 61 / 2^{\prime \prime} \times 755^{\prime \prime}$. For 115 volt AC operation. Shpg. wt., 21 lts.
HE-284WX Model DR-200 .......................... 169.50
DRS-1-Matching Speaker for Model DR-200
HE-285

## CRYSTALS FOR DR-200

Spectal Crystals for DR-200 ground to order. Specify exact frequency. Allow 3 to $A$ weeks for delivery. HE-268Y $30-50 \mathrm{MC}$ band. Specify

EXACT Frequency
HE-269Y 152-174 MC band. Specify
EXACT Frequency
Net 11.95 Net 11.95

- M.40: Tunable $30-50$ MC
- M-160; Tunable 152-174 MC

High quality moblle recelvers for governmental, municipal and industrial uses. These .tuneable receivers cover the entire FM communications bands with excellent sensitivity. 10 tobe circult features a fully tuned RF amplifier, dual conversion, and two stages of limiting followed by the discriminator. Power output is 8 watts, built- $\ln 4^{\prime \prime}$ speaker. For 12 v . DC 3.9 amperes. Housed in attractive cabinet, only $41 / 2 \times 61 / 2 \times 83 / 4{ }^{\prime \prime}$. Shpg. wt., 10 lbs.
MODEL M-40 Mobile FM recelver for $30-50 \mathrm{MC}$ band. Sensitivity $2 \mu \mathrm{v}$ for 20 do quieting. HE.278WX

Net 103.55
MODEL MC-40 "Same as above but crystal controlled for $30-50$ MC band. Shipped from factory with crystal for exact operating frequency installed and adjusted. Specify exact frequency desired. Shpg. wt., 15 ibs. HE-279WXY Net 122.95 MODEL M- 160 Mobile FM tunable recelver for the 152-174 MC bands. Sensitivity $4 \mu \mathrm{~V}$ for 20 dt quleting. WE. 280 WX

Net 103.55
MODEL MC-160* Same as above but crystal controlled for 152.174 MC band. Shipped from factory with crystal for exact operating frequency installed and adjusted. Specify exact frequency desired. Shpg. wt., 12 lbs.
HE-28iwXY
Net 122.95
Specify Frequency for MC Models
NOTE: Crystal-controlled Receivers must be ordered special and are subject to a 3 to 4 weeks delivery delay.


## FIXED FM RECEIVERS

## - MR-10 Tunable 152-174 MC

- MR-33 Tunable $30-50$ MC

Extra sensitive FM receivers for police and flre departments, Civil Defense, and industry use. Ideal for any type of fixed or portable appliration. 3-gang tuning condenser. Sensitivity of $4 \mu v$ or less for fuli 20 db quieting. Adjustable squelch eliminates noise between transmissions. Built-in 5" speaker, . 8 watt output. Illuminated slide-rule dial for night operation. Two-tone metal cablnet $111 / 4 \times 77 / 8 \times 61 / 2^{\prime \prime}$. For $105-125$ volts 60 cycle AC only. U.L. Approved. Shpg. wt., 15 lbs.
MODEL MR-10 tunable FM receiver for $\mathbf{1 5 2 - 1 7 4}$ MC band.
HE-27OWX
Net 72.50
MODEL MRC-10: crystal-controlled FM receiver for 152-174 MC band. Shipped from factory with crystal for exact operating frequency. Installed and adjusted. Specify exact frequency desired. Wt., 15 tbs. HE-27iWXY ................................................... 79.95
MODEL MR- 33 tunable FM receiver for $30-50$ MC band. HE-273WX Shpg. wt., 15 tos.

Net 72.50 MODEL MRC-33* crystal-controlled FM receiver, for 30.50 MC band. Shipped from factory with crystal for exact operating frequency. Installed and adjusted. Specify exact frequency deslred. Shpg. wt., 15 los.

## HE-274WXY

Net 79.95
MODEL M-80LR Window Mount Antenna for $30-50 \mathrm{mc}$. HE-959W Shpg. wt., 3 tos. .......................... Net 7.35

- Speclfy Frequency for MC Models

NOTE. Crystal-controlled Receivers must be ordered special and are subject to a 3 to 4 weeks delivery delay.


## MONITORADIO

MODELS PR-35 AND PR-155 FM RECEIVERS

- FOR POLICE, FIRE, FORESTRY TAXI, CIVIL OEFENSE MARINE ANO INOUSTRIAL APPLICATIONS
Highly sensitive FM recelvers for police, flre, forestry, taxi, civil de fense, marine and Industrial applications. Receivers are quality bullt for long ilfe and dependable service. Features a temperature com. pensated superheterodyne circuit for drift-free receptlon. Ratio detec lor circult cuts down on noise under "no signal" conditions. 4" P.M. speaker is built-In provides plenty of clear sound over volce frequencies. Specificationsi PR-35 covers $30-50$ MC. PR-155 covers 152-174 MC. Sensitivity: 10 microvolts for $\pm 5 \mathrm{KC}$ deviation; Selectivity: 100 KC ; Power Output: 1.1 watts maximum; Antenna Impedance: 50-72 ohms. In a handsomely designed plastic cabinet only $91 / 2 \times 6 \times 51 / 2^{\circ}$. For $110-120 \mathrm{~V} 50 / 60$ cycles $A C$ or DC. Shpg. wt., 6 lbs. PR- 35 FM recelver; 30.50 MC

HE. 282
Net 54.50
PR- 155 FM Receiver, 152 -174
HE. 283

## KUPFRIAN POWER SUPPLIES

 shipg. wt., 2 lbs.| Wired |  |
| :---: | :---: |
| Stock No. | Net <br> Each |
| HE-811 | 49.00 |
| HE-813 | 54.00 |
| HE-815 | 54.00 |
| HE-625 | 59.00 |
| HE-827 | 71.00 |
| HE-821 | 59.00 |
| HE-229 | 96.00 |
| HE.823 | 57.00 |

Transistorized power supplies, to convert low valtage D.C. to high voltage D.C. or A.C. Instant starting, rugged quiet. No vacuum tubes or moving parts. Excellent voltage resulation and $0.4 \%$ max, ripple over a temperature range of $-55^{\circ}$ to $+60^{\circ} \mathrm{C}$. Size $33 / 4 \times 41 / 6 \times 2 \frac{1 / 2 "}{}$ high; Attach to equipment by 4 threaded holes. Avg.


INDUSTRIALS: Write for Quantity discounts.

## FIXED AND MOBILE CONVERTERS AND PREAMPLIFIERS

 battery. Better than one $\mu \mathrm{v}$ sensitivity on all bands Tuned RF stage for maximum image and spurious rejection. Crystal used cover a spread of 1 MC . $33 / 4 \mathrm{Hx}$ GWx63/"D. Wt., 4 lbsHE-868 Less crystal, wired and tested...... Net 84.95 Crystals for Model CMA - Specify frequency desireddelivery approx. 3 weeks.

- HE.869Y


## MODEL CMA TRANSISTORIZED ALL-BAND CONVERTER

- Mobile or fixed Station Use A crystal controlled transistor. Ized, all band converter that can recelive signals between 1.8 and 174 MC. Includes CB, police fire, business, aviation, marine



## MOBILE CONVERTERS

## CLB

- For Ham, Clitizens Band, Pollca. Fire, Marine, Aviatlon, Buslness Bands, etc. From 2 MC to 17 MC. Works into Broadcast racelvers.

MODEL CLB LOW-BAND CONVERTER
A crystal controlled converter that can cover any spec Ifled frequency or band from 2 to 54 MC Unit uses a 6EK6 rf amp. and a $12 A D 6$ mixer/osc. $1 / 4$ uy sensltivity. Uses the car's 12 volt battery supply. All you have to do is plug the antenna into the converter. Size: $31 / 2 H \times 21 / 2 W \times 31 / 2^{\prime \prime} \mathrm{D}$. Shpg. wt., $11 / 2$ los. ME-853 Model CLB for 6 Meters

Net 24.45
HE 854 Model CLB for Citizens Band
Net 24.45 - HE-855Y Model CL8 for any other frequency from 2 to 54 MC. Specify frequency

Net 25.43 MODEL CHT HIGH BAND TRANSISTORIZED CONVERTER Model CHT will convert any single frequency or band of frequencles between 108 and 175 MC down to the broadcast band. Uses 3 high quallity transistors and a diode and has a $V_{2}$ microvolt sensitivity. Can be operated from the car's battery or from an Internal battery. Model CHT can be used for fixed or mobile operation and works into any broadcast band radlo operation and works into any broadcast band radio
Including pocket translstor sets. Size: $2 \sqrt[2]{2} \mathrm{~Hz} 2 \$ \mathrm{BWx}$ Including pocket trans
$61 / 2^{*} D$. Shpg. wt., 2 los.
HE- 868 Moded CHT for 2 meter Ham Band .... Net 35.26 -HE-86TY Model CHT for any other frequency from 108 to 175 MC. Specify frequency ......... Nef 35.23 on speclal order and subject to 3 weeks delivery.

NEW AMECO MODEL PCL NUVISTOR CASCODE PREAMPLIFIER


- Covers 6 Through 80 Meters Improves receiver receptlon Covers 6 through 80 meter ama teur bands. Uses 26054 Nu vistors in a cascode circult for greater receiver gain and exremely low nolse figure of 1.8 to 3.5 db . Also im proves image and spurious rejection. Controls: 4 position range switch ( 1.8 to 54 MC ); Antenna Tunling Control, and 3 positlon switch for On, off and Standby. Size: $5 \mathrm{~W} \times 3 \mathrm{Hx} 3^{\circ} \mathrm{D}$. Shpg. wt., 2 lbs.
HA-194
No Money Down
Net 24.95
AMECO NUVISTOR VHF CONVERTER
KITS FOR 50 MC, 144 MC, 220 MC BANDS
Extremely sensitive converters
employing 3 Nuvistors for mini. mal noise. Average gain is 50 db with noise figures of $2.5 \mathrm{db}-50$ $\begin{array}{ll}\mathrm{Mc}, \\ -200 \mathrm{db} . & 144 \mathrm{Mc} \text {., } 4.0 \mathrm{db} \text {. } \\ -2 p u r l o u s ~ r e l e c t i o n ~\end{array}$ more than 70 db . Tubes: first RF 6CW4, second RF 6DSA, mber 6 CW4, oscillator 6J6. Gain control provided. Power requirementss $100-150 \mathrm{~V} @ 30 \mathrm{ma}$. and 6.3 VAC @ 1a. Satin finished copper chassis, Size $2 \times 2 \frac{1}{2} \times 6 \frac{3}{}{ }^{\prime \prime}$. Shpg. wt., 3 tbs.
tock No Type No Meters
Meters
$6(50 \mathrm{Mc})$
$6(50 \mathrm{Mc})$
$11 / 4(220 \mathrm{MC})$
$11 /(220 \mathrm{Mc})$
$2(144 \mathrm{Mc})$

Net Each
HE-860 CN-50 Klt 6 (50 Mc)
34.25

ME-851 CN-50 Wired 6 ( 50 Mc
HE-862 CN-220 Kit
HE-863 CN-200 Wired
HE-864 CN. 144 Kit
HE.865 CN-144 Wlred
2 ( 144 Mc )

### 34.25

48.95 2 (144 Mc)

AMECO
MODEL PV NUVISTOR VHF PREAMPLIFIERS

Designed for elther 50, 144 or 220 Mc , a Model PV Nuvistor preamplifier can be used ahead of a recelver or converter to improve the gain and nolse figure considerably. Unit employs a completely neutralized 6 CW4 Nuvistor, for a gain of over 20 db and a noise figure of 2.5 db at $50 \mathrm{Mc}, 3.0 \mathrm{do}$ at 144 Mc , and 4.0 db at 220 Mc . Completely wired and tested, requires 100.150 YDC it 8 ma and 6.3 volts at .13 amps , AC or DC. Only $21 / 2 \times 31 / 2 \times 7^{\prime \prime}$. Shpg. wt., 2 lbs HE- $403 \mathrm{PV}-50$, for $50^{\circ} \mathrm{Mc}$

Net 13.87 HE-404 PV-144, for 144 MC
HE-405 PV-220, for 220 Mc
HE. 406 PV-27, For 27 Mc

Net 13.67
Net 13.67
Net 13.67

## AMECO 6-METER BROADBAND CONVERTER KIT

## MODEL CB-6K

Now you can convert any recolv. er to cover the 6 meter band. Crystal controlled. Utilizes a 6 U8A mixer-oscillator, a 6ES8 cascode RF amplifler and specially designed transformers. High sensltivity
Noise flgure-better than 4 db . If rejectlon-over 100 db . Housed in 2 piece salin finished copper chas sts. WILL NOT BECOME OBSOLETE, since the IF output can be easily changed to match any receiver. Size: $4 \times 21 / 2 \times 5^{n}$. Comes less power supply. Complete with tubes, crystal for 14-18 Mo IF output, and Instructions Shpg, wt.. 1 io.
ME. 385 CB-6K KIt
Net 19.55
HE. 386 CB-6W above, wired
Net 26.95
MODEL CB.EK "SPECIAL"-For I.F. outputs other than
$14-18 \mathrm{MC}$-Please specify I.F. ontput.
HA-190Y CB-6K. Special Kit ....................... 20.58
MDDEL CB.6W "SPECIAL"-as above but wired. Speclfy I.F. output.
MA-191Y ...................................................... Net 27.95

## AMECO CB-2K METER

 BROADBAND CONVERTER KITSimilar to CB-6K except for 2 meter band. Utilizes 3 tubes for optimum performance. 6ES8 high galn, low noise, cascode first RF amplifier; 6U8A second RF ampll. fler and mixer, and 616 os cillator/ multiplier. Crystal controlied for stable performance. Over 30 db
gain. Comes less power supply but
with tubes, crystal $14 \cdot 18 \mathrm{mc}$ output, and Instructions. Size: $4 \times 2 \frac{1}{2} \times 5^{\prime \prime}$. Shpg. wt., 1 it.
HE-391 CB-2K Kit .......................................... 23.47 HE-392 CB-2W Wired and Tested ............... Net 33.27 MOOEL CB-2K "SPECIAL"-For I.F. outputs other than 14-18 MC-Please specify I.F. cutput. HL-192Y C8-2K Special Kit

Net 24.47
MODEL CB-2W "SPECIAL"-.as abcve but wired. Specify I.F. output.
HA-193Y
HA-193Y

Net 34.27
AMECO PS-1 POWER SUPPLY Housed in an attractive 2 -plece Satin copper chassis that matches the CB-6 and CB-2. Supplies 125 volts DC at 50 ma and 6.3 volts $A C$ at $2 A$. May be used to power CB-6. CE-2, and other acces. sorles around the bam shack. Shpg. wt. 6 lbs.
HE. 387 Wired
Net 11.27

## AMATEUR POWER SUPPLIES AND ACCESSORIES



TRANSISTORIZED POWER SUPPLIES

- OC-DC Transistorized
- Powers Transceivers In the 100 watt output class
A transistorized power supply designed for dependable starting and long operating life in moblie service: compact enough to be tucked under the auto seat or mounted on the firewall. Easily installed, blas adjustment control and DC input fuse are located on panel for easy access. Supplies all operating voltages for 100 watt SSB excitersz $800 \mathrm{~V} @ 275 \mathrm{ma;} 300 \mathrm{~V}$ @ 150 ma , and a zener diode regulated -90 VDC blas supply, Shpg. wt, $71 / 2$ ibs. HB-160WX Model MPS. 800 MODEL MPS-1250. Suppiles 1250 VDC @ 400 ma for any typa linear amplfier: 300 VDC @ 150 ma , and $z e n e r$ dode regulated - 90 VDC bias supply. HB-161wX Shipg. $w^{*} 71 / 2$ los.

Net 139.50


## AMATEUR ACCESSORIES From LEADING MANUFACTURERS


ameco standing wave bridge AND BRIDGE INDICATOR
Model SwB STANDINE wAVE BRIDGE is an Inductlve type of bridge that is continually left in the line. Reads SWR's from 1.8 Mc. 10225 Mc. and can handie one thousand watts. Has negligible insertion loss. Contains two SO. 239 UHF connectors. Size $21 / 4 \times 156 \times 41 / 2^{n}$. Wired and tested. Shpg. Wt., 2 lbs.
HE-377 Standing Wave Bridge
Model BIU GRIDGE IMDICATOR UNIT contains a 100 ml croamp 2 be" square American made D'Arsonval Meter that reads in SWR, percentage power and percentage voltage (three scales). Switching provldes for reading of any one of two bridges. Satin finished copper panel and charcosil grey cabinet. Size: $27 / 4 \times 5 W \times 3^{\prime \prime} D$.
HE-378 Indicator Unit Shpg. wt., 2 tbs.
Net 15.63


## AMECO HP-45 FILTER

Migh-pass TVI filter placed in the ama teur and TV antenna line for aftenua tions of 40 db at 14 Mc and 20 db at 28 Mc . Balanced constant $K$ clrcuit accepts 300 ohm twin line. Negligible Insertion loss. Shpg. wt., 302
HE-402


## AMECO COOE

## PRACTICE OSCILLATOR

## - variable tone control

 - IN KIT OR WIREO FORMThis Code Practice Oscillator, for 110 volts AC or OC, with built-in 4 inch speaker, produces a pure, steady tone. It can take a large number of headphones or keys. The oscillator is easily converted to an excellent c.w. monitor, with tubes shpe. Wt., 3 lbs.
ME 400 MODEL CPS-KT KII
Net 13.47
HE-401 MODEL CPS-WT. Factory wired ..... Net 14.65


## CODOME <br> aUTOMATIC MORSE <br> CODE INSTRUCTION MACHINE <br> FOR THE NOVICE

The CODOME and Its accompanying manual provide all the materials necessary to prepare the beginner for his Novice class amateur license examination. The machine itself sends groups of letters and numbers automatically, in random order. Built-in key permits the student to develop his senaing technique in step with his recelving technique. As each group of characters is being practiced, the student is introduced, by means of the accompanying manual, to the basic concepts of electricity and radio, and to the FCC regulations pertinent to amateur communications. For 117 VAC. $21 / 4 \times 51 / 4 \times 63 / 4$
WE. 696 Shpg. wt $t_{\text {, }} 21 / 2$ ibs


B \& W 550A ANTENNA COAXIAL SWITCH<br>- No Loss When Switching Antennas

An inexpensive multi-position coaxial switch that eliminates the annoyance of screwing and unscrewing coaxial connections. The \& W 550A permits you to instantly select any one of five transmitters, antennas exciters recelvers and other r-\& generating devices exciters, recelvers, and other r-f generating devices using 52 or 75 ohm line. The switch handies up to of of modulated power with a maximum cross-talk Herg1 -10 d at 30 mc
MR-91 Shpg. wt., 2 los.
Net 8.25
Model 902-Knob for use with 550A
HP-171
3818 -Dial plate for use with 550 A
HP. 172
Net 20


Eliminates TVI problems forever
85 do attenua. Completely self-contalned, usable with transmitters to 1 kw, using coaxial transmission line. HE- 301 Model 425 for 52 ohm coax.

Net 17.10 HE-302 Model 426 for 75 ohm coax. Net 17.10

## B \& W MINIDUCTORS

## y.7adabo

Air wound, polystyrene insulation. Easlly cut to slie All are $2^{\prime \prime}$ long except miniductors with $1^{\prime \prime}$ diameter are $3^{\circ}$ long. Shpg. wt., 6 oz.

## 4 TURMS PER IN.

| D1am | STOCK \# | TYPE | NET | STOCK | TYPE | NET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 2^{\prime \prime}$ | HP-75 | 3001 | . 4 | HP. 76 | 3002 | . 44 |
| 59" | HP.79 | 3005 | . 53 | HP. 80 | 3006 | . 53 |
| 1/4" | HP-3 | 3009 | . 62 | HP. 84 | 3010 | . 62 |
| $1^{\prime \prime}$ | HP-87 | 3013 | . 68 | HP. 88 | 3014 | . 6 |
|  | 16 TURNS PER |  | IN. | 32 TURNS PER |  | IN. |
| $1 / 2{ }^{\prime \prime}$ | HP. 77 | 3003 | . 44 | HP. 78 | 3004 | . 44 |
| *** | MP. 81 | 3007 | . 53 | HP. 12 | 3008 | . 53 |
| 3/4** | HP. 85 | 3011 | . 62 | HP. 86 | 3012 | . 62 |
| 1* | HP. 89 | 3015 | . 60 | HP. 90 | 3016 | . 68 |

R.L. DRAKE TV. 300 HP -Cuts off below 52 mcs. for 300 a line. TV. 72 HP as above, but for $72 \mathrm{\Omega}$ line. Net 3.89
TV.72HP as above, but for 72 I line.
TS. 311
Net 3.09
TV.300HP (RCA plug-In) for RCA receivers
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## FOR USE AT THE TRANSMITTER

TV-100LP Attenuates above 54 mc . Handles 100 watts $6-160$ meters, 20 -watts on 6 meters. For 52 ohm line. TS. 313

Net 5.83
TV-1000LP as above, but handles 1 Kw 6-160 meters,
200 watts on 6 meters.
TS-314
Net 16.61

DOW-KEY RELAYS, ANTENNA SWITCHES, CONNECTORS


## MODEL DK60 COAXIAL RELAY (Fig. A)

Low-loss coaxial relay designed for dependable antenna switching. Low contact resistance with contact force at least 50 grams in transmit and 35 grams in recelve position. Breakdown voltage in excess of 1000 volts rms. Insulation resistance at least $50,000 \mathrm{megohms}$. Coll impregnated with epoxy resin. Heavy phosphor bronze contact tongue with pure silver contacts. RF carrying parts are all silver plated. Adjustable con. nectors and-inspecting port aid in contact cleaning. Body finished in blue-gray wrinkle. Size $33 / 4 \times 23 / 4 \times 114^{\prime \prime}$ Mig. holes $6-32$ clearance or $8-32$ tapping. Avaliable for 115 VAC $50-60$ cycles or 12 VDC . With receiver protecting connector. Shpg. wt., 1 to. HE-783 OM60-G2C with 115 VAC Coll.

Net 15.65 HE-784 OK-60-G2C with 12VDC Coll ............... Net 15.85

## MODEL DKF2 DOUBLE MALE CDNNECTOR

a connector permitting coaxia! relay to be mounted directiy at output of transmitter. Easily secured In place. Silver plated. Shpg. wt., 8 oz.(Not lilus, HE.782 ...................................................... Net 1.25

## MDDEL DKCO-RFB PREAMPLIFIER (Fig. B)

A $50-70$ ohm impedance matching broadband preampllfier that will substantially improve the signal to noise ratio and gain of receivers with medium or low sensitivity. Circuit employs 6CB6 low nolse RF tube. It provides an overall gain of 1 to 6 " S " units (up to $36 \mathrm{db})$ in most receivers, from 1.5 to 30 megacycles A silght gain results on frequencies up to 60 megacycles. Use for fixed or mobile Installations. Powered by recelver or auxiliary filtered supply. Requires $125-$ 175 VDC at 7 ma . for B-plus and 6.3 VAC at .3 amp for fllament of 6 CB 6 tube. Size: $13 / 4 \times 2^{\prime \prime}$. Shpg. wt. 12 oz.

Net 10.75
MDDEL DK6D-P PANEL MDUNTING COAXIAL CONNECTOR (FIE.C)
A panel mounting coazial connector that can be pepmanently installed on panel in just a few minutes, without screws. Only single to diameter hole is iequired. Two serrated jam nuts hold connector securely in posifion. Will not loosen from frequent use. Easy to solder terminal. Shpe. wt., 602. Easy
HE. 781

Net .70
MODEL DK-2-60 COAXIAL SWITCH (Fig. D)
A DPDT coaxlal switch for switching two coaxial lines simultaneously. Ideal for switching linear amplifier in and out of circult. Frea. range - 0 to 500 MC . power rating to 1 Kilowatt. Comes with type UNF connector. Size: $23 / 4 \times 33 / 4 \times 13 / 4^{\prime \prime}$. Shpg. Wt., 1201.
HE. 788 DK-2.60 for 110 V AC. HE.799 DK-2-60 for 12V DC ….................... Net 19.00

## DK-71 DELUXE ANTENNA COAXIAL SWITCH

 (Not Illus.)A deluxe single pole, six throw, weatherproof coaxial pelay for remote switching of R.F. Sources. Designed for mounting on mast. Remote switching up to slx antennas. $534^{\prime \prime}$ diam.; $274^{\prime \prime}$ deep. Shpg. wt., 4 lbs. HE-786

## NEW! LAFAYETTE 24-HOUR WORLD CLOCK <br> With $8^{\prime \prime}$ Diameter Face <br> Shows Time of 56 Places Throughout

the World AT THE SAME TIME!

- No Cord. No Plug, No Batteries
- Cleaming Brass Case
- Sturdy Gimbal Mount

The new Lafayette 24 -hour world clock teatures a precision, accurate movement. The large $8^{\prime *}$ diameter face has 2 dials-the inner dial, caliorated in hours and minutes, is for local time. The outer dial has a white area for day time and a black area for night time-shows the correct time for 56 difierent locations throughout the mount, makes it ideat for use in most every room in the mount, makes it ideal or use in most every room in the
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listeners. Shpg. wt., 5 lbs.
ML-249

## CLOCKS!



TD-2400, self-starting, accurate ciock or telling world-wide as well as local time. Calibrated in hours. 0100 to 2400; in minutes and seconds, 1 to 60 Shows time directly in all time zones. $10^{\circ}$ dia. For 110.120 volt, 60 cycles. .C. Shpg. wt., 4 lbs

24-HOUR ELECTRIC WORLD CLOCK

- Overall diamete Adjustable for Various Time Zones - South Polar Projection

Self starting, accurate electric cloch. Tells world-wide and local time. Call orated in hours- 1 to 24, minutes and white graduations. Chrome plated case. U. approved $110-120$ V 60 cyc. AC. Shog, wt., $11 / \mathrm{s}$ lbs
ML-210 including excise lax. Net 47

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Built-In 10 Minute Timer
Control A unique 24 -hour clock which can be hung on a wall or placed on desk. Has a built-in 10 minute timer control on front panel. South Polar Projection map of world indicates time around the world at a glance. Name plate can be personalized with operator call number. U.L. approved self-starting electric clock movement. Size $63 / 4 \mathrm{Wx} 3 \mathrm{Hx} 94 \mathrm{y}^{\prime \prime} \mathrm{L}$. ML-316 Shpg. wt., 10 lbs. Net 11.45

afayette's sensational shortwave receiver kit is a complete shortwave and standard broadcast set which covers the entire region from 550 kilocycles to su megacycles. Four whole bands of fascinating programming. Perfect for language students and tadio amateurs.
Oniy a regenerative circuit can offer such amazing performance and yet be so simple to build. Building this fine kit is an absolute pleasure-it's so well designed you can't go wrong. Kit includes all the parts you need, and the detailed step-by-step instruction book with its giant pictorial drawings shows you just how to put them together.
One front panel knob does all the bandswitching at the flick of the wrist. immediately taklng you from band to band. All coils are prewound for greater accuracy. Thls kit is so easy to build anyone can do it. The chassis is com-

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- Amateur 10-15-20-40-80-160 Meter Bands
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- Complete Band Switching From Front Panel
- Bandspread Tuning - Built-in $4^{\prime \prime}$ Loudspeaker


## only $\leftrightharpoons 95$ <br> NO MONEY DOWN

## EASY PAY PLAN SEE PAGE 412

pletely isolated from the circuit, so there is no shock hezard.
This precision radio kit is just full of extra features. Complete 4 band coverage of broadcast stations, international broadcast bands, amateur, maritime, and WWV time signals. Big $4^{\prime \prime}$ speaker and sensltive circult with, 50C5 output stage and $12 A T 7$ regenerative detector and amplifier stages give you all the volume you want. Phone jack for privacy automatically disconnects speaner. All conrols are on the front panel: On-Off Volume, Main Tuning, Bend Saread, Bandswitch, Antenna Tuning, and Regeneration. 110 volt $50-60$ cicle AC.DC power supply lets you use this fine set anywhere. Size: $10 \times 7 \times 5^{\circ \prime}$. Everything needed for unexcelled reception is combined in a compact, economical package. KT-135 EXPIOR KT-135 EXPLOR-AIR RECEIVER KIT (Less Cabinet) wt., 5 ibs.
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- needs no special high intensity lights - instantaneous or sustaineo operation on the


A real achlevement in a super-sensitive photocell relay ktt. Ideal for sustained operation required for burglar alarms, door buzzers, for turning on porch and home lights at night to discourage prowlers when away in the evening. Excellent for instantaneous on-off operation required for counters, packaging, door opening, motor activation and countless industrial applications. A flip of the switch converts unit from instantaneous "on-off" to sustained "On" operation. A simple push on the "RESET" switch opens the external circuit and turns off the alarm. The unit operates on 110 volts $A C$ and incorporates the efficlent 5823 cold cathode tube, permitting longer life since there are no filaments to burn out. The controlied clrcuit is plugged into a convenient 110 V AC output socket. A simple change in wiring (in instructions), as well as convenient Input terminals, enable you to supply the external circuit with any desired voltage. Relay contacts rated at 3 amps permitting up to 300 watts external load on 110 Volts AC. Complete with all parts, photocell. tube, chassis, silk-screened metal cabinet and easy-to-follow lilustrated instructions. Size: $3 \times 4 \times 5^{\circ \prime}$. Shpg. wt., 3 lbs. KT-133A Kit. Complete

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CAN BE USED AS BURGLAR ALARM

## LIGHT SOURCE

- SEALED BEAM UNIT
- includes red filter
wired and assembled light source with AC line cord and plug. WIII actuate red filter which makes light beam invisible by day and very difficult to detect at night. Metal case, Size: $5 \mathrm{t} / 4 \times 3 \times 4^{\prime \prime}$. For 110 V 60 cycle AC. Shipg wt., 4 lbs . PC-48


## LAFAYETTE Easy-ta-Build EDUCATIONAL KITS



## New! 20-IN-1 TRANSISTOR

 FUN TO BUILD - EDUCATIONAL - and ALL 20 projects result in a useful working instrument!

# This new Educational KIt opens the field of transistor. shock hazard. Amaze your friends with a Volce-Actuated 

 electronics with all its fascinating circults and in a simple, easy-to-follow manner. Excellent for beginners as well as advanced experimenters, this kit enables you to bulld and learn about 20 interesting and useful translstor circuits. By utilizing "Breadboard" construction, each project can be simply wired and traced. After bullding the basic circuit, any of the 20 projects can be built by simply inserting a few preassembled component blocks and interconnecting leads between them. A soldering iron is only required for the basic wiring and not for subsequent projects. All wiring is covered in a step-by-step manner by the instruction manual. Each of the 20 projects is clearly oresented with step-by-step instructions, large easy-to-read pictorlal wiring diagrams, schematic diagrams, and an explanation of the circuit behavior. There are no $A C$ voltages to produceAlarm Rain Alarm, Home Broadcaster, and other projects. Build useful projects for the home - Metronome, Burglar Alarm, and Timer. Learning Morse Code with the Code Practice Oscillator and receiving Short-Wave Citizens Band Statlons are only a few more of the many interesting and useful things you will bulld while exploring this new world of transistor-electronics. The kit is complete with perforated mounting board, 2-transistors, 1-dlode, earphone, light sensitive plate, and all other parts required for con struction. The detailed 28 page instruction manual contains a wealth of information about each project. Less batterles and tools. Shpg. wt., 6 lbs

KT-173 Complete
Net 16.95
BA-155 Z Cell Battery for Kit projects
BA-270 $221 / 2$ Volt Battery for Kit projects

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## PROJECTS YOU BUILD

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8. TIMER
9. ONE TRANSISTOR RECEIVER
10. CODE PRACTICE OSCILLATOR
11. METRONOME
12. TWO TRANSISTOR RECEIVER
13. ELECTRONIC GAME
14. HOME BROADCASTER
15. PHOTO ELECTRIC RELAY
16. BURGLAR ALARM
17. WIRELESS TRANSMITTER
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## LAFAYETTE 10-in-1 LAB KIT



1. RADIO RECEIVER
2. PHONO-MICROPHONE AMPLIFIER
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10. PhOTOCELL RELAY

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- ISOLATION TRANSFORMER
- SEPARATE VOLUME CONTROLS
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Features separate volume control for each channel; ganged tone controls; Stereo. Features separate volume control for each channel; ganged tone controls; Stereomonaural switch to feed one channel to both speakers and to reverse the channels. Just right for any use where a small stereo amplifier is required-ideal for custom mounting in even the tighest locations; specially designed for small apartment sized stereo systems.
An isolation transformer makes this circuit extra safe. Other circuit features for better performance include application of negative feedback to driver and output stages for wide-range response and extra low distortion. Dual-triode $12 A x 7$ tubes function as voltage amplifier and driver, providing very high gain: 40 millivolts drives this unit to full output. This tremendous galn, plus an extremely high input impedance, make this amplifler perform exceptionally well with all types of ceramic and crystal pickups, as well as tuners, tape recorders, etc. Selenlum rectifler power supply has extremely good regulation, Logical layout, high quality parts, plus complete instructions for assembly, make this kit a pleasure to bulld and use. For 3.4 or 8 ohm speakers. Tubes: $2-50 \mathrm{C}, ~ 2-12 \mathrm{AX7}$ plus selenium rectifier. Size: $91 / 2 \times 5 \times 41 / 2^{\circ "}$. Complete with all parts. For $110-120$ volts, 60 cycle KT-126 Kit Complete

Net 19.95


- SEPARATE VOLUME, BASS \& TREBLE CONTROLS - PUSH.PULL AUDIO OUTPUT STAGE - INVERSE FEEOBACK CIRCUIT - AC OR OC OPERATION Here in kit form is an $A C$-DC hiffi amplifier that presents unusual features despite its amazingly low price. The separate bass and treble controls permit adjustment of both low and high irequency response and balance. Works equally well with both crystal or ceramic cartridges. Has a 4 -tube line up-a $12 A X 7$ amplifier and phase inverter, a 35 W 4 rectifier and a patr of 35 C 5 's in push-pult, having a power-packed low distortion output. The circuit utilizes an inverse feedback 1000 to reduce the level of hum and distortion. Kit is complete containing all essential parts, tubes and detailed instruction manual showing pictorial and schematic diagrams. Shipg. wt., 4 lbs .
diagra
KT-92


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## COMPLETE STEREO PHONO SYSTEM KIT

- Save By Building This Excellent Stereo Amplifier
- Plays Both Stereo and Monaural Records


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Enjoy fine stereo or monaural performance with this easy to assemblo package. The complete system consists of the Lafaye:te KT-126 Stereo Phono amplifier kit (as descrlbed above); the Lafayette-Webcor automatic 4 speed 4 -pole record changer complete with stereo monaural cartridge with diamond stylus (see page 78); 2 Lafayette SK-109 Miniature speaker systems in mahogany veneer enclosures. Each cabinet is supplied with 25 ft . of hookup cable and measures only $91 / 2 \mathrm{~W} \times 73 / 4 \mathrm{Hx} 3 \mathrm{~L}{ }^{\prime} \mathrm{D}$. Shpg. wt. 30 lbs. Base for changer not included.


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BROADCAST/AMPLIFIER KIT Use it either as a Wireless Broadcaster or AM Audio Amplifier!

- CLEAN, MODERN STYLING
- POWERFUL SIGNAL
- WORKS WITH ALL CRYSTAL AND MAGNETIC MIKES AND PHONO CARTRIDGES
- PLAYS THROUGH ALL AM RADIOS


MICROPHONE

Treat yourself and your family to hours of fun with this new Lafayette Kit. Make your own radio programs, announcements, etc. through AM radios anywhere in the house, without wires or extra gadgets. Designed for easy construction by youngsters or adults, the KT-195 combines in one compact unit a powerful 3 -tube wireless broadcaster and an audio amplifier. Clearly written instruction manual makes it a cinch to build, Operates on any frequency between 900 and 1600 hilocycies on your radio dial. It will accept any crystal or magnetic microphone. In addition, the KT-195 may be used directly as a phono or microphone amplifier. No external preamp is reoulred. Simple slide switch dermits either form of operation. Just connect it to a PM speaker (4-16 ohms). Conforms to FCC regulations and is designed to provide high quality voice or record broadcasts. Within this range, however, the unit con provide high quality volce or record broadcasts.
No license or permit is necessary. Complete with crystal clear instruction manual. Less Mike. For $105-125 \mathrm{~V}$ AC or DC Attractively styled metal cabinet sultable for any decor.
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KT-195
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LA. 23
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PA. 13

## LAFAYETTE 2-STATION INTERCOM SYSTEM KIT

## LOW OPERATING COST HIGH SENSITIVITY

## Modern Styling



- mooern circuitay - up-to-0ate tubes
- MOOERN STYLING
- 2 COMPLETE STAGES OF AMPLIFICATION
- COMPLETE-ONE MASTER anO ONE REMOTE STATION PLUS 50-FT. OF CABLE

The perfect $\mathbf{2}$-station intercom kit beautifully styled and engineered by Lafayette's Kit Divisions, it will grace any room in the home, office, shop, school, etc. Consisting of a Master Station and a Remote station, most useful to communicate with the basement, garage, playroom or nursery. The master unlt features a highly sensitive 3 -tube circuit with 2 complete stages of audio amplification for maximum talk-power and sensitive reception. Makes a marvelous "baby-sitter" Remote unit may be left In permanent "Taik" position. Master Station has a 3 -way lever switch which provides Momentary Talk, Listen, and a lock-in talk position to free hands for other dutles or for extended conversation. Master station front panel also inciudes a combined on/off switch, volume control. Only the master unit need be plugged into outlet-remote may be placed anywhere. The system may use up to 3 remotes.

- PERFECT AS BABY SITTER OR SICKROOM WATCHER
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KT. 196 2-Station Intercom Kit
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DOWN

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Net 64.95


#### Abstract

The fascinating world of electronics introduced in a simple, easy-to-follow manner through this new Lafayette KT-180 Electronic Educational Kit. Not a toy-this kit is designed to provide youngsters and adults with a complete beginners electronics laboratory course featuring an extremely useful AC/DC Multitester meter to bulld and learn from. In the process of constructing this test meter, the fundamental principles of electricity and electronics are introduced in a "learn-by-doing" method. The focus of aftention is on the basic sensitive meter for measuring the flow of electrical current. From this simple measurement, the meter is bulit up to indicate voltage and resis. tance. The detalled 116-page instruction manual contains 194 illustrations and is written in a simple, easy-to-read step-by-step manner with questlons and answers supplled for each section. Providing a virtual "gulded tour" of electrical fundamentals, this kit furnishes a complete course in AC and DC including ohms law, series and paraltel connectlons, making electro-magnets, producing electricity by Induction and testing house appliances. Having completed the 12 experiments and construction of the AC/DC multi-tester, the student has a useful instrument that has countless applications in the home, workshop and business. The hit is supplied less batteries, but is otherwise complete with everything needed for an enilghtening Introduction to the world of electronics. Shpg. wt., 5 lbs. KT-1 180


NO MONEY DOWN

## - Teaches Basic Concepts of Computer Operation and Technology Your Rewarding Introduction to the Exciting Computer Field - Performs Functions of Full Size Computer - <br> Solves Scientific \& Business Problems

The 601 demonstrates how computers operate, what they can and cannot do by simulating computer appilications in business, science and military. It can learn, remember, calculate, and make decisions. Indispensable to teachers, businessmen who need to keep up with modern technology, a first hand opportunity to explore space age techniques and experimentation. A set of six comprehensive manuals are provided with esch Minivac 601. These provido step-by-step experiments demonstrating how computers do arithmetic, use logic, provide automatic control, and language translation... It even plays games as an opponent, partner or referee. The Minivac is ready to use the moment you unpack it. Operates on a low 12 -volt system-It is as safe to use as an electric train. Minivac consists of a $24^{\prime \prime}$ console with 12 indicator lights. 1 clrcuit breaker, 6 DPDT memory storage relays; 6 secondary memory storage switches; 6 data input push buttons; 16-position switch (motor driven); game matrix; 194 dual terminals and 100 program wires. The console measures $24 x$
 HE-647w

## EXPERIMENTERS AND HOBBYIST RADIO KITS <br>  TRANSISTOR TAPE RECORDER

| TRANSISTO |
| :--- |
| 195 |



ASSEMBLES
DUAL TRACK EASILY IN LESS THAN AN HOUR

- Extra Small - Fully portable-Battery Powered - A Mere $21 / 2$ Ibs. in Weight - Pre-wired - 4 Transistor Printed Circuit Amplifier - Accepts Standard 3" Tape Reel - Instant-Action Play/Rewind Lever Control - Record, Rewind, Playback, Erase


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erful 4 transistor precislon wired amplifler drives a a $\mathrm{A} \cdot 156 \mathrm{~V}$ Battery for above (1 req.). Shpg. wt.. specially designed built-in $2^{\prime \prime}$ PM speaker. With its 202.

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F. 832 Shpg. wt. 6 lbs. ................................. Net 17.96 F. 833 Additional Cards, pkg. of 100 .......... Net 3.92


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You bulld up to 125 exciting "electric brain" machines. Has spectal circults for forecasting weather. No soldering required. Comes complete with extra pamphlets including 64-page "Simple Electronic Brains and How To Make Them". "Symbolic Analysis of Relay and Switch-
ing Circuits", "Beginner's Manual, Machine to Compose Music, Wiring Diagrams, etc. Complete with battery. $161 / 2 \times 113 / 4^{\prime \prime}$. Shpg. wt., 6 lbs.

KT-175
Net 9.95


The latest Analog Computer Kit offering a basic introduction to computer theory -Glives accurate answers to practical problems. Perform over 50 experimentsmultiplication, division, powers, square roots, rocketry, interest, radioactlve decay, light, Kinetic energy, etc. Level of accuracy better than 5\%. The computer consists of a masonite, solid instrument panel, kits, potentiometers, meter, specially calibrated scales, guide and operating booklet. Easy-to-assemble. Shpg. wt. 6 lbs.

Net 9.95


## SHORTWAVE AND BROADCAST SUPERHET RADIO KIT

2 bands cover both standard broadcast 540-1700 KC and shortwave 5.8.18 MC which includes international broadcast, 40 and 20 meter ham bands and some of the aeronautical and marine bands. Superheterodyne circuit has high gain If's. built-in broadcast band loop antenna. Comes complete with walnut cabinet, 4*: built-in broadcast band 100 p antenna, Comes complete with wainut cabinet, ${ }^{4}$, Easy to follow step-by-step instructions. Shortwave band requires external antenna Easy to follow step-by-step instructions. Shortwave band requires external antenna
(not supplied). Size $93 \mathrm{~W} \times 6 \mathrm{Hx} 542^{\prime 2}$. For 110 V AC or DC . Shpg. wt. 6 lbs. (not supplied). Size $936 \mathrm{~W} \times 6 \mathrm{H} \times 512^{\prime \prime} \mathrm{D}$. For 110 V AC or DC. Shpg. wt. 6 lbs.
KT-257

# THE LAFAYETTE SUPER-TROL LINE <br> <br> R/C EQUIPMENT 

 <br> <br> R/C EQUIPMENT}


## RADIO CONTROL TRANSMITTER

- meETS FCC REGULATIONS

Assembled-tested-guaranteed.
Crystal controlled with $.01 \%$ tolerance crystal as per FCC regulations. Uses powerful 3A5 tube for range of approximately one mile. Will operate any 27.255 MC R/C receiver. Overall dimensions only $81 / 2 \times 23 / 4 \times 13 / 4^{\prime \prime}$ A neat little handful! Includes antenna, tube, crystal with FCC approved tolerance, and Instructions. FCC license applications enclosed - no examination re quired. Less batteries. Shpg. wt., $21 / 2$ lbs. Imported F-249
8A-124 Batteries Burgess U30 (3 Needed) ........ 1.75 ea. BA-157 \#2 Batteries (1Needed)

## RADIO CONTROL RECEIVER

RAOIO CONTROL RECEIVER: COmpletely wired and tested receiver...extremely sensitive and stable. Com. pletely enclosed-ideal in boats-or case may be removed if desired. Ingeniously constructed to withstand vibration and shock. Features external fine tuning-antenna "snap" lead-plug for power and actuator connections, Ideal Companion for f-249 Transactuator connections,
mitter and $F .327$ Servo shown elsewhere on this mage, Requires one 1.5 V battery and one 67.5 volt batpage. Requires one 1.5 V battery and one 67.5 Volt bat-
tery. Size determined by use. Measures only $3 \times 27 / 4 \times 11 / 2^{\prime \prime}$. Complete with tube and instructions. Less batteries. Shpr. wt., 8 oz. Imported
F-208
Net 8.95
BATTERIES REQUIRED:
BA-5 .......LAFAYETTE (1 needed) Imported .... 1.29 Burgess No. 2 (1 needed) BA-157

13 ea.

## SPECIAL COMBINATION OFFER

Consists of R/C Transmitter (F-249), and R/C Receiver (F-208) F-259-Combination 22.90

195"JEWELL" REMOTE CONTROL RELAY

A natural for remote control receivers, it is highly sensitive, and, bullt to withstand severe crashes. The smallest commercial job avallable. It weighs less than $1 / 2$ oz. Factory adjusted to pull in at 1.4 MA. drop out at 1.2 MA D.C. Single pole, double throw. Used in out standing R/C recelvers. 5,000 ohm coll. imported

F-260 Relay
Shpg. wt., $20 z$
Net 1.95 MS Min $78.050^{\prime \prime}$

27.255 CITIZENS BANO AND R/C CRYSTAL .005\% TOLERANCE!


Designed specifically for use in R/C model planes, boats, cars, etc., as well as on channel 23 of class "D" Citizens Band Equipment. Type $\mathrm{HC}-6 / \mathrm{U}$ hotder; Pin spacing .493;

## REMOTE CONTROL ESCAPEMENT

## - at the lowest price anywhere!

A sturdy 2 arm self neutralizing escapement. Completely wired (not a kit). Converts electrical impulses from remote control receiver to mechanical motion for varying movement of plane, boat, or car. Four $90^{\circ}$ rotations-two by armature activation, two by neutralization. Has ratchet governor for maintaining foolproof rotating speed. Weighs only $7 / 8$ oz. Size: $13 / 4 \mathrm{x} 2^{\prime \prime}$ W overall. Shpg. wt., 5 oz F-255 Imported

## REMOTE ENGINE CONTROL ESCAPEMENT

Lafayette's exciting new air-bleed self-neutralizing remote engine control. Varies engine speed of your model. Neutral position of one arm is low speed, neutral position of 2 nd arm is high speed, and maintained actlvated position of elther arm (armature activated) stops motor. Perfect mate for Lafayette F.256. Compact and weighs only $3 / 402$. Requires $14 / 2$ volt battery. Low current drain. Size: $15 / \mathrm{a} \times 1 \times 13 \mathrm{~A}^{\prime \prime}$. Shpg. wt., 5 oz . Imported
f.257

Net 2.45

## COMPOUND REMOTE CONTROL ESCAPEMENT

LAFAYETTE'S AMAZING VALUE IN A A-ARM SELF-NEUTRALIZING COMPDUND ESCAPEMENT! - NO NEEO TO WORRY ABOUT LOSING YOUR MODEL!
You have no sequence of operation to worry about! Simple as A B C! One pulse always gives right turn; two pulses always gives left turn. Three pulses closes the circuit for the supplementary control such as motor (F-257) or elevator, if the circuit for the supplementary control such as motor ( $F$-257) or elevator, if
used. The rudder always refurns to neutral position after any furn as soon as used. The rudder always returns to neutral position after any furn as soon as
transmitter keying button is released. With ratchet governor for foolproof operation. transmitter keying button is released. With ratchet governor for foolproof operation.
Sturdy construction-low current drain. Uses $11 / 2$ volt battery. Weighs $11 / 8 \mathrm{oz}$. Size: 2\%/8Lx1k." overall. Shpg. wt., 6 oz . Imported F-255

# NEW! MULTI-PURPOSE 

 ELECTRO SERVO MECHANISM 4,95- POWERFUL, MOTOR DRIVEN R/C ACTUATOR
- POSITIVE, INSTANTANEOUS ACTION
- for model boats ano cars

Lafayette's new, motor driven, remote control servomechanism. Imported by Lafayette. to sell for half the price of any comparable unit! Carefully constructed for power, durability and rugged use, Operates with any single channel, remote control receiver and transmitter. When operated at the prescribed 3 volts, the action is accurate and rapid. Provides for selective steering and automatic return to neutral. Extremely efficient when used with model boats or land vehicles. Hobbyists will find uses for the servo-mechanism restricted only by their imagination. Single pulse operation-electronic neutralization. Measures only $21 / 2 \times 2 \times 13 / 4$ " overall. Includes instructions and linkage to extend actuator arm. Shpg. wt., 8 oz. Imported
F. 327

Net 4.95

## MINIATURE TELESCOPING ANTENNA

RETRACTS to 9 Inches with PLASTIC CASE ideal for mobile or fixed transceivers, miniature portable and pocket transistor radios, wireless broadcasters and a host of similar applications. This 5 -section antenna is made of chrome-plated brass and screws into a jack which is supplied. Measures $38^{\circ "}$ fully extended and retracted is $9^{\circ}$ to facilitate carrying in pocket. Comes in a flexible plastic case with slip-under protecting flap.Imported
F. 343 Telescoping Antenna

Net .59


MATCHING CRYSTAL SOCKET FOR MS-786 and all HC-6/U Citizen band and R/C crystals Rugged Ceramic Body. MS-787

Net .20
BOOKS ON RADIO CONTROL
gernsback PuBLICATIONS

RAOLO-CONTRDL HANDBOOK-REVISEO (NO. 93), BY H. G. McEntee. An up-to-date version of the handbook which has become the standard in the fleld. New ideas for remote control of model boats, planes and cars by radio. Information on servos and actuators as well as receivers and transmitters. 304 pgs receivers and transmitters.
$8 K-949$ Postpaid in U.S.A.

Net 4.95
MODEL RADIO CONTROL (NO. 74). By Edward L. Safford, Jr. Covers coders, decoders, transmitters, receivers, control systems, troubleshooting, etc. - from theory to practical hints. Tells how to build successful models. Illustrated.
BK-931 Postpaid in U.S.A.
Net 2.65
RADIO CONTROL MANUAL (NO. 91). By E. L. Safford, Jf, Starts with the most basic system and advances to an ultimate multi-channel R/C system. Lots of do.it yourself information for beginner or veteran, 192 pgs . BK-944 Postpaid in U.S.A.

Net 3.20
FUN WITH RADIO CONTROLLED MODELS (No. 106.) By Edward L. Safford, Jr. Learn by building. Simple proj. ects for the beginner. Installation hints and methods for steering and motor and engine control. How to operate lights, horn and other accessories with relays and escapements
BK.95t Postpaid in U.S.A
Net 3.20

# CITIZEN-SHIP R.C. TONE TRANSMITTERS AND RECEIVERS 

## CITIZEN-SHIP MODEL BR-6 REED R-C RECEIVER <br> 6-CHANNEL TONE TRANSISTORIZED RECEIVER


$(27.255 \mathrm{mc})$

## LAFAYETTE LOW

 PRICE $39^{95}$NO MONEY DOWN
Newly designed integral reed bank gives excellent remote control results in this highly efficient transistorized tone actuated R-C receiver. Use with TNA Servos for fool-proof performance. Requires one $11 / 2$ volt and one 30 volt battery. Measures $21 / 8 \times 31 / 4 \times 1 \mathrm{Ks}^{\prime \prime}$; welghs 4 oz . Shpg. wt. 1 ib . AP- 125 Less Batteries

BATTERIES REQUIRED
BA. $15512 / 2$ Volt Battery (Burgess "2")
BA. $120 \quad 30$ Volt Battery (Burgess U20)
Net
Net
1.23
CITIZEN-SHIP MODEL BT-6 TRANSMITTER
6-CHANNEL TONE TRANSMITTER
( 27.255 mc )

## LAFAYETTE LOW PRICE



## NO MONEY DOWN

Designed for exceptional, proven tone stability. Housed in light aluminum case and uses contest type lever switches. Employs highly dependable, tried and proven MOPA circuit. Collapsible antenna is packed with set. Transmitter operation has low battery drain and is perfect operating mate for Citizen-Ship BR-6 receiver. Shpg. wt., 4 Ibs AP. 126 Less Batterles

BATTERIES REQUIRED
Net 54.95
Net 1.15
BA. 102 11/2 Voll Battery (Burgess 4F)
Ea. Net 2.45
BA. $132671 / 2$ Volt Battery (Burgess XX45) 2 Required

## SAVE 495

MODEL BR-6 6 CHANNEL TONE REED RECEIVER DIUS MODEL BT- 66 CHANNEL RECEIVER DIUS MODEL
TONE TRANSMITIER. TONE TR
AP. 127 M

MODEL TNA TRANSISTORIZED SERVO
For Tone Actuated Receivers
LAFAYETTE LOW PRICE


Operates directly and efficiently from any standard reed bank. Transistors protected against danger from closing 2 or more reeds simultaneously or from servo being stalled by tocked control. Designed for use up $10140^{\circ} \mathrm{F}$. Completely reliable and foolproof. Uses 6 volts ( 4 pencells). Shpg. wt.. 1 lb .
AP-128 Less Batteries
BATIERIES REQUIRED
BA. 155 14/2 Volt Batteries (Burgess " 2 ") 4 required
Net 21.95
ea. Net 13

## COMPLETE R/C SYSTEM

LAFAYETTE LOW PRICE
Model BR- 6 Receiver plus Model BT- 6 Transmitter plus 3 ea. Model TNA Servos-AP-129wXM

Net 149.95
MODEL TIX TRANSISTORIZED TONE TRANSMITTER
 SINGLE CHANNEL 27.255 mc LAFAYETTE LOW PRICE

## NO MONEY DOWN

 100 R collector modulated (no reduction of RF signal with modulation). In addition It features a high efficiency externally loaded antenna and printed circuit chassis. It operates on 9 volts; requires no license. Operates R/C pack with SE-2 Escapment below. Shpg. wt.. 2 lbs,
AP- 130 Less Battery
BA.180 9 Volt Battery (Burgess 2N6)
$\begin{array}{lr}\text { Net } & 26.50 \\ \text { Net } & 1.30\end{array}$
CITIZENSHIP MODEL MDL SINGLE CHANNEL RELAYLESS
TONE RECEIVER - Smaller, Than A Postage Stamp
Subminiature, super-regenerative, relayless tone recelver that operates from any tone transmitter. Designed for perfect unit opera. tion with powerful SE-2 escapement. So small that $1 / a A$ plane accommodates receiver and escapement. Virtually crash proof. Requires 3 volts (2 pen cell batteries). Size with plastlc cover: 7/0xly $\mathrm{K}_{6}$ ". Welghs $4 / 202$. Shpg. wt. 402 AP-118 less batteries
BA. 155 112 Volt "2" Batteries (2 required)

## CITIZENSHIP MODEL SE-2 ESCAPEMENT

 - Smallest Sire Compound or Selective Type Sensitive Escapement. Select right or left at will. Always starts from same neutral. One pulse gives right rudder, two pulses left rudder. Will operate directly from a transistor. Weighs less than one ounce. Voltage required, 3 Volts ( 2 pen cells).
## AP. 119

BA. 155 1 $1 / 2$ V Pen Cells (2 req.)
This popular, efficient single channel tone transmitter measures $31 / 4 \times 51 / 3 \times 17 / 8^{\prime \prime}$ and weighs only 12 0z. with weighs only 12 oz . With battery. it is


CITIZEN-SHIP R/C PACK with SE-2 ESCAPEMENT


## LAFAYETTE LOW PRICE

$29^{95}$
Single Channel - 27.255 mc

## NO MONEY

 DOWN

RESONANT REED
HOBBY RELAY

## TUNED TO FREQUENCIES:

280.8 CPS,313.0 CPS
349.0 CPS, 389.0 CPS

## A compact, reliable, 4 channel resonant reed frequency

 selective relay. Frequency tolerance $\pm 1 \%$. Especially adaptable to 4 channel remote control hobby tone receivers and citizens Band tone signalling recelvers. Features low funing error, good temperature stability, and low driving requirements. Reed response aoorox. 75 milliseconds; contact rating 100 ma at 48 VDC, 15 ma at $100 \mathrm{VDC}, 1 \mathrm{ma}$ at 150 VDC . Drive power varles from 1 milliwatt at 100 cps to 50 milliwatts at 800 tapped holes on back and bottom. Shpg. wt. 800. RY. 580

## SCIENCE - TECHNOLOGY • KITS

## INTERNATIONAL RECTIFIER EDUCATIONAL SCIENCE KITS



## SOLAR ENERGY AND TRANSISTOR ELECTRONICS LAB 1 KIT

## - More than 30 Fascinating Projects

Designed to acquaint the Junior Scientist with basic electronic circuitry. Master control panel features in dicator scope, galvanometer, signal buzzer, and push button selector. Builds projects in electronic circuitry including two different radios, code practice set, sun operated "Wake Up" alarm, phone and telegraph broad cast transmitters. Completely safe, no soldering, no special tools required. Complete with easy-to-follow instruction manual. Solar power will operate most ex. periments; battery power optional on all experiments. Size 16 K $\times 113 / 8 \times 3$.
RT- 330 Shpg. wt., 3 tbs.
Net 14.66
Net 1200

## solar energy and transistor electronics LAB 2 KIT

## - Over 50 Basic and Intermediate Projects

in This Advanced Kit
Features magnificent master control panel with speaker ear-phone jacks, additional push button switches and electronic circuit elemerts. Builds Solar Powered satellite type "beep" transmitter, electronic light in dicators, burgiar and fire alarm systems, radios, transistorized broadcast transmitter. Completely safe, no soldering, no special tools required. Complete with easy-to-follow instruction manual. Solar power will operate most experiments; battery power optional on all experiments. Size $16 \chi_{1} \times 16 \times 3$.
KT. 331 Shpg. wt., 5 lbs.
Net 22.01
Lots of 3 ea.
Net 18.00
SOLAR ENERGY AND TRANSISTOR ELECTRDNICS LAB 3 XIT

- Builds Over 70 Different Projects and Experiments This unit includes all of the exclusive features of the other International Rectifier Electronic Labs, plus the components to build an amplifier, public address system, inter com, telephone pickup, electronic timer, and many more circuits simulating those in missile guidance, computers, etc. Every component is of the professional quality used in commercial and industrlal equipment. This advanced lab is as simple to assemble as the basic unit. Completely safe, no soldering, no special tools required. Complete with easy-to-follow instruction manual. Solar power will operate most experiments; battery power optional on all experiments. Size $16{ }^{2} \times 16 \times 3$."
KT. 332 Shpg. wt. 5 lbs.
Net 29.36


## PHOTO ELECTRIC AND SOLAR POWER

$$
\text { LAB } 1
$$

A basic kit designed to demonstrate photo electricity and solar energy and its conversion for use in basic electric circuitry. The master control panel is used to indicate audible or visual signals, controlled by light, temperature or moisture. Builds light meters, rain de: tectors, "Wake-Up" alarms, light operated door alarms, TV "Commercial Killers," etc. Completely safe, no soldering, no special too's required. Complete with easy-to-follow instruction manual. Solar power will operate most experiments; Dattery power is optional on all experiments. Sizer $11 \$ / 4 \times 14 \times 31 /{ }^{\prime \prime}$. Shpg. wt., 6 lbs. KT-261
Lots of 4
Net 18.34

## PHOTO ELECTRIC AND SOLAR POWER

## LAB 2

Over 30 exciting solar power and photo energy experiments to be performed using professional components in this complete, advanced lab. Master control panel indicates audible or visual signals, controlled by light, temperature or moisture. Features an electric motor which runs directly off the Solar Cell, and a Power Relay for remote control of electrical appliances. Com. pletely safe, no soidering, no special tools required. Complete with easy-to-follow instruction manual. Solar power will operate most experiments; battery power optional on all experiments. Size: $161 / \times 14 \times 31 / 8^{\prime \prime}$. Shpg. Wt .7 lbs .
KT. 262
Lots of 3
Net 25.69

MAGIC-GLO BLACK LIGHT TEKNIKIT


This new Black Light Kit enables you to see the invisible. Guaranteed completey safe and harmiess. This kit al lows children to study the phenomena of fluorescence and phosphorescence. Set contains black light, socket and cord, laboratory lamp stand, 4 jars of fivorescent paint, Invisible ink, invisible crayon, tracer powder, 3 fluorescent mineral specimens, phosphoragram, optical bleach, brushes and pen, and a box of fluorescent specimens. Enables the student to perform endiess numbers of fascinating experiments. The amply illustrated 48 page booklet "The Story of Black Light-The Unseen World Around Us," explains the use of black light in fields such as mineralogy, electronics, crime detection, medicine, stamp collecting, and many others. Shpg. wt 41 los
AP. 61
Net 9.95
AP. 73 Replacement U.V. Bulb for AP. 61
Net 2.70


Forty-eight specimens-pre-selected to illustrate such physical characteristics as cleavage, hardness, color luster, specific gravity, crystal form, etc. Contains spe cimens of ore-organics-fossils-elements-Plutonics - oxides - volcanics - hypabyssals - effusives crystals-common and uncommon minerals. An aid in the study of mineralogy, petrology, structural geology, physiography, economic geology. Each specimen is tagged and removable from its compartment. Each comtagged and removable from its compartment. Each com-
partment is correspondingly tagged and named. All are named as well as classiffied. An excellent introduction to rock and mineral identification. Handy reference for the advanced "rock hound." Shpg. wt., 1 lb. Imported f-566

Net 2.95
NEW! MINERAL TEKNIKIT * VOL. II

- 48 Additional Specimens! - No Two Alike!
- Many Uncommon Minerals!

Volume 2 of Lafayette's popular Mineral TEKNIKIT has been as carefully pre-selected and packaged as its predPhosphates - Inctumens of Carbonates - Tantaline Phosphates - Gemstones - as well as additional Plutonics - Volcanics - Sulphides - Metamorphics silicides - Oxides and many others. Specimens are tagged, compartments identified and the entire collec tion is indexed for type and classification. Shpg. wt. 1 lb Imported
F.676

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## LAFAYETTE KT-181 MAGNETICS KIT

Contains 7 Complete Experiments

- Step-by-Step Illustrated Instruction Manual
- Complete With Questions


Now unlock the mysteries of magnetism in SEVEN fascinating, fun-filled experiments. You teach yourself by doing-it-yourself. Every phase of magnetics is covered. Size: $123 / 4 L \times 91 / 0 \mathrm{Wx} 13 / 4$ " H
KT-181 Shpg. wt., 2 lbs.

REVELL PORTABLE
WEATHER RESEARCH LABORATORY UNIT


THE MOST PRACTICAL IND MOST ATTRACTIVE KII FOR THE STUDY OF WEATHER CONDITIONS A completely portable, fficient weather Research Laboratory Kit assembled $n$ a Deluxe plastic console storage and carrying case vith handle. Extremely easy to assemble, is so efficie it that it can be used by professional forecasters $\rightarrow$ it simple to operate and understand. Includes profissional Aneroid barometer with completely assemblid mechanism. Also, professional style anemomete with red blinker signal light and on-off switch fir remote observation. Instruments and equipment hiclude nephoscope, relative humidity calculator, tempe ature humidity index calculator, compass, compass isse (for use in conjunction with included wind vane ant nephoscope) rain gauge, sling psychrometer with t 105 inch thermometers, wind and gust indicator and cloud chart. Also includes U.S. Weather map, weath ir recording forms, and scientific booklet.
KT-189 Shpg. Wt., 3 Ibs
Net 13.88

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## A SCIENTIFIC

 INSTRUMENT FOR THE EXPERIMENTERS- POWERFUL

110 VOLT
AC/OC MOTOR

- minIATURE ATOM SMASHER
- PRODUCES 75,000 VOLTS
- ABSOLUTELY SAFE

COMPLETELY WIREO (NOT A KIT)


In no sense of the word a toy or gadget. This machine is a scientific instrument capable of producing 75,000 volts -makes sparks up to $2^{\prime \prime}$ long-yet is is absolutely safe because the current is infinitesimal. The science teacher -sclence lover-or hobbyist can perform experiments to astound students-friends-iamily. Makes smoke dis-appear-defy gravity-turns propellers at a distancetransforms atomic energy into light-makes artificial lightning-smashes atoms-demonstrates ionic space ship drive-and many other experiments. Will hold an audience spellbound as it performs trick after amazing trick. Includes an experiment kit and illustrated experiment manual. Manual explains the "how" and "why." You will invent many new experiments of your own. A fine research tool that will give years of beneficial service to the institution or individual who owns one 110 V. AC or DC. Imported.
F. 371 Assembled-Shpg. wt., 4 lbs

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## PHILMORE <br> DUAL BAND BROADCAST SHORTWAVE RAOIO KIT <br> - 3 TUBES <br> nClUoing RECTIFIER

The perfect kit for the beginner at radio. this radio covers the standard broadcast band from 550 to 1650 Kc, and a shortwave band from 3 to 13 Mc . Features modern circuitry and miniature tubes, with enough audio to drive a built-in $31 / 2$ inch PM speaker. The kit bullder will learn radio fundamentals and be rewarded with the satisfaction of having bult a radio which wlll actually pull in standard broadcast, amateur and other shortwave stations. Includes punched chassis, grey hammertone panel, $34 / 2^{\prime \prime}$ soeaker, pictorial and schema tic diagrams, and easy-to-follow instructions. Complete with all hardware: less solder, wire and tubes. Tubes required: 1-35W4, 1-50C5 and 1-12AU6. For 105 required: $1-35 W 4$.
125 volts. $A C$ or $D C$.
125 volts. AC or DC.
KT-177 MODEL $7001 C$
KT-177 MODEL 700iC

## GENERAL ELECTRIC EDUCATIONAL LABORATORY PROJECT KITS

## TRANSISTORIZED <br> TRANSMITTER KIT <br> BROAOCAST THRU YDUR DWN RAOIO



GE MODEL EF-120, Builds a 3 transistor radio trans. mitter complete with microphone and whip antenna. Broadcasts can be received on any closeby standard A.M. radio. Basic principles of radio transmission clearly taught through illustrative experiments as well as construction of the transmitter. Manual combines explanation of elementary transmitter electronics with assembly instructions. No soldering required, All needed tools included. Shpg. wt., 4 lbs.
KT-244
Net 13.30

## BASIC TRANSISTOR LAB



GE MOOEL EL-10. Teaches fundamentals of transistors and radio through basic experiments. No soldering required. Earphone, necessary tools and complete manual Included. KT-246 Shpg. wt., $11 / 2 \mathrm{lbs}$.

Net 4.63
ELECTRONICS LAB KIT


GE MODEL EL-40. More than 30 experiments offering intermediate lab work, ranging from basics of applied electricity to engineering of electronic devices. Constructs transistor amplifiers, oscillators, recelvers, transmitters and alarm systems. Teaches theory and practical applications. Includes earphone, tools and instruction manual.
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CE MODEL EL.30. Over 50 advanced experiments in electronics. Teaches principles of electronics through construction of radio receivers, voice transmitters, pub. lic address system, electronic relay, rain detector, proximity alarm. No soldering required. Completo with manual and all needed tools. Shpg. wt., 9 ibs. KT-239


GE MODEL EF-150. Teaches principles of modern superheterodyne radio, using 5 transistors for standard shortwave band that receives international, amateur and police broadcasts. Has beat frequency oscillator for code reception. Complete with soldering iron, Instruc tion manual and earphone. Shpg. wt., 6 lbs .
KT-247
Net 19.98
TRANSISTORIZED INTERCOM

G.E. MODEL EF-130. Build and talk over 3-transistor intercom, master and remote. Both with volume control. construction illustrates transistor amplifier principles. Construction llustrates transistor amplifier
No soldering. Tools and manual included. KT-243 Shpg. Wt., $41 / 2 \mathrm{lbs}$.

Net 13.30

## ELECTRICITY LAB KIT


C.E. MODEL EL-20. Perform over 25 fascinating, instruc tive experiments in electricity and magnetism. All needed tools included, plus complete instruction and teaching manual.
KT-245 Shpg. wt., 4 lbs.
Net 9.97

## TRANSISTOR RADIO KIT


G.E, MODEL EF-110. Construct a seff-contained radio recelver based on the transistor. Built-in air loop antenna plus earphone. Manual combines instructions with simple course in basic radio principles. No soldering. All tools Included. Shpg. wt., 4 lbs.
KT-248
Net 6.83
TRANSISTORIZED COMPUTER

C.E. MOOEL EF-140. Teaches electronics and mathematles through construction and use. Accurately solves practical problems. Has memory paneis, audio indicator with 3 transistors, oscillator and amplifier. No soldering required-all needed tools included.
KT-238 Shpg. wt., 9 lbs.
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## WEATHER STATION KIT

Forecast the weather with Your Own Weather station! Easy to Bulld and Operate for Hours of Fun!
Build and learn all about basic weather instruments. Includes a barometer, outdoor thermometer, rain-fal gauge, and an electronic raln detector. A one transis. tor electronic circuit connects to a detector unit placed outdoors that actlvates a light when rain hits the detector. Changling air pressure, forecasting a change in weather, registers on the barometer. Console back-panel contains unique visual indicators that show todays weather and tomorrow's forecast. Complete cloud chart included. Operates on two ordinary flashlight batteries. Step-by-step instructions have large mlustrations. Size: $12^{\prime \prime \prime} \times 6^{\prime \prime} x^{\prime \prime}$ ". Shpg. wt., 2 lbs KT-184

## LITE-WRITER KIT

WRITE OR DRAW ON A PHOSPHORESCENT SCREEN
WITH A BEAM OF LIGHT
The Lite. Writer kit is your introduction to the magica world of phosphorescence. Actually write or draw on a phosphorescent screen with a beam of light. Watch how the screen glows in the dark. Kit includes a mark ing pencil, acetate tracing sheet, parts tray and as an added feature, 6 special constellation cards, allowing you to study ite spening shy rlate in your own home You can reproduce the constellation patterns on your You can reproduce the constellation patterns on your phosphorescent screen as an exact reproduction of the night sky. Comprehensive instruction booklet explains each step in detall. Operates on two ordinary flash light batteries. Size: $12^{\prime \prime} \times 16^{\prime \prime} \times 2$
Ki.188 Shpg. wt., 2 lbs.
Net 2.98

## ALARM SYSTEM KIT

SURPRISE ANO AMAZE YOUR FRIENDS
WITH YOUR OWN ALARM SYSTEM!
Completely transistorized circuit operates an alarm that is ether audible or visual from a buzzer or a light. Detects opening doors or windows, lifted objects, even steps on a rug. Warning flag on console panel drops when the circult has been triggered. Easy to build and operate-completely safe. Complete set of instructions explains principles of switching circuits as well as the uses of alarm systems operates on two ordinary flashlight batteries. Slze: $12^{\prime \prime} \times 16^{\prime \prime} \times 2^{\prime \prime}$ on iwo ordinary flashight batteri

Net 2.98

## ASTROSCOPE KIT

## PUT SATELLITE INTO ORBIT

You control satellites distance from earth with a vari able speed motor. A unique reflected-light feature makes the earth appear motioniess as the satellite rises You learn principles of centrifugal force as well as of basics of satellites orblt. Operates on two ondin. as ofy flashlight batteries for complete safety. Well illus ary tiashighuction manual eyplains every step lize man explains suery step. Size: $12^{\prime \prime} \times 16^{\prime \prime} \times 2^{\prime \prime}$
KT-187 ShpE. wt., 2 Ibs
Net 2.98

## GENERAL ELECTRIC 5-TRANSISTOR PORTABLE



## RADIO KIT



An authentic G.E. portable radio. Well engineered electronic components have been preassembled into 3 factory-tested sub-units for quick, easy soldering to the printed clrcuit board. Kit includes 5 transistors plus diode, prealigned IF's, ferrite antenna, G.E. $31 / 2^{\prime \prime}$ plus ditic speaker, textron carrying case and all parts magnetc sper, pperates on 9 volt battery (not supplied). Complete Instruction manual. Shpe. wt., 3 lbs.
KT. 249
Net 14.63
BA-2 9 volt battery for above
Net 21

# LAFAYETTE TRAMSISTOR SPECIALS FOR Exp ERMENTER Oligultay SPECIALS kit bulder - hoesisis 

 5-TRANSISTOR PUSH-PULL AUDIO AMPLIFIER

- 360 MW OUTPUT COMPLETELY WIRED direct wiring

ONLY $315 / 6^{\prime \prime} \times 115 / 10^{\prime \prime} \times 11 / 6^{\prime \prime}$
A more powerful and more sensitive version of the PK.543, this amplifier employs 3 stages of audio driving a push-pull output stage. Power output is 360 mw , designed for speakers with a voice coil impedance of 8.11 ohms. Low impedance input has sensitivity of 300 microvolts. Input transformer for matching high Impedance to the amplifier input avaliable as an accessory (see below). Comes with leads for low impedance input, speaker, volume control/on-off switch. Battery clips and leads supplied for 9 volt miniature battery (one required). Shpg. wt. 5 oz. Imported. PK. 544

## ACCESSORIES FOR ABOVE

 sK. $1938^{8} \mathrm{ohm} \mathbf{3}^{\prime \prime}$ speaker. Shpg. wt., 10 oz. SK-189 $8 \mathrm{ohm} 2^{\prime \prime}$ speaker. Shpg. wt., 8 oz.
Input transformer for matching high impedance (mike, etc.) to amplifier
ported.
Net 6.95

Net .21
Net .69
Net 1.49 Net 1.49 TR-120

## 4 TRANSISTOR SUBMINIATURE

 PUSH-PULL AUDIO 495 AMPLIFIER
## OUTPUT 100-MW

 - TERRIFIC FOR THE EXPERI. MENTER, HOBBYIST AND KIT BUILDER! - COMPLETELY WIRED, NOT A KIT! • PRINTED CIRCUIT BOARD - COMPLETE WITH TRANSISTORSA tiny, transistorized push-pull audio amplifier with a multituce of applications Only $3^{\prime \prime} \times 1 K_{1}^{\prime \prime} \times{ }^{\prime} \%_{0}{ }^{\circ}$, It can be mounted inside other equipment to serve as subminiature phono amplifier, tape recorder, amplifier etc. Can be the complement of a homebuilt project which needs only an audio amplifler to make it complete and self-contained. Two stages of audio are followed by a push-pulf output stage de. signed to deliver 100 mw to an 8.11 ohm impedance. Low impedance input, with a sensfitilty of 0.9 mv . Input transformer for matching high impedances to the amplffier avallable as an accessory (see below). Includes leads for input, speaker, and volume control/on-off switch. Battery clips and leads supplied for 9 volt miniature volume control/on-off switch. Battery clips and
battery (one required). Shps. wt., 5 oz. Imported.
PK.543

> ACCESSORIES FOR ABOVE

BA. 29 volt'battery. Shpg. wt., 2 oz.
VC. 3150 K ohm volume control w/ switch. Shpg. wt., 202
SK-193 8 ohm voice coll gpeaker. Shpg. wt., 1002
SK-189 8 ohm voice coll speaker. Shpg. wi., 8 oz .
Input transformer for matching high impedance (mike, etc.) to amplifler 7R. 120

Net 4.95
Net .21
Net .69
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Net 1.49
Not .89
NEW! TRANSISTORIZED MINIATURE AMPLIFIER AND TUNER APPLICATIONS

Avallable
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An Exclusive Lafayette Publication
96 Pages . . Over 61 Circuits . . . 60 Illustrations 6-Chapters-Audio, Amateur \& Citizens Band, Controls, Test Instruments, Tuners, Hearing Aids, Intercoms, Etc.

## By

Rufus P. Turner Many original Applications Not Found Elsewherel An insplring new book written by a registered Professional Englneer and author
of 13 technical books and of more than 2000 magazine articles. Deals primarily of 13 technicalo over 60 challenging and interesting applications, many of them original, of the Lafayette transistorized minlature amplifiers and tuners described on this page Consists of 6 interesting chapters

1. Audlo Applications-Amplifiers, Preampliflers, Modular Amplifiers, Stereo Amps, etc.
2. Ham Radio and Citizens Band-Selective Call Alarms, Speech Clipper, Speech Amplifier Modulator, etc.
3. Control-AM RF Relay, Capacitance Relay, Sound Operated Relay, etc.
4. Test Instruments-AF RF Signal Tracer, Percent Modulation Meter, A-F Wattmeter, Sound Level Meter, etc.
5. Tuners- No License Radio Communication System, Broadcast/Short-Wave Tuner etc.
6. Miscellaneous-Hearing Aids, Intercoms, Electronic Stethoscopes, Light Beam Transmitter \& Receive, Gelger Counter, Electronic Announcer, etc.
An excellent educational source of information for the kit bullder, experimenter and for workers in various areas of electronics. Postpaid in U.S.A. BK-24

Net 1.50

## 3-TRANSISTOR SUBMINIATURE AM BROADCAST TUNER

## - 4 TRANSFORMERS: 3 If plus 1 Oscillator Transiormers for Exceptional

 Superhet Sensitivity and Selectivity. - 540KC TO 1600KC USED IN MANY EXPENSIVE IMPORTED RADIOS!
## 795

- FEATURES COMPLETELY WIRED PRINTED CIRCUIT BOARD.
AN OUTSTANDING AM BROADCAST RADIO WHEN CONNECTED TO ANY TRANSISTOR AUDIO AMPLIFIER ON THIS PAGE OR ELSEWHERE!
A deluxe 3 translstor subminiature $A M$ broadcast tuner that features 3 dependable translstors, 3 if plus 1 oscillator transformer, and fertite antenna in an efficlent,
completely wired superheterodyne circult on a sturdy printed-circuit board. completely wired superheterodyne circuit on a sturdy printed.circuit board.
Now you can build your own highly efficlent broadcast receiver by simply adding Now you can build your own highly efficlent broadcast receiver by simply adding
this exceptional tuner to any of the transistor audio amplifiers listed below or elsewhere. The long tuner leads for connecting to external amplifier and/or to a separate 9 volt battery, makes this easy as pie. Also features a large clearly visible calibrated tuning dial. The printed circuit board layout permits either vertical or horizontal mounting. Supplled complete with mounting brackets and detailed instruc tions. Size, $4 \times 13 / 42^{\prime} \mathrm{H}$ with brackets. Shpg. Wt., 802 . Imported
PK.633
Net 7.95


## 3-TRANSISTOR SUBMINIATURE



HOBBYIST, AND KIT BUILDER!

- PRINTED CIRCUIT - COMPLETE WITH TRANSISTORS

Here is an amazing little audlo amplifier with a multitude of challenging applica. tions; i.e., subminiature phono ampllfier, tape recorder amplifier, hand.held public address amplifier, tetephone pick.up amplifier, etc. Output sufficient for average listening. Has leads for any one of the following inpuls: Tape recorder record/ playback heads, radjo-tuner, crystal or ceramic phono cartridge, and crystal or ceramic microphone. Has lead terminations for ON-OFF switch. Volume Control. to 10 ohm speaker, and leads terminating in clips for a 9 volt miniature battery. Size: $2^{13} 14 \times 11 / 4 x^{3 / 4} 4^{\prime \prime}$. Can be readily mounted on chassis. Shpg. wt., $80 z$. Imported Size?
PK. 522
BA. 89 Volt Battery
Net .21
5K ohm Volume Control with SPST Switch and Knob; Shpg. wt., 202.
VC. 62
Net . 59
Miniature Crystal Microphone $11 / \mathrm{g}^{\prime \prime}$ Dlam. $x$ K" Deep. Shpg. wt., 602. Net 1.49
Miniature Speaker $21 / 2^{\prime \prime}$ Diam. 10 ohms Volce Coll Impeaance. Shpg. wi., 8
SK-66
Net 1.49

## NEW! 4-TRANSISTOR SUBMINIATURE AM/SW

 TUNER WITH VERNIER TUNING DIALPlus 1 Oscillator, for Fine Superheterodyne Performance

Vernier type tuning mechanism makes precise AM/SW tuning a cinch with thls extremely powerful and sensitive 4-transistor funer. Outstanding features include: completely wired printed circult board, 3 IF and 1 oscillator transformers for exceptional sensitlvity and selectivity, built-in ferrite antenna for both AM \& SW reception, superhet circult with BC \& SW band switch. S/N Ratio: 14 db on AM: 20 db on SW. Supplied complete with 3 long leads for connecting to external amplifier and/or to a separate 9 v battery (only 3 ma . drain), mounting brackets and operating instructions. Overall Dimensions: $61 / 8 \mathrm{~W} \times 3 \%_{6} \mathrm{O} \times 2^{11 / 4}{ }^{\prime \prime} \mathrm{H}$. Shpg. wt., 1 lb. Imported
PK. 768 antenna matching and output. Used in Lafayelte HE-20. Consists of mounting bracket, Final coil, 10 uufd plate capacitor and 330 uufd output capacitor. Completely wired. Size $21 / 2 \times 13 / 3 \times 21 / 4^{-1}$ High. with schematic.
HP-57 Shpg. wt., 802.
Net 2.25
RECEIVER RF COIL For transformer COuD. ling RF stage to the mixer stage. Two windings (individually slug-tuned)-one for RF Ampilfier Plate circuit, second for Mixer Grid Circult. Ke" Diam. x $21_{0}^{\prime \prime} L$ with schematic.
HP-58 Shpg. w
.402.
Net .59
RECEIVER OSCILLATOR COIL - For use with tuneable citizens band recelver with If Frequency at 1650 KC as used
in $\mathrm{HE}-20$. $1 / \mathrm{m}^{\omega \prime L \times 1 / 4 . ~ D i a m . ~ C o m p l e t e ~}$ with schematic.
HP. 62 Shpg. wt. 4 oz Net 1.50
1650 KC INTERMEDIATE FREQUENCY TRANSFORMERS For use in any citizens band receiver utilizing 1650 KC if Fre. quency and in conjunction with the above oscillator and RF coils. $1 \% \times 3 / 4 x$ $3 / /^{" \prime}$. Complete with schematic.
HP-63 Shpg. wt., 8 oz.
Net .75
TRANSMITEER OSCILLATOR COIL - FOR use as oscillator piate tank coil in cilizens band transmitters using 6AU8, 6 AW8 and $6 \mathrm{CX8}$ type tubes. Used in HE-20. Size: $1 / 2^{\prime \prime}$ dlam. $\times 11 / 2^{\prime \prime}$. Complete with schematic.
HP-60 Shpg. wt., 4 or.
Net 49
OUTPUT AND MODULATION TRANSFORMERS HP-61 matches 6AQ5 as modulator and 3.2 ohm voice coil as used in
and
 WIth application instructions.
HP-61 Shpg, wt., 1 lo.
Net 1.00
Dutput Transformer matches 6V6GT as modulator and 3.2 ohm voice coll as used in Lafayette HE-15. $21 / 2 L x 13 / 6 \mathrm{Wx}$ 17/ "H. Complete with schematic. HP-64 Shpg. Wt., 1V/" lbs...... Net 1.39


TUNING CAPACITOR ASSEMEIY


- Capacitor Plus Dial Plus Knob

Variable tuning capacitor plus attractive 3 in . diam. channel indicator dial with hub and set screw for mounting on outer shaft of capacitor. plus black and chrome knob for vernier tuning shaft. With schematic.
HP- 227 Shpg, wt. 1202.
Has ilated outer onty mounting or for course tuning knob: llatted concentric vernier tuning shaft for vernier tuning knob. Has 6-32 threaded holes for mounting. $13{ }^{\prime \prime}$ "Lx "10"Wr150" H . With schematic. HP. 72 Shpg. wt., 8 oz.

Net 1.39


## TUNING CAPACITOR ASSEMBLY

- Capacitor Plus Concentric

Tuning Knobs
Variable tuning capacitor, plus 1 "diam. concentric gray outer knob for course tuning, plus $1 /^{\prime \prime}$ diam. gray inner knob for vernier tine tuning. Used in Lalayette HE-15. With schematic.
HP- 229 Shpg. wt., 10 oz.
Net 1.69


LEVER POINTER MNOB Facilitates switch actuation where spring return switch is used, such as "Transmit-RecelveTransmit spring return" in Lafayette HE-15, eic. Gray pointer Mnob 1\%。" long for $1 / 4^{\prime \prime}$ diam. Shaft. Mounts by set
SP. 230 Shpg. wt., 4 oz. Net 19
XNOB (Used in HE-15) Attractive gray and chrome knurled knob for activating potentiometers and switches used in crystal selection, noise limiting, squelch ON.OFF, volume, etc. For $1 / 4$. diam flatted shaft. 3/4" diam. Net 19
HP.231 Shpg. wt., 4 oz.
POWER TRANSFORMER (Used in Latay ette ME-15). Sturdy, enclosed power transformer used in lafayette HE-15A 115 Volt primary, one secondary wind ing for $8+$ and one secondary winding
for filaments. 211 is $L \times 2 \mathrm{~V}_{4}{ }^{-1} \mathrm{~W} \times 2 \mathrm{~V} / 4^{\prime \prime H}$. With schematic
HP-233 ShpR.
., 3 los.
Net 2.90
TVI TRAP COIL-Suppresses Television Interference from Citizens Band Trans ceivers. Coll for use with 50 undo capacitor in a parallel tuned circuit. $\mathrm{Ko}^{\circ}$ dia

HP 59 Shpg. wt., 40 oz.
Net .29
TRANSMIT - RECEIVE - TRANSMIT SPRING RETURN SWITCH. A 4 -pole 3 position switch for use in Citizens Band switching circuit. Position 1-Transmit (locks); Position ? Receive; Position 3 Transmit, with spring refurn, for short periods of transmissions. Used
elle HE-15. With schematic. HP-65 Shpg. wt., 6 oz.

Netl. 13


PUSH-TO.TALK RELAY DOUble Pole Double Thiow relay lor microphone push-to-talk relay operation as used in Lafayette, HE-20 and most popular citizens band transceivers. Sturdy for trouble free mobile operation. Has 6.32 threaded
 schematic.
HP-225 Shipg. wt., 8 oz.
Net 3.95
1750 KC INTERMEDIATE FREQUENCY TRANSFORMER USed in Lafayette HE-15. Can be used in any CB transeeiver having a 1750 KC if frequency as well as with above oscillator and RF coils. $13 /{ }^{\prime \prime}$ Ln $3 / 4$ "Wx $31 / 4{ }^{\prime \prime}$ D. Complete with sche. matle. Shpg. wt., 8 lbs.
HP-226
Net .75


AUTOMOBILE CIGARETTE LIGHTER CABLE ASSY. (Used in Lalayette ME-20) Connect the two free leads of this power cable to your equipment power input, plug into car cligarette lighter outlet and that's alt there's to it. Fused for holder wired into cable. 3 ft . long.

HP-232 Shpg, wt., 6 or. ...... Net . 95


VIBRATOR TRANSFDRMER versatile vibrapack transformer as used in Lafayette HE-16 and HE-18 12 Volt and 6 volt vibrator power supplies for ME-15. Citizens Band Transceiver and ME-35 6 meter transceiver. $21 / 4-L x 1 / 4-W \times 2 \% / H$
With schematic. HP-234 Shpg. W

Nel 2.45
AUOIO OUTPUT TRANSFORMER Used in HE-29B. Subminiature $3,4 x^{2} / 8 x^{5} / 90 \mathrm{H}$. Cen ter-tapped primary; 2 secondary wind. ings. Impedance: primary- 500 ohms C. $T$, secondary -8 ohms and 3 K ohms
With schematic. Imported TR-119 Shps. wt.. 8 oz.
Net 89

## $3 / 2 x^{5}+x^{3}+\mathrm{B}^{\circ}$ LAFAYETTE SPECIAL!

## 100 MILLIWATT WALKIE TALKIE MATCHED TRANSISTOR PACKAGE RDRDANDATS

- 9 Transistors - 1 Diode - 1 Varistor

ALL EFFICIENTLY MATCHED FOR TDP CITIZENS BAND 100 MILLIWATT PERFORMANCE! USED IN LAFAYETTE HE-29A! Latayette makes your job of bullding a 100 milliwatt citizens band "walkie talkle" easy as pie with this outstanding matched transistor package. Especially matched for outstanding performance in superhetero dyne transcelvers as used in Lafayette's tamous ME-29 Consists of 9 transistors (used in receiver oscillator mixer, IF driver, push-pull output. transmitter osclila. tor and output stages), I diode as detector and I varistor for circuit stability. No other semiconductors 10 buy! HP-71 Shpg. wt., 8 oz. Imported Nel 7.50

WALKIE-TALKIE PRINTED CIRCUIT BOARD
 (Used In Lafayelte HE-29A) Neatly designed miniaturized printed circuit board ideally suited for Citizens Band "walkie-talkie." Cutouts for parts list led above. Designed to make wiring and assembly simple despite small size.


## WALKIE-TALKIE <br> CITIZENS BAND

## SUBMINIATURE PARTS

Sturdy, highly efficient components used in many citizens Band walkie talkie transceivers, as well as in popular Lafayette HE-298. All precision engineered and constructed for top quality periormance. All parts com plete with schematics. Imported

ANTENNA LOADING COIL Variable coil for matching output from final to impedance of antenna for maximum transmitter power output. $3 / 9{ }^{\prime \prime}$ diam. x 5. "L. less connecting pins. Slug tuned. Inductance 44 to $.535 \mathrm{uH}_{\mathrm{i}} \mathrm{Q}=82$. HP. 67 Shps. wt., 402 . Net .59

RECEIVER ANTENNA COIL Variable RF Antenna Coil for RF Input tank assembly. Inductively tuned by slug. $3 / 8^{\prime \prime}$ diam. $x$ Y"L. For HE-29A only, Avg. $Q=80$. HP. 66 Shpg. wt., 402 . Net .59
RECEIVER OSCILLATOR COIL COMPact, slug-tuned receiver oscillator coil. Slug tuned to give resultant if frequency of 455 KC . Has tapped primary, plus sec ondary windings. For HE-29a only,
K" diam, x Ni" 'L. Avg. $Q=80$.
HP. 68 Shpg. wt., 401.
Net .59

TRANSMITTER OSCILLATOR COIL SIUgtuned subminiature variable transmitter oscillator coll. Precision bultt for ultra efficient operation despite its subminiature size. Wax impregnated. Ko" diam. $x x_{0}{ }^{2} L$ less connecting pins. Avg, $Q=85$ HP. 69 Shpg. wt., 4 oz

TAANSMITTER OUTPUT COIL Sturdy, compact subminiature wax impregnated transmitter, output coil. Slug-tuned. Has primary and secondary coils. K." diam. x "'"L less connecting pins. Aug. $\mathrm{O}=85$.
HP-70 Shpg. wt., 4 oz . 59
ar

Ist IF TRANSFORMER Subminiature IF
transformer. 455 KC IF. Slug tuned. ${ }_{6}$." transformer. 455 KC IF. Slug.tuned. Ki"
$\mathrm{Sq} . \times 1 / 0_{0}^{\circ} \mathrm{High}$. Primary 70.000 ohms, secondary 1500 ohms.
MS- 776 Shpg. wt., 6 oz.
Net 69
2nd IF TRANSFDRMER Subminiature slug tuned 455 KC If transiormer. Impedance: $50,000 \mathrm{ohm}$ primaty, $1,000 \mathrm{hm}$ second-
MS. 777 shise. wt., 6
01.
Net 69

3rd IF TRANSFORMER Precision -built, Subminiature ${ }^{\text {Slug. funed. Primary } 30,000 \text { ohms. sec }}$ ondary 5,000 ohms. Ko ${ }^{*}$ sq. x "his"H. Ms.778 Shpg. wt., 6 oz. Net . 69
PUSH-TO-TALK SWITCH APDT miniature push-totath spring return switch for "Walkle-Talkie" CB transceivers. Rated 800 Ma for 100 VAC. Heavy duty spring. $130 \times{ }^{3} \mathrm{~K}_{4} \times 2 / 2^{\prime \prime}$ plus $1 / 2^{.}$. plunger. Complete with mounting bracket and hardware. Shpa, wt., 402.
SW-102 Net, ea. 79;
Lots of 10 , ea. . 75 ; lots of $100 \mathrm{ea} . ~ 69$
27MC WALKIE-TALKIE TELESCOPING AN-
TENNA Attractive and highly efficient 12 section chrome plated brass telescoping antenna for "walhie talkie" transceivers. Measures 52 " fully extended and $5 \%{ }^{\circ}$ retracted, Has 8.32 threaded stud and nut at bottom for easy mounting, and F. 703 Shpg. wt., 10 oz. Net 1.95
INTERSTAGE DRIVER TRANSFORMER -
(Used in HE-298) Subminiature, efficient driver transformer used to drive push pull output transistors. Secondary cen-ter-tapped. Impedance: primary -10 K
ohms, secondary -2 K ohms, CT. h, ohms, secondary - 2 K ohms, CT. hox


Net .89

# SELECTED FAMOUS NAME MARINE EQUIPMENT 



A smartly styled dependable marine radio telephone FCC type accepted. Has 45 -watt power input, 6 marine channels and broadcast band with noise limiter and RF sensitivity control, Utilizes high level class "B" modulation and high level speech limiter. Easy-to-use front panel tuning with RF tuning indicator. Plug-in microphone and plug-in power cable are quickly detachable. Universal mounting tray set; can be installed in any position. Unit can be quickly removed for safe keeping. Frequency range for both transmitter and receiver $2000-6000 \mathrm{KC}$. Operates with 12 -volt systems only. Rugged all-aluminum non-magnetic construction. Treated against effects of salt water and fungus. Complete with 3 pairs of crystals and microphone. Size: $105 / 6 \mathrm{~W} \times 61 / 4 \mathrm{H} \times 131 / 2^{\prime \prime} \mathrm{D}$.
He-107wX Shpg. wt., 16 lbs.
Net 299.95


NEW HARTMAN Model 3059 30-WATT TRANSISTORIZED 5 Separate Channels
Complete with: 4 pairs crystals, 16 ft . Deluxe Antenna, Universal Gimbal Mounting
Powerful 30 -watt output rating permits transmisslons up to 125 miles. No warm-up. receiver responds the instant it is turned on. Five separate channels: Marine telephone channel (ship-to-shore); standard broadcast channel; 2 ship-to-shore channels and a Coast Guard emergency channel. Panel meter and selector switch Indicates best power setting and antenna resonance for every condition. Allaluminum construction is completely moisture-fungus proof. Unit cannot be damaged by reversal of battery polarity. Frequency range: 2000-3000 KC. Includes carbon push-to-talk microphone, built-in $6^{\prime \prime}$ speaker, 4 pairs of crystals, 16 ft . deluxe center-coll loaded aluminum antenna, and gimbal bracket permits mounting anywhere in your boat, and all connecting cables. For 12 or 6 -volt operation. Size: 13Wx71/4H×93/4"D
HE-343WX Shpg. wt., 13 lbs. - 10 Transistor Circuitry

- Self-Contained Battery Power Supply

The Hammarlund RDF provides all 3 necessary radio bands - standard broacast, marine band and beacon band: The self-contained power supply operates on six flashlight cells (not incl.). Features a bullt-in, automatic circuit that protects the transistors should batteries be inserted incorrectly. Battery drain less than average flashlight bulb. Directional antenna controlled by front panel knob. Sensing antenna effect results in single sharp lobe for directional antenna. No installasingle sharp
tlon required. Size: $81 / 2 \times 11 \times 9^{\prime \prime}$. Shpg. wt., 12 lbs. HE-173WX Less Batteries (6..................... Net 179.50 8A-156 Burgess \#1 Battery ( 6 req.) ...... Net ea. .13

## 28 <br> $33^{42}$ <br> No Money 0own

ANTENNA SPECIALISTS
MARINE WHIP ANTENNA MODEL ASP-194

## - For 2000-2830KC

- Heavy Gauge Aluminum



## Bendif Navigator 410 3-BAND PORTABLE DIRECTION FINDER 9995 <br> no money DOWN <br> 

- 3 Bands-Beacon, Broadcast and Marine
- Sensitive 8-Transistor Circuit
- Complete With Batteries, Mounting Stand, Earphone and Leather Case
High-gain, low-noise 8-transistor recelver with tuned RF stage, 3 -gang tuning capacitor, push-pull audio amplifier and heavy-duty speaker. Special features include: "NULL" Meter for visual null indication: Rotating Loop Antenna eliminates need to rotate entire set; DF Level Control for adjusting strength of incomIng signal. Use it (1) To find relative bearing of any station from a boat (2) For "homing" to a transmitter (3) As a Pelorus (4) As a portable radio by removing set from mounting bracket. Size: $8 \mathrm{~W} \times 5 \mathrm{H} \times 21 / 2$ "D HE-904WX Shpg. wt., $31 / 2$ lbs. Imported ...... Net 99.95


A center-loaded vertical whip antenna for the marine frequency range of 2000 to 2830 KC . Designed to operate with any type of marine radio telephone. Bultt to withstand high winds and corrosion. Mounting brackets attach to cabin or any flat vertical surface. Overall height is 12 ft . 9 Inches including stainless steel whip. 21" loading coll is covered with epoxy resin. Mast is 6 feet long, made of $I^{\prime \prime}$ 0.D. heavy gauge anodized aluminum tubing. Shpg. wt., 6 Jbs.

Net 33.42

## (HE-356WX ....Specify 6 or 12 volts....... Net 139.50

## HARTMAN SHIP-TO-AUTO ALL-TRANSISTOR CONVERTER



Now you can listen 10 marine broadcasts on your car radio. A flick of the switch and your auto radio becomes a powerful, long-range marine receiver. Switch back and it plays the normal broadcast band. Alltransistor circuitry uses only $1 / 2000$ of an amp from built-in battery; virtually the battery's entire shelf life. Converter selects any frequency between 2000 KC and 3000 KC . Operates with either 6 V or 12 V automo. bile ignitlon system. Shpg. wt., 3 lbs.
HE-646 HE-646

Net 19.95 - OnePiece, Non-magnelic Construction ghiy sensitive, extremely accurate depth indicator for bulkhead mounting. Measures from 1 to 250 feet. Easily installed-..even while boat is in water Requires 6 or 12 VDC. Size: $111 / 4 W \times 71 / 2 H \times 71 / 2 " D$ Complete with transducer, gimbal and fairing block Shpg. wt.
HE-356WX

## SELECTED AMATEUR <br>  <br> AK-2 <br>  BLILEY AMATEUR CRYSTALS

Type $\mathbf{x}-2$. Most popular with hams. Acid-etched quartz. Srainless steel electrodes. Pin size: . $093^{\prime \prime}$ spaced $486^{\circ}$. Tolerance $\pm 500$ cycles at designated frequency except $14-14.5 \mathrm{MC} \pm 10 \mathrm{KC}$. Wili supply within 5 KC . (except within 30 KC .) Specify frequency desired when ordering. Av. shpg. wt., 2 oz. (Allow 3 weeks for dellivery)
Meeks for delivery
MP-180C
MP-181C
MP-182C
MP
M
$\begin{array}{ll}\text { MP-182C } & 8000-9000 \mathrm{KC} \\ \text { HP-183CY } \quad . \quad 14-14.5 \mathrm{MC}\end{array}$
BLILEY ALIGNMENT CRYSTAL
Type MC-9. Suggested primarily for use in Signal Generators and for test equipment such as FM and IF marker generators. Size: $1^{\prime \prime} \mathrm{Kox}^{1 / 2} \mathrm{~K}_{0} \mathrm{~K}_{0}^{\prime \prime}$. Pin size $.093^{\prime \prime}$ spacing $.486^{\prime \prime}$. The plug-in type holder is gasket sealed for optimum protection against moisture. HP-184 5000 KC . $02 \%$ Net 3.87

Net 2.69
Net 2.89
Net 2.89
Net 3.87

$$
5000 \text { KC . } 02 \%
$$

$-2$
S


## Special Application Crystals

For Oscillators with tow crystal currents. Type H-173, HC.6/U. Pin. Dia. $.050^{\prime \prime}$. Pin Spacing $.486^{\prime \prime}$-Specify Freouency. (Allow 30 days for delivery).
HE-755CY21-40 MC Supplied within $01 \%$
ME-756CYO. 75 MC Supplied within $+01 \%$ Net 4.95 ME-756CYa0.75 MC Supplied within $\pm .01 \%$ Net 5.95 TV and Marker Crystals. Calibrated $\pm .005 \%$ Type 4173 (HC-6U) Pin Dia. . $050^{\prime \prime}$ Spaclng $.486^{\prime \prime}$ for 1000KC
HE 834 L

Net 7.95
Type H17 (HC-6/U) Pin. Dia. .050" Spacing .486" for 4.5 MC
HE .757 L
(A) NATIONAL SOCKETS (A)

These Steatite insulated sockets will strongly hold the crystal contacts. Can be used for chassis or for panel mounting. The bushing will project through a round hole in panel. Av. shpg. wt.. 2 oz.

| Stoch No. | Type | Pin | Spacing | Each |
| :--- | :---: | :---: | :---: | :---: |
| HP-156 | CS-8 | $.125^{\prime \prime}$ | $.750^{\prime \prime}$ | .36 |
| HP-154 | CS-6 | $.095^{\prime \prime}$ | $.486^{\prime \prime}$ | .36 |
| MP-153 | CS-5 | $.125^{\prime \prime}$ | $.500^{\prime \prime}$ | .36 |
| MP-155 | CS-7 | $.050^{\prime \prime}$ | $.486^{\prime \prime}$ | .36 |

MOSLEY CRYSTAL HOLDER ADAPTORS (B) Mosley 5.75 adapts $1 / 2^{\prime \prime}$ spaced holder to $3 / 4$ " spac ing. Shpg. wi., 2 ozs.
MS-320
Net .34
Mosley $75-5$ zdapts $1 / 4 "$ spaced holder to socket MS.321 spacing to octal socket. Shpg. wt., 2 ozs

## AMATEUR KEYS AND CODE COURSES



## SEMI-AUTOMATIC "BUG"

A quality "Bug" designed for clear, easy send ing and wide range of speed. 7 adjustments for speed and comfort. Precision-tooled, anti rust nickel-plated brass and stainless steel operating parts. Speed adjustable 10 wpm to as high as desired. $1 / e^{"}$ sliver contacts; weight scale for reproducible speed settings. A rea value for radio amateurs and professional CW operators! $67 / 8 L \times 3 W \times 21 / 4 " H$ exclusive of knobs and feet. Shpg. wt., $31 / 2$ lbs. MS-435-imported

## CODE PRACTICE SET



179

LAFAYETTE VALUE
A budget Item for the beginning amateur and code practice groups. Key has adjustable spring tension, and adjustable contact clearance. High frequency buzzer has frequency, and tension adjustment with lock nuts to assure constant frequency. There is provision for insertion of head quet by means of binding posts with knuried tightening screws. For individual, group or remote listening. Uses Burgess ${ }^{\prime 2} 11 / 2$ Volt battery Base $63 / 4 \mathrm{x} 23 / 4 \mathrm{~W} \times 13 \mathrm{~m}^{\prime \prime} \mathrm{D}$, overall length $81 / 2^{\prime \prime}$ Shpg. wt., 2 lbs. (less battery). Imported MS-438-Code practice set .............. Net 1.79 BA.157-Burgess \$2 ........................... Net . 13 MS-369-Stethoscope Headset .............Net 1.39

## SAVE ON NEW TELEGRAPH KEY

Economical key for beginning amateurs. Solid, heavily chrome and nickel plated metal parts molded phenolic base. Adjustable spring tension and adjustable metal parts. molded phenolic base. Adjustable spring tension and adlustable contact clearance. 2 mounting holes in base. Base $34 / 4 x^{11} \mathrm{~K}_{0}{ }^{\text {" }}$ W. Overall length $5^{\text {* }}$; helght $17 \mathrm{~s}^{\prime \prime}$ Shpp. wt., 12 oz . Imported MS. 319 - felegraph Key

Net .69

## LAFAYETTE "BRASS.POUNOER'S" KEY

## LAFAYETTE



## - WITH BALL-BEARING PIVOTS

- SOLID POLISHED-BRASS BASE

A better quality precision-made key designed for hard usage. Spring tension and contact clearance adiustments; Kanct $^{\prime \prime}$ silver contacts: adjustable ball-bearing oivots: Circult closing switch Base $3 \times 2^{\prime \prime}$; overall size $5 \times 23 \times 1 \mathrm{~K}_{0}^{\prime \prime}$. Shpg. wt. 11/2 los. Imported MS-42 -Telegraph Key
high freouency code practice buzzer
Adjustable frequency buzzer ideal for individual or group code practice. Perfect code litem for the ham shack. Black molded phenolic housing. the ham shack. Black molded phenolic housing. Works with $1 / 2$ volt battery. Screw adiustment
for changing tone. $1 \%^{\prime \prime}$ dlam. $\times 1 \mathrm{~K}_{\mathrm{ol}}{ }^{\prime \prime}$ high. Shpg. wt. 6 oz. Imported MS.436-Buzzer

Net .79

## TELEGRAPH TRANSMITTER

## And Code Practice Oscillator

 Only 2.952 for 4.904 for 8.75- Send and receive for miles on one wire!
- Ideal for Hetwork Practice
- For Individuals, Group, Classrooms, Hams, etc.

An ideal communications instrument that can be set up, with others, for network practice in classrooms, groups, house to house, etc. Adjustable spring tension and contact clearance. Crystal earphone-high output-lightweight. Molded Bakelite base. Lightweight, only $6 \mathbf{0 2}$., yet designed to give good stability while in use. Complete with 50 ft . of wire on reel, ground spike, ground wire, earphone and Morse code sheet. Uses 1.5 V battery (not included). Dverall $41 / 4 \times 4 \times 11 / 2^{\prime \prime} \mathrm{h} / \mathrm{gh}$. Shpg. wt., 1 lb . Imported

Net 2.95 Shpg. Wt. 1 Ib. Imported

Net .13 BA-157 Battery for above

## TAPEDCODE

Prerecorded magnetic tapes containing a complete course in the International Morse Code. The tapes are 7", 1200 ft . and can be played on any standard tape recorder. Playing time 2 hours per tape. Shpg. Wt., $11 / 2$ lbs, NOVICE 2 hours per tape. Shog. Wh., $11 / 2$ bos
NOVIC
RT-14 $A D V A N C E D$ Code at $9-18$ WPM.
RT. 15


## Rider "Sight 'N' Sound" Code Course

New improved courses, easier than ever to learn code with Rider's "Sight ' $N$ ' Sound" method.
REC-08 NOVICE COURSE-0 to 8 WPM,3LP records, 47 identification cards, and Instruction Book. Snpg wt., 2 lbs.
PR. 90
Net 9.50
REC- 920 ADVANCED CDURSE - 9 to 20 WPM 3 LP records and instruction Booklet. Shpg. wt., 2 lbs.

Net 8.95

## LaFAYETTE SPECIAL CODE COURSE



Learn Morse Code the modern practical way. Supplied with 10 lessons and a non-breakable high quality $331 / 3 \mathrm{rpm}$ long playing record, recorded with code sound to provide further ald. Perfect for home studying. Speed progresses stead lly from 2 to 15 wom. Complete with sturdy record album and instruction manual. Shpg. wt., $1 / 2 \mathrm{lbs}$.
PR-13 Lafayette Code
Course
Net 3.50

## VIBROPLEX SEMI-AUTOMATIC KEYS



LESS CORD AND WEDGE
"Champion". Designed for a low priced Vibrople in the radio field. Of high quality for clear, speedy and easy sending. ideal for amateur or professional radio operators. Chromium finished top parts with black crystal base. Single lever with 2 pairs of contact points. Shpg. wt., 4 lbs.

Net 17.95 "Original". Acclaimed by veteran operators for its ex-
 tremely smooth, clear, rapid, effortless and accurate operation. A rugged, well bulli, expertly engineered machine for all classes of transmitting work. Large contact points. Die cut dot contact. Chrome-plated mechanism. Cast.iron base. Shpg. wt., 5 lbs. MS-716

Net 22.45
Deluxe "Original". As above but jeweled bearings, chrome-plated base. Shpg. wt., 5 lbs. MS. 717

Net 26.95
"Blue Racer". Very similar to the "Driginal", but half size. Compact and light weight. Shpg. wt., 4 lbs. MS. 718 . Compact and Hight weight. Shpg. Wét 22.45 "Blue Racer". Deluxe. As above but jeweled bearings. Chrome Base. Shpg. wt., 4 lbs .
MS. 719
Cord and wedge for above. Specify model of key.
MS. 854 Key and Osplil. wt., 8 oz................... Net 1.75 F-479M Key and Oscillator
vibro-Kayer. An efficient keying mechanism for an electronic transmitting unit. Same large size contracts and frame as Deluxe vibroplex. Easy operating trunion lever, Size: $31 / 2 \times 41 / 2^{m}$. Shpg, wi., 3 lbs
MS. 723

# 2 NEW SCOTT STEREO KITS 



## MODEL LK-30 30-WATT STEREO AMPLIFIER KIT

Has all of these fine features: dual tone controls, tape monitor, front panel stereo headphones jack, derived center channel output, all-aluminum chassis scratch fitter, stereo balancing, loudness/volume control. Output circuitry delivers full power down to the lowest frequencles. Will drive most inefficient speaker systems to full room volume. Frequency Response $20 \cdot 20,0 \mathrm{CO} \mathrm{cps} \pm 1 \mathrm{db}$. Power Output (IHFM) 30 watts, 15 watts per channel. Hum and Nolse -70 db . Distortion less

21 6008WX (less case) NO MONEY DOWN Net 99.95 21 6009w Leatherette metal case for LK.30. Shpg. wt., 2 Ibs.

## MOOEL LT-111 STEREO TUNER KIT

All the features you want and need are included: "Time Switching" Multiplex circultry, wide-band design, Sonic Monitor Stereo indicator, precision tuning indicator. New Compactron circuitry assures outstanding performance. Allgn•AScope lets you allgn, each section of the tuner perfectly without special instru. ments. Frequency Response $30-15,000 \mathrm{cps}$. Sensitlvity $3.5 \mu \mathrm{~V}$ (IHFM). Channel Separation 30 db . Distortion $0.8 \%$. Signal-to-Noise Ratio 55 db. Capture Ratio 6 db . Site: $15 \mathrm{~W} \times 1 \pm / 8 \mathrm{H} \times 10^{\prime \prime} \mathrm{D}$. Shpg. wt., 13 lbs.
21 6007WX (less case) ............................ Net 109.95 21 6009w Leatherette metal case for LT-111. Shpg. wt., 2 lbs..... Net 13.95

## * SCOTT

EASY TO BUILD STEREO KITS


## LC-21 STEREO PREAMPLIFIER KIT

This preamplifier kit has all the control features of the LK. 72 PLUS dual magnetic pickup switch; rumble as well as scratch filter; microphone equalization phase reverse and separate on/off; D.C. heated tubes. Frequency response: 8 -50,000 $\operatorname{cps} \pm 1 \mathrm{db}$; distortion $0.1 \%$ at 2.5 volts output (perfect mateh for input sensi. tivity of LK-150 stereo power-amplifier). $15 \mathrm{~W} \times 43 / 8 \mathrm{HX} 111 /{ }^{*}{ }^{*} \mathrm{D}$.
21 6004WX (tess case) Shpg. wt., 10 lbs. Net 99.95 21 . 6009 w Leatherette Metal case for LC-21. Shpg. wt., 2 lbs... Net 13.95

## LK-150 130-WATT STEREO POWER AMPLIFIER KIT

This remarkabie stereo power amplifier is the perfect unit for the LC-21. Aluminum chassis and careful design for low - 90 db hum; 6550 output tubes run at onfy 65 watts IHFM; power bandwidth from below 19 cps to 25 KC ; harmonic distor tion at full output less than $0.5 \%$; IM distortion less than $0.5 \%$; input sensitivity switchable from 2.5 volts (for LC-21) to 1.5 volts to permit use with virtually all preamplifiers. Has built-in meter for bias adjustments. Dimensions $141 / 2 \mathrm{Wx} 43 / \mathrm{Hx}$ $114 \mathbf{}^{*} \mathrm{D}$. Shpg. wt., 52 lbs . 21 - $6005 w x$

NO MONEY DOWN
Net 169.95
LK-48 48-WATT STEREO AMPLIFIER KIT


The most remarkable kit value today -H. H. Scott quality at a nominal price. Has same controls as LK-72 except center channel output does not have front panel level control. Power output - 24 watts per channel (IHFM); distortion at full output same is LK-72. IHFM Power bandsame is LK-72. IHFM Power band-
width to 20 kc . DC heated preamp width to 20 kc . DC heated preamp
filaments and aluminum chassis for filaments and aluminum chassis for
low -80 db hum and noise. Dimenstons $15 \mathrm{~W} \times 43 / 2 \mathrm{Hx} 10^{2} \mathrm{D}$.

Net 124.95 21 A 6009 W Leatherette Metal case for Lk-48, Shpg. Wt., 2 lbs...... Net 13.95


## MODEL LK-72 80-WATT STEREO AMPLIFIER KIT

An H. H. Scott masterpiece of kit engineering with radically new assembly fea tures. Aluminum chassis and DC heated preamp fllaments give low - 80 db hum and noise. Frequency response 20 CPS to $20 \mathrm{KC} \pm 1 \mathrm{db}$; harmonic distortion at full output $0.8 \%$. IM distortion $0.3 \%$ (CCIF); IHFM power bandwidth 20 CPS to 20 KC ; speaker output impedances $4,8,16$ ohms. Front panel controls; Input selector (phono- or tape-head, Tuner, Extra); Equalization (FAB tape-head or RIAA
record equalization); Stereo Selector (same as 299C); separate tone controls for record equalization); Stereo Selectorive (same as 299C); separate tone controls for
channels A \& Btereo Balance; Derived Center Channel Lever Control; Loudness On-Off; Scratch Filter; Tape Moniter; Loudness Compensation. Matches LT-110 FM Tuner Kit in appearance and cabinet size. $15 \mathrm{~W} \times 43 / 4 \mathrm{H} \times 10^{\circ} \mathrm{D}$.
21 5001wK (less case) Shpg. wt., 35 lbs.......NO MONEY DOWN........Net 159.95 21 5009w Shpg. wt., 2 los. Leatherette metal case for LK-72. LT-110 Not 13.95

## MOOEL LT- 110 WIDE-BAND FM STEREO MULTIPLEX KIT

Both the Multiplex section and silver-plated front end are factory pre-assembled and pre-aligned. You need only align the tuner's wide-bandpass IF's and detector using the meter on the tuner itself. Sonic Monitor gives mositive indication of FM Stereo broadcasting. Features Stereo Nolse filter, Vernier Tuning, Front Panel Tuning Meter, Stereo Tape Recorder Output. Sensitivity $1.0 \mu \mathrm{v}$ for 20 db quleting: $2.2 \mathrm{\mu v}$ iHFM usable. Frequency Response $30 \cdot 15,000 \mathrm{cps}$. Signal-to Noise Ratio 60 db . Uses 8 tubes, 11 diodes plus rectifier. Size: $15 \mathrm{~W} \times 4 \frac{1}{3} \mathrm{H} \times 10^{\prime \prime} \mathrm{D}$ Shpg. wt., 20 lbs.
21. GOO2WX (less case) NO MONEY DOWN

Net 159.95
21 A 6009 W Leatherette metal case for LT-110 Shpg. wt., 2 lbs. Net 13.95

## FISHER STRATAKITS

## FISHER KM.GO FM STEREO TUNER KIT



A high quality FM Stereo multiplex tuner *it with famous Fisher features. UltraSensitive Golden Cascode Front-End provides clear reception even from distant stations, exclusive Stereo Beam instantly indicates whether or not a station is broadcasting in stereo precision D'Arson. broad tuning meter which is also used in val tuning meter which is also used in
alignment of if and ratio detector sections; pre-aligned front-end and multiplex section. 4 If stages and 2 limiters. SPECS: Sensitivity 0.6 microvolts at 20 db quieting, signal-to-nolse ratio 70 db at $100 \%$ mad., Freq. respanse - $\pm 1 \mathrm{db} 20-15,000$ CPS. 11 Tubes 12 Diodes, Selenium rectifier. Complete with illustrated manual. Size $251 /{ }^{-1} \mathrm{~W} \times 4^{13} / \mathrm{H} H \times 13^{\prime \prime} \mathrm{D}$. 21 A 3624 wX KM60 Kit Shpg. wt., 18 lbs. Less cabinet .. .............. . Net 169.50 21 A 3625WX KM61 Same as KM60 but factory wired \& tested........... 219.50 21 A 3609W MC-2 Metal cabinet for KM-60 and KM-61 Shpg. wt, 9 tos. Net 15.95

## FISHER KX-200 80-WATT STEREO CONTROL AMPLIFIER KIT



Fisher engineers have developed a new concept of kit design known as Stratakit. Major components are premounted and wires are pre-cut. The $k X-200$ amplifier/ preamp specifications are; 80 watts IHFM music power output; ( 35 watts RMS each channel) Harmonic distortion (at rated output) $0.4 \%$; IM Distortion (SMPTE, at rated output $0.8 \%$; Frequency response (overall $20-20,000 \mathrm{cps} \pm 1 \mathrm{do}$ - total hum and noise -80 db ( 450 mv REF); Channel Separation at 1 KC better than 50 db . Tubes: 6 -ECC83, 4-7591, 2-SD95A, 2-SD91A Built-In D'Arsonval calibration meter. For $117 \mathrm{~V}, 60$ cycles AC . Si:e: $151 / 9 \mathrm{~W} \times 121 / 2 \mathrm{D}$ $\times 5 \mathrm{~V} / 4 \mathrm{MH}$.
21 A $3626 \mathrm{wx} \mathrm{KX}-200$ Amplifier, less case. Shpg. wt., 30 ibs. ............. Net 169.50 21 A 3609w MC-2 Metal Cabinet for KK-200. Shpg. wt., 9 lbs. ... ....... Net 15.95

FISHER KX. 100 50.WATT STEREO MASTEP AUOIO


CONTROL AMPLIFIER
front panel earphone jack. Newly de signed Novar type No. 7868 output tubes Features unique Stratakit assembly design to eliminate possibility of error. Facliities for direct connection of center chan nel speaker. 14 front-panel controls, In cluding sharp cut-off high-frequency ifl. ter. Tape Monitor. Loudness Contour switch. Tape and phono Equalization. 10 tubes. 2 Silicon rectifies. Size: $151 / 8 \mathrm{Wx}$ $121 / 2 \mathrm{D} \times 51 /$ 月 $^{N} \mathrm{H}$.
21 A627wX Shpg. wt., 24 lbs. NO MONEY DOWN
Net 129.50
21 A 3609W MC-2 Metal Cabinet for KX-100 9 lbs.
Net 15.95

#  



MODEL SCA-35 35-WATT STEREO INTEGRATED AMPLIFIER KIT


## NEW MODEL PAS3 STEREO PREAMPLIFIER KIT

A renowned stereo preamp of outstanding flexbility (without complexity) to satisty the stereo enthusiast. Ideal for use with high quality basic amplifier. Includes two independent high gain, low noise preamplifier-control channels. inputs: 3 stereo low level and 4 stereo high level. Frequency response: $\pm 0.5 \mathrm{db} 10-40,000$ cps. Distortion: less than $.05 \%$. Noise: less than $2 \mu \mathrm{v}$. equivalent noise input on RIAA. Gain: 60 db at 1000 cPs on RIAA, 20 db on high level. Tubes: $4-12 A \times 7$ ECC -83, $12 \times 4$, selenium rectlfier. For $110-120$., $50 / 60$ cycles AC. Deluxe gold panel. Slze: $13 \times 8 \times 4^{\text {". Shpg. wt., } 11 \text { Ibs. }}$
21 A 2301 WX PAS-3 Kit with deluxe gold panel
Net 69.95
DYNAKIT PAs-3A Wired with deluxe gold panel.
21 A 2302WX Shpg. wt., 11 lbs. $\qquad$ Net 109.85

## "STEREO 70" 70-WATT BASIC AMPLIFIER KIT



Meets the need of the discriminating listener. The center of your system. the stereo 70 features firm bass, and smooth natural highs. Patented DYNACO printed circuitry and transformers give you top reliability... ease of assembly. It dellvers 35 -watts per channel, for a full 70 -watts of stereo output. Frequency response: $\pm 0.5 \mathrm{db}$ from 10 cps to 40,000 cycles. IM distortion: less than $1 \%$ at 35 watts Sensitivity 1.3 volts rms input for 35 watts output. Hum and Noise: better than 90 do below rated output. Output impedance: 4,8 and 16 ohms. Nichel-finished chassis vinyl-coated charcoal brown cover. For $110-120 \mathrm{~V} 50 / 60$ cycles AC. Slze 9 Wx 64 h Hx vinyl-coated charcoal b
$13^{\circ \prime} \mathrm{D}$. Shpg. wt., 32 lbs.
21 A 2303WX 'Stereo 70/A Kit ............................................................................................... 59.5 $\begin{array}{ll}21 & 2303 W X \\ 21 & 2304 W X \\ \text { Stereo 70/A Kit }\end{array}$

Net 128.95
"STERED 35" 35-WAT BASIG AMPLIFIER KT (NOT ILLUSTRATED) Offers traditional DYNACO quafity. Ideal match for PAS. 2 A preamp. Frea. Response: $\pm 1 \mathrm{db} 10-40,000 \mathrm{cps}$. With case. Slze: $13 \mathrm{Wx} 4 \mathrm{Hx} 54 / 2^{\circ} \mathrm{D}$. For $110-120 \mathrm{~V} 50 / 60 \mathrm{cycles}$ AC. Shpg. wt., 16 lbs
21 23iswx Kit
21 2316wX Wired
Net. 59.95

Combines a quality stereo preamplifier having full control flexiblity with a 35 -watt (continuous rating) stereo power ampliffer. Dynakit's heavy duty efched circult construction and straightionward design make assembly simple. Specifications: Inputs 7 pairs; outputs; tape, 8 and 16 ohm speaker outputs and precision for head. phone connection. Frequency Response: $20-20.000 \mathrm{cps} \pm 0.25 \mathrm{db}$. IM Distortion. less than $1 \%$. Hum and noise, 70 db below rated output. Controls: Input Selector, Volume, Bass, Treble, Stereo-Mono Switch, Loudness compensation switch, Filter switch. Power switch. For 112 V AC. Complete with case, deluxe gold panel. Size: $13 \times 10 \times 4$. Shpg. wt., 20 lbs.
21 2317WX SCA-35 Kit with deluxe gold panel ................................................. 99.95 21 A 2318 WX SCA. 35 Wired with deluxe gold panel

Net 139.95

## MODEL FM.1/A DYNATUNER FM TUNER KIT



The "Dynatuner" meets the important specifications necessary for top performance In near or fringe areas. Can be completely alligned without the need for auxiliary equipment op instruments - using only the built-In tuner Indicator. Designed for maximum linearity and stability of operation-yet has high sensitivity. Tuned RF input provides 4 microvolt (INFM) sensitivity and excellent rejection of spurious signals. IM OISTORTION: less than $0.5 \%$. 7 tubes plus rectifier, tuning eye and 2 diodes. POWER REQUIREMENTS: $110-120$ V. AC. $60 \mathrm{cps} .13 \times 4 \times 8^{\circ}$. Shpg. wt., 12 Ibs. 21 A $2305 W \mathrm{X}$
FMX-3 MULJIPLEX ADAFTER KIT
Converts FM- 1 to a complete high quality stereo tuner
21 S 2351 Shpg, wt. 2 Ibs.
FM-3/A Stereomatie FM Muftiple Net 79.55

FM-3/A Stercomatic FM Muftiplex Tuner with Delux Cold Panel.
Model FM.I Tuner and Model FMx-3 Multiplex Adapter completely assembled, wired and tested to give a complete FM multiplex tuner. Shpg. Wt., 14 lbs
21 2300wx
oriale bvintit Ai-fi components
21 2313WX Mark IV Kit Shpg. wt., 20 Ibs.
Not 16.83
Net 59.95
21 a 2352 PAM-IK'Kit ShDg. wt., 7 ibs.
21 A 2353 PAM.1/A Wired

## NEW LOW PRICE QUALITY HI-FI AMPLIFIER KITS

NEW! 12-WATT HI-FI AMPLIFIER KIT
BUILT-IN PRE-AMPLIFIER


- designed for easy ASSEMBLY
- for monaural or as amplifier for secono STEREO

This new High Fidelity WILIIAMSON type 12. Watt Amplifier with built-In preamplifler offers a combination of outstandint features in an amplifier at Lafayette's Low-Low Price.

## FEATURES

Separate full-range bass boost and treble controls. 4, 8 and 16 ohms speaker voice coil output. Amplifier, pre-amplifier and power supply laid out on single open pre-punched chassis for the easlest construction. 4 input connections located at rear of chassis for magnetic phono or tape, crystal phono, tuner/radio, and mike or auxiliary.
Auxillary power receptacle in rear controlled by power switch. Self-balance phase inverter system and full range tone control amplifier. Inverse feedback circuit. Removable front panel for professional appeapance in custom installations. Amplifier can be used with electric guitar, etc., or in a Public Address Systam. Frequency Response: 1 db 20 to 20,000 cycles. Oistertion $1 \%$ at rated output. Hum: Tuner/Crystal Phono 80 db below 12 watts. Magnetic Phono/Tape 60 db below 12 watts. Sensttwity: Magnetic Phono/Tape 3 mv . Crystal phono 0.5 volt. Tuner/Radio 0.5 volt. 4 Controls: Function, Loudness, Bass, Treble/Power Switch Tuner/Radio 0.5 volt. 4 Controis: Function, Loudness, Bass, Treble/Power Switch,
Tube Complement: $12 A \times 7 / E C C 83$ Preamp; 12AT7 Phase Inverter; Tone Control Tubu Complement: $12 A \times 7 / E C C 83$ Preamp; 12AT7 Phase Inv
Amplifier; $2-6$ V6 Push-pull Beam Power Amplifier; 1 Rectifler.
Complete with 24 -page exceptionally simple and clear instruction book complete with diagrams, Illustrations, and step-by step construction details. Baked Hammer. tone, Goiden Brown Finish Chassis. 11 Wx 7 Dx 5 H H . Shpg. wt., 11 lbs. Power Consumption 55 watts; 117 VAC; $50-60$ cycles.
KT-255

## NEW! STEREO 30-WATT WILLIAMSON TYPE DUAL AMPLIFIER/PREAMPLIFIER KIT

(1)

All-New Stereophonic 30-Watt Williamson Type Dual Amplifier/Preampllfier Kht offering Styling, Features and Specifications Avaliable at Lafayette's Low-Low Price.

## FEATURES:

Stereo inputs for Tape/Low Level Phono, High Level Phono, FM/AM Tuner, High Level Tape/Auxillary. Dual tape outputs. Output Impedances: 4, 8, and 16 ohms. 3rd channel output. Equalization: (Tape) NAB; (Phono) RIAA. Two AC corvenience receptacles in rear controlled by power switch. Separate full-range bass boost and treble controls for each channel.
Frequency Response: $\pm 1$ do 20 to $20,000 \mathrm{cps}$. Distortion: Less than $1 \%$ harmonic distortion. Hum: Tuner/MI Phono/Aux, 70 db below 15 watts. Low Phono 60 db below 15 watts. Tape 55 db below 15 watts. 9 Front Panel Contrals: Function, Loudness, Balance, Trebel A/Off. Treble 8, Bass A. Bass 8, Equalization, Mode. Tubes: 2-12AX7/ECC83, 2-12AT7/ECC81, 4-7408, 1.5U4.
Operates on 117 volts, $50-60 \mathrm{cps} A C$ @ 125 watts. Baked Hammertone, Golden Brown Finish Chassis. Complete with "Foolproof" Instruction book having diagrams, illustrations and step-by-step construction details. Size: $14 \mathrm{~W} \times 6 \mathrm{H} \times 8$ "D Shpg. wt., 18 lbs.
KT-256
Net 38.50

## FICD KITS-BUILD YOUR OWN AND SAVE MONEY



## EICO ST-4OK 40-WATT STEREO INTEGRATED AMPLIFIER KIT

The ST. 40 contains 2 twenty watt amplifiers and a complete stereophonic hi-fi control center on one chassis. FEATURES: Switched sets of stereo inputs including magnetic phono (2), tape head, preamplified tape, FM-AM stereo tuner, FM-FM Multiplex, and Auxiliary. Balance Check switch. Loudness/level switch. Bass and treble controls. Other controls include: Six position mode selector, tape monitor, scratch and rumble. Output 4,8 , and 16 ohm. Third channel speaker connection. Specifications: IM distortion- $2 \%$ at 40 watts; Harmonic Distortion- $1 / 2 \%$ at 40 watts; Frequency response-士 $1 / 2 \mathrm{db} .20 \cdot 20,000 \mathrm{cps}$. Shpg. wt., 27 lbs
21 A 2506 WX
21 A $2507 \mathrm{~W} \times$ Same as above, but wired
Net 79.95


## EICO ST-7CK 70 WATT STEREO

 INTEGRATED AMPLIFIER KITConsists of 2.35 watt amplifiers and a complete stereophonic hi-fi control center on one chassis. Stereo inputs in switched sets including: 2 magnetic phono (one for turntable, one for changer); tape head, preamplifled tape, FM-AM stereo tuner, FM-FM Multiplex, and Auxlliary, Controls: Level with balance check switch and loudness/ level switch; bass, treble, six-position mode selector, blend, tape speed, tape monitor, scratch, and rumble. Output: 4,8, and 16 ohm speaker. Third channel output available. Specifications: IM distortion - $2 \%$ at 70 -watts. Harmonic Distortion
 21 A 2508WK
As above, but factory wired
21 A 2509wx
Net 149.95

## EICO MODEL HF85K STEREOPHONIC DUAL PREAMP KIT

Self-powered preamp-control center offering complete switching and control facilities for any stereo program source. SPECIFICATIONS (both channels): Frequency response $5-200,000 \mathrm{cps} \pm 0.3 \mathrm{db}$; 1 M distortion ( 608 $7000 \mathrm{cps}) .03 \% @ 1 \mathrm{v}$. RMS output; Harmonic distortion ( $20-20,000 \mathrm{cps}$ ) $1 \%$ @ 3 v . RMS output: Tone-control range $\pm 15 \mathrm{db} @ 50$ and $10,000 \mathrm{cps}$; RIAA phono and NART8 tape head ( $15,7.5$, and 3.75 ips) equalization; Output-to-main amplifier impedance, 8000 ohms. Tubes: 5-12AX7/ECC83's, $1.6 \times 4$. Size: $31 / 2^{\prime \prime}$ high, $12^{\prime \prime}$ wide, $81 / 4^{" \prime}$ deep. Shpg. wt., 10 lbs. Cover supplied. HF85k Stereo Dual Preamp Kit
2142559
HF85 Same, Factory wired and tested
21 A 2560
Net 39.95
Net 64.95

## EICO MODEL AF-4K COMPLETE STEREOPHONIC DUAL AMPLIFIER KIT



Model AF-4K utilizes a 27db reedback level to help lower harmonic and intermodulation distortion. Independent, concentric level and tone controls. SPECIF1. CATIONS: FREQUENCY RESPONSE: $\pm 0.50 \mathrm{D}$ 30-20,000 cDS. HARMONIC DISTORTION: less than $1 \%$ at 4 watts. SENSITIVITY (for 4 W . output/channel): 26 V (phono) . 113 V (other inputs). HUM: 74db below fuli output. SPEAKER CONNECTIONS: 4, 8, 16, 32 ohms. TU日E COMPLEMENT: 2-120W7, 2-EL84, 1-EZ81. $35 / 8 \times 12 \times 81 / 4^{\circ}$. Shpg. wt., 13 lbs.
21 A 2561
AF-4 Same as above, but factory wired.
Net 38.95
21 A 2562
Net 64.95

## 2 NEW QUALITY MONAURAL KITS



EICO MODEL HFT-90AK FM TUNER KIT
Factory pre-wired and pre-aligned front end. Pre.wired tuning eye assembly. Features "traveling" tuning indicator, fly-wheel tuning and AGC. SENSITIVITY: $1.5 \mu \mathrm{v}$ for 20 db quieting; $2.5 \mu \mathrm{v}$ for 30 db quieting; full limiting from $25 \mu \mathrm{v}$. OUTPUTS: Cathode follower and multiplex. HUM: 60 db below 1 volt. For $110-120$ voits AC, 50.60 cycles follower and multiplex. HUM: $60 d \mathrm{below} 1$ volt, For $110-120$
Complete with Instructions, $12 \times 81 / 4 \times 35 / \mathrm{g}^{\prime \prime}$. Shpg. wt., 10 lbs .
Complete with
21 A 2554 Kit
21 A 2554 Kit
HFT-90A Same as above, but factory wired
21 A 2555
E-3A Cover for HFT-90A Shpg. wt., 3 lbs.
21 A 2556
Net 44.95

Net 3.95
NEW EICO MODEL HF-12A 18-WATT INTEGRATED AMPLIFIER
Compact, attractively styled amplifier with complete front end facilities and true high fidelity performance. Power output: 18 watts continuous, 36 watts peak. Inter modulation distortion $1.5 \%$ at 18 watts, $0.55 \%$ at 9 watts, 60 to 6000 cps . Fre. quency response $12-50,000 \mathrm{cps} \pm 0.5 \mathrm{db}$ at 1 watt: $25 \cdot 20,000 \mathrm{cps} \pm 0.5 \mathrm{db}$ at 18 watts. For 16,8 , and 4 ohms. For $110.120 \mathrm{v}, 50 / 60 \mathrm{cps}$. AC. Size: $3 \mathrm{H} \times 12 \mathrm{~W} \times 8 \mathrm{Ha} \mathrm{C}$. Shpg. wt., 13 ibs. With instructions
21 A 2552 kit
HF-12A As above, but factory wired.
HF-12A AS
21 A 2553
Net 39.95
Net 59.95


## EICD ST-97

FM STEREO TUNER KIT
Quality FM Stereo Tuner with buift-in multiplex circuitry. Employs pre-wired and pre-aligned front end, IF strip and wide.band ratio detector. Features AFC with defeat. Cathode follower driven. Slide-rule tuning with tuning indicator. Stereo indicating pilot lamp, automatically lit by stereo pllot carrier Controls: Tuning, Separation, AFC on-off, stereo-mono, and power on-off switches SPECIFICATIONS: IHFM Sensitivity: $3 \mu \mathrm{~V}$ ( $1.5 \mu \mathrm{~V}$ for 20 do quieting); IHFM S/N Ratio 55 db ; Harmonic Distortion $0.6 \%$; IHFM IM Distortion $0.2 \%$; IHFM capture ratio 3 db ; Orift; $0.2 \%$ without AFC; 5 to 1 correction with AFC. Frequency Response $\pm 1$ db $20 \operatorname{cps}-15 \mathrm{KC}$; Channel Separation 30 dt . Size: HWD - $51 / \mathrm{a} \times 157 / \mathrm{ax} 113 / \mathrm{al}^{\prime \prime}$ Shpg. wt., 17 lbs .
21 A 2501 wX FM Tuner kit
Net 99.95
21 A 2502Wx FM Tuner Same as above, but factory wired


## EICO ST-84 STEREO PREAMPLIFIER

A comprehensive self-powered stereo preamplifler which features $0.05 \%$ distortion or less on all basic functions (mag phono, tuner, tape). Input and mode selectors each have seven positions each for maximum flexibility. independent bass and treble controls provide true varlable crossover control to boost or cut. Tape recorder outputs are not affected by controls. Has high and low frequency filtering. Tape Speed equallzation and monitor switches for top tape control flexibility. Also includes level, and balance controls and a loudness switch. Frequency Response is 0.3 db from 5 to $25,000 \mathrm{CPS}$. Hum and noise is -65 db frequency low level inputs and -75 db for high level inputs. RIAA phono equalization and NARTB for Tape. Tube Complement five $12 A \times 7 / E C C 83$ plus one $6 \times 4$. Metal cover is included. Finished in brush gold aluminum faceplate with brown accenting band. Size: $54 / 2 \mathrm{Hx} 157 / 8 \mathrm{~W} \times 83 / 4 * \mathrm{D}$.
21 2504WX ST. 84 Kit
Net 59.95
21 A 2505 WX ST. 84 Same as above, but Factory wired
Net 89.95


## EICO MX-99 FM MULTIPLEX

 ADAPTERThe EICO MX-99 is a self-powered multipler adapter It is free of phase distorting Fiters and meets or exceeds the required suppression of all spurious signals including the SCA (67KC) background music carrier, reinserted ( 38 KC ) sub-carrier, the (19KC) pilot carriep and alt harmonics thereof. This factor is very important for high quality stereo tape recording. This adapter will synchronize with any usable output from the FM tuner. Provides automatic stereo-monophonic operation and includes low impedance cathode follower outputs. An indicator lamp turns on when a station is broadcasting muttiplex stereo. It can achieve channel separation of 35db. The MX-99 is destgned for all EICO FM equipment (HFT-90, HFT-92, ST-96), and any other component quality ratio detector FM tuners provided with a multiplex output. Size: $91 / 6 W \times 61 / 20 \times 3 \%{ }^{17} \mathrm{H}$. Shpg. wt., 7 lbs.
21 . 2557 Kit
39.95

21 A 2558 Factory wired and tested

## EICO ST-96K FM-AM STEREO TUNER KIT

Features pre-wired, pre-aligned FM front end, FM and AM IF strips. SPECIFICATIONS: SENSITIVITY: (FM) 1.5 uv for 20 ob quieting: (AM) 3uv for 1.0 V average output at $20 \mathrm{db} \mathrm{S} / \mathrm{N}$ ratio. SELECTIVITY: (FM) 250 kc . IF bandwidth (6db down); (AM) overall If bandwidth of 18KC at "broad bandwidth" 9KC at "narrow bandwidth." FREQUENCY RESPONSE: (FM) 20-15,000 $\mathrm{cps} \pm 10 \mathrm{~b}$; (AM) $20.9,000$ cps on "wide bandwidth." $20-4500 \mathrm{cDS}$ on "narrow bandwidth." IMAGE REJECTION: (FM) 40db; (AM) 60db; HUM LEVEL: 60db down; ORIFT: (FM) less than 2 parts in 10,000 from cold start; (AM) negligible. OUTPUT LEVEL: (FM) 2.5 v for $100 \% \mathrm{mod}$. (AM) 1.0 v average. POWER REQUIREMENTS: 117 volts AC, 60 cps . $15 \% \times 5 \times 14^{\prime \prime}$. Shpg. wt., 19 ibs. 21 A 2512wX Model ST-96 Same as above, but factory wired.
Model ST-96
21 A 2513 WX
Net 89.95
Net 129.95

## EICO HFT-92K HI-FI FM/AM TUNER KIT

Pre-wired and pre-aligned, the FM section employs full-wave rectification and heavy filtering for stability. Broad-band ratio detector with stable low threshold limiting provides a sensitivity of 1.5 uv for 20 db quieting. FREQUENCY RESPONSE: $20-20000 \mathrm{cps} \pm 1 \mathrm{db}$ for FM, $20.5000 \mathrm{cps} \pm 3 \mathrm{db}$ for AM. ANTENNA INPUT: 300 ohms FM. Ferrite Rod for AM. POWER REQUIREMENTS: 117 volts AC. $60 \mathrm{cps} .35 \times 12 \times 81 / a^{\text {". }}$. Shpg. wt., 12 lbs .
21 A 2510WX
Model HFT- 92 Same as above, but factory wired.
21 A 2511wx
Net 94.95

## EICO HFT-94K HI-FI AM TUNER KIT

The new HFT94K is a basic AM funer klt designed for hi-fi applications. Features include: slide-rule dial, fly wheel tuning low inter-station noise, tuned RF stage, built-In ferrite loop antenna, pre-wired travelling eye Indicator and pre-aligned RF \& IF colls. SPECIFICATIONS SENSITIVITY: $3 u v$ at $30 \%$ mod. for iv output. SELEC. TIVITY: (wideband) 14KC bandpass; (narrow band) 7KC bandpass. FREQUENCY RESPONSE: $20-9000 \mathrm{cps}$ (wide), $20.5000 \cos$ (narrow) OUTPUT: low impedance plate follower. Extra recording out put. POWER REQUIREMENTS: 110.125 volts AC, 60 cps . $31 / 8 \times 12 \times 81 / 4{ }^{\prime \prime}$. Shpg. Wt., 12 lbs.
21 A 2563
HFT94 Same as above, but factory wired.
21 A 2564
Net 39.95

## NEW! सICD CLASSIC HI-FI SERIES



## DELUXE CLASSIC COMPONENTS KIT AND WIRED

## MODEL 2536 FM STEREO RECEIVER SEMI-KIT <br> Critical Circuits Pre-aligned

 A complete 36 .watt stereo amplifier and superb FM stereo tuner on one compact chassis. High quality materlals are used throughout which will resuit in years of trouble-free listening pleasure. Features ready to-use component assemblies both prewired and prealigned for ease of construction and best performance. Other features include. precise ro tary tuning diar, bar-type electronray tuning indicator and stereo de feat switch. Amplifier output: 36 watt (IHFM music power); Harmonic distortion: $0.5 \%$ at 10 W per channel. IM distortion $0.25 \%$ at 1 -watt. Separate hum batance and Rass and Treble controls for each channel. Balance control; Blend; Tape Monitor switch and Tape Output. ${ }^{4}$ Inputs. Tuner, $3 \mu \mathrm{y}$ IHFM useable sensitivity; audio bandwidth: flat to 53 KC : Channel separation. 30 db . Extruded aluminum panel matches other classic units For 115 V 60 cycles AC. Size: $15 \%$ WxS5/kHx135/8"D. Shpg. wt., 25 lbs.21 A 2515 WX Model 2536 Semi-Kit
Net 154.95 21 A 2516 wx Above, wired and tested

Net 209.95


A deluxe amplifier kit beautifulfy styled and completely stable with any speaker system. Has excellent overload, transient, and regulation characteristics. Easy to bulld with all parts operating well within ratings. Features Speaker System selector switch that permits selection between 2 different pairs of speaker systems. Power: 36 watts (IHFM music); Intermodulation distortion. $2 \%$ at systems. Power: 46 watts $0.7 \%$ at 5 watts; Harmonic distortion: $0.6 \%$ at 10 -watts, $0.2 \%$ at
 -watt; frequency Response: $\pm$ do others; Inputs: magnetic phono or adapted ceramic phono, tuner, tape, - 80 do others; Inputs: magnetic phono or adapted ceramic phono, tuner, tape, auxiliary; Speaker output 8-16 ohms. Extruded aluminum panel, brushed silver
on upper half, brushed pale gold, lower half, Size: $15 \% \mathrm{~W} \times 5 \% \mathrm{H} \times 11 \mathrm{~F}^{\circ} \mathrm{D}$. For on upper half, brushed pale gold, lower half, Siz
115 V 60 crcles AC. Shog. wt.. 21 lbs. Less Cabinet.
21 A 2521 WX Model 2036 Kit
Net 79.95
21 a 2522 WX Above, Factory Wired and Tested
Net 109.95
MODEL 2050 50-WATT STEREO AMPLIFIER (Not Illustrated)
Matching the appearance and performance of the Classic Tuner, the $205 n$ stereo amplifier serves as the "heart of a quality home music system. In addition to the classic series common amplifier circuits and controls, it provides a 12 db octave switched high frequency filter, a speaker system switch that permits selection between different pairs of speaker systems and a headphone back. Power output: 50 -watts (IHFM Music); Intermodulation distortion: $0.5 \%$ at 17 . watts. $0.3 \%$ at 5 -watts. Frequency Response: $\pm 1 \mathrm{db} 10 \mathrm{cDs}-40,000$ cos: Noise: - 65 db phono. - 80 do others: Inouts: magnelic phnno or adapted Noise: - 65 do phono, - 80 obe auxiliarr. Decorator sfved extruded aluminum ceramic phono. tuner, tape, auxiliary. Decorator sivied extruded aimmom panel-brushed silver. upoer half, brushed pale pold.
$55 / \mathrm{Hr} 115^{\prime \prime} / \mathrm{D}$. For 115 V . 60 cycles AC . Shpg. wt., 25 lbs .
$55 / 8 \mathrm{Hr} 11 \mathrm{~S}^{5 / 7}$ "D. For 115 V .60 cyC
21 A 2523 WX Model 2050 Kit
Net 92.50
21 . 2524 wX Above, Factory Wired and Tested
Net 129.95

## ENCLOSURES FOR NEW CLASSIC SERIES

## MODEL 2200 FM STEREO TUNER SEMI-KIT

## - The Completed Kit Does Not Require Alignment



A new aristocrat in Kit Tuners, the Model 2200 features ease of construction, with reliability and simplicity of operation. Some of its many features include: Pre-wired and pre-aligned front-end and 4 stage IF strip A high quality circult board is provided for the stereo demodulator circuit. and the colls supplied are prealigned. The completed kit does not require alignment or adiustments
Precise rotary tuning dial with Ilfuminated numerals; bar-type electron-ray tunin, indicator; stereo defeat switch to eliminate sub-carrier interference. Supert decorator styling with extruded aluminum panel, brushed silver on upper half decorator styling wher extruded lome sensitivity: 3 , bv (IMFM); audio bandwidth: flat and pale gold on lower half. Usable sensitivity: ${ }^{3}$ (IVVFM); audio bandwidth: fat
to $53 \mathrm{KC}, \mathrm{S} / \mathrm{N}$ ratio .55 db : harmonic dist., $0.6 \%$ (IMFM) 9 tubes plus rectifier and tuning eye. Size: $15 \% / \% \mathrm{~W} \times 5 \% \mathrm{Hx} 11 \% \mathrm{~m}^{\circ \mathrm{D}}$. Less cabinet. For 115 V 60 cycles AC. Shps. wt., 12 lbs.
21 'A 2518 wx Model 2200 Semi-Kit
Net 92.50 21 A 2519 wx Above, factopy wired \& tested

Net 119.95

## MODEL 2400 4-TRACK STEREO TAPE DECK KIT

- Records: 4-Track Stereo, 4 Track Mono
- Plays: 4.Track Stereo, 2 and 4 track Mono


For top high-fidellty performance
. Model 2400's many professional features include: a 3 -motor tape transport with electrody. namic breaking; full record and play-back equalization on both $71 / 2$ and $33 / 4$ lps tape speeds; mixing mic and line level controls; fast-acting electron-ray tube level indicators, digital turns counter and automatic end-of-tape stop switch. Easy to assemble components. Speeds: $71 / 2$ and $31 / 4$ ips; Reel Size, 7-inches; Heads: 4 -track erase and 4-track record/play; Signal-tonoise ratio: $45 \mathrm{db}_{;}$Response: $\pm 3 \mathrm{db}$ 30-17.000 cps @ $71 / 2 \mathrm{ips}, \pm 3 \mathrm{db} 30$ $12,000 \mathrm{cps}$ @ $33 / 4 \mathrm{ips}$; wow and flutter: under $0.2 \%$ @ $71 / 2 \mathrm{ips}$, under 0.3 @ $37 / 4$ ips. Size $12 \%$. W $\times 123 / 4 \mathrm{Hx} \times 1 / 2^{\circ *} \mathrm{D}$. Shpg. wt. 25 ibs.
RK-445wx Model 2400 Kit ....... Net 199.95 RK-446WX ADOVe, factory wired and lested

Net $\mathbf{2 6 9 . 9 5}$

## TWO NEW EICO FM MONO RECEIVERS

- Produces Excellent FM Programming For Offices, waiting Rooms, Stores, Restaurants, Etc.

AS LOW AS
12995

## MODEL 2715

MODEL 2716 A

FACTORY WIRED
AND TESTED ONLY


MODEL 2715 Employs Classic Series FM front end and 4 stage IF strip plus an 18 -watt (IHFM music Power) amplifier for glorious high fidelity sound. Provides ceramic phono and tape Inputs; precision rotary tuning dial and bar-type electron-ray tuning indicator. Tuner Response: $\pm 1$ ob 20-15.000 cps Sensitivity: $3 \mu \mathrm{v}$ (30 db quieting); Amplifier: Intermodulation distortion, 2\% @ 14-watts; Harmonic distortion, $0.6 \%$ @ 10 -watts. $0.2 \%$ @ 1 -watt. Response: $\pm 1 \mathrm{db}$ Harmonic distortion, $0.6 \%$ @ 10 -watts. $0.2 \%$ @ -1. watt. Response: eye and $15-40,000 \mathrm{cps}$; Noise -80 do on phono, tape. 8 tubes plus tuning eye and G2-34 rectifler. S
Shpg. wt., 17 lbs.
21 A 2525wx Model 2715 Wired only ........................................................ 129.95
MODEL 2716. FM MOno 18 -watt Receiver with Paging Facility. Same as Model 2715 but with microphone stage and relay for paging or other public address

21 A 2526 WX Model 2716 wired only

## WORLD FAMOUS LINE OF <br> cITATION HI-FI KITS

## CITATION "A" STEREOPHONIC PREAMPLIFIER CONTROL CENTER

- Freq. Response-one to one Million Cycles Per second, $+0-1 / 4$ db . No Measurable Distortion
An advanced professional-type 33 transistor preamplifier which meets the requirements of audlo perfectionists. Uses heavy duty modular construction for both strength and ease of assembly. Specifications: frea. response: $+0,-1 / 4 \mathrm{dt}$ $\cos$ to 1 mc .: harmonic distortion unmeasurable at 2 -volts output. hum and noise, 70 db below rated output at 5 mv .; Professional Step-type Tone controls for each channel electrically out of circuit in flat position. Other controls include: 2-power switches, 6-position Function switch, 5 .position Mode selector; variable 8lend control, separate Turnover and Roll-off, to set individually; Batance Control, Contour Switch. Channel Reverse switch; Low Cut fllter, High frequency Filter, Tape Monltor switch; Center Channel output, stereo Headphone jack, and push. button selector switch. Four switched AC convenience outlets. Grown and gold panel. Size: $147 / 8 W \times 55 / 4=7 \times$ D. For $110-120$ volts, $50 / 60$ cycles AC. Shpg. wt. 30 ths, less case.
21 A 4202 WX Kit
21 A 4203 WX Above Wired
31 A 4236 W WCA Walnut Case, wt, 3 lbs

harman -kandon citation I kit Stereo Preamplifier Control Center
A high quality stereo-monaural preamp-control unit. Inputs: 12 (six pairs) - Aux, Tape Amp, Tuner, Iow-level phono, high-level phono. Outputs: 5-Two main preamp outputs plus a third channel output. two tape outputs for recording. Mode selector chooses output types: stereo Blend $A+8$. Channel $A$ Channel stereo Reverse IM DISTORTION. Less than $0.05 \%$ at 2 volts. RESPONSE: to $\pm .5 \mathrm{db} 5-80,000 \mathrm{cps}$. Tubes: $9 . E C C 83 / 12 \mathrm{AX7}$ plus silicon rect. POWER REQUTREMENTS: 110 V AC, SIZE, $14 \%$ WXI2 $1 / 40 \times 66^{* H}$. Shpg. wt 20 lbs. Gold \& Charcoal orown finish.
21 4204wxkit
21 4205wx Wired
21 A 4224W inalnut Enclosure

Net 269.95
Net $\mathbf{3 5 0 . 9 5}$ Net 350.00
Net 19.95


## CITATION IIIX

 FM STEREO TUNER KITFamous Citation tuner 111 now has built-in muttipiex, Outstanding sensitivity is fea. tured with a compretely assembled and prealigned front end and converting if sections. Maximum sulectivity is assured by Nuvistor Front end followed by three wide band IF stages. Senstivity 0.65 microvolts for 20db quleting. Frequency response $\pm$ $0.5 d b, 1.52,000$ CPS; Dual cascaded gated beam limiters; Foster.Seeley discrim. nator Selectivity: 240 kc bandwidih 6 db down. Hum: 650 below $100 \%$作 modulation. Stereo Separation,
21 A 4208 Wx Citation IIIX Stereo Tuner Kit
Net 230.00
$2 t$ A 4209wx Citation $111 x$ Stereo Tuner wired .............................. Net 315.00
21 A 4210wx Citation III FM Tuner Kit with multiplex output jack. Shpg. wi., 32 Ibs.
21 - $4211 w x$
4211wx Citation III wired with Multiplex output jack Net 229.95 21 A 4224W WCI walnut enclosure for Citation III and IIIX ........ Net 29.95 21 A $4212 W \mathrm{X}$ Citation IHI MA FM Stereo Adapter wired.

Shpg. wt., 3 lbs.
Net 79.95


## harman-kardon citation il kit

## 120 Watt Stereophonic Hi-Fi Power Amplifler

Two ultra-finear type amplifiers deliver 60 watts each channel or a total of 120 monaural. Frequency Response: $18.40,000 \mathrm{cps}+0$ to $-1.0 \mathrm{db} \mathrm{O}_{60} 6 \mathrm{watts}, 2 \cdot 80,000$ cps $+0-1.0 \mathrm{db}$ @ watt; 1 M Distortion Less than $5 \%$ @ 60 watts, Harmonic Distortion: Less than $0.5 \%$. $20-20,060$ cDs @ 60 watts, Outpuf 4, 8, 16 ohms. Tubes: 6.12872. 4-KT88, plus 4-Silicon Diodes \& 1 Selenium rect. Dimensions: $163 / 4 \mathrm{Wx9H} 11142^{\circ} \mathrm{D}$. Charcoal Brown \& Gold Finish. Shpg. wt., 60 lbs.
21 A 4206wx kit
NO MONEY DOWN

Net 179.95
21 A 4207wx Wired
Net 249.95
21 A 4225w Charcoal Brown Metal Enclosure
Nel 7.95

## HARMAN-KARDDN CITATION IV STERED PREAMPLIFIER KIT

A compact stereo preamp with many features of CITATION I. Response: $\pm 1 / 2 \mathrm{db}$ $5.80,000$ ups. Distortion: $.05 \%$ at 2 volts, For $110-120 \mathrm{~V}$ AC, $50 / 60$ cycles. Size: $147 / 0 \times 11 \times 5^{5 / 8 .}$. Shog. wt., 20 lbs., less case.
21 A $4213 W X$ Kit
21 A $4214 W X$ Above, Wired
21 A 4224K Walnut case for above, 3 lbs.
Net 119.95
Net 189.95

## HARMAN-KARDON CITATION V BASIC STEREO POWEF AMPLIFIER KIT

Conservatively rated at 40 watts per channel. with 80 watts stereo output. Less than $0.5 \%$ harmonic distortion at 40 watts. For $110-120 \mathrm{~V} 50 / 60$ cycles. AC. Size: $137 / 0 \times 5 \frac{1}{2} \times 111 / 4^{* \prime}$. Less case. Shpg. wh, 40 Ibs.

## 21 A 4215 WX Kit

Net 119.95
21 A216WX Above, Wired
Net 179.95
21 4217W ACV Metal Case for above, 2 lbs.
Net 7.95

## harman kardon HI-FI STEREO AWARD SERIES

MDOEL FA30XK 30 -WATT FM STERED RECEIYER KIT


Full input and control tacilities make this a highly flexible unit Incorporates a sensitive, stable wide-band FM multiplex tuner especially designed for ease of construction. FM stereo indicator light. Solid 30 -watt power amplifler. 6 stereo inputs, 2 lape recorder outputs. Features illuminated push-button on/off switch, defeatable AFC and variable blend control. Specifica. tions: Audio: 15 watts per channel (music power), Frequency response: $15 \cdot 70,000 \mathrm{cps}+1 \mathrm{db}$, ganged bass and treble tone controls, Tuner: sensitivity 3.5 microvolts (IHFM) Less than $1 / 2 \%$ distortion Easy to build instruction book and functional packaging. For $110-120 \mathrm{~V} 50 / 60$ cycles AC . Size: $15 \mathrm{y} / 4 \mathrm{~W} \times 5 \% \mathrm{Hx}$ 11 pachod. Shpg. wt. 35 los.

ENCLOSURES FOR AWARD SERIES KITS
Stock No.
Modet No. Finish Use For wt. 21 A 4220 Wx
21 A 4221wx
21 A $4222 w$
21 A 4223WX
WW50 Walnut

A30K. A50K 5 lbs F50xK
Cx50 Metal Sameas above Cx80 Metal FA30XK Ww80 Walnut FA30XK

Net 169.95

| $21 / 2 \mathrm{lbs}$. |
| :--- | :--- |
| $\begin{array}{l}12.95 \\ 4 \\ \text { 10s. } \\ 12.95\end{array}$ |



## MODEL F5OXK FM STEREO

 MULTIPLEX TUNER KIT cuitry, 3 IF stages, and triode grounded grid RF stage provide extended sensitivity and Freq. response. Sensi tivity. IHFM $2.8 \mu \mathrm{v} @ 20 \mathrm{db}$ S/N. Freq. Response $10-52, \mathrm{co0} \mathrm{cps} \pm 1 \mathrm{db}$. Built-in multiplez and tuning meter. Brushed gold panel. Size: $151 / 4 W \times 5 \% / i s \mathrm{H} 12^{\prime \prime} \mathrm{D}$. Shpg. Wt., 22 los.Less case.21 A 42i'swx No Money Down Net 129.95

## MDOEL A50K 50-WATT

## INTEGRATEO STERED AMPLIFIER KIT

## Model A50x is a 25 watt per channel music power

 output. Features center channel gain control, blend control with lamps and front panel stereo headphone jacks. 9 tubes. Frea. Response $12 \cdot \mathbf{7 0 , 0 0 0} \mathrm{cps} \pm 1 \mathrm{db}$. Hum - 85 db . High level input sensitivity, $200 \mu \mathrm{v}$., 12 Stereo Inputs. 2 Mag. phono, 2 tape head, 2 crystal phono, 2 tuner 2 tape amp., 2 aur. 2 tape monitor. phono, 2 tuner 2 tape amp., 2 aur is 2 tape monitor.Brushed gold front panel. Size: $154 / 4 W \times 5$ Kot $\mathrm{H} 12^{\prime \prime} \mathrm{D}$. Brushed gold front panel.
Shpg. wt., 32 lbs. Less case. 21 A 4219wx No Money Down

## MODEL A30K 30.WATT

## INTEGRATED STEREO AMPLIFIER KIT

Model AJok features continuously varjable blend control to fill the "hole in the middle," ganged bass and treble controls. Has 9 tubes plus twe silicon rectifiers. Freq. Response: $15-70,000 \mathrm{cps} \pm 1 \mathrm{eb}$. Hum -80 db . Excellent $8+$ regulation by silicon diode power supply. Music power oulput, 15 watts per rhannel. 8 stereo inputs. Power consumption, 90 watis. 8 rushed gold
 25 lbs Less case.
21 A 4226 WX
No Money Down
Net 79.95

Chassis are of one piece construction with gussets spot-welded to the bottom flanges for additional strength. Steel chassis are made of No. 20 gauge cold rolled steel, except * are no. 16 gauge. Steel chassis are finished in elther Black Wrinkle " $8 W^{\prime \prime}$ ') or Zinc Plated. Aluminum chassis made of No. 18 gauge ( .040 ) aluminum except are No. 14 gauge (.064) and have a Natural Finish.

| ZINC | ED |  |  | LE |  |  | NET |  | ALUMIN | CHASSIS |  |  | I |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Size <br> DIWyH" | Stock |  | Stock No. | Type L |  | 1.24 | $\begin{aligned} & 25 \\ & 49 \end{aligned}$ | $\begin{aligned} & 50 . \\ & 99 \end{aligned}$ | Stock No. | Type 1 | Lbs. | 1.24 | $\begin{aligned} & 25 \\ & 49 \end{aligned}$ | $\begin{aligned} & 50 . \\ & 99 \end{aligned}$ |
| $4 \times 6 \times 11 / 2$ | MC. 318 | CH-436 | MC-319 | CH-4368W | $3 / 4$ | 1.22 | 1.12 | 1.01 | MC. 164 | ACH-436 | 1/4 | 1.07 | . 98 | . 88 |
| $4 \times 6 \times 2$ | MC-308 | CH-431 | MC. 309 | CH.4318W | 1 | 1.27 | 1.17 | 1.05 | MC-159 | ACH-431 | $1 / 4$ | 1.25 | 1.16 | 1.04 |
| $4 \times 6 \times 3$ | MC-310 | CH-432 | MC-311 | CH-4328W | 1 | 1.22 | 1.12 | 1.01 | MC-160 | ACH-432 | $1 / 4$ | 1.30 | 1.20 | 1.08 |
| 4x8x2 | MC-320 | CH-437 | MC- 321 | CH-4378W | 1 | 1.27 | 1.17 | 1.05 | MC-165 | ACH-437 | 3/8 | 1.11 | 1.02 | . 92 |
| 4x17x3 | MC-262 | CH-408 | MC-263 | CH-4088W | 21/4 | 1.76 | 1.62 | 1.46 | MC-136 | ACH-408 | 1 | 2.31 | 2.12 | 1.91 |
| $5 \times 7 \times 2$ | MC. 298 | CH-426 | MC-299 | CH-4268W | 1 | 1.22 | 1.12 | 1.01 | MC. 154 | ACH-426 | 1/4 | 1.07 | . 98 | . 88 |
| $5 \times 7 \times 3$ | MC-302 | CH-428 | MC. 303 | CH-4288W | $11 / 4$ | 1.27 | 1.17 | 1.05 | MC-156 | ACH-428 | $1 / 4$ | 1.47 | 1.35 | 1.21 |
| $5 \times 10 \times 3$ | MC. 248 | CH-401 | MC-249 | CH-4018W | $11 / 2$ | 1.52 | 1.39 | 1.25 | MC-129 | ACH-401 | $3 / 4$ | 1.49 | 1.37 | 1.23 |
| $5 \times 13 \times 3$ | MC-304 | CH-429 | MC. 305 | CH-4298W | 2 | 1.86 | 1.71 | 1.54 | MC-157 | ACH-429 | 3/4 | 1.76 | 1.62 | 1.46 |
| 54/2x91/2×11/ | MC-246 | CH-400 | MC-247 | CH-400BW | 1 | 1.08 | . 99 | . 90 | MC-128 | ACH-400 | 1/2 | 1.30 | 1.20 | . 08 |
| $6 \times 14 \times 3$ | MC. 250 | CH-402 | MC-251 | CH-4028W | 21/2 | 1.76 | 1.62 | 1.46 | MC. 130 | ACH-402 | 1 | 2.52 | 2.31 | 2.08 |
| 6x17x3 | MC-314 | CH-434 | MC- 315 | CN-434BW | 4 | 2.11 | 1.93 | 1.74 | MC-162 | ACH-434 | 1 | 2.65 | 2.43 | 2.19 |
| 7×7×2 | MC-252 | CH-403 | MC-253 | CH-4038W | 11/4 | 1.27 | 1.17 | 1.05 | MC. 131 | ACH-403 | $1 / 2$ | 1.30 | 1.20 | 1.08 |
| 7×9x2 | MC-254 | CH-404 | MC-255 | CH-4048W | $11 / 2$ | 1.52 | 1.39 | 1.25 | MC-132 | ACH-404 | $1 / 2$ | 1.36 | 1.25 | 12 |
| $7 \times 11 \times 2$ | MC-256 | CH-405 | MC-257 | CH-4058W | $17 / 8$ | 1.57 | 1.44 | 1.30 | MC. 133 | ACH-405 | $3 / 4$ | 1.49 | 1.37 | 1.23 |
| $7 \times 11 \times 3$ | MC. 296 | CH-425 | MC-297 | CH-425BW | 21/4 | 1.67 | 1.53 | 1.38 | MC-153 | ACH-425 | 7/8 | 1.61 | 1.48 | 1.33 |
| 7x12x3 | MC-312 | CH-433 | MC-313 | CH-4338W | 21/2 | 1.71 | 1.57 | 1.41 | MC. 161 | ACH-433 | 7/6 | 1.79 | 1.65 | 1.48 |
| 7x13x2 | MC-258 | CH-406 | MC-259 | CH-4068W | 2 | 1.67 | 1.53 | 1.38 | MC-134 | ACH-406 | 3/4 | 1.61 | 1.48 | 1.33 |
| $7 \times 15 \times 3$ | MC-260 | CH. 407 | MC. 261 | CH-4078W | $23 / 4$ | 1.96 | 1.80 | 1.62 | MC-135 | ACH-407 | 1 | 2.83 | 2.60 | 2.34 |
| $7 \times 17 \times 3$ | MC-264 | CH-409 | MC. 265 | CH-4098W | 31/8 | 2.16 | 1.98 | 1.79 | MC-137 | ACH-409 | 11/2 | 2.79 | 2.56 | 2.30 |
| $8 \times 10 \times 21 / 2$ | MC. 328 | CH-441 | MC-329 | CH-4418W | 21/2 | 1.67 | 1.53 | 1.38 | MC. 167 | ACH-441 | 1 | 1.65 | 51 | 1.36 |
| $8 \times 12 \times 3$ | MC-306 | CH-430 | MC-307 | CH.4308W | $21 / 2$ | 1.96 | 1.80 | 1.62 | MC-158 | ACH- 430 | 1 | 2.15 | 1.97 | 1.77 |
| $8 \times 17 \times 2$ | MC-266 | CH-410 | MC. 267 | CH-4108W | $23 / 4$ | 1.96 | 1.80 | 1.62 | MC. 138 | ACH. 410 | 116 | 2.83 | 2.60 | 2.34 |
| $8 \times 17 \times 3$ | MC. 268 | CH.411 | MC-269 | CH-4118W | 54/4 | 2.16 | 1.98 | 1.79 | MC-139 | ACH-411 | $11 / 2$ | 2.94 | 2.70 | 2.43 |
| $81 / 2 \times 15 \times 3$ | MC. 300 | CH-427 | MC-301 | CH-4278W | 3 | 2.25 | 2.07 | 1.86 | MC. 155 | ACH-427 | $11 / 4$ | 2.85 | 2.62 | 2.36 |
| 10x12x3 | MC. 270 | CH-412 | MC-271 | CH-4128W | $23 / 4$ | 2.11 | 1.93 | 1.74 | MC-140 | ACH-412 | $11 / 4$ | 2.63 | 2.41 | 2.17 |
| $10 \times 14 \times 3$ | MC-272 | CH-413 | MC-273 | CH.4138W | 31/4 | 2.18 | 2.02 | 1.82 | MC-141 | ACH-413 | $11 / 4$ | 3.33 | 3.06 | 2.75 |
| $10 \times 17 \times 2$ | MC-274 | CH-414 | MC-275 | CH-414BW | $31 / 4$ | 2.25 | 2.07 | 1.86 | MC-142 | ACH-414 | 14 | 3.19 | 2.93 | 2.64 |
| 10x17x3 | MC-276 | CH-415* | MC. 277 | CH-4158W* | 9 | 2.55 | 2.34 | 2.11 | MC-143 | ACH-415* | $17 / 6$ | 3.58 | 3.28 | 2.95 |
| 10x17x4 | MC. 278 | CH-416* | MC. 279 | CH-4168W* | 71/2 | 2.86 | 2.61 | 2.35 | MC. 144 | ACH-416* | 2 | 4.12 | 3.78 | 3.40 |
| 10x17x5 | MC-324 | CH-439* | MC-325 | CH-4398W* | $81 / 2$ | 3.43 | 3.15 | 2.83 |  |  |  |  |  |  |
| 10x23x3 | MC. 316 | CH-435* | MC. 317 | CH-4358W* | 10 | 3.23 | 2.97 | 2.67 | MC. 163 | ACH-435* | $21 / 2$ | 5.26 | 4.83 | 4.35 |
| $11 \times 17 \times 2$ | MC-280 | CH-417* | MC-281 | CH-4178W* | 54/4 | 3.09 | 2.83 | 2.55 | MC. 145 | ACH-417* | $13 / 4$ | 3.41 | 3.13 | 2.82 |
| 11x17x3 | MC-282 | CH-418* | MC-283 | CH-4188W* | 64/4 | 3.38 | 3.10 | 2.79 | MC-146 | ACH-418* | 2 | 4.18 | 3.84 | 3.46 |
| $12 \times 17 \times 2$ | MC-284 | CH-419* | MC-285 | CH-4198W* | 5 | 2.35 | 2.16 | 1.94 | MC-147 | ACH-419* | 17/6 | 3.73 | 3.43 | 3.09 |
| $12 \times 17 \times 3$ | MC-286 | CH.420* | MC-287 | CH-4208W |  | 2.84 | 2.6 | 2.35 | MC-148 | ACH-420 | 21/8 | 4.42 | 4,06 | 3.65 |
| 12x17x4 | MC-288 | CH-421* | MC-289 | CH-4218W* | 84/2 | 3.09 | 2.83 | 2.55 | MC-149 | ACH-421* | $27 / 8$ | 4.88 | 4.48 | 4.03 |
| $13 \times 17 \times 2$ | MC-290 | CH-422* | MC. 291 | CH-4228W* | 6 | 3.38 | 3.10 | 2.79 | MC-150 | ACH-422* | $17 /$ | 3.94 | 3.62 | 3.26 |
| $13 \times 17 \times 3$ | MC-292 | CH-423* | MC-293 | CH-4238W* | 7 | 3.92 | 3.60 | 3.24 | MC-151 | ACH.423* | $21 / 6$ | 4.69 | 4.31 | 3.88 |
| $13 \times 17 \times 4$ | MC. 294 | CH-424** | MC-295 | CH-4248W* | 10 | 4.46 | 4.09 | 3.68 | MC-152 | ACH-424* | $21 / 2$ | 5.37 | 4.93 | 4.44 |
| $13 \times 17 \times 5$ | MC-326 | CH-440* | MC. 327 | CH-4408W* | 11 | 5.05 | 4.63 | 4.17 |  |  | 3 |  | 9.71 |  |
| 17x17×4 | MC-322 | CH-438* | MC. 323 | CH.4388W* | 13 | 6.37 | 5.85 | 5.26 | MC-166 | ACH-438* | 3 | 10.57 | 9.71 | 8.74 |

## BOTTOM PLATES

for use with above chassis. Have holes to match chassis and have 4 pressed dimples. Steel plates No. 20 gauge in Black Wrinkle or
gauge (.040) natural flnish. Avg. shpg. wt., 2 lbs

| ZINC PLATED |  |  | BLACK WRSNKLE |  | NET |  |  | ALUMINUM |  | NET |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FIts Chassis | Stock No. | Type | Stock No. | Type | 1-49 | $\begin{aligned} & 50 . \\ & 99 \end{aligned}$ | $\begin{aligned} & 100 \\ & 149 \end{aligned}$ | Stock No. | Tуpe | 1.49 | $\begin{aligned} & 50- \\ & 99 \end{aligned}$ | $\begin{aligned} & 100 . \\ & 149 \end{aligned}$ |
| $4 \times 6{ }^{\prime \prime}$ | MC. 224 | BP.426 | MC. 225 | BP-4268W | . 49 | . 45 | . 40 | MC-120 | ABP. 426 | . 85 | 78 | 70 |
| $4 \times 8$ " | MC-232 | BP. 430 | MC-233 | BP-4308W | . 49 | . 45 | . 40 | MC-124 | ABP-430 | . 85 | . 78 | . 70 |
| 4×17" | MC-200 | BP-408 | MC-201 | BP.4088W | . 49 | . 45 | . 40 | MC. 108 | ABP-408 | 1.29 | 1.19 | 1.07 |
| $5 \times 7{ }^{\prime \prime}$ | MC-218 | BP. 423 | MC. 219 | BP-4238W | . 49 | . 45 | . 40 | MC. 117 | ABP-423 | . 85 | . 78 | . 70 |
| $5 \times 10^{\prime \prime}$ | MC. 186 | BP-401 | MC-187 | 8P-401BW | . 54 | . 49 | . 44 | MC-101 | ABP. 401 | . 85 | . 78 | . 70 |
| $5 \times 13^{\prime \prime}$ | MC-220 | BP-424 | MC-221 | BP-4248W | . 78 | . 72 | . 85 | NC-118 | ABP 424 | . 97 | . 89 | . 80 |
| $51 / 2 \times 91 /{ }^{\prime \prime}$ | MC-184 | BP-400 | MC-185 | BP.400BW | .49 | . 45 | .40 | WC. 100 | ABP-400 | . 85 | . 18 | . 70 |
| $6 \times 14^{\prime \prime}$ | MC-188 | BP-402 | MC-189 | BP.4028W | 73 | . 67 | . 60 | MC-102 | ABP. 402 | 1.29 | 1.19 | 1.07 |
| $6 \times 17^{\prime \prime}$ | MC-228 | BP-428 | MC-229 | BP-4288W | . 93 | . 85 | . 76 | MC. 122 | ABP-428 | 1.33 | 1.22 | 1.10 |
| $7 \times 7{ }^{\prime \prime}$ | MC. 190 | BP.403 | MC-191 | BP-4038W | . 54 | . 49 | . 44 | MC-103 | ABP-403 | . 88 | 81 | .73 |
| $7 \times 9^{\prime \prime}$ | MC-192 | BP.404 | MC. 193 | BP-4048W | . 59 | . 54 | . 49 | MC-104 | ABP. 404 | . 94 | 86 | . 77 |
| $7 \times 11^{\prime \prime}$ | MC-194 | BP-405 | MC-195 | BP-4058W | . 49 | . 45 | . 40 | MC. 105 | ABP 405 | 1.04 | . 95 | .85 |
| $7 \times 12$ " | MC-226 | 8P-427 | MC. 227 | BP.427BW | . 98 | . 90 | . 81 | MC. 121 | ABP-427 | 1.12 | 1.03 | . 93 |
| $7 \times 13^{\prime \prime}$ | MC-196 | BP. 406 | MC-197 | BP-406BW | . 78 | . 70 | . 63 | MC-106 | ABP-406 | 1.29 | 1.19 | 1.07 |
| $7 \times 15$ " | MC. 198 | 6P-407 | MC-199 | BP.4078W | . 8 | 81 | 73 | MC-107 | ABP.407 | 1.29 | 1.19 | 1.07 |
| $7 \times 17{ }^{\prime \prime}$ | MC-202 | BP-409 | MC-203 | BP.4098W | . 93 | . 85 | . 76 | MC-109 | ABP-409 | 1.33 | 1.22 | 1.10 |
| $8 \times 10^{\prime \prime}$ | MC-238 | 8P-433 | MC. 239 | BP.433BW | . 98 | . 90 | .81 | MC-127 | ABP-433 | 1.12 | 1.03 | . 93 |
| $8 \times 12^{\prime \prime}$ | MC-222 | 8P-425 | MC. 223 | 8P-425BW | 1.13 | 1.03 | . 93 | MC-119 | ABP-425 | 1.29 | 1.19 | 1.07 |
| $8 \times 17^{\prime \prime}$ | MC. 204 | BP-410 | MC-205 | BP.410BW | . 93 | . 85 | . 76 | MC. 110 | ABP-410 | 1.50 | 1.38 | 1.24 |
| $81 / 2 \times 15^{\prime \prime}$ | MC-236 | BP-432 | MC-237 | BP.432BW | 1.42 | 1.30 | 1.17 | MC. 126 | ABP-432 | 2.36 | 2.17 | 1.95 |
| $10 \times 12^{\prime \prime}$ | MC-206 | 6P. 412 | MC-207 | BP-412BW | . 93 | . 85 | . 76 | MC. 111 | ABP-412 | 1.47 | 1.35 | 1.21 |
| $10 \times 14^{\prime \prime}$ | MC-208 | 8P-413 | MC-209 | 8P-4138W | . 98 | . 90 | . 81 | MC-112 | ABP-413 | 1.34 | 1.23 | 1.11 |
| $10 \times 17^{\prime \prime}$ | MC-210 | 8P-414 | MC-211 | 8P-414BW | 1.22 | 1.12 | 1.01 | MC-113 | ABP. 414 | 1.69 | 1.55 | 1.39 |
| $10 \times 23^{\prime \prime}$ | MC-230 | BP-429 | MC-231 | BP.4298W | 1.96 | 1.80 | 1.62 | MC. 123 | ABP. 429 | 2.50 | 2.29 | 2.06 |
| $11 \times 17^{\prime \prime}$ | MC-212 | 8P-418 | MC-213 | BP-418BW | 1.27 | 1.17 | 1.05 | MC-114 | ABP. 418 | 2.12 | 1.94 | 1.75 |
| $12 \times 17^{\prime \prime}$ | MC. 214 | 8P-419 | MC-215 | 8P.419BW | 1.32 | 1.21 | 1.09 | MC. 115 | ABP-419 | 2.23 | 1.98 | 1.78 |
| $13 \times 17^{\prime \prime}$ | MC-216 | BP-422 | MC-217 | BP-4228W | 1.42 | 1.30 | 1.17 | MC. 116 | ABP. 422 | 2.36 | 2.17 | 1.95 |
| $17 \times 17^{\prime \prime}$ | MC-234 | 8P-431 | MC. 235 | BP-4318W | 2.06 | 1.89 | 1.70 | MC-125 | ABP-431 | 2.52 | 2.31 | 2.08 |

WALL SPEAKER BAFFLE
Constructed of "18 gauge cold rolled steel to eliminate splitting, warping, or cracking. Interior has special under coating to eliminate metallic sound Mounting bracket for hanging on wall Brown hammertone or buff. enamel.

Size: $A-111 / 2 \times 91 / 2 \times 7^{7} ; B^{B} 15 \frac{1}{2} \times 131 / 2 \times 934^{4}$. Shpg, wts., WSE-8-5 lbs., WSE-12-8 lbs.

Buff Hammer. Mfr Spl
Enamel tone Type Size Size 1-24 2549 Net $50-99$ $\begin{array}{llllllll}\text { MC-469 MC-43 } & \text { WSB-8 } & \text { A } & 8^{\prime \prime} & 5.98 & 5.49 & 4.94\end{array}$

## UNIVERSAL METER CASES



A new meter case that can accom modate either a $2^{\prime \prime \prime}$ or $3^{\prime \prime}$ meter Center hole for $2^{\prime \prime}$ meter increases to $3^{\prime \prime}$ meter hole by simply remov ing a knock-out. 4 1 , $\times 41 / 2 \times 41 / 4^{\prime \prime}$. Sup plied with two $1 / 2^{\prime \prime}$ dia. knockouts or feed through insulators or Vol ume Controls. In $\% 20$ gauge stee gauge (.040) Aluminum-Natural Finish. Average shipg wt., 3/4 lb.

# STOCK TYPE MATERIAL_LBS._149 50.99_100-149 $\begin{array}{lllllll}\text { MC. } 353 \text { SPC-23 Steel } & 3.4 & 1.37 & 1.26 & 1.13\end{array}$ 

 U1 179 ASPC-23 Aluminum 1.34| MINIATURE ALUMINUM |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OPEN-END CHASSIS |  |  |  |  |  |  |
| Ideal for small amplifiers, oscillators, and miniature |  |  |  |  |  |  |
| assembiles. Made of 18 gauge ( .040 ) aluminum, natural finish. |  |  |  |  |  |  |
| Size | Stock |  |  |  |  |  |
| DxWxH" | No. | Type | L |  |  | 99 |
| 25/4×27/4×11/4 | MC. 168 | ACH-1350 | 1/4 | . 39 | . 36 | . 32 |
| $17 / 4 \times 31 / 8 \times 1$ | MC-169 | ACH-1351 | 1/4 | . 43 | . 40 | . 38 |
| $31 / 4 \times 41 / 2 \times 2$ | MC-170 | ACH-1352 | 1/4 | . 45 | .41 | . 37 |
| $23 / 4 \times 41 / 8 \times 1$ | MC-171 | ACH-1353 | $1 / 4$ | . 45 | .41 | . 37 |
| $37 / 4 \times 4$ /0x11/2 | MC-172 | ACH-1354 | 1/4 | . 45 | .41 | . 37 |
| $3 \times 61 / 6 \times 11 / 4$ | MC-173 | ACH-1355 | 1/4 | . 54 | . 49 | . 44 |
| $53 / 4 \times 47 / 8 \times 14 / 2$ | MC-174 | ACH-1356 | 1/4 | . 57 | . 52 | . 47 |
| $4 \times 31 / 8 \times 1$ | MC-175 | ACH-1357 | $1 / 2$ | . 45 | .41 | . 37 |
| $4 \times 41 / 8 \times 1$ | MC. 176 | ACH-1358 | 1/2 | . 49 | . 45 | . 40 |
| $4 \times 54 / 6 \times 1$ | MC-177 | ACH-1359 | 1/2 | . 53 | . 49 | . 44 |
| 4×61/6x1 | MC. 178 | ACH-1360 | $1 / 2$ | . 57 | . 52 | . 47 |

MINIATURE UTILITY

## CABINETS WITH ATTACHED CHASSIS

Small 20 gauge steel cabinets with a chassis spot welded to front panel. Front and rear panels removable Finished in black wrinkle Average shpg. wt., $21 / 4 \mathrm{lbs}$



## HEAVY DUTY CHASSIS <br> WITH TOP PLATE <br> Made of 16 gauge steel. Top <br> and bottom edges flanged <br> in on four sides. Top plate <br> wrinkle or zinc plated finish. Shpg. wis., RCH-415 and RCH $416=5 \mathrm{lbs} ., \mathrm{RCH}-423=9 \mathrm{lbs} ., \mathrm{RCH}-424=10 \mathrm{lbs}$

$$
\left.\begin{array}{lcllll} 
& \begin{array}{c}
\text { Stock } \\
\\
\\
\\
\text { No. }
\end{array} & \text { Stock } \\
\text { No. }
\end{array}\right] \quad \text { NET }
$$

Size
$0 \times W \times H$ $\begin{array}{lllllll}10 \times 17 \times 3 & \text { RCH-415 } & \text { MC. } 341 & \text { NC. } 342 & 4.72 & 4.34 & 3.91\end{array}$ $\begin{array}{lllllll}10 \times 17 \times 4 & \text { RCH } & 416 & \text { MC- } 343 & \text { MC. } 344 & 5.24 & 4.81 \\ 13 \times 17 \times 3 & \text { RCH-423 } & \text { MC. } 345 & \text { MC-346 } & 4.95 & 4.54 & 4.09\end{array}$ $\begin{array}{lllllll}13 \times 17 \times 4 & \text { RCH } & 424 & \text { MC. } 347 & \text { MC. } 348 & 6.12 & 5.62\end{array} 5.06$ REPLACEMENT TOPS
Shpg. wis., RTC $-415=2$ lbs., RTC $-423=3 \mathrm{lbs}$ $\begin{array}{lllllll}10 \times 17 & \text { RTC-415 } & \text { MC-349 } & \text { MC-350 } & 1.88 & 1.71 & 1.54 \\ 13 \times 17 & \text { RTC-423 } & \text { NC-351 } & \text { MC-352 } & 2.25 & 2.07 & 1.87\end{array}$

## WALL SPEAKER MOUNTING PLATE

Designed for simple mounting of with wSE speaker baffle to standard $2 \times 4^{\circ}$ and W $\$ 8.12$ Wall $4 \times 4^{\prime \prime}$ electrical outlet boxes. Bracket Speaker gaffles) has two threaded holes for easy mounting to baffie. Made of No. 16 gauge cold rolled steel and finished in gray primer.
Stech : Type $1.9 \quad 10.14 \quad 15.19$
MC-603

## (1) pramurail <br> STANDARD AMPLIFIER FOUNDATIONS <br> Designed to meet the most critical requirements. Consists of regular chassis with ruggedly constructed metal covers. Top Cover has perforations, rounded corners, and Is $6^{\prime \prime}$ high. Finished in Gray Wrinkle. Chassis constructed of one piece with corners spot-welded. Finished in Black Wrinkle. <br> 

Standard PRECISION BUILT METAL HOUSINGS

| Stock | Chassis |  |  | NET |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Type | DXWxH | Lbs. | 1.24 | 25.49 | 50-99 |
| MC. 402 | AF. 510 | $5 \times 10 \times 3$ | 9 | 4.95 | 4.54 | 4.69 |
| MC. 403 | AF-615 | $6 \times 14 \times 3$ | 10 | 5.73 | 5.26 | 4.73 |
| MC. 408 | AF. 1017 | 10x17x3 | 13 | 7.69 | 7.06 | 6.35 |
| MC. 409 | AF-1317 | 13×17x3 | 15 | 9.15 | 8.49 | 7.64 |



## ALUMINUM MINIBOXES

Two piece case made of \#16 gauge ( 0.51 ) aluminum Each section forms 3 sides. Flanges assure proper shielding. Avallable in variety of sizes for popular electronic devices and construction projects. Avallable in natural finish or grey hammertone.
matural aluminum

| Stock No. | Size | NET |  |  |  |  | NET |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 50. | k |  |  | 100 |
|  | 1×W× ${ }^{\text {H" }}$ |  | 1-49 | 99149 |  |  | 1.49 .99 | 149 |
| MC-358 | $23 / 4 \times 21 / 6 \times 15 / 4$ | 1/4 AMC. 1000 | 69 | . 63.55 | MC-375 | PMC-1000 | . 77.71 | 64 |
| MC. 359 | 31/4x21/ax156 | $1 / 4$ AMC-1001 | 69 | . 63.56 | MC. 376 | PMC. 1001 | 77.71 | . 64 |
| MC-360 | $4 \times 21 / 2 \times 15 / 8$ | 1/2 AMC-1002 | . 72 | . 67.60 | MC-377 | PMC-1002 | 81.75 | . 67 |
| MC-361 | $4 \times 21 / 4 \times 21 / 4$ | 3/8 AMC-1003 | . 94 | . 86.77 | MC-378 | PMC-1003 | 1.04 .95 | 85 |
| MC-362 | $5 \times 21 / \times 21 / 4$ | 3/1/ AMC-1004 | . 97 | . 89.80 | MC. 379 | PMC:1004 | 1.07 . 98 | 88 |
| MC. 363 | $5 \times 4 \times 3$ | 1/2 AMC-1005 | 1.15 | 1.05 . 94 | MC. 380 | PMC-1005 | 1.201 .11 | 1.00 |
| MC. 364 | $51 / 4 \times 3 \times 21 / 6$ | $1 / 2$ AMC-1006 | 1.07 | . 98.88 | MC. 381 | PMC-1006 | 1.171 .07 | . 96 |
| MC. 365 | $6 \times 5 \times 4$ | 1 AMC-1007 | 1.36 | 1.251 .12 | MC. 382 | PMC-1007 | 1.501 .38 | . 24 |
| MC. 366 | $7 \times 5 \times 3$ | $3 / 4$ AMC-1008 | 1.53 | 1.401 .26 | MC-383 | PMC-1008 | 1.661 .52 | . 37 |
| MC-367 | $8 \times 6 \times 31 / 2 \quad 1$ | 11/ AMC-1009 | 2.26 | 2.081 .87 | MC. 384 | PMC-1009 | 2.402 .20 | 2.08 |
| MC. 368 | $10 \times 6 \times 31 / 2 \quad 1$ | $11 / 2$ AMC-1010 | 2.82 | 2.592 .33 | MC. 385 | PMC-1010 | 2.982 .71 | 2.47 |
| MC-369 | $12 \times 7 \times 4$ | 13/4 AMC-1011 | 3.17 | 2.922 .63 | MC-386 | PMC-1011 | 3.503 .19 | 2.87 |
| MC-370 | $17 \times 5 \times 4$ | 2 AMC-1012 | 3.76 | 3.463 .11 | MC.387 | PMC-1012 | 4.123 .78 | 3.40 |
| MC-371 | 10×2×1\% | $1 / 2$ AMC-1013 | 1.15 | 1.05 . 94 | MC-388 | PMC-1013 | 1.201 .11 | 1.00 |
| MC-372 | $12 \times 21 / 2 \times 21 / 4$ | $1 / 4$ AMC. 1014 | 1.50 | 1.381 .24 | MC-389 | PMC-1014 | 1.621 .48 | 1.33 |
| MC. 373 | $4 \times 2 \times 23 / 4$ | 1/4 AMC-1015 | . 91 | . 85.76 | MC-390 | PMC-1015 | 1.181 .08 | . 97 |
| MC-374 | $41 / 4 \times 21 / 4 \times 11 / 2$ | $1 / 4$ AMC-1016 | . 94 | . 86.79 | MC-391 | PMC-1016 | 1.04 .95 | . 85 |

## SLOPING PANEL CABINETS



These handy cabinets have rounded top corners and a removable front panel. Back of cabinet is perforated and has opening for leads. Constructed of 20 gauge steel. Finished in Grey Wrinkle.

| Stock | Mrr. | size |  | NET |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ne | Tro | HxWxo | Hassis | Lbs. | 1.24 | 25-49 | 50.99 |
| MC-410 | SFC. 500 | $8 \times 8 \times 8$ | 7x7x2 | 5 | 4.80 | 4.41 | 3.97 |
| MC-411 | SFC-501 | $8 \times 10 \times 8$ | 7x9x2 | 7 | 5.33 | 4.90 | 4.41 |
| MC-412 | SFC-502 | $8 \times 14 \times 8$ | $7 \times 13 \times 2$ | 8 | 5.72 | 5.24 | 4.72 |
| MC. 413 | SFC-503 | $9 \times 18 \times 8$ | $7 \times 17 \times 3$ | 10 | 8.21 | 7.54 | 6.79 |
| MC-414 | SFC. 504 | 12×18×12 | 10×17×3 | 14 | 10.49 | 9.63 | 8.67 |

## DELUXE CABINET RACKS

16 Gauge steel cabinet racks. Front vertical corners are rounded and the top and bottom are trimmed with red striped chrome finished moulding. Recessed pianotype hinged door in top. Units marked also have hinged rear door. Louvered sides and rear opening provide ventliation. Panel mounting holes tapped for $10-32$ machine screws. Gussets welded at bottom of rear on types 170 350 for adoltional strength. All are $217 / 4^{\prime \prime}$ wide, $151 / 4^{\prime \prime}$ deep. Finished in either black or gray wrinkle. o/a $=$ overall. BLACK GRAY Stock Ma. MC-473wx MC-474WX MC-475WX MC. 476 WX MC-477WX MC-478WX MC-479WX MC. 480 WX MC. 481 WX MC-482Wx
WP
MC
$M C$
$M C$
$M C$
$M C$
$M C$
$M C$
$M C$

WRINKL Stoch
No.
MC-427WX
MC. 42 BWX

| Mfr. | ola | Panel |
| :---: | :---: | :---: |
| Type | ${ }^{\prime \prime}$ | Space |
| DCR-70 | 81/4 | 7 |
| DCR-80 | 101/2 | 83/4" |
| DCR-100 | 121/4 | 101/2" |
| DCR-120 | 14 |  |
| DCR-140 | $153 / 4$ | $14^{\prime \prime}$ |
| DCR-170 | 191/4 | 1712" |
| DCR-190* | 21 | 191/4" |
| DCR-210* | 223/4 | $21^{\prime \prime}$ |
| DCR-260* | 28 | 261/4 |
| DCR-310 | 331/4 | 3112" |
| DCR-350* | $363 / 4$ | $35^{\prime \prime}$ |

0 c


## PANEL MOUNTED BLOWER

 To fit standard $19^{\circ *}$ wide panel space with permanent type washable filter. Permanently lubricated motor. Motor rating 3000 RPM, 120 watts, 115 V AC at 1.5 amps Ball bearing shaded pole. Supplied with $42^{\prime \prime}$ lead and molded plug. Finished in gray hammertone. Shpg. wi., 14 Ibs.METAL UTILITY CABINETS
Have two removable sides for easy accessibility. Have flanged edges and spot-welded corners. No. 20 ga. steel finished in Black Wrinkle; No. 16 ga . (.051) aluminum in natural aluminum finish. Avg. shpg. wt. of steel cabinets 3 lbs., aluminum $11 / 2 \mathrm{lbs}$. Type No. Is prefaced by "C" for steel and $A C$ for aluminum.

BLACK WRINKLE STEEL
natural aluminum

| $\begin{gathered} \text { Sixe } \\ H \times W \times 0 \end{gathered}$ | Mfr. Type | Stock No. | $\begin{gathered} \text { NET } \\ 1.49^{50-99} \end{gathered}$ |  | $\begin{aligned} & 100 . \\ & 149 \end{aligned}$ | Mfr. Type | $\begin{gathered} \text { Stock } \\ \text { No. } \end{gathered}$ | $1.49^{\mathrm{N}}$ | $50-99$ | $\begin{array}{r} 100- \\ 149 \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4×4×2 | C-442 | MC-392 | 1.03 | . 94 | . 85 | AC. 442 | MC-460 | 1.37 | 1.26 | 1.13 |
| $4 \times 5 \times 3$ | C-453 | MC-393 | 1.22 | 1.12 | 1.01 | AC-453 | MC-461 | 1.51 | 1.39 | 1.25 |
| $5 \times 6 \times 4$ | C-564 | MC-394 | 1.41 | 1.30 | 1.17 | AC-564 | MC-462 | 1.78 | 1.64 | 1.48 |
| 5×9x6 | C-596 | MC-395 | 2.20 | 2.02 | 1.82 | AC-596 | MC-463 | 2.94 | 2.70 | 2.43 |
| $6 \times 6 \times 6$ | C.666 | MC-396 | 1.96 | 1.80 | 1.62 | AC-666 | MC-464 | 2.06 | 1.89 | 1.70 |
| 6x9x5 | C.695 | MC. 397 | 2.20 | 2.02 | 1.82 | AC-695 | MC-465 | 2.94 | 2.70 | 2.43 |
| $7 \times 5 \times 4$ | C-754 | MC-398 | 1.57 | 1.44 | 1.30 |  |  |  |  |  |
| $8 \times 10 \times 10$ | C-8101 | MC-399 | 3.68 | 3.37 | 3.03 |  |  |  |  |  |
| 12x7×6 | C-1276 | MC-400 | 3.09 | 2.83 | 2.55 | AC-1276 | MC-466 | 4.02 | 3.69 | 3.32 |
| $15 \times 9 \times 7$ |  |  |  |  |  | AC-1597 | MC-467 | 5.54 | 5.08 | 4.57 |


BLACK WRINKLE STEEL

[^8] $4 \times 5 \times 3$
$5 \times 6 \times 4$
$5 \times 9 \times 6$
$\qquad$
$6 \times 6 \times 6$
$6 \times 9 \times 5$
$6 \times 9 \times 5$
$7 \times 5 \times 4$ $7 \times 5 \times 4$
$8 \times 10 \times 10$ $8 \times 10 \times 10$
$12 \times 7 \times 6$ $15 \times 9 \times 7$

## SLOPING PANEL UTILITY BOXES

Steel and aluminum sloping panel cabinets with round iop corners and sloping front. For instaliations that require opening in reaf of box. No. 20 gauge steelBlack Wrinkle finish. No, 18 gauge ( 040 ) aluminumnatural aluminum finish. $41 / 2^{\prime \prime} \mathrm{H} \times 41 / 4^{\prime \prime} D$.

BLACK WRINKLE

| TYPE | 1BS. |
| :---: | :---: |
| SPC-1200 | $1 / 4$ |
| SPC-1201 | 1 |
| SPC-1202 | 1 |
| SPC-1203 | $11 / 2$ |
| ALUMINUM |  |
| ASPC-1200 | $1 / 2$ |
| ASPC-1201 | $1 / 2$ |
| ASPC-1202 | $3 / 4$ |
| ASPC-1203 | $3 / 4$ |



MET
$56=9$
$\qquad$

1.48
1.18
1.33
1.51
1.82
1.48
1.68
1.90
2.28

| $N 1$ |  |
| :---: | :---: |
| 51.09 | 100.149 |
| 1.08 | .97 |
| 1.22 | 1.10 |
| 1.39 | 1.25 |
| 1.67 | 1.50 |
| 1.36 | 1.22 |
| 1.54 | 1.39 |
| 1.75 | 1.57 |
| 2.10 | 1.89 |

## STREAMLINED CABINETS

The perfect cabinets for electronic devices not requir. ing excessive depths. Has hinged top front vertical rounded corners and a removable front panel. Sides and back of cabinet are louvered for ample ventilation. Back has opening for leads. Constructed of \#20 gauge steel. has opening for leads. Cons
Finished in Grey Wrinkle.

| Stoch | Mir. |  | Panel |  | Use | MET |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Type | HxWxD | Sire | Lbs. | Chassis | 1.24 | 25.49 | 50-99 |
| MC-415 | HTC-200 | $8 \times 10 \times 8$ | $8 \times 8$ | 6 | $7 \times 7 \times 2$ | 4.95 | 4.54 | 4.09 |
| MC. 416 | HTC-201 | $8 \times 12 \times 8$ | $8 \times 10$ | 61/2 | 7x9x2 | 5.34 | 4.90 | 4.41 |
| MC-417 | HTC-202 | $8 \times 16 \times 8$ | $8 \times 14$ | 11 | 7×13×2 | 6.96 | 6.39 | 5.75 |
| MC. 418 | HTC-203 | $9 \times 7 \times 11$ | $9 \times 15$ | $61 / 2$ | $10 \times 14 \times 3$ | 10.74 | 9.86 | 8.87 |
| MC-49 | . HTC-204 | $12 \times 20 \times 12$ | $12 \times 18$ | 1312 | $10 \times 17 \times 3$ | 12.70 | 11.66 | 10.49 |
| MC. 420 | HTC. 205 | $8 \times 14 \times 8$ | $8 \times 12$ | 71/4 | 7x11×2 | 6.15 | 5.65 | 5.08 |




RELAY RACKS FOR EVERY NEED!
Rigidly constructed of $\$ 16$ gauge steel. The panel mount- and cover the mounting screws. Top and bottom are ing angles are of $: 12$ gauge steel and tapped for 10.32 trimmed with red stripped chrome finished molding. machine screws on universal spacings.Rear doors hung on sturdy slip.jointed hinges and closed by a chrome handle. Bottom accommodates CA- $\mathbf{4 ( 2 ^ { \prime \prime } ) \text { casters. DELUXE }}$
 TYPE-removable vertical corner moldings are rounded assembly. Racks are $22 \mathrm{~W} \times 18^{\prime \prime} \mathrm{D}$.

## ENCLDSED RELAY RACKS FIG. (A)



## TELEPHONE TYPE CHANNEL RELAY RACKS FIG. (B)

Open type racks constructed of $\mathbf{\# 1 2}$ gauge steel finished for $10-32$ machine screws, Racks shipped knocked down in Black Wrinkle. Vertical members and top crossbrace with all necessary bolts for easy assembly. Base punched are Included together. Panel moonting holes are tapped to accommodate type CA-4 casters.


For standard $19^{\prime \prime}$ rack panels designed for multiple Both legs of angle are tapped 10-32, knockouts on sides installation and for use with PREM-O-RAK console of upright for use in ganging frames; rectangular cutout cabinets. Frame 14 gauge steel; tops of front and rear in bottom for leads; doors can be mounted to front or are rounded; frame completely welded throughout; suppled with 4 No. 12 gauge steel panel mounting angles. rear of frame; holes in bottom for $2^{\prime \prime}$ and $3^{\prime \prime}$ casters Finished in grey hammertone
FRAMES FIG. (D1) $22^{\prime \prime} \mathrm{W} \times 22^{\prime \prime} \mathrm{D}$.

| Stock No. | Mfr. No. | Ibs. | Height | Panel Space | 1.9 | 10.14 | 15.19 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MC.627WX | FA-42-22 | 50 | 485/6" | 42x19" | 76.44 | 70.20 | 63.18 |
| MC-628WX | FA.52-22 | 65 | 594/ | $521 / 2 \times 19^{\prime \prime}$ | 82.91 | 76.14 | 68.53 |
| MC-629WX | FA.61-22 | 80 | 677/8 | $611 / 4 \times 19^{\prime \prime}$ | 93.93 | 86.26 | 77.63 |
| MC-630WX | FA. 70.22 | 100 | 765/日" | $70 \times 19^{\prime \prime}$ | 110.19 | 101.20 | 91.08 |
| MC-631WX | FA.77-22 | 110 | $835 /{ }^{\prime \prime}$ | 77×19" | 113.28 | 104.03 | 93.63 |

One piece 16 gauge steel. Attaches to frame by screws on top. Ball cornered. Supplied with louvres. bracket on bottom and held securely by two captive

| Stock No. | Mfr. No. | For Frame | Lbs. | 1.9 | Net 10-14 | 75-19 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MC-609WX | CEP.42-22 | FA.42-22 | 23 | 18.51 | 17.01 | 15.31 |
| MC-610WX | CEP-52-22 | FA. 52-22 | 27 | 22.25 | 20.43 | 18.39 |
| MC-611WX | CEP-61-22 | FA.61-22 | 30 | 24.70 | 22.68 | 20.41 |
| MC.612WX | CEP-70-22 | FA. 70-22 | 33 | 26.56 | 24.39 | 21.95 |
| MC-613WX | CEP-77-22 | FA-77-22 | 35 | 28.71 | 26.37 | 23.73 |

## DOORS

FIG. (D3)
For $22^{\prime \prime}$ deep racks. Made of 16 gauge steel. Mounted either left or right hand by rotating door $180^{\circ}$. Doors supplied blank. Louvres at no additional charge;
specify. Hung on sllp jointed hinges and supplied blank. Lour. Mir. For

| Stock No. |
| :--- |
| MC-614WX |
| MC-615WX |
| MC-616WX |
| MC-617WX |
| MC-618WX |

Lafayette stocks complete Premier metal line. Write or call for quotations on unlisted items.

## STANDARD RACK PANELS

All panels are $19^{\prime \prime}$ wide and
$1 / \mathrm{a}^{\circ}$ thick. Steel panels are
No. 12 gauge and finished in reversible Gray and Black Wrinkle. Aluminum finished in reversible Gray and Black Wrinkle. $\mathrm{H}=$ height
Steel Panels-Reversible Black and Gray Wrinkle

| Stock No. | Mfr. No. | H | Lths. | 1.49 | $\begin{gathered} \text { Net } \\ 50-99 \end{gathered}$ | $\begin{array}{r} 100 . \\ 149 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MC. 553 | RP-119 | $13 / 4{ }^{\prime \prime}$ | 1 | . 83 | . 76 | . 68 |
| MC-554 | RP. 319 | $31 / 2^{\prime \prime}$ | 2 | . 98 | . 90 | . 8 |
| MC-555 | RP. 519 | 51/" | 3 | 1.18 | 1.08 | 9 |
| MC-556 | RP-719 | 7 | 4 | 1.37 | 1.26 | 1.1 |
| MC-557 | RP. 819 | $83 / 4{ }^{\prime \prime}$ | 54/4 | 1.67 | 1.53 | 1.38 |
| MC. 558 | RP-1019 | 101/2" | 61/4 | 2.01 | 1.84 | 1.66 |
| MC. 559 | RP-1219 | 121/4" | $71 / 4$ | 2.40 | 2.20 | 1.98 |
| MC-560 | RP-1419 | 14 " | 81/4 | 2.76 | 2.54 | 2.29 |
| MC. 561 | RP. 1519 | 153/" | 9 | 3.10 | 2.84 | 2.5 |
| MC. 562 | RP-1719 | 1712******* | 104/2 | 3.51 | 3.22 | 2.90 |
| MC-563 | RP-1919 | 191/4* | 12 | 3.78 | 3.46 | 3.1 |
| MC. 564 | RP-2119 | 21 " | 121/2 | 4.17 | 3.82 | 3.44 |
| Aluminum | Panels | St | Gray | Bl |  |  |
| Stock | Mfr. |  |  |  | Net | 100 |
| No. | Type | H | Lbs. | 1.49 | 50.99 | 149 |
| MC. 565 | ARP. 119 | 13/4" | 1/2 | 1.10 | 1.01 | . 91 |
| MC. 566 | ARP. 319 | 342* | 1 | 1.47 | 1.35 | 1.21 |
| MC. 567 | ARP. 519 | 51/4" | $11 / 2$ | 2.01 | 1.84 | 1.66 |
| MC. 568 | ARP-719 | 7 7" | 2 | 2.41 | 2.21 | 1.99 |
| MC. 569 | ARP. 819 | 83/4" | 21/2 | 2.89 | 2.65 | 2.38 |
| MC-570 | ARP-1019 | 1042" | 3 | 3.67 | 3.37 | 3.03 |
| MC-571 | ARP. 1219 | 121/4" | $31 / 2$ | 4.07 | 3.73 | 3.36 |
| MC. 572 | ARP-1419 | $14 *$ | 4 | 4.90 | 4.50 | 4.05 |
| MC. 573 | ARP-1519 | 15\%" ${ }^{\prime \prime}$ | 4 | 5.39 | 4.95 | 4.45 |
| MC-574 | ARP. 1719 | 171/2" | 43/4 | 5.98 | 5.49 | 4.84 |
| MC. 575 | ARP-1919 | 191/" | 5 | 6.57 | 6.03 | 5.43 |
| MC-576 | ARP-2119 | 21 " | 6 | 7.35 | 6.75 | 6.07 |

## ALUMINUM PANEL CHASSIS

Front flange notched for mounting on 19" standard racks. Made of 14 gauge (.064) aluminum. All chassis depths are $5 \%_{2}{ }^{\text {". Gussets are spot }}$ welded in each corner for great Etched finish. $\mathrm{H}=$ Height

| Stock No. | Mfr. Type | H | Lbs. | 1.24 | Net | 50.99 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MC. 577 | ACH-1200 | 13/4" | 1/4 | 2.50 | 2.29 | 2.06 |
| MC. 578 | ACH-1201 | 31/2" | 11/4 | 2.73 | 2.51 | 2.26 |
| MC. 579 | ACH-1202 | 51/4" | $11 / 2$ | 2.98 | 2.74 | 2.47 |
| MC. 580 | ACH-1203 | 7 " | 2 | 3.44 | 3.16 | 2.84 |
| MC. 581 | ACH-1204 | 83/4" | 21/4 | 4.06 | 3.73 | 3.36 |
| MC-582 | ACH-1205 | 104/2" | 23/4 | 4.35 | 4.00 | 3.60 |
| MC. 583 | ACH-1206 | 121/4" | 3 | 4.85 | 4.45 | 4.00 |
| MC. 584 | ACH-1207 | 14 " | 31/4 | 5.24 | 4.81 | 4.33 |

## CASTERS FOR RACKS AND CABINETS

## 

Made of Plaskite non-marking composi. tion wheel with Ball Bearing Swivel Plate. Packed one set of 4 in bor with screws for assembly.

## Stock No.

$M f r$
No
Wheel
Diam
$\begin{array}{lll}\text { NET PER SET OF } 4 \\ 49 & 50-90 & 100-149\end{array}$

| MC. 451 |  | CA. 4 | $2^{\prime \prime}$ | 4.16 | 3.82 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| MC-452 | CA-5 | $3^{\prime \prime}$ | 9.80 | 9.00 | 8.44 |

S.22-22 SHELF

No. 16 gauge steel. $203 / \mathrm{s}^{\mathrm{m}} \mathrm{Dx}$
$171 / 2$ " W for frames FA.42-22,
FA-52-22, FA-61-22, FA-70-22, and FA-77-22. Gray ham
tone. Shpg. wt., 5 lbs.
MC.632 1-9 ea. 3.85; 10-14
ea. $3.54 ; 15-19$ ea. 3.19

long to fit frames $201 \mathrm{~B}^{\prime \prime}$ 22, FA-52-22, FA-61-22, FA. $70-22$ and FA-77-22. Gray Hammertone. wt., 4 lbs. 1.9

| 4.90 | 4.50 | 4.05 |
| :--- | :--- | :--- |
| CHASSIS SLIOES |  |  |

Solid bearing slides to fit FA 22" series frame. Requires no driling, counter sinking, quick disconnect allows for re moval of chassis. Slide length $20^{\circ \prime}$. Slide mounts standard $17^{\prime \prime}$ wide chassis. can be tilted $90^{\circ}$ above or below horizontal position.

Stock No. Mfr. No. load Shpg. $\frac{\text { Net Per Pair }}{1.14} 15.24 \quad 25-34$ | MC-634 | S8.75-20 | 175 | 5 lbs. | 17.15 | 15.75 | 14.18 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| MC-635 | S8-175-20 | 175 | 9 lbs. | 36.13 | 33.52 | 30.17 | MC-636* SB-175-DL-20 17512 lbs. $57.82 \quad 53.1047 .79$

Side Mounted. Slide Rolls On Nylon Wheels
$\begin{array}{llllllll}\text { MC. } 637 & 330-46.20 & 46 & 3 & \text { lbs. } & 3.72 & 3.42 & 3.08\end{array}$

# Belden WIRE <br> <br> SINGLE CONDUCTOR HIGH <br> <br> SINGLE CONDUCTOR HIGH IMPEDANCE MIKE CABLE 

 IMPEDANCE MIKE CABLE} FOR MICROPHONES - INTERCOM - P.A. - SOUND

## 4 CONDUCTOR COILED <br> MICROPHONE CORD

Shielded single conductor cables. No. 25 tinned stranded wire; $3 \times 33$ copper and $4 \times 33$ copperweld tinned, cellutose yarn brald, polyethylene insulated, tinned copper braid shield, chrome vinyl jacket. Type 8410 has rubber insulation and black rubber jacket. Available only in lengths listed below.

| Beld. | Out | Wt | 15 Ft . |  | 25 Ft . | 1 | 50 Ft . | pool | 100 Ft | Spool |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Diam. | $100^{\circ}$ | Sth. No. | Net | Sth. No. | Net | Sth. No. | Net | Sth. No. | Not |
| 841 | .144" | 2 lb . | WR. 369 | . 70 | WR-370 | 99 | WR-371 | 1.71 | WR-372 | 3.09 |
| 8401 | .200" | 3 lb . | WR-361 | . 85 | WR-362 | 1.18 | WR-363 | 2.30 | WR-364 | 4.21 |
| 8410 | .245" | 4 lb . | WR-365 | 1.32 | WR-366 | 2.06 | WR-367 | 3.82 | WR-368 | 7.20 |
|  |  |  |  |  | 2 CO | CT | 10 |  | AN |  |
|  |  |  |  |  | NIATUP | AN | ST |  | CABL |  |

All cables shielded. Miniature types 8420 and 8413 both No. 24 stranded tinned. 8420 has polyethylene insulation and chrome vinyl jacket, 8413 rubber insulation and black rubber jacket. Stranded types: 8422 is 22 stranded tinned, poly insula tion and chrome vinyl jacket; 8412 No. 20 stranded tinned, rubber insulation and black rubber jacket; 8428 is heavy duty No. 18 stranded tinned, black Neoprene jacket for studlo use. Available only in lengths listed below.

|  | Ou |  |  |  | - |  | , |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Diam. | 100' | th. No | + | th. No. | Ne | Sth. No. | N | Sth. No |  |
| 420 | .178" | $21 / 2 \mathrm{lb}$. | WR-44 | 1.47 | WR-448 | 2.20 | WR-44 | 3.33 | WR.450 | . 27 |
| 8413 | 185** | 21/2 lb. | WR-451 | 1.47 | WR-452 | 2.20 | WR-453 | 3.92 | WR.454 | 7.35 |
| 8422 | 231" | 4 | WR-377 | 1.18 | WR-378 | 1.88 | WR-379 | 3.18 | WR-380 | 5.73 |
| 8412 | $268{ }^{\circ}$ | 6 | WR-373 | 1.49 | WR-374 | 2.30 | WR-375 | 4.21 | WR-376 | 8.08 |
| 8428 | .295" | $61 / 2 \mathrm{lb}$. | WR-381 | 1.71 | WR-382 | 2.79 | WR-383 | 5.29 | WR-384 | 10.2 |

##  <br> SHIELDED CABLES FOR <br> PA AND INTERCOM

2 CONDUCTOR-TWISTEO PAIR-SHIELDED CABLES
All have stranded, tinned copper conductors (except $\Delta$ is solid) with vinyl insulation and tinned copper shield, except thave polyethylene insulation and alumi-num-Mylar wrapped shield and $t$ has rubber insulation. Types 8460-61-62 have stranded tinned copper ground wire. All have chrome vinyl jacket except 8432 is lacquered cotton braid and types with $\#$ have no outer jacket over shield. For lengths over 100 ft . use per ft , stock no. and base cost on 100 ft . price.

| Beld. No. | Gauge | D.D." | $\begin{aligned} & \text { Lbs. } \\ & 100 \mathrm{ft} . \end{aligned}$ | Per ft. Stock No. | Net | Per 10 Stock No. | Net |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8739 | 223 | . 160 | 21/2 | WRC-10 | . 035 | WR-455 | 2.89 |
| 8737 | 22 | . 170 | 21/2 | WRC-11 | . 04 | WR.456 | 3.33 |
| 8759 | 20 | . 195 | 21/2 | WRC-12 | . 05 | WR-457 | 3.67 |
| 8790 | 18 | . 231 | 4 | WRC-13 | . 05 | WR-458 | 4.36 |
| 8780 | 16 | . 266 | 2 | WRC-14 | . 07 | WR-459 | 5.59 |
| 8761* | 22 | . 167 | 2 | WRC-15 | . 03 | WRC-15 | 2.35 |
| 8762* | 20 | 184 | 3 | WRC-16 | . 04 | WR-460 | 3.38 |
| $8760^{\circ}$ | 18 | . 222 | 3 | WRC. 17 | . 05 | WRC-17 | 3.67 |
| 8738* | 225 | . 130 | 2 | WRC-18 | . 03 | WRC. 18 | 2.50 |
| 8758 | 20 | . 165 | $21 / 2$ | WRC-19 | . 035 | WR-416 | 2.94 |
| 8789 类 | 18 | . 205 | 2 | WRC-20 | . 05 | WRC-20 | 4.21 |
| 8779 | 16 | . 225 | 2 | WRC-21 | . 06 | WRC-21 | 5.14 |

## 2 CONDUCTOR-TWISTED <br> PAIR-UNSHIELDED

All have tinned stranded copper conductors except * are solid copper. Types with t have ohrome vinyl jacket overall, others without jacket. All conductors have viny! insulation. For lengths over $100^{\circ}$ use per ft . stock number and base cost on 100 ft . price.

| Beld. |  |  | Lbs. | Per |  | er |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Gauge | 0.0." | 100 ft . | Stock No. | Net | Stock No. | Net |
| 8481 | 22* | . 112 | 1 | WRC-23 | . 015 | WR-465 | 1.40 |
| 8482 | 19* | . 115 | 12/2 | WRC-24 | . 02 | WR-466 | 1.76 |
| 8460 | 18 | . 175 | 1 | WRC. 25 | . 03 | WR-467 | 2.45 |
| 8470 | 16 | . 195 | 2 | WRC-26 | . 035 | WRC-26 | 2.79 |
| 87404 | 22* | . 150 | 2 | WRC-27 | . 02 | WR-469 | 1.76 |
| 8486 | 19 * | . 162 | 2 | WRC-28 | . 025 | WRC-28 | 2.06 |
| 8461 ¢ | 18 | . 226 | 3 | WRC-29 | . 04 | WR-471 | 3.38 |
| 8471 + | 16 | . 256 | 4 | WRC-30 | . 05 | WRC-30 | 3.92 |

UNSHIELDED 2 CONDUCTOR TWISTED PAIR SPEAKER AND INTERCOM CABLE
BELDEN 8205. 2 conductor No. 20 tinned copper, vinyl insulated, cabled with overall chrome vinyl jacket. 0.D. 190". Shpg. wt. $100^{\circ}, 2$ lbs. Lengths under 100 ft. avallable only in sizes listed below.

| Belden | 5 | 100 Ft. Spool | over |
| :---: | :---: | :---: | :---: |
| No. | Stock No. Net | Stock No. Net | Stock No. |
| 8205 | WR-350 . 81 | WR-351 2.45 | WRC-31 |

[^9]
## DECIMAL "TIME-OUT" TIMER



## - 7.JEWEL

 SWISS MOVEMENT Ideal for industrial time-studies. Easy-to-read outer dial divided in $1 / 100$ of a minute registering up to one minute. inner dial graduated in minutes and registers up to 30 minutes. Push button, for timing out. brings both hands back to zero. Pressures on the crown will consecutively start, stop and again start the timer. Dependable 7 -jewel movement. Swiss made Shpg. wt., 802.F-664L
Net 9.75

## 1/10-SECOND "TIME-OUT" TIMER <br>  <br> AS LOW AS <br> $6^{90}$

Suggested for close timing. Large hand registers $\mathbf{1 / 1 0}$ of a second. up to 30 seconds; small hand in minutes, up to 15. Start, stop, and continue from crown; instant return to zero by push button. Accurate 1 -jewel movement. Chromlum plated nickel case. Shpg. wt., 8 oz . Imported
F-665L
Net 6.90
Same a
Net 9.33

1/5-SECOND "TIME-OUT" TIMER


Ideal for Dsychologists, bashetball, football and radio-TV. Sweep second hand registers $1 / 5$ of seconds; completes one turn of dial in 60 seconds. Small hand registers up to 30 minutes. Slde sjide starts and stops hands. Pressure on crown brings hands back to zero. Dependable 7 -jewel movement. Shpg. wt., 8 02. Imported
F.954L

Net 9.75
Same as F-954 (above) except 1 jewel. F-955L

Net 7.49


Especially useful as a timing component of electronic and radar equipment. Made in accordance with government specitication number MIL-W-6510 (USAF) type A-8. Dial face calibrated in $1 / 10$ seconds. Sweep hand completes turn in 10 seconds, Register divided in 10 sec. Increments, completes turn in 5 minutes. Lumin. ous figures on black face. Start, stop and fly back to zero by successive depressions of the crown. Balance staff shock protected, unbreakable mamspring, nickel finished case. Swiss made.
F-774L Shpe, wt. 8 ozs
Net 25.95
24-HOUR GMT AIRCRAFT CLOCK


NO MONEY DOWN
$\$ 5$ monthly See Page 412

- Shows Greenwich \& Local Time Simultaneously
- 24-Hour Olal
- Made in Accordance with USAF Specifications
- 8-0ay Clock

A precision 8 -day aircraft clock equlpped with addl. tlonal hand which is set for Greenwich tlme and moves simultaneously with the regular hour hand. Lightweight, unbreakable, oxidized black aluminum case. Winds and sets from the front. 24 -hour, $17 / \mathrm{g}^{\prime \prime}$ dial. Shpg. wt., 1 lb F.828L

Net 47.95

# LAB and FIELD RESEARCH EQUIPMENT 

Combination Long Wave and
Short Wave UV Hand Lamp

## 



- Long and Short Wave Ultra-Violet Light - With 20 Identified Mineral Specimens an economical, compact, self-contained source of both short wave and long wave ultra-violet light of medium intensity. For lab, home and field use where high intensity is not required. Operates from either AC house current or batteries. Easily carried-weighs only $1 \mathrm{lb} ., 14$ 02s. Portability extends its uses. Typical applications: fluorescence demonstrations, mineral determination, prospecting. Special circult has been designed for high efficiency, low draln operation. Tubes are easily replaced. Separate, extra large filters for short wave and long wave and switch for independent operation of each source. Includes 20 identified mineral samples and a 12-page book which describes some of the many uses of ultra-violet radiation. Comes complete ready for use-for $110-120$ volts $50 / 60 \mathrm{cps}$ AC. Less batteries $(2-45 \mathrm{~V}$ " 8 " batteries required for portable use). 8attery adapter case optional. Size: $51 / 2 \times 2 \times 81 / 2^{\prime \prime}$. Shpg. wt., 4 lbs.
ML- 255
Net 24.95
Battery Adapter Case with adjustable shoulder strap. Shpg. wt., 2 fbs.
ML. 256

Net 5.75
45-Volt " 8 " Battery (2 required for battery operation). Shpg. wt., 302
BA-126
Net ea. 2.70

## U/V FLUORESCENCE ACCESSORY SET (Not Illustrated)

Contains 16 different items incluoing: Invisible water paint (4 colors) invisible tracer power, invisible writing Ink, phosphoragram, UV transmitting and absorbing clear plastic, invisible dye. 10 yds. fluorescent elastlc cord. 48-page "Story of Black Light" book of experiments.
ML-291 Shpg. wt., $11 / 2$ Ibs.
Net 6.95

## "INTER-VUE" ILLUMINATED INSPECTION SCOPE



This is an observation magnifler whose long, narrow construction and small illuminating lamp make it ideal for viewing the inner surfaces of objects. Employs a right-angle prism, an oblective lens, two inter mediate lenses, and an eyepiece. Total magnification factor of 6 . Since the inspection scope transmits the image through a right angle, It can be an invaluable aid in dental examinations. Can also be inserted into miniature equipment to "see around corners" and provide the magnification necessary for close examination. May be submerged in water or other fluid which is not an alcohol. The fleld of view is a circle, 3/8" in diameter, and the entire length of the instrument is $7 \mathrm{H}_{10}{ }^{\circ}$. A small adapter (included) with a $6-\mathrm{ft}$. cord is plugged into a 117 VAC outlet and the inspection scope is connected to the adapter through another $6-\mathrm{ft}$. cord. Unit is supplied with 3 replacement illuminating lamps, plus fitted wooden case. Shpg. wt., 2 lbs. Imported.
F.766L

DiSONtegrator ${ }^{*}$
ULTRASONIC Cleaner $\square 1$


- EMPLOYS AN ADVANCED CLEANING PROCESS


## - HIGH CAPACITY - $1 / 2$-GALLON TANK BO-WATT AVERAGE OUTPUT GENERATOR

## Lafayette brings you one of the lowest priced ultra.

 sonic cleaners available, Uitrasonics has resulted in a new standard of time-saving, immaculate cleaning. A special transducer located in the solvent tank is excited by an ultrasonic generator (at $90,000 \mathrm{cps}$ ). It sets the solvent in agitation, producing microscopic bubbles (cavitation) which disintegrate dirt particles. Soil can be removed from the finest crevices whout damage to delicate parts. DiSONTegrator Ultrasonic Cleaner consists of a 40-watt pulse generator and a $1 / 2$-gallon cleaning tank. Tank constructed of stainless steel with 4 A grade polish. Specifications: Input 110. $117 \mathrm{~V}, 50 / 60$ cycles; Output $90 \mathrm{kc}-80$ watts. avg. 320 watts peak. Generator size: $12 \mathrm{Lx} 93 / 4 \mathrm{Wx} 7$ " H. Tank size: $61 / 4 L \times 7 W \times 61 / 2{ }^{\prime \prime} H$ Complete with $4^{\circ}$ connecting cable and 5-year free service guarantee. Exterior of tank and generator finished in baked enamel gray. See listing below for solvents.Net 119.95

## 30-WATT ULTRASONIC CLEANER

For cleaning small manufactured parts - electrical contacts, contact lenses, dentures, bearings, jewelry, etc. Generator output 30 watts average, 120 watts peak. Inside tank dimensions: $358 \times 3^{5 / 6 \times 3} 3^{\text {"0 }}$ deep, 1 -pint capacity. Shpg. wt., 18 lbs.

## ML.300WX

## 120-WATT ULTRASONIC CLEANER <br> - $11 / 2$ GALLON TANK

A extra high capacity cleaner widely used in elec. tronics, automotive and other precision instrument fields. Valuable in all areas of applied medicine. Pol. Ished stainless steel tank size (inside): $123 / 4 \times 7 \times 8^{1 / 2 " 1}$ ished stainless steel tank size (inside):
high Generator output: $90 \mathrm{Kc} @ 120$ watts average. high. Generator output: 480 wa @ 120 watts average 480 watis peak. 32 -page manual
ML-301wX Shpg. wt., 20 lbs.
Net 219.95
SONItizere Uitrasonic Cleaning Chemicals. Avg. shpg.

## wt., 9 lbs. per gal

ing Chemicals. A
Net 4.05
$\begin{array}{lll}\text { ML. } 257 & \text { Ammoniated Detergent, } 1 \mathrm{gal} & \text { Net } 4.05 \\ \text { ML.258 Detergent Concentrate, } 1 \mathrm{gal} . \quad \text { Net } 3.95\end{array}$ ML-258 Detergent Concentrate, 1 gal. . Net 3.95 300 Watt Immersion Heater
Nichrome alloy heating element. Sheathed and sealed in nickel plated brass. Overall length 61/2". 115 V AC/DC 300 watts. Shps. wt, 8025.

Net .79
BASIC ULTRASONICS by Cyrus Glickstein. A deflnitive illustrated work for a complete understanding of the new art of ultra sonics. Divided into three sections: general theory, with special reference to the nature of sound and ultrasound waves; basic types of ultrasonic equipment; and ultrasonic applications. Each section is independent and can be read without reference to the other section. Soft cover, 144 pages $6 \times 9^{\prime \prime}$
日K.863 Postpaid in U.S.A
Net 3.43

## ABBE DRAWING APPARATUS <br> - MICRO-CAMERA LUCIDA - HIGH OPTICAL QUALITY - EXCEPTIONAL CONVENIENCES

## - Lightweight <br> - Compact <br> - Easy To Hold

A powerful, compact unit that is ideal for industrial, laboratory and general research applications. Specu lar alzac reflector permits greater output and thrust Special removable filter for viewing without filter. Operates on either AC house current or batteries, if used with optional Power Pack/Carrying Case (see below). Housed in black, high impact plastic case with on-off switch in handle. For $110-120$ volts, $50 / 60$ cps AC. Size $101 / 2 \times 2^{\prime \prime}$
ML- 361 Shpg. wt., 2 lbs.
Same as ML-361 (above) except produces U/V ligh
ML-362
Net 27.50

## POWER PACK/CARRYING CASE

## For fledd use of ML-361, ML-362 (above). Contains

 battery adapter circuitry, tamp holder, $61 / 2 \times 51 / 4 \times 5^{\circ}$ daytight viewing compartment with two hinged doors, plastic carrying handle and battery chamber for two 45. volt " 8 " batterles (not supplied). Overall size: $12 \mathrm{~W} \times 83 / 4 \mathrm{H} \times 52 / 2^{\circ} \mathrm{D}$ML. 363 Shpg. wt., 8 lbs.

Net 19.50
45 V " 8 " battery for above (2 req.)
EA-126 Shpg. wt., 1 lb .

$$
\text { Net ea. } 2.70
$$

## DUPLEX EYEPIECE

## ADAPTOR

- simultaneous DUAL OBSERVATION
Practical, comfortable view. ing of the microscope fleld by two observers. Exceptional optical quality provides equal. iy clear, undistorted views to either fube. No variation is created in focusing methods. May be useo with eye pieces of equal or varying power. Particularly suited to classroom "student-instruction" work or where too few microscopes are available. Provides for ocular power varlation without removing eyeplece. Permits "consultaton" vlewing. Fits standard Society size micro scopes and accepts standard ( 23 mm ) eyepieces. Shpg. wt. 12 oz. Imported


## DEMONSTRATION EYEPIECE

## - VARIABLE OCULAR INDICATOR

A movable pointer in the eyepiece is visible in the optical field. Permits indication of points of interest-serves as index guide or point of reference. $8 x$, highly corected, fits any standard 23 mm microscope tube. Complete with case. Shpg. wt., 8 oz . Imported.

- Wind Direction and Velocity Indicator
- Direction and Velocity on One Dial
- Indicates Velocity from 0 to 100 m.p.h
- New "Gyro" Design
- Starting Speed: 5 m.p.h.
- Accuracy for Speed $\pm 5 \%$

Registers wind velocity and direction on a single dial. Completely self contained-no outside power source is required. A precision velocity/direction system designed to flll the needs of serious weather sfudents, piliots, colleges, broadcast stations, marinas, airports, farms, testling labs, drilling rigs, forestry stations, yacht clubs, motels as well as private homes and executive offices. The transmitter assembly may be mounted on any suitable elevated position. Utilizes any $11 / 4^{\prime \prime} 0 . D$. plpe or mast. Indicating unlt can be wall mounted or set on a desk, table, mantle or shelf. The indicator is housed in a handsome wooden cabinet, $51 / 2^{\prime \prime \prime} \times 21 / 2^{\prime \prime} \times 77 / 8^{\prime \prime}$, finished in black and gold. Highly legible dial face $41 / 2^{\prime \prime \prime} \times 31 / 2^{\prime \prime}$. Two scales for speed, 0 to $25 \mathrm{~m} . \mathrm{p} . \mathrm{h}$. and 0 to $100 \mathrm{~m} . \mathrm{p} . \mathrm{h}$. plus third scale for direction. Outdoor parts of aluminum and specially coated and treated steel for maximum corrosion resistance. Self contained battery-no draln except when reading wind direction. Simple installationsimilar to TV antenna installation. New "Gyro" design for maximum stability and minimum wind loading. Complete with 60 ft . of 5 conductor, color coded cable, $12 / 2$ volt battery and instructions. Shpg. wi., 15 lbs. F-507WX Imported

Net 48.95

## "WINDICATOR" MOUNTING KIT

- Guyless Universal Mounting Assembly

Consists of mini-tower for mounting on any peaked or flat roof or surface. 5 ft ., 18 gange, $11 / 4^{\prime \prime} 0.0$. aluminum mast. Special, hafdened screw-nalls for rigid fastening. Self sealing, adjustable feet. Five standoff insulators. Set up height 9 ft .
AM-20wM Shpg. wt., $81 / 2 \mathrm{Jbs}$.
Wire for extended runs, 5 cond., color coded.
WR-121 Shpg. wt., $21 / 2$ lbs. ........ Net, per 100 ft .4 .70

## ABNEY CLINOMETER LEVEL



The Abney topographic level enables the user to determine ground elevation-measures degrees of slope or Inclination-run a level line-etc. Permits preliminary surveying with little or no experience. Fine prismatic system. Arc scale is divided Into 60 degrees both sides of zero. Vernier scale reads 1 to 10 minutes. Arc swings from 0 to 90 degrees. Particularly useful in laying out drains-retaining walls and fences-drlveways-fields-etc. Includes feather case and strap. Shpg. wt., 3 lbs. Imported
F. 138

## PORTABLE WINOICATOR

- Hand Held Anemometer
- Indicates wind direction and velocity to 50 m.p.h.
- Easy to operate30 second readings
- Simple-foolproof -direction indicator



## NO MONEY OOWN

A completely self contained instrument that registers wind velocity up to $50 \mathrm{~m} . \mathrm{p} . \mathrm{h}$. and wind direction by means of an integral compass and accurate vane. Re quires only 30 seconds exposure for accurate readout Immediately resettable. Designed specifically for boat owners, marinas, pilots, airports and small weather statlons. Indispensible for sports events such as skiling, salling regattas and shooting meets. Lightweight and rugged, contoured handle for ease of holding. The handle may be removed and the entire unit mounted on a standard camera tripod. This feature permits untended continuous wind direction indications. Easily read, 33/4" white dial face with black numerals and red indicator. Heavily chromed and enameled to resist the elements overall height 15", includling handle. Shpg. wt., 2 lbs. F-623

Imported
Net 22.50

## POCKET THERMOMETER

- Accurate Lab Type
- With Metal Case


## 180

Ideal for a wide range of testing and inspection jobs in the laboratory, factory, and the fleld. Mercury type-partial immersion. Easy-to-read white scale with black numerals. Sub-divided by 20 F . Polished nickel-plated case with pocket clip and ring on top. nickel-plated case with pocket clip and ing on top.
Overall $61 / 4$ long; tube length $51 / 2^{\prime \prime}$. Shpg. wt., 4 oz . F.771 Range: - $30^{\circ}$ to $120^{\circ}$ F 51.2 . Nerg. Wet 1.80 F. 772 Range. 00 to $220^{\circ} \mathrm{F}$ Net 1.80

## HYGRO-THERMOMETER



Do you ever wonder what it is about the weather that makes you feel miserable? This Instrument evaluates the physical discomfort that is caused by the relative fluctuation of temperature and humidity. A large 31/2" easy-to-read dial face is housed in a metal case fitted to hang on your wall. One scale records the humidity in the atmosphere and is marked in percent. the other scale indicates the temperature in degrees fahrenheit. Each scale has its own individual dial polnter for at a glance readings. Shpg. wt., 1 ib .

## HUMIDICATOR-"SLIDE RULE" HYGROMETER

- Slide Rule Readings
- No Computing - Nn Conversion
- Exceptional Ease and Accuracy

The most recent innovation In weather instruments. Fastest-easiest method of determining relative humidity With the cursor (slide) set an the temperature, the relating humidity is read directly off the humidity indicator graph. Does away completely with tables, charts and time consumIng calculations. The "sliderule" cal. culator correlates wet and dry butb readings and "calls-out" percent of relative humidity. The "Humidicatop" graph is calibrated in Incremerts of $\mathbf{2 \%}$. Lessep figures may be readily estimated. Both thermometers are calibrated in increments of $2^{\circ}$ from $20^{\circ}$ F to $120^{\circ}$ F. Background colors chosen for easy readibility and instant reference to "Humidicator" graph. Specially treated gauze for wet thermometer has increased "wetting" capacity.
Overall size, Including cistern, is $131 / 2^{\prime \prime} \times 33 / 4^{\prime \prime}$. All mounted on a mahogany board with provision for hanging. Shpg, wt., $\&$ lb.
F-496
Imported
Net 2.69

## INDOOR-OUTDOOR THERMOMETER

Tell inside and outside temperatureinstantly - from the comfort 0 youl room. Inside location-ideal for quickeasy reading. Dual tubes single scale for instant, visual comparison. Plastic case with modern tapered lines. $8^{\prime \prime} \times 212^{\prime \prime} x$ $48^{\circ \prime}$ long copper capillary tube and bulb. Large scale numeral for ease of reading. No moving parts to become worn. Shpg. wt., 1 Ib F-321

Net 2.58


## MAXIMUM-MINIMUM THERMOMETER



For weather enthusiasts-gardeners-farmers, efc. Gives three readings at a glance - ma=imum, minimum and present temperatures. Self-registe ing - no knobs magnets - or push buttons needed for reset. Magnifying tens case for ease of reading. Maintains automatic check on temperature variations. Makes you the local weather expert. Shpg. wt., 1 lb.
F-372
REMOTE READING TMERMOMETER. Same as above but with remote for comfortable indoor reading of outdoor temperafure. Includes mounting bracket and instruc. temperature. Includes
tions. Shpg. wt., 1 lb . tions.

Net 7.49

## RAIN GAUGE

Farmers, gardeners, weather hobby sts. All need this sturdy, molded plastic rail gauge. precision manufactured to give accurate rainfall records. Unique "chisel" shape permilts recording of minute Quantities of pre. cipitation. Exclusive easily-operatec Cumulative Rainfall Indicator. The gatge has large numerals on an easy-to-read scale graduated up to $51 / 2$ inches Scales in black numerals on transparent shell with opaque
 numerais on transparent shell with opaque back for easy readability. With complete instructions for mounting and use, to obtain weather-station accuracy to $1 / 10$ th of an inch. Overall length $103 / 44^{\prime \prime}$ width $21 / 2^{\prime \prime}$. Shpg. wt., 8 ozs.
F. 494

## EXPERIMENTERS - HOBBYISTS-STUDENTS

SENSATIONAL NEW LIE-DETECTO MaCHINE

## PROJECT-A-SCOPE

- Projects Giant Pictures in Color or Black and WhiteWithout films of. Negatives
- For Lectures Study - Classroom or Just Plain Fun


## 595

Handsome projector molded of heat and abuse resistant, hi-impact plastic for tong life. Casts sharp, giant-size enlargements on any white wall or screen in brilliant color or black and white. Simple to operate. Can be used by students, artists, collectors, lecturers and demonstrators. Children can project their favorite comics or story books to amuse themselves and their friends. Uses ordinary household bulbs. U/L approved. 110 volts, AC. DC. Shpg. wt., 2 lbs.


## An Action Packed

Electronic Sensation!

- Employs The Same Method As The Famous Polygraph Machine
- Registers Emotions, Feelings and Reactions
- Absolutely Safe

Lie-Detecto measures the change in resistance in the skin due to emotional response by means of a special hand-band which detects the amount of perspiration on the skin. Emotions, Feelings and Reactions are registered on an indicator which swings from Start thru Could Be, Are You Kidding, Little Whopper and Big Whopper, depending on the reaction of the person tested. In addition two panel controls provide fo Sensitivity and Adjustment. Unit is enclosed in an attractive rugged enclosure of non-breakable Norolon Supplied with simple instructions and sample questions, hand-band and batterles. Shpg. wt., 4 lbs AP-84

NEW! ELECTRIC MUSIC BOX MOVEMENTS
198
F-694
Net 5.95
NEW! REVELL "Slant-Six" MODEL KIT

## 

## DISTLER MINI-MOTOR

 - Extremely efficient - voltage range 1.5 to 6 v.d.c. Exceptionally versatile miniature D.C. motor. Operating voltage from 1.5 to 6 volts O.C. Entremely low current drain Wifl operate on voltages for above and below rated requirements. Ball bearings afford maximum efficiency. Transparent plastic brush housing-removable brush es - tubular form. Overall size $23 / 4 \mathrm{Ln}$ 1 "D. Shaft $x_{0}$ ". Weight $2 \frac{1}{4}$ 02. Recom. mended for industrial and laboratory development work. Used in remote control devices, models, displays, etc. 602. F. 258 Imported from Germany Net 2.25
## SUPER MICRO-MOTORS

- half the weight -TWICE THE POWER!
- HIGHER SPEEDLOWER DRAIN!
- PERMANENTLY LUBRICATED!
- double PermaNENT FERRITE MAGNETS!


Expertly designed, miniature, O.C. permanent magnet motors. Highest power and speed to weight ratio of any minlature motor makes these a "natural" for models and remote control applications. Utilizes phosphor. and remote control applications, beriizes phosphor.
bronze brushes and brass sleeve bearings! shafts are bronze brushes and brass sleeve bearings! Shafts are
$x_{2}{ }^{\prime \prime}$ in diameter. $\mathrm{F}-403$ is $1 \mathrm{k} 11 / 8 \times 11 / 2^{\prime \prime}, 11 / 4$ oz. $\mathrm{F}-404$ is $11 / 4 \times 13 \operatorname{san} 13 / 4^{\prime \prime}, 21 / 4$ or. $F \cdot 405$ is $11 / 4 \times 13 / 4 \times 13 / 4^{\prime \prime}, 21 / 401$. Avg. shpg. wi., 4 ox. Complete with leads. Imported.

| Stock | Volts | Drain |  |  | of |
| :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Range | Ma. | RPM | Ea. | 3 Ea. |
| F-403 | 1,5-4.5 | 200-300 | 5000.6000 | . 59 | . 33 |
| F-404 | $1.5 \cdot 6$ | 200.300 | 6000.7000 | . 89 | . 80 |
| F. 405 | 1.5-9.0 | 100-150 | 7000.8000 | 1.10 | . 98 |

## 49

"ROCKET" GERMANIUM RADIO

- No Batteries - No Power Needed
- Includes Crystal Earphone A Antenna
- A Comalete Rado Receiver

This authentic plastic molded space rocket may not permit space travel, but the sensitive Germanium receiver It houses is capable of receiving the entire broadcast band. Easy tuning is assured by the collapsible nose "an tenna." Supplied with Germanium Dlode, crystal earphone and clip on antenna. Size: 41/6" $-31 \mathrm{~K}_{4}{ }^{\prime \prime}$ Dlam. at base. Shpg. wt., 6 oz. Imported b-417 an "alidade" type sighting tube and a jeweled pivot liquid compass. Takes instant, accurate sightings on landmarks and converts them into compass bearings. By recording two bearings you can return to the pre. cise position at any time. Fixes your position automatically easily-and without "navigators", complicated instruments. The compass is graduated in increments of 10 with each $10^{\circ}$ called out. Constructed of heavy orass throughout, anti-magnetic and corrosion-proof Complete with instructions. Shpg. wi., 3 lbs. Imported. F. 660

Net 24.95
BA-155 Battery for F-660
Net 24.13
(B) MARINE COMPASS Entirely non-magnetic and cor. rosion resistant. Direct-reading $360^{\circ}$ dial. All cardinal points are oversized, Compass is easily removed from gimbal for safe keeping. May be mounted as a perma. nent binnacle or used as a portable unit. Dimensions are $45 / 6 \times 45 / 8 \times 31 / 9^{" \prime}$. Shpg. Wt., $11 / 2$ los. Imported.
F-386
(C) COMBO COMPASS Here is an unusual gift for the outdoorsman-boy scout, camper, or boatsman. Combines four useful instruments in one compact unit. Compass-transparent for accurate course plotting. Calendar-indicates any day of the week up to 1977. Magnifler-also ideal for fire starting. Mirror-tocated on back of unit; can be used for signalling. Compass on one olvol arm, magnifier on other; unit folds down to $23 / 4 \times 13 / 4 \times 3 / 4^{\prime \prime}$. Shpg. wt., 4 ozs. Imported.
F. 935


(M) $30 \mathrm{x}, 60 \mathrm{~mm}$ SPOTTING SCOPE Field of view is 85 feet at 1000 yds. 1 Both front and rear optics are coated. High relative brilliance due to 60 mm objective lens. Exceptionally small and light - weighs only 2 lbs. Including metal tripod! The perfect companion for shooting - hunting - viewing - , 7aturallsts - and hobbyists. Equipped with $111 \frac{1}{2 \prime \prime}$ tripod and zippered leather carrying case. Shpg. wt., 3 liss. Imported F. 149

## Net 16.95

(N) MINIATURE IMPROVED HOIST Indispensable in industrial plants and workshops. Perfect for hunters industrial plants and workshops. Perfect for hunters
braaters-airplane owners - motorists. Made of high
grade aluminum with steel axles. Prelubricated for life. grade aluminum with stee axies. Preldericated for ring.
Two lifting slings-with heavy. welded steel ring. Two lifting slings-with heavy, welded steel rings.
Nylon cable supplied tests af 550 tos. per strand. "Midget" hoist comes with 70 ft . of Nylon cable, has a 5 to 1 ratio- 1000 lb . test-and weighs only 13 or. "Tiny" holst has 100 it . of Nylon cable, a 7 to 1 ratio- 2000 lbs. test--and weighs only 15 oz . $\mathrm{HD} \cdot 330$ "Midget". Shpg. wt., $11 / 2 \mathrm{lbs}$. HO-331 "Tiny". Shog. wt., 2 lbs . lbs

Net 6.95 (0) SMALL FRY PORTABLE ALCOHOL STOVE Made of lightweight aluminum with a ceramic insert that completely absorbs the alcohol fuel. This remarkable alcohol stove is so sate you can roll it along the floor while it is burning. Boils water in 12 minutes. Burns for 3 hours for 10 c of fuel. Weighs only 24 ounces and measures a compact $5 \times 5^{\circ}$. Shpg. wt., 2 lbs.
(D) LENSATIC POCXET COMPASS Jeweled-bearing metal scale with cardinal points in luminous paint. Twin scale, 0 to 64 and 0 to 360 . Bezel rotates $360^{\circ}$ with $30^{\circ}$ click stops for ease in computing. "Notch and hairline" sighting for accurate azimuth readings. Luminous reference lines on $2^{2}$ diameter glass face plate. Black anodized aluminum case with brass fittings. Shpg. wt., 602. imported

Net 2.25
(E) MAP MEASURER \& COMPASS Just trace along route on map and multiply miles - per inch factor by reading on dial. Also reads directly in inches up to $39^{\prime \prime}$. Built-in magnetic compass has cardinal and secondary points-full $360^{\circ}$ markings in tenths. Accurate and dependable. Complete with leather sheath. Shpg. w. $\mathrm{F} . \mathrm{A}^{8} 8$ oz Imported

Net 1.59
(F) UNIVERSAL SUN DIAL COMPASS Pocket-sized modernized version of the worlds oidest "time piece." Perfect companion for Boy Scouts-hikers-hunters-campers- lourists-fishermen. Unusually accurate sunlime readings are posslble by means of timè/sun declination charts included. Sun dial, compass and level are incorporated in one solid case measuring $23 / 4 x$ $11 / 2 \times 1 / 2^{\prime \prime}$. Shpg. wt., 6 o2s. Imported.
F.627

Net 1.15
(G) LAFAYETTE BOAT-LITE KIT The Lafayette Boat-LIte Kit meets the rigid requirements for lights on small boats as set up by the U.S. Coast Guard. The combina tion red and green running light has correctly shielded lens for clear visibility for over one mile. The flag-staff stern light has a unique plug-in feature for quick and easy removal. Light is visible for 2 miles. All parts are corrosion-resistant. Kit includes mounting brackets and instructions. Shpg. wt., 3 lbs . Imported. F. 559 Boat-Lite Kit (less battery)

Net 3.69 BA-163 6-Volt Battery for abeve (vt., $34 / 4$ lbs.) Net i.83 (ii) AMPHIBIOUS FLASHLIGHT Completely waterproof, gas tight, explosion proof flashlight. Tested to more than 150 feet under water. Unique lens provides both spot and diffused light. Base switch can be set to use for signaling. Perfect for the skin diver fisherman, sportsman-or in industry, mines, tankers. Shps. Wt. 110 . Imported.
${ }_{F}^{1} 10.434$
(i) DELUXE GENERATOR FLASHLIGHT The pocket flashlight for home, car-or to carry with you pocket flashlight for home, car or ${ }^{10}$ carry with you
Plenty of bright light generated by thumb pressure. No batteries lo corrode or go dead. Beautifully styled, it includes lock switch and finger strap. Only $4 \mathrm{H} \times \mathrm{y} / \mathrm{WW}$ $13 /{ }^{\prime \prime} 0$. Ideal for camoers--tourists-motorists. Weighs only 6.5 oz . Imported
F. 838 Shpg. Wr., 11 oz
F. 839 Replacement buib

Net 3.59

(P) CAMPER'S HAND AXE Orop forged steel, one piece scout axe. Re-curved, shock absorbing handle. Air cushioned rubber grip. Fully polished head and shaft 24 02. Weight. $1313^{\prime \prime}$ overall. With nail-puller. Shpg wt., 2 lbs. Imported
HD. 461
Net 1.95
(Q) FOLDING CAMPERS SAW Handy, compact folding saw. Nine-inch spring steel blade folds back into polished, hardwood handle. Special snap lock keeps blade in sawing position. Ideal companion for campers, hunters, or as a gardener's pruning saw. Overall size only $101 / 2 \times 2 \times 7 / 4 \times$. Shpg. wt., 8 oz . Imported.
H0-482
12 assorters "KOMBO-KNIFE" 11 steel blades offer pruning knife scissors, fork $31 / 2^{2}$ saw, $31 / 2^{\prime \prime}$ knife corkscrew, screwdriver, file, scraper. Handle of tough simulated bone. When closed measures only $43 / 4 \mathrm{~m}$ Iong Complete with leather sheath. Shpg. wi., $1 \mathrm{lb} . \mathrm{Im}$. ported.

Net 1.59

## DELUXE LAFAYETTE AUTOMATIC LECTRIC EEE 8mm ZDOM MOVE CAMRA movie camera



## $59^{95}$

 No Money Down $\$ 5$ Monthly- Fully Automatic Exposure
- Fast I/ 1.9 Zoom Lens
- Brilliant "Follow Focus" View Finder
- Trigger Action Pistol Grip

A great value from Lafayette. Buitt-in electric eye automatically, continually sets exposure for ASA 10-40. Fast, // 1.9 lens 200 ms from Wide-angle through Normal and Telephoto. Big picture window viewfinder instantly gives field of view. Signal appears in vlewfinder if light is not sufficient for proper exposure. Other outstanding reatures include manual exposure control. continuous run or single frame exposure, cable release socket and sturdy pistol grip handle for steady pictures. Fast dropin loading makes using this camera a holiday of pleasure. Smart two-tone grey finish. Imported Shpg. wt., 5 lbs. F.940L

Net 59.95
Carrying Case for Above Camera and Accessories. f-784L Shpe. wi., 2 lbs..................................... 5.79

## ZOOM MOVIE OUTFIT



## 12450

Only $\$ 7$ Monthly No Money Down
A complete Zoom movie outfit with matched components to assure success in taking and showing home movies. The camera is Lafayette's 200 m f/1.9 Auto 8 ( $F$-940L), "Ultra" 500 projector ( $\mathbf{F} .785 \mathrm{WX}$ ), $30^{\prime \prime} \times 40^{\circ}$ folding screen ( 5.536 ), new Hi-Lite movie gun ( $F-868 \mathrm{M}$ ) 2 Sets of $400^{\circ}$ reels \& cans (F-538), Zoom camera case (F-784), 25-ft. roll of color movie film with processing ( $\mathbf{F} .948$ ). F. 95 dWXM Shpg. Wt., 40 lbs.

Net 124.50

## continental compartment CASE 899 <br> - Finest Cowhide leather <br> - New Swing-Away Top <br> - $9^{\prime \prime} 75^{\prime} \times 6 \mathrm{~V}_{2}{ }^{\circ}$ <br> - Contour shape <br> 

Holds movie camera plus accessorles. Unique swing. away tops stays open for easy access. Contour shape hugs the body. Imported black cowhide with nickel fit. tings and corduroy lining. Adjustable shoulder strap with foam rubber pad. Shpg. wt., 3 los. Imported

## vernon $/ 8 / 28$

 aUTOMATIC 8 mm MOVIE camera

An outstanding value in automatic 8 mm movie cameras. Completely new design of rugged die-cast construction houses a fully automatic camera. Fast, sharp $\mathbf{f / 1 . 8}$ 13 mm lens does not require focusing. Built-in automatic electric eye adjusts lens opening from $/ / 1.8$ to //16 according to light conditions. Adjustable for film speeds ASA 10 to 50 . Perfect shots every time. Lens opening visible on side window. No rewinding, causing you to miss precious "once-in-a-lifetime" shots. All. electric drive runs on 4 inexpensive penlight cells. Shoots up to 20 rolls without a battery change. Run, lock or continuous run release trigger lets you get into your own movies. And best of all, a remote control ( $10 . \mathrm{ft}$. cable) is available at extra cost... It lets you obtain true candids, natural shots of children and wild life, Imported
F.931L Shpg. wt., 5 lbs. .................................. 39.95
F.932 Remote control Switch and Cable ... Net 4.98

## MINOLTA ZOOM 8

- CdS Electric Eye Automatic Exposure
- 10.Element f/1.8 Rokkor Lens
- Micromotor Electric Drive


A fine, battery powered, 8 mm camera featuring a sensitive cadmium sulfide light meter that automatically sets the right exposure for any film (ASA 10-400), color or black and white. Just sight and shoot . . that's all. Zoom 8 does the rest. A warning signal shows in the viewfinder in case of insufficient light for perfect ex. viewinder in case of insufficient light for perfect ex.
posures. Rokkor $i / 1.8$ lens zooms from wide-ankle to posures. Rokkor $1 / 1.8$ lens zooms rom wide-angle to
telephoto $(10.30 \mathrm{~mm})$ with the touch of a finger. Film. ing Speeds: 12, 16 and 24 fps . High-efficiency micromotor is powered by four inexpensive penlight batterles (Included). Has manual control for special effects, single lens reflex viewfinder for through-the-lens focusing and viewing, built-in battery level indlcator. Spool loading. Shpg. wt., 4 lbs. Imported.
F. 9591

Net 127.50

## 3-LENS $\mathbf{f / 1 . 8} 8 \mathrm{~mm}$ CAMERA with ELECTRIC EYE <br> CANTERAS

## $29^{95} 55$ monthyy

 NO MONEY OOWN- Automatic, Cross. Coupled Electric Eye
- 3 Quick Change, Turret-Mounted 1/1.8 Lens
- Built-in " $A$ " Con. version and UV Haze Filters
- Pistol Grip with Trigger Release
- "Combo.View" Finder for Normal, Wide-Angle and Telephoto Shooting


You get perfectly exposed movies automatically simply by allgning the needte in the viewfinder. Fllm spead selector dial adjusts for speeds of ASA 10-40. A quisi twist of the turret dials the effect you want; from Normal to Wide-angle or Telephoto for thrilling close ups of distant subjects. The fast $\mathbf{6 / 1 . 8}$, fixed-focus lenses are color-corrected and coated. Eiched optical view finder shows exact field for each lens. Full size pistol grip with trigger release provides easy one harlo operation. Economical drop-in spool loading. Includes Instrucfions and pistol grip handle. Imported
F.863L SnpR. wt., 5 lbs.

Net 29.95 F-648L Holster case for F-863L ………............Net 2.95

## BUDET PRIGED <br> AJTMATG MOME OITFT



Everything you need for movie-making and showing fun. No need to "shop" for unmatched equipment, no need to pay more. You get all this: Lafayette's F-863L f/1.8 Triple-Turret movie camera with automatic meter: F. 784 holster-type camera case: "Holiday," F.526, 500.watt projector: F. 536 30x40* screen; F. 537 Bar Light; 2 F. 539 photo flood lamps: 2 F. $538400^{\circ}$ reels and cans. Unbeatable for foolproof shooting and showing of Indoor and outdoor movies. Shpg. wt., 30 lbs .
F.867WXM

## 298 SPORTPOD

The Sportpod is a 3 -section leg with tripod screw on top, protected with a removable cap. Offers rigid camera support with least possible weight and bulk. Supplied with suspension strap. Total extended length is $58^{\prime \prime}$; telescopes $10{ }^{211^{\prime \prime}} \mathbf{2}^{\prime \prime}$. Sec-

F.96. 1

# YASHICA AUTO-8 ZOOM MOVIE CAMERAS 

DELUXE YASHICA "UP" POWER ZOOM-8


No Money Down

## $\$ 7$

Monthly

- With Pistol Grip
- Fully Automatic Exposure
- Pushh-Button Zoom
- cos Electric Eye
- Reflex "Thru-the-Lens" Viewing A deluxe, all-electric 8 mm camera featuring pushbution 3 second power 200 m from 9 mm wide-angle to 27 mm telephoto with high-speed Yashion 1/1.8 lens. Focuses from $31 / 2$ feet to infinity. Fully automatic exposure set by ultra-sensitive CdS electric eye with full ASA range from 10 to 640. Reflex viewfinder offers "through-thelens" viewing-you film exactly what you see. 3-speed battery operated micromotor lilm drive operates at 12 , 16 and 25 fps for high-speed, normal or slow-motion filming. Has buill-in Type-A filter; battery condition indicator; manual exposure control and $z 00 \mathrm{~m}$ ring; ex. posure warning indicator; wind-back key for double ex. posures, lap dissolves; adjustable eyeplece. Spool loading. Supplied with remote control, pistol grip with trig. ger and four penlight batterles, Shpg. wt. 6 los. Imported.
F.960L

BA. 155 Repl. Penlight Batteries (4 req.) Net Net 129.95

## ZOOM MOVIE GUN



## $10^{95}$

- Separate Normal/Wide-Angle and Telephoto Positions - "Bounce" Light Lever
- 650. Watt Bulb

Now, a $200 m$ movie gun made espectally for 200 m movie cameras. Simple to operate-switch up gives widest beam spread for normal and wide-angle lenses, switch down for a narrow, concentrated light beam with tele photo tens. Special tilt lever for "bounce" illumination. Convenient exposure guide on back of light. Simple fold-a-way bracket takes any movie camera. Sylvania 650-watt. seafed beam bulb supplies maximum illumination without overloading power circuit. U.L. approved. Overall less than 12"; under 2 lbs. Operates on 115125 V 60 cycle AC. Shpg. wt., 4 lbs. F-926

## 8 mm MOVIE MAKER'S WORKSHOP

- Includes Butt-Splicer, Quik-Splicer. Rewinds and Mounting Board with FPS Scale



## $6^{88}$

Complete 8 mm splicing and film repair outfit includes butt-type splicer, two post rewinds with self-lubricat ing Nylon gears mounted on a deluxe hardwood base which has a scene timing scale. Holds reels with to to $400^{\circ}$ film capacity. Steel arms are chrome plated. Shpg. wt. 2 lbs.

YASHICA U-MATIC REFLEX ZOOM-B


The U-Matic combines the convenience of automatic electric eye exposure with wind-back and fade controls for lap dissolves and complex trick effects. Highspeed Yashinon $1 / 1.8$ lens zooms from 9 mm wide-angle to 28 mm telephoto and stays in sharp focus from $31 / 2$ feet to infinity. Parrallax-free reflex viewfinder permits "through-the-lens" viewing-what you see is what you film. Battery operated motor runs camera at 12, 16 and 24 fps for fast, normal or slow-motion filming. Has ASA film speed dial ( $10,16,25,32,40$ ); built-in battery tester; zoom lever. manual exposure control: exposure warning (indicates insufficient light for filming); adjustable eyepiece. Spool loading. Supplied with $16-\mathrm{ft}$. remote control and switch, trigger pistol grip and four penlight batteries. Shps. wt., $31 / 2 \mathrm{lbs}$. Imported. f.962L

Net 99.95
BA- 155 Repl. Penlight Batteries (4 req.) Net ea. 13

## YASHICA 8U-G REELEX 200M-8

A completely automatic camera which contains most of the features anyone could eve want in one unlt. just point and shoot-automatic eletric eye makes perfect exposure. High-speed Yashinon $1 / 18$ lens 700 ms from 5 mm to 19 mm Reflex "th ough-the-lens" viewing suarantees that what you see is what you set view fitm Battery operated electric motor drive you get on rim Gever operated electric motor drive means that you'll ogain have to rewind it the midst of an important scene. Operates at 16 tos. Has ASA film speed dial $(10,16,25,32,40)$; bu it in battery condition meter; exposure warning (indiates insufficient light for filming): focusing eyeplece. Convenient drop-in spool loading is fast and eas to use-no threading required. Supplled with trigge* pistol grip and four penlight batteries. Shpg. wt., $=1 / 2$ 价s. Imported. F.963L

BA. 155 Repl. Penlight Batteries (4 req.) Net ea. $\begin{array}{r}79.95 \\ \hline\end{array}$

## ZOOMETTE MOVIE GUN



- Universal Mourting
- Fits All Cameras-Still or Movie
- Dual Beam Swi:ch-Zooms the Light New universal gun lype thoht trat nits all cameras all movie cameras including pietol grip type and all still camera flash shoes. Supplies complete with easily attached adapter for pistof grif cameras that cannot accept standard type lights. Simple to operate.-dual beam switch gives widest bean spread for normal wide-angle lenses or narrow. concentrated light beam for telephoto lens. Powerful 650 -vatt sealed twin beam bulb supplies maximum illumination without overloading power circuit. U/L approved. Operates on $115-125$ volts, 60 cps AC. Shpg. wt., $21 / 2 \mathrm{lbs}$.

Net 9.95

## 8 mm PROJECTOR SCOPE

- Large. $3 \times 21 / 4^{\prime \prime}$ Viewing Screen
- 400.Ft. Film Capacity
- Ultra Compact-0nly $7 \times 5 \times 31 / 2{ }^{\prime \prime}$


A self-contained editing outfit for 8 mm film. Action viewer with prismatic shutter magnifies olcture more than 300 times for viewing on big. $3 \times 2 \frac{1 / 4 " ~ s c r e e n . ~}{\text { ser }}$ Features Slip-In Film Loading that eliminates thread ing. Has single sprocket drive to assure no skipping. flickering or film wear. Other features include auto matic framing and focusing, fold-away butt-type 1 -step spllcer, folding $400^{\circ}$ capacity rewinds and a convenient frame marker Operates on 110.120 volts AC/DC with 10 -watt auto bulb and transformer. Complete with sup. ply of Mylar splice tape. Overall Size: $7 \times 5 \times 31 / 2^{\prime \prime}$ Shog. wt 4 lbs

## CAMERAS-ELECTRONIC FLASH UNITS-GADGET BAGS

## YASHICA PENTA.J SLR



- Fully Automatic Film Winding
- Split-Image Focusing
- Hard-Coated 1/2 Anastigmat Lens
- Accessory Clip for Coupled Exposure Meter


## No Money Down $Q 95$

Outstanding 35 mm single lens reflex camera has Yashinon $50 \mathrm{~mm} \mathbf{~} / 2$ hard-coated anastlgmat lens with convenlent screw-in type mount. Features accessory clip for optional shutter-coupling exposure meter (see below); split-mage rangefinder for needle sharp focus ing; built-in Penta.Prism and Fresnel lens for brilliant parrallax-free viewing; completely automatic instantreturn mirror; fully automatic film winding, cocks shutter to prevent double exposures; 9 shutter speeds, $1 / 2$ to $1 / 300$ second plus $X$ and $B$. Complete with carrying case, less exposure meter. Shpg. wt., 3 lbs. Imported F. 969 l

## YASHICA EXPOSURE METER FOR PENTA.J

Clip-on, shutter-csupling exposure meter made exclu sively for the Yashica Penta-J. It couples automatically to shutter speed dial for any film speed between ASA 6 to ASA 3200. Shpg. wt., 6 oz. Imported. F-970L

## TRANSISTORIZED

 ELECTRONIC STROBE FLASHOperates from Bafteries and AC

## 2) 50

No Money Down

- Lightweight \& Compact-No Power Pack Needed Ful Iy Transistorized Operates on ${ }^{4}$ Eco nomical "E" Cell
Batterles - Fits any
Camera Shoe
Now you can have a high-powered, transistorized elec tronic flash that operates from standard AC house current or 4 economical " 2 " cell batteries. Compact and featherweight - no power pack is required. Flash duration of $1 / 2000 \mathrm{sec}$. for fast pictures. Recycling time: 6.10 seconds; color temperature: $6000^{\circ}$ Kelvins Gulde number dial for F stop on back. Complete with AC cord. Less batteries
F. 827 Shipg. wt., 2 lbs. Imported

Batterles for above ( 4 required). BA-155

Net 21.50


## BOUNCE FLASH BRACKET <br> 

Particularly sulted to Single-lens Reflex cameras. Permits bounce flash with any cllo on Flashgun. Mounts in standard tripad socket. Adjustable lengih, rotatingswiveling head. Shps. wt., 6 ozs. Imported. f. 620

YASHICA


- Correct Emposure. Focus, Composition on Sight - Color-Corrected F1.8 Lens - 11 Shutter Speeds

The Yashica Lynx assures perfect pictures under any dight condition. The 3.way finder shows you correci exposure, focus and composition on sight-simply focus. frame, center the needle, and shoot. Superspeed shutter with 11 speeds from 1 second to $1 / 1000$ second and bulb. Exposure indicator coupled for a full range of ASA readings ( 10 to 800). M-X flash synchroniration with bult-in self-timer. High-speed, coated, color-corrected F1.8 Iens. Single stroke transport lever simultaneously advances film and cocks shutter. Automatic parallax correction; rapid rewind crank. Shpg wt. 3 lbs. Imported
F-919L.
Net 69.88
F-920L Deluxe Leather Eveready Case
Net 4.95

## ULTRABLITZ MONOJET SP ELECTRONIC FLASH



- Transistorized Featherweight Unit Fits in Your Pocket
- Weighs only 1602
- Use Dutdoor Color film Anywhere, Anytime

The smallest, complete electronic flash unit. Powered by longlife nickle-cadmium batterles that recharge over-night on household AC current. Each charge gives more than 70 flashes... recycles in only 10 seconds. Can also be operated on $\mathbf{1 1 0 - 2 2 0 V}$ AC. Flash duration $1 / 1300$ second freezes any actlon. Square reflector throws $65^{\circ}$ beam without hot spots. Bullt-in exposure guide dial tells you correct lens opening. Can be mounted vertically or horizontally. Built-in charger, voltage-regulating monltor circuit. Regular Kodachrome voltage-regulating monitor circuit. Regular Nodachrome
Gulde No. 32. Measures only $43 / 4 \times 3 \% / 8 \times 1 \% / 80^{\circ}$ includes shutter cord, charging cord, mounting bracket. F-892 Shpg. wt. 2 lbs. Imported

## NEW! ULTRABLITZ ROCKET ELECTRONIC FLASH



No Money Down
$24^{95}$ $\$ 5$ Monthly - Transistorized Circuit

- Operates on Batteries or AC Instant Flash Calculator Dial A new transistorized electronic flash unit that operates elther on two "C" cell batteries or on 110 volts AC. Compact and lightwelght, It weighs only 18 oz . Including batterles. Each set of regular batterles delivers 50 llashes (a set of Alkaline batteries delivers 150 Dashes) with guide number of 40.50 for ASA 25 . Flash Duration: $1 / 600 \mathrm{sec}$. Recycling Time: $10-12$ seconds. Kelvin Temperature: $5600^{\circ}$. Mounts elther horizontally or ver. tically. Complete with bultt-in sync cord and AC power cord. Less batteries. Size: $47 / 4 \times 33 / 6 \times 1 / 80^{\circ}$ Imported 24.95
F-971 Shpg. wt. $11 / 2 \mathrm{lbs}$. 8A. 156 Regular Batteries for above (2 rea.) Net ea. . 13 BA. 277 Alkaline Batterles for above (2 req.) Net ea. 39

YASHICA FLASH-O-SET II FULLY AUTOMATIC 35MM camera


Full Automatic Exposure Control

- Bulttin BC Flash Gun
- ASA Film Range: 10 to 200
- Single Stroke Lever


JUST POINT AND SHOOT-Sharp clear pictures are yours automatically
Now you can equip yourself with a quality 35 mm cam era which is as easy to use as a box camera. Just point and shoot. Fully Automatic lens-circling electric eye sets proper lens opening regardless of IIght conditions. Warning needle tells you when to switch to built-in BC type AG-1 flash unit. You'll never bother about focusing either. With the sharp, preset lens, Single-Stroke lever advances film, cocks shutter, and prevents double exposures. Works equally wefl with color or black and white film. Complete with carrying case. Shpg. wt., 3 los. Imported.
f.923L

Net 49.88
NEWI DROPFRONT "PRO" BAG


- BIG $13^{\prime \prime} x 7^{\prime \prime x 9} 9 y^{\prime \prime}$.
- accepts all cameras -From movie to

PRESS-TYPE

- EXCEPTIONALLY RUGGEO ano ourable

A heavy-duty professional bag with plenty of room for all your equipment. Zippered for easy access. Luggage styled for easy, hand or over-the-shoutder carrying. Removable, adjustable straps snap on or off in an instant Durable, chrome plated front snap-lock, feet and hard ware. Handsome, heavy, rich looking, black simulated cownide with leather and corduroy lining. Gussets prevent contents from falling out when front is open. Frent tripod carrying straps. Measures $13^{\prime \prime}$ long $x 7^{\prime \prime}$ wide $\times 91 / 2^{\prime \prime} \mathrm{hlgh}$. Shpg. wt., 3 lbs. Imported
F-862

"SUPER-PAO 18" Giant version of famous dropfront "Pro" bag shown above. Measures $16 \times 73 / 4 \times 11$ ". Same deluze features plus all the room you'll ever need in a gadget bag. Shpg. wt., 4 lbs. Imported | F. 936 |
| :--- |

Net 13.95
35MM SLIDE SORTER


SEE ALL YOUR SLIDES AT ONE TIME
If you have a problem with sorting countless 35 mm lides then this slide sorter is your answer. The Hluminated 11×15" inspection screen is large enough to see a whole tray full of slides (35) at one time. Saves you time and effort in sorting out slides for projection in proper sequence. Folds flat in a jiffy for compact stor. age, built-in Illumination with on-off switch, 6 ft . line cord; can be used with 110 or 120 volts, AC or DC Size: $15 \times 81 / 2 \times 81 / 2^{\prime \prime}$. Shpg. wt. 3 tbs.
Size:
F-924

MIRANDA "DR" 35MM SLR


- Accuracy of Single Lens Reflex plus Speed of Range-Finder-Focusing
- Unique Lens Mount Accepts Lenses of Most other 35's.
A complete 35 mm precision single tens retex camera with luxury features at a low, low, price. The Miranda DRf $/ 2.8$ offers the accuracy of single lens photography with built-in split-grid rangefinder focusing plus brilliant ground-glass locusing. Features threaded and bayonet lens mounts; instant return mirror; vibration-free operatlon; depth-of-field preview button; rapid advance and rewind levers; RP and $X$ flash synchronization. Shutter speeds from one second to $1 / 500$ th second plus buib. Preset $\mathbf{1 / 2 . 8}$ lens. Complete with case. F-921L Shpg. wt., 5 lbs. Imported ....... Net 109.95 MIRANDA "DR" $1 / 1.9$. As above but with Automatic //1.9 lens. Imported
F-922L
Net 139.95


## MIRANDA UNDERWATER <br>  HOUSING <br> 6995 <br> $\$ 5$ monthly

 no money downA deluxe underwater housing designed for use with Miranda 35 mm cameras oniy. $\mathbf{4}$-section construction for easy installation of camera and connection to outside mounted extension contral knobs. Tested to withstand water pressure at 100 feet. Shpg. wt., 5 lbs.

## F. 978

## KALIMAR CdS-430 EXPOSURE METER



## 1188

- ON/OFF Push-8utton to Conserve Battery
- ASA Scale 6 to 12,000
(DIN Scale 8-42)
- $1 / 1$ to $1 / 32$ Lens

Aperture scate
An extremely sensitive Cadmium Sulfide photoelectric exposure meler. Perfect for still or movie photography either Indoors or outdoors. Designed to be used elther as a hand meter or can be mounted to the accessory shoe of still cameras. Has EV indicatop for Polaroid and other cameras equipped with LVS numbers. Uses readily obtainable mercury battery. Measures reflected or Incident IIght; supplied with Incident light attachment. Lightweight and very compact. Measures only $1 \times 14 / 4 x$ 11/3". Complete with mercury baftery and leather carry ing case. Shpg. wt., $1 / 2 \mathrm{lb}$. Imported

## F-979L

" 35 ". CLIP-ON EXPOSURE METER

## 395

- Fits Camera Accessory Shoe
- ASA Scale 10 to 1000
- Measures Reflected and Incident Light


Exceptionally convenient exposure meter. Clips right on camera-quick easy reading. Gives better, more accurately exposed pictures with a minimum of effort. Speeds $1 / 1000$ to 1 Sec . Lens aperture $\mathbf{1 : 1 . 4}$ to $\mathbf{f : 2 2}$. Mounts on camera or may be hand held. Complete with leather case and instructions. Shpg. wt:, $1 / 2 \mathrm{lb}$. $1 \mathrm{~m}-$ ported.
ported.
Net 3.95

## MINOLTA "16 II" SUBMINIATURE CAMERA



- Rokkor $\mathbf{3 - E l e m e n t ~} \mathbf{f / 2 . 8}$ Lens
- Automatic Film Advance $\&$ Shutter Cocking
- Direct Viewfinder


## 2995

 an extremely easy-to-operate, paim-size camera that you can carry with you always. No need to miss those once-in-a-lifetime shots. Sliding camera in and outof bulit-In case advances film, cocks shutter, counts exposures and prevents double exposure-ail automatically. 6 shutter speeds from $1 / 30$ to $1 / 500 \mathrm{sec}$, plus B. Click-stod settings. Internally synchronized for electronic flash and bulb. Takes regular black and white pictures or color slides that fit any 35 mm pro. jector. Direct viewfinder shows pieture exactiy as it will appear on film. Lens opening from $1 / 2.8$ to $\$ / 16$. Wlick-stop settings. Complete with case. Shpg. wt., it ib. f.974L

Imported
FILM FOR " 16 II" - All are 20 -exposure magazines.
Shpg. wt., 302.
F.975 Kodak Panatomic X
F. 976 Kodak Tri-X

Net
F.976 Kodak Tri-X
F. 977 Kodachrome

Net

## NEW FRONT FOCUS PHOTO MONOCULAR



- makes your camera telephoto-Bring Distant Object from 6 to 8 Times Nearer
- Superb optics - Lightweight

Achieve supertelephoto photos with your single lens or twin-lens reflex camera and this supert optical in. strument. The front focus system is specially made for on-camera operation. There is no need to miss those once-in-a-lifetime shots. Increases focal length of your camera lens $6 X, 7 X$ or $8 X$ depending on model selected. Rugged, lightweight construction-weight only $71 / 2$ ounces; is only 5 inches long. Includes series VI adapter ring and leather case. Shpg. wt., 1202. Imported. F-889 $6 \times 30 \mathrm{~mm}$
F. $890 \quad 7 \times 35 \mathrm{~mm}$
F. $8918 \times 30 \mathrm{~mm}$

## BOOSTER EXPOSURE METER

- Includes booster-Leather cases-neck cord
- Stiils or Movies - ASA Scale-IVS Scale


Extremely versatile-extremely simple. Highly legible drect reading dial. Speeds from 4 sec . to $1 / 1000 \mathrm{sec}$. Lens aperture settings from $1: 1$ to $1: 32$. ASA scale 6 to 800. LVS scale 1 to 18. Cine scale 8, 16, 24 and 32 frames per second. Booster cell mahes oossible readings af extremely fow light levels. Small-rugged-lightweight. Includes booster cell, leather cases, neck cord and instructions. Shpg. wt., 1 th. Imported.
and in
$\mathrm{F}: 349 \mathrm{~L}$

AUTOMATIC PENTA-PRISM SLR 35MM CAMERA


Ultra-Sharp $\mathbf{1 / 2 . 0}$ Lens Eye-Level Penta-Prism Viewing Buitt in Coupled Exposure Meter
Just view, focus and shoot . . . all through one win. dow. Built-in Ilghtmeter needle, cross-coupled to tens and shutter, gives perfect exposure. Diaphragm is wide open for viewing and focusing, stops down to desired aperture, automatically returns to full opening after hutter is released. Instant return mirpor flips bach hutter is released. instant return mirror flips back automatically after exposure, $50 \mathrm{~mm} 1 / 20$ 6-element prominar lens. Bright Penta-Prism viewing shows lmage right slde up. Shutter speeds from $1.1 / 500$ seconds plus B. $M X$ flash synchronization and built-in selftimer automatic fitm counter; fold away rewind lever; single stroke rapid film advance. ASA $12-1600$ settings. F. 898 Shpg. wt., 4 Ibs. Imported
F. 899 Leather Case for above

Net 79.95
Net 6.95

## AUXILIARY LENSES



Telephoto shots-wide angle shots or extreme close ups. Easy as $1.2-3$ with the new auxlliary lenses. Each lens is hard coated for maximum light transmission. Pre. focused and color corrected. No increase in exposure setting is necessary. Bring your subject twice as close with Telephoto-add $75 \%$ more area with the WideAngle. Close up lens kit consists of $+1,+2,+3$ Proxar lenses - allows focussing down to 64,2 for amazing close-up results. Use with any color or black and white film. Auxiliaries and close-ups mount by means of adapter ring listed below. Shpg. wt. of each auxiliary lens approx. 6 ozs. Auxtliary lenses and view finder are imported.
F-488L_AUX. TELEPHOTO LENS (A)
F-488L_AUX. TELEPHOTO LENS (A)
F.489L-AUX. WIDE ANGLE LENS (A)
F-294L-CLOSE UP SET (B)
Net 7.70

F-647L-VIEW FINDER FOR TELEPHOTO AND
W-A LENS (C)
Net 7.70
F.776L-Adapter ring (for F-898) close up set, filters and auxiliary lenses (D) Shpg. Wt., 4 ozs.

Net 3.39 Shpg. Wt., 4 01s.

## AUTO-DIAL EXPOSURE METER

Holds its reading indefinitely.
Meter is almed and dial stopper depressed. ihe dial then swings to correct reading and remains fixed when stopper is released. Ideal for widely variant light Ideal for widely variant light
conditions. Color and black and conditions. Color and black and
white calitration with ASA white calitration with ASA
speeds to 25.000 . Reflected and incident light read on same scale. IVS 1 to 19. Lens: $1 / 1.0$ to $1 / 32$. Direct reading cine speeds 8.64 fps. Meter has zero adjust. Leather carrying case and nech strap. tmoorted
F. 7911 Shpg. wt., 1 Ib. Net 7.9



- Fully Automatic Threading - Fast $11.5 \mathbf{2 0 0 m}$ Lens - Variable Speed Control - Tru-Flector Lamp Gives 500-Watt Brilliance
An 8 mm Keystone projector offers every advanced feature for easier-than-ever film showing. Has 6 -second automatic film threading - simply insert the leader and the projector does the rest. Fast fl .5 lens gives needle-sharp picture ... 200 ms picture to fit screen from 11 to 20 feet away - zooms in focus for close ups. Tru-flector lamp is brighter, cooler than standard 500w lamp. One knob for forward, still, reverse, off fast rewind. Variable control speeds or slows action $\ldots$ controls reverse and forward. Includes focusing control, tilt control and room light switch. Die-cast aluminum body and case, fully geared reel arms, $400-\mathrm{ft}$. reel. Uses universal motor, $110 \cdot 120$ volts $A C / D C$. F.980wX Shpg. wt.. 20 ths.


## DELUXE LENTICULAR SCREEN

## $11^{88}$

Net 92.50

- Greater Brilliance-Especially in llluminated Rooms - Ourable Vinyl Fabric - Large $40 \times 40^{\circ}$ Screen specially-designed, optically-correct lenticular screen is free of glare, sheen and hot spots. Offers amazing sharpness and color rendition in lighted rooms as well as darkened rooms. Durable vinyl fabric resists fire and fungus. Sturdy chrome tripod legs. Screen is $40 \times 40^{\circ}$. Shpg. wt., 12 lbs.


## AIREOUIPT <br> SLIDE PROJECTOR OUTFIT



| 1 | SUPERBA 33A PROJECTOR | B | $\begin{aligned} & 30^{\prime \prime \prime} \times 40^{\prime \prime \prime} \\ & \text { SCREEN } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| c | Projection table | D | SLIDE Magazines |

A complete outfit for the finest slide viewing at a modest price. Outfit consists of: Superba 33 A semi automatic slide projector with 500 -watt picture power and 4 -inch 93,5 color-corrected lens; large $30 \times 40^{\circ}$ glas beaded screen; folding projectlon table; 3 vari-mount plastic magazines for all slides up to $1 / \mathrm{s}^{\prime \prime}$ thickness. F-981wXM Shpg. wt., 30 lbs F. 906 Superba 33A Projector only. Shpg. wt., 10 lbs.


MANSFIELD "ULTRA" 500.WATT BRILLIANCE 8 mm MOVIE PROJECTOR 5395 NO MONEY
OOWN
$\$ 5$ monthly

- Fast, Easy Loading - Forward, Still \& Reverse - Self-Contained Carrying Case

The new "Ultra" 8 mm projector features several unusual conveniences to uncomplicate movie showing. Has swing-out gate for fast threading. Forward, Stili and Reverse positions. Brilliant, new DFA lamp gives uniformly bright olcture. Cinepar $\mathbf{1 / 1 . 6}$ lens. Selfcontained carrying case.
F.785wX Shpg. wt., 10 lbs

Net 53.95
F. 786 Replacement Lamp (DFA)

Net 2.70

## LAFAYETTE ZOOM LENS



The very latest in profection accessories for the movie fan. Coated, $11.5,15$ to 25 mm focusable 200 m lens fits most popular priced projectors. Converts our own "Holiday" (F.526) into a modern, zoom projector. Adds reatism and depth to old "reels". Fills a 30 " $\times 40$ " screen at from $12^{\prime}$ to $15^{\prime}$-then zooms in for exciting closeups. Show your movies at the slize you wantwithout moving projector or screen. Shpg. wt., 6 ozs. Imported.

Net 6.95
F-6901

- With Electric Power Station

DELUXE and Slide Viewer
PROJECTION - Table Folds for Storage TABLE

## 1095



Show your movies and slides with king size viewer-view two slides at a time. Double power outlet lets you control projector and room lights. Recontrol projector and room lights. He.
move viewer and use table as TV , utility and multi-purpose stand. Table top of permanent vinyl; chrome-plated legs have non-marring tips. Table folds for storage. Shpg. Wt., 5 lbs. F.927w
ss monthly MANSFIELD 500-WATT 35MM PROJECTOR

## 2995



Self-Contained Case

- Brilliant 500-Watt Turbo Blower Cooled
- 4 -Inch, f .5 Coated. Corrected Lens

Compact convenient semi 500 watt, convenient, semi-automatic, plus big.picture,
 828 (bantam) and 127 (super-slides). Seml-automatic "Presto-Matic" changer, one push-pusl movement pleks, shows and replaces 36 slides in sequence. Self-contained storage for over 100 slides. Die-cast aluminum. Self-contained case. All optics hard coated Designed for optimum projection brilliance. For 110 120V. AC/DC. Shpg. wt., 12 lbs.
F-667
Net 29.95


AIREQUIPT METAL MAGAZINES
World's most popular magazine for automatic slide changers. Has individual frames to protect your slides from wear and dust. Holds 36 slides.

"HOLIDAY"
500-WATT 8 mm PROJECTOR


## $\$ 5$ monthly

- Swing.Out Gate-Easy Loading - Coated $3 / 4$ " 11.6 Lens - High Intensity Blower Cooler - 400. ft. Reel Capacity
Show your movies sharo and clear! Swing-out gate for fast, easy loading. Scientific Marex film extends life of your film with less wear and tear. High Intensity blower for cooling. Coated $3 / 4$ " $\mathbf{1 1 . 6}$ lens for wide. angle viewing. Separate switches for blower and lamp. Rapld rewind and quick-tilt features for ease of operation. Lifetime lubrication with oll light bearings. All-aluminum, die-cast construction. 500 watt bulb. Lifetime guarantee. Shpg. wt., 10 lbs.


## F.526wX

Net $\mathbf{3 7 . 5 0}$
F. 649 Carrying Case for F-526

Shpg. wt., 2 los.
Net 6.44
F. 786 Replacement Lamp (DTA) …................. Net 2.70

## NEW! T T T LE SPOTS <br> 488

Lets you make animated titles
with any 8 or 16 mm camera
equipped with single frame release. Constand, with 112 letters and characters which push into holes on the board. Any number of pleasing and varied titles can be made. By simply moving letters one hole per frame exposure you produce true letters one hole per frame exposure you produce true
animated titles - marching letters, revolving letters, exploding words, etc.
F.983 Shpg. wt., ? ibs. ............................. Net 4.88

## AIREQUIPT

## Deluxe FULLY AUTOMATIC SLIDE PROJECTOR OUTFIT



Everything you need to show your favorite slides, Superba 77A 500 -watt slide projector, with focus, advance, reverse by remote control and built-in timer that lets the projector do all the work; large $30^{\prime \prime} \times 40^{\prime \prime}$ glass beaded screen; folding projection table; 3 vari. mount plastic magazines for all slides up to $1 / 8^{\prime \prime}$ thickness.
F.982WxM Shpg. wt., 32 lbs. .......................... Net 96.50
-905 Superba 77A Projector only. Shpg, wt., 10
lbs.

# PHOTO ACGESSORIES 

## NEW!

TWIN
FLASH

## BRACKET

- Adequate, Even Light, Even for Wide Angle Shots
- Eliminates Shadows and Hot Spots
- Use With any Flash Unit, Including Strobe
- Tripod Socket Allows Use of Tripod or Pistol Grip

The unique twin flash bracket offers sufficient light for full coverage from edge to edge of pictures. Unusual side lighting effects are easily achieved, and the user of a wide angle lens can get ample light to make full use of his lens with a flash, Bounce light can be used with slow color fitm too. Iripod sockef enables use of tripod or pistol grip. Compact and light weight, constructed of rugged, die-cast aluminum. Shpg. wt., $1 / 2 \mathrm{lo}$. f.968 Imported.

## FOLDING BC

FLASH GUN
Includes Battery
and Leather Case

- Folds Like $A$ fan to $4^{\prime \prime} x^{\prime \prime}$ ?

Efficient B-C Operation!

$$
399
$$

Efficient $41 / 2^{\prime \prime}$ diameter metal reflector has pebbled finish to eliminate hol spots. B-C combination for sure. fire and hi voltage. Heavy molded battery case with bullt-in test lamp-bulb ejector-extension socket. Standard shoe with pressure adjust fits accessory cips. Uses standard bayonet base flash butbs. Novel, usefli exposure guide bullt in on rear of case. Complete with leather case, icondenser,
Shpg. wt., 1 ib. Imported. F-209
BA-i2 Battery for above
Net 3.99

## LAFAYETTE AG

## FLASH GUN

Compact, palm size, dependable B-C operation. Made for the new AG flashbulbs. Fan-type reflector measures $2^{\prime \prime \prime}$ in diameter when opened. Shoe fits all standard accessory clips. Fea. tures a computor dial for de. termining correct $F$ stop. Testlight, and Bulb Ejector. Comlight, and Bulo Ejector. Complete with cord. Operates on 15 V battery (not incl.). Shpg. wt., 8 ozs. Imported.
F-699.
BA-11 15-Volt Battery for above. Imported
Net 2.99
Net

## CLAMP-POD

## - Portable Camera Suppoit

- Clamp And Tilt-Top Combined A valuable addition to any camera bag. Prevents neediess camera jitterclamps to most anything, Lightweight and compact, yet extremely strong, it will support most cameras easily. Double-ball-point head with lock permits an infinite variety of camera mounting angles. clamp also accepts standard tripod mounting. Clamp opens to $13 / 4{ }^{\prime \prime}$. Will not mar wood or other ine finishes. Chrome and enamel fin| ish. Sh |
| :---: |
| $\mathbf{1 . 8 3 4}$ |



Net 2.49

## ELEVATOR TRIPOD

Folds to $16^{\prime \prime}$ - Extends to $47^{\prime \prime}$
PLUS 7" Elevator!

- Tri-Tilt head-

For any small cảmera - 35 mm - reflex - or movie. Professional quality for professional results. Strong steady - Hightweight. Pencil slim, chrome plated, brass legs. Lock securely in place - fold down readly. Single action tilt-pan - and swing over for taking pictures in vertical or horizontal format. Geared eleva. tor centerpost with positive lock and folding crank. weighs only 31 ors. All the most wanted features in one tripod. Shpg. wt.. $21 / 2 \mathrm{lbs}$. Imported.
F .339

## Dymachrame COLOR FILM WITH PROCESSING

- Beats the High Cost of Color Film
- Same Fine Pictures
- Processing Included Direct To Your Home


New Oynachrome fllm is the same type of color film you've used for years - same reversal type, same natural colors, same superb quality. Only the price is different - It's almost like getting the processing free. And the low price includes processing direct to your home.
F.948 $8 \mathrm{~mm}, 25$-1t. roll, Daylite, ASA 10 ........ Net 2.49 F.949 8mm, 25-1t, roll, Indoor, ASA 16 ........ Net 2.49 F. $95035 \mathrm{~mm}, 20$ exp., Daylite Net 2.19
F. $95135 \mathrm{~mm}, 36$ exp., Daylite

Net 3.11

## KODAK FILM WITH PROCESSING INCLUDED

- Slides Returned Mount ed, Ready for Viewing or ShowIng!
- Rigid Processing controls Assure highest Quality
- Convenient direct-mail
 "mallers" in every roll Prints guaranteed for Kodacolor and black and white.
You get factory-fresh film plus a convenient directmail mailer. After the complete roll has been filmed, put it into the maller, drop into a malibox and in a few days your finished films are delivered postpald to your door. You get $31 / 2^{\prime \prime}$ square or $34 / 2 \times 5^{\prime \prime}$ giant prints with Kodacolor and Black \& White-and a full number of prints is guaranteed. Should you get less than the full number of prints of Kodacolor or Black \& White printable negatives per roll, you will receive coupons for additional FREE prints. DO NOT MAIL FILM TO LAFAYETTE RAOIO.


## NEWI KODACHROME II 35 mm COLOR SLIOE FILN

 - ASA Inder Dajlight 25, Indoor 40.$\begin{array}{ll}\text { F. } 796 & 35 \mathrm{~mm} \text {, Daylight, } 20 \text { Exp. } \\ \text { F. } 797 & 35 \mathrm{~mm}, \text { Daylight, } 36 \text { Exp. }\end{array}$
2.74
4.03

NEW! KODACHRDME \| COLOR MOVIE FILM ASA Inder Dayllght 25, Indoer 40

## KODACDLOR COLOR SNAPSHOTS

## F-585 120 indoor/Outdoor

3.11

KODAK BLACK \& WHITE ROLL FILM
$\begin{array}{ll}\text { F.587 } & 127 \text { Verichrome Pan } \\ \text { F.58d } & 120 \text { Verichrome Pan }\end{array}$
$\begin{array}{ll}\text { F-589 } & 620 \text { Verichrome Pan }\end{array}$
F-590 $35 \mathrm{~mm}, 20$ Exp., Plus $X$
$\begin{array}{ll}\text { FF } \\ \text { F. } 591 & 351 \\ 35 m m & 36 \text { Exp., Plus } X \\ \text { Plus } X\end{array}$
1.25
1.25

## PHOTOFLASH BULBS Es \&

BUY IN QUANTITY ANO SAVE

- "My.T.Myte" and "Synchro Sure" Photoftash Bulbs - Standard Sizes-Highest Quality-Pre-Tested

| $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | $\begin{aligned} & \text { Lamp } \\ & \text { Type } \end{aligned}$ | Pkg. Quan. | Per Phg. | Each Pkg. In Lots of 6 |
| :---: | :---: | :---: | :---: | :---: |
| F-798 | AG-1 | 12 | 1.08 | . 98 |
| F-870 | $A G-1 B$ | 12 | 1.17 | 1.05 |
| F. 471 | M2 | 12 | 1.17 | 1.05 |
| F-472 | M2B | 12 | 1.35 | 1.20 |
| F-474 | SM | 12 | 1.62 | 1.46 |
| F. 475 | 5 | 8 | 90 | . 85 |
| F-476 | 58 | 8 | 1.08 | . 96 |
| F-477 | 6 | 12 | 1.62 | 1.46 |

## AG "SIXSHOOTER" BC FLASH

- Six-Shot Repeater
- Holds 6 AG Bulbs for Instant Use
- Efficient Reflector with Fresnel Lens

Holds slx AG-1 or AG-18 flash butbs for rapid, succes. sive firing. Smaller and lignter than many single-lamp guns; weighs only $61 / 2$ oz. Maximum light output as guns; weighs only $61 / 2$ 01. Maximum light output as-
sured by a precisely designed $2^{\prime \prime}$ reflector and fresnel sured by a precisely designed $\mathrm{Z}^{\prime \prime}$ reflector and fresnef left. Built-in exposure calculator, test light, flash shield, Bulbs and battery luad easily from front. Fits any camera with standard accessory shoe. Replaceable standard cord with PC fitting. Uses long lasting 22.5 v BC battery. Less battery. Imported. Shpg. wt., 8 oz. F-848
BA.14 22.5v Battery for F-8<8
Net .59
NEW MICRO-FLASH AG BC FLASH GUN


- Compact, Light Weight

- Fits Any Camera with Access ory Shoe
- Uses Powerful, Low Cost AG-1 Bulbs

A lightweight, compact flash gun you can put into your pocket. One-plece construction, uses miniature AG-1 buibs. Fits any camera's accessory shoe. Features BC action for powerful unisorm flashes every time; square horizontal reflector; bulb ejector button. Uses 15 V photoflash battery. Complete with flash cord, less battery. Shpg. wt., 6 oz. Imported F. 925

Net 1.49

## "PRO" ELEVATOR TRIPOD

- Holds Heaviest Equipment $\$ 95$
- Velvet Smooth Panning Action
- Extends to 461/2

Elevator Adds $10^{\prime \prime}$-Closes to $22^{\prime \prime}$
All aluminum construction. Gear drive elevator with positive lock, Large, cushioned pan head fits any camera. Head pans $360^{\circ}$-tilts $180^{\circ}$. tegs lock at any height. Lock and unlock with a half twist. Completely rigid, even when fully extended. Long section construction for maximum stability. Oversize thumb locks and handle for ease of use, Velvet smooth action in all planes of motion. Positive leg stops prevent overspread. Rubber tlpped feet for solid footing on any surface. Satin black and aluminum finish - chrome trimmed. Shpg. wt., 4 lbs. Imported
F-650
Net 11.95


## MOVIE \& SLIDE PROJECTION LAMPS

## (졸) End

Exact replacement projection lamps for most movie and slide projectors. Make your pictures sparkle with a new, efficlent lamp. Imported. Avg. shpg. wt., 6 ozs.

| slock No. | $\begin{aligned} & \text { ASA } \\ & \text { Code } \end{aligned}$ | Watt | Base Туре | Net Ea. |
| :---: | :---: | :---: | :---: | :---: |
| F-869 | OCA | 150 | 4.Pin | 2.70 |
| F. 786 | OFA | 150 | Prefocus | 2.70 |
| F. 741 | CLS | 300 | Bayonet | 1.49 |
| F. 742 | CLX | 300 | Bayonet | 1.49 |
| F.743 | CMV | 300 | S.C. Bay | 1.49 |
| F. 744 | CYC | 300 | S.C. Bay | 1.49 |
| F. 750 | CWO | 300 | Prefocus | 1.69 |
| F. 871 | C2A | 500 | 4-Pin | 2.49 |
| F. 747 | EDK | 500 | Bayonet | 1.79 |
| F. 745 | C2X | 500 | Prefocus | 1.79 |
| F. 746 | DAK | 500 | Prefocus | 1.89 |
| F.748 | DDB | 750 | Prefocus | 2.15 |
| F. 749 | DFO | 1000 | Prefocus | 2.90 |

## PHOTO FANS SHOP Lafayette FOR LOW COST ACCESSORIES


(B)

(C)
(D)

18) $(F)$
ath

(H)
(L)

(N)
(K)

(J)

TILT-TOP (F)
ELECTRIC SLIDE VIEWER (A)
Centers all slides for correct magnification. Trans. parencies Illuminated and eniarged through a fine optically ground and polished lens. Electrically oper-ted-equipped with bulb, socket, on-off switch, 6 ft . cord and plug. All steel construction.
F- 26 Shpg. wt. 2 IDS.
CISIP HANOLE (B)
Net 3.75 platformtripod socket in base. Hammertone finish. Standard f.
. 549 Shpg. Wt. 10 OZ. 15 SECONO SELF-TIMER (C)
Net 1.88
Fits in the cable releasg of all cameras. Special adapter for Leica-type release sockets. Plunger length adjustable to protect shutter. Retracts after picture has been taken. Set for 15 seconds or less. Imported. F-25 Shpg. wt., $40 z$. Net 1.98 FOLOING TRIPOD PROJECTION SCREEN (D) Fine grain glass beading for extra brilliance, excelrent viewing. Heavy-duty folding tripod adjustable to various heights. Large $30^{\prime \prime} \times 40^{\prime \prime}$ size. Shpg. wt., 10 los. F. 536
2.LIGHT BAR (E)

Net 6.95
Holds still or movie cameras. Grip-hande prevents light bar from turning. 6 ft . cord. (Bulbs not included). F. 537 Shpg. Wt.i $11 / 2$ lbs.
PHOTOFLOOD BULBS. 300 -watt, reflector type.

Net 2.50
F-539 Shpg. wt., 1 lb.
Net ea. . 95

## MULTI-FLEX UNIVERSAL LIGHT BAR

- Flood Lisht -Bounce Light -Concentrated Light - Fully AdjustableSwivel Heads, Flex Arms

Arms rotate $180^{\circ}$ and heads swivel in every direction to give you all lighting conditions necessary for picture taking-bounce, fill-in and side lighting: concentrated, spot lighting; regular flood lighting. Camera mounts bove bar so handle an be unscrewed to fit bar on triond. For $110-120 \mathrm{VAC}$. Shpg. wt., 3 lbs. Imported. friond. For $110-120$

## Net 5.75

## DUAL REFLECTOR PHOTOFLOOD LAMPS

F-854 500-Watts
Net each. 1.95
F-853 300 -Watts
Net each, 1.69

## "HI-LITE"TM MOVIE LIGHT

## - Mounts Like a Flash Gun

## - Fits Any Camera

- New Dual Reflector Lamp Folding Flex-Angle Bracket
Evenly llluminates subject and background to. give needed depth and roundness. The secret is in the dual reflector; one spherical and one elliptical surface, producing a broad beam
 of soft even light. The beam angle is approximately $100^{\circ}$ average color tempera ture $3200^{\circ} \mathrm{K}$. The flex-angle bracket adjusts to practically any desired angle. 500 -watt, Dual Reflector lamp. For $110-120 \mathrm{~V}$ AC. Shpg. wt., 2 lbs. Imported. F.868m

Net 5.90
OUAL REFLECTOR PHOTOFLOOD LAMPS
F-854 500 watts
Net 1.95
35 mm SLIDE FILE $(K)$

POLAROID ${ }^{*}$ PICTURE ROLLS


32 and 42 are panchromatic types with an exposure index of 400 and 200 respectively. 37 and 47 have index ratings of 3000 and are used with the wink-light for indoor shots at normal room lighting levels. Shpg. wt., per roll, 5 ozs.
Precision made-heavily chrome plated. All-angle "Tilt-Top" fits German and American Tripods and Cameras. Positive locking action at every possible angle. Imported.
... Net 1.55
F. 160 Shpg. Wt., ${ }^{4}$ OZ

5 -section, chrome-plated, brass tripod. Extends to $46^{\prime \prime}$. telescopes down to $13^{\circ \prime}$, only 20 ozs. Tension ad. just screws for each leg. Camera retaining screw on panhead rotates-pans and tilts with a single motion. Handle is detachable, Pans $360^{\circ}$-tilts $145^{\circ}$. Imported. F-295 Shpg. Wh. ${ }^{21 / 2}$ IDS.
BRAIDED WRIST STRAP (H)
Fine quality braided leather wrist strap. Sliding satety lock. Metal clamp links strap to tripod screw. Rubber non. slip surface prevents accidental unscrewing. For movie and 35 mm cameras. Shpg. wt., 4 ozs. Imported F-639

## 8 mm REEL AND CAN ( 11

400' reel runs true without wooble or binding, for lasting service. Can keeps film safe from dust and scratches.
F-538 Shpg. wt. 14 o2s. …..................... 95
FLASHLIGHT SCR
An excellent lecture tool. Points out subject material without creating shadows. Adjustable arrow focus. Black hood prevents light spread. With cells. From W. Germany
F. 792 Shpg wt. 12 oz

Net- 5.25
BA-156 No, 2 cell for abo p

Type Camera Model Per Roll F-712L 47 All Except 80 Series, $1.33 \quad 1.89 \quad 1.80$ F-713L 42 All Except 80 Serles, J.33, J-66 1.77 1.68 F.714L 37 80B, 80A, $80 \mathrm{~J} .33 \quad 1.48 \quad 1.40$

## F.715L 32 80B, 80A, 80

1.48

POLACOLOR FILM
F.942L 48 AH except 80 series, J-33 F-945L 38 J. 33
4.89

F-943 660 Adapter Kit for J.66
3.38 F-946 330 Adapter Kit for J. 33
F. 944274 Cutter Bar for J. 66 F-947 273 Cutter Bar for J. 33
4.49

## INSTANT STEREO FOR POLAROID CAMERAS



959
Create 3 -dimensional photos with this true stereo attachment. You can also double your shots or shoot trick effects all on the same roll of film, comes complete with snap-on stereo converter, film saver, pocket size stereo viewer and instructions. Shpg. wt., 1 ib. Fits all Polarold cameras except J.33 and J.66.
F-917 Fits Polaroid $/ 33$ and J .66

Net 9.59

Portable all steel 35 mm slide file. Store $1502 \times 2$ glass slides or $300 \quad 2 \times 2$ cardboard slides. Includes index card, and numbered strips for quich, easy identificatlon. Finished in platinum gray enamel. Shpg. wt., 3 los.
F. 161

PANHEAO (L)
-Net 1.69
Chrome finish. Camera retaining screw rotates-makes turning camera unnecessary. Twist of handle locks pan and tilt. Pans $260^{\circ}$ tilts approx. $145^{\circ}$ Imported F-215 Shpg. wt. 8 oz. ...................... Net 1.66

GENUINE PIGSKIN GADGET BAG (M)
Full $10 \times 8 \times 4^{\prime \prime}$. $20^{\prime \prime}$ zipper top. Outside pouch with strap and buckle. Brass hardware. Shoulder strap and pad. imported.
F. 320 Shpg, wt., 1 to.

LEATHER NECK STRAP (N)
Heavy leather camera carrying strap. Posity swivel grips. Adjustable to 36 inches. Heavily chromed metal parts. Shpg. wt., 4 ozs. Imported.
F. 640

CHRDME "SNAKE" NECK CHAIN (O)
Heavily chromed, super.flexible "Snake" chain. 39" long-positive, screw type catches. Holds any camera securely and ready for instant use. Shpg. wt., 4 ozs. F. 653

Imported
MP TRIPOD (P)
An Indispensable photographic accessory. Combines in one small unit, a clamp tilt top, and table top tripod. Legs stored in shaft. Will clamp to trees, pipes, light stand, car, window, etc. Supplied com. plete with zipper case. Shpg. wt., 1 ilb.
F. 654

Net 5.98
BIFLEX "LENS MASK" FOR POLAROID CAMERAS

- Gives You Twice As Many Color Pictures per Roll
 Half
- Makes Trick Shots Possible
Double your Polarold pictures from the same roll of flim-color or
as low
as
amazing biflex lens mask is so easy to use. simply slips over your Polarold camera lens and presto-you get 16 pictures from each 8 exposure roll of Polarold film. Will pay for itself the first two times you use it. film. Will pay
Shpg. wt., 6 oz .
Shpg. Wt., 6 02.
For Series 95, 95z, 95b, 100, 150, 700, 800. 850. 900. F-825L Biflex
For Series $110.110 \mathrm{a}, 110 \mathrm{~L}, \mathrm{~J}-66$.
F-826L Biflex if
POLAROID CLOSE UP KIT
Focus as close as 6 inches from your sub. ject. Take portraits small still lifes - do photocopying. Includes lenses, leather case and lenses, leather case and

725rate focusing shog accu 8 ozs.
F-72IL for all except $110 \mathrm{~B}, 110 \mathrm{~A}, 110,133, \mathrm{~J} .66$ Net 7.25
REPLACEMENT KIT FOR POLAROID ${ }^{8}$

## WINK-LIGHT

Kit contains both battery and bulb for replacement in Polaroid WINK-LIGHT. Manufacturer recommends both batterv \& buth he replaced together to insure well lighted shots. Shpg. wt., 1 it.
BÁ-320

## LAFAYETTE DIRECT IMPORTS - COMPARE FOR VALUE

## LAFAYETTE BINOCULARS

## RRU-Z00m

- Not a "Vari.Power"One Control Zooms both barrels!


## 41 $95 *$ NO MONEY DOWN

- 7X to 12Xor any Power in Between
\$5 monthly
easy pay plan SEE PAGE 412

- Center Focus-Right Eye Adjust-Plus Single Synchronous Zoom Control! - The Perfect Power For Any View!
Sensational Zoom action holds even fast-moving subjects in perfect view. Sight in any subject at 7 -power - then Zoom up to 12 -power (or any four inbetween) for closeup viewing. Full 40 mm , objectlve lenses, hard coated achromats. Field of view is 290 feet at 1000 yds, at 12 -power ( $5.5^{\circ}$ ). Prisms clamped in shockresistant mounts. Lightweight alloy frame and body. Sealed against dust and moisture. Includes plush-lined, hard leather case and straps. Shpg. wt., 5 lbs. Imported. F. 793

Add 10\% Fed. Tax
Net 41.95*

## ZOOM OPERA GLASS



Coated Zoom Optics
2 to $4 \times 30$
Perfect for Sports, Theater
$10^{95 *}$

Zoom In on your subject - make it blg as life. Actually magnifies 2 to 4 times larger than can be seen with the naked eyel Just right for the opera, sporting events, bird watching or all around use. Small enough to fit in your pocket. exceptlonally lightweight. These glasses feature zoom optics, 2 -power 104 -power. Brings everything up close fast. Individual focus with master zoom control. Coated optics and wide angle give an amazingly clear view. Compares favorably with larger binoculars. Neck oand and zipper leather case included. Shpg. wt., 1 lb. Imported. F. 835 "Add $10 \%$ Fed. Excise Tax


## LAFAYETTE

## 14" TRANSPARENT CELESTIAL GLOBE

Basic Ald for Students and Teachers of Astronomy - NAVIGATORS

- aeronautics - astronautics
- Adjustable Satellite Orbits
- Satellites Travel around Earth Automatically
- Adjustable Sun and Moon
- Adjustable Lunar orbital inclination
- 80 Constellations-including all stars of 1 st, 2nd, 3rd and 4th Magnitude
- Similar devices used by the Navy -Air Force-and Marines
The Lafayette celestial sphere may be defined as a sphere of infinite radius with its center located at the center of the earth. This system of geocentric coordinates will Illustrate the true geographic zeniths of the sun and stars at any time of any day. All systems of astronomical spherical coordinates( such as the equatorial, galactic. ecliptic, etc., which are based on the celestial sphere, rotate with the sphere. The apparent contra-rotation of the stars, actually due to the earth rotating about an axis is clearly demonstrated. The sphere will illustrate how the sky will appear at any hour - on any date - from any point on earth. With It you can tell time by the stars - learn to tell time by the sky - clearly illustrate and help solve navigational problems. Traces the orbits of man made satellites and finds their overhead positfons. Serves as a superb star chart. Sun and moon positioned by external controls. Artificial satellites automatically circle around the terrestrial globe. The various stars, constellations and their identifications are permanently nolded - not printed- on the celestial sphere. The celestial globe is $14^{\prime \prime}$ in diameter with the terrestrial globe centered within. Equipped with horizon ring time ring - fixed meridian ring - swinging meridian ring - sun and moon pointers - fixed ecliptic - detachable "planet" Indications - unlvorsal base - and com. plete instructions. Shpg. wt., 15 lbs. Imported.

Net 49.50

Low Prices - Fine Quality - Exceptional Value
 clamped in lightweight alloy frame and body - sealed against dust and moisture - properly collimated and aligned. All are center focus with adjustable right eyepiece. Hard leather case and reeckstraps included.
$7 \times 35$ Popular, versatlle, all purpose binoculars. For the sportsmen - hunter - bird watcher - vacationer. High luminosity. Compact design. Shig. wt., 3 lbs.

## F-183

Net 21.95*
7x35 wide Angle. Top performance - highest quality. Almosi twice the fleld of view of ordinary $7 \times 35$ binoculars. Spots and holds a moving target faster and easier. Oversize oculars and prisms. Shpg. wt., $31 / 2 \mathrm{lbs}$.

## F. 184

Net 32.95*
$7 \times 50$ Navy style night glasses. Favored for marine use. The choice of professionals because of exceptionally high light gathering power. Superior image brightness. Shpg. wt., $31 / 2 \mathrm{lbs}$.
F. 164

Net $26.75^{*}$
$20 \times 50$ King of the long range. Hunters, mountain climbers, plane spotters, forest rangers-any long distance viewing and observation requirerent. Shpg. wi., $4 \mathrm{lk} / \mathrm{lbs}$. F. 185

Net 29.95*
*Add $10 \%$ fed. Tax to the above prices. All above binoculars are imported.

## VIEWFINDER 'SCOPES



These are the same fine viewfinders used on Lafayette's refractor telescopes. All have coated, achromatic objectives and eyepleces. Equlpped with mounting brackets, and centering screws for collimation. Imported.
(A) $30 \mathrm{~mm}\left(1.2^{n}\right), 6 x$; Ouraluminum tube finished in white enamel. Draw tube focusing. Eyeplece is interchangeable, 24 mm (.97") 0.0 . Single mount ng bracket, as shown with the Polaris, F.342. Shpg. wt., 2 lbs.
F. 629

Net 6.95
(B) 32 mm (1.6"), 25x: Air spaced objective .500 mm focal lengths. Dual mounting brackets, as shown on the Arcturus, F-385. Sultable for use as a small celestial and/or terrestrial telescope. Duraluminum iube, finlshed in wite enamel. Standard rack and pinion focusing. Cirome plated brass draw tube. 20 mm eyepiece supplied can be interchanged with eyepleces of other focal lengths. Shipg. wt., 8 ibs. can be
F. 628


Manufactured to extremely wose tolerances by one of worls's leading manufacturer's of optical accessories. These oculars allow you to obtain maximum per formance from your refractor or reflector. You can determine the magnification possible by dividing the focal length of the eyepiece into the focal length of the telescope oblectlve lens. All are hard coated. The 24.5 mm 0.0 ., ( $97^{\prime \prime}$ ) fits most telescopes currently avaliable. Imporied
Stock \# Description Net, ea.
F.391L 4 mm Orthoscoplc $\quad \mathbf{8 . 9 5}$
F.392L 6 mm Huygenian-Mittenzwey 5.45
F.393L 9 mm Huygenian-M/ttenzwey 5.45
F.394L 12.5 mm Huygenian-

Mittenzwey
5.45
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- Viewfinder Scope 25x, 42-mm -910-mm Facal Length - 76.2 mm Clear Aperture Micromotion Controls for Declination and Right Ascension Resolv. Ing Powe: 1.6 Barlow Lens Included

The objectlve lens is a $79-\mathrm{mm}$, hard coated, air spaced Fraunhofer achromat with a clear aperture of $76.2 \cdot \mathrm{~mm}$ $\left(3^{\prime \prime}\right)$. Focal length $910-\mathrm{mm}$, focal ratio $\mathrm{f} / 12$, resolving power $1.6^{\prime \prime}$. Seven coated eyepieces provide magnifica. tions of $227 x, 152 x, 101 x, 73 x, 45 x, 35 x$, plus $25 x$ through the vlewfinder. Barlow lens add ranges of $454 x$, $304 x, 202 x, 146 x, 90 x, 70 x$ and $50 x$. Focusing by means of micro-precise rack and pinion drive. The viewfinder scope has a $42-\mathrm{mm}$ ( 1.6 in . clear aperture) objective - $500-\mathrm{mm}$ focal length-rack and pinion focusing - and will accommodate various eyepleces. Finely calibrated hour and declination circles for rapid finding and setting. Body tube of white enameled aluminum. Accessorles include three sunglasses, moonglass, two star diagonals, sun dlagonal, erecting prism, sun projecting screen, extensible field tripod, chain brace, accessory shelf, wooden cabinat. VIA EXPRESS ONLY. F.384wx Shpg. wt., 60 lbs.


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## 2.4" EQUATORIAL

## REFRACTOR

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F.391 $4-\mathrm{mm}$. orthoscopic eyeplece for

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- Six paired objectives
- Universal mounting device

Unique design permits examination of opaque or gross specimens in any plane as well as use of standard stage an extremely wide field, has a high eyepoint and long working distance. The image is not inverted or reversed; all movements appear in their actual direction. Engineered versatility for use in laboratory, industrial, and general research. Exceptionally fine optics pro-


SEE PAGE
412

duce the most briliant resolution. Fine stereoscopic (3-dimension) vishin-
wide tlat field with exceptional depth of focus. Unexcelled optical and me. chanical design.
OPTICAL SPECIFICATIONS: Six palred, achromatic, coated objectives, $2 \mathrm{X}, 4 \mathrm{X}$, 6 X . Interchangeable by means of a dovetail slide. Six paired widefield eyepieces. Coated and corrected for chromatic aberration and fleld curvature. Two each 5X Huygenian, 10X Kellner and 15X Keliner.
80DY: Inclinable $90^{\circ}$, coated prism system for maximum IIght transmission, interpupiliary adjustment 55 mm to 75 mm , eyepiece diopter adjustment.
STAGE: $90 \mathrm{~mm} \times 100 \mathrm{~mm}$ removable stage. 70 mm flush top glass plate, long spring clips, removable hand rests.
FOCUSING: Rack and pinion focusing mechanism with $3^{\prime \prime}$ excursion of the rack. STAND: Universal mounting dase clamps on any flat surface up to $21 / 2^{\prime \prime}$ thick. Maximum vertical travel of Optiscope on unlversal stand is $43 / 4^{\prime \prime}$ Affords $10^{\circ}$ clearance from work surface to objective lens. Horizontal excursion Is $4^{\prime \prime}$. Rotation through $360^{\circ}$ in two axds. Includes fitted cabinet of fine grained oak. Shpg. wt., 25 lbs. Imported

## MICRO-STANDARD

Net 189.00


- locates any spot on a slide, "ON THE NOSE"
$g^{95}$
- SMOOTH ACTION-ilORIZONTAL AND VERTICAL
- FOOL PROOF CO-OROINATE
SYSTEM

Graduated mechanical stage attaches to any "Soclety" size microscope stage such as F. 367 Medica F. 368 Micro-Piex and F-602 Micro-Standard. Adjustable holder takes any slide up to $90 \mathrm{~mm} \times 50 \mathrm{~mm}$. Essential for methodical examinations such as is required under an oll immersion lens or in blood counting. Locates and relocates portion of the slide quickly and easily. Vertical movement by rack and pinion - horizontal movement by worm gear. Machine engineered scales, graduated in single millimeters with vernier reading to $1 / 10 \mathrm{th} \mathrm{mm}$. All sides can be charted by means of the co-ordinates of these scales. Spring clip automatically fits the slide into proper position. Supplised with fitted woodenjcase. Shpg. wt., I lb. Imported F. 362 L

Net 19.95


# RESEARCH EQUIPMENT FOR SCIENCE AND TECHNOLOGY 

## Miera-Plex <br> -Binocular-Monocular Research Microscope

- 20X to 2000X - Interchangeable Binocular/Monocular Tubes
- Vernier calibrated mechanical stage - Eight paired eyepieces
- Quadruple revolving nosepiece


BUY ON TIME
SEE PAGE 412
An outstanding instrument with reatures of construction and design that will, without reservation be appreciated by competent experts.
OPTICAL SPECIFICATIONS: Four achromatic, coated objectives $4 \times / 0.15$ n.a., $10 \times / 0.25$ n.a., $40 \times / 0.65$ n.a., oll immersion $100 \times / 1.25$ n.a. Eight paired eyepieces. Two each $5 \times$ Huygenian, $10 x$ Huygenian, 15x peri-planatic, $20 x$ Kellner. Dust proof quadruple revolving nosepiece.
FIELD SIEE: Fleld area in millimeters is from 4.7 to 2.0 mm for the 20 x to 80 x range, 1.88 mm 0.8 mm for $50 \mathrm{x}-200 \mathrm{x}, 4.7 \mathrm{~mm}-2.0 \mathrm{~mm}$ for 200 x $800 \mathrm{x} 1.88 \mathrm{~mm}-0.8 \mathrm{~mm}$ for $500 \mathrm{x}-2000 \mathrm{x}$. Field size taken at 170 mm focal length.
taken at 170 mm focal ength.
BOOY: Interchangeable Binocutar tube inclined $45^{\circ}$, graduated interpupillary adjustment; left eyetube adjusts for refractive difference between two eyes. Monocular tube is extendable, graduated in mm from 140 mm to 190 mm . Parfocal at 170 mm .
STAGE: Square stage $125 \mathrm{~mm} \times 130 \mathrm{~mm}$. Mechanical stage with $30 \mathrm{~mm} \times 70 \mathrm{~mm}$ range of movement with vernier accurate to 0.1 mm . Slides of practically every shape and size, inctuding petri dishes, can be used
FOCUSING: Coarse focus by means of coaxial rack and pinion drive on dovetall slide. Fine focus by coaxial micrometer slow motion Meyer's type adjust. Graduated 1 division equals . 052 mm (2 micron intervals). Spring loaded action prevents driving through subject.
SUBSTAGE: Rack and pinion drive. Double lens bright field condenser (interchangeable) 1.2 n.a. irls diaphragm. Filter holder, stop against overwind, 50 mm plano-concave mirror. Satin black baked enamel finish. Chrome trim.
$134 / 4884 / 2 \times 51 / 4^{\prime \prime}$
overall. Net weight 34 lbs. in$134 / 488 / 2 \times 51 / 4{ }^{\prime \prime}$ overall. Net weight 34 los. In-
cludes fitted cablnet of fine grained oak with cludes fitted cabinet of line grained oak with
lock and key, 5cc of cedar oll, spring cllps, lock and key, 5cc of cedar oll, sping
spanner, blue filter. Shpg. wt., 42 ibs.
F-36awx imported.
Net 345.00

## UNIVERSAL MICROSCOPE ILLUMINATOR



## Universal Microscope

 Illuminator with Iris DiaphragmProvides an intense, relatively cool light. Designed for use with stereoscopic microscopes (incident light), vertical illumination and as a general laboratory light source. Excellent for use as a "Millikan oil drop" experiment illuminator. Mounted on a heavy base, the lamp can be adjusted for any angle of above or below stage lllumination. Size of the illuminated field is controlled by iris diaphragm. Ventilation openings are baffled to confine stray light. Focusable from an image of the filament to a broad field. The variable transformer permits continuous variation of light intensity. Supplied with a 6.5 volt, 25.5 c.p., clear glass bulb. blue glass filter and variable transformer. Shpg, wt., 10 lbs .
-445 Imported
F-755 Repl. 8ulb for F-445 Net, ea.
Net 35.00
.69

## MICROSCDPE STAGE MICROMETER <br> \author{ - GRAOUATEO TO $1 / 100 \mathrm{MM}$ 

} and standardizing micrometer eyepleces. Fine polished glass slide, $75 \mathrm{~mm} \times 25 \mathrm{~mm}$, has a 1.0 mm scale with 100 g gaduations $(0.01 \mathrm{~mm})$ ruled directly on it. Each fifth $100 \mathrm{graduations}(0.01 \mathrm{~mm})$ ruled directly on it. Each fifthand tenth calibration is a larger line to aid in measureand tenth calibration is a larger line to aid in measure-
ment. The lines are stained black and protected by a cover glass. Complete in hinged case. Shpg. wt., Go2s. F-448 Jmported

## Medica II

- Standard Society Size
- 20X to 1500X
- Vernier callbrated mechanical stage
- Extendable Monocular Tube
- Par-focal at 170 mm tube length

Outstanding design-features unexcelled optically and mechanically-and priced far below any equivalent instrument.
OPTICAL SPECIFICATIONS: Four coated achromatic objectives. $4 \times / 0.10$ n.a., $10 \times / 0.25$ n.a., $40 \mathrm{X} / 0.65$ n.a., ofl immersion $100 \mathrm{~K} / 1.25$ n.a. Three eyepieces, $5 \times$ Huygenlan, 10x Huygenian, and $15 X$ peri-planatic.
BC OY: Extendable monocular tube. Graduated from 155 mm to 200 mm . Parfocal at 170 mm . STAGE: Square stage $120 \mathrm{~mm} \times 125 \mathrm{~mm}$. Graduated mechanical stage with $50 \mathrm{~mm} \times 80 \mathrm{~mm}$ range. Vernier accurate to 0.1 mm .
FOCUSING: Coarse focus by means of rack and pinion drive on dovetall slide. Fine focus by coaxial, lever type. micro-motion. Full 16 revolutions for 3 mm travel. Spring loaded safety device prevents drlving through subject. FocusIng tension adjustable.
SUBSTACE: Ring type, rack and pinion drive. Double lens bright field condenser (interchangeable) 1.2 n.a., iris diaphragm, filter holder, stop against over wind, 50 mm planoconcave mirror.
$121 / 2 \times 81 / 2 \times 51 / 4^{\prime \prime}$ overall. Net weight 21 lbs. Includes filted cabinet. sec of cedar oll, spanner, spring clips, blue filter. Shpg. wt., 29 lbs. F-367WX Imported
-Medical-Bacteriological Microscope


## SUBSTAGE ILLUMINATOR

Provides brilliant, even, Illumination generality unobtainable with ordinary substage lamps. Well-ventliated -cool operating- 110 Volt, 15 watt clear glass bulb. Mounts in any mirror fork that holds 50 mm mirror, such as the Micro-Plex (F-368) or Nedica (F-367). Has both diffuser tens and ground glass blue filter. Complete with 2 spare bulbs and wooden case. Shpg. ware bulbs and wood
f.438

Net 8.50
F. 754 Repl. Bulb for F-438 Net, ea. . 39

## SIMPLEX CYLINDER MICROTOME

- Graduated in 10 micron intervals
- Surgical Steel Knife
- 75 mm ground glass stage

Smali, accurate ficrotome for freehand sec tioning. Suitable for school use as well as lab applications where a hand operated feed is sufficient. Extremely well made to very close tolerances. Micrometer feed screw is

\section*{1995} graduated in 10 micron intervals. The ground glass stage is 75 mm in diameter. The microtome knife is of surgical steel, ground and tempered to produce and retaln a keen cutting edge. Complete with knife and wooden storage case. Shpg. wt., 2 Ibs. Imported | F. 442 |
| :--- |

## WIDE FIELD 10X EYEPIECE

Coated Kellner $10 x$ widefield eyeplece for all standard, society size ( 23 mm ocular tube) microscopes. A positive achromat with a large eye lens and a high eyepoint. Offers a considerably wider field of view, and far greater eye relief than a standard Huygenian eyeplece. Invaluable ald to prolonged research and study. For use with such microscopes as our F-829, F-368 and f. 367. Imported F. 367 .
F. 801

SUB-MINIATURE TRANSISTOR HEARING AIDS
(A) 4 TRANSISTOR UNIT. Features an extremely advanced circuit with 4 transis. tors, a high-performance crystal microphone, 3 -ft, thin, plug-in colorless flexible cord and a unique magnetic earphone providing clear reception and sound reproduction. Supplied with leather carrying case, earphone and battery. Shpg. wt., 1 lb . Imported
F. 480 L
$\begin{array}{lr}\text { Net } & 22.50 \\ \text { Net } & .08 \\ \text { Net } & .55 \\ \text { Net } & 1.59\end{array}$
8A. 153 Extra Battery, Burgess NE type
F. 567 Extra Plug. in Cord

No Money Down
$\$ 5$ Monthly
(B) 3 TRANSISTOR UNIT. Imagine - a powerfut hearing ald weighing less than a single ounce. Derives its power from a tiny mercury cell, known for long life, and is replaced in seconds. A hold-down spring clip keeps hearing aid in place. Rotating volume control, adjustable over $180^{\circ}$, provides the amount of amplification necessary. 3-feet of flesh-tinted cord with plugs at both ends and special fleshtinted earpiece. With velvet-lined leather case, mercury cell and instructions. Shpg. wt., 1 lb . Imported.
.7581
Net 29.50
Mallory RM. 625
No Money Down

## $\$ 5$ Monthly

## OCULAR MICROMETER RETICLES

Convert your microscope into a precise, "quantitative" measuring instrument. Use these reticles to measure with extreme accuracy the length of, or the area occupied by, the smallest microsized specimens. Excellent for measuring dispersion and distribution of microscopic life in their media. Reticles mount in the ocular of the microscope; yield perfectly clear field. Made of the finest type of engraving on optically flat glass discs which may be easily cleaned before Instaliation. Each disc in a plastic case. Reticle Diam. - 19 mm . Imported F-363L-10mm-100 divisions Linear Scale .. Net 1.95 F.364L- 5 mm - 100 divisions Linear Scale ..... Net 1.95 F. $365 \mathrm{~L}-10 \times 10 \mathrm{~mm}-400$ squares- $0.25 \mathrm{~mm}^{2}$ Min. Net 1.95 F. $365 \mathrm{~L}-5 \times 5 \mathrm{~mm}-100$ squares- $0.25 \mathrm{~mm}^{2} \mathrm{Min}$. Net 1.95


## LAFAYETTE OPTICAL MICROMETER

- Pocket sized Comparator - Linear scale in inches - Direct measurements to .005
- Measures Diameters - Radii - Angles

High quality optical micrometer using a triplet lens system of approximately 7 power. Triplet system affords a wide flat field of view. Extremely accurate reticle of etched glass. Unaffected by changes in temperature and humidity-impervious to oll, solvents and scratches. 0.5 inch Hinear scale calibrated to .005 inch. 10 mm scale calibrated to .2 mm . Hole diameters from $1 / 4$ to $\mathrm{Kicos}^{\prime \prime}$ and from .005 to $.05^{\prime \prime}$ Thickness scales from $x_{\text {t }}$ to $1 / 4^{\prime \prime}$. Radii from $1 / 10$ to $1 / 0^{\prime \prime}$ and angles from 0 to $90^{\circ}$. Measures instantly-without adjustments. Accurate to edge of $1^{\prime \prime}$ field. Adjustable focus. Reticle removable for use as highpower magnifier. Infinite uses in lab and industry. Complete with teather case. F.37EL Shpg. wt., 6 02. Imported

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## SPECIAL MICROMETER RETICLES

Extremely accurate, etched glass reticles for use with F-376 optica Micrometer or other comparators of equal quality. Unaffected by changes in humidity and temperature - resistant to scratching - oils - and solvents. All reticies measure $11 / \mathrm{ro}^{\prime \prime}(27 \mathrm{~mm})$. Imported
Particle measuring grid $0.4 \times 0.3^{\prime \prime}$ subdivided to $.005^{\prime \prime}$. Hole diameters from 0.1 mm to 3.0 mm . Radii from 1 mm to 10 mm . Angles from 0 to $90^{\circ} .10 \mathrm{~mm}$ linear scale calibrated to 2 mm . Shpg. wt., 4 ozs. F.456L
 plete with battery recharger and 2 alkali batteries. Shpg. wt., 3/4 lb. Imported F.6si

## SUGAR REFRACTOMETER

- A modified Abbe design-reads percentage of sugar in solution
- Completely portable-fits in pocket

- Four units cover both high and low range readings
- Accuracy $\pm 0.2 \%$ for low range instruments -


## $\pm 0.5 \%$ for high range.

An exceptionally well made, highly accurate hand sugar refractometer. Designed for accurate measurements of the percentage of sucrose or dissolved solids in solution. Particularly suited to the sugar industry. Permilts accurate measurements, in the fleld, of sugar percentage in fruits and vegetables. Equally suitable for use in the "juice" industry, by sugar growers, in canning plant lab, candy, chocolate and jelly industries, soft orink plants, breweries, agricultural as well as in other phases of chemistry and clinical pathology. Extremely simple in operation-no moving parts except the focusing eyepiece. Completely color corrected optical train, perfectly clear field. Range of $0.32 \%$, reads directly to $0.2 \%$, easily estimated reading to $1 \%$ Accuracy to $2 \%$ Includes adusting screw driver temperature correcting tables, leather carrying case and straps. Shpg. wt., $11 / 2 \mathrm{lbs}$. Imported
F.358L

Net 29.95
F. 431 LRange 28 to $62 \%=0.2 \%$

F-430LRange 45 to $82 \% \pm 0.5 \%$
F-432LRange 58 to $90 \% \pm=0.5 \%$
Net 33.95
Net 41.90

## DIRECT VISION SPECTROSCOPE

- Superior to grating 'scopes
- Adjustable Slitfocusable field

simple, accurate instrument for the spectroscopic analysis of emission spectra from ight sources, vaporized chemical salts, solids, llquids and the Solar Spectrum. Most convenlent for experimental and student use. A broad dispersion field of high intensity obtained from several dispersing prisms of matched glass, while a high grade optical system yields good resolution, sufficient to separate $5769.6 A^{\circ}$ from $5790.6 A^{\circ}$ in the pectrum of a fluorescent lamp. The slit has adjustable width and can be focused sharply by means of an eye piece draw-tube, assuring easy viewing and establishment of Fraunhofer lines of the Solar spectrum or bright lines of the emission spectra. Metal parts are made of chrome-plated, corrosion-proof brass. Supplied in fitted case. Shipping wt., 902 . Imported



## LAFAYETTE ILLUMINATED OPTICAL MICROMETER

\author{

- Takes Direct Measurements To $1 / 200^{\prime \prime}$
}

ONLY
$5^{95}$
A quality optical micrometer which illuminates both the recticle and the objec to be examined Lens system magnifles work 10 times. This instrument makes precision measurement of dlameters, radil and angles without eyestrain. Extremely accurate stched giass recticle of $1^{\prime \prime \prime}$ dia. Measures. Hole Diameters from 14 " to $10 "$ in 64 ths and from $002^{\circ}$ to 05 ; Radil from $1 /{ }^{\prime \prime} 103 /{ }^{\prime \prime}$ in 32 nds . Angles from
 $0^{\circ}$ to $90^{\circ}$ callorated every $5^{\circ}$, plus $29^{\circ}, 55^{\circ}, 60^{\circ}$ and $118^{\circ}$. Wo Direct Measure me.l flashlight cells (not supplied) imported
F. 846 Shpg. wt., 907.

Net 5.95
BA-156 Batteries for above (2 req.)
Net ea. . 13
plus Diode and Thermistor

FOR THE FIRST
TIME - A LAFAYETTE 9-TRANSISTOR CB TRANSCEIVER AT ONLY 259. 2 for $49^{95}$ no moner ouwn $\$ 5$ monthly

Complete with Leather Case, Earphone, Antenna \& Batteries


- Transmits \& Receives Up to 1.5 Miles
- Crystal Control on Both Transmit \& Receive
- Leather Case with Shoulder Strap
- Requires 6 Inexpensive Penlight Batteries
- 46" Telescoping Antenna
- Push-To-Talk Operation
- Earphone for Personal Listening

No license or permit required per FCC Regulation Part 15. Complete portable two-way communications for everyone, everywhere
hunting, fishing, boating, virtually all sports; at work in construction, warehouse, office, farm or for in-plant communications. Recelves and transmits up to 1.5 miles under average conditions (no intervening obstructions.) As simple and easy to use as your telephone and twice as handy-weighs only 16 ounces and silps into your pocket. Two controls provide fast, efficient operation, on/off volume and push-to-talk. When push-to-talk bar is depressed for transmitting, the bulit-in speaker acts as a sensitive microphone. Private monitoring of conversation by means of a special jack and earphone. Teiescoping antenna extends 46 Inches.
Achieves optimum reliability and performance by use of sophisticated transistor techniques and advanced design. Full-transistor circultry employs 9 transistors, 1 diode. Crystal controlled transmitter section delivers 100 miliwatts of power to the final RF amplifler, the maximum permitted by FCC specifications for unlicensed units in the 27 mc Citizens Band spectrum. Crisp, clear reception furnished by the efficient superheterodyne receiver. Power supplied by 6 penlight batteries with life expectancy of up to 55 hours. To conserve battery power, a 117 AC power pack is available as an optional plug-in accessory and plugs into battery eliminator jack.
Housed in black and brushed aluminum metal case with leather carrying case and shoulder strap. With earphone, antenna, batterles and a pair of crystals for the channel of your choice. $67 / 8 \times 2 \%_{6} \times 1{ }^{3 / 3 "}$ Shpp. wt., $21 / 2 \mathrm{lbs}$ I Imported.
HE-29CL Specify Channel
Set of 2
Matched Crystals for Above. Specify channel
Net 49.95
HE-892C Pair
Net 4.50
Replacement batteries for HE-29C "Walkie-Talkie," 6 required. BA-155 2 Cells

# New! Lafayette 3-Hransistor Citizens Band Walkie Talkie <br> Not a kit-Completely wired 

Great Fun for Kids Too

- At a Price Even They
Can Afford!
GREAT FOR: Home, Hunting, Fishing, Picnicking, Cycling, Camping,
Golfing, etc.
No Time Wasted in Building - Use This Terrific Litte walkie Talkie As soon As You Receive It
Attractlve, Neatly Styled Plastic Case - Silp it Into Your Shirt Pocket! A great new CB challenge to youngandjold for countless exciting short range applications. This new Lafayette Citizens Band Walkie Talkie is a 3.transistor transceiver with crystal control on transmit and with an efficient superregenerative receiver. Super-regenerative has minimum external ignitton nolse pickup when voice signal is belng received. Excellent for camping, picknicking, hunting, fishing, golfing, surveying, cycling, construction and many other appilcations requiring up to $1 / 4$ mile communications.
Has Push-to-Talk Button, On-Off Switch and efficient speaker that is used as speaker and microphone. Complete with built-in telescope antenna, transmitting crystal. one 9 volt battery and plastic carrying case. Size: Approx. $51 / 6 \times 2 \frac{1 / 2}{} \times 11^{3 / 8}$. Shpg. wt., 1 lb . Imported. HA. 7 L

2 for
BA-2 REPLACEMENT BATTERY FOR HA-70

# New! LAPAYHWम 1-Watt 2-Channel Portable Citizens Band Transceiver 

## A NEW CONCEPT IN 2-WAY CB RADIO THE SUPER WALKIE TALKIE!



CAN BE USED ANYWHERE - Ideal for Builders, Contractors, Surveyors, Fishermen, Farmers, Hunters, Campers, Plant Watchmen, Security Personnel, Warehouse Personnel - can be used out of case ... placed on table, desk, vehicle or boat.

Featuring
an External Push-To-Talk Dynamic Microphone For Greater Effective Range.

* 13-Transistor 5-Diode Circuit
* 2-Channel Operation
* Complete with 2 pair Transmit/


## Receive Crystals

## $\star$ Push-Button Operated

$\star$ Self-Contained Batteries or Powered


ONLY

Comes complete with leather carrying case and shoulder strap portable.


Conforms with all FCC regulations
Here is a fully transistorized 2-way Cltizens Band Radlo that offers the portability and convenience of a "walkie-talkie" yet has features found only on large mobile transceivers. It has full 1 -watt RF input . . up to 6 -mile range. a heavy-duty battery pack that maintains the transceiver's maximum capabilities for maintains the transceiver's maximum capabilities for
longer periods of time-and with less frequent battery changes. Yet this remarkable transceiver weighs only 4 lbs. including batteries you carry it with you wherever you go. External dynamic push-to-talk microphone assures perfect intelligibility - effectively increases range of transmission as a result. 4 convenient push-buttons give you complete control-let you change channels ... switich in the squelch circuit.
$100 \%$ Solld-state circuitry using 13 transiscors and 5 diodes, offers dependable, service-free operatlon. High efficiency variable-angle antenna extends to 59 inches
collapses $1071 / 2$ inches and folds neatly across froni of transceiver when not in use. Transmitter has rugged silicon-Mesa type transistor In RF output stage for high efficiency. Sensitive superhet receiver circuit provides high "pull-in" power and has push-pull audio stage and large 3 -inch speaker for high output and undistorted sound which can be heard from both sides of the transceiver.
Then there is the extra convenience and flextbility of 2-channel operation. If one channel is busy you simply switch to the other channel. The transcelver is equipped for operation on channels 10 and 15 , but may
also be operated on any other two channels in the citizens Band by changing crystats-a simple plug-in operation that requires no clrcuit retuning or read. justments. Another convenience is a quick-release battery compartment that uses 8 inexpensive flashlloht eells The H4-150 is an ideal choice in any situation which calls for portable 2 -way radio communication, whether for business or personal use. It offers the needed range, controls and features to assure you of outstanding CB transmission and reception. And, the HA-150 is an amazingly versatile unit. It can be used in or out of lis case ...as a base station or remote. carried by the shoulder strap or placed on a desk, table, vehicie, boat-even on the ground
The HA-150 is furnisned complete with changel 10 and 15 crystals ( 2 transmit. 2 receive), batteries, push-totalk dynamic microphone in leather carrying case, ear. phone, cord and plug for external battery connections, 59 " telescoping antenna, and leather carrying "case with shoulder strap for transceiver. with shoulder strap for transceiver.
Dimensions: $914 \mathrm{~W} \times 2 \mathrm{~L} / 4 \mathrm{Hx} 51 / 2^{" D}$. Operates from self. contained 12 volt battery pack or 12 volt DC external supoly. Imported. Shpg. wt., 7 lbs. HA-150

Set of $2^{\text {Net }} \begin{array}{r}79.95 \\ 154.95\end{array}$

## Replacement batteries for HA-150.

 $8 A .156 \quad 1.5$ volt " $C$ " cell ( 8 required) Additional matched palr of crystals HE-892C. Specify channel(s) requiredea. Net 13 ea. pair 4.50

SPECIFICATIONS
TRANSMITTER: Crystal controlled, 2-channel. 1-watt RF Input, meets FCC regulations. RE CEIVER: 2-channel crystal-controlled super heterodyne, 455 Kc IF, $1 \mu \mathrm{v}$ sensitivity for $10 \mathrm{db} 5 / \mathrm{N}$ ratio, push-pull output stage. AUOIO OUTPUT: 1 watt max. LOUDSPEAKER: 3 -inch, round, PM type. POWER SUPPLY: 8 serles-arranged 1.5 volt cells. 12 volts DC sertes-arranged 1.5 volt cells. 12 volts DC TRANSISTOR COMPLEMENT: Total 13; 2SA74, 2SC17, 2SC20, 2SA93, 2SA76. 2SA92, 2SA49, 2SAS3 (2), 2SBS4, 2SB56, $2 S 8202$ (2), D1ODES: 1 N60 (5).

WHAT OTHER PORTABLE CB OFFERS ALL THESE FEATURES?


1. EXTERNAL PUSH-TO-TALK DYNAMIC MICROPHONE FOR RELAY SWITCHING 2. CHANNEL SELECTOR
2. SQUELCH
3. AUTOMATIC NOISE LIMITER
4. MODULATION-BATTERY INDICATOR SWITCH
5. MODULATION-BATTERY INDICATOR METER
6. POWER ON-OFF/VOLUME
7. CRYSTAL ACCESS PLATE
8. TELESCOPING WHIP ANTENNA
9. HEAVY-DUTY 12 VOLT BATTERY PACK
10. EXTERNAL GATTERY SOCKET
11. EARPHONE SOCKET

## LAFAYETTE PORTABLE PHONOGRAPHS

## MONAURAL PORTABLES

## ECONOMY 4-SPEED MANUAL



## $14^{95}$

## STANDARD 4-SPEED MANUAL

## $\rightarrow$ Full size

 case; plays $12^{\prime \prime}$ records with lid closed With this portable phonograph you can play any record up to $12^{\prime \prime}$ size at $162 / 3,331 / 3,45$ or 78 rpm with the lid closed. Has retractable 45 RPM chuck. A single lever selects any speed. The lightweight pickup arm is equipped with a turnover cartridge with dual synthetic sapphire styil. Has both fone control and volume control with on-off switch. Fine quality Alnico $5^{\prime \prime}$ PM wpeaker. Attractive 2 -tone quality Alinico 5 PM case with matching diamond pattern grill cloth. For $110-120$ volts, 60 cps, AC. Dimensions $13, W \times 121 / 20 \times 7$ "H. Shpg. wt., 10 lbs. PH-172W


## 4-SPEED MONAURAL AUTOMATIC PHONOGRAPH



No Money Down
$37^{50}$

- British BSR Automatic Record Changer
- Plays All Sizes and All Speeds
- Intermixes sizes of Same Speed size records of same speed. Plays 12 "records with the lid closed. After last reeord motor turns off and arm refurns to rest automatically. Tummever cartridige with duai
mowther styil. Has both tone and volume controls. On-off and reject switch on changer. Fine SEE PAGE 412 Atnico $V$ PM. Speaker. Sturdy case attractively covered in 2 -tone brown and white with matehing grille cloth in criss-cross pattern interlaced with dull gold. size $14 \mathrm{~W} \times 150 \times 81 \mathrm{~m}^{\circ} \mathrm{H}$. For 110.120 volt 60 cycle AC Shpg. wt., 16 lbs . PH.173W


## COMPATIBLE STEREO-MONAURAL PORTABLE PHONOS

## 4-SPEED AUTOMATIC STEREO PHONO

- Latest Drop Lid Design
- Detachable Wing Speakers
- V.M. Automatic Changer
- Compatible-Plays both Stereo And Monaural
- 4 Controls

A handsome portable in the new drop lid design. Equipped with 4 -speed automatic intermix changer with turnover cartridge and dual styll: Plays all sizes and speeds. After last record motor turns off and arm returns to rest automatically. Has 2 volume controls and 2 tone controls, 1 for each channel. Detachable wings each have $5^{\prime \prime}$ Alnico V P.M. speaker with $7.1 t$. cable so wings may be conveniently placed. Beautifully styled all-wood case is covered in rich charcoal with contrasting white trim, silver control panel, black knobs with silver insert. Tapered case measures (closed) $22 \frac{2}{2}$ W $\times 80 \times 141 / 4^{\prime \prime} \mathrm{H}$. For 110.120 volt 60 cycle AC. Shpg. wt., 25 lbs.
PH. 174 WX
Net 57.50


No Money Down

DELUXE AUTOMATIC STEREO PHONO



No Money Down SEE Page 412


- Garrard 4 Speed Intermix Changer
- 4 Speaker System in Detachable Wings
- 4 Contrals - Drop Lid Construction
- Amplifier Has 3 Tubes Plus Rectifier

A deluxe compatible automatic portable that olays all sizes and speeds of stereo and monaural records. 4 controls: master bass, master treble, balance and loudness enable you to achieve the qualities of reproduction you desire. 2 detachable wings with $6 . \mathrm{ft}$. cables each have a $6^{\prime \prime}$ bass and mid-range speaker and a $4^{\prime \prime}$ speaker to cover the high frequencies. Turnover cartridge with dual styli. Garrard automatic changer intermixes all sizes of same speed. Motor turns off and arm returns sizes of same speed. Motor turns off and arm returns
to rest atter last record. On-off and reject switch on changer. sturdy all-wood case is covered in a beautiful
chet grained charcoal brown with fine gold beading, brass trim, and white and gold grilie cloth. Size (closed) $24 \mathrm{~W} \times 9420 \times 15^{\circ} \mathrm{H}$. For $110.120 \mathrm{~V}, 60$ cycle AC Shpg. wt., 25 los.
PH-182WX
Net 77.50

## LAFAYETTE'S FINEST ALL-TRANSISTOR HIGH FIDELITY STEREO PORTABLE PHONO



- Completely Transistorized
- Garrard Automatic Intermix Changer
- 4 Speakers - Detachable Wings
- 4 Controls
- Superb Tone
- Diamond Stylus - 45 RPM Spindle
- Drop-Lid Construction

Here is Lafayette's finest portable sterto phono with tone quality that will delight you. The powerful 8 transistor amplifier circuit includes 4 power transistors that feed into 2 dual-speaker systems. Each detachable wing has a wide-range 6 -inch alnico PM speaker with extra heavy ( 2.1502. ) magnet to cover the low and mid-frequencies and a 4 -inch PM speaker for the upper mid and high frequencies. Each wing has a $6 . \mathrm{ft}$. extension cable. Each channel has its own tone and volume controls to enable you to adjust for the exact stereo effect that meets your own personal taste. Wide-range turnover cartridge is equipped with a diamond stylus for LP and stereo records and a synthetic (superior to natural) sapphire stylus for standard 78 RPM records. The Garrard record changer will handle all sizes and all speeds of both stereo and monaural records and will intermix different sizes of the same speed, Contains on-off and reject switch. Motor stops and arm returns to rest automatically after last record. Housed in beautifully styled all-wood case with charcoal gray covering and fine white beading. Silver and gray speaker grilles contrast just enough with the case to make its appearance a delight to the eye. Modern drop-lid construction adds to styling and convenience. 45 ppm automatic spindle included. size (closed): $237 / \mathrm{WW} 15 \mathrm{Hx} 9 \mathrm{~F} /{ }^{\prime \prime} 0$. For 110 120 vnits. 60 cps AC. Shpg. wt., 27 libs. PH-133WX

Net 99.50


## LAFAYETTE'S NEW decor-ette

HIGH FIDELITY STEREO AUTOMATIC PHONO


# 9950 

NO MONEY OOWN

$\$ 5$ monthly

| ONLY |
| :--- |
| 16\%" |
| HIGH |

easy pay plan SEE PAGE 412

## An Outstanding Combination

 of Beauty, Styling andPerformanceLafayette is especially proud of this modern streamined beauty that solves the problem of combining fine music reproduction with good furniture styiling and minimum space requirements. Only $165 \mathbf{\% m}^{\prime \prime}$ high, it is constructed of kiln afled $3 /^{\prime \prime}$ piywood with fine walnut finish. The top has a special permanent mar-resistant surface which both brings out the beauty of the wood grain with a dull satin finish and is resistant to impacts, surface which both brings out the beauty of the wood grain, with a dull satin finish and is resistant to impacts,
boiling water, heat, ink stalns, juices, alcohol, crayons, etc. You can use ti for a coffee table, for placing ash trays, etc. without any fear of damage. It is designed for placement anywhere. Attractive gold grille cloth wrap-around motlf is extended from front to rear of unit. Acoustically designed speaker compartments project sound from both front and rear for maximum music enjoyment at any angle. Each speaker compartment contalins a heavy-duty, wide-range alnico V PM speaker. Pull-out drawer in center houses a British BSR high fidelity automatic record changer with 4 -pole motor. Plays all sizes and all speeds of both stereo and monaural records. Motor turns off and arm returns to rest after last record. Controls include on-off and reject switch on changer, master tone, master volume and balance. Turnover cartridge with dual synthetic (superior to natural) sapphire styil. Amplifier section circultry employs 3 tubes plus a silicon rectifier and delivers 6 watts of peak audlo power - more power than you'll need in any living room. For $110-120$ voits, 60 cps AC. Overall size: $47 \mathrm{~W} \times 16 \% \mathrm{H} \times 167 / \mathrm{a}^{\circ} \mathrm{D}$. ShDg. wt., 60 lbs.

Net 99.50


## PORTABLE CONSOLETTE AUTOMATIC HI-FI STEREO PHONOGRAPH

Strikingly beautiful in appearance and cleverly styled to use as either a portable or consolette, this phonograph will give you outstanding reproduction of the tonal ranges on your records. The 3 -speaker system with its electrical crossover distributes the tones to the proper speakers to give you full rich sound. Wings may be left in place for monaural records or separated up to 12 ft . from main cabinet to left in place for monaural records or separated up to 12 ft . from main cabinet to
get wide dispersion of monaural sound and full effect of stereo records. 20 watts power to spare for all requirements. Plays all sizes and speeds and intermixes all sizes of same speed. Separate master bass and treble controls, master loudness control and balance control enable you to vary reproduction to sult your own taste and to balance the stereo effect for the fullest possible enjoyment. The wide-range furn-over cartridge is of heat and moisture-resistant ceramic equipped with both diamond L.P. stylus and synthetic (better than natural) sapphire stylus for 78's. included also is a 45 RPM spindle so you can stack 14 of these records without the bother of inserting chucks in each record. Finished in beautiful Bavarian black with Elite grey banding. Comes without legs which are optional and are listed below. Size (closed) $25 \mathrm{~W} \times 193 / 40 \times 93 / 4^{2} \mathrm{H}$. Each wing $14 \mathrm{~W} \times 41 / 2 \mathrm{Dx} 93 / 4^{\prime \prime} \mathrm{H}$. For $110-120$ volts 60 cycles AC. Underwriters Laboratories Approved. Shpg. wt., 40 lbs . PK-185WX

Net 109.00

## optional legs

Conso-Legs are tapered and finished in brushed chrome to complement design of cabinet. Easily screw Into underside, eliminating need for table or stand. Legs add $16^{\prime \prime}$ to helight. Shpg. wt., (set of 4) 5 lbs.
PH. 186 W (set of 4 legs)

## AMPLIFIER ANO CONTROLS

AMPLIFIER ANO CDNTROLS
Separate AC amplifier for each channel stacked on one chassis. Range $30-20,000$ cps . The low ranges are electronically separated to center speaker. Total peak power 20 watts. 4 controls: master bass, master treble, loudness and balance.

## AUTOMATIC 45 SPINOLE

Stacks 14-45 RPM records. Eliminates need for Individual chucks.
CERAMIC-DIAMDND CARTRIDGE
Long-life ceramic wide range. Turnover with diamond L.P. stylus and synthetic

## Portable-Consolette Complete Hi-Fi Music Center



## 

THE RADIO
Receives every type of radio broadcast: standard AM, standard FM, FM multf. plex (stereo FM). AFC clicuit prevents drift.

AMPLIFIER AND CONTROLS
Separate A.C. amplifler for each channel stacked on one chassis. Range $30-20,000$ cps. Total peak power 20 watts. 8 controls include master dual bass, master dual treble, master dual loudness, balance, FM stereo separation/AFC on-off, and tuning and on-off controls.


## खD



FM-AM RADIO FM STEREO RADIO STEREO-MONAURAL PHONO
Here, all in one fabulous. beautifully styled unit is everything for complete home enjoyment of radio and records. Sensitive receiver covers standard AM broadcasts ( 540.1600 KC ) as well as standard and multiptex (stereo) FM (88-108 MC). Has stereo separation switch for multiplex broadcasts, AFC circuit for locking in standard FM broadcasts to prevent drifting. The two AC amplifiers have a total peak power output of 20 watts and cover a range of $30-20,000$ cycles. The automatic record changer plays alt sizes, all speeds of both monaural and stereo records, intermixing all sizes of the same speed. After last record, motor shuts off and arm returns automatically to rest. Heavy-duty motor system. is housed In the detachable wings, each of which has a $12 . \mathrm{ft}$. cable for easy placement of the speakers for best effect. Each wing measures $131 / 4 W \times 50 \times 81 / 2^{\prime \prime \prime} H$ and contains an $8^{\prime \prime}$ speaker for reproduction of the low and midrange notes and a 4 " high frequency tweeter for the upper ranges. The ceramic cartridge is heat and moisture-resistant and is the furnover type equipped with a diamond stylus for L.P.'s and a synthetic (better than natural) sapphire for $78^{\circ} \mathrm{s}$. Included also is a 45 RPM spindle so you can stack up to 14 of these records without the need of inserting chucks in each record. The attractive cabinet is finished in textured tweed effect in Midnight Grey, trimmed in Capri Grey and highlighted with smart metallic tic that accentuates the beautiful control panel. Comes without legs which are optional and are listed below. Size (closed). $251 / 2 W \times 221 / 20 \times 102 / /^{\prime \prime H}$. For $110-120 \mathrm{~V} \quad 60$ cycle A.C. Underwriters Laboratories Approved. Shpg, wt., 45 ibs. PH-187WX

Net 169.95

## OPTIONAL LEGS

Tapered, finished in satin chrome to complement design of cabinet. Easily screw Into underside eliminating need for table or stand. Add $16^{\prime \prime}$ to height. Shpg. wt., (set of 4) 5 los.
PH-186w (set of 4 legs)
Net 6.50

## STERED-MDNAURAL CHANGER

Plays all sizes, all speeds, intermixes sizes of same speed. Automatic motor shut-off and return to neutral. Heavyduty motor, positive drive, mounted for vibration-free operation.
AUTOMATIC 45 SPINOLE
Stacks 14-45 RPM records. Eliminates need for individual chucks.

## CERAMIC-DIAMDNO CARTRIDGE

 Long-life wide-range ceramic cartridge with diamond L.P. stylus and synthetic (better than natural) sapphire for 78 's.
## SPEAKER <br> SPEAKER

Four speakers. Each detachable wing with 12-ft. cable has heavy duty $8^{\prime \prime}$ to cover bass and midrange plus $4^{\text {" }}$ high
frequency twoeter.

## NATIONALLY FAMOUS RECORD PLAYING EQUIPMENT

## PORTABLE AUTOMATIC STEREO PHONO

- Decorator Drop-Lid Design
- 4 Speaker System
- 4 Controls
- Diamond Stylus
- Automatic Changer
- Compatible-Plays Stereo and Monaural

A beautifully designed hi-fidelity portable that automatically plays all sizes and speeds of both stereo and monaural records and intermixes all sizes of the same speed. After last record motor shuts off and arm returns to rest automatically. Main cabinet and the detachable wing each contain a $51 / 4^{\prime \prime}$ P.M. speaker with $11 / 2^{\prime \prime}$ whizzer cone and a $4^{\prime \prime}$ P.M. speaker. The wing measures $145 / 8 \mathrm{Hx} 71 / 4 \mathrm{~W} \times 87 /{ }^{\prime \prime} \mathrm{D}$ and has $12-\mathrm{ft}$. of cable. Each set of speaker is served by its own amplifier section with a frequency response of 50 to $16,000 \mathrm{cps}$. Total peak power is 7 watts. System has 4 controls: master dual bass, master dual treble, master dual loudness and a balance control. Long-life, heat and moisture-resistant ceramic cartridge is turnover type equipped with a dlamond stylus for L.P. records and a synthetic (better than natural) sapphire stylus for $78^{\prime} \mathrm{s}$. Included is a 45 RPM adapter so you can stack these records without the bother of inserting chucks in each record. The cabinet is covered In a metallic grey, accented with silver knobs and sifver trim. Size $29 \%$ W×87/80x145/8"H. For 110.120 V 60 cycle AC. U.L. Approved. Shpg. wt., 39 lbs . PH.189WX

Net 78.25


## KOSS PERSONAL LISTENER



Koss, world famous for the quality of their stereo headsets, have now combined them with a quality record player to give you complete high fidelity reproduction In complete privacy. You can Nisten without disturbing the rest of the household. For elther stereo or monaural listening, you get "clear as a bell" sound. The 4.speed turntable has a quiet, efficient 4 -pole motor and plays all sizes and speeds of both stereo and monaural records. Has automatic shut-off. Ceramic turnover cartridge has a diamond stylus for LP's and synthetic better than turnover cartidge has a diamond stylus for natural) sapphire for $78^{\circ} \mathrm{s}$. Comes with a pair of Koss Stereophones with a range natural) sapphire for 78 's. Comes with a pair of Koss stereophones with a range
of $30-15,000 \mathrm{cps}$. Extremely comfortable to wear, tight yet rugged. The Personal Listener has an extra jack to plug in an additional set of phones. Each channel has its own volume control. On-off switch on front of cabinet. Walnut flnish cabinet. Entire unit and phones comes in handsome brown carrying case with gold beading. Record player may be removed from carrying case. Size record player, $12 \mathrm{~W} \times 8 \mathrm{D} \times 51 / 4^{\prime \prime} \mathrm{H}$. Carrying case $211 / 2 \times 13^{4} / 2 \times 6^{\prime \prime}$ For $110^{\circ}-120 \mathrm{~V} 60$ cycle AC. Shpg. wt.. 22 lbs.
PH.isiwx

## LAST MINUTE RELEASES

For Vertical or Horizontal Mounting


POWER HANDLING
CAPACII 15 watts. 30 watts A superbly styled oil coninu load power - 30 wars Impedance - 8 ohms molding, bordering fine

## NEW LAFAYETTE GENERAL

 PURPOSE DYNAMIC MICROPHONE - A Hi-Fidelity Omni-directional Microphone For Recording, Radio Broadcasting, and PA Applications
## 

Lafayette is proud to offer high quality omni-direc tional dynamic microphone at such an unusually low price. Beautifully styled in chrome-plated djecast frame that is equipped with an on-off switch Specifically designed for recording, radio broadcasting, and public address applications. Features a "pop-proof" and "Blast-proof" mylar diaphragm, and superior antl-feedback properties. Frequency response $100 \cdot 10,000 \mathrm{cps}$-Sensitivity 30 K at 60 db 600 ohms at -70 db . Shpg. wt., 2 lbs . Imported PA-408

Net 9.95

## 1195

 frequencies Shpg. wt., 2 lbs.PA. 409

## LAFAYETTE DUAL IMPEDANCE DYNAMIC MIKE

- Designed Specifically for High Quality PA Applications - Omni-directional pattern at all

A superd new Lafayetfe dual impedance, omni-direc. tional Dynamic microphone at a remarkable low, low price. Designed for high quality PA applications. Superior anti-feedback properties. Allows close talling without boom or bass accentuation. Features popproof wire mesh grille. special filter minimizes wind effect. Attractive chrome plated frame of modern de. sign. Equipped with on-off switch. Freq. Response $100-20,000 \mathrm{cps}$. Sensitivity- 30 K at -60 db . Mylar diaphragm for "pop" and "blast" proofing. Dual impedance: may be shifted from high impedance to 250 ohm low impedance by means of a cable connection.

Net 11.95

## POCKET AC-DC VOM

OUR LOW, LOW PRICE


- Extremely Compact, Measures Only $37 / 8 \times 2 \mathrm{~V} \times 1^{\prime \prime}$ Weighs 5 0zs. 1,000 Ohms Per Volt Sensitivity - Complately Wired - $1 \%$ Precision Resistors - Reads: $0-1000$ Volts AC-DC, 0-10020, 0-150 MA Lafayette's new, pocket multitester features small physical size, and a wide selection of useful panges. It can be used for trouble-shooting any type of electronic circults or electrical appliances such as irons, lamps, radios, television, hi-fi equipment, etc.
1000 ohms per volt sensitivity, and 1\% precision re. sister components assure accurate, precise readings. operation is extremely easy, no switching or fidgeting required. Ranges Volts: $0.15-150-1000 \mathrm{AC}$ and $D C$ Ohms: $0-100 \mathrm{~K} ;$ MA $0-150$. The VOM comes completely wired and tested, and is enclosed in durable plastlc case. All accessories including battery are rubber in. sulated. color coded, flexible test leads are supplied. Imported

With Applications
Booklet and Schemotics

Net 8.45

- For Monaural, Stereo, Intercom, P.A., Signal Tracer, etc. - Full 2 Watt Power - Ruggedly Constructed \& Completely Encapsulated
Specifically designed to offer compactness, ruggedness, versatility and quality. Adaptable to hundreds of audio applications. Full 2 watt power yet fits in the palm of your hand. Completely encapsulated in high quality epoxy-will not be affected by high humidity or salt content in aif; water-proof and shock-proof. Frequency Response: 20 cycles to $15 \mathrm{KC} \pm 2 \mathrm{db}$ at 1 watt. Input Impedance: 45 ohms to 50 K ohms; Output Impedance: 3.2 ohms to 45 ohms; Power Requlrements 6 to 12 volts at 30010700 ma . Overall $2 \times 31 / 2 \times 7 / 6$ Shpg. wt., 1002.
PK.638


## 16-TRANSISTOR FM-AM 6-BAND PORTABLE RADIO



6 BANDS: ${ }^{150.300 ~ K C} ; 4.10 \mathrm{Mc}_{i}$ 540-1600 KC: 9-22 MC:
1.6-4 MC; 88. 108 MC .

- 6.Band Slide Rule Dial
- Includes: FM, Navigation, Shortwave Bands
- Push-Button Band Switches
- Tuning/Battery Strength Meter
- Electronic Fine Tuning
- World Time Zone Map
- Direction Finder
- 3 Antennas

A real powerful performer for all around use on land or sea! Extremely sensitive circult contains 16 transistors and seven diodes. 6 Dands tune: Navigation Band $(150-300 \mathrm{Kc})$; Standard broadcast ( $540-1600 \mathrm{KC}$ ); marine band (1.6-4 MC) 2 shortwave bands ( $4-22 \mathrm{MC}$ ) and FM band ( $88-108 \mathrm{MC}$ ). Some of this radios outstanding features include fast push-button band selection; push-button pilot lamp, llluminates dial at night; electrical bandspread fine tuning for precise station selection and a station tuning meter which also indicates battery strength. The cover has a world time zone and a booklet is enclosed with listings of shortwave stations throughout the world. A handy feature for marine use is a bullt-in compass point indicator which helps locate your position at sea as a radio direction finder. Two oval $23 / 4 \times 4^{\prime \prime}$ speakers In a sturdy, luxurious genuine cowhide cabinet provides full rich tone. AFC eliminates drift on FM. Sensitivity is increased by 2 telescop. Ing dipole antennas. 2 earphone jacks and earphones supplled. Uses 4 economical flashlight batteries for power (supplied). Size $12 \mathrm{Wx} 91 / 2 \mathrm{Hx} 4 \sqrt[2]{2}$ "D. Shpg. wt., 18 los. Imported.
FS.276WK
Net 99.95
8A-157 Extra batteries. Uses 4, Wt., 3 oz.
Net .13

## 14-TRANSISTOR FM-AM SHORTWAVE 3-BAND PORTABLE



- Tunes: $590-1600 \mathrm{KC}, 3.5-10 \mathrm{MC}, 88.108 \mathrm{MC}$
- Effective Automatic Frequency Control
- Operates as an Audio Amplifier
- Operates up to 1,000 Hours

A superb, hi-quality portable radio receiver that does the job of several separate units First, not only does it perform as a radio, but it will also operate as an audio amplifier for you to play your records through! Efficient and excellent tone is accomolished by the complete elfimination of audlo output transformers and by the output transistorcoupled Into a large loudspeaker. Second, is its use as a radio receiver. Incorporated are three antennas (bullt-in ferrite rod for AM, and a built-in 2-piece telescopic balanced type for FM) to really pull in the weak stations. The receiver will pull in foreign, amateurs, ships, planes, etc. on the $\mathbf{3 . 7 - 1 0 \mathrm { Mc }}$ short wave band. To facilitate this "pulling-in" of weak stations, 14 transistors PLUS 5 diodes are used in advanced circultry incorporated into the overall circuit are frequency control circuits which. circulre drift-free stable operation on both AM and FM bands. A large easy-to-read slide-rule type tuning indicator (tuning ratio of $12: 1$ ) makes positive dial setting a slide. rule type tuning indicator (tuning ratio of $12: 1$ ) make the mater, The unit will operate up to 1,000 hours on the foural " $D$ " size simple matter. ${ }^{\text {f }}$
Nlashlight cells.
Specs: Frequency coverage: 3 bands - $540-1600 \mathrm{KC}$ (Standard Broadcast), 3.5-10MC
 required); Outputs; two for earphones; Inputs: one for phono-pich-up use and one for multiplex adapter for stereophonic use. Size: $7.4 \mathrm{H} \times 11 \mathrm{~W} \times 3.4 ⿻ \mathrm{C}$. Case covered with beautiful vinyl leather. Shpg. wt., 7 lbs. Imported.
FS. 140
Net 54.50
BA-157 "D" Cells for above (4 required)
Net ea. . 13

## "TENSTAR" 10-TRANSISTOR PORTABLE <br> WHEN ONLY THE BEST WILL DO! CarryIng case <br> - 10 Perfectly Matched Transistors, <br> 

2 Diodes, 1 Thermistor - Powerful Performance - Dversize Ferrite Antenna - Big Set Tone - $23 / 4^{\prime \prime}$ Speaker Acoustically matched and Balanced - Batteries, Earphone, Leather Case Included
A remarkable achievement in compact desikn. 10 transistors and 2 diodes provide brilliant performance - for your listening pleasure. This means more stations, greater selectivity and sensitivity. Large, dynamic $23 / 4^{* \prime}$ speaker gives you big greae. indoors, outdoors - wherever you go. Plays for hours on 4 penlite cells carefully encased to protect set against battery acld corrosion. Fine quality leather cases are included for the radlo and separate earphone. Two controts for simplicity: volume-off and Tune. Easv-to-read vertical slide rule dial. Complete with batterles and earphone. Size: $31 / 4 \mathrm{H} \times 61 / 2 \mathrm{~W} \times 13 / 4{ }^{\prime \prime} \mathrm{D}$. Imported.
FS-129L Shpg. wt., 1.5 lbs.
Net 19.95
FS-129L Shps. Wt., 1.5 lbs.
Additional batterles
$84-155$ (4 required)
Net ea.
.13

## NEW! 10-TRANSISTOR De LUXE PORTABLE RADIO

- More Pulling Power Better Sensitivity Clearer Reception
- Big 21/2" Dynamic Speaker for True Tonal Quality
- 10 Transistors, 2 Diodes
- Super-Sensitive Com. pact Portable
- Built-in Antenna
- Complete with Leather Carrying Case with Strap, Magnetic Earphone, Batteries


Lafayette combines compactness, power and long-distance reception to give you hours of AM listening pleasure everywhere you go. The big $24 z^{\prime \prime}$ permanent dynamic speaker offers fine tonal quality and faithfully reproduces sound of music and voices. 10 transistors and 2 diodes give you power to spare. 100 MW undistorted audio output. Built-in ferrite core antenna brings in the weaker stations. Plays on 2 inexpensive penlight batteries (Included). Earphone jack with earphone for private listening. Complete with leather carryint case, 2 batterles, and earphone. Size: $6 \times 31 / 4 \times 13 /{ }^{\prime \prime}$. Imported
FS-284L Shpg. Wt. 2 tbs.
.... Net 15.95 BA-155 Replacement Penilight Batteries ( 2 required)

Net ea. 13


## Lafayette FM/AM/CLOCK RADIO

- Automatic Telechron Clock - Wake-to-Music Plus Alarm
- Sleep-Switch; Lulls you to Sleep - 600 -Watt Appliance Outlet


## NO MONEY DOWN



Combines a fully automatic Telechron clock with luminous hands and a superb FM/AM broadcast radio. Handy sleed.swltch permits you to slowly drift-off to dreamland while the radio shuts itself off at a preset time. A buzzer alarm is included. In addition to a standard AM broadcast radio, a quality FM radio with AFC wili In addition to a standard AM broadcast radio, a quality FM radio with AFC wil expand your listening pleasure; has a 600 -watt appliance outlet - useful to turn on
the coffee pot, light, etc. Slide rule dial for easier tuning. Beautiful low boy plastic cabinet in antique white with gold trim. Tubes: 50C5, 12AU6, 12AL5, 12BA6, 128E6, 17 EW 8 plus selenium rectifier. Size $14 \frac{5}{6} \mathrm{~F} \times 61 / 4 \mathrm{H} \times 6^{\circ} \mathrm{D}^{\circ}$. For $110-120$ volts, 60 cps AC only. Imported
FS-239 Shpg. wt., 8 lbs.
Net 39.95

## LAFAYETTE AM TABLE RADIO

With BIG SET POWER Fine, Full Tone


- Powerful Circuit
- Efficient Printed Circuit Chassis
- Long Range, Hi-Q Ferrite Antenna
- Electrical Safety Inter. lock, UL Power Cord

Highly Sensitive


Double your Ilstening pleasure by adding this as a "second" set In your home. Glves big set performance. Dependable built-in Hi-Q Ferrite antenna provides exceptional reception even in difficult reception areas. A $31 / 2^{\prime \prime}$ permanent dynamic speaker produces rich, full room tone. Sensitive direct drive tuning dial makes It easy to tune in your favorite AM programs. Convenient on/off volume control. Attractive Impact case will not chip, crack or fade under normal conditions. Back completely enclosed with addition of safety interlock to prevent shock hazard. Convenlent size - contemporary design. Tubes, 12BE6, 12BA6, 12AV6, 50C5, plus $35 W 4$ rectifier. Measures only $8 W \times 41 / 2 H \times 31 / 2^{\prime \prime} \mathrm{D}$. For $105-120$ volts $A C$ or DC. Shpg. wt.. 2112 lbs . Imported.
FS. 254
Net 8.95

## 3.GANG TUNING with RF STAGE FOR EXCEPTIONAL SENSITIVITY and Selectivity <br> - Automatic Frequency Control <br> - 10-Tube Performance <br> - Built-in Hi-Q Antenna - Provision for Exten. sion Speaker - Balanced 300.0 hm Antenna Input Terminal <br> - Shielded to Meet FCC Radiation Requirements

The Lafayette "Symphony" is a complete AM/FM table model radio. Incorporating features found only in more expensive units, it brings the luxury of FM reception right to your fingertips. Improved AFC Action - by capacity variable diode, locks in stations and assures drift-free operation. Automatic Volume Control softens any sudden blasts of volume anc makes tuning stations of different levels a cinch. A super-sensitive AM antenna brings in stations clearly while reducing unwanted noise. An FM wire antenna assures all benefits of clear pure reception. Bullt-in input terminals for external $300 \cdot \mathrm{hm}$ FM antenna. The $4^{\prime \prime}$ PM speaker produces rich sound from low to high range to enhance your music-listening pleasure. A styllish polished plastic cabinet in distinctive black and white has an easy-to-read slide rule dial with an on-off neon indicator light. Contains 6 tubes, 1 varicap, 2 diode detectors and slificon diode rectifier. An output jack on the rear of the radlo permits simple plug-in connection of an extension speaker. For $\mathbf{1 1 0 - 1 2 0}$ volts, 60 cPS AC or DC. Sizet $10 \mathrm{~W} \times 5 \mathrm{D} \times 51 / 2 * \mathrm{H}$. Imported
FS-221A Shipg. wt., 5 lbs .
Net 27.50

## Completely Automatic!



## "CONTEMPORARY" AC/DC RADIO

Distinctive Style - High Quality - Low Price


- Advanced Handwired Chassis
- Fingertip Tuning
- Electrical Safety Interlock

An excellent radio - engineered and styled to last. Petite, contemporary design maintains clean, good looks and peak performance. Hi-Q ferrite rod antenna pulls in more distant AM statlons. $31 / 2^{\prime \prime \prime}$ PM speaker, properly baffled in a sturdy, vented cablnet for clear tonal quality. Muted colors to match any color-scheme; gold trim. Pedestal base swivels for sound and reception directivity. Cabinet measures $81 / 2 \times 41 / 4 \times 4^{\prime \prime}$ overall. Tubes: 50C5, 12AV6, 12BA6, 12BE6, plus 35W4 rectlfier. For $110 \cdot 120$ volts AC or DC. Shpg. wt., 3 lbs. Imported.
rectifie
FS-233


Engineered and constructed with the jewel-like precision of a fine watch, this handsome pocket radio is a triumph in miniaturization-yet has "pull-in" power and sound quality that will amaze you. Uses 6 transistors in a sensitive superhet circuit with push-pull audio for clean, crisp tone. AVC circuit eliminates blasting or fading. Employs trouble-free printed clircuit and requires only one long.llfe 9 . volt battery for dependable, economical perform. ance. Attractively styled in high-Impact plastic
case. Measures only $42 / 2 \mathrm{Hx} 23 / 4 \mathrm{Wx} 14 / 3^{\prime \prime}$ thick and weighs a mere 8 ounces-slips easily into pocket or purse. Supplied complete with soft-leather carrying case, earphone for private listening, and g-volt battery all at an unbellevably low orice! Imported
FS-281L "Tiny"' 6 -transistor Pocket Radio. Net 5.88 Shpg. wt., 2 lbs.

Net 6.88 Extra 8attery for FS-281L (1 required).
. 2 Shpg. wt., 2 oz.

## LAFAYETTE <br> "BEACH-MATE"

 PORTABLE RADIOhas CLEAR, FULL TONE FOR ENJOYABLE LISTENING... . INDOORS OR OUTDOORS
CAMPING

- 8 Transistors, 2 Diodes, 1 Thermistor
- $31 / 2^{\prime \prime}$ Full-Tone Speaker
- AVC Stops Fading or Blasting
- Precision Vernier Tuning

A handsomely styled portable AM radio for outstanding reception indoors or outdoors. Offers big, clear sound-even in crowded beach areas. Sensitive Superhet circuit with high-gain ferrite antenna uses 8 transistors, 2 diodes and 1 thermistor for real "pull-in" power. AVC clrcuit prevents fading or blasting sound when position of radio is changed. $31 / 2^{\prime \prime}$ full-tone speaker and 3 audio stages provide faithful reproduction-sound is never muffied or distorted. Also equipped with two earphone jacks for private listening, convenient thumb-wheel control for precision vernier tuning, volume on/off control, and retractable carrying handle. Housed in high-impact plastic case. Supplled complete with 4 "C" cells and earphone. Size: $83 / 4 \times 4 \$ / 64 \times 24 / 2^{\prime O}$. Shpg. wt., $34 / 2 \mathrm{ibs}$. Imported.

## 12 -TRANSISTOR FM-AM PORTABLE RADIO

## TUNES IN HI-FI FM BROADCASTS AND STANDARD AM...DELIVERS "BIG-SET" SOUND

- 12 Transistors, 5 Diodes, 1 Thermistor
- Full-Range Tone Control
A reatly deluxe portable FM and AM radio with rich, "big.set"

Receives Static-Free
FM and Standard AM Broadcasts

COMPLETE WITH
BATTERIES AND EARPHONE sound. Ideal for use in the home or outdoors-take it wherever you go and enjoy the utmost in listening pleasure. Uses 12 transistors, 5 diodes and 1 thermistor in a superhet circult for superior reception. Equipped with hi-gain Ferrite antenna for AM, and telescoping whip antenna for FM. Has special AFC circuit to minimize drifting on FM. Heavy-duty special AfC circuif fulitrange tone control assure superior $31 / 2$. speaker and
sound quality. Beautifully styled in ivory and black with chrome trim. High-impact plastic case has chrome carrying handle. Uses four inexpensive " $C$ " batteries (supplied), and has earphone supplied for private listening. Size: $81 / 2 \mathrm{Wx} 7 \mathrm{~W} / 4 \mathrm{x}$ 21/2"D. Shpg, wt., 4 lbs, Imported.
FS-138L

## LAFAYETTE'S 3 -IN-1 EASY PAY CREDIT PLAN makes it easier for you to buy now! NO MONEY DOWN Up To 24 Months To Pay As Little As $\$ 5.00$ Per Month CHOOSE THE PLAN THAT SUITS YOU BEST:

1. REGULAR PLAN - NO Money Down! Monthly payments as low as $\$ 5$ !
2. E-X-T-E-N-D-E-D PLAN - No Money Down! Up to 24 months to pay!
3. ALTERNATE 60-DAY PLAN - No credit service charge. Select the Regular or Extended Plan. Make your first payment within 30 days as scheduled. Pay the full balance, if any remains, within 60 days of shipment and you automatically convert to the Alternate 60-Day Plan and SAVE THE ENTIRE SERVICE CHARGE.

## OPEN A LAFAYETTE EASY-PAY ACCOUNT AND ENJOY THESE 10 BIG ADVANTAGES! -

1. EASIER TO ORDER!
2. NO DOWN PAYMENT!
3. ONE LOW MONTHLY PAYMENT!
4. ADD-ON PURCHASES AT ANY TIME!
5. UP TO 24 MONTHS TO PAY!
6. LOWEST CREDIT SERVICE CHARGES!
7. NO PAYMENT DUE FOR 30 DAYS!
8. NO WAITING FOR MONTHLY STATEMENTS!
9. YOU ALWAYS KNOW YOUR EXACT BALANCE!
10. EASY TO REORDER ONCE YOU HAVE ESTAB. LISHED CREDIT!

## Here's How To Open Your Easy Pay Account

Use the regular Lafayette order blank (more will be supplied upon request). Complete both sides of the form carefully, following the step-by-step instructions and illustration. Accuracy will speed handling of the form from the moment of receipt and permit immediate shipment upon approval of credit. Be sure to sign the agreement and indicate which Easy-Pay Plan you prefer - the liberal Regular or special Extended.

For both Plans, minimum order is $\$ 20$ and first instalment is not due until 30 days after shipment.

No Credit Service Charge for the alternate 60 -Day Plan. For the Regular and Extended Plans, you are privileged to prepay the balance in full at any time to obtain a partial rebate of normal credit service charges.

Easy-Pay privileges are available to qualifying U.S. citizens or residents of all 50 States, Puerto Rico, Canada, and U.S. territories hav. ing comparable postal and express facilities. Any responsible individual over 21 years old with a steady source of income can apply.

## "DOLLAR POWER PLUS"

| You Get "DO Lafayette's One Low More For | LAR POWER PLUS" with 3-IN-1 Easy-Pay Plan. onthly Payment Buys u. |
| :---: | :---: |
| Monthly | Unpaid Balance |
| Payments | fotal amount less |
| FOR ONLY | down payment- if any) YOU CAN BUY UP TO |
| \$ 5 | \$100.00 |
| 6 | 120.00 |
| 7 | 140.00 |
| 8 | 160.00 |
| 9 | 180.00 |
| 10 | 200.00 |
| 11 | 225.00 |
| 12 | 250.00 |
| 14 | 275.00 |
| 15 | 300.00 |
| 17 | 350.00 |
| 19 | 400.00 |
| 22 | 450.00 |
| 24 | 500.00 |
| For monthly payments on balances over $\$ 500$, please write us. |  |


| "EASY PAY PLAN" PAYMENT SCHEDULE |
| :---: | :---: | :---: | :---: | :---: | :---: |

## H O W

IT'S EASY, ANO FUN, TO SHOP AT HOME WITH THE LAFAYETTE CATALOG
Choose from thousands of ltems, all at your finger-tips. Prices listed in this catalog are the lowest avallable at the time of printing. All prices and specifications are subject to change without notice. All shipping weights are approximate.
We will follow your shipping instructions unless postal or carrier regulations restrict us, or unless a change is in your best interest.


Use a Lafayette Order Blank from any catalog, or your own stationery.

Always Use The Same Name When Ordering (I.e., If you have ordered as "Frank Jones," do not re-order as F. Jones). This way your name will remain in our active file assuring you faster service and a copy of each catalog as quickly as it comes off the press.

Include Postage with Order. Use the Parcel Post Rate Chart on thls page for the amount to include for postage for "Total Pounds." Overpayments are refunded with your order. IT IS NOT NECESSARY TO SEND MONEY FOR FREIGHT OR EXPRESS SHIPMENTS these are sent collect (items with stock numbers ending in $X$ or $W X$ ).
Special Instructions, Requests for Information, etc., should be written on a separate plece of paper. Thls will assure prompt handling of both your request and your order.
00 Not Send Cash, unless you register your letter.
Give full Ordering Information. To insure your satisfaction with every order, give Lafayette stock numbers, quantity desired, description of Item, total price, shipping welght and any special information asked for in the description of the Item.


## BY PHONE

Call our catalog shop-by.phone DEPARTMENT, 516 WAInut 1.7500 , for prompt service from friendly well-trained personnel. Your order will be written for you and approximate delivery time given. Your order is shipped the same day it is received vla United Parcel Service in areas. Our shop-by-phone service is convenient and time saving!


## IN PERSON

Visit any Lafayette Store where you will see a wide assortment of mer chandise from the catalog. avail able for your inspection. Friendly, competent sales personnei, specially trained to serve you, will give you personalized assistance with your electronic, ham, citizens band or hi.fi shopping problems.

## REA EXPRESS INFORMATION

Large, bulky or delicate articles are shipped by Railway Express, the fastest and most economical way to ship merchandise which is unmailable. (If you desire other shipping methods, please specify.) These packages shipping methods, on fast passenger trains and get preferred attravel on fast passenger trains and get preharred. The tention "and special handling at no extra charge. The letter "x" after our stock number (i.e. Nr-500wh) identifies the item exceeding parcel post size or
DO NOT SEND MONEY for express charges with your order. Express charges are collected upon delivery at no extra cost to you. Insurance is included in your express rates. Be sure to specify your nearest Express office if there is no agent in your town.

## APPROXIMATE EXPRESS CHARGES (SUBJECT TO RATE CHANGES)

Express charges are also determined by the weight of the shipment and the distance of consignee from the shipper. The following chart indicates approximate charges. Add 3\% Federal Iransportation Tax.

## 24 HOUR SERVICE

## Most Orders Fully Processed Within 24 Hours After Receipt

## PARCEL POST SHIPPING RATES

## HOW TO FIGURE POSTAGE

## 1. FIGURE TOTAL WEIGHT OF YOUR ORDER

As you write your order, include shipping weight of each item. Total and convert ounces to pounds. Any frac tion of pound remaining is considered a full pound.

## 2. FIND POSTAGE RATE

Use the map below to find your postal zone from syosset. In the rate chart, find the welght of your order in the column headed "Shipping Weight". Move across from your Shipping Weight to your Postal Zone to find your parcel post rate on your order.

## 3. INCLUDE POSTAGE AMOUNT

Our prices are the lowest available and do not include shipping charges. Since postal charges are payable in advance, your remittance should include enough money to cover postal charges. Overpayments are refunded to you.

## 4. PARCEL POST LIMITATIONS

Parcels weighing not more than 70 pounds and measuring not more than $100^{\prime \prime}$ combined in length and girtt (distance around the widest point) may be malled to all zones, including APO's and FPO's, with the following exceptlons: a parcel post shipment from New York to any First Class Post Office may not exceed $72^{\prime \prime}$ in length and girth combined and shall not welgh more than 40 lbs . to Zones 1 and 2, or 20 lbs . to 2 2ne 3 to 8.


| SHIPPING  <br> WEIGHT  <br> Up to  <br> but not Local <br> including  <br> 16 ozs.  | 20 NES |  |  |  |  |  |  | PARCEL POST <br> RATE CHART <br> Subject to post office rate changes. When fig. uring postage, a fraction of a pound is fig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1.2 <br> up ts <br> 150 <br> Miles | $\begin{aligned} & 3^{3} \\ & 151 t^{1} \\ & 300 \\ & \text { Miles } \end{aligned}$ | 4 301 to 600 miles | $\begin{aligned} & 5 \\ & 01 \text { to } \\ & 1.000 \\ & \text { Wlles } \end{aligned}$ | $\begin{gathered} 6 \\ 1,001 \text { te } \\ 1,400 \\ \text { miles } \end{gathered}$ | $\begin{aligned} & \quad 7 \\ & 1,401 \text { to } \\ & 1,800 \\ & \text { Milles } \end{aligned}$ | $\begin{gathered} \text { B } \\ \text { Over } \\ 1.800 \\ \text { Miles } \end{gathered}$ |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  | 3c for the first 2 ounces and 11/2c for each additional ounce |  |  |  |  |  |  |  |
| 102 l0s. 90.24 | \$0.33 | \$0.35 | \$0.39 | \$0.45 | 50.51 | \$0.58 | 80.64 |  |
| -10 | - 3.38 | -41 | 47 | . 55 | 81 | 14 | .83 | Use the chart and in. |
| - 4 - 28 | .43 | 42 | 55 | 65 | .77 | .80 | 1.02 | clude amount for post- |
| 5 - 30 | . 48 | 53 | 63 | 75 | .90 | 1.06 | 1.21 |  |
| $6-32$ | - 53 | 59 | 70 | 85 | 1.03 | 1.22 | 1.40 | age. |
| 7 34 | 58 | 65 | . 77 | 85 | 1.16 | 1.38 | 1.59 |  |
| $8-\frac{34}{35}$ | 63 | 11 | .84 | 1.05 | 1.29 | 1.54 | 1.78 |  |
| $9 \quad .38$ | 68 | 77 | 91 | 1.15 | 1.42 | 1.70 | +.97 |  |
| 10.40 | 73 | 83 | . 98 | 1.25 | 1.55 | 1.86 | 2.16 | PARCEL |
| $11-42$ | 77 | 89 | 1.05 | 1.35 | 1.67 | 2.02 | 2.34 | HANDLING |
| 12 - 12 | 81 | 95 | 1.12 | 1.45 | 1.79 | 2.18 | 2.52 | CHARGES |
| $13-46$ | 85 | 1.01 | 1.19 | 1.55 | 1.91 | 2.34 | 2.70 |  |
| 14 . 48 | 89 | 1.07 | 1.26 | 1.65 | 2.03 | 2.50 | 2.88 | up to 5.00 .. ....... . 05 |
| $15-.50$ | 93 | 1.13 | 1.33 | 1.75 | 2.15 | 2.66 | 3.06 | 5.01 to 10.00 ... . 10 |
| $16-52$ | . 97 | 1.18 | 1.40 | 1.85 | 227 | 2.81 | 3.24 | 10.01 to 25.00 |
| $11-5$ | 1.0) | 2.23 | 1.7 | 195 | 2.39 | 2.96 | 3.42 | 25.01 to $50.00 \ldots .20$ |
| 18 . 56 | 1.05 | 1.28 | 1.54 | 205 | 2.51 | 3.11 | 3.60 | 25.01 to $50.00 \ldots . .20$ |
| 19 - 58 | 1.09 | 1.33 | 1.61 | 2.15 | 2.4 | 3.25 | 3.78 |  |
| 20.60 | 1.13 | 1.38 | 1.68 | 2.25 | 2.75 | 3.41 | 3.86 |  |
| FOR EA. ADDED <br> LB. ADD 2C | 4c | 5 c | 7 c | 96 | 12c | 15c | 18 c |  |

## C.O.O. FEES

If you order C.O.D., the post office collects a handling charge, plus a money order fee, in addition to the regular parcel post charge. (We cannot accept COD's for APO's. FPO's or for special-order merchandise). Here are the extra C.O.D. fees:
Amount of Order Money Order Fee COD Fee

Amount of Order
Money Order Fee
COD

| Up $10 \$ 5.00$ | 20 c |
| :--- | :--- |
| $\$ 5.01$ to 10.00 | 20 c |
| 10.01 to 25.00 | 30 c |
| 25.01 to 50.00 | 30 c |

### 10.01 to 25.00

25.01 to 50.00
50.01 to 100.00

## AIR SHIPMENTS

for fast delivery, you may specify Air Parcel Post. Air Express or Air Freight. For Air Express Rates see your local REA Agent. For Air Frelght see your nearest com. mercial alrport office. Air Parcel Post limits are 70 lbs. in weight, $100^{\prime \prime}$ in length and girth combined, except APO and FPO which are 2 lbs, and 20'

| AIR | PA | EL | POST | RATES |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ZONES | 12,3. | 4 | 5 | 6 | 7 | 8 |
| 1 st lt. | . 68 | . 73 | . 78 | . 83 | . 3 | . 88 |
| For each | add | add | add | add | add | add |
| extra to. | . 48 | . 50 | . 56 | . 64 | . 12 | . 80 |
| U.S. Possessi | ions, T | ritori | APO'S, | FPO | -. 80 | It. |

## WHAT IS THE BEST GUARANTEE YOU CAN GET?

An open letter from Laf ayette to you. PLEASE READ THIS. WE BELIEVE IT TO BE MORE IMPORTANT than all the legal guarantees or warranties we can PRINT.

GLAFAYETTE



Dear Customer:

## 30-DAY FREE HOME TRIAL

Buy with confidence. Try your purchase at home. If for any reason you are dissatisfied you may retum it within 30 days and your money will be refunded (less transportation charges). Merchandise returned must be in good condition and not abused. This policy does not apply to kits (which are covered by a separate guarantee below) nor to pre-recorded tape, records, books or repair parts.

## SERVICE AND REPLACEMENT GUARANTEES

Because it is a legal requirement, all companies do for Because try to publish the details of the various as the law warranties and free trial offers as accurately at" and you warranties on this page we, too, "spell them been written and demands.
should read them. But after they have
read, what is your BEST GUARANTEE?
In the end, your real assurance of fair and equitable treatment, your real assurance of satisfaction with your pur ment, your real assurance of proper adjustment when the chase, your rea is based on the kind of people with whom occasion
you deal. When you buy from hat has been built on the good will, the cony that knows the trust of millions of customers; a company that knows the value of a satisfied customer; a companding, healthy that the only way to build a successful, expandly presented business is by selling good merchandise how it because that's at fair and comp
't find the attitude so common today of At Lafayelte you won't find the att" We believe that for $\$ 5.00$ At Lafayette he expect for $\$ 5.00$ ?" We believe exactly what is (or $\$ 50$, or 5 cents) you are entitled to exacty item acoffered to you. We do our best to describe each can. Do we curately and to price it as competitively as we can. ver "goof"? Sure, we do! We're proud of how seld thing occurs, but it does sometimes happen. The important thing is that when it does, we are ready, willing and anxious to equitably remedy the situation.

Thank you for your patronage.
Lafayette Radio Electronics Corp.
All merchandise is guaranteed to be free of defects in material and workmanship for the period of time specified in the listing of the product. Where no time is specifled the guarantee is for 90 days. Wherever so indicated in our listing of the product we will replace it. Wherever our listing does not specify we will either replace it or repair it at our option. Item must be returned prepaid for our inspection.

## LAFAYETTE KITS

All parts in kits are guaranteed to be free from defects in material or workmanship, and if properly wired, to meet the published specifications for performance. Parts are guaranteed for the tlme specified in the listing. Where no time is specified guarantee is for 90 days. During this period we will replace or repair at our option any defective part returned to us.
If your kit does not function properly when fully wired it may be returned to us prepaid for inspection. If failure to function is due to improper wiring or handling, we will make the necessary corrections or repairs at modest charges. These charges vary with each kit and are shown in a price sheet enclosed with each kit.

## OTHER KITS

Kits of manufacturers other than Lafayette carry the same guarantee as above, except that Lafayette does not repair or receive them. They may be returned to us and we will forward them to the manufacturer who will determine the charges, where applicable.

## HOW TO RETURN MERCHANDISE

## (Merchandise Returned Must be in New Condition)

We want you to be completely satisfied with every fem you purchase from us. ff there is an irregularity in your shipment and you find it necessary to return an item to us, follow these instructions:

## PARCEL POST SHIPMENTS

1) 

Place all order papers, invoices, correspondence and your instractions in an envelope inside your package.
2)

On the outside of your package, mark
"First Class Mail Enclosed" (directly below the postage) and add an additional 5¢ postage. Do not send the letter separately; it will delay our speedy adjustment handling.
3)

Pack the merchandise securely and send to:
Customer's Service Dept., LaFAYETTE RADIO
111 Jericho Turnpike, Syosset, Long Island, N. Y.
For your protection, report damaged receipts to your postman and enclose his report with your papers.

## BY EXPRESS OR TRUCK

If your shipment is received darmaged, obtain a report from your express agent or trucker, and mail to us. Wait until you receive our instruc. tions on how to return. (NOTE - Merchandise not regularly stocked that has been ordered for yoll is NOT returnable for refund or exchange).

## IF IT IS NECESSARY TO WRITE US:

Before writing, please compare papers or invoices with your order recelved, You will find explanations on your order papers about how your order has on handled. Sometimes merchandlse arrives before been after order papers. Please wait until you before or before writing. If you write, be sure you have both papers concerning the order. be sure to include all litems, catalog numbers, order. Please give names of any special information you thinty, color, price, and delails you give us, the more quickly youry. The more will be made. On Easy Payment quickly your adjustment include your EP account numbert orders, be sure to

## ORDERS FOR EXPORT SHIPMENT

Carefully fill out our order blank. Enclose with your order, check or draft; or remit International Postal Money Order or confirmed, irrevo. cable Letter of Credit. All payments should be in U.S. Dollars payable at U.S. Bank. Foreign currencies will be accepted at prevailing exchange rate when converted. Full payment should accompany order. Include 20\% above merchandise value to cover international postage, insurance, consular fees and other export shipping costs, and crating charges when necessary. Slightly more should be allowed for heavy
items and ocean or air freight shipments. We refund any balance not used. Merchandise supplied packed in heavy, reinforced, corrugated cartons. All prices F.O.B. our Warehouse and subject to change without notice. We reserve the right to route order by the best method where order does not indicate routing or when method suggested is not possible or impractical. Items marked "Postpaid" refer only to shipments made to points within the eight U.S. Postal Zones.
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| :--- |
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## LAFAYETTE FM/AM DUAL SPEAKER TABLE RADIO .

## beaUtiful oiled walnut cabinet

- Two 4-Inch PM Speakers for Full Dynamic Range - Greater Sensitivity - Built-in Hi-Q Antenna
- Beautiful, Oiled Walnut Fine Furniture Cabinetry - External 300-Ohm Antenna Input Terminals
- AFC for Drift-Free FM - Provision for Extension Speaker

High Fidelity FM/AM table radio. Fine furniture styling. Dual, 4 -inch PM speakers, in an acoustically correct cabinet, produce rich full-frequency sound on both FM and AM. Features improved AFC action which "locks-in" FM stations for drift-free reception; Automatic Volume Control to soften any sudden volume blasts and to make tuning stations of different levels easier. A super-sensitive AM antenna brings in distant stations clearly while reducing unwanted noise. An FM wire antenna is provided to assure all benefits of clear, pure FM
reception. An external $300-\mathrm{hm}$ FM antenna can be attached to built-in input terminals for improved reception of distant stations. Beautifully finished Oiled Walnut cabinet and easy-to-read slide rule dial with an on-off neon indicator light. Meets FCC requirements for radiation shielding. A receptacle on the rear of the radio allows easy, quick addition of an extension speaker. For 110 120 volts, $60 \operatorname{cps}$ AC or DC. Size $17 \frac{1}{2}$ Wx $7 X_{6} H x$ $53_{6}^{\prime \prime}$ D. Shpg. wt., 8 lbs. Imported.
FS-246 $\qquad$ Net 39.50

Two
$4^{\prime \prime}$ PM Speakers for Full Range

Provision for Extersion Speaker on Back


## LAFAYETTE 12-TRANSISTOR 4-BAND PUSH-BUTTON SW/AM PORTABLE RADIO

4 Bands \(\left\{\begin{array}{l}1.6-4.4 \mathrm{mc} \mathrm{c}<br>1.5-1.12 \mathrm{c}<br>12-24 \mathrm{c}\end{array}\right.\)

- 2 Speakers - 3 Built-in Antennas -2 Ferrite Rods plus Chrome Telescoping Whip - Tuned RF Stage - Big Easy-ToRead Slide Rule Dial - Fine Tuning Control - Tone Control - Complete with Batteries and Dynamic Earphone

A really superb shortwave portable with more sensitivity and pulling power than many table model SW receivers. Four bands: Pushbutton selected AM Broadcast and 3 Shortwave Bands blanket the airwaves with the world's most interesting programs. Listen to Police, Maritime, Mobile Phone, WWV, $75,40,20$ and 15 -meter Amateur, Aircraft, and all the exciting and informative International Shortwave Aroadcasts from most anywhere in the world! Powerful shortwave broadcasts are broadcasts from most anywhere in the world! Powerful shortwave broadcasts are
beamed from every country in the world. many of them in the English language. Keamed from every country in the world. many of them in the Engitsh language. prise the main circuit elements of this well designed portable. Two dynamic speakers ( $31 / 2^{\prime \prime}$ and $2^{\prime \prime}$ ) give you rich table-model tone, plenty of volume. Fast pushbutton band seiection for all four bands. Includes 7 -section 291/2" chrome shortwave monopole antenna, feritite AM antenna, ferrite booster antenna, earphone for private listening and six "C" batteries. Battery life can be greatly extended if set is run on standard. AC house current (117v, 60 cycles) when used indoors with FS-255 Adapter. Size: $10 \mathrm{~W} \times 41 / 4 \mathrm{H} \times 23 / 4$ "D. Shpg. wt., 5 Ibs. Imported FS-252L

Net 49.95
Additional Batteries For Above. BA-156 "C" cell, 6 required ….............Net ea. . 13 $117 v$ AC Adapter for above. Imported $21 / 2 \mathrm{lbs}$.
FS-255
Net 7.95

# LAFAYETTE 10-TRANSISTOR 3-BAND AM PORTABLE TUNES AM BROADCAST -LW-SW BANDS 

\author{

- 4 Audio Stages - 3 Bands $\left\{\begin{array}{l}110 \mathrm{Kc}-1100 \mathrm{Kc} \\ 140 \mathrm{Kc}-110 \mathrm{Kc} \\ \mathrm{mc}-12 \mathrm{mc}\end{array}\right.$
}

You have the world in your pocket with this outstanding compact portable. Tunes 430 to 1600 KC AM broadcast (medium wave), 140 to 400 KC long wave and $4 M C$ to 12 MC , short wave. Powerful, sensitive 10 transistor superheterodyne circult picks up stations from faraway places. Four audio stages and a $3^{\prime \prime}$ dynamic speaker insure vivid tonal quality with less distortion. Has AGC and AVC. Tone control to vary sound quality. Features thumbwheel controls, $18^{\prime \prime}$ telescoping whip antenna for LW and SW bands, ferrite-bar antenna for broadcast band and earphone Jack. With earphone leather case and batteries. 10 transistors, 1 diode, 1 thermistor. Only $8 W \times 4 H \times 2^{\circ} 0$. Shigg. wt., 13/4 Ibs. Imported.
FS-280L No Money Down
Net 29.95
B4 155 Extra Batteries. Uses 4 wt. 4 oz.

# LAFAYETTE 8-TRANSISTOR 2-BAND AM/MARINE PORTABLE RADIO 

- Wide-Range $21 / 4^{\prime \prime}$ Speaker
- Highly Sensitive Rod-Antenna Plus Built-in Ferrite Core Antenna
- Tuning and Battery Energy Indicator
- Earphone for Private Listening

[^10]
## LAFAYETTE "MIGHTY 9"" POCKET RADIO

## - Power Packed, Fine Tone <br> - With Leather Case, Earphone

Shirt-pocket size, yet it picks up distant AM stations. Fine tone is achieved with $2 \mathrm{Ya}^{\prime \prime}$ speaker and negative feedback circuit. Precision direct-drive tuning provides noise free pin-point selectivity for accurate station selection. Only $21 / 2 \times 43 / 8 \times 13 / \mathrm{m}^{\prime \prime}$ deep, accurate station selection. Only $21 / 2 \times 4,7 \times 13 / 0$ deep,
its powerful superheterodyne circuit contains 9 Its powerful superheterodyne circuit contains 9
transistors, 1 thermistor and 1 diode. Has AGC transistors, ${ }^{1}$ thermistor and automatic volume control to drevent fade-out and sudden blasts of volume. Earphone jack for private listening. Operates on single low cost 9 volt battery. Includes leather case, earphone and battery. Shpg. wt., 1 ld . Imported.
FS-278L
BA-2 Extra Battery. Wi., 2 oz.
Net 10.88
Net $\quad .21$

## FOR EXTRAORDINARY TONE QUALITY!

$39^{50}$
NO MONEY DOWN

Na MONEY DOWN
 $49^{95}$

LAFAYETTE 10-TRANSISTOR 3-BAND AM PORTABLE TUNES AM BROADCAST. LW-SW BANDS

## Lafayette 12-Transistor FM/AM Shortwave Portable

World Wide Reception


NO MONEY DOWN


$3^{\prime \prime} \times 5^{\prime \prime}$ Speaker Gives Rich Tone Quality


3 Bands FM-AM-SW (4-12 MC)

## COMPARE THESE FEATURES FOR VALUE

- 12 Transistors - 4 Diodes plus Varistor
- Tuned RF Stage
- Hi-Q Long Range Antennas
- FM/AFC - Locks-in Stations
- Tone Control plus AGC

Triple your listening pleasure with a $4-12$ megacycle shortwave band which can pick up amateur (40 Meters), Police, aeronautical and Foreign stations; exciting programming from all parts of the world, plus static-free FM programs providing life-like muslc and voice comparable to many large table model radios. Receives AM too, gets excellent reception where lesser portables fail. The 12 Transistor 4 diode plus varistor superheterodyne circult with 7 -section $291 / 2^{\prime \prime}$ monopole FM antenna has extra sensitivity to bring in those distant stations. Heavy magnet $3 \times 5^{\prime \prime}$ speaker provides rich full tone. Separate Tuning and Volume controls permit easy adjustment to individual taste. FM circuit has AFC switch to "lock-in" stations. Tone Control switch provides desired listening quality for voice or music on alt bands. Also Band Selection switch. Economical to operate-plays on 6 standard "C" celis or AC with adapter (optional at slight extra cost). Includes earphone and batteries. Dimensions: $9^{\prime} K_{6} W \times 51 / 10 \mathrm{H} \times 23 / 4^{\prime \prime} \mathrm{D}$. Shpg. wt., $51 / 2 \mathrm{lbs}$. Imported FS.251L
BA-156 "C" cell, Additlonal Batteries For Above. 6 required. ........... Net ea. 13 FS-255 117V AC Adapter For Above. Wt., 21/2 Ibs, Imported. ............... Net 7.95

## Lafayette 9-Transistor AM Portable and Table Radio

with Superb Tone Quality

- 9 Transistors, I Diode, 1 Thermistor - Big Tone 31⁄2" PM Speaker - Direct Drive Precision Vernier Tuning - Genuine Top Grade Cowhide Cabinet


Receive top performance and glorious tone from this highly attractive poitable radio over the entire broadcast band. Exterior design and finish is truly luxurious. Entire cabinet is made of genulne top grain cowhide, a feature reserved for much more expensive sets. Big sound provided by a $31^{\prime \prime \prime}$ PM speakergives "big-set" tone even in noisy outdoor areas. The combination of superior tone and cabinetry make this deluxe set ideal for use anywhere in your home. Powerful 9-transistor circult really pulls in stations from near and far. Uses six readily obtainable flashlight batteries. Features, vernier tuning for easy station selection, built in ferrite rod antenna, earphone, integral leather case with handle, and batteries. Dimensions: $73 / 4 \mathrm{~W} \times 51 / 4 \mathrm{H} \times 21 / 2^{\prime \prime} \mathrm{D}$. Shpg. wt., 5 lbs . Imported S. 258

Net 24.50
BA-156 Extra "C" batteries, (use 6) wt., 2 oz.
ea, Net 13

# N:W LAFAVY:TIE ALL-TRANSSTTOR 44-WATT STREP ANPLIIIR 

- Cool Running, Reliable Transistor Circuitry - 20-20,000 cycles $\pm 1 \mathrm{db}$
- Smooth, Fast Transient Response
- Freedom From Hum and Noise
- Complete Stereophonic Control facilities

- Modern Styling, Compact Size


## 19 Transistors, 3 Silicon Diodes

The LA-200 is an advanced transistor design with outstanding high fidelity performance. Combines a complete stereophonic preamplifier and a dual channel 44 -watt power amplifier on one compact chassis. All-transistor circuit offers advantages not found in tube sets . . Cool operation-low heat output and power consumption of transistors enables them to outlast tubes; instant warm-up, no filaments to heat up; no microphonics, hum and noise are virtually eliminated; no output or driver transformers, direct coupled circuit gives you low distortion and superb transient response. In addition, military-type terminal boards are used in a ruggedly constructed metal chassis. A fastacting relay protects the output transistors from overloads or short circuits in the speaker line. The initial performance level is maintained for years without adjustments when operated properly. Other features include: Front panel stereo headphone receptacle, scratch and rumble filters, separate on-off power switch, bass and treble controls for each channel, 4 -position mode switch, volume, balance and 5 -position input selector switch, speaker on/off switch. Phase switch on rear panel; 2 AC convenience receptacles, one switched; pilot light. Operates with 4, 8 or $16 \cdot 0 \mathrm{hm}$ speakers. Brown textured finish metal case, gold finish aluminum panel and knobs. For 105-125V 50/60 cycles AC. Size: 13Wx43/6Hx9"D (with legs). Shpg, wt., 14 Ibs. Imported.
LA-200 WX
Net 109.50

## SPECIFICATIONS

IHFM Music Power: 44 watts; 22 watts per channel, Frequency Response $\pm 1 \mathrm{db}$, $20-20,000 \mathrm{cps}$. Harmonic Dist.: $1 \%$. Hum \& Noise: Tuner, - 74 db ; Mag. Phono, -54 db . Tone Controls: $\pm 10 \mathrm{db}$. Inputs: ( 5 pairs): Tape Head; Mag. Phono; Cer. Phono; Tuner; Aux. Outputs: Tape Recorder, 4 ohms (also for 8 and 16 ohm speakers).


## Years Ahead Features

1 Smootr Positive Action Contros and Switches
2 Front Fanel Stereo Phone Jack
3 Oversize Electrolylic Capacitors for Better Power Supply Filtering, Longer Life
4 Militarr-type Terminal Boards Give Greater Reliability
5 Heat Ssield for exira component protection
6 Massive Heat Sink to Insure Cool operat on of Power Transistors
7 Speaker Phase Switch
82 AC Cכnvenience Outlets, One Switched
$9^{\circ}$ Fused IC Line
10 Massive Power Transformer
11 Relay For Complete Overload or Shot Circult Pratection
1219 Transistors, 3 Silicon Oiodes

## LAFAYETTE TAPE RECORDERS

Portraits of Outstanding Achievements When you want superlaitive performance


## LAFAYETTE

 DELUXE 7" Reel Tape Recorder Record/Playback Tape Deck,

LAFAYETTE MINIATURE 2-Spged Push-Buttion Tape Recorder


LaFAYETIE 2-Speed Stereo Playback Tape Deck



[^0]:    Power Output 15 watts Inst tute of High Fldelity Manufacturers Rating ( 30 watts peak). Frequency Response $15 \cdot 30,000 \mathrm{cps} \pm 1$ ob (at normal listening level); Sensitivity: For full power, High level Inputs 0.5 v , Mag. phono 3 mv . Hum and Noise: Volume control at mox. High level inputs 65 db below rated outpu-, Mag-Phono 55 db below rated output; Harmonic Distortion less
    than $.3 \%$. Inputs: Total 5-Aux, Tuner, Mag. Phono, Crystal Phono, Tape Head. Outputs: Tape Phono, Crystal Phono, Tape Head. Outputs: Tape
    Out, 4,8 and 16 -ohm speater terminals; Tubes Total of 5 plus rectifier - 2-EL84, 1-6BL8, 1.6AV6, 1.12AX7, and 1-GCA4/E281. Controls: Monitor/On-Otf; Volume/power On-Off: Bass; Treble; Rumble Fllter. Ham balance control. Selector; 4 -position, Aux, Tuner, Phono, Tape Head. Complete with removatle case and legs. AC receptacle on rear of chassis. Dimensions: $133 / 4 W \times 4 \mathrm{Hx} 83 / 4{ }^{" 0}$. Knobs extend $3 / /^{\text {" }}$ in front of 133/4 Wx4Hx83/4 "D. Knobs extend $1 / 4 \mathrm{~m}$
    panel. Shpg. Wt., 20 lbs. Imported. panel,
    La. 55 WX

    Net 44.50

[^1]:    FREE tems Stylus Pressure Gauge, Automatic 45 RPM Spindle, Record Cleaning Kit, Speaker Cable and full connecting instructions.

[^2]:    Here is a high quality, low cost, dual-cone speaker featuring outstanding sound and a heavy-duty die cast frame to permanently center the sound reproducing elements. This insures low distortion for the life time of the speaker. The shallow frame design of the SK-255 permits simple custom installation in walls, "thin-type" enclosures, ready-made consoles or wall baffle extension speaker use. The big $12^{\prime \prime}$ high compliance woofer delivers plenty of solid bass while the separate high frequency whizzer cone handles the middle and high frequencies clearly to the upper audio spectrum. Other features are $2^{\prime \prime}$ edgewound voice coil assembly and a built-in miechanical crossover at 1800 cycles. Has convenient binding post terminals for fast, easy connections to any amplifier.
    SPECIFICATIDNS-Frequency Response: $20-13,000$ cycles. Power Handling Capacity: 20 watts, 40 watts peak. Voice Coil Imped. ance: 8 ohms. Cone resonance: $45 \mathrm{cps} \pm 10 \mathrm{cps}$. Voice Coll olameter: 2 inches. Size: $121 / a^{\prime \prime}$ diameter $x 31 / 2^{\prime \prime}$ deep. Shpg. wt., 7 lbs. Imported.
    SK-255
    Net 13.95
    2 for 26.95

[^3]:    FULL SIZE PERFORMANCE - This outstanding Lafayette Ultra-Compliance 2 way speaker sys. tem achieves a purity of sound and musical quality that is astounding from a speaker system occupying less than one cu. ft . of space. A pertect speaker for use anywhere in your home or office... makes ideal extension units or use in pairs for stereo.
    The speaker features a unique dual cone with an extra heavy magnet structure, employed in a specially designed tuned ducted port enclosure. Both tweeter and woofer "ufloat" on flexible, corrugated edges, with the outer edge of the tweeter-cone attached to the midsection of the woofer. This results in a mechanical crossover so that both cones operate in phase at low frequencies, but only the tweeter cone radiates high frequencies. The same type of wide-range frequency response is achieved that normaliy is found only in true coaxial or multiple speaker systems. Frequency response is $40.16,000$ cps - impedance: 8.16 ohms.

    Avaliable in rich mahogany walnut, or oiled walnut. Finished on four sides - place it hcrizontally on lts side or vertically on its base. Easily adapts to bookshelf placement or
     Lafayette Ulitra-Compliance 2 way Speaker System.
    SK. 124 WXX Mahogany or Walnut (Specify Finish)

[^4]:    The "Slimform Dekorator" offers extraordinary sound and styling This system incorporates the latest ad. vanced acoustic design by the finest British craftsmen. All cabinets are slim in appearance with olled walnut inish and decorator styied gilles. The $8^{\prime \prime}$ and $10^{\prime \prime}$ woofers incorporate a Rigidflex Floating Piston Hyperbolic Cone. The $6^{\prime \prime}$ Mid-Range unlts are closed back type provlding uniform response to $10,000 \mathrm{cps}$. The $31 / 2^{\prime \prime}$ high-frec. tweeters are designed for extended response to $17,000 \mathrm{cps}$. Power rating, 30 watts. 1 mp . 16 ohms. Size: $25 \mathrm{H} \times 17 \mathrm{~W} \times 51 / /^{\prime \prime} 0$. Shpg. wt., 26 bs. 21 a 5703 WX

[^5]:    The Admiral "Ensign" is an exceptional value offered by Lafayette
    monaural Built for compatibolity with both siereopnonic and monaural records. The balanced featherweight tone arm operates at only 5.7 grams of needie pres sure to minimize record wear. Arm is.equipped with Flip-Type Ronette ceramic stereo cartridge. Heavy precision turntable without any noticeable hum, rumble, or wow. Drive wheel disengages in neutral position, thus preventing rumble producing flat spots, Plays $162 / 3,331 / 3,45$ and 78 RPM records. Intermixes $10^{\prime \prime} \& 12^{* \prime \prime}$ records of the same .speed. Plays records manualiy if desired. Single knob speed/function control switch. Automatic 3-way shut-off after last record 117VAC, 60 cycles. Compact and exceptionally functional, only $1312^{\prime \prime} \times 12^{\prime \prime} \times 71 / 2^{\prime \prime}$. $3^{\prime \prime}$ below \& $51 / 2^{\prime \prime \prime}$ above mounting board. Beautiful brown \& gold finish. Shpg. wt., 12 lbs
    PK. 800 W less base
    PX. 606 W Walnut Base for above
    PK. 607w Mahogany Base for above PK-608w Mounting Board for above PK-609 45 R.P.M. Spindle for above

[^6]:    SPECIAL 10 FT. JUMPER CABLE. Unshielded parallel cable, 10 ft . long, with alligator clips (1) at both ends.
    MS-561
    Net 60

[^7]:    Ferrite antenna colls for broadcast frequencies, having high $Q$ for maximum signal pickup and energy transfer to transistor. Type 14.9015 is adjustable. Wt., 402

    Stock

    ## No. <br> C0. 216

    0.216
    CO
    C

    | $\mathrm{CO}-217$ |
    | :--- |
    | CO |

    $\mathrm{CO}-219$
    CO
    C .221

    | CO |
    | :--- |
    | CO |
    | CO |
    | CO |


    | C 0.223 |
    | :--- |
    | CO |
    | CO |
    | CO |

    tuning induct.

    | Type | Fig. | CAP. UUF | $\mathbf{u H}$ | Size |
    | :---: | :---: | :---: | :---: | :---: |
    | 14.9001 | FF | 98 | 880 | \% ${ }^{\prime \prime} \times 3 / 4^{\prime \prime} \times 25 / 8^{\prime \prime}$ |
    | 14.9003 | FR | 365 | 240 | 1/2" dia. x $7^{\prime \prime \prime}$ L |
    | 14.9005 | FF | 123 | 667 | $x^{\prime \prime \prime} \times 3 / 4 \times 31 /{ }^{\prime \prime}$ |
    | 14.9009 | FR | 165 | 506 | $3{ }^{\prime \prime}$ dia, $\times 7^{\prime \prime}$ |
    | 14.9011 | FR | 73 | 1125 | $3{ }^{\prime \prime}$ dia. x $5^{\prime \prime}$ |
    | 14.9013 | FR | 123 | 667 | \%" dia. $\times 5$ " |
    | 14-9015 | IF | 100-365 | 200.900 | \%/9" dia. $\times 2$ "' |

    

    - Only $3 / 4^{\prime \prime}$ Square

    The most popular replacement I.F. Ideal for experimenters. Exceptionally high gain powdered Iron core compression tuned 455 KC midset compression tuned, 455 KC midget 1.f.-only $3 / 4$ square by $1 /{ }^{\prime \prime \prime}$ high. For both input and output circuits. Sup. plied with mounting clip and adapter plate to replace both midget and larger size cans. Used in Lafayette $\mathrm{HE}-15 \mathrm{CB}$ Transcelver. Shpg. wt., 4 ozs.
    MS.22 mS-22 $\quad$ Lots of 10 each .49

    FIG. 3 - "MINIATURE" ADJUSTABLE

    ## VIDEO PEAKING COILS

    Permit "exact" screwdriver adjustment of frequency response in video ampllfier stages by use of powdered iron cores. Mtg. by leads. $1 \times 1 / 2^{\prime \prime}$. Shpg. wt., 4 oz . Stock
    No.
    C0-254
    C0.255
    $\mathbf{C 0}-256$
    $\mathbf{C 0 . 2 5 7}$

    | Type | Inductance Range |
    | :--- | :---: |
    | $19-1920$ | $65-115$ uh |
    | 19.1921 | 115.195 uh |
    | 19.1922 | $195-325$ uh |
    | 19.1923 | $325-500$ uh | inductance make these colls ideally suited to replacement in compact circuits or where mounting or original coil is difficult to duplicate. Designed to cover the broadcast band with gang condensers havlng effective capacitles of 280 to 420 mfd . Shpg. wt., 8 oz .

    C0.208 Meissner 14.1071-Antenna
    C0-209 Meissner 14-1072-RF

    ## FIG. H - MINIATURE ADJUSTABLE

    BROADCAST OSCILLATOR COILUtilizes 100 mmfd. Capacity Interwinding. For use with 6SA7, 12SA7, 6BE6, 128E6, 7Q7, and 14Q7 tubes in receivers having 455 KC Intermediate Frequency and with effective gang condenser capacities of 108 to 180 mmfd . In unpadded circults, and 365 to 420 mmfd. in padded circuits. Adjustable iron core per. mits accurate adjustment for proper tracking and calibration. Its smali size of $1^{\prime \prime} \times 3 / 0^{\prime \prime}$ permits its use in the most compact circuits. Shpg. wt., 8 oz. C0-210 Meissner 14-1073

    FIG. I - PHONO OSCILLATOR COIL
    FOR WIRELESS RECORD PLAYERS
    Knod adjustment for selection of clear frequency in
    8 BC band. $1 \%$ sq. $\times 31 / 3^{\prime \prime}$ high. Shpg. wt., 6 oz .
    C0.253 Melssner 17.93)
    BFO COIL
    Supplies beat note for CW reception. Range 290650 KC . Peaked at 456 KC . $1 \%$ sq. x $31 / 2^{\prime \prime}$ high. Shpg. Wt. 8 oz.

    252 Meissner 17.6753
    
     .

    ## LAFAYETTE SERVICEMAN'S SPECIAL 455 KC UNIVERSAL I.F. TRANSFORMER FOR BROADCAST AND CITIZENS BAND

    
    

    ## TRANSISTOR FERRITE ANTENNA COILS

    

    # TRANSISTOR ANTENNA RODS <br> J. W. MILLER TRANSISTOR COILS 

    Page 157

    2007
    

    2000

    Low loss ferrite core with a high Q. 2000 and 2004 have an inductance of $240 \mu \mathrm{~h} .2007$ has inductance of $150-1,000 \mu \mathrm{~h}$. All cover a band of $540-1650 \mathrm{KC}$. Shpg wt., 407.

    | Stock | Mfg. | Q © | Max. Tuning Cap. | Net |
    | :--- | :--- | :---: | :---: | :---: |
    | No. | No. | 790 K |  |  |
    | C0-16 | 2004 | 450 | 365 mmf | 1.91 |
    | C0.89 | 2007 | 500 | 365 mmf | 1.78 |
    | C 0.90 | 2000 | 220 | 100.250 mmf | 1.41 |

    ## D

    SHORT WAVE COILSAdjustable Iron Core can be made to track with many types of variable condensers. For use with a 365 mfd tuning condenser. Oscillator coil is cathode tapped type and it is possible to achieve 3 point tracking when a .002 pad. is used. Shpg. wt., 3 oz
    C0.91 Type 85496C tapped osc. 455KC ............. Net 1.62
    

    ## TRANSISTOR I.F. TRANSTORMERS

    Type 2041. These transformers have been designed for use with Raytheon Transistor Type CK760. They feature a tapped primary having an impedance near 25,000 ohms, and secondary winding having an impedance near 600 ohms. 455 kc . Pri. $25 \mathrm{~K}, \mathrm{Sec} .6000$. Sizei $3 / 2$ sq. $\mathrm{x}=3 / 4{ }^{\circ}$ high. Shig. wo. 502 . CO-18

    ## P16 10.7 MC TRANSISTOR l. F. TRANSFORMERS

    A complete series of IF Transformers specifically designed for operation with transistor in both standard and printed circuht units. Standard size: $3 / 4^{4}$ sq. $\times 2^{\prime \prime}$ High. Printed circult: $3 / /^{\prime \prime}$ sq. $\times 21 / /^{\prime \prime}$ high.

    ## Sto

    | Stock |  |  |  |
    | :---: | :---: | :---: | :---: |
    | No. | Typt | Item | Net |
    | C0.102 | 1601 | First IF | 2.23 |
    | C0.103 | 1602 | Second IF | 2.32 |
    | C0.104 | 1603 | Third IF | 2.32 |
    | C0.105 | 1604 | Discriminator | 2.50 |
    | C0-106 | 1605 | Ratio Detector with diodes | 4.70 |
    | C0-107 | 1606 | Ratio Detector | 2.29 |
    |  |  | UTED CIRCUIT |  |
    | C0.108 | 1601-PC | First If | 2.23 |
    | C0.109 | 1602-PC | Second 1F | 2.32 |
    | C0.110 | 1603.PC | Third If | 2.32 |
    | C0.111 | 1605-PC | Ratio Detector with diodes | 4.70 |
    | C0.112 | 1606-PC | Ratio Detector | 2.29 |
    |  | SUB | INIATURE STYLE |  |
    | Single | ned IF's | d double tuned ratio det | ctor. |
    | Size: 1.5 |  | $1 / 2^{\prime \prime}$ high-Size: ratio detec | tor- |
    | C0-113 | 2070 | First If | 20 |
    | C0-114 | 2071 | Second If | 2.20 |
    | C0.115 | 2072 | Third If | 2.20 |
    | C0-116 | 2073 | Ratio Det | 2.65 |

    For use in FM stereo Multiplex tuners and recelvers, both standard and printed circuit. Size: $74^{\prime \prime}$ sa. $\times 1 / \not / z^{\prime \prime}$ high. Shpg. Wi., 402.

    ## STANDARD

    | Stock No. | Typ | Item |  |
    | :---: | :---: | :---: | :---: |
    | C0.92 | 1351 | Low Pass Filter | 1.9 |
    | C0.93 | 1352 | Band Pass Filter Series Element | 1.7 |
    | C0.94 | 1353 | Band Pass Filter Shunt Elment | 1.7 |
    | C0.95 | 1354 | Locked Oscillator 19Kc | 1.8 |
    | C0.96 | 1355 | Output Transformer 38 Kc | 2.2 |
    |  |  | PRINTEO CIRCUIT |  |
    | C0.97 | 1351-P | Low Pass Filter | 1.9 |
    | C0.98 | 1352-PC | Band Pass Filter Series Element | 1.7 |
    | C0.99 | 1353.PC | Band Pass Filter Shunt Element | 1. |
    | C0.100 | 1354.PC | Locked Oscillator 19Kc | 1.8 |
    | C0.101 | 1355-PC | Output Transformer 38Kc | 2. |

    ## TRANSISTOR OSCILLATOR COIL

    Type 2020. For use with transistor to supply the local oscillator enercy to the mixer stage. Used with a variable capacitor having a maximum ca oacity of 365 mmfd . For intermediate irequency 455 kc with broadcast band $540-1650 \mathrm{kc}$. Padder .0004 mmfd . Mounting clip fits into a $\mathrm{K}_{0}{ }^{\prime \prime}$ diameter hole. Size: \$\%" diam. $x 11 h^{\prime \prime}$ high. Shpt C0-17 wt., 3 oz .

    ## MILLER T.V. COILS

    

    ## Fig. F - 4.5 MC INTERCARRIER SOUND I.F. COMPONENTS

    Fits the popular Intercarrier sound TV receivers. Iron core tuning and Hi-Q no-drift capacitors are used throughout. Aluminum shields except *. Top and bottom tuning. Mounting by 6-32 spade bolts. 1469 is used to remove 4.5 MC signal from output of sound detector or plate of video amp. 1470 may be inserted in any part of circuit to attenuate 4.5 MC signal. Shpg. wt., 5 oz . Steck No. Type

    Fig. B - 44MC MINIATURE PICTURE I.F.'S
    Permeabilty tuned. For intercarrier recelvers of later design. Small physical shie for use where space is lacking. Mounts with spring clip. Adapter plate furnished for tube socket hole. "have trap windings. $3 / 4 \times 2$ ". Avg. shpg. wt., 502.
    

    Fig. C -21.25 MC TV SOUND I.F. TRANSFORMERS Permeablity tuned. For use In TV receivers using separate sound and picture I.F. Channels. Alt double tuned, top and bottom. High gain and adequate bandwidth for high fidelity sound. 6190 and 6191 are $7 / 8 \times 7 / 9 \times 21 / 4^{*} .6192$ and 6184 are $11 / 0 \times 11 / 2 x^{1 / 2 " .}$ Avg. shpg. wt., $50 z$.
    stock Ne.
    $\begin{array}{lll}\text { co-38 } & 6190 & \text { Ist Sound I.F. } \\ 0.39 & 6191 & \text { Ind Sound i.f. }\end{array}$
    C0-40 6192 Foster-Seeley Discriminator
    Fig. D - SYNC. STABILIZER COIL (Ringing Coil)
    Wound on a $2^{\prime \prime}$ long bakelite form and unshlelded. Mitg cllps fits a $\mathrm{K}_{4}$ " hole. $16-42 \mathrm{Mh}$, adjustable within a range contalning the horizontal sweep frequency. May be used as stabilizer in a multi-vibrator circuit. Overall $3 / 4 \times 21 / 4{ }^{\prime \prime \prime}$. Shps. wt., $20 z$.
    C0-52 Type 6210
    Net 1.82
    FIg. E - WIDTH LINEARITY CONTROL

    ## with A.G.C. WINDING

    To add AGC to width circuit. Width coll $5-40 \mathrm{MH}$. AGC winding $2.5-7 \mathrm{MH}, 3 / 4 \times 21 / 4^{\prime \prime}$. Shpg. wt., 502. C0.75 Type 6316

    Video peaking colls designed to provide proper bandwidth and wave shape for video signals. Wound on plastic forms except shunt type wound over resistor forms. is fliament choke; isolates illament to reduce eedback, stray coupiing, etc. $y_{2} x \geqslant{ }^{\circ}$ long. Peaking colls $K_{6} \times 3 / \mathbf{b}^{\prime \prime}$ long. Avg. shpg. wi., 202. Steck $\begin{array}{llllllrr}\text { No. } & \text { Type } & \text { Uh Shunt } & \text { No. } & \text { Type } & \text { Uh } & \text { Shunt } \\ \text { co-25 } & 6175 & 0.8 & \text { None } & \text { co-29 } & 6179 & 180 & 39 K\end{array}$ $\begin{array}{llllllll}C 0-19 & 6152 & 20 & \text { None } & \text { Co-30 } & 6180 & 180 & \text { None } \\ \text { C0-26 } & 6176 & 36 & \text { None } & \text { C0.21 } & 6154 & 200 & \text { None }\end{array}$ | co-23 | 6172 | 73 | None | co-24 | 6173 | 250 |
    | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
    | co.27 | 6177 | 93 | None | Co.31 | 6181 | 250 | $\begin{array}{llllllll}C 0-28 & 6178 & 120 & 22 K & C 0-22 & 6155 & 300 & \text { None }\end{array}$ Co.20 6153120 None Co-85 6174500 None

    

    CO.13
    C0.14
    CO-15

    \section*{| 1466 | In |
    | :--- | :--- |
    | 1467 | Fos |}

    1468
    $1470^{\circ}$

    Similar to above but only $3 / /^{\prime \prime}$ square by $2^{\prime \prime}$ high. With socket hole.

    | Stock No. | Type | Item | Net | C |
    | :--- | :--- | :--- | ---: | ---: |
    | C0-49 | 6203 | Input or Interstage | 1.94 | C |
    | C0.50 | 6204 | Discriminator | 2.20 | C |
    | C0.31 | 6205 | Ratlo Detector | 2.20 | C |

    ## Fig. G - HORIZONTAL OSC. AND SYNC. <br> CONTROL COILS

    Permeability tuned - for use in horizontal osc. and AFC circuits. Aluminum case. No. 6194 has iwo coupled windings: one tapped, for use in horizontal osc. circuit; the second center-tapped for phase discrimination. No. 6182 has a tapped osc. coll for use in a horizontal blocking osc. and as sync. control. No. 6183 is same as 6182 but has additional winding for sync. stablization. Av. shpg. wt., 502
    Stock No. Type Item
    C0.41 1 No. 6194 Horiz. Osc. \& Discriminator C0.32 No. 6182 Horiz. Osc. \& Sync. Control C0.33 No. 6183 Horlz. Osc. \& Sync. Stabiliz

    ## —Fig. H -

    For seis with $62191 / 2^{\prime \prime} 0.0 . \times 11 / 4^{\prime \prime}$. Avg. shpg. wt., 502.
    Stock No.
    co.53
    CO-53
    $\mathrm{CO}-87$
    $c 0.54$
    $c 0.55$
    $C 0.55$
    $C 0.56$
    Type
    6215
    $6216+$
    6217
    $6218 \dagger$
    $6219 *$
    ttem
    Input or Interstage Ratio Detector
    Sound Pick-0ft
    1470-A Sound Trap

    ### 4.5 MC MINIATURE I.F.

    mounting clip and adapter plate for use in standard tubepicture A.F. carrer at 41.25 and interto 45.75 MC . 中 have trap windings, $7 / 5 \times 7 / 21 / 4$ " except

    Converter I.F
    Ist Plx I.F. Grid
    1st Pix I.F. Plate
    2nd Pix I.F. Grid

    Net
    1.94
    2.28
    2.41

    ## .97 CO

    ## CO

    co
    $\begin{array}{ccc}C 0-129 & 6033-R \quad 10785-6.1 / \\ 106387\end{array}$
    C0.130 6034.R 105292
    C0.131 6035-R 105293
    $C 0-1326038-R \quad 105294 /$
    1107858.1
    C0.133 6337-R 102195 Horiz. Waveform
    $\begin{array}{llll}\text { Co-134 } & 6338-R & 105196 & \text { Horiz. Linearity } \\ \text { Co-135 } & 7105-R & 105286 & \text { 4.5 MC Sound IF }\end{array}$
    $\begin{array}{lll}\text { Co.135 } & 7105-R & 105286 \\ \text { Co.136 } & \text { 7106-R } & 105287\end{array} \quad$ 4.5 MC Sound if
    $\begin{array}{lll}C 0.136 & 7106-R & 105287 \\ \text { C0.137 } & 7107-R & 105288\end{array} \quad 4.5 \mathrm{MC}$ Sound IF
    C0-138 7108-R $106381 \quad$ 4.5 MC Sound IF
    C0.139 7109.9106382
    C0-140 7110-R 106383
    4.5 MC Sound IF

    Fig. I-HORIZONTAL LINEARTY AND WIDTH CONTROLS
    Iron core varlable inductance colls for linearity and width adjustment. Wound on a bakelite form $3 / 0^{\prime \prime}$ in dfameter. Mtg. cilp fits $X_{4}{ }^{* \prime}$ hole. 6300's phenolic form. Avg. shpg. wt: 402.
    Stock No.
    CO
    $\mathrm{CO}-42$
    CO
    $\mathrm{CO}-43$
    $\mathrm{CO}-44$
    $C 0-44$
    $C 0.45$
    CO-45
    CO-46
    CO-47
    C0.48
    $C 0.72$
    co.73
    C0.74
    $c 0.74$
    $c 0.75$
    C0.75
    $\mathbf{c} 0.77$
    C0.77
    C0.78
    $\mathrm{CO}-78$
    co. 80

    | 1st Pix I.F. Plate | 2.12 | C0.82 |
    | :--- | ---: | ---: |
    | 2nd Pix I.F. Grid | 2.00 | C0.83 |
    | 3rd, 4th and 5th Pix I.F. | .97 | C0.84 |


    | Millinenries | Net |
    | :--- | ---: |
    | $.185-1.000$ | .97 |
    | $.054-0.245$ | .82 |
    | $.054-50$ | Tapped |
    | $.550-2.300$ Tapped | .94 |
    | $.170-0.610$ | .94 |
    | $1.300-4.100$ Tapped | 1.00 |
    | $.500-1.700$ | .97 |
    | $.50-5.0$ | 1.29 |
    | $2.0-18$ | 1.21 |
    | $4.0-30$ | 1.29 |
    | $4.0-30$ With ACC | 1.76 |
    | $3.2-9.0$ With AGC | 1.62 |
    | $.20-3.0$ | 1.09 |
    | $15-60$ | 1.62 |
    | $.20-3.0$ Tapped | 1.12 |
    | $1.0-5.0$ Tapped | 1.29 |
    | $1.5-10$ | 1.21 |
    | $.50-5.0$ Tapped | 1.12 |
    | $60-130$ Tapped | 1.62 |

    ## LAFAYETTE EXCLUSIVE MINIATURE RECEIVER COMPONENTS

    ## POLY-VARI-CON MIDGET VARIABLE CONDENSERS

    

    Two-gang midget variable gives top performance in transistor superheterodyne radio receiver circuits. Capacitance of anteñna section 6.5 to 148.5 mmf ., and 6.5 to 65.2 mmf capacitance of osciflator section. Self-contained trimmers. Tunes through $180^{\circ}$ Enclosed in transparent plastic case. With 3 solder leads Shpg. wt., 40 oz. Imported.
    MS-947
    Net .95
    POLY-YARI-CON SINGLE GANG VARIABLE CONDENSER (Fig. B) - Only $7 / x^{3 / 4}$ " Sa .!

    Single.gang midget variable for efficient TRF radio recelver circults. Capacity -8 mmf to 260 mmf . Tunes through $180^{\circ}$ Transparent plastic case with 2 solder leads. Shpg, wt., 4 oz. Imported
    MS.946
    Net 69
    ATTRACTIVE TUNING DIAL FOR MINIATURE "POLY-YARI-CON" CONDENSER $11 / 2^{\prime \prime}$ diam. Shpg, wt., 4 ozs. Imported
    KN-24 IVORY ANO GOLO
    Net .45
    KN- 25 MAROON AND SILVER

    ## miniature 2 gang variable condenser for Japanese TRANSISTOR RADIOS - Perfect Replacement in Most Sets

    > The ideal variable tuning condenser for replacement in practically all of the current miniature Japanese transistor recelvers. The unusually small size of this variable permits it to be installed In the most compact radios. Easily mounted on printed circult boards. Sturdy transparent piastic case protects delicate plates from any possible damage. Rotates through a full $180^{\circ}$. Trimmer adjustment on rear of case. Shpr. wt., 4 ozs. Imported MS-840
    

    ## SMALLEST TUNING CONDENSER-with DIAL

    ## - 365 MMF.

     CIRCuITs
    A new "Poly-Varl-Con" model for use in TRF broadcast-band and experimental recelvers. Complete with good-looking clear plastic
    
    tuning dial with calibrations from 530 to 1600 KC . Capacity variable from 10 to 365 mmf . Knurled dial is $114^{\prime \prime}$ diam. rotation is $180^{\circ}$. Dlal is mounted to condenser shaft by Ks" diam. chrome-plated threaded retainer. Shpg. wt., 5 oz . Imported MS-445

    Net .59
    TRANSISTOR LOOP ANTENNA AND OSCILLATOR COIL

    MS. 95
     MS-956 FOR USE WITH 148.5 mmf CONDENSERS
    SUCH AS MS-947 POLY-VARI-CON
    Especlatiy oesigned to match the Input impedance of the RF stage in iransistor superheterodyne circuits. Requires maximum capacity of 148.5 mmf in RF section of variable condenser. Matched with the new midget 2 -gang variable condenser MS-947 to give excellent sensitivity and selectivity over the entire broadcast band of $540-1650 \mathrm{KC}$. Wired on high efficiency iron core. $4^{\prime \prime 2} \mathrm{Lr}^{1 / 4^{\prime \prime}}$ Dia. Shpg. Wt., 4 ozs.
    MS.956
    Net .95
    MATCHING OSCILLATOR COIL
    Designed for optimum performance with MS-947 varlable condenser and MS-956 loopstick antenna. For 455 KC IF. Shpg. wt., 4 oz. MS-957

    Net . 79

    ## TRANSISTOR TRF FERRITE LOOP ANTENNA

    ## P FOR USE WITH 260 mmf

    VARIABLE CAPACITORS SUCH AS MS.946 Especially designed for exceptional sensitivity and selectivity when used with the Lafayette MS-946 midget single-gang Poly-Vari-Con variable capacitor. Excellent mate for all other 260 mmi variable capacitors. Wound on high efficiendy Iron core for optimum performance. 4 "x $1 / 4$ ". Shpg. wt., 4025MS-955
    Net . 98

    ## REPLACEMENT 5K VOLUME CONTROL FOR JAPANESE TRANSISTOR RADIOS

    A volume control with the proper resistance, dimensions and mounting for replacement In almost all compact transistor radlos. A 5,000 ohm potentiometer with S.P.S.T. switch. Only $3 / 0^{\prime \prime}$ dia., $y^{\prime \prime}$ total depth. Easily instalied in printed circuits. Comes with Ths" dia. knob. printed circuits. Comes
    Shpg. wt., 2 ozs. Imported
    VC-62
    Net .59

    ## ULTRA SUB-MINIATURE TRANSISTOR COIL KIT

    

    All in one kit-a complete set of matched micro-miniature coils, ferrite loop antenna, ultra-compact 2 gang variable condenser, tuning dial and schematic diagram for bullding a subminiature 6 transistor radio. Kit includes: Shielded and impregnated high-a 455 KC If transformers and osclllator coll-all slug tuned. Proper impedances are provided for optimum circult performance. Varlable condenser has protective case and rear trimmer adjustment. Flat ferrite loop antenna measures: 21/ex/sx $x^{1 / 2 "}$ thick. Clearly—printed circuit diagram indicates all parts necessary for a powerful 6 transistor receiver. Tuning dial and knob ( $17 \mathrm{~K}^{\prime \prime}$ dia.) fits securefy on V.C. shaft.
    MS-828 Shpg. wt., of hit is 1 ib. Imported

    ## NEW! 6 TRANSISTOR FM TUNER IF TRANSFORMER KIT

    Bulld your own 6 transistor FM tuner with the help of this If transformer kit. KIt consists of 5 miniature if coll transformers with built in capacitors and 1 if trans. former with 3 external capacitors, Overall gain 60 db $\pm 3 \mathrm{db}$; center frequency, 10.7 MC . Primary impedance, 30,000 ohms, secondary impedance, 400 ohms. Foster Seeley detector; overall selectivity, 200 KC (detune) Treated against humidity. Pin terminal connections. Schematic Included. Size: Ko $4 x^{3} 48 W \times 3 / 6{ }^{\circ} 0$. Shpg. Wt., 2 OZ. Imported
    MS-944
    Net 2.95
    

    ## MATCHED TRANSISTOR 455 KC I.F.'S

    - FERRITE CORE - SLUG TUNED - ONLY $1 / 2^{\prime \prime}$ SQ. $9 / 16^{\circ \prime}$ H Products of the latest engineering research, these 455 KC transistor I.F. transformers are designed with improved ratios of primary to secondary turns and of capacity to inductance for perfect impedance matching. Exacting research has proven that matching 1st and 2nd I.f.'s having a primary impedance of 25.000 ohms and a secondary Impedance of 600 ohms with a 3rd I.F. having a primary impedance of 25,000 ohms and a secondary impedance of 1,000 ohms gives vastly improved results in transistor superhet circuits. Lafayette is first to make these specially matched transistor 455 KC I.F. transformers avallable to you. Shpg. wt., 4 ozs
    MS-268A 1 st and 2 nd I.F. primary impedance 25,000 ohms, secondary 600 ohms 89 MS-269A 3rd I.F..... primary impedance 25,000 ohms, secon-
    dary 1,000 ohms
    .89


    ## TRANSISTOR LOOP ANTENNA AND OSC. COIL

    ## M MS-264

    A 1000 antenna witli a primary inductance of 700 microhenry, especially
     designed with the proper tap to match the input Impedance requlred in transistor circults. Covers the entire broadcast band from $540-1650$ KC when used with latest miniature type varlable condensers such as used in G.E. Regency and other subminiature sets. (Lafayette MS261 is ideal.) Requires maximum capacity of 123 mmf in RF section of varlable condenser. Wound on high efficiency iron core $4^{\prime \prime}$ long $\times 14^{\prime \prime}$ diam. Shpg. wt., 4 ozs.
    MS-264 In lots of 6, Each . 89
    MS-265 Matching Dscillator Coil. In lots of 6 , Each .69 Singly, Each . 79
    MS-265

    ## MATCHED SET TRANSISTOR ANTENNA LOOP AND OSC. COIL <br> FOR USE WITH 365 <br> MMF CONDS. <br> 

    A Transistor Loop Antenna with a flxed Inductance loop; specially designed with $1 / 2^{\prime \prime}$ diameter Ferrite Rod to insure adequate signal to the first stage. Inductor is tapped to match an input impedance of 600 ohms . Frequency range $540-1650 \mathrm{KC}$. when used with variable condenser having a maximum capacity of 365 mmfd . Dimenslons K K $441 / \mathbf{s}^{\prime \prime}$. Shpg. wt., 4 ozs.
    MS-166
    Net 1.25
    Designed for transistor circuits to supply the local oscillator energy to mixer stage. Intermediate frequency 455 Kc . Used with a variable condenser maximum capacity of 365 mmfd . Mounting clip flits into $\$ / \mathrm{s}$ " dlameter hole. Dimensions \$/6x14/6" high. Shpg. wt., 4 ozs.
    MS. 165

    ## LAFAYETTE SPECIALIZES IN MINIATURE PARTS FOR TRANSISTOR CIRCUITS

    TRANSISTOR FLAT FERRITE TAPPED ANTENNA COIL FOR USE WITH MINIATURE SETS

    ## 

    ## FOR USE WITH

    365 uUf VARIABLE CONDENSER
    Small in size, $23 /{ }^{\prime \prime} \mathrm{L} \times 3 / 4{ }^{\prime \prime} \mathrm{W} \times \mathrm{K}_{6}$ " Thick, for miniature circuits. For use with 365 mmfd Variable Condensers, such as MS-142, MS-274 and MS-445. Inductance $230 \mu \mathrm{~h}$. Shpg. wt., 402. M5-330 Translstor Antenna Coill

    ## HIGH-GAIN LOOPSTICK ANTENNA

    ## 

    Glve high gain across complete AM broadcast band from 540 to 1600 KC when tuned with standard 365 mmf luning condenser.
    A. VARI-LOOPSTICR. A revolutionary antenna development. An extremely small yet very powertul replace. ment antenna with a " Q " of $240-275$. Boosts sensitivity and signal to noise ratio considerably in portable receivers. With adjustable ferrite core for maximum peaking efficiency and precise tracking on entire broadcast band. Single hole snap-in mounting, plus mounting bracket. Equally efficient at any angle. $21 / 4 x$ Ko". Shpg. wt., 402.
    MS-11
    In lots of 10. Each 36c
    8. ENERGIZEO FERRI-LOOPSTICK, New 5 " ${ }^{\prime \prime}$, Eacrite oopstick antenna with a "Q" of up to 350 . Extremely high gain brings in even distant stations not normally received. New type adiustable coil with self-locking vinvl collar permits peaking antenna for super sensitive results. $3 \mathrm{Br}^{\circ}$. Shpg. wt., $60 z$ MS-287.

    Net 88c
    C. $7^{\prime \prime}$ SUPER LOOP. Super sensitive ferrite loopstich antenna with a " $Q$ " of up to 425. Excellent for replacement of old style looos. Brings in even hard to get stations with incomparable ease. Adjustable for maximum senslitivity over length of 7 In. Complete with mount. Shpg. wt., 60 oz .
    MS-44

    ## TRANSISTOR

    TAPPED

    ## VARIABLE

    ## ANTENNA

    COIL- boosts sianal pickup - swera.setective

    Transistor-wise Lafayette leads again with this new miniature tapped Varlable Antenna Coll. Speclally designed for matching the low input impedance of transstors. Results in maximum transfer of signal energy from tuning stage when used with 365 to $420 \mu \mu F$ variable.capacitors, as well as in minimum loading by flrst transistor stage for sharper tuning and greater selectivity. Also improves selectivity and performance when used in multiple tuned RF stages. Highly sensitive with a " 0 " of up to 250. With adjustable ferrite core for maximum peaking, Single-hole snap-in mounting, plus mounting bracket. Efficient at all angles. Size; $2 \times 3 /{ }^{\prime \prime}$ diam. Shpg. wt., 4 oz.

    ## FERRITE ANTENNA KIT

    

    ## - 3 AnTENNAS for 79

    - high "a" FOR TOP RECEPTIONThree sizes of flat ferrite antennas for the price of one! Each has a high inductance of 480 microhenries. Tapped leads are color coded. Designed to match most AM transistor radios. Matches tuning condenser setc. $167.5-8 \mathrm{mmfd} .$, osc. sect. $75.5 \mathrm{mmfd}-8 \mathrm{mmfd}$. Sizes: (1) $13 / 3 \times 3 / \mathrm{s}$ $x^{1 / 6 " ~(2) ~} 21 / 6 x 3 / 8 \times 2 / 6^{\prime \prime}$ (3) $21 / 6 \times 6_{6} \times 1 / 6^{\prime \prime}$. MS-488 Shpg. Wt., 5 oz. Imported

    Net . 79

    TRANSISTOR POTENTIOMETERS
    

    For Transistor and Sub. Miniature circuits Versatile carbon controls for audio, tone and similar applications; specially designed for Transistor and Sub-miniature circuits. Only "有" diameter, Shaft 1" long $1 /{ }^{\prime \prime}$ diameter. Shaft easily cut to desired length includes nut and lock washer. Shpg, wt., 2 oz.

    ## WITHOUT SWITCH

    VC-32 1,000 ohms VC-24 25,000 ohms
    VC-33 5,000 ohms VC-36 50,000 ohms
    VC. $3410,000 \mathrm{ahms} \quad$ VC. $371 / 2 \mathrm{Meg}$ VC-35 15,000 ohms VC- 381 Meg MS.185-Miniature Knob $58 .{ }^{\text {m" Meg }}$ WITH S.P.S.T. SWITCH
    These Versatile Sub-Minlature Controls with S.P.S.T. switch ratings 1 amp at 20 Volts, $1 / 4 \mathrm{amp}$ at $671 / 2$ Volts. Control was especlally designed for Transistor and Sub-Miniature applications; Bushing $1 / 4^{* \prime}$ diameter and $144^{\prime \prime}$ long, includes nut and lock washer. Only $3 / 4$ " diameter $3 /{ }^{\prime \prime \prime}{ }^{\prime \prime}$ deep, shaft $x_{t}{ }^{\prime \prime}$ diameter, $1^{\prime \prime}$ long. Shaft can be cut to desired length. VC. 26 1,000 ohms VC- 2525,000 ohms VC-27 5,000 ohms VC-31 50,000 ohms VC-28 10,000 ohms VC- $391 / 2$ Meg. vC. $29 \quad 15,000$ ohms VC. 401 Meg .
    MS-185-Miniature Knob \$/4" Diam. ..........Net 9c
    TRANSISTOR 5000 OHM POT WITH SWITCH, SLOTTED SHAFT and KNURLED FLAT
    DIAL-5/16" DIAM
    New 5,000 ohm, 5/a" diam. subminiature volume control with ONOFF switch. Ideal for transistor kits! Neat
    knurled plastic dial knurled plastic dial
    etched with "OfF" press etched with "OFF" press diam. slotted shaft. 1/2" body height, 1 Yo" "L overall. Shpr, wt., 2 oz. KN-23 Dial Net 81

    TRANSISTOR ON-OFF VOLUME CONTROL DIAL Neat flat transparent dial color-etched with "OFF" Fits $1 / \mathbf{" n}^{\prime \prime}$ diam, volume control slotted shafts. Knurled periohery for easv vertical or horizontal activation. $1^{\prime \prime}$ diam. x $1 /{ }^{n}{ }^{n}$ thick. Can easily fit VC-26 thru VC- 35 If slot is made in shaft. Imported
    KN-23
    Net .12c

    ## KIT OF 3 MINIATURE ADJUSTABLE

    LOOPSTICKS .89

    NondirectionalInstall in Any Position

    - Pulls in Distant
    Radio Stations

    Lafayette's kit of 3 miniature adjustable loopsticks pull in those distant radio stations with amazing ease and clarity. Has set-screw adjusting slug to obtain maximum loudness. May be installed in any position. Complete with instruc. tions. Shpg. wt., B oz. Imported.
    MS-880
    Set of 3 Net 89

    MINIATURE AND SUB-MINIATURE
    

    TRANSFORMERS IDEAL REPLACEMENTS for JAPANESE 6-TRANSISTOR RADIOS
    

    Slug tuned, printed circuit mounted miniature IF transformers. All have 455 $9 / 16^{\circ} \mathrm{KC}$ intermedlate frequency. Each with sche: matic and pin contacts.

    - ALL UNITS ONLY $3 / \mathbf{s}^{* \prime}$ SQ. AND $9 / 16^{n}$ HIGH

    MS-779 Oscillator Coil: Inductance $270 \mu \mathrm{H}$ MS-780 1st IF; pri. 70,000 ohms,
    sec. 1500 ohms
    MS-781 2nd IF: pri. 50,000 ohms,
    NET EACH sec. 1000 ohms
    MS-782 3rd IF: pri. 30,000 ohms,
    sec. 5000 ohms

    ## SUB-MINIATURE TRANSFORMERS

    - ALL UNITS ONLY 5/16" SQ. AND 7/16" HIGH
    

    Same as miniature IF transformers above exceot size. MS. 775 Oscillator Coil MS. 776 1st IF
    MS-717 2nd IF
    MS. 778 3rd IF
    .69

    ## SUB-MINIATURE <br> VARIABLE RESISTORS <br> SIZE-3/" Oia. $1 \mathbf{k}^{\prime \prime}$ Thick <br> 29c each

    Imported

    Carbon composition potentiometers built for the most compact installations-in transistor and sub-miniature circuits. Ideal for printed circuits. Sh. wt., 202. VC-57 1000 ohms VC-58 5 K ohms VC-58 10K ohms VC. 60 50K ohms VC- 61500 K ohms Imported

    ## ANTENNA COIL

    Antenna Coil-Hghly efficlent ferrite antenna coll for Japanese superhet receivers. 437 microhenries, $Q$ is 200 at $1000 \mathrm{kc}, 23 / 4 \times 1 / 2 x^{3} / 6_{6}^{\prime \prime}$. Shpg. Wt., 4 ozs . MS. 754 Imported.

    ## 7" TRANSISTOR LOOP ANTENNA

    Tapped to match input impedance of transistor circuits. Covers broadcast band with variable such as Laf. MS-26I and Laf. MS-265 oscillator coll. " 0 " over 400. Ferrite core $7 \times 1 / 2^{\prime \prime}$. Shipg. wt., 602.

    FERRITE ANTENNA CORES

    - FERRAMIC a RODS ANO STRIPS! - CUSTOM BUILO YOUR FERRITE ROD ANTENNAS!
    Now you can wind your own ferrite rod an. tenna- to fit your own particular length, width and 0 requirements. A real boon to the experimenter - builder - smali lab. design engineer. A necessity in attempting receiver miniaturization. Easily cut to any size required. Avg. shpg. wt., 4 oz.
    MS-331 Rod 71/2×1/4"
    Net ea. 12 for
    MS. $332 \operatorname{Rod} 71 / 2 \times 33^{m}$
    $\begin{array}{ll}30 & 3.24 \\ 48 & 4.76\end{array}$
    MS-333 Rod $71 / 2 \times 1 / 2=$
    $.65 \quad 6.98$
    $7 / 41$ stranded per 100 ft . Shpg. wt., 8 or
    WR-417 Belden $\# 8817$ St. ShDg. Wt. 8 or.


    ## Page 160

    ## SPECCALTY PARTS for the EXPERIMENIER, BUILDER and HAM

    NEW LAFAYETTE VARIABLE TUNING CONDENSER FOR CB \& 10 METER RIGS

    ## - Used in Famous Lafayette HE-20A and HE-15A Transceivers

    A single ganged, variable tuning condenser offering unlimited possibilities to the experimenter, ham, and hobbyist in building Citizen Band Transcelvers and 10 Meter rigs. This condenser is used by Lafayette englneers in their famous HE-20A and HE-15A Transceivers. The unusually fine vernier action of the funing shaft allows for the very precise adjustment needed to select the closely alloted channels of the 27 MC Citizen's Band frequencies. Rotates thru a full $180^{\circ}$. Single ganged, having a shaft with an overall length of $11 / /$ inches $^{\text {a }}$ Can be top or front panel mounted. Well constructed with a minimum capacity of 6.5 mmf , and a maximum capacity of 13 mmf . Dimensions $1 x_{6} \times 1 \%_{4} x^{1} x_{0}$ inches excluding shaft.
    HP- 72 Shpg. wt., 3 oz. ..................................Net 1.30

    ## VARIABLE CONDENSERS

    ## MIDGET 2 GANG SUPER

    2 gang. Front section 27 plates with capacity of 10.5 mmf to 365 mmf ; rear section plates with capacity of 7.6 mmf to 132 mmf individwal trimmers on each section. End plates of RF section slotted for easy tracking. $180^{\circ}$ rotation. Capacity increases counter clockwise. $1 / 4^{\prime \prime}$ diam, brass shaft, mounted on ball-beapings, extends $11 / 2^{\prime \prime}$ from cadmium plated steet frame. Frame size: $11 \mathrm{~K}_{6} \mathrm{Dx} 1 \mathrm{~V}_{2} \mathrm{~W} \times 1 \mathrm{~K}_{0}$ "H. Standframe. Frame size: $1 K_{6} D \times 11_{2} W \times 1 h_{1}$ "H. Stand-
    ard mounting holes front and rear. Brass conard mounting holes front and rear. Brass con-
    tact wiper. For superhet circuits with 455 KC tact wiper. For supert
    IF. Shpg. wit., 10 oz.
    MS. 141

    ## 2 GANG TRF

    Same construction as above but each gang has 23 plates. Maximum capacity each section 365.7 mmf , minimum 10.3 mmf . Frame size 2K.OX1'K.WY15: "H. Shpg. Wt., 10 oz. Net 98 MIDGET 1 GANG TRF
    Similar in construction to above but single gang with capacity from 10 to 365 mmf . Size
    
    MS. 214 Shps. wt.,

    ## TRANSISTOR MINIATURE 2 GANG SUPER-HET VARIABLE CONDENSER

    ## ONLY 15 x136x18

    aluminum Lightwelght - both the frame and plates are rotation. Bakelite stator insulation. Capacity of 11 plate R.F. section is 6.3 to 123.1 mmfd ; 9 plate oscillator section is 5.7 to 78.2 mmf . Effective range of trimmers 15 mmf . These add 2 mmf to minimum capacity. Capacity increases in counter, clockwise direction. Flatted shaft, $1 / a^{\prime \prime}$ dlameter by $11 / a^{\prime \prime}$ long.
     MS-261

    ## NATIONAL RF CHOKES

    Wound on ceramic forms except R33, R50 and R60 series on bakelite, All have fungus resistant varnish coat. Type R33 is 2 section, R50 are 3 and 4 section. Types with $\dagger$ mounted on fixed standoff insulator. Types ending in $U$ have removable standoff. Avg. shpg. wt., 2 to 6 oz .

    | $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | Mfr. <br> Type | Fig | MH $\ddagger$ | Ma | Ohms |  |  |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | MP-125 | R-100 | A | 2.5 | 115 | 44 | . 57 | 4 |
    | HP-126 | R-100 | A |  | 70 | 90 | 90 | 5 |
    | HP-127 | R-100 | A | 10 | 60 | 130 | 1.12 | 1.06 |
    | HP. 129 | R-100U $\dagger$ | 8 | 2.5 | 115 | 44 | . 74 | 70 |
    | HP-130 | R-100U $\dagger$ | 8 | 5 | 70 | 90 | 1.04 | 99 |
    | HP-131 | R-100U $\dagger$ | 8 | 10 | 60 | 130 | 1.26 | 1.20 |
    | HP. 133 | R-100S $\dagger$ | C | 2.5 | 115 | 44 | 99 | 94 |
    | HP. 134 | R-100st | C | 5 | 70 | 90 | 1.32 | 1.25 |
    | HP-135 | R-100S $\dagger$ | c | 10 | 60 | 130 | 1.49 | 1.41 |
    | HP. 137 | R-100st | D | 2.5 | 115 | 44 | . 66 | . 63 |
    | HP-138 | R-100ST | 0 | 10 | 60 | 130 | 1.12 | 1.06 |
    | HP. 128 | R-300 | A | 1 | 400 | 11 | . 57 | . 54 |
    | HP. 132 | R-300U $\dagger$ | B | 1 | 400 | 11 | . 17 | . 73 |
    | HP. 136 | R-300St | C | 1 | 400 | 11 | 1.00 | . 95 |
    | HP-139 | R-300ST | 0 | 2.5 | 375 | 17 | 80 | . 76 |
    | HP-146 | R-50 | E | 5 | 150 | 15 | . 42 | . 40 |
    | HP-147 | R-50 | E | 1. | 135 | 23 | 42 | . 40 |
    | HP.145 | R-50 |  | 2.5 | 125 | 38 | . 42 | . 40 |
    | HP. 148 | R-50-1 | E | 10 | 115 | 36 | . 42 | . 40 |
    | HP-150 | R-154 | G | 1 | 600 | 6 | 2.31 | 2.08 |
    | HP | R-154U | H | 1 | 600 | 6 | 2.01 |  |
    | HP-152 | R-175A |  | 225 | 800 | 5 | 3.56 | 3.20 |
    | HP-143 | R-33 | E | $1 *$ | 850 | . 06 | 36 | 34 |
    | HP-140 | R-33 | E | 10** | 350 | 1.8 | 36 | . 34 |
    | HP-141 | R-33 | E | 50* | 225 | 3.5 | . 36 | 34 |
    | HP. 142 | R-33 | E | $100^{\circ}$ | 200 | 5 | . 36 | . 34 |
    | HP.144 | R. 33 | E | 750 * | 125 | 16 | 36 | . 34 |
    | HP. 149 | R-60 | F | 2* 11500 |  | icrohenries |  | 28 |
    | $\ddagger=$ Millthenries |  |  |  |  |  |  |  |

    HAMMARLUND MINIATURE VARIABLE CONDENSERS

    ## TYPE APC

    Compact. high quality Has high leakage resistance, and resistant to temperature, moisture, and vibration effects Straight line capacitance. Hex collar on slotted shaft for rotor and screw-driver adjustment. Air gap is $0.015^{\prime \prime}$ nominal. Shpg. Wt., 40 OL.

    Series APC (Screwdriver Slot)

    | Stock No | Mfrs. <br> Type | Maz. <br> Mmf. | Min. <br> Mmi. | Net |
    | :--- | :---: | :---: | :---: | :---: |
    | HP-10 | APC-15 | 17 | 2.8 | 1.22 |
    | HP-11 | APC-25 | 25 | 3.0 | 1.32 |
    | HP-12 | APC-50 | 50 | 3.9 | 1.52 |
    | HPP-13 | APC.75 | 75 | 4.6 | 1.67 |
    | HP-14 | APC-100 | 100 | 5.5 | 1.81 |
    | HP-15 | APC-140 | 140 | 6.7 | 2.11 |

    Series APC-B ( $1 / 2^{\prime \prime}$ Shaft)

    | HP. 16 | APC-15B | 17 | 2.8 | 1.47 |
    | :---: | :---: | :---: | :---: | :---: |
    | HP. 17 | APC-25B | 25 | 3.0 | 1.57 |
    | HP-18 | APC-50B | 50 | 3.9 | 1.76 |
    | HP-19 | APC.75B | 75 | 4.6 | 1.91 |
    | HP- 20 | APC-100B | 100 | 5.5 | 2.06 |
    | HP-21 |  | 140 | 6.7 | 2.35 |
    | Series APC-C (locking shaft) |  |  |  |  |
    | HP. 22 | APC-15C | 17 | 2.8 | 1.62 |
    | HP-23 | APC-25C | 25 | 3.0 | 1.71 |
    | HP-24 | APC-50C | 50 | 3.9 | 1.91 |
    | -25 | APC-75C | 75 | 4.6 | 2.06 |
    | HP-26 | APC-100C | 100 | 5.5 | 2.20 |
    | HP-21 | APC-140C | 140 | 6.7 | 2.50 |
    | TYPE HF (not illus.) |  |  |  |  |

    Single section tuning employing "APC" rotor and stator design-ideal for critical high freq. circuits. Isolantite insulation. Air gap is $0.015^{\prime \prime}$, nominal.

    | HP-46 | HF15 | 17.5 | 2.8 | 1.09 |
    | :--- | :--- | :---: | :---: | :---: |
    | HP-47 | HF35 | 36. | 3.2 | 1.22 |
    | HP-48 | HF50 | 42. | 3.7 | 1.28 |
    | HP-49 | HF100 | 102. | 5.3 | 1.46 |

    ##  <br> APC <br>  <br> MAPC

    ## TYPE MAPC

    About half the weight and size of the APC, but with the same quality and performance. Excellent for VHF use. Slotted shaft for screwdriver or hex wrench adjust. Nom. air gap $0.0135^{\prime \prime}$. Slze ${ }^{2} y_{2}{ }^{4}$ Wx'Ko "H. Shpg. wt., 4 oz .

    Series MAPC (Screwdriver Slot)

    | Stock Mo | Mfrs. <br> Type. | Max. <br> Mmf. | Min. <br> Mmf. | Net |
    | :---: | :---: | ---: | ---: | ---: |
    | HP-28 | MAPC-15 | 15 | 2.3 | .99 |
    | HP-29 | MAPC-25 | 25 | 2.6 | 1.08 |
    | HP.30 | MAPC-35 | 35 | 2.9 | 1.08 |
    | HP-31 | MAPC.50 | 50 | 3.2 | 1.17 |
    | HP-32 | MAPC.75 | 75 | 3.9 | 1.25 |
    | HP.33 | MAPC-100 | 100 | 4.5 | 1.41 |

    Series MAPC-B ( $1 / 2{ }^{\prime \prime}$ Shaft)

    | HP-34 | MAPC-15B | 15 | 2.3 | 1.08 |
    | :--- | :--- | :--- | :--- | :--- |
    | HPP-35 | MAPC-25B | 25 | 2.6 | 1.15 |
    | HP.36 | MAPC-35B | 35 | 2.9 | 1.17 |
    | HP-37 | MAPC-50B | 50 | 3.2 | 1.23 |
    | HP-38 | MAPC.75B | 75 | 3.9 | 1.35 |
    | HP-39 | MAPC-100B | 100 | 4.5 | 1.50 |

    Series MAPC-C (locking shaft)

    | HP-40 | MAPC-15C | 15 | 2.3 | 1.31 |
    | :--- | :--- | ---: | ---: | ---: |
    | HP-41 | MAPC-25C | 25 | 2.6 | 1.37 |
    | HP-42 | MAPC-35C | 35 | 2.9 | 1.34 |
    | HP-43 | MAPC-50C | 50 | 3.2 | 1.43 |
    | HP-44 | MAPC-75C | 75 | 3.9 | 1.52 |
    | HP-45 | MAPC-100C | 100 | 4.5 | 1.68 |

    Suppresses Television Interference from Citizens Band Trans ceivers. Coil for use with $50 \mu \mu$ fd capa chlor in a parallel tuned circuit. Ko" dia. ${ }^{x} 14 z^{\prime \prime}$. With schematic

    ## COUPLERS EXTENDERS

    (A) $\leq 5$
    (B) $\longrightarrow$

    Brass couplings ( $A$ ) and extenders ( $B$ ) Diameter of extender or coupling may be equal to, greater than, or less than be equal to, greater than, or less than
    diameter of shaft extended. Extender shaft length, s/s"; overall length, $11 /{ }^{\prime \prime}$. Average shpg. wt., 4 oz .

    ## Stock No.

    MS-201. Oescription| MS-201 Coupling | 1/4x1/4" | 18 |
    | :---: | :---: | :---: |
    | MS-202 Coupling | $1 / 4 \times 3 / 8{ }^{\prime \prime}$ | 18 |
    | MS-203 Coupling | 3/6x ${ }^{\text {/3/ }}$ " | 18 |
    | MS-204 Extender | 1/4x1/a" | 19 |
    | MS-206 Extender | 3/ $\times 1 / 4$ " | 19 |
    | EXTENSION RODS |  |  |
    | $\xrightarrow{3}$ |  |  |
    | For $1 / /^{\prime \prime}$ dia. extension 40 oz . | Av. 5 | . wt., |
    | MS-196-6" Brass |  | . 18 |
    | MS-197-6" Phenolic |  | . 15 |
    | MS-198-12" Brass |  | . 35 |
    | MS-199 - 12" Phenolic |  | 29 |

    DIAL CORD

    TVI TRAP COIL

    Net 29
    

    PI-NETWORK ASSEMBLY oracket, final coil, 10 uufd plate capacitor and 330 uufd output capacitor. Completely wired. Size $21 / 2 \times 13 / 4 \times 21 / a^{\prime \prime}$ High. With schematic.
    HP-57 Shpg, wt., 802
    Net 2.25

    ## STANDARD

    INSULATED

    ## COUPLING

    
    flashover voltage is 2500 V. RMS. Brass hubs and spring lempered phosphor bronze arms. Can withstand tempera ture variations of from - 110 to 210 degrees $F$. Bushing is standard $1 / 4^{\prime \prime}$ dia meter. Shpg. wt., $11 / 2$ oz. Imported. MS. 917

    ## PANEL BEARING

    ASSEMBLYUse with rigid or flexible coup-
    ling when mounting. For up to
    Ko., panels. Av. shpg. Wt., 6 oz.

    $\frac{\pi}{\frac{13}{1}}$
    Use
    line
    to MS- 93 - $3^{\prime \prime}$ " long. $1 / 4^{\mu}$ shaft Wt., 6.32
    MS $194-6^{*}$ long, $1 / 4^{\prime \prime}$ shaft
    MS-195-Bearing only

    | $\begin{gathered} \text { STOCK } \\ \text { NO. } \\ \hline \end{gathered}$ | MMF | $\begin{gathered} \text { EACH } \\ 1.9 \\ \hline \end{gathered}$ | $\begin{aligned} & \text { EACH } \\ & 10-49 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { EACH } \\ & 50 \text { ur } \\ & \hline \end{aligned}$ |
    | :---: | :---: | :---: | :---: | :---: |
    | C-731 | $2 \cdot 30$ | . 24 | . 21 | . 18 |
    | C.732 | 4.80 | . 26 | . 23 | . 20 |
    | C.733 | 9.180 | 29 | . 26 | . 23 |
    | C-734 | 25-280 | . 32 | 29 | . 26 |
    | C.735 | 45-380 | . 35 | 31 | . 28 |
    | C.736 | 70.486 | . 38 | 34 | . 31 |
    | C. 737 | $100 \cdot 580$ | 44 | 40 | 36 |

    Handy spools of prestrerched nylon dial cord in slizes that cover almost all replacement needs. Breaking strength med. Is 35 lbs., std. 20 lbs., thin 15 lbs. Average shpg. wt., 502 s .

    | TYPE | OIA. | NO. 100 | NET | NO. 25' | NET |
    | :--- | :---: | :---: | :---: | :---: | :---: |
    | Med. | $.040^{\prime \prime}$ | MS-507 | 2.37 | MS.504 | .75 |
    | Sta. | $.032^{\prime \prime}$ | MS.508 | 2.37 | MS-505 | .75 |
    | Thin | $0.25^{\prime \prime}$ | MS.509 | 2.37 | MS.506 | .75 |

    # INSULATORS AND TERMINAL CONNECTORS <br> E. F. JOHNSON INSULATORS 

    THRU PANEL INSULATORS

    A

    ## A

    Available in steatite or porcelain types-The high voltage insulators are compression mounted by means of a stud throughout the entire length of the unit. increasing the breakdown rating. Flat mounting surfaces with cushion washer. Hardware: *10-32, $\Delta$ banana jack plus lug type terminal, $+1 / 4^{\prime \prime}-20, \ddagger 6-32$. Average shipg. wt., 10 oz .

    ## steatite

    | Stock No. | Mfrs. Type 135. | Fig. | $\begin{aligned} & \text { Top } \\ & \mathbf{H L} \\ & \hline \end{aligned}$ | PNL Hole | Net Each |  |  |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    |  |  |  |  |  | 1.49 | 50-99 | $\begin{array}{r} 100- \\ 499 \end{array}$ |
    | CN-475 | 40 | $A^{*}$ | 11/4" | K\%" | . 42 | . 38 | . 35 |
    | CN-476 | 40.2 | BA | 11/4" | \%" | . 53 | . 48 | . 44 |
    | CN-477 | 42 | A* | 7/9" | $11{ }^{\prime \prime}$ | . 42 | . 38 | . 35 |
    | CN-478 | 42.2 | B $\triangle$ | 7/8" | 132" | . 50 | . 48 | . 42 |
    | CN-479 | 44 | A $\ddagger$ | 5" | ห." | . 31 | . 28 | . 26 |
    |  | PORCELAIN |  |  |  |  |  |  |
    | CN-480 | 45 | C | 13/8" | $1 / 2{ }^{\prime \prime}$ | . 59 | . 3 | . 49 |
    | CN-481 | 45.2 | D $\Delta$ | 13/8" | $1 / 2{ }^{\prime \prime}$ | . 68 | . 63 | . 58 |
    | CN-482 | 46 | At | 23/" | "16" | 1.50 | 1.38 | 1.26 |
    | CN-483 | 47 | Af | $41 / 2{ }^{\prime \prime}$ | ${ }^{31} 1_{2}^{\prime \prime}$ | 2.75 | 2.52 | 2.32 |
    | CN-484 | 48 | $\mathrm{C}^{\circ}$ | $2 \times$ | "1\%", | . 95 | . 87 | . 80 |
    | CN-485 | 48.2 | D $\Delta$ | $2^{\prime \prime}$ | "16" | 1.05 | . 96 | . 88 |

    ## STEATITE CONE INSULATORS

    Ideal for mounting coils, capacitors etc. Constructed of grade L. 4 or better steatite. Deep, clean threads are tapped directly Into the ceramic. Insulators are furnlshed complete with 2 nickel plated machine screws, nich
    lon washer.

    | Stock No. | $\begin{aligned} & \text { Mirs. } \\ & \text { Typ. } \\ & \text { 135. } \\ & \hline \end{aligned}$ | Ht. | Net Each |  |  |  |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    |  |  |  | Wdth. | 1.49 | 50-99 | $\begin{gathered} 100- \\ 499 \end{gathered}$ |
    | CN-509 | 500 | $58^{\prime \prime}$ | $58^{\prime \prime}$ | 23 | . 21 | . 19 |
    | CN. 510 | 501 | $1{ }^{10}$ | $3 / 4 "$ | . 31 | . 28 | . 26 |
    | CN-511 | 502 | 11/2" | $1 "$ | . 51 | . 46 | . 43 |
    | CN-512 | 503 | $2^{*}$ | 11/6" | . 77 | . 70 | . 64 |
    | CN-513 | 504 | 3 | $11 / 2^{\prime \prime}$ | 1.34 | 1.23 | 1.13 |

    ## STAND OFF INSULATORS

    

    Ideal for Transmitter Applications. Features low leakage, low cap., freedom from moisture absorption. STEATITE-Sturdy and economical, these insulators have relatively large mounting surfaces. Two hole mounting permits substantial lateral loads. PORCELAIN - Type 60 and 62 are ribbed and feature square mounting bases with four mounting holes. Type 65, 65-2, $68,68-2$ are ribbed and have drain and etched alumi. num bases. Type 66, 6G2, and 67 have smooth surfaces and drawn bases $t$-hardware-banana jack and a soider lug mounted on top of the insulator similar
    to fig. $G$, but with square base. Avg. shpg. wt., 1 lb . to fig. G, but with square base.
    STEATITE
    

    ## FEEDER SPREADERS

    Conventional feeder spreaders for high efficiency openwire antenna feeders and transmission lines. Made of high grade low absorption porcelain, silicone impregnated for moisture resistance. $3 / 6 \times 1 / 2^{\prime \prime \prime}$ cross section. Stock No. Mirs. Type Length $\begin{gathered}\text { Net Each } \\ 1.49 \\ 50-9\end{gathered}$

    CINCH JONES BARRIER STRIPS
    
    

    Increased Insulation is provided by having barriers placed between each ter-
    minal. Barriers follow around the edge of the strips and terminate at the base. Makes long leakage path and prevents shorts caused by frayed wires at the shpg. wt. 5 oz.

    |  |  |  | Net Each |  |  |
    | :---: | :---: | :---: | :---: | :---: | :---: |
    | Stock No. | Mfg. No. | Term. | 1-49 | 50.99 | $\begin{gathered} 100- \\ \text { UP } \end{gathered}$ |
    | CN. 229 | 1.140 | 1 | . 09 | . 075 | 06 |
    | CN- 100 | $2 \cdot 140$ | 2 | . 14 | . 12 | . 096 |
    | CN. 103 | 3-140 | 3 | . 20 | .165 | . 132 |
    | CN-106 | 4-140 | 4 | . 25 | . 21 | . 168 |
    | CN-109 | 5.140 | 5 | . 31 | . 255 | . 204 |
    | CN. 112 | 6.140 | 6 | . 35 | . 295 | . 239 |
    | CN-115 | $7 \cdot 140$ | 7 | . 41 | . 34 | . 272 |
    | CN-118 | $8-140$ | 8 | . 46 | . 385 | . 308 |
    | CN-121 | 9.140 | 9 | . 52 | . 43 | . 344 |
    | CN-124 | 10-140 | 10 | . 57 | . 475 | . 38 |
    | CN-127 | 11.140 | 11 | . 62 | . 515 | . 412 |
    | CN-130 | 12-140 | 12 | . 67 | . 56 | . 448 |
    | CN-230 | 13.140 | 13 | . 73 | . 605 | . 484 |
    | CN- 231 | 14.140 | 14 | . 79 | . 655 | . 524 |
    | CN-232 | 15.140 | 15 | . 84 | . 70 | . 56 |
    | CN-233 | 16-140 | 16 | . 89 | . 745 | . 596 |
    | CN-234 | 17.140 | 17 | . 94 | . 785 | . 628 |
    | CN-235 | 18.140 | 18 | 1.00 | . 83 | . 664 |
    | CN-236 | 19.140 | 19 | 1.05 | . 875 | . 70 |
    | CN-237 | 20.140 | 20 | 1.10 | . 92 | . 736 |
    | CN-238 | 21.140 | 21 | 1.16 | . 965 | . 772 |


    | Stock | Net Each 100. |  |  |  |  |
    | :---: | :---: | :---: | :---: | :---: | :---: |
    | No. | Mfg. No. | Term. | $1-49$ | 50-99 | Up |
    | CN. 101 | 2.141 | 2 | . 19 | 1.55 | . 124 |
    | CN-104 | 3 -141 | 3 | 25 | . 21 | . 168 |
    | CN-107 | 4-141 | 4 | . 32 | . 27 | . 216 |
    | CN-110 | 5-141 | 5 | . 39 | . 325 | . 26 |
    | CN-113 | 6-141 | 6 | . 45 | . 375 | . 30 |
    | CN-116 | 7.141 | 7 | . 53 | . 44 | . 352 |
    | CN-119 | $8-141$ | 8 | . 59 | . 495 | . 396 |
    | CN-122 | 9.141 | 9 | . 66 | . 55 | . 44 |
    | CN-126 | 10.141 | 10 | . 73 | . 61 | . 488 |
    | CN-128 | 11-141 | 11 | . 80 | . 665 | . 582 |
    | CN-131 | 12.141 | 12 | . 86 | . 72 | . 576 |
    | CN-239 | 13.141 | 13 | . 94 | . 78 | . 624 |
    | CN-240 | 14.141 | 14 | 1.00 | . 835 | . 668 |
    | CN-241 | 15-141 | 15 | 1.07 | . 89 | . 712 |
    | CN- 242 | 16.141 | 16 | 1.14 | . 95 | . 76 |
    | CN-243 | 17-141 | 17 | 1.21 | 1.005 | . 804 |
    | CN-244 | 18.141 | 18 | 1.27 | 1.06 | . 848 |
    | CN-245 | 19.141 | 19 | 1.34 | 1.120 | . 896 |
    | CN-246 | 20-141 | 20 | 1.41 | 1.175 | . 94 |
    | Series | 142 1\%. | /6" | 8.32 | 1 |  |
    | Stock |  |  |  | t Each | 100. |
    | No. | Mig. No. | Term. | 1.49 | 50.99 | UP. |
    | CN-102 | 2.142 | 2 | 22 | . 18 | . 144 |
    | CN-105 | 3.142 | 3 | . 31 | . 255 | . 204 |
    | CN-108 | $4 \cdot 142$ | 4 | . 39 | . 325 | . 26 |
    | CN-111 | 5-142 | 5 | . 47 | . 39 | . 312 |
    | CN-114 | 6-142 | 6 | . 55 | . 46 | . 368 |
    | CN-117 | 7.142 | 7 | . 64 | . 535 | . 428 |
    | CN-120 | $8-142$ | 8 | . 72 | . 60 | . 48 |
    | CN-123 | 9.142 | 9 | . 80 | . 67 | . 536 |
    | CN-125 | 10-142 | 10 | . 89 | . 745 | . 596 |
    | CN-129 | 11.142 | 11 | . 97 | . 81 | . 648 |
    | CN-132 | 12-142 | 12 | 1.06 | . 88 | . 704 |
    | CN-247 | 13.142 | 13 | 1.14 | . 95 | . 760 |
    | CN-248 | 14.142 | 14 | 1.22 | 1.02 | . 816 |
    | CN-249 | 15.142 | 15 | 1.31 | 1.09 | . 872 |
    | CN-400 | 16-142 | 16 | 1.39 | 1.16 | . 928 |
    | CN. 401 | 17-142 | 17 | 1.47 | 1.225 | . 98 |

    - 

    

    $\theta$
    Insulated bushings ideal for use in transmitter and antenna installations. Serves as antenna terminals on transmitters, as high voltage terminals on heavy duty power supplies. Type $50,51,52$, and 55 are steatite, supplied with cushion washers and hardware. Type 53 , and 54 are porcelain less all hardware except cushion washer. Maximum diameter: Type $503 / 4^{\prime \prime}$ Type $5111 / 4^{\prime \prime}$
    Type $5213 / 4^{\prime \prime}$. Type $52212^{\prime \prime}$. Type $5431 / 2^{\prime \prime}$, and Type $553 / 4^{\prime \prime}$. Avg. shpg. wt. 802.

    | Stock No. | Mirs. <br> Type <br> 135. | Fig. | Top Ht. | PNL <br> Hole | Net Each |  |  |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    |  |  |  |  |  |  | 50. | 100. |
    |  |  |  |  |  | 1.49 | 99 | 499 |
    | CN. 500 | 50 | M | $1 / 2 "$ | 13/7" | . 40 | . 38 | . 33 |
    | CN. 501 | 51 | M | 1\%" | $11 / 32^{\prime \prime}$ | . 57 | . 52 | . 48 |
    | CN-502 | 52 | M | 11/8" | 173* | . 89 | . 81 | . 75 |
    | CN-503 | 53 | K | $13 / 4$ " | 137\% ${ }^{\prime \prime}$ | . 35 | . 32 | . 29 |
    | CN. 504 | 54 | , | $4{ }^{\prime \prime}$ | $2 \mathrm{Ko} \mathrm{\prime}$ | 1.10 | 1.01 | . 92 |
    | CN-505 | 55 | 1 | V/ ${ }^{* \prime}$ | $1 \%_{3}{ }^{\prime \prime}$ | . 31 | . 28 | . 26 |

    ANTENNA STRAIN INSULATORS

    Porcelain type glazed to prevent moisture and absorption. Superior quality-heavily glazed surfaces and heavy nickel-plated brass hardware. Type 107 and 112 are wet process, $1^{\prime \prime}$ diameter; type 104 is dry process, 76 " square with 400 lbs. breaking strength.

    | Stock No. | Mirs. <br> Type <br> 136. | Siz* | Shpg. Wt. | 1.49 | t Ea 50. 99 | $\begin{array}{r} 100 . \\ 499 \end{array}$ |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | CN-506 | 104 | $4 x^{5} / 8^{\prime \prime \prime}$ sq. | 4 02. | 28 | . 25 | 23 |
    | CN. 507 | 107 | $7 \mathrm{xl} \mathrm{\prime} \mathrm{\prime}$ | 10 oz . | 1.30 | 1.19 | 1.10 |
    | CN-508 | 112 | $12 \times 1$ "dia. | 14 lb . | 1.85 | 1.70 | 1.58 |

    

    ANTENNA STRAIN INSULATORS

    Used as end insulators in long wire, dipole, and doublet antennas. Constructed of brown glazed porcelaln. Shpg. wt., 2 oz.
    MS-933
    Lots of 10
    Net .05
    Each .045
    CINCH JONES MARKER
    BARRIER STRIPS
    Constructed of $K_{2}{ }^{\prime \prime}$, black fiber and contain the same mounting holes as the barrier strips which they are to be used. Imprinted in white ink from 1 up. Strips can serve the purpose of insulating strips when barriers are mounted on metal surfaces. They prevent short circuits when tonger screws are accidentaly inserted. Avg-shog. wt., 502.

    FOR 140 SERIES

    | Stock No. | Term. | 1-49 | $\begin{gathered} \text { Net Each } \\ 50.99 \end{gathered}$ | 100-Up | Stoch Mo. | Term | 1.49 | Net Each 50.99 | 100-19 |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | CN-402 | 2 | . 05 | . 044 | . 035 |  |  |  |  | 100.4 |
    | CN-403 | 3 | . 06 | . 049 | .039 | CN-422 | 2 | . 06 | . 047 | . 038 |
    | CN. 404 | 4 | . 06 | . 054 | . 043 | CN-423 | 3 | . 06 | . 054 | . 043 |
    | CN-405 | 5 | . 07 | . 058 | . 046 | CN-424 | 4 | .07 | . 060 | . 048 |
    | CN-406 | 6 | . 08 | . 063 | . 050 | CN-425 | 5 | . 08 | . 066 | . 053 |
    | CN-407 | 7 | . 08 | . 068 | . 054 | CN-426 | 6 | .09 | . 073 | . 058 |
    | CN-408 | 8 | . 09 | . 073 | . 058 | CN-427 | 7 | . 10 | . 079 | . 063 |
    | CN-409 | 9 | . 09 | . 077 | . 062 | CN-428 | 8 | .10 | . 085 | . 068 |
    | CN-410 | 10 | .13 | . 107 | . 086 | CN-429 | 9 | .11 | . 092 | .073 |
    | CN-411 | 11 | .13 | . 112 | . 089 | CN-430 | 10 | .15 | .123 | . 098 |
    | CN-412 | 12 | . 14 | . 117 | . 093 | CN-431 | 11 | .16 | . 129 | . 103 |
    | CN- 413 | 13 | . 15 | .121 | .097 | CN. 432 | 12 | .16 | .136 | .108 |
    | CN-414 | 14 | .15 | .126 | . 10 | CN. 433 | 13 | .17 | . 142 | .113 |
    | CN-415 | 15 | . 16 | .131 | . 104 | CN-434 | 14 | . 18 | . 148 | . 118 |
    | CN-416 | 16 | . 19 | . 161 | . 128 | CN-435 | 15 | . 22 | . 18 | .144 |
    | CN-417 | 17 | . 20 | . 165 | . 132 | CN-436 | 16 | . 22 | .186 | .148 |
    | CN-418 | 18 | . 20 | . 17 | .136 | CN-437 | 17 | . 23 | .192 | . 154 |
    | CN-419 | 19 | . 21 | . 174 | . 14 | CN-438 | 18 | . 24 | .199 | . 159 |
    | CN-420 | 20 | . 25 | . 205 | . 164 | CN. 439 | 19 | . 28 | . 23 | . 184 |
    | CN-421 | 21 | . 25 | 209 | . 167 | CN-440 | 20 | . 28 | . 236 | . 189 |
    |  |  |  | $\begin{gathered} \text { Net Each } \\ 50.99 \\ \hline \end{gathered}$ | FOR 142 SERIES |  |  |  | $\begin{aligned} & \text { Net Each } \\ & 50.99 \\ & \hline \end{aligned}$ |  |
    | Stock No. | Term | 1.49 |  | 100-U9 | Stock No. | Term | 1.49 |  | 100.up |
    | CN-441 | 2 | . 06 | . 051 | . 04 | CN-449 | 10 | . 17 | . 139 | .111 |
    | CN-442 | 3 | . 07 | . 058 | . 046 | CN. 450 | 11 | . 18 | . 147 | .117 |
    | CN-443 | 4 | . 08 | .066 | . 053 | CN-451 | 12 | . 19 | . 155 | . 124 |
    | CN-444 | 5 | . 09 | . 074 | . 059 | CN-452 | 13 | . 20 | . 163 | .13 |
    | CN. 445 | 6 | . 10 | . 082 | . 066 | CN-453 | 14 | 20 | .17 | .136 |
    | CN. 446 | 7 | .11 | . 09 | . 072 | CN-454 | 15 | . 24 | . 203 | . 162 |
    | CN-447 | 8 | .12 | . 098 | . 078 | CN-455 | 16 | . 25 | . 211 | .169 |
    | CH. 448 | 9 | 13 | 11 | 084 | CN-456 | 17 | 26 | 219 | 175 |

    ## DIALS-KNOBS-DRIVES

    

    Precislon planetary drive vernier dials with approximately 8 to 1 ratio. Mounts on panel surface and has accurately centered metal inserts for $1 / 4$ " shafts. Metal dials are brushed silver finish with deeply efched and black fllled engraving to provide maximum legibliity even under poor lighting conditions. Reads counter-clockwise 0 to 100 in $180^{\circ}$. Uses tough scratch resistant for sure grip fluted molded knob and housing. Phosphor bronze and brass utilized for Internal parts. Shpg. wt., 802 s. F. $34036 \mathrm{MM}\left(11 / 2^{\prime \prime}\right.$ ) Oiameter Vernier Dlai, ${ }^{1 \%} \mathrm{~K}_{4}$ from front to back .............. Net . 09 F. 347 50MM ( $2^{\text {" }}$ ) Diameter Vernier Dial, $1^{\prime \prime}$ from front to back F. $34670 \mathrm{MM}\left(27 \%^{\prime \prime}\right)$ Dlameter Vernier Dial, $118^{\prime \prime}$ from front to back .......... Net 1.39

    GOLD INSERT KNOBS
    

    Attractive, modern-shaped knobs for replacement purposes, molded of high-quality plastic and beautifully finished. All with rich-looking gold insert. Avg shpg. wt., 2 ozs.

    SET SCREW TYPE
    

    Fit flat $1 / /^{\prime \prime}$ shafts. "Indicates convex gold insert and back of knob protrudes $K_{0}$ ". Others have flat gold insert and flush back. \& For $1 / 4^{\prime \prime}$ hnurled shaft with gold indicator line.
    KN-15 14." B Mark Maroon
    KN-16*
    KN. $52 \ddagger$
    KN-18*
    KN-20

    | B | 11/4" |
    | :---: | :---: |
    | D | 140" |
    | J | 1\%** |
    | A | 1\%" |
    | H | 7/8" |

    > Dark Maroon Dark Maroon Dark Maroon Dark Maroon

    Black
    POINTER TYPE
    This knob has a gold pointer and polished gold concave insert. Fits $1 / 4^{\prime \prime}$ flat shaft. KN. 21 E $11 / \mathrm{B}^{\prime \prime} \quad$ Black $\quad .20$. 18 . 15

    FLUTED KNOBS
    

    Black fluted knobs, with and without skirt. Made of thermosetting plastic with high glass finish. All have recessed brass insert and set screw. Mount on $1 / 4$ round or flatted shaft. Shpg. wt., 4 ozs. NET EACH STOCK

    | $\begin{aligned} & \text { STOCK } \\ & \text { NO. } \end{aligned}$ | FIG. | OIAM. | HEIGHT | 1.24 | 25-99 | $\begin{gathered} 100 . \\ 499 \end{gathered}$ |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | KN. 30 | A | 12/8" | 5/8" | . 23 | . 20 | . 17 |
    | KN. 31 | A | 13/6" | "\%" | . 24 | . 21 | . 11 |
    | KN. 32 | A | 1\%" | 3/4" | . 27 | . 24 | . 20 |
    | KN. 33 | B | 112" | 'K60' | . 40 | . 35 | 30 |
    | KN-35 | 8 | 2K0" | "\%3" | . 50 | . 44 | . 38 |

    

    ## COMMUNICATION

    RECEIVER
    TYPE KNOBS
    Molded of top-quality Tenite, and have easy grip knurling. These knobs are $1.7 / 1 /$ /s " in over-all diameter with chrome-plated bevel skirts for attractive appearance. Depressed numerals are black enamelled on chrome plate. Designed to fit $1 / 4^{" \prime}$ shafts. Shpg, wt., 4015. KN-54 Numbered $0-10$ through an arc of $300^{\circ}$ clock. wise. Imported
    KN- 55 with a single etched center line index. Imported KN-56 Numbered $0-10$ through an are of $180^{\circ}$ clockwise. Imported
    Any type
    Singly .34
    Lots of 6
    Each .29
    

    ## NATIONAL KNOBS

    Molded of high quality plastic. All have $13 /{ }^{\prime \prime}$ diam. chrome plated bevel skirts. Fit $w / 4$ " shaft. Avaliable in black or gray. Specify. Av. Shpg. wt., 4 02s. 1. 100 -

    | MO. | MO. | MARKING | TION | EA. | EA. |
    | :--- | :--- | :--- | :--- | :--- | :--- |
    | NP.157 | HRS.3 | $0-10$ | $300^{\circ}$ | .66 | .63 |
    | HP-158 | HRS.4 | Single LIne | - | .86 | .63 |
    | HP-159 | HRS.5 | 0.10 | $180^{\circ}$ | .86 | .63 |

    

    ## TUNING DIAL AND KNOB

    Attractive dark maroon plastic push-on knob with gold insert calibrated for AM broadcast band. Fits $14^{\prime \prime}$ shafts such as MS-141, MS-142, MS-214, and MS-261. Fluted, tapered rim 1 \$/a" dia. Back protrudes Kons $_{0}$. Shpg. wt., 402. KN- 26
    ## MINIATURE KNOBS

    Plastic knot, only 5\%" diameter fits $1 / \mathrm{B}^{\prime \prime}$ shafts, for miniature components such as Ferri-loopstock, subminiature pots, etc. Av. Shpg. wt., 4 ozs.
    MS-185, Brown
    Net .09
    

    ## STANDARD PLASTIC KNOBS

    Plastic knobs with knurled bodies for general application. All have molded hole with set screw for mounting $1 / 4^{\text {" }}$ round or flatted shafts except * is ppush on type for flatted shaft. $\dagger$ has white indicator Unes, $\ddagger$ has gold indicator line. Av. Shpg. wt., 4 ozs. MET EACH STOCK

    | NO. | FIG. | DIAM. | COLOR | 1-24 | 25-93 | 499 |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | KN-22 | C | $1 "$ | Brown | . 14 | . 11 | . 10 |
    | KN-39 | c | $1 "$ | Black | . 13 | . 10 | . 09 |
    | KN-38** | 0 | $1 "$ | Black | . 13 | . 11 | . 09 |
    | KN-36 $\dagger$ | E | 11/2" | Black | . 14 | . 12 | . 11 |
    | KN-37 $\dagger$ | E | \%/8" | Black | . 13 | . 10 | . 09 |
    | KN-19 | 0 | "1*" | Maroon | . 10 | . 08 | . 07 |

    PROFESSIONAL KNOBS
    
    (fig. A)
    

    ## POINTER, BAR AND LEVER KNOBS

    Black knobs molded of high quelity plastic. All have set screw for $1 / 4^{" \prime}$ round or flatted shaft, and white indicator lines. Items marked *have brass insert. Size shown is length. Av. Shpg. wt., 13 oz.

    | STOCK NO. | FIG. | SIZE | 1.24 | $\begin{aligned} & \text { NET E/ } \\ & 25-99 \\ & \hline \end{aligned}$ | $100 . \mathrm{UP}$ |
    | :---: | :---: | :---: | :---: | :---: | :---: |
    | KN. 40 | F | $2^{\prime \prime}$ | . 17 | . 15 | . 13 |
    | KN-41 | G | 11/4" | . 10 | . 08 | . 07 |
    | KN-42* | G | 11/4" | . 14 | . 12 | . 11 |
    | KN-43 | H | 11/4" | . 13 | . 10 | . 09 |
    | KN-44* | , | 156" | . 18 | . 16 | . 14 |
    | KN-45 | J | 1360" | . 11 | . 09 | . 08 |

    

    VERNIER DIAL MECHANISM

    A 9 to 1 precision reduction for careful accurate manipulation of critical controls. Mechanical linkage is slip-free, yet overtravel will not cause damage. For $1 / 4^{\prime \prime}$ knob and shaft. Shaft rotated $180^{\circ}$. Size: $2 \times 21 / 4 x$ $1 \%{ }^{\prime \prime}$ deep. Mounting for dial. Shpg. wt., 5 oz. Imported
    $\qquad$
    

    Fluted, skirted, tapered design in black plastic with brass insert and set screw. For $1 / 44^{\prime \prime}$ shafts. Imported KN-62 Knob with $142^{\prime \prime}$ dlam. skirt, without pointer. Shpg, wt." 3 az.

    Net 23
    Knob with 1K." diam. skirt, pointer.
    KN-E3 Shpg. wt., 4 oz.
    Net .19
    an aftractive steel unctionaliy styied knobs. Finished in an attractive steel gray and molded from tough hi-impact plastic, the knob is of cylinder design with sure-grip fluted sides and an afuminum ring-set in a recessed face. Rugged brass screw and mounting shaft insert will accept up to $1 / 4$ " round or flat shaft. Each kit contains 5 knobs-all same size. Shog, wt., 7 ozs. Imported KI-55 Size: $17 \%$ Dlam., $\% / \%^{00}$ Déep Kit of $5 \ldots . . .$. Net .79
    

    ## NATIONAL VERNIER DIALS

    Alf have 3 blank scales and one $0-100$ logging scale, $5: 1$ drive ratio, clear-view plastic windows, clear plastic pointers with centered hairlines and holes for calibrating each scale. Black wrinale escutcheons. Type 1CN is Illuminated. All fit $1 / 4^{\prime \prime}$ shaft. Complete with instructions and hardware. Mechanism extends $1 / 4$ " below rear of frame. Av. Shpg. wt., 13 ozs.
    

    | STOCX NO. | NAT. NO. | F16. | S12E | NET |
    | :---: | :---: | :---: | :---: | :---: |
    | HP-160 | ACN | A | 5" $\mathrm{H} \times 74 / 4{ }^{\prime \prime} \mathrm{W}$ | 7.80 |
    | HP-161 | ICN | 8 | 51/8" $\mathrm{H} \times 71 / 4{ }^{\prime \prime} \mathrm{W}$ | 7.80 |
    | HP-162 | SCN | A | 4\%" Hx61/4"W | 7.80 |
    | HP-163 | MCN | A | 2\%" $\mathrm{H} \times 37{ }^{\prime \prime}{ }^{\prime \prime} \mathrm{W}$ | 7.20 |

    

    ## PRINTED CIRCUIT COMPONENTS - EXPERIMENTERS ITEMS

    

    These sturdy, perforated boards are the ideal base for builders, experimenters, and labs to mount miniaturized components. Two types available: either high grade bakelite for wired circuits, or one side copper-clad for
    "printed" circuitry. Holes are $\mathrm{K}_{6}$ " diameter with K $\mathrm{K}_{6}$ " between hole centers. All boards are K" thick. For contacts, the MS-263 flea clips listed on this page are ideal. Avg. shps. wt.. $60 z$

    ## UNCLAD BOARD

    | Stock No. | Size | No. of Holes | $\begin{aligned} & \text { Net Each Lots of } \\ & 1 \quad 100 \quad 250 \\ & \hline \end{aligned}$ |  |  |
    | :---: | :---: | :---: | :---: | :---: | :---: |
    | MS-304 | 27/1833/9 | $17 \times 12$ | . 25 | . 20 | 18 |
    | MS-305 | $323_{2} \times 63 / 4{ }^{\prime \prime}$ | $35 \times 19$ | . 45 | . 40 | . 35 |
    | MS-306 | $7 \%^{10} \times 63 / 4{ }^{\prime \prime}$ | $39 \times 35$ | . 75 | . 65 | . 60 |
    | MS-846 | 101/2x7\%. | $56 \times 38$ | 1.20 | 1.08 | . 97 |
    | MS. 916 | 18×7 $\mathrm{K}_{4}{ }^{\prime \prime}$ | $95 \times 38$ | 1.89 | 1.71 | 1.55 |

    ## (0) <br> FLEA CLIPS FOR TRANSISTOR AND SUBMINIATURE CONTACTS

    "Flea" clips are specially designed for subminature work. Fit perfectly in holes in perforated copper-clad and unclad boards listed above. Made of beryllium copper, silver plated finish. Simply insert wire thru hole for positive grip contact

    | MS-263 | Package of 12 |
    | :--- | :--- |
    | MS-851 | Package of 1000 |
    | MS-852 | Package of 5000 |
    | MS-853 | Package of 10,000 |

    $\begin{array}{lr}\text { Net } & .25 \\ \text { Net } & 15.75 \\ \text { Net } & 76.15\end{array}$
    Net 149.30

    | COPPER CLAD BOARDS |  |  |  |  |  |
    | :---: | :---: | :---: | :---: | :---: | :---: |
    | Stock N0. | Size | No. of Holes | 1 | $\begin{aligned} & \text { Each L } \\ & 100 \end{aligned}$ | of |
    | MS. 847 | 2740338" | 17×12 | . 35 | . 30 | . 24 |
    | MS. 848 | $321_{2} \times 63 / 4^{\prime \prime}$ | $35 \times 19$ | . 55 | . 50 | . 45 |
    | MS. 849 | 7K. $\times 63 / 4{ }^{\prime \prime}$ | $39 \times 35$ | 1.15 | . 96 | . 87 |
    | MS-850 | 101/2x796" | $56 \times 38$ | 1.90 | 1.58 | 1.42 |

    ## COPPER CLAD LAMINATE

    

    ## LAFAYETTE'S LOW PRICES!

    Finest quality XXXP bakelite base, copper clad boards for printed circuit work. Av. shpg. wi., 2 ozs.

    NO. OESCRIPTION
    MS. 510 XXXXP Copper Lam.- 1 side- 9 "x12"
    MS. 511 XXXP Copper Lam.-1 side- $6^{\prime \prime} \times 42 / 2^{\prime \prime}$
    MS-512 XXXP Copper Lam.-1 side- $3^{\prime \prime} \times 41 / 2^{\prime \prime}$
    MS-513 XXXX Copper Lam.-1 side- $\mathbf{2 " ~}^{\prime \prime} \times 41 / 2^{\prime \prime}$
    MS. 514 XXXP Copper Lam.- 1 side- $3^{\prime \prime} \times 2^{\prime \prime} / /^{\prime \prime}$
    MS-515 XXXP Copper Lam.-2 sides- $9^{\prime \prime} \times 12^{\prime \prime}$
    MS-516 XXXP Copper Lam. -2 sides- $6^{\prime \prime} \times 41 / 2$
    
    Ms-519 XXXP Copper Iam.- 2 sides- $3^{\circ} \times 21 / 4$
    

    Ideal For Lab
    

    ## VECTOR EXPERIMENTERS CHASSIS KITS

    Designed for rapid set-up of experimental tube or transistor circuitry. Each kit contains 1 or more prepunched phenolic boards all $/ 3 / 2$ " thick, aluminum channels for mounting, an assortment of sockets, push in terminals types $\mathbf{T 9 . 4}$ and T30N, spring clips, assorted screws, nuts spacers, metal strap, brackets, installation tool for I30N, spring pusher needle, 6 sheets of layout paper, plastic parts box and instructions.
    Kit No. 20x for tube Circuitry. Includes 1 punched board $43 / 4 \times 842^{\prime \prime}$ and 8 asstd. tube sockets
    Kit No. 21 X for Tube and Transistor Circuitry. Includes 3 boards, $43 / 4 \times 17^{\prime \prime}, 13 / 8 \times 1.9^{\prime \prime}$, $84,2 \times 1.9^{\prime \prime} .6$ transistor sochets, 8 asstd. tube sockets, 14 diode dips and wire
     7 asstd. transistor sockets, 12 dlode clips and wire.

    | Stock No. | Vect. No. | Stipg. Wt. | 1.19 | $\begin{gathered} \text { Net Each I } \\ 20.99 \\ \hline \end{gathered}$ | $\begin{aligned} & \text { Lots of } \\ & 100-199 \\ & \hline \end{aligned}$ | 200-Up |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | CN-332 | 20x | 1 lb . | 6.12 | 5.68 | 5.25 | 4.17 |
    | CN-331 | $21 \times$ | 21/4 tos. | 15.05 | 13.85 | 12.80 | 10.15 |
    | CN-325 | 22x | $11 / 4$ los. | 10.29 | 9.55 | 8.80 | 7.00 |

    

    BUY ON TIME SEE PAGE 412

    ## [1]

    ## VECTOR PUSH-IN TERMINALS

    19.4
    

    T30N
    

    For vectorborass istea at tighe
    Type T9.4 brass, tin-plated with serrated slols: T28 beryllium copper tin plated; T30N nickel plated brass. r30N holds up to 6 wires without soldering. No staking required on any terminals. Shpg. wi., 3 oz . per pkg. of 100.

    | Fits Hole Size | Mir. <br> Type | Net Per Stock No. | Pkg. 1-19 | 100 0.99 | Net P Stock No. | Pg. | 1000 5.24 |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | .093" | T9.4 | CN-328 | 1.22 | 1.13 | CN-351 | 8.90 | 7.48 |
    | .062" | T28 | CN-349 | 1.55 | 1.40 | CN-352 | 11.00 | 9.90 |
    | .093" | T30N | CN-329 | 8.45 | 7.61 | CN. 353 | 58.90 | 53.01 |
    | CN-350 Pkg. of 10 T30N ............................... Net 1.15 |  |  |  |  |  |  |  |

    ## INSERTION TOOLS

    CN-330 Type P-92A for T30N and T9.4
    Net .50 CN. 354 Type P. 91 for T28

    Net . 50

    ## MASONITE BREADBOARD <br> - Ideal for Kit Builders

    Tempered masonlte board with holes spaced $1 / 2$ " apart to facilitate mount Ing of parts. Size $771 / 2_{2} \times 11^{2 \%} / /_{2} \times 1 / 8^{\prime \prime}$ thick. Shps wt $120 z$
    ML- 81

    PRINTED CIRCUIT

    ## KITS

    - Ideal for Laboratory Work to Make Prototypes
    - For The Builder -

    Experimenter -
    Student - Technician
    

    Printed circuits are designed to eliminate wiring and are deal for space saving, particularly where miniature components are used. They are being used widely in an ever increasing number of applications. With these kits, you can etch your own circultry on copper clad XXXP insuiating boards with etching materials provided Kits end parts such as also contain variety of other materials and parts such as printed circuit sockets, varlous types of resist-material, etc. Listing below gives contents. All in handsome plastic boxes.

    ## TECHNICIANS KIT

    Contains 8 copper clad single faced and 2 double faced boards from $41 / 2 \times 66^{\prime \prime}$ to $3 \times 21 / 4^{":} 6$ tube sockets; 2 packs etchant; 1 tape resist; 1 liquid resist; 3 dozen eyelets 1 drill and typical circuit diagrams and directions. In plastic bou size: $93 / 4 \times 61 / 2 \times 2^{\prime \prime}$. Shpg. wt. 1 lb. 5 oz . plastic box Size: $93 / 4 \times 61 / 2 \times 2^{\prime \prime}$. Shpg. wt., 1 lo. 5 02. 9.75
    MS. 725 KIT NO. 5003 P

    ## BASIC KIT

    A good wit to start off learning the technique of etched circuitry. Contains 3 copper clad boards from $41 / 2 \times 3^{m}$ to $3 \times 21 / 4^{\prime \prime}$; 1 each 7 and 9 pin sockets; 1 pack etchant; 1 tape resist; eyelet assortment; drill and directions. In olastic box size $51 / 2 \times 13 / 4 \times 4^{\prime \prime}$. Shpg. wt.. $80 z$.
    MS-961 5002P
    Net 4.75
    NEW BALL POINT TUBES
    Make resist patterns directly on copper clad boards. As easy to use as a ball point pen. Deposits line K/" wide. No need to "lay-out" colors of resist for color coding of circuiting.
    Liquid resist ball point tubes are vallable in various colors. Yellow, green, blue, red, brown, black and orange.
    MS. 728 PRLT-Specify Color
    Net 1.25
    PRINTEO CIRCUIT ACCESSORIES
    Basic components for the experimenter-designer-lab -limited production-etc., in printed circuit construc tion. Highest quality materials-indispensable for pro lotype work

    Stock
    No. Type
    0

    MS-730 PE-5 Etchant-P
    $1 \mathrm{lb} . \quad 1.25$
    MS. 731 PE. 7 Etchant-Ot. ............... 2 价. 2.25
    MS-962 PEY-12 125 Eyelets .0620.X. .093L
    MS-734 PRT-1 Tape Resist $1 / 32 \times 320^{\circ}$.... 2 025. . 85
    Taoe Resist $1 / \mathrm{in} \times 320^{\prime \prime}$
    MS-909 PRT-3 Tape Resist $\mathrm{K}_{2} \times 320^{\circ}$.... 2 ozs. 90
    MS.736 PRT. 4 Tape Resist $1 / 8 \times 320^{\prime \prime}$........ 2 0zs. . 90
    MS-737 PRTD-6 100 Tape Reslst
    Circles
    quid Resist
    MS-738 PR-L Liquid Resist-1 02......... 302s. . 50

    ## VECTOR PREPUNCHED BREADBOARDS

    Pre-Punched terminal boards for breadboarding and production. All are natural tan phenolic (MIL-P-3115B) except are lvory epoxy-paper (M1L P-18177). All $093^{\prime \prime}$ holes and $.200^{\circ}$ spacing center to center. All others have .093" holes on $.265^{\prime \prime}$ centers except " has $.062^{*}$ holes on $200^{*}$ centers. For use with Vector push-in terminals. Shpg. wt., approx. 7 az.

    | Stock No. | Mifs. No. | L | W | No. of Holes | 1.19 | 20-99 | $199$ |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | CN. 326 | 64A18 | $17^{\prime \prime}$ | 413 | $64 \times 18$ | 1.22 | 1.12 | 1.05 |
    | CN-333 | 85C24 | 17" | 41 | $85 \times 23$ | 1.38 | 1.27 | 1.19 |
    | CN. 334 | 95G43 $\ddagger$ \# | 19" | 85\%" | (95)43)x2 | 2.27 | 2.09 | 1.97 |
    | CN-335 | 72A33 | 19** | 874" | $72 \times 33$ | 2.19 | 2.02 | 1.92 |
    | CN-336 | 32AA18* | 81/2" | 41\%" | 32×18 | . 82 | . 76 | 72 |
    | CN-327 | 64AA18* | 17" | 41\%" | $64 \times 18$ | 1.57 | t. 44 | 1.34 |
    | CN-337 | 32AA9* | 81/2" | 27/1" | $32 \times 9$ | . 59 | . 54 | . 5 |
    | CN. 338 | 64AA32* | $17^{\prime \prime}$ | 81/2" | $64 \times 32$ | 2.43 | 2.20 | 2.08 |
    | CN-347 | 85F24EP | $17^{\prime \prime}$ | 41\%" | $85 \times 23$ | 2.06 | 1.85 | 1.73 |
    | CN-348, | 85G24EP | $17^{\prime \prime}$ | $4^{1} \mathrm{~K}_{6}{ }^{\prime \prime}$ | $(85 \times 23) \times 2$ | 2.0 | 1.85 | 2.73 |

    EASY BUDGET PLAN SEE PAGE 412

    ## SPECIALTIES for BUILDERS and EXPERIMENTERS

    ## COILMASTER DELUXE

    

    Latest redesigne model gives even greater accuracy than ever to meet modern requirements. Easy-to-use set winds honeycomb, spiderweb and solenoid coils of various widths and diameters-equal in appearance to a factory job. Also suitable for winding chokes, transformers and filter inductors. Indicator counts number of turns on coil. Supplied with accessories including wood spools, metal pegholders and extension for making long solenold colls. Instructions included, but less coll form and pegs. Shpg. wt., 6 lbs.
    ML- 260
    Net 6.75

    ## MINIATURE EQUIPMENT CASE

    A miniature plastic case mounted on a standard octal base. For equipment designers - experimenters - builders hobbyists. Perfect for modular construction. Mount relays - resistors - condensors - networks - any miniaturized circuitry - for plug-In use. Add whole stages in one unit to existing equipment. Thousands of uses. Size $11 K_{6} \times 1{ }^{1} x_{2}$ sq. Project $2^{\prime \prime}$ above chassis. Shpg. wt., 4 oz RY-262

    Net .55

    ## POLYSTYRENE RODS TUBE AND SHEET

    Feature high dielectric strength, dimensional stability low loss, are-resistance, and insulating properties. Mois ture proof. Easily sawed, drilled and tapped. Sheets and rods are transparent, tubing satin finish.

    ## POLYSTYRENE SHEETS

    | Stocking | Site | Thick Inch | Shpg. Wt. | $\begin{aligned} & \text { Net } \\ & 1.9 \end{aligned}$ | $\begin{aligned} & \text { Each } \\ & 10-49 \end{aligned}$ |
    | :---: | :---: | :---: | :---: | :---: | :---: |
    | P-450 | $12^{\prime \prime} \times 12^{\prime \prime}$ | Ko" | 8 oz. | 4.07 | 3.66 |
    | P-451 | $12^{\prime \prime} \times 12^{\prime \prime}$ | 为" | 10 oz . | 4.70 | 4.23 |
    | P-452 | $12^{\prime \prime} \times 12^{\prime \prime}$ | 1/8" | 12 oz | 5.39 | 4.85 |
    | P-453 | $12^{\prime \prime} \times 12^{\prime \prime}$ | $3_{16}{ }^{\prime \prime}$ | 1 lb . | 7.01 | 6.31 |
    | P-454 | $12^{\prime \prime} \times 12^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | 11/2 lb. | 7.99 | 7.19 |
    | P-455 | $12^{\prime \prime \prime} \times 24^{\prime \prime}$ | K0" | 1 lb . | 7.64 | 6.88 |
    | P-456 | $12^{\prime \prime} \times 24^{\prime \prime}$ | $\%_{10}$ | $11 / 4 \mathrm{lb}$. | 8.97 | 8.07 |
    | P. 457 | $12^{\prime \prime} \times 24^{\prime \prime}$ | 1/8" | 11/2 lb. | 10.29 | 9.26 |
    | P-458 | $12^{\prime \prime} \times 24^{\prime \prime}$ | $K_{6}{ }^{\prime \prime}$ | 2 lbs. | 12.89 | 11.60 |
    | P-459 | $12^{\prime \prime} \times 24^{\prime \prime}$ | $1 / 4{ }^{\prime \prime}$ | 3 lbs. | 15.34 | 13.81 |

    ## 12" POLYSTYRENE RODS

    | Stock | Sire LX Diam. |  | Shpg. Wt. |  | $\begin{aligned} & \text { Net } \\ & 1-9 \end{aligned}$ | $\begin{aligned} & \text { Each } \\ & 10-49 \end{aligned}$ |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | No. |  |  |  |  |  |  |
    | P.460 | 12" | $1 / 8^{\prime \prime}$ | 2 | 02. | . 03 | . 02 |
    | P-461 | 12' | \% Ko" | 3 | 02. | . 07 | . 06 |
    | P. 462 | 12" | 1/4" | 5 | 01. | . 12 | .11 |
    | P-463 | 12' | \% ${ }^{\prime \prime}$ | 6 | O2. | . 18 | . 16 |
    | P-464 | 12" | - 3/8" | 6 | 02. | . 25 | . 22 |
    | P. 465 | 12" | 1/2" | 6 | OL. | . 47 | 42 |
    | P-466 | 12" | 5/9" | 8 | 02. | .71 | . 64 |
    | P-467 | 12" | 3/4" | 8 | 02. | . 98 | . 88 |
    | P. 468 | 12' | 7/9" | 8 | 02. | 1.39 | 1.25 |
    | P-469 | 12" | - $1^{\prime \prime}$ | 8 | 02. | 1.86 | 1.67 |

    ## 12" POLYSTYRENE TUBES

    | Stock No. | 0. 1. | I. D. | Shpg. Wt. | $\begin{aligned} & \text { Net } \\ & 1-9 \end{aligned}$ | $\begin{gathered} \text { Each } \\ 10-49 \end{gathered}$ |
    | :---: | :---: | :---: | :---: | :---: | :---: |
    | P-470 | $1 / 4^{\prime \prime}$ | $1 / 8^{* \prime}$ | 202. | . 10 | . 09 |
    | P-471 | K6" | 76" | 302. | . 14 | . 13 |
    | P. 472 | 3/8" | $1 / 4^{\prime \prime}$ | 302. | . 18 | . 16 |
    | P. 473 | $1 / 2^{\prime \prime}$ | $38^{* \prime}$ | 302. | . 25 | . 22 |
    | P-474 | 59" | 1/2* | 402. | . 31 | . 28 |
    | P-475 | $7 / 4^{\prime \prime}$ | 59" | 502. | . 39 | . 35 |
    | P-476 | 1 1' | 7/8" | 602. | . 55 | . 49 |

    INDUSTRIALS WRITE FDR PRICES ON LARGER RUANTITIES
    POLYSTYRENE CEMENT AND COIL DOPE Pure polystyrene dissolved in thinner. For coating, doping, scaling coils, and for ce menting polystyrene to polystyrene. 2 oz, bot tie. Shpg. wt., 4 oz.
    P. 283

    Net .47
    THINNER FOR ABOVE. Cuts and dissolves potystyrene material. 2 oz. bottle. Shpg. wt., 4 oz P-303
    

    PHOTOGRAPHIC
    PRINTED
    CIRCUIT KIT

    New ready to use presensitized copper clad laminate cuts time to make prototype printed circults. KIt contains 20 pieces single and double clad $\mathrm{XXX}-\mathrm{P}$ and epoxy fiberglass laminates in assorted convenient sizes, presensitized and uncoated. 20 assorted printed circuil tube and transistor sockets. 2 rolls tape resist strip 1 14" and
     dameter. Bottle liquid resist and brush. Ball-point resist pen. Package of printed circult eyelets and terminals. 51 drill, layout paper, exposure clamp, developing and etching solutions with trays. Full instructions and technical bulletins. Shpg. wt., 10 fbs.
    MS-904

    ## ACcesson

    Net 29.95
    MS-905 8 oz . Developer
    1.00

    MS.906 $6 \times 9$ " Single Side Sensitized Board
    MS. $9076 \times 41 / 2^{\prime \prime}$ Single Side Sensitized Board
    MS-908 $3 \times 4 \frac{1}{*}$ ~ Single Side Senslitized Board
    

    Here's a kit every serviceman needs to repair printed circuits or printed wiring in TV sets, hearing aids radios etc. Contains Print-Kote silicon resin, solvent pure silver print, solder probe toot. Print-Kote solder stainless brush scraper and prined circuit service man ual. Wt., 2 lbs.
    P-308 GC-680 Kit
    Net 5.73
    ECONOMY KIT
    Same as above but less the pure silver print. Wt., 2 los P-309 GC-681 Kit

    ## PRINTEO CIRCUIT ESSENTIALS

    PRINT-KOTE SILICON RESIN. Used to coat and protect joints and parts after repair. Fast, alr drying 2 oz. bottle with brush. Shpg. wt., 6 ozs.
    P-310 GC•14-2
    PRINT-KOTE SOLVENT. For removing silicon resin or to thin it. 2 oz. bottle. Shpg wt., 6 ozs.
    P-311 GC-13-2
    Net .36
    PRINT-KDTE SOLDER. NOn-corrosive flux with low melting solder combined with pure silver. 2 oz . coil. Shpg. wt.
    4 ozS.
    P- 312 GC-9131
    Net .57
    PRINT-KOTE SILVER PRINT. Pure silver compound. Air drying. Used to repalr printed clrcuit "wires" and touch up connections. $1 / 2$ Troy oz. Shpg. wt., 4 ozs.
    P-313 GC-21-1
    SOLDER-AID PRORE. Special fine paint Stainless steet Solder won't stick. Shpg. wt., 2 ozs.
    P-314 GC-9093
    Net .98
    BRUSH AND SCRAPER. Stainless steał brush and steel scraper. Indispensable repair tool for printed circuits. Shpg. wt. 2 ozs
    P. 315 GC. 9094

    K-27 PRINT COAT. Clear sillicone resin in 6 oz. spray can. Insulates and protects. Shpg. wt., 8 ozs. P-316 GC-14-6

    Net 2.37

    ## MAGNETIC STRIP

    - Flexible-Versatile. Permanent Magnet - Made In Ensland

    Remarkable, new magnet material. Flex ible, extruded plastic strip. Impregnated with Barium Ferrite magnetic powder Can be cut with a mnife, scored and broken by hand, drilled, nalled, screwed does not demage magnetic properties Strip measures Ko" wide by $1 / 40$ " thick. Pull is 3 ozs. per inch length with $000^{\circ}$ gap (no intervening material) to 1.5 oz . per in. with a $015^{\circ \prime}$ gap. Limitless Industrial, commercial and domestic applications. Used for magnetic closures holders, locators, conveyors, displays, collectors, buf fers, lifters. Will bend to a $3^{\prime \prime}$ circle, at room tempera. ture, without breaking. May be warmed to Increase flex Ibllity without effect on magnetic propertles.
    F.751 3 ft . length, Shpg. wt., 8 ozs.
    F .75212 ft . length, Shpg. wt., $14 / 2 \mathrm{lb}$

    Net 1.69
    Net 5.50

    bakelite<br>CASES and PANELS

    Ideal for building lest equipment and small elec tronic devices. All black bakelite with rounded corners and recessed threaded inserts for mounting panels. Walls $1 / \mathrm{s}^{\prime \prime}$ except:
    
    

    Stock No. MS-216 MS-217
    MS-218*
    MS-219
    MS. 844
    MS-845

    ## PLASTIC CASE FOR MINIATURE EQUIPMENT

    Beautiful pocket sized modern streamilned case with rounded corners and removable snap-on cover. ideal for that transistorized receiver -or other miniature or subminiature preamplifier, amplifier, oscillator or transmitter., Two pre-drilled aper tures, a $21 / 2^{*}$ diameter opening idea for Poly-vari-Con tuning capacitor and a Ko" opening ideal for volume control and switch. In addition, there are two small openings on the side for such internal leads as antenna or eafphone. Size: $4^{1 / 6 \times 256} \times 11 / \mathbf{m}^{\prime \prime}$. Shipg wt., 6 02. Imported
    MS-302
    Net .59
    Ivory \& Gold Dial Knobs For Above. Wt., 1 oz. Imported KN-24

    Net 29
    Ivory Miniature Vol. Control Knob. Wt., 1 oz
    Net 11
    

    ## PLASTIC CASES

    for MINIATURE ELECTRONIC GEAR
    Clean, polystyrene cases. Ideal for miniature assemblys. Alt have ball type hinged covers except ", which have removable covers. Avg. shpg, wt., 6 oz .

    Stock No
    Size-LXWKH
    MS. 156
    $15 / 8 \times 21 / 8 \times 1^{\prime \prime}$
    $27 / 8 \times 1.3 / 6 \times 1^{\prime \prime}$
    $27 / 8 \times 2 \times 1^{10}$
    $356 \times 25 \times 1$ "1
    $43 / 8 \times 21 / 6 \times 23^{\prime \prime}$
    $71 / 2 \times 5 \times 11 / 2^{3}$
    $45 / 6 \times 23 /{ }^{\text {" }}$
    ${ }^{4} 1 \%_{6} \times 3 \% \times 11 / 4$
    $5 \times 51 / 4 \times 15 e^{\prime \prime}$
    $53 / 4 \times 3 \times 13_{0}^{\prime \prime}$
    $37 / 8 \times 31 / 8 \times 11 / 8^{\prime \prime}$

    ## AMPHENOL

    

    ## TUNING EYE

    ASSEMBLIESFor use im custom buitding. Simple to install. For set with AVC, FM sets, test instruments, etc. Shpg. wt., 8 oz.

    6 PRONG TYPE: for 6 prong tubes. Includes 1 meg resis tor wired into socket, 5 -wire color-coded 22" long cable mtg bracket, escutcheon, hardware and instructions CM-49 AMPHENOL 58-MEA 6

    Each Net 2.1
    Lots 50, Each 1.75
    OCTAL TYPE: For all octal tubes including dual and mul-ti-pattern types. With 8 wire, color-coded $22^{\prime \prime}$ cable.
    CM. 50 AMPHENOL 58-MEA 8

    Each Net 2.98
     and near infrared spectral region. Act as resistors which vary with applied fllumination. Permits high speed applications without compensation. Have very low dark current and negliglble cell noise. Maximum Vollage? 300 V DC or peak AC. Operating temperature: 50 to $75^{\circ} \mathrm{C}$. Power dissipation 50 mw .
    PLASTIC TYPES: Polyester cases; 50 Mw power dissipation. $1 / /^{\prime \prime}$ dia. $x 1 / 2 "$ long. Shpg. Wi., 3 oz. Cadmium Selenide.
    

    GLASS TYPES: Feature hermetically sealed glass enclosures; Low Resistance "L"" types for Transistor and other low voltage applications. 75 mw power dissipation except 500 series is 500 mw with heatsink and 250 mw without heat sink. "400"" series $265 \times 1$ ". " 500 " series $.5 \times .5 "$ " 600 " series. $25 \times .5 "$ "Average DC resistance measured at 2 foot-candles, $2870^{\circ} \mathrm{K}$ and $25^{\circ} \mathrm{C}$ amblent. CdS $=$ Cadmium Sulphide; CdSe $=$ Cadmium Selenide. $A=$ Peak Spectral Response in Angstroms.
    

    CADMIUM SULPHIDE PHOTOCELL
    

    ## - For Sensitive Relay Actuation

    - For Photo Electric Control

    A neatly constructed crysta! photocell that has countless applications in counting, relay actuation, etc. Resistance varies with light from 1 megohm in total darkness to approx. 1500 ohms at 100 foot candles. Responds to entire visible spectrum and has $1 / 10$ sec. response for relay operation. Minimum current output 60 ma at 50 ft . candles at 90 volts. Power dissipation 2 watts for 5 seconds, $1 / 2$ watt continuous. Output as low as .08 ma at 1 ft . candle at 6 volts, varying with illumination intensity and applied voltage. Neatly capsulated for easy mounting with leads for electrical connection. $11 / 4 \times 2 / 2 x^{1 / e^{\prime \prime}}$ overall. Imported
    MS-827
    Net 1.59
    

    ## POLARIS "MAJ-I" RESISTOR PHOTOCELL 199

    A cadmium-sulphide light-dependent resistor used to actuate door openers, burglar alarms, smoke detectors, light controls, production counters, etc. Resistance varies from 200 ohms at approx. 93 foot-candles to over 10 megohms in total darkness. Maximum volts: 11OVAC (peak) 110 VDC ; maximum dissipation: 2 watt @ $40^{\circ} \mathrm{C}$, 1 watt@ $00^{\circ} \mathrm{C}, 0 \Leftrightarrow 60^{\circ} \mathrm{C}$. Capacity approx. 6 mmf .
     MS-791
    

    ## LAFAYETTE AUTOMATIC PHOTO-ELECTRIC 'LUMINATOR

    ## - Automatic Light Switch

    ## - Lights on at sunset-off at sunrise

    New photo-electronic, light sensitive switch turns lights on and off at dusk and dawn. Better than a clock-no setting and resetting of timer. Variance in "on-off" cycle adds extra protection when away from home. You need never come home to a dapkened house. The controlled lamps go on as darkness falls-stay on untll sufficient day light returns or until manually turned off. Just plug it in for protection from prowlersto turn on night lights-illuminate outdoor areas-light up broodersgreen houses-displays-show windows-any place you require automatic illumination. Mounts most anywhere on rubber suction cup feet. Unobtrusive-measures only $33 / 4 x 21 / 2 \times 21 / 4 "$. Use on 117 volt AC only. Maximum 300 watts lamp load. Instructions included. Shpg. wt., 1 Ib MS. 790 Imported

    Net 4.95
    

    ## 

    - High Sensitivity
    - Valuable For Experimenters

    395
    A cadmium photo-conductor cell mounted in an octal type tube base for versatility in application. Ideal for mounting on chassis with all components of a photocell relay. Rated, 4900 ohms at 10 ft . candles; 200 megohms at 0 ft . candles. Spectral response covers from 4000 to 8000 Angstroms; maximum power dissipation (at $25^{\circ} \mathrm{C}$ ) 0.5 Watts; ambient temperature - 40 to $+60^{\circ} \mathrm{C}$. Maximum voltage ratings: 200 volts DC or AC peak. Resistance value characteristics: at 0 ft . candles $=500,000$ ohms: at 1 ft . candle $=5,000$ to 30,000 ohms; at 10 ft . candles $=90$ ohms to 5,000 ohms. Size $2-1 / 10^{\prime \prime} \mathrm{H}$ overall. Imported
    MS. 882
    Net 3.95
    

    ## CADMIUM

    PHOTOCELL FOR HEAVY DUTY OPERATION

    89

    - $3 / 4^{\prime \prime}$ Light Area

    An efficient cadmium photocell utilizing an extremely sensitive film element with $3 / 4^{\text {" }}$ light area. Ideal for relay operation door openers, counters, etc. Rated at $200 \mathrm{~V} ; 20-\mathrm{ma} ; 0.2 \mathrm{~W}$ power dissipation at $20^{\circ} \mathrm{C}$. Sensitivity is $610 \pm 50$. Resistance Value Characteristics - 0 Ft. Candles: 1 M ohm/up; 1 Ft . Candles: 33 K ohms; 10 Ft. Candles: 8 K ohms. Size ' $\mathrm{K}_{4}$ " Diam. $\times \mathrm{K}_{4}$ " depth. MS-886 Imported

    Net 1.89
    

    ## NEW CADMIUM SULPHIDE PHOTOCELL 150 <br> - */*"Light Area

    A variable resistance device with extremely broad re sponse to vislble light. Peak in blu.green with a highly sensitive surface, 猪" light area. Ideal for direct relay operation, home lamp control, headight dimmer, counter controls, door controls etc. Rated at 300 V DC, 500 V AC peak 250 MW dissipation; Resistance at 1 foot candle (dayilght), $2.5 \mathrm{~K}-100 \mathrm{~K}$, Resistance at 50 foot candles (incandescent) $100-1000$ ohms; dark resistance, 1 M-1000 Megohms, Size: $1 / 2^{\circ \circ}$ Dia. $\times 1 / 2^{\prime \prime}$ depth. Shpg. wt., ${ }^{2} 02$.

    ## INFINITE DARK RESISTANCE PHOTO- ONDUCTOR <br> CONDUCTOR

    - Mount This Lafayette Special In Any Position
    - $11 / 2^{\prime \prime}$ Diam. $11 / 2^{\prime \prime}$ High

    Thls Lafayette cadmium sulfide PHOTO-CONDUCTOR special can be mounted in many positions through two leads from the base of the cell. An ideal cell for the experimenter requiring extreme versatlity. Spectral re sponse covers from 4,000 to 8,000 angstroms. Maximum power dissipation ( $25^{\circ} \mathrm{C} / \mathrm{W}$ ): 1.0. Ambient tempera ture $\left({ }^{\circ} \mathrm{C}\right)$ : -40 to +60 . Maximum voltage 200 volts $D C$ or AC Deak. Resistance Value Characteristics - 0 Ft candles: above 200 K ohms 1 Ft . Candle: 500 to 40 K . ohms; 10 Ft . Candles: 100 to 800 ohms. Size 1-1/20x-$1-7 / 10^{\prime \prime} \mathrm{H}$. Shpg. wt., 4 oz. Imported
    MS-881
    Net 3.95
    

    ## LAFAYETTE

    CADMIUM PHOTOCELL 149

    - 3/9" Light Area

    A quality cadmium photocell, Derfect for transistor and printed circuit use. Employs sensitive film element with 3 m" light area. Rated at 200 V ; 10 ma ; 0.1 W power dissipation @ $20^{\circ} \mathrm{C}$. Sensitivity is $610 \pm 50$. Resistance Value Characteristics - 0 Ft . Candles: 2 M ohms/up; 1 Ft. Candles: 100 K ohms; 10 Ft . Candles: 25 K ohms; Size K." Diam x $1 / 4 "$ Depth. Imported

    MS-885
    Net 1.49

    ## LAFAYETTE CADMIUM SULPHIDE PHOTOCELL

    - Only $3^{\prime \prime} \mathrm{D} \times 1 / 2^{\prime \prime} \mathrm{W}$
    

    New head-type window cadmium sulphide photocell. Maximum Ratings: 200 volts DC or AC peak. Temperature is $-40^{\circ} \mathrm{C}$ and $+80^{\circ} \mathrm{C}$; Resistance is over 10 megohms at zero ft . candies, 100,000 ohms to 10 megohms at 1 foot candie, 100,000 to 350,000 ohms at 10 foot candles; Range of sensitive wave tength is 4000 to 8000 angstroms. Size: \%" diam. x "Ke" L. o/a. Standard screw mount: miniature base. Imported MS. 855 Shpg. wt., 402.

    LAFAYETTE MINIATURE SELENIUM RECTIFIER size make this precision rectifier ideal for prototype and miniature applications Measures $3 / 6^{\prime \prime D} D 1 / 2^{*} W$ plus $1 / 4^{\text {" }}$ mounting lip. Rated Input-117VAC, 110 to 130 V DC; Output-10ma DC 20 ma DC intermittent; Amblent Temperature $40^{\circ} \mathrm{C}$. Maximum input capacitance 10 MFD. Two convenient solder lug terminals. Imported
    MS. 887

    # LAFAYETTE SUPER.VALUE SUN BATTERY 

    

    Excellent for Experimenter, Kit Buifder, efe.
    Sensational buy enabies Lafayette to offer this amaz. ing selenium photocell at a fraction of the price of similar photoelectric cells! Surpasses by far, specifl. cations of cells of equivalent size! Specifications: 0.9 ma Current Output at 100 ft . candles with 100 ohm load; 0.27 ma Current Output at 100 ft . candles with 1000 ohm load. 11/:" diameter. With colored pigtail leads. Imported
    MS-891
    Net 1.95
    

    ## B2M SUN BATTERY

    International Rectifier's Sun Battery requires just verage sunlight to generate 2 ma . current under 10 -ohm load. With milliammeter can be used as light measuring device. In series or series-parallel will drive transistorized equipment. Ideal for spectrophotometers, headlight dimmers, burgiar alarms, limers, etc. Measures $.724 \times 443 \times .040^{\prime \prime} .60$ microamps @ 100 footcandles with 55 ohm load. 5 volt in average sunlight, 25 volt at 100 footcandles. Complete with $1 / 4^{\omega}$ mounting bracket, $6^{*}$ leads.
    MS-112
    IN LOTS OF 10 OR MORE
    Ea, 1.32
    INTERNATIONAL RECTIFIER
    B3M SELENIUM SOLAR CELL

    Selenium photocell in molded plastic case. Ratings (in full sunlight, using conventional volt and milliamp meters): Output 0.2 to 0.4 Volts, $11 / 1$ to $21 / 2$ milli. amps. Supplied with pigtail leads and with adhesive disc for attaching cells to almost any surface. Size: 1/9x18/5xKı". Shpg. wt., 4 oz MS.est

    Net 1.11
    In lots of 10 or more
    Ea. Net 1.52

    ## INTERNATIONAL RECTIFIER SIM SILICON SOLAR CELL

    Silicon solar cell in molded plastic case. Output rating 0,3 to 0.4 Volts and 10 to 16 milliamps (in full sunlight, using conventional volt and milliamp meters). Complete, with leads and pressure sensitive adhesive disc that permits mounting to almost any surface. Size: $11 / 0 \times 11 / 0 \times 36_{8}^{\prime \prime}$. Shpg. wt., 4 oz. MS-898

    Net 2.20
    Lots of 10 or more
    Ea. Net 1.96

    ## CS-120-M6 CAOMIUM SULPHIOE

    PHOTO CONOUCTIVE CELL
    International Rectifier popular cadmium sulphide photo conductive cell. Maximum applied voltage 120 volts; 0.2 watt max. power dissipation. Resistance ratings: 1.5 megohms in dark; 10,000 ohms at 10 foot candes; 2,000 ohms at 100 foot candles. In molded plastic case. With pigtail leads and adhesive disc for mounting to surface. Size: $11 / 4 \times 11 / 4 \times 1$ Ka". Shpg. wt., 402 MS-899

    Net 2.30
    

    ## EXPERIMENTER'S <br> handobook

    for SOLAR CELLS
    

    SELF GENERATING PHOTOELECTRIC
    

    - Complete with leads


    ## SELENUM PHOTOCELL <br> Excellent for <br> - Burglar Alarms 1,50 <br> - Door Openers

    - Counters
    quantity limited OPERATES 600 MICROAMPS RELAYS DIRECTLY
    

    Barrier iayer. self-generating type: light striking upon cell generates current sufficient to operate relays di. rectly without the use of auxlliary power, Lifetime of cell is unllmited. 600 microamperes output at 100 foot candles. 2 inches in diameter. Mounted in a handsome plug-in plastic case. Imported.
    MS-826 Photocell, Wt., 8 oz .
    Net 4.95

    - No external power needed
    - Output in sunlight up to 60 MA
    - Up To 750 Ha at 100 ft . Candles

    Selenium self.generating photocells convert sunlight or artificial light energy into electrical energy without any auxiliary source of power. Sensitive to a wide spectrum including white, colored or ultra-violet light. All unmounted; complefe with leads. Outputs In table below taken at 100 foot candie illumination with 100 ohm load. Higher outputs obtainable with greater light. Shpg. wt., 3 oz. Imported

    | Stock No. | Out $\mu \mathrm{a}$ | Size | 1.4 | Net Each $5.9$ | 10 |
    | :---: | :---: | :---: | :---: | :---: | :---: |
    | MS. 711 | 100 | 1194"xKo. | . 59 | . 56 | 53 |
    | MS-712 | 250 | 11边"氣" | . 69 | . 66 | . 63 |
    | MS-713 | 350 | 1110 " $\times 7$ \%" | . 89 | . 85 | . 80 |
    | MS-774 | 750 | 11K"×11\%** | 3.18 | 3.03 | 2.88 |

    ## INTERNATIONAL rectifier solar cell and Photocell handoook

    Thls 112-page technical manual features full descriptions of over

    $$
    75 \text { practical light-operated circults }
    $$

     contains projects and demonstrations of both selenium photocells and silicon solar cells. includes chapters on basic pholovoltaic theory, photocell peiformance characteristics, radiation theory, and infrared and ultraviolet photocell applications ... contains data on silicon solar cells and their use on satellites and space vehicles.
    BK-1521
    Net 2.00

    ## LAFAYETTE CADMIUM SULPHIDE PHOTOCONDUCTIVE CELLS

    MS-893
    
    MS. 894
    

    MS-895
    

    These new Lafayette cadmium sulphide photoconductor cells have numerous invaluable apolications: l.e. door openers, chimes, automatic switches, burglar alarms, electric eye of cameras, etc. Their conductivity varies with the intensity of light. All are rated 20 millamps at 200 voits, and have a Sensitive Wave Length range of 4,000 to $\mathbf{8 , 0 0 0}$ angstroms. All have leads for mounting. Shpg. wt., 2 oz Imported
    RESISTANCE IN OHMS AT

    | Stock No. | 0 FC | 1 FC | 10 FC | 100 FC | Max. Temp. ${ }^{\circ} \mathrm{C}$ | Oimensions Inches |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | MS. 893 | 10 Meg | 1.5 Meg | 150,000 | 20,000 | +70 to -20 | y/"dia. $x$ Ko"L |
    | MS-894 | 10 Meg | 1.5 Meg | 150,000 | 25,000 | +70 t0-20 | K." dia. $x$ \%/4 ${ }^{\prime \prime}$ |
    | MS-695 | 5 Meg | 25,000 | 4,500 | 700 | +50 to - 20 | 1\%." dia. $\times 1 / 40 \times T h k$ |
    | MS-896 | 1 Meg | 20,000 | 3,500 | 600 | +70 to -20 | 1/2" dia. $\times$ Kt" Thk. |

    FC $=$ Foot Candles Resistance ratings at 1,10 and 100 foot candles have $\pm 50 \%$ tolerances
    

    ASSORTMENT OF 8 PHOTOCELLS WITH VARIEO SHAPES, SIZES ANO OUTPUTS!
    SOME EQUIVALENT TO FAMOUS INTERNATIONAL REC. TIFIER TYPES B2PL, A7PL, 7C, etc. Some have pigtail leads mounted; leads supplied for all the cells. Nominal output range $1 / 3 \cdot 1 / 2$ volts; 250 microamps to 5 MA in bright sunlight. Shpg. wt., $80 z$ MS.921

    Net 1.98

    ## HYGROPAK-HUMIDITY SENSOR

    

    New type of electric humidity meas uring element. Film type element for stabillty - reproducibility - polarization. Resistance decreases with increase in humidity. Extremely fast reaction time. Will operate in temperatures up to $200^{\circ}$ F. Covers the peratures up to $200^{\circ}$ F. Covers the
    entire humidity range with a near entire humidity range with a near
    linear curve. Shpg. wt., 2 ozs. linear curve. Shpg. wt., 2 ozs.
    MS-407

    Net 2.98

    A cadmlum-sulphide light-activated resistor used to actuate door openers, burglar alarms, relays, light controls, production counters, etc. Resistance varles from 75 ohms at approx. 93 foot-candies to over 10 megohms in total darkness. Maximum volts: 110 VAC (peak) 110 VOC ; maximum disslpation: 2 watt @ $40^{\circ} \mathrm{C} .1$ watt @ $50^{\circ} \mathrm{C}, 0$ @ $60^{\circ} \mathrm{C}$. Capacity approx. 6 mmf . $1 / 2^{\circ}$ dlam. $x$ \% $60^{\circ} \mathrm{C}$. Capacity approx. 6 mm
    thick. Shpg. wt., 3 oz. Imported thick. Shps. wi., 3 oz. Imported
    MS. 922
    Net .89

    ## EL-TRONICS HUMIDITY <br> SENSING ELEMENT

    New highly accurate extremely stable humidity sensing element. Varies blas on control grid of vacuum tube - directly controls meter reading in bridge circult. Employs conducting plastic which changes resistance in the presence of water vapor. Rapld reaction time. Long term stability-irouble free operation. Employs punted electrodes on each face. $3 / 4 \times 11 / 2 \times 1 / 0^{\prime \prime}$. Includes Specs - curves sample clrculting. Shpg. wt., 402. sample
    

    Net 9.00

    # Page 168 <br> GENERAL RADIO VARIAC ${ }^{\circ}$ CONTINUOUSLY ADJUSTABLE TRANSFORMERS WITH EXCLUSIVE DURATRAK ${ }^{\text {B }}$ CONTACT SURFACE 

    
    

    ## SPECIFICATIONS

    Frequency: Soecs for 'W' models are 50.60 cycle. Units can be operated al rated current and voltage from $50-40 \mathrm{C}$ cycles. On 25 cycles, 230 volt units can be used at half their 60 cycle voltage and kva, ratings. Rated Current: Can be drawn from the VARIAC at any dial setting. Maximum Current: Can be drawn at maximum voltage when line-voltage connection is used. Line Voltage Connection: Oulput voltage variable from 0 to line vollage. Overvoltage Connecnection: Qutput vollage variable from 17\% above line voltage.
    general radio variace adjustable transformer (U.S. Patent No. 2,949,592) advantages include
    banked windins for space economy. unit brush for ease of replacement, wiring diagram and voltage data on terminal plates, precision machine winding on toroidal winding machines and long life essentially the same as fixed-ratio power transformers. Olher features are good regulation, smooth control. high efficiency. linear oul. pul voltage (up to $117 \%$ of line volfare) direct-reading, reversible dials calibrated for $320^{\circ}$ clockwise rotation. rugged construction-no delicate parts. Six basic types listed below provide a lopical series of ralings up to 50 amperes af 50.60 cycles. Uncased models for behindpanel mounting. cased models for front-panel, wall or bench mounting. portable models have line cord, plug. on-off switch. reseltable overload prolector, outlat sockel and handle.

    TYPE W2. 4 models - up to 3.1 amps. output at $120 \mathrm{v} \ddagger$ has over voltage connections and corresponding dial scale
    

    TYPE W5, 10 models - up to 11 amps. output at 120 v or 2.6 amps. at 240 v
    

    | Stock No. | Type | Fit. | Input Volt | Volts | Output Rated Amp. | Max. <br> Amp. | Snpt. Wt. Lbs. | 1.9 | Net Each 10.15 | 20-39 |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | 370.185 | W5 | 1 | 120 | 0.140 | 6.0 | 7.8 | 12 | 18.00 | 17.10 | 16.20 |
    | 37 D .186 | WSM | 2 | 120 | 0.140 | 5.0 | 6.5 | 13 | 26.00 | 24.70 | 23.40 |
    | 370.187 | W5MT* $\ddagger$ | 3 | 120 | 0.140 | 5.0 | 5.0 | 15 | 31.50 | 29.93 | 28.35 |
    | $3 \mathrm{TD}-188$ | W5MT3\& | 3 | 120 | 0.140 | 5.0 | 5.0 | 15 | 33.00 | 31.35 | 29.70 |
    | 3 TD-210 | WSL= | 1 | 120 | 0-120 | 8.5 | 11.0 | 12 | 17.50 | 16.63 | 15.75 |
    | 3 T0-211 | W5LM $=$ | 2 | 120 | 0.120 | 7.1 | 9.2 | 13 | 25.50 | 24.23 | 22.95 |
    | 310.224 | W5LMT3 | 3 | 120 | 0.120 | 7.1 | 9.2 | 15 | 34.50 | 32.72 | 31.05 |
    | 3T0.189 | W5H | 1 | $\begin{aligned} & 240 \\ & 120 \end{aligned}$ | 0.280 | 2.0 | 2.6 | 10 | 21.50 | 20.43 | 19.35 |
    | 370.190 | WSHM | 2 | 240 | 0-280 | 2.0 | 2.6 | 13 | 29.50 | 26.13 | 26.55 |
    | 3T0-191 |  |  | 120 240 | 0.280 | $\frac{1.0}{2.0}$ |  |  |  |  |  |
    | 310.191 | WSHMT* | 3 |  |  | 2.0 | 2.0 | 15 | 35.00 | 33.25 | 31.50 |
    | $\begin{array}{r} 3 T 0.192 \\ 370.193 \\ \hline \end{array}$ | VB. 2 Repl <br> VB-1 Repl | bru | Shes | above exc | onty ${ }^{\text {a }}$ | ' typ |  |  | Net Net | .80 .80 |
    | TYPE W10. 8 models - up to 13 amps. output at 120 v , or 5.2 amps , at 240 v . |  |  |  |  |  |  |  |  |  |  |
    |  |  |  |  |  |  |  |  |  |  |  |
    | StockNo. | Type | Fig. | Input Volt | Overvo | Dutput | $1 \text { Max. }$Amp. | Shpr. |  |  | 20-99 |
    |  |  |  |  |  |  |  |  | Net Each 10. 19 |  |  |
    | $3 T \mathrm{D} .175$ | W10 | 1 | 120 | 0.140 | 10 | 13 | 18 | 33.00 | 31.35 | 29.70 |
    | 3T0-176 | W10M* 1 | 2 | 120 | 0.140 | 10 | 13 | 21 | 46.00 | 44.70 | 41.40 |
    | 3 T0-177 | W10MTt\% | 3 | 120 | 0-140 | 10 | 10 | 24 | 56.00 | 53.20 | 50.40 |
    | 370.178 | W10MT3+f | 3 | 120 | 0.140 | 10 | 10 | 24 | 57.50 | 54.83 | 51.75 |
    | 370.179 | W10H | 1 | 240 | 0-280 | 4 | 5.2 | 18 | 35.00 | 33.25 | 31.50 |
    | $3 \mathrm{O}-180$ | WIOHM * | 3 | 240 | 0.280 | 4 | 5.2 | 21 | 48.00 |  | 43.20 |
    |  |  |  | 120 |  |  |  |  |  | 45.40 |  |
    | $\begin{aligned} & 3 \Gamma 0.181 \\ & 310.182 \end{aligned}$ | W10HMT $+\ddagger$ | 3 | 240 | $\begin{aligned} & 0.280 \\ & 0.280 \end{aligned}$ | 4 | 4 | 2424 | $\begin{aligned} & 58.00 \\ & 60.00 \end{aligned}$ | $\begin{aligned} & 55.10 \\ & 57.00 \end{aligned}$ | $\begin{aligned} & 52.20 \\ & 54.00 \end{aligned}$ |
    |  | WIOHMT3t |  | 240 |  |  |  |  |  |  |  |
    | - 2 W | ire $\dagger=3$ | Wi |  |  |  |  |  |  |  |  |

    3 TD. 183 VBT. 10 Repl. brushes for above except "H" type Net 1.35
    $3 T D-184$ VBT-11 Repl. brushes for " H " type only

    ## CHOKES FOR PARALLEL COMBINATIONS

    By using this choke, you may limit circulating current. Load rating of 2 identical Variacs if twice that of single unit. Use 1 choke to paraltel 2 units, 3 for 4 units. Cannot be used for loads in excess of 2 type W50.
     lots of 10 , ea. 15.20 ; lots of 20 , ea. 12.40
    For loads in excess of 2 type $W 50$, use a third choke type $50-\mathrm{P} 2$.
    $3 T \mathrm{D}-440$ type $50 . \mathrm{P}$ ?
    lots of 10, ea, 15.20 ; lots of 20 , ea. 12.40

    ## REPLACEMENT BRUSHES

    3TD-441 200-315 Repl. brush for 200t-10c
    $310-442$ VBT- 2 Repl. brush for M-10, V-10, V-10M, V-10MT
    $310-443$ VBT-2-2 Set of 2 for V-2OH, V-20HM
    3 PO-444 VBT-4 Repl, brush for V-10H, V-10HM, V-10HMT
    3 TD-445 VBT-5 Set of 2 for V-20, V.20M

    Type W8 2 models - up to 13 amps, $t=3$ wire, \# for 120 V 60 cycle only no over voltage connections supplied. Output at 12 CV , $\ddagger$ has over voltage connection and corresponding dial scale.

    | Slock |  |
    | :--- | :--- |
    | No. | Type |
    | $370-466$ | W8\& $\dagger$ |
    | $350-447$ | W8L $\dagger \dagger$ |

    Input ig. Volt<br>\(\begin{array}{ll}1 \& 120<br>1 \& 120\end{array}\)

    Overvolt Output
    Ralts Amps Amps lbs.
    Net Each
    $1.9 \quad 10.19 \quad 20.99$ $\begin{array}{llllllll}0.120 & 10.0 & 13 & 15 & 21.00 & 19.95 & 18.90\end{array}$

    3TD-451 VB. 3 Replacement brushes for above
    Net Each . 90
    

    TYPE W30. -4 Models. Up to 36 amps. Output at 120 V . or 15.6 amps at 240 V
    
    $3 T \mathrm{D}-206$
    VBT. 6 Repl, brushes for above except "H" type
    Net 7.50 Net 7.50

    ## 400 CYCLE UNITS FOR POWER SUPPLIES

    TYPE M-350.1200 CYCLE SERVICE, 4 models-high frequency equivalents of type " $W$ ' but much smaller and lighter. Made to MIL-specs for shock, vibration, salt.spray and tropicalization including: high and low temperature lubilcation. Iridite-treated aluminum parts, fungicidal ireatment of all phenolic parts, special nickel-plated brush holder. Uses same brushes as equivalent ' $w$ ' models.

    Stock
    Stoct
    No. 3TD-212 $3 T 0-212$
    $3 T 0-213$
    $370-214$
    $3 T 0-215$

    ## GENERAL RADIO GANGED AUTOTRANSFORMERS

    ## SINGLE-PHASE GANGED ASSEMBLIES

    for 120 volt input for parallel operation, two ganged units use $1.50 \cdot \mathrm{Pl}$ choke and three ganged units use 1-50-P1 and 1.50 .92 choke. for 60 cycle use only, no over. voltage connection provided. All are cased except which is uncased.
    

    ## THREE-PHASE GANGED ASSEMBLIES

    Two ganged unit uses an Open-Delta connection. With this connection two Variacs will control a three-phase load from a three-phase source. With 240 volt models, output voltages of more than doubled the supply voltage can be obtained, although current and power ratings are halved. Three ganged units use WYE connection. With this connection models can be operated from three-phase lines of twice the voltage rating. All units are cased except $\Delta$ which is uncased. \& Over-voltage connection not recommended. W5LG3, W5L3M, W8LG3 are for 60 cycie use only, can be used in WYE if the 3 -phase 60 cycle line does not exceed 208 volts.

    0
    No.
    3TD-231wX
    3TD-232WX
    3TD-449WX
    3TD-400X
    3TD-401X
    

    ## TRANSISTOR TRANSFORMERS - SPECIAL TRANSFORMERS

    

    ## ARGONNE HI-FI <br> TRANSISTOR TRANSFORMERS

    - designed for wide range transistor aUDIO AMPLIFIERS.
    - 20-20,000 CPS $\pm 0.25 \mathrm{DB}$

    Completely encased transformers specifically designed for use in transistorized, wide range, high fidelity audio ampliflers. Both driver and output have a frequency response of 20 to $20,000 \mathrm{cps} \pm 0.25 \mathrm{db}$ when used in properly designed circuits At full power rating of 1.5 watts the same response may be achieved at $\pm 2 \mathrm{db}$. Size: $1^{1} \mathrm{~K}_{\mathrm{o}} \times 1^{1} \mathrm{~K}_{\mathrm{s}} \times 13 / 4^{\prime \prime}$. Threaded mounting studs. Color coded leads. Shpg. Wt., 9 ols

    ## DRIVER TRANSFORMER

    Primary impedance 5000 ohms, 3000 ohm center tapped secondary, DC resistance of primary 50 ohms, of secondary 75 ohms. Unbalanced primary current 20 ma DC AR-500

    ## OUTPUT TRANSFORMER

    Primary impedance, 125 ohms center tapped. Secondary impedance, 8 ohms. OC resistance of primary is 4 ohms, of secondary, 0.8 ohms. Unbatanced primary current 50 ma DC.
    AR-501
    Net 5.75
    

    ## POWER TRANSISTOR AUOIO TRANSFORMERS

    - designed for high output transistors

    USED IN AUTO RADIOS - PA SYSTEMS -
    INTERCOMS - ETC.
    OUTPUT TRANSFORMER
    Rated 6 watts. Frequency response 70 to 20,000 cycles $\pm 2 \mathrm{db}$. Primary impedance, 48 ohms center tapped. Secondary, 3.2 ohms; Primary DC resistance 1.1 ohms , sec-
     wt. 1 lo.
    AR. 503

    ## INPUT TRANSFORMER

    Rated 2 watts. Frequency response 70 to $20,000 \mathrm{cps} \pm 2 \mathrm{Jb}$. Primary impeoance 100 ohms. Secondary impedance 200 ohms CT. Primary DC resistance 1.8 ohms, secondary 2.7 ohms. Unbalanced primary current, 200 ma DC. Size $1 \% \times 17 / 8 \times 1 \% 0^{\prime \prime}$. wt., 1 it.

    Net 1.50
    

    ## UNIVERSAL POWER

    TRANSISTOR OUTPUT TRANSFORMER- DESIGNED FOR THE EXPERIMENTER
    - PRI. TAPPED AT 8-12-16-24-32 AND 48 OHMS - RATED 10 WATIS

    Lafayette's latest transistor circuit component. Engıneered for construction projects using the Increasingly popular power transistors. Will also serve as a general replacement for many transistorized auto radios. Rated at 10 watts for push-pull operation. Primary tapped at $8,12,16,24,32$ and 48 ohms. Secondary tapped at 4, 8 and 16 ohms. Sizes $31, \times 21 / 4 \times 2 \%_{0}^{\prime \prime}$. Shpg. wt., 3 los. TR-94

    Net 3.75
    

    ## TRANSISTOR OUTPUT TRANSFORMER

    Only $5 / 6 \times 7 / 8 \times 1 K_{6}$. 2000 onm primary to 10 ohm voice coil. Matches most transistor outputs. Shpg. wt., 8 ors. TR-93 Imported
    

    TRANSISTOR OUTPUT TRANSFORMERS

    ## RATED 150 MW

    Here is an outstanding value in the most popular transistor output transformer for 10 to Pl ohm speakers. Rated power is 150 milliwatts. Primary impedance is 400 ohms, center-tapped and secondary 11 ohms. DC resistance of primary is 20 ohms and secondary .9 ohms. Sizes $3 / 4 \times 58^{\prime \prime}$. Shpg. wi., 4 ors. imported TR-109

    ## 100 MW transistor driver transformen

    Primary impedance 20,000 ohms. Secondary impedance 1000 ohms. OC resistance of primary 400 ohms, of secondary 50 ohms. Unbalanced primary current 1 ma DC. Rated 100 mw . Size: $3 / 4 \times 5 / 6 \times 5 / \mathrm{m}^{\prime \prime}$. Shpg. wi., 402 s . Imported.

    ## SUBMINIATURE TRANSISTOR AUOIO TRANSFORMERS

    

    A new series of miniature transformers for transistor and experimental miniature circuits. Ideal for miniature radio recelvers, amplifiers, hearing aids, etc., using standard transistors. Incorporate special heat-treated high permeability magnetic cores treated to resist corrosion. Designeo for improved frequency response with low distortion. 3 " color-coded leads. Average shpg. wt., 4 oz. Imported

    Impedance D.C. Resistance

    | Impedance |  | D.C. Resistance |  |
    | :---: | :---: | :---: | :---: |
    | Pri. Ohms | Sec. Ohms | Pri. Ohms | Sec. Ohms |
    | 100,000 | 1000 | 1000 | 1000 |
    | 10000 | $2000 \mathrm{C.T}$ | 240 | $60 \mathrm{C.T}$ |
    | $500 \mathrm{C.T}$ | 3.2 | $42 \mathrm{C.T}$. | 0.7 |
    | 200,000 | 1000 | 1400 | 50.5 |
    | $500 \mathrm{C.T}$ | 8 | 50 CT | 17 |

    ## Net

    
    $\begin{array}{ll}\text { TR-98 } & \text { DRIVER } \\ \text { TR-99 } & \text { OUTPUT }\end{array}$

    TR-120 INPUT
    $\begin{array}{cccl}200,000 & 1000 & 1400 & 50.5 \\ 500 \text { C.T. } & 8 & 50 \text { C.T. } & 1.7\end{array}$

    ## 50 C.T. <br> MINIATURE TRANSISTOR TRANSFORMERS

    

    - TRULY MINIATURE-ONLY Y/ax5/ax $/$ /a
    - MATCHES ANY 3.2 OHM SPEAKER
    - EXCELLENT FOR RECEIVER REPLACEMENT TRANSISTOR OUTPUT
    - TRaNSISTOR OUTPUT TRANSFORMER

    Here is an outstanding value in the most popular transistor output transformer for 3.2 ohm speakers-and an exact replacement for all commerclal receivers using such a transformer. May be used elther single ended or push-pull. Wound on nylon bobbins with mylar outer wrap with laminations on nickel-steel and silicone-steel. Rated power is 100 mHIl watts. Primary impedance is 500 ohms Centertapped and secondary 3.2 ohms DC resistance of primary is 20 ohms and secondary .3 ohms. Ideal for transistorized recelvers, audio amplifiers, Code practice oscillators, etc. Color coded leads. Net wt., 1 1/4 oz. Shpg. wt. 4 oz. Imported
    TR-95 TRANSISTOR OUTPUT TRANSFORMER
    Net .89

    ## TRANSISTOR DRIVER TRANSFORMER

    Single-ended transformer for driving transistor power-stage. Impedances 10,000 ohms pri., 2000 ohm C.T. sec.: dc res. 500 ohms pri., 50 ohms sec. 1.5 ma . dc unbalanced pri. current. Rated 100 mw . $3 / 4 \times 5 / 9 \times 5 / 0^{\prime \prime}$. Shpg. wt., 4 oz . Imported
    TR-96 TRANSISTOR DRIVER TRANSFORMER
    Net . 89

    ## SPFCIAL LAFAYETTE TRANSFORMFRS

    SPECIAL LAFAYETTE TRANSFORMERS
    

    Matches 50L6, 35L6, 2516 etc 50 OUTPUT Matches 50L6, 35L6, 25L6, etc. to $3-4$ ohm voice coil. Shpg. wt., $1 / 2$ lo,
    TR-10-Singly, each 45 Lots of $10, ~ E a, ~$
    6.3 VOLT FILAMENT TRANSFORMER

    Primary 115 V . Secondary 6.3 V at 1 amp . Shpg. wt., $3 / 4 \mathrm{lbs}$
    TR-11-Singly, each . . 89 Lots of 5, Ea.
    Lots of 5, Ea. . 81
    UNIVERSAL OUTPUTS
    Match any single or push-pull outout tubes to any voice coil. Shpg. wt., $3 / 4 \mathrm{los}$.
    TR-12-4 watt-Singly, each - 1.39 In lots of 5 , each

    ### 1.26

    TR-13-8 watt-Singly, each 1.53in lots of 5 , each
    1.38

    ## STEP DOWN AUTO TRANSFORMERS

    

    ## POWER TRANSFORMER for SELENIUM RECTIFIER CIRCUITS

    Most popular replacement power transformer for circuits using selenium rectifiers or rectifler tubes such as 6AX5, $6 \times 4,6 \times 5$. Primary is 117 V 60 Cycles A.C. $6 \times 4,6 \times 5$. Primary is 117 V 60 Cycles A.C.
    Plate supply is 125 VAC $1 / 2$ wave at 15 ma with 6.3 V 0.6 amp fliament winding. Sire: $2 \times 23 /{ }^{2} \times 13$ 月 $^{\prime \prime}$; mounting centers $2^{\prime \prime}$ Shpg. wt., 1 lb .
    TR-121

    ## POWER/ISOLATION TRANSFORMER

    Here is a versatile power transformer that is ideal for experimenters, hobbyists and constructors. Primary 117 volts and secondary 105 volts no-load82 volts with 150 ma filament load. Literally hun dreds of uses for this versatile unit. A 12 page booklet gives pictorial and schematic diagrams for using this transformer in circuits for broadcast receiver phono oscillator, audio ampllfier broadcast station, code practice oscillator, capacity operated relay, signal tracer, electronic timer, electronic switch and photocell relay. Minimizes the danger of shock by Isolating circuits from the power line Slie: $24 / 4 \times 2 \times 112^{\prime \prime \prime}$. Shpg. wt., 3 lbs. Size: $24 / 4 \times 2 \times 12 / 2$.
    Th-91 Transformer

    Net 1.59

    - Ideal For Amplifiers, Intercoms and Receivers
    


    ## DI-T200 TRANSISTOR TRANSFORMER

    Same as the series on the left except lead material used is $1^{\prime \prime}$ long . 017 Dumet wire, gold plated and leads spaced on $\mathrm{l}^{\prime \prime}$ radius and conform to the "ro-s" cased semiconductors and micrologic elements. All rated at 500 mm level except $\dagger$ is 100
     Stock UIG MAY BE ASSORTED 1-24 25 -99 100.

    | $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ |  | Us* |  |  |  |  |  |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | 3TC. 340 | D1. 7225 | 1 | $80 \mathrm{CT} / 100$ | 32 split/ 40 | 8 | 7.14 | 6.72 |
    | 3TC-341 | DI-T230 | 0 L | 300 CT | 600 CT | 7.06 | 6.12 | 5.76 |
    | 3TC-342 | DI- 7235 | 1 | $400 \mathrm{CT} / 500 \mathrm{CT}$ | 40 split/ 50 split | 8.23 | 7.14 | 8.72 |
    | 3TC-343 | DI. 1240 | 01 | 400 CT/500 CT | 400 split/ 500 split | 8.23 | 7.14 | 6.72 |
    | 3TC. 344 | D1.T245 | OM | $500 \mathrm{CT} / 600 \mathrm{CT}$ | $50 \mathrm{CT} / 60 \mathrm{CT}$ | 6.76 | 5.87 | 5.52 |
    | 3TC. 345 | D1.1250 |  | 500 CT | 600 CT |  |  |  |
    | $3 T \mathrm{C}-346$ | DI. 1255 | OM | $1 \mathrm{KCT} / 1,2 \mathrm{KCT}$ | $50 \mathrm{CT} / 60 \mathrm{CT}$ | 7.08 | 8.12 | 5.76 |
    | $3 T C-347$ | D1-7260 | M | 1,5K CT | 600 CT | 7.06 | 6.12 | 5.76 |
    | 3 C C. 348 | D1. 1265 | IX | $2 \mathrm{KCT} / 2,5 \mathrm{KCT}$ | 8 K split/10K split | 8.53 | 7.40 | 6.96 |
    | 3TC-349 | D1. 12701 | OD | 10K CT/12K CT | $500 \mathrm{CT} / 600 \mathrm{CT}$ | 7.54 | 6.63 | 6.24 |
    | 3TC-350 | D1-T273 | 00 | $10 \mathrm{KCT} / 12,5 \mathrm{~K}$ CT | 1,2K CT/ $1,5 \mathrm{~K}$ CT | 7.64 | 5.63 | 6.24 |
    | 3TC-351 | DI. $\mathrm{T}_{2} 76$ | 10 | $10 \mathrm{KCT} / 12 \mathrm{KCT}$ | 2 K CT/2,4K CT | 7.64 | 6.63 | 6.24 |
    | 3 TC-352 | D1. T278 | 10 | $10 \mathrm{KCT} / 12.5 \mathrm{KCT}$ | 2 K split $/ 2,5 \mathrm{~K}$ split | 8.53 | 7.40 | 6.96 |
    | 3TC-353 | D1.T283 | IX | $10 \mathrm{KCT} / 12 \mathrm{KCT}$ | 10,K CT/12,K CT | 8.23 | 7.14 | 8.72 |
    | ${ }^{\text {3TC. }} 354$ | D1. 1288 ¢ | 10 | $20 \mathrm{KCT} / 30 \mathrm{KCT}$ | $800 \mathrm{CT} / 1,2 \mathrm{~K} \mathrm{CT}$ | 7.94 | 6.89 | 6.48 |
    | 3TC.355 | D1-T204* |  | Split Inductor 1 | Hy@ 4 madC | 5.88 | 5.10 | 4.80 |
    | 3TC-356 | D1-T208** |  | Split Inductor 9 | Hys @ 2 maDC | 5.88 | 5.10 | 4.80 |
    | 3TC-357 | DI.T212* |  | Split Inductor 2.5 | Hys @ 2 madc | 5.88 | 5.10 | 4.80 |
    | 3TC.350 | D1.T216 |  | Split Inductor 4. | Hys@ 2 madC | 6.76 | 5.87 |  |

    ## MINIATURE WIDE APPLICATION PULSE TRANSFORMERS

    Highly reliable wound core oulse transformer. Hermetically sealed by vacuum molding, usable from $-70^{\circ} \mathrm{C}$ to $+130^{\circ} \mathrm{C}$. Width micro-sec indicates both block ing oscillator and coupling characteristics. Meets MiL-T-21038B. All have ratio 1:1:1 except * = 5:3:1. Av. shpg, wt., 2 or

    | Stock No. | Mr. | Pri. Ohms | Sec. Ohms | Terty Ohms | $\begin{aligned} & \text { Imp. I, } \\ & \text { out, } \\ & \text { ohms } \end{aligned}$ | $\begin{aligned} & \text { Width } \\ & \text { usec. } \end{aligned}$ | Slze | $\begin{gathered} \text { May } \\ 1-24 \\ \text { EA. } \end{gathered}$ |  | orted <br> 100.Up <br> EA. |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | 3 TC. 289 | H-45 | 3 | 3.5 | 4 | 250 | 0.05 | 3/8×3\%" | 6.61 | 5.75 | 5.40 |
    | 3TC-290 | H-46 | 5.5 | 6.5 | 7 | 250 | 10 | 36x3/8 | 6.61 | 5.75 | 5.40 |
    | 3 TC-291 | H-47 | 3.7 | 4.0 | 4 | 500 | . 20 | $\%_{6} \times \%_{6}$ | 5.88 | 5.10 | 4.80 |
    | 3 3TC-292 | H.48 | 5.5 | 5.8 | 6 | 500 | . 50 | \%0x\% | 5.88 | 5.10 | 4.80 |
    | 3 TC-293 | H. 49 |  | 8.5 | 9 | 500 | 1 | \%16\%\% | 5.88 | 5.10 | 4.80 |
    | 3TC-294 | H. 50 | 20 | 21 | 22 | 500 | 2 | Y, $\times$ K | 5.88 | 5.10 | 4.80 |
    | 3TC-295 | H-51 | 28 | 31 | 33 | 500 | 3 | K, $x^{2}$ | 5.88 | 5.10 | 4.80 |
    | 3TC-296 | H-52 | 36 | 41 | 44 | 1000 | 5 | Sox | 5.88 | 5.10 | 4.80 |
    | 3 TC-297 | H. 53 | 37 | 44 | 49 | 1000 |  | 5/9x ${ }^{5 / 2}$ | 5.88 | 5.10 | 4.80 |
    | 3 TC-298 | H-54 | 50 | 58 | 67 | 1000 | 10 | $59.6 \%^{\prime \prime}$ | 6.17 | 5.36 | 5.04 |
    | 3TC-299 | H. 55 | 78 | 96 | 112 | 1000 | 16 | $5 / 8 \times 5 / 80$ | 6.17 | 5.36 | 5.04 |
    | 3TC. 300 | H-56 | 93 | 116 | 138 | 1000 | 20 | 5/8x590" | 6.17 | 5.36 | 5.04 |
    | 3TC-301 | H. 57 | 104 | 135 | 165 | 1000 | 25 |  | 6.17 | 5.36 | 5.04 |
    | 3 TC. 336 | H-461* | 9.6 | 6.4 | 2.5700 | /250 | . 1 | $3 \mathrm{~A} \times 1.8$ | 6.62 | 5.75 | 5.40 |
    | 3TC-337 | H-501* | 30 | 20 | 71400 | /500 | 2 | \% $0 \times 16$ | 5.88 | 5.10 | 4.80 |
    | $3 \mathrm{TC}-338$ | H-531* | 66 | 47 | 172800 | /1000 | 7 |  | 5.88 | 5.10 | 4.80 |
    | 3TC-339 | H-561* | 180 | 142 | 532800 | /1000 | 20 | 5/8x ${ }^{\text {/ }}$ | 6.18 | 5.36 | 5.04 |

    ## UTC PIP TRANSISTOR PULSE TRANSFORMER <br> Hermettcally sealed subminiature type $4: 4: 1$ ratio. Checked and adjusted in

    transistor test circuit for correct pulse width. Width is same in both coupling circult or blocking osc. Size Kt" dia $\times \mathrm{K}_{4}^{\prime \prime}$ high wi. $1 / 2$ oz

    UTC OUNCER AUDIO UNITS
    Weigh only 1 oz. Folly-impregnated and sealed. 7/8 Dlam, $x$ 1k."H. Shog. wr., 40 .

    ## INPUT ANO MIXING DUNCERS

    rigeresponse $30-20,000 \mathrm{CPS} \pm 1 \mathrm{DB}$ except - is $50-5000$. Max. level dbm +8 except $\Delta$ is +15 .

    | STOCK no. | UTC <br> TVPE | P8IMARY IMP | SEC IMPED | $\begin{gathered} 1-24 \\ E A \\ \hline \end{gathered}$ | $25.89$ | $\begin{gathered} 100 . U P \\ \text { EA } \end{gathered}$ |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | $3 \mathrm{CC}-129$ | 0-1 | 50/200/250/500/600 | 50,000 | 7.64 | 6.63 | 6.24 |
    | $3 \mathrm{TC}-130$ | 0-2 | 50/200/250/500/600 | 50,000 1 | 7.64 | 6.63 | 8.24 |
    | 3 TC-131 | 0-3 | 7.5/30 | 50,000 | 7.35 | 6.38 | 6.00 |
    | 3 TC-139 | 0-11 | 50,000 | 50/200/250/500/600 | 7.4 | 6.63 | 6.24 |
    | 3 TC-140 | 0-12 | 50,200/250 | 50/200/250/500/600 | 7.64 | 6.03 | 8.24 |
    | 3 TC. 142 | 0.14* | 200 | 1/2 Megohm | 7.35 | 0.38 | 0.00 |
    | 3 TC-144 | 0-16 | 250 Cl | 50,000 | 10.00 | 0.67 | 0.16 |
    | 3 TC-226 | 0-25 | 600/150 SPLIT | 2000/500 SPLIT | 7.94 | 6.89 | 4.48 |

    Freq. response $\pm 1$ OB types $0-4$ and $0.6=30-20 \mathrm{~K} ; 0-5$ and $0.7=200.10 \mathrm{~K} ; 0.15=100$ 3K; all others $100-20 \mathrm{~K}$. Max. level MW types $0-4$ thru $0-15$ is 6.3 ; types $0-18$ thru $0-30$ is 100; others 1 watt at 200 cycles. $1 / 2 \mathrm{~W}$ at 100 cycles. May Be Assorted
    

    | 10. | TYPE | UNBAL. MADC | SEC IMP | EA | ca | EA |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | 3TC-132 | 0-4 | 15,000 | 60,000 | 6.47 | 5.61 | 5.20 |
    | $3 \mathrm{TC.133}$ | 0.5 | 15,000, 4MA | 60,000 | 6.47 | 5.61 | 5.20 |
    | $3 \mathrm{TC}-134$ | 0.6 | 15,000 | 95,000CT | 7.35 | 6.38 | 8.00 |
    | 3TC-135 | 0.7 | 15,000, 4MA | 95,000C7 | 7.35 | 6.38 | 6.00 |
    | ${ }^{3} \mathrm{TC}$-143 | 0-15 | 15,000 | 1 MEG | 7.35 | 6.38 | 6.00 |
    | 3 TC. 146 | 0-18 | 10K/2.5K SPLIT, 4MA | 2000/500 SPLIT | 7.64 | 6.63 | 6.24 |
    | 3 TC-147 | 0.19 | 10K/2.5K SPLIT, 4MA | 4K/1K SPLIT | 7.64 | 6.63 | 624 |
    | 3 TC-227 | 0.26 | 10,000CT, 4MA | 10,000 | 7.94 | 4.18 | 6.48 |
    | 3 TC-228 | 0-27 | 10,000CT, 4MA | 500/125 SPLIT | 0.23 | 7.14 | 672 |
    | 3 TC-229 | 0.28 | 50,000CT, 2MA | 500/125 SPLIT | 0.23 | 7.14 | 6.72 |
    | 3 TC-230 | 0-29 | 100,000CT, 1MA | 500/125 SPLIT | 4.53 | 7.40 | 6.96 |
    | 3TC-231 | 0.30 | 500/125 SPLIT, 20MA | $500 / 125$ SPLIT | 7.44 | 5.68 | 6.48 |
    | 3TC-232 | 0.31 | 500/125 SPLIT, 20MA | 150/37.5 SPLIT | 7.94 | 6.89 | 6.48 |
    | 3 TC-233 | 0.32 | $500 / 125$ SPLIT, 20MA | 50/12.5 SPLIT | 7.94 | 6.09 | 6.48 |
    | 3TC-234 | 0.33 | 100/25 SPLIT, 40MA | $40 / 10$ SPLIT | 7.94 | 6.08 | 6.48 |

    OUTPUT OUNCERS
    Freq, response $\pm 108100-20 \mathrm{~K}$ except ${ }^{2}$ is $30-20 \mathrm{~K}$ and $0-9$ is $200-10 \mathrm{~K}$. Max. level MW 6.3 except $\dagger$ is 100 and $0-22$ Is IW at 200 cycles.
    sTock UTC PRIMARY IMP

    | 6.3 exc STOCK NO. | UTC <br> TYPE | and $0-22$ Is IW PRARY IMP UNBAL MAOC | SEC IMP | $\begin{gathered} \text { May } \\ 1.24 \\ \text { EA } \end{gathered}$ | $\begin{gathered} \text { Be Ass } \\ 25-95 \\ \text { Eh } \end{gathered}$ | $\begin{aligned} & \text { sorted } \\ & 100 \text { EA } \\ & \text { EA } \end{aligned}$ |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | $3 \mathrm{TC}-136$ | 0-8* | 15,000 | 50/200/250/500/600 | 7.4 | 6.03 | 6.24 |
    | 3 TC. 137 | 0.9 | 15,000. 4MA | 50,200/250,500/600 | 7.64 | 6.63 | 6.24 |
    | 3 TC-138 | $0.10^{\circ}$ | 30,000CT | 50.200/250,500/600 | 8.23 | 7.14 | 6.72 |
    | $3 \mathrm{TC}-148$ | 0.201 | 1500CT, 8MA | 500/125 SPLIT | 6.17 | 5.38 | 5.04 |
    | 3 TC. 148 | 0.21 | ${ }^{2 \mathrm{KCT}}, 4 \mathrm{Ma}, 4 \mathrm{KCT}$ | 8/16 | 5.29 | 4.59 | 4.32 |
    | 3 TC-150 | 0-22 | $400 \mathrm{CT}, 20 \mathrm{MA} ; 500 \mathrm{CT}$ | 3.2/4 | 5.29 | 4.59 | 4.32 |
    |  |  | REACTDRS |  | May Be Assorted |  |  |
    | STOCK NO. | UTC TYPE | DESERIPTION |  | $1.24$ | $25.99$ | $\begin{aligned} & 100-\text { UP } \\ & \text { EA } \end{aligned}$ |
    | 3 TC-141 | 0.13 | 300 Hys. @ 0 O.C; 50 Hys. © 3 MADC 6000 Ohms 7 Hys. @ 3 MADC; 3.5 Hys. 10 MADC; 230 Ohms 1.6 Hys.@3MADC; 8 Hys. 10 MADC; 25 Ohms |  | 0.17 | 5.3* | 5.04 |
    | $3 \mathrm{TC}-151$ | 0.23 |  |  | 5.00 | 4.34 | 4.08 |
    | 3 TC. 152 | 0.24 |  |  | 5.00 | 4.34 | 4.09 |
    | 3 TC-14S | Type 0-17 | SHIELD <br> Hiperm Shield for 25 OB shielding |  | 1.47 | 1.24 | 1.20 |
    | 3TC-317 | SO-CH | Mounting Channel for above |  | . 30 | . 26 | . 24 |

    "Construction \& "Use" UTC SUB-OUNCERS
    this page. Size $4 x^{2} / x^{1}$.". Weigh same as suo-sub ouncers listed on
    SO. 2100 MW , S0. 3 thru S0. 8200 MW , others 250 MW . Shpg. wt., 2 oz

    | $\begin{gathered} \text { sTOCX } \\ \text { NO. } \\ \hline \end{gathered}$ | $\begin{aligned} & \text { UTC } \\ & \text { TYPE } \end{aligned}$ | USE | $\begin{aligned} & \text { PRIM } \\ & \text { IMP } \end{aligned}$ | MAOC | $\begin{aligned} & \text { SEC } \\ & \text { IMP } \end{aligned}$ | $\begin{gathered} \text { May } \\ 1.24 \end{gathered}$ | $\begin{aligned} & 8 \mathrm{~A} \\ & 25-99 \end{aligned}$ | $\begin{aligned} & 100 \cdot \text { UP } \\ & \text { EA } \end{aligned}$ |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | 3 TC. 153 | S0.1 | A | 200/50 | 0 | 250K/62.5K | 3.53 | 3.06 | 2.88 |
    | 3TC-154 | S0-2 | 1 | 10k | 0.25 | 90 K | 3.23 | 2.81 | 2.64 |
    | 3TC-155 | S0-3 | P | 10k/25K | 3/1.5 | 200/500 | 3.23 | 2.81 | 2.64 |
    | 3TC-156 | 50-4 | 0 | 30 K | 1.0 | 50 | 3.23 | 2.81 | 2.64 |
    | 3TC-158 | S0-6 | 0 | 100k | . 5 | 60 | 3.82 | 3.32 | 3.12 |
    | 3TC. 159 | S0.7 | TI | 20k/30K | .5/.5 | 800/1200 | 2.94 | 2.55 | 2.40 |
    | 3 3C-160 | S0-8 | TP | 10k | 1 | 2000 CT | 3.53 | 3.06 | 2.88 |
    | 3TC.161 | 50.9 | TV | 500 CT | 0 | 3.2 | 3.53 | 3.06 | 2.88 |
    | 3TC-162 | S0-10 | TV | $2 \mathrm{KCT} / 4 \mathrm{KCT}$ | 4/2 | $8 / 16$ | 3.53 | 3.06 | 2.88 |
    | 3TC-235 | S0-11 | II | 400CT/500CT | 8 | 400 SPLIT/500 SPLIT | 4.12 | 3.57 | 3.36 |
    | 3TC-236 | S0-12 | TI | $400 \mathrm{CT} / 500 \mathrm{CT}$ | 8 | 120 SPLIT/150 SPLIT | 4.12 | 3.57 | 3.36 |
    | 3TC. 237 | S0.13 | TI | $400 \mathrm{CT} / 500 \mathrm{CT}$ | 8 | 40 SPLIT/ 50 SPLIT | 4.12 | 3.57 | 3.36 |
    | 3 TC -238 | S0.14 | TI | 80CT/100CT | 16 | 32 SPLIT/ 40 SPLIT | 4.12 | 3.57 | 3.36 |
    | 3TC-157 | SO-5 |  | Reactor, 50 Hy | @1 MA | 2675 OHMS | 2.94 | 2.55 | 2.40 |

    ## SUB-OUNCER PRINTED CIRCUIT MOLDED TYPE

    All are 200 mw except SO-2P, 100 mw ; SO-9P, 250 mw .
    Size, $3 / 4 \times 1 \times{ }^{2} \gamma_{2}$ " Shpg. wt., 2 oz.
    

    ## UTC ULTRA COMPACT AUDIO UNITS

    The UTC Ultra compact audio units are high fldelity units, small and light in weight, ideally suited to remote amplifier and similar compact equipment. Case size $11 / 2 \mathrm{~L} \times 11 / 2 \mathrm{~W} \times 2^{\prime \prime} \mathrm{H}$ Shpg. wt., $3 / 4 \mathrm{lbs}$.

    INPUT TRANSFORMERS
    All are $\pm 20 \mathrm{~B}$ from $20-20,000 \mathrm{cps}$ except A-20 is $10-50,000 \mathrm{cps}$ and A-21 is $30-30,000$ cps. Max. level +15 dbm on all except $A-11$ is $+5 \mathrm{dbm}, A-39$ is +10 dbm . indicates multiple alloy shield. $\dagger$ indicates high electrostatic' shielding.

    | $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | $\begin{gathered} \text { Type } \\ \text { No. } \end{gathered}$ | Primary Imp. | Secondary Imp. | May Be Assorted |  |  |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    |  |  |  |  | $\begin{gathered} 1-24 \\ \text { Ea, } \end{gathered}$ | $\begin{gathered} 25-99 \\ \text { Ea } \end{gathered}$ | $100-1 \mathrm{Jp}$ |
    | $37 \mathrm{C}-250$ | A. 10 ( | (50.125/150, | 50.000 (Split) | 12.94 | 11.22 | 10.56 |
    | $31 \mathrm{C}-251$ | A-12 | 200/250, 333 | 80.000 (Split) | 11.76 | 10.20 | 9.60 |
    | 37 C -252 | A-20¢ | 500/600 | Same as orimary | 14.11 | 12.24 | 11.52 |
    | 3TC-253 | A-11* | 50, 200, 500 | $50,000 \mathrm{CT}$ | 11.76 | 10.20 | 9.60 |
    | 31C. 254 | A.21* $\dagger$ | 50, 200/250 | $50.250 / 500$ | 11.76 | 10.20 | 9.60 |
    |  |  | 500/600 | 500/600 |  |  |  |
    | 37C-255 | A.39* | 600/150 (Split) | 2000/500 (Split) | 10.88 | 9.44 | 8.88 |

    All are +2 db from $40-20,000 \mathrm{cps}$ except $\ddagger$ which is $30-20,000 \mathrm{cps}$
    $\Delta$ is $20-20,000 \mathrm{cps}$ * is $20-40,000 \mathrm{cps}$. Max Level is 1 Watt except t which is

    | Stock No. | $\begin{gathered} \text { Type } \\ \text { Mo. } \end{gathered}$ | Primary Ime. | Secondary Imp. | $\begin{gathered} \text { 1-24 } \\ \text { Ea. } \end{gathered}$ | $\begin{gathered} 25-99 \\ \text { Ea. } \end{gathered}$ | $\begin{gathered} \text { 100.Up } \\ \text { E3. } \end{gathered}$ |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | 3TC. 256 | A-15 | 10,000/2500 (Split) | 2000/500 (Split) | 9.70 | 8.42 | 7.92 |
    | 3TC.257 | A.16A | 15,000 | 60,000 | 9.70 | 8.42 | 7.92 |
    | 3TC-258 | A-184 $\dagger$ | 15,000 (Split) | 80,000 (Split) | 11.76 | 10.20 | 9.60 |
    | 3TC. 259 | A-19 $\dagger$ | 15.000 | 80.000 (Split) | 11.76 | 10.20 | 9.60 |
    | 3TC-260 | A-22 | 500 CT | 500/125 (Split) | 9.70 | 8.42 | 7.92 |
    | 3TC-261 | A-23 | 500 CT | 16/4 (Split) | 9.70 | 8.42 | 7.92 |
    | 3TC.262 | A-24* $\dagger$ | 15,000 (Split | 50, 125/150 | 12.64 | 10.97 | 10.32 |
    | 37 C 263 | A. 25 t | 15,000 | 200/250, 333 | 11.76 | 10.20 | 9.60 |
    | 3TC-264 | A-26 ${ }^{\circ} \dagger$ | 30.000 (Splif) | $500 / 600$ | 12.94 | 11.22 | 10.56 |
    | 3TC. 265 | A.34 | 25,000/6250 (Split) | 500/125 (Split) | 10.00 | 8.67 | 8.16 |
    | 3TC-266 | A.35\% | 10,000/2500 (Split) | $500 / 125$ (Split) | 9.70 | 8.42 | 7.92 |
    | 3TC. 267 | A-36 | $500 / 125$ (Split) | 150/37.5 (Split) | 9.41 | 8.16 | 7.68 |
    | 31C.268 | A-37 | 500/125 (Split) | 50/12.5 (Split) | 9.41 | 8.16 | 7.68 |
    | 3TC-269 | A. 38 | $100 / 25$ (Split) | 40/10 (Split) | 9.11 | 7.91 | 7.44 |
    | 3TC-272 | A. 33 | Hipermalloy shield |  | 2.65 | 2.30 | 2.16 |

    UTC SUB-SUB OUNCERS
     INPUT, I-INTERSTAGE, P P plate to line, 0 -output, Ti-Iransistor Interstage. TP-transistor to PP sec, TV-Trans. to V.C., TO-trans. output,
    CT-crystal to trans., D-driver, CC-crystal chopper. Max level 100 MW
    except is 5 mw and A is 30 MW . Primary MADC is UNBALANCED.
    
    

    # THORDARSON TELEVISION AND AUDIO TRANSFORMERS 

    

    ECONOMY "24" POWER TRANSFOMERS

    ## ATTENTION INDUSTRIAL BUYERS

    WRITE, WIRE OR PHONE OUR INOUSTRIAL DIVISION FOR PRICES IN LARGER QUANTITIES.

    FILAMENT TRANSFORMERS

    | All primaries are 117 Volt $50 / 60$ cycle except * which is 6.3 V . |  |  |  |  |  |  |  |  |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | stock No. | Thord No. | $\begin{aligned} & \text { Mtg. } \\ & \text { Type } \end{aligned}$ | Secondary |  |  | Shpg. | Net Each |  |
    |  |  |  | Volts | Amps | Insul. | Wt. Lbs. |  | 5.49 |
    | T8-36 | 21503 | BAV | 5 CT | 3.0 | 2500 | 1.0 | 3.97 | 3.44 |
    | TB. 38 | 21508 | BAV | 6.3 CT | 1.0 | 2500 | 1.0 | 1.76 | 1.55 |
    | TB-39 | 21F09 | BAH | 6.3 CT | 1.2 | 2500 | 1.0 | 1.76 | 1.55 |
    | TB-40 | 21F10 | BAH | 6.3 CT | 3.0 | 2500 | 1.25 | 2.68 | 2.32 |
    | T8-41 | $21 F 11$ | CAV | 6.3 CT | 6.0 | 2500 | 2.75 | 4.41 | 3.80 |
    | T8-42 | 21512 | CAV | 6.3 CT | 10 | 2500 | 3.25 | 5.59 | 4.84 |
    | T8-43 | 21527 | BAH | 26.5 CT | . 6 | 3000 | 1.25 | 3.67 | 3.19 |
    | TB.48 | $26 F 60$ | BAH | 6.3 | 1.2 | 5000 | 1.25 | 2.65 | 2.21 |
    | T8-49 | 26561 | BAH | $\left\{\begin{array}{l}5.3 \\ 6.3\end{array}\right.$ CT | $\left\{\begin{array}{l}3.0 \\ 3.6\end{array}\right.$ | $\left\{\begin{array}{l}2500 \\ 2500\end{array}\right.$ | 2.5 | 6.86 | 5.95 |
    | TB. 50 | 26563 | BAV | 16.3 | $\{3.0$ | \% 5000 | 2.0 | 5.14 | 4.44 |
    |  |  |  | 6.3 | ( 3.0 | 15000 |  |  |  |
    | TB. 52 | 26F65* | BAH | 6.3 | 1.2 | 5000 | 1.25 | 2.65 | 2.35 |
    | TB. 53 | $26 F 67$ | BAH | 12.6 Cr | 2.0 | 2500 | 1.0 | 3.28 | 2.69 |
    | TB. 54 | 26F69 | HKF | \{ 6.3 | $\{3$ | 2500 | 3.0 | 7.06 | 6.12 |
    |  |  |  | \% 6.3 | 16 |  |  |  |  |
    | T8.45 | $21 F 34$ | BAH | 2.5 CT | 1.5 | 2500 | . 7 | 2.20 | 2.65 |
    | TB-46 | $21 F 35$ | BAH | 2.5 CT | 2.5 | 2500 | . 7 | 2.80 | 2.42 |
    | T8-34 | $21 F 01$ | BAV | 2.5 CT | 10 | 2500 | 1.5 | 4.41 | 3.82 |
    | T8-35 | $21 F 02$ | CAV | 2.5 CT | 10 | 10000 | 2.75 | 5.14 | 4.46 |
    | T8.37 | 21506 | CAV | 5.0 CT | 13 | 2500 | 3.25 | 7.64 | 6.63 |
    | TB-47 | 21540 | BAV | 6.3 CT | 3 | 2500 | 1.0 | 3.38 | 2.93 |
    | TB-33 | 21500 | BAV | 2.5 CT | 5 | 2500 | 1.0 | 2.94 | 2.55 |
    | TB-44 | 21F31 | BAV | 2.5 CT | 5 | 7500 | 1.5 | 3.03 | 2.63 |

    ## FILTER CHOKES

    All chokes are BAH mounting type except ones which are mounting type GGV.

    | Stock | Thord No. | Hys. | Ma | Onms | Size | Lbs. | Net |  |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | TB-23 | $20 C 49$ |  |  |  |  |  |  |  |
    | 18-23 | 20.49 | 5 4.5 | $\begin{aligned} & 150 \\ & 200 \end{aligned}$ | 58 | 25/6x21/6x4 | 2.5 | 3.38 | 2.93 |
    |  |  | 4 | 250 |  |  |  |  |  |
    | TB. 24 | $20 C 53$ | $\begin{aligned} & 17 \\ & 12 \end{aligned}$ | 60 80 | 375 | $2 \times 21 / 8 \times 31 / 4$ | 1.5 | 2.20 | 1.85 |
    |  |  | 8 | 100 |  |  |  |  |  |
    | TB-25 | 20C54* | 12 | 100 | 145 | $31 / 6 \times 25 / 6 \times 25 / 6$ | 3.0 | 3.97 | 3.44 |
    |  |  | 8 | 150 |  |  |  |  | 3.44 |
    |  |  | 4 | 200 |  |  |  |  |  |
    | TB-26 | 20C55* | 9 | 150 | 75 | $31 / 2 \times 27 / 6 \times 31 / 4$ | 3.5 | 5.88 | 5.10 |
    |  |  | 6 | 200 |  |  |  |  |  |
    |  |  | 2 | 300 |  |  |  |  |  |
    | T8.28 | 26C41 | 1.5 | 200 | 90 | 1560156927/8 | 0.7 | 1.55 |  |
    | TB-29 | $26 \mathrm{C42}$ | 4.2 | 50 | 200 | 156x15/3×27/8 | 0.5 | 1.47 | 1.28 |
    | 18.30 | $26 \mathrm{C43}$ | 2 | 200 | 50 | 2×15/631/8 | 1.0 | 2.35 | 2.04 |
    | TE-31 | $26 \mathrm{C44}$ | 1 | 300 | 60 | 2x24/2x $31 / 8$ | 1.5 | 2.94 | 2.55 |
    | TB.32 | 26C45** | 10 | 200 | 140 | $31 / 2 \times 27 / 6 \times 41 / 8$ | 4.9 | 6.17 | 5.35 |

    

    Types ending with $U$ are for upright mounting Fig. GCV. Others have adjustable brackets to allow flush, vertical or horizontal mounting Fig. AGF. All have 110-120 volt $50-60$ cycle primaries. FiI. 1 windings are CT. **All plate windings are centertapped.
    

    | Stock No. | Thord No. | Primary Impedance | Sec IMP |  |  | Mtg. | Lbs. |  |  |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    |  |  |  |  |  | Type |  | Los. | 1.4 | 5.49 |
    | T8-83 | 24S60 | $\begin{aligned} & 4000 / 7000 / 8000 / \\ & 10000 / 14000 \mathrm{CT} . \end{aligned}$ | .1-30 | 4 | BHH | 2 | $1 / 2$ | 2.35 | 2.04 |
    | TB-84 | 24561 | Same as above | . 1.30 | 8 | BHH | 2388 | 1 | 2.51 | 2.17 |
    | TB-87 | 26546 | Same as above | . 1.30 | 18 | BHV | 23\% | 142 | 3.88 | 3.56 |
    | T8-73 | 22587 | $\begin{aligned} & 2000 / 3500 / \\ & 8000 / 14000 \mathrm{cr} . \end{aligned}$ | 3.5/8 |  | BAH | 23/8 | $3 / 4$ | 4.41 | 3.82 |
    | TB-74 | 22S88 | Same as above | 3.5/8 | 8 | BAH | 2\% | 1 | 4.41 | 3.82 |
    | T8-27 | 22S62 | $\begin{aligned} & 1500 / 2000 / 2500 / \\ & 3000 / 4000 \mathrm{CT} \text {. } \end{aligned}$ | . $1-30$ | 8 | BHH | 27/8 | $11 / 4$ | 3.67 | 3.19 |
    | T8-67 | 22S60 | 2500/4000 СT. | 3.5/8 | 10 | BAH | 27/8 | $11 / 4$ | 3.67 | 3.19 |
    | TB-66 | 22558 | 5000/7000 CT. | 3.5/8 | 10 | BAH | 27\% | 11/4 | 2.94 | 2.55 |
    | TB-65 | 22S56 | 8000/10000 CT. | 3.5/8 | 10 | BAH | 27/8 | $11 / 4$ | 2.94 | 2.55 |

    ## FIXED AUDIO OUTPUT

    Unlts marked * are humbucking with $3 \%$ and $6 \%$ taps. All are BAH-BAV mounting types and have 3.2 ohms secondary. $26 \$ 59$ also has 8 and 16 ohm secondary.

    | Stock No. | Thord |  |  | Mtg. | Wt. | Net Each |  |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    |  |  | Pri. Imp. | Watts | Ctrs. | Lbs. | 1.4 | 5-49 |
    | TB-77 | 24548 | 4000-5000 | 5 | 13/4 | $1 / 2$ |  |  |
    | TB-78 | 24549 | 7000-8000 | 5 | 13/8 | $1 / 2$ | 1.18 1.18 | 1.02 |
    | T8.79 | 24S50 | 2000 | 5 | 13/4 | $1 / 2$ | 1.18 1.27 | 1.02 |
    | TB-20 | 24S50A* | 2000 | 5 | 2 | $1 / 2$ | 1.27 1.91 | 1.65 |
    | T8-80 | 24S51 | 5000 | 5 | 2 | $1 / 2$ | 1.27 | 1.10 |
    | TB-21 | $24551 A^{*}$ | 5000 | 5 | 2 | $1 / 2$ | 1.91 | 1.65 |
    | TB-81 | 24552 | 7000-10000 | 5 | 2 | $1 / 2$ | 1.32 | 1.15 |
    | T8-82 | 24554 | 15000-25000 | 5 | 2 | $1 / 2$ | 1.35 | 1.17 |
    | TB-88 | 26547 | 14000 CT . | 12 | 23/4 |  | 2.94 | 2.70 |
    | TB-89 | 26548 | 7000 | 8 | 23\% | $3 / 4$ | 2.49 | 2.31 |
    | TB-90 | 26549 | 5000 | 8 | 23\% | $3 / 4$ | 2.20 | 2.03 |
    | TB.91 | 26S50 | 3500 | 8 | 23/6 | $3 / 4$ | 2.49 | 2.31 |
    | T8-92 | 26558 | 2500 | 3 | 11/2 | 1/2 | 1.76 | 1.62 |
    | 18-93 | 26559 | 10000 CT . | 10 | 23/4 | $1{ }^{1 / 2}$ | 3.53 | 3.24 |

    AUDIO INTERSTAGE TRANSFORMERS
    Primary current, 8 ma. All Fig. BAH except $20 A 23$ Fig. FGV and 20A29, Fig. BAH Av. Shpg. wt., $11 / 4 \mathrm{lbs}$.

    | Stock No. | Thora No. | Turns Ratio | Application | Mtg. Ctrs. |  | $\begin{gathered} \text { Each } \\ 5-49 \end{gathered}$ |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | TB-15 | 20 A16 | 1:2 | Sgl. plate to sgl. or PP grids | $2{ }^{\prime \prime}$ | 1.91 | 1.66 |
    | TB-17 | 20419 | 1:3 | Plates to grids, sgl. or PP | 23/8" | 2.59 | 2.24 |
    | TB-18 | 20422 | 1:3 | SgI. plate to sgI, or PP grids | 27/8" | 2.50 | 2.17 |
    | TB-19 | 20423 | 1:3 | Sgl. Plate to sgl. or PP grids | 23\% | 5.23 | 4.54 |
    | TB-22 | 20429 | 1:1:1:1 | Univ. car radlo interstage | $2^{\prime \prime}$ | 5.29 | 4.59 |
    | $\qquad$ TUBE-TO-LINE TRANSFORMERS (LOW LEVEL) <br> Rated 8 Watts. Primary for single or PP plates. Frequency response 60-15,000 |  |  |  |  |  |  |
    |  |  |  |  |  |  |  |
    | Stock No. | Thord No. | Fig. | Pri. Se | Ctrs. | $\underset{1-4}{\text { NET }}$ | EACH <br> 5.49 |
    | T8-75 | 22S90 | FGV | 20,000 CT. 125,200,500 | $\begin{aligned} & 23 / 6 \\ & 27 / 8 \end{aligned}$ |  | $\begin{aligned} & 3.82 \\ & 2.80 \end{aligned}$ |
    | T8.76 | 22591 |  | 20,000 CT. 125,200,500 |  | 3.23 |  |

    # THORDARSON TRANSISTOR AND MICROPHONE TRANSFORMERS <br> $\rightarrow$ BAV <br> <br> \section*{BAK <br> <br> \section*{BAK <br> <br> <br> BAH} <br> <br> <br> BAH} <br> MAH <br>  

    ## -THORDARSON TRANSISTOR TRANSFORMERS

    Usages indicated in application column are A-input, S-output, 0 -driver and $J$-inter stage. All 50 milliwatt are type $\mathrm{MAH} 7 / 16 \times 1 / 2 \times 7 / 16 ; 150 \mathrm{MW}$ are type BCH $11 / 16 \times 13 / 16 \times 5 / 8 ; 300 \mathrm{MW}$ are type BAH $3 / 4 \times 5 / \mathrm{Bx} 13 / 16$. Average shpg. wt., 6 oz .

    Stock Thord. TB. 94

    | No. | No | Wind'g. 1 | Wind'g. 2 |
    | :---: | :---: | :---: | :---: |
    | - TB.94 | TR-1 | 500 CT | 500CT |
    | TB-95 | TR-2 | 5,000CT | 7,500 |
    | TB-98 | TR-5 | 490CT | 150CT |
    | TB. 100 | TR. 7 | 10,000 | 2,000CT |
    | TB-101 | TR-B | 48 CT | $4 / 8$ |
    | TB-102 | TR-9 | 5,000 | 30,000CT |
    | T8-107 | TR-14 | 20,000 | 1,200 |
    | TB-110 | TR-17 | 20.000 | 800CT |
    | TB-114 | TR-21 | 160CT | $4 / 8$ |
    | 78-115 | TR-22 | 400 CT | $4 / 8$ |
    | 18.116 | TR-23 | 10.000 | 200CT |
    | TB. 120 | TR-27 | 500CT | 3.2 |
    | T8-121 | TR-28 | 200,000 | 1,000 |
    | T8-122 | TR-29 | 825CT | 3.4 |
    | TB-125 | TR-32 | 9,800 | 15 |
    | TB.129 | TR-36 | 500,000 | 200CT |
    | TB.131 | TR-38 | 6.000 | 5.000 CT |
    | T8-132 | TR-39 | 4,000 | 2.600 CT |
    | TB-137 | TR-44 | 20,000 | 1,200 |
    | TB-142 | TR-49 | 500CT | 10 |
    | TB.143 | TR-50 | 200CT | 3.2 |
    | TB-194 | TR-101 | 350 CT | $4 / 12$ |
    | TB-206 | TR-113 | 400 CT | 4/8/16 |
    | T8-207 | TR-114 | 500CT | 4/8/16 |
    | TB-208 | TR-115 | 700 CT | 4/B/16 |
    | TB-209 | TR-117 | 2,500 | 4/8/16 |


    | All Type BAH. Shpg. wt., 1 lb . |  |  |  |  |  |  |  |  |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | Stock No. | Thord No. | Impedance |  | Primary | Watts | Mtg. Center | Net Each |  |
    |  |  | Primary | Secondary | MADC |  |  | $1-4$ | 5.49 |
    | TB. 157 | TR-64 | 100 | 100CT | 200 | . 5 | 13/4 | 2.08 | 1.79 |
    | T8-158 | TR-65 | 100 | 200Ct | 200 | 5 | 13/4 | 2.08 | 1.79 |
    | TB-159 | TR-66 | 500CT | 200ct | 50 | . 5 | $13 / 4$ | 2.08 | 1.79 |

    

    Consists of a single-layer winding and high grade toroidal core. Sliding brush taps transformer to permit selection of any output voltage. All have over voltage connections. Has zero wave form distortions. Brush is always in contact with at least one turn of wire. Bench models are housed in die cast aluminum cases equipped with pilot light, switch, fuse, line cord with plug, and output receptacle. All are for $50-60$ cycle operation. 25 cycle operation is permissible if output power ratings are reduced by $50 \%$

    | Stock No. | $\begin{gathered} \text { Mir. } \\ \text { No. } \end{gathered}$ | Fig. | Input Volts | Output |  | Max. <br> MVA | Description | Shipg. Wt. Lbs. | Size | Each Asst.$1.5 \mid 6.49$ |  |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | T0-155 | PA-1 | A | 120 | 0.132 | 1.25 | . 165 | Portable type |  |  |  | 14.80 |
    | TD-150 | $1008 U$ | B | 120 | 0.132/0.120 | 1.25 | . 165 | Mounts up to $1 / 4{ }^{\prime \prime}$ Panel | 3 | $2 y_{1} \times 2^{\prime} y_{2}$ | 8.09 | 6.60 |
    | T0.156 | PA-3 | C | 120 | $0 \cdot 140$ | 3.0 | 42 | Portable type | 7 | $61 / 2 \times 61 / 5 \times 61 / 2$ | 25.48 | 20.80 |
    | T0. 151 | 300BU | 0 | 120 | 0.140/0-120 | 3.0 | . 42 | Mounts up to $1 / z^{\prime \prime}$ Panel | 5 | 31160311/6 | 12.25 | 10.00 |
    | T0.152 | 5008 | E | 120 | 0.140/0.120 | 7.5 | 1.05 | Enclosed type | 11 | 64/2x45/8 | 22.54 | 18.40 |
    | T0.153 | 500 BU | F | 120 | 0-140/0-120 | 7.5 | 1.05 | Mounts up to $1 / 2^{\prime \prime}$ Panel | 10 | $5 \times 45 / 8$ | 17.64 | 14.40 |

    

    ACME T8394M VARIABLE VOLTAGE ADJUSTER

    300 w . continuous duty variable transformer. Adjusted by rotary tap sw. Used as step up r. step down. Voltmeter shows sec, voltage. Pri. $95 / 100 / 105 / 110 / 115 / 120 / 125$ volts at $50 / 60 \mathrm{cps}$. Sec. out 115 V. $8^{\prime}$ cord and plus. Size $43 / 4 \times 4 \times 5^{\prime \prime}$. Shpg. wt., 9 lbs.
    

    LAFAYETTE SPECIAL
    70.7 VOLT LINE-TO.VOICE COIL TRANSFORMER

    - 10 watts max.
    $5.8-16$ onms

    70 volt line-to-volce coll maiching transformer. Primary tapped 10, 5, 2.5, 1.25 and .625 watts. Secondary tapped 5,8 and 16 ohms. Size $2 \times 11 / 2^{\prime \prime}$. Mitg. Centers $23^{\prime \prime}$
    TR-111 ShDg. wt. 1
    1 lb .

    Net 11.32 TR-1i1

    ## LAFAYETTE

    These transistorized power fransformers are ideally suited for power supplies for all kinds of battery operated equipment such as mobile communication systems, aircraft and marlne navigational systems, photoflash, ultrasonic applications and even 117 Volts 60 CPS from an automoblle battery so as to operate 117 V radio. television, electric shavers, etc. Complete instructions supplied with each transformer. "At 60 cycles. Average shpg. wt., $1 / 2 \mathrm{ib}$.

    | Stock No. | Thord. No. | Volt in. | Output Volt | Pow. Out | Mtg. <br> Type | $\begin{aligned} & \text { Mtg. } \\ & \text { Ctrs. } \end{aligned}$ |  | $\begin{aligned} & \text { ach } \\ & 5 \cdot 49 \end{aligned}$ |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | T8. 162 | TR-69 | 6 | *117VAC | 50 | GGV | 15/9x2 | 8.82 | 7.65 |
    | T8-163 | TR-70 | 12 | -117VAC | 50 | GGV | $15 / 8 \times 2$ | 8.82 | 7.65 |
    | TB-164 | TR-71 | 12 | - 117VAC | 110 | GGV | 2\%. $\times 21 / 2$ | 10.58 | 9.18 |
    | TB-165 | TR-72 | 12 | -117VAC | 250 | GGV | $3 K_{0} \times 3$ | 17.64 | 15.30 |
    | TB-167 | TR-74 | 12 | 150VDC | 15 | TAV | $14 / 4 \times 21 / 8$ | 8.82 | 7.65 |
    | TB-168 | TR-75 | 12 | 200VDC | 20 | TAV | $11 / 4 \times 21 / 8$ | 10.58 | 9.18 |
    | TB-169 | TR-76 | 6 | 225VDC | 15 | TAV | $11 / 4 \times 21 / 8$ | 10.58 | 9.18 |
    | TB-170 | TR-77 | 12 | 225 VDC | 20 | TAV | 11/4 $\times 21 / 6$ | 10.58 | 9.18 |
    | TB-171 | TR-78 | 12 | 250VDC | 16.5 | DAH | 11/2 | 5.88 | 5.20 |
    | TB-172 | TR. 79 | 6 | 250VDC | 50 | TAV | $11 / 2 \times 27 / 8$ | 10.58 | 9.18 |
    | T8-173 | TR-B0 | 12 | 250VDC | 50 | TAV | $11 / 2 \times 23 /$ | 10.58 | 9.18 |
    | TB-175 | TR-82 | 12 | 275 VDC | 48 | TAV | $11 / 4 \times 21 / 8$ | 10.58 | 9.18 |
    | TB-176 | TR-83 | 12 | 300 VDC | 30 | OAH | $11 / 2$ | 8.82 | 7.65 |
    | TB. 177 | TR-B4 | 12 | 300 \& 150VDC | 120 | TAY | $11 / 2 \times 23 / 8$ | 17.64 | 15.30 |
    | TB-181 | TR-88 | 4.5 | 390 VOC | 12 | OAH | $11 / 2$ | 8.82 | 7.65 |
    | TB-191 | TR-98 | 12 | 1500VDC | 20 | TAV | 11/2×23/4 | 10.58 | 9.18 |
    | TB-192 | TR-99 | 6812 | $\begin{aligned} & 200 \cdot 225-250 \\ & \text { of } 275 \mathrm{VDC} \end{aligned}$ | 20 | TAV | 112 $23 \%$ | 10.58 | 9.18 |

    ## POWER TRANSISTOR OUTPUTS

    All rated 10 watts except $\dagger$ is 5 and $\ddagger$ is 3 . Average shpg. wt., 1 lb .

    | Stock No. | Thord. No. | $\underset{\text { Primary }}{\substack{\text { Imp }}}$ | dance Secondary | Primary MADC | Mts. | Mtg. Centers | $\begin{aligned} & \text { Not Each } \\ & 1-4,5-49 \end{aligned}$ |  |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | TB.150 | TR-57 | 32 CT | 1.6/4 | 575 | BAH | 2'\%6, | 3.82 | 3.32 |
    | T8.151 | TR-58 | 32 CT | 3.2/8/16 | 575 | ВАН | 2\%, | 3.23 | 2.80 |
    | T8.152 | TR-59 | 48 CT | 1.6/4 | 550 | eav | 23\% | 3.82 | 3.32 |
    | T8-153 | TR-60 | 48 CT | 3.2;8/16 | 550 | bhy | 23.8 | 3.82 | 3.32 |
    | 18.154 | TR-61 $\dagger$ | 48 CT | 3.2/8/16 | 550 | BhV | $11 / 4$ | 2.06 | 1.79 |
    | TB-155 | TR-62 ${ }^{\text {¢ }}$ | 100 | 3.2/8/16 | 150 | BAV | $13 / 2$ | 2.06 | 1.79 |
    | TB. 156 | TR-63 | 100 CT | 3.2/8/16 | 500 | bav | 23/6 | 2.94 | 2.55 |

    ## STANCOR TRANSFORMERS, YOKES, \& FLYBACKS

    

    All are ferrite cores, cosine wound, type oy. All for
    $70^{\circ}$ tubes except are $53^{\circ}, 1$ are $90^{\circ}$, $\ddagger$ are $110^{\circ}$.
    Shpg. wt., $11 / 2$ bs.
    

    VERTICAL OUTPUT TRANSFORMERS All type $A$, except $\ddagger$ is $N V$, is $\mathrm{Nl}_{1}$, is NH , is type S , $\dagger$ is autoformer type, 8 is a 5.1 to $50: 1 \mathrm{Mul}$. ti-Ratio Type. Average shpg. wt., 2 los.

    | STOCX | $\begin{aligned} & \text { STAN } \\ & \text { NO. } \end{aligned}$ | $\begin{aligned} & \text { DC } \\ & \text { PRI } \end{aligned}$ | RES SEC | SIZE | NET EA. |
    | :---: | :---: | :---: | :---: | :---: | :---: |
    | 1A-42 | A-8112 | 1300 | 10 | $2 \times 13 \times \times 31 / 4$ | 2.94 |
    | TA-43 | A.8113 | 700 | 12 | $2 \times 13 / 4 \times 31 / 4$ | 3.08 |
    | TA.44 | A-8115 | 600 | 7 | 3K. $\times 21 / 2 \times 21 / 2$ | 5.24 |
    | TA-50 | A. 8123 | 1200 | 11 | 2x134314/4 | 2.91 |
    | TA-64 | A-8140\% | 400 | 0.3 | $3 K_{0} \times 21 / 2 \times 21 / 2$ | 5.23 |
    | TA.65 | A-81414 | 1650 | 4.5 | $21 / 4 \times 334 \times 21 / 6$ | 4.17 |
    | TA-66 | A-8142* |  | 10.5 | 2\% $\times 21 / 4 \times 3$ |  |
    | TA.67 | A. 8143 | 625 | 14 | $21 / 4 \times 21 / 4 \times 35 / 8$ | 3.37 |
    | 14-68 | A-8144 | 540 | 15 | $21 / 4 \times 13 / 4 \times 359$ | 3.13 |
    | TA-69 | A-8145* | 540 | 14 | 25/4x21/4x2 | 4.20 |
    | Ta.70 | A-8146 $\dagger$ | 375 | 10 | 2x17/8 $\times 31 / 4$ | 2.97 |
    | 11 | A.814 | 30 | 9 | 2x134x31/4 | 2.88 |
    | TA-97 | A.8148 | 375 | 6.5 | 2x17/9314/4 | 3.37 |
    | TA.72 | A-8149 ${ }^{\text {d }}$ | 330 | 8.5 | 2x1\% $\times 314$ | 269 |
    | TA.74 | A-8151 | 580 | 6.7 | $21 / 4 \times 33 / 4 \times 21 / 2$ | 3.53 |
    | TA-342 | va-110 | 1670 | 7.0 | 2x2x31/4 | 2.12 |
    | TA-343 | vo.111 | 1425 | 7.5 | 2×2x34/2 | 3.25 |
    | TA. 344 | vo-112 | 384 | 3.5 | 24/4x3\% $\times 2 / 6$ | 3.35 |
    | TA.345 | vo.113t | 1435 | 19.7 | $2 K_{1} \times 13 / 4 \times 2{ }^{1}$ | 2.72 |
    | TA.346 | V0-114 | 250 530 | ${ }_{5}^{6.0}$ | $2 \times 31 \times 13 \times 1 \%$ | 2.82 4.11 |
    | TA-258 | vo. 1084 | 350 | 10.3 | $2 \times 34 \times 2 \times 2$ | 2.84 |
    | TA.259 | vo-109§ |  |  | 2x $31 / 4 \times 2$ | 5.41 |

    ## VERTICAL BLOCKING OSCILLATORS

    Turns ratio $1: 4.2$ except * is $1: 1.5,+$ is $1: 3.33$. Type A. 8124 has 2 secs. 1:0.48 and 1.11 . Shpg. wt., i/2 ib.
    

    ## STANCOR EXACT DUPLICATE FLYBACKS

    These exact replacement flybacks are built from the set manufacturer's original specifications.
    They are exact electrical and physical duplicates of the units they are designated to replace. (Ay. Snpg. wi., $1 / 3$ lbs.)

    | STOCX NO. | STANCOR NO. | MFR'S PART NO. | NET | STOCK NO. | STAMCOR NO. | MFR'S PART NO. | NET | STOCK NO. <br> TA. 213 | STANCOR NO. | MF R'S PART NO. | NET |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    |  |  | AOMIRAL |  | TA.57 | A-8130 | 7711, except where |  | $\begin{aligned} & \text { TA- } 213 \\ & \text { IA. } 213 \end{aligned}$ | $\begin{aligned} & \mathrm{HO}-277 \\ & \mathrm{HO} \mathrm{O}-277 \end{aligned}$ | $\begin{aligned} & 32-8465-2 \\ & 32-8509 /-2 \end{aligned}$ | $\begin{aligned} & 9.41 \\ & 9.41 \end{aligned}$ |
    | TA-55 | A-8128 | 79C23.3, 79C28-1 | 6.88 |  |  | $6 \mathrm{CO6}$ is used | 7.17 | TA-214 | H0-278 | 32-8695 | 7.06 |
    | TA. 354 | A.8133 | $79 \mathrm{C} 30-1 / 3$ | 9.89 | TA.117 | A-8262 | RTO-131/141/146-3 | 6.91 | TA-200 | H0-264 | 32.8709.1 | 6.53 |
    | TA-60 | A-8134 | 79С30-2/4, 79C38-1, |  | TA.121 | A-8266 | RTO-161 | 6.17 |  |  | RCA |  |
    |  |  | 79038-1 | 8.96 | TA.190 | H0. 252 | RTO.165 | 6.47 | TA-193 | H0-256 | $23571{ }^{\text {R }}$ |  |
    | TA-110 | A. 8255 | 79C60-2/-3 | 6.49 | TA.191 | H0-253 | RTO-175/187 | 6.47 | TA.99 | A-8244 | 78201, 78810 |  |
    | TA. 201 | H0-265 | 79070-2/-1 | 5.83 | TA-192 | H0-254 | RTO-179 | 6.47 | TA.85 | A-8233 | 76430, 76795 | 6.60 7.35 |
    | TA.61 | A-8135 | 79041-1/-2 | 7.64 | TA-227 | H0-298 | RTO-207 | 6.69 | TA.86 | A-8234 | 76501, 76795 | 7.35 4.67 |
    | 1A.140 | A. 8292 | 79065-1 | 7.05 | TA.228 | H0-299 | RTO-208 | 7.06 | TA-87 | A-8235 | 75519, 75585, 76381 | 5.38 |
    | TA-197 | H0-301 | 79065-2/-4 | 7.17 |  |  | HALLICRAFTERS |  | TA-208 | H0-272 | 972914-1, 103092 | 5.38 6.53 |
    | TA-209 | H0.302 | 79065.3 | 7.06 | TA-118 | A-8263 | 558253/66, 550266 | 7.56 | TA-282 | HO-320 | 10389. | 5.66 |
    | TA-211 $\text { TA. } 219$ | $\mathrm{HO}-303$ $\mathrm{HO}-304$ | 79074-1/-2 | 6.47 |  |  | HOFFMAN |  | TA-283 | H0-321 | 104876, 106063 | 7.11 |
    | $\begin{aligned} & \text { TA. } 219 \\ & \text { TA-267 } \end{aligned}$ | H0-304 $\mathrm{HO}-317$ | 79077-2 $798 / \mathrm{L} / \mathrm{E77.6}$ | 7.79 5.26 | TA-107 | A-8252 | 5156/60 | 6.53 | TA-284 | H0-322 | 104309, 106533 | 7.18 |
    | TA-268 | H0.318 | 798/0/E77.7 | 5.26 |  |  | MAGNAVOX |  |  |  | SILVERTONE |  |
    | TA-269 | H0.319 | 79083-1/-2 | 6.44 | TA-202 | HO-266 <br> H0-279 | 360659 | 6.53 | TA.82 | A. 8230 | 10104/07/08/10/26;35 | 7.35 |
    | TA.457 | HO-350 | 79083-4,5,7,8,10 | 6.62 | TA-215 | $\begin{aligned} & \text { HO-279 } \\ & \text { HO-331 } \end{aligned}$ |  | 6.53 | TA.83 TA-210 TA | A.8231 $H 0.274$ | 101368 37/38/59 | 7.35 |
    | TA-458 | H0.351 | 79E77-11,14,15 | 5.88 | TA.276 | H0-331 H0.32 | 360580-1, $360604 \cdot 1$ | 6.138 | TA. 210 TA.285 | H0-274 H0-337 | $180-326 / 336$ $80-368 / 390 / 411$ | 6.76 4.30 |
    |  |  |  |  | TA-278 | H0-333 | 360700-1-2 | 5.74 | TA-462 | H0.353 | 80-1-3,3-3,4-3,6-3 | 4.30 8.47 |
    |  |  | CAPEHART |  | TA-279 | H0.334 | 320811.1 | 5.14 | TA-463 | H0.354 | 80-8-3,9.3 | 6.47 6.76 |
    |  |  | 750163A.1 |  | TA-280 | H0-335 | 360779.1 | 6.60 | TA-464 | H0.355 | $80-8 \cdot 3 \cdot 9 \cdot 3$ $80.13 \cdot 3$ | 6.76 |
    | T4.58 | A. 8131 | 750163A-1 | 5.87 |  |  | MOTOROLA |  | TA.465 | H0-356 | 80-10-3.15-3 | 6.76 7.06 |
    |  |  | CBS-COLUMBIA | - | TA.222 | H0-293 | 24C736488 | 8.56 | TA-465 | H0-357 | $80.13 \cdot 3.14-3.17 \cdot 3.18-3$ | 8.08 6.47 |
    | TA-82 | A. 8230 | 10104 | 7.35 | TA-91 TA 216 | A-8239 H0.280 | 24K732753, 24 K 701099 | 6.98 8.28 | TA-467 | H0-358 |  | 6.76 |
    | TA.195 | H0-258 | 12000151, 12000751 | 7.02 | TA-217 | H0-281 | 24K730902/3, 24K732584 | 8.82 |  |  | SYLVANIA |  |
    | TA.133 | A. 8284 | 120001051 | 6.53 | TA.217 | H0-281 | 24K732746/7, 24K733407 | 8.82 | TA-196 | H0-259 | 241.0011 | 6.47 |
    |  |  |  |  | TA.217 | H0-281 | 24K738699 | 8.82 | TA-282 | H0-320 | $241-0046 / 48$ | 5.66 |
    |  |  | CROSLEY |  | TA. 218 | но-282 | 24C736487, 24K738699 | 8.37 |  |  | travler |  |
    | TA.118 | A.8263 | 158481-1/-2/-5 | 7.47 | TA.281 | H0.336 | 24C739283 | 6.43 | TA-347 | H0-323 | TR. 24 | 5.96 |
    | 14.223 | H0-305 | 159947-1/-2 | 7.7 | TA.253 | H0.341 | $24 \mathrm{C736095}$ (coil only) | 2.59 | TA-348 $\mathbf{T A} 349$ | HO-324 | TR-27 | 6.54 |
    |  |  |  |  | TA.254 | HO-342 | 24C740969, 24 C742676 | 6.94 | TA-349 | H0-325 | TR-28 | 6.76 |
    |  |  | OUMONT |  | TA. 255 | H0.343 | $24 C 744042$ | 7.06 |  |  | NESTINGHOUSE |  |
    | TA. 107 | A-8252 | 20008061/8402 | 6.53 | TA. 256 | H0.344 | 24K748397, 24K754273-Z | 6.69 | TA-88 | A-8236 | V-11548-1/-2/-3/-4 |  |
    |  |  |  |  |  |  | MUNTZ |  | TA-350 | H0-339 | 493V004M02/3/4 | 8.82 |
    |  |  | EMERSON |  | TA.59 | A-8132 | T0-0031 | 8.82 | TA. 351 | H0-340 | 493V003M03 | 8.23 |
    | TA.58 | A-8131 | 738047/48/53/60 | 5.87 |  |  | PHILCO |  |  |  |  |  |
    | TAR 51.84 | A-8138 | 738079/84 | 6.43 | TA-198 |  |  | 8.37 |  |  | ZENITH |  |
    | TA-84 | A. 8232 | 738067/68/69/73/74/75/82 | 7.35 | $\text { TA. } 75$ | $\text { A. } 8220$ | $32-8565$ including | 0.37 | TA. 122 | A-8267 | S.15911 | 7.06 |
    | TA-224 | H0-294 | 738103/09 | 6.53 |  |  | Term bd. Components | 8.22 | TA. 122 | A. 8267 | \$-17130 | 7.06 |
    | TA-225 | H0-295 | 738106/07/11 | 7.32 | TA.78 | A-8223 | 32-8572 with Choke |  | TA-122 | A. 8267 | S. 17245 | 7.06 |
    | TA-226 | H0-296 | 738119/22/28/29/40 | 7.50 |  | A-8223 | on Term 8d. | 6.92 | TA-122 | A-8267 | S. 17646 | 7.06 |
    | TA-270 | H0-309 | $738138 / \mathrm{A}$ | 5.88 | TA-145 | A-8298 | 32.8677/-1/.2 | 7.86 | TA-122 | A-8267 | S. 17927 | 7.06 |
    | TA-271 | H0-310 | 738142 | 7.06 | TA-199 | H0-263 | 32-8634 | 8.33 | TA.203 | H0-267 | S-20099 | 7.19 |
    | TA-272 | H0-311 | 738155 | 5.15 | TA-212 | H0-276 | 32-8624/-1 | 8.47 | TA-204 | H0-268 | S-23049 | 6.08 |
    | TA-273 | H0.312 | 738160 | 4.93 | TA-459 | H0-345 | 32-8855-1.-2.-5 | 7.05 | TA-205 | H0-269 | \$.22720 | 6.14 |
    | TA-274 | H0.313 | 738162 | 5.26 | TA.460 | H0.346 | 32-8830-1-2-3. $32.8853-1$ | 6.47 | TA-206 | 40.270 | S-18125 | 5.88 |
    | TA-275 | H0.314 | 738169 | 4.71 | TA-461 | H0-349 | 32.8993-3 | 5.88 | TA. 207 | H0-271 | S-22451 | 6.53 |

    # POWER, FILAMENT, CHOKE AND OUTPUT TRANSFORMERS <br> STancoR 

    

    All primarles 117 v fo cycle. All $6.3 V$ secondarles are C.T. except and PC-8414 which has extra $6.3 V 3 \mathrm{amp}$ winding. Types with are for selenlum rectifier cir-
    cults or tubes such as $6 A \times 5,6 \times 4,6 \times 5$, etc. All type M mtg. except PC and Pare $C$
    

    |  | S m | VCT | MA | Amo | Amp | Size | Wt. L | 1.9 | 10-24 |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | S | St | CT |  | amo | Amp |  |  |  |  |
    | TA.338 ${ }^{\text {/ }}$ | PS-8415 | 125 | 15 |  | 0.6 | 2x23/8×13/6 | $3 / 4$ | 2.32 | 2.13 |
    | TA-305* | PA-8421 | 125 | 50 | - | 2.0 | $21 / 4 \times 33 / 4 \times 21 / 8$ | $11 / 2$ | 3.76 | 3.46 |
    | TA-339* | PS.8416 | 125 | 25 | - | 1.0 | 2\%. $\times 27 / 8 \times 13 / 4$ | 1 | 2.79 | 2.56 |
    | TA-307* | PC. 8418 | 460 | 50 | - | 2.5 | $3 \% \times 256 \times 25$ | $21 / 4$ | 4.70 | 4.32 |
    | TA.306* | PM-8418 | 460 | 50 | - | 2.5 | $25 / 8 \times 24 / 2 \times 3$ | $21 / 4$ | 4.70 | 4.32 |
    | TA. 325 | PM-8401 | 470 | 40 | 2.0 | 2.0 | 25/624/2x3 | 214 | 5.67 | 5.19 |
    | TA-311 | PC.8401 | 470 | 40 | 2.0 | 2.0 | 3\%, $\times 2$ \%x2598 | 21/4 | 5.42 | 4.98 |
    | TA. 326 | PM-8402 | 480 | 55 | 2.0 | 2.0 | 23/4×21/2x3 | $21 / 2$ | 5.53 | 5.08 |
    | TA.312 | PC-8402 | 480 | 55 | 2.0 | 2.0 | $31 / 8 \times 25 / 8 \times 23 / 4$ | 21/2 | 5.38 | 4.94 |
    | TA.337* | PM-8419 | 480 | 70 |  | 3.0 | 27/日 $\times 21 / 2 \times 3$ | $23 / 4$ | 5.41 | 4.97 |
    | TA-324* | PC-8419 | 480 | 70 | - | 3.0 | $3 \% 10 \times 25 / 6 \times 27 / 0$ | $21 / 4$ | 5.41 | 4.97 |
    | TA-308* | PM-8420 | 520 | 90 | $\longrightarrow$ | 4.0 | $31 / 2 \times 27 / 6 \times 33 / 8$ | $31 / 2$ | 6.56 | 5.99 |
    | TA-309** | PC. 8420 | 520 | 90 | - | 4.0 | $31 / 2 \times 3 \times 31 / 2$ | $31 / 2$ | 6.29 | 5.78 |
    | TA. 327 | PM. 8403 | 500 | 70 | 2.0 | 2.5 | 31/8×21/2x3 | 31/4 | 6.23 | 5.72 |
    | TA.313 | PC-8403 | 500 | 70 | 2.0 | 2.5 | $3 \mathrm{k}, \times 25 / 8 \times 31 / 8$ | 31/4 | 6.23 | 5.72 |
    | TA. 328 | PM.8404 | 520 | 90 | 2.0 | 3.0 | 35/8x27/8×33/6 | 4 | 6.91 | 6.34 |
    | TA-314 | PC-8404 | 520 | 90 | 2.0 | 3.0 | 35/6×3x $31 / 2$ | 4 | 6.91 | 6.34 |
    | TA. 329 | PM-8405 | 540 | 120 | 3.0 | 3.5 | $31 / 2 \times 34 / 8 \times 37 / 4$ | 5 | 9.01 | 8.27 |
    | TA.315 | PC. 8405 | 540 | 120 | 3.0 | 3.5 | $4 \times 31 / 4 \times 31 / 2$ | 5 | 9.01 | 8.27 |
    | TA-310 | PM-8423 | 600 | 90 | 2.0 | 3.5 | 31/4×21/ax27\% | 4 | 7.97 | 7.32 |
    | TA-374 | P6358 | 600 | 65 | - | 2.7 | $31 / 6 \times 25 / 6 \times 21 / 2$ | 3 | 5.84 | 5.36 |
    | TA. 330 | PM. 8406 | 650 | 40 | 2.0 | 2.0 | $23 / 4 \times 21 / 2 \times 3$ | 21/2 | 5.64 | 5.18 |
    | TA-316 | PC. 8406 | 650 | 40 | 2.0 | 2.0 | $3 x_{6} \times 25 \times 23 / 4$ | $21 / 2$ | 5.64 | 5.18 |
    | TA.331 | PM-8407 | 650 | 55 | 2.0 | 2.0 | $31 / 8 \times 21 / 2 \times 3$ | 31/4 | 5.88 | 5.40 |
    | TA.317 | PC. 8407 | 650 | 55 | 2.0 | 2.0 | 310x256x31/8 | 314 | 5.88 | 5.40 |
    | TA. 332 | PM-8408 | 680 | 70 | 2.0 | 2.5 | 31/2x27/6x $31 / 8$ | 4 | 7.35 | 6.75 |
    | TA.318 | PC. 8408 | 680 | 70 | 2.0 | 2.5 | 35/6x $\times 3 \times 3 / 8$ | 4 | 7.35 | 6.75 |
    | TA. 333 | PM-8409 | 700 | 90 | 2.0 | 3.0 | $31 / 4 \times 27 / 8 \times 37 / 8$ | 41/2 | 7.76 | 7.13 |
    | TA. 319 | PC.8409 | 700 | 90 | 2.0 | 3.0 | 35/63×35/8 | 41/2 | 7.76 | 7.13 |
    | TA. 334 | PM-8410 | 720 | 120 | 3.0 | 3.5 | $31 / 4 \times 31 / 6 \times 33 / 4$ | $51 / 2$ | 9.17 | 8.43 |
    | TA. 320 | PC-8410 | 720 | 120 | 3.0 | 3.5 | 4x $31 / 4 \times 33 / 4$ | $51 / 2$ | 8.81 | 8.10 |
    | TA-335 | PM.8411 | 750 | 150 | 3.0 | 4.5 | 37/0x31/2x41/8 | 6 | 12.30 | 11.30 |
    | TA.321 | PC-8411 | 750 | 150 | 3.0 | 4.5 | 4 1 x $\times 35 / 6 \times 4$ | 6 | 11.79 | 10.83 |
    | TA-336 | PM-8412 | 800 | 200 | 3.0 | 5.0 | $37 / 8 \times 37 / 4 \times 41 / 2$ | 814 | 12.23 | 11.33 |
    | TA-322 | PC-8412 | 800 | 200 | 3.0 | 5.0 | $43 / 4 \times 4 \times 4$ | $81 / 4$ | 12.30 | 11.30 |
    | TA.323 | PC-8414 | 1200 | 200 | 3.0 | 3.0 | $41 / 4 \times 4 \times 41 / 4$ | $81 / 2$ | 14.46 | 13.29 |

    ## FILAMENT TRANSFORMERS

    $\qquad$
    All primaries are 117 volf 50.60 cy $A C$ except which is 6.3 volt and $t$ which
    has a $117 / 107 \mathrm{~V}$. has four 6.3 V secondaries with 1 center tap, has two 6.3 V has a $117 / 107 \mathrm{~V}$. $\ddagger$ has four 6

    |  | Stan | Secondary volts Amperes |  |  | Mtg. | Shpg. Wt. |  | ch |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | No. | Ho. |  |  | Insul. | Type | in libs. | 1.9 | 10.24 |
    | TA-375 | P. 6133 | 2.5 CT | 5.0 | 7.500 | 5 | 1.5 | 3.72 | 3.42 |
    | TA. 237 | P-6454t | 2.5 CT | 10.0 | 7,500 | 5 | 2.5 | 3.92 | 3.60 |
    | TA. 376 | P. 3060 | 2.5 CT | 10.0 | 10,000 | 8 V | 2.5 | 6.59 | 6.05 |
    | TA-377 | P-3026 $\dagger$ | 5.0 CT | 3.0 | 2,500 | C | 2.4 | 4.90 | 4.50 |
    | TA.378 | P-6467 | 5.0 CT | 3.0 | 2,500 | A | 1.4 | 3.14 | 2.88 |
    | TA-238 | P. $6455 \dagger$ | 5.0 CT | 6.0 | 2,000 | S | 2.0 | 4.24 | 3.90 |
    | TA-379 | P-3062 | 5.0 CT | 6.0 | 2,500 | BV | 2.3 | 5.04 | 4.63 |
    | TA.380 | P. 6433 | 5.0 CT | 15.0 | 2,500 | BV | 3 | 7.01 | 6.44 |
    | TA. 381 | P-6432 | 5.0 CT | 21.0 | 2,500 | BV | 4.5 | 8.27 | 7.50 |
    | TA-262 | P-6492 | 5.0 CT | 30.0 | 2,500 | C | 7.5 | 10.72 | 9.85 |
    | TA. 382 | P-6465 | 6.3 CT | . 6 | 1,500 | A | 0.4 | 1.94 | 1.78 |
    | TA.230 | P-6134 | 6.3 CT | 1.2 | 3,000 | A | 0.8 | 2.06 | 1.89 |
    | TA-286 | P. 8190 | 6.3 | 1.2 | 5.000 | A | 1.0 | 2.70 | 2.46 |
    | TA.287 | P-8191* | 6.3 | 1.2 | 5,000 | A | 1.0 | 2.91 | 2.67 |
    | TA.383 | P. 6428 | 6.3 | 1.75 | 2,500 | C | 3 | 6.08 | 5.58 |
    | TA-384 | P. 5014 | 6.3 CT | 3.0 | 2,500 | 8 V | 2.0 | 4.58 | 4.20 |
    | TA.385 | P. 6466 | 6.3 CT | 3.0 | 2,500 | A | 1.4 | 3.32 | 3.05 |
    | TA-243 | P. $6462 \dagger$ | 6.3 | 3.0 | 7,000 | S | 2.0 | 5.49 | 5.04 |
    | TA.386 | P. 6430 \% | 6.3 CT | 3.0 | 2,500 | C | 2.8 | 5.39 | 4.95 |
    | TA.387 | P. $6429 \pm$ | 6.3 | 3.5 | 2,500 | C | 4.8 | 8.26 | 7.59 |
    | TA.388 | P.6431" | 6.3 CT | 6.0 | 2,500 | C | 4.8 | 8.17 | 7.51 |
    | TA-389 | P. $4019 \dagger$ | 6.3 CT | 4.0 | 2,500 | C | 2.7 | 4.94 | 4.54 |
    | TA. 245 | P-3064 | 6.3 CT | 6.0 | 2,500 | BV | 2.4 | 5.31 | 4.88 |
    | TA-390 | P-4089 ${ }^{\text {P }}$ | 6.3 CT | 6.0 | 2,500 | C | 3.5 | 6.49 | 5.92 |
    | TA-239 | P. $6456 \dagger$ | 6.3 CT | 6.0 | 2,000 | A | 2.0 | 3.74 | 3.44 |
    | TA.391 | P. 6464 | 6.3 CT | 10.0 | 2,000 | C | 3.5 | 6.80 | 6.25 |
    | TA. 235 | P-6308 $\dagger$ | 6.3 CT | 10.0 | 2,500 | 8 V | 3.4 | 6.46 | 5.93 |
    | TA-392 | P. 6309 t | 6.3 CT | 20.0 | 2,500 | 8 V | 6.7 | 10.01 | 9.19 |
    | TA.393 | P. 5015 | 7.5 CI | 4.0 | 2,500 | 8 V | 2.7 | 4.66 | 4.28 |
    | TA-240 | P.6457 | 7.5 CT | 21.0 | 2,000 | C | 8.0 | 12.44 | 11.42 |
    | TA-241 | P. 6458 . | 10.0 CT | 5.0 | 2,000 | 8 V | 3.0 | 4.61 | 4.23 |
    | TA.394 | P. 6139 | 10.0 CT | 8.0 | 2,500 | 8 V | 4.9 | 7.35 | 6.75 |
    | TA-395 | P-4097 ${ }^{+}$ | 10.0 CT | 8.0 | 2.500 |  | 5.2 | 7.66 | 7.54 |
    | TA-266 | P. 8130 | 12.6 CT | 2.0 | 1,500 | A | 1.4 | 3.36 | 3.09 |
    | TA-246 | P-6469 | 25.2 | 1.0 | 1.500 | A | 1.4 | 3.20 | 2.94 |

    All type A mtg. 10,000 ohm primary, single plate to push-pull grids. Use between
    first audio and push-pull output. Ratio is pri. $101 / 2 \mathrm{sec}$. first audio and push-pull output. Ratio is pri. $101 / 2 \mathrm{Sec}$.

    |  |  | Max MA |  |  |  | Each |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | Stock No. | Stan. No. | Pri. DC | Ratio | Size | 1.9 | 10-24 |
    | TA-100 | A-4713 | 30 | 2:1 | 15627/6x11/2 | 2.08 | 1.91 |
    | TA-101 | A. 4723 | 30 | 3:1 | 14/627/6x11/2 | 2.11 | 1.94 |
    | TA. 102 | A. 4752 | 40 | 1 | $2 \times 34 / 4 \times 13 / 4$ | 2.87 | 2.6 |

    # STAncOR TRANSFORMERS Stancor 91. 19.3 .4 

    ## INTERCOM AND TRANSCEIVER TRANSFORMERS

    A3833 and $A 3817$ are for citizens band transceivers; A4749 for telephone patch circuits; A4744 for intercoms voice coll to grid input. Max. watts: $\uparrow 3$; ${ }^{\circ} 5$; 8 ; $\$ 10$

    | Stock No. | Stan. No. | Fig. | Pri Ohms | Sec. Ohms | Size | wt. Lbs. | $1.9$ | $\begin{aligned} & \text { Each } \\ & 10.24 \end{aligned}$ |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | TA-396 | A3833* | A | 200/5000 | 60,000 | 13/623/0x12/3 | 1 | 2.81 | 2.58 |
    | TA-397 | A4744 | VE | . | 25,000 | 13/6×23614/2" | $3 / 4$ | 1.98 | 1.82 |
    | TA-398 | A4749 | TD | 10,000 | 500 |  | 1 | 4.75 | 4.36 |
    | TA-399 | A8090t | 0 | 45.50 | 3-4/6-8 | 17/6x23/4x11/2' | 3 | 1.73 | 1.59 |
    | TA.400 | A8091. | 0 | 45-50 | 3-4/6-8 | 1\%\%21/0x15\%" | 1 | 2.06 | 1.89 |
    | TA-401 | A3817 | A | 5000 | 6750/4 | 1'K, $\times 11 / 2 \times 23 \%^{\prime \prime}$ | 34 | 2.94 | 2.70 |

    ## TELEVISION POWER TRANSFORMERS

    Replacement use in standard iv receivers
    Plate windings are CT . Leads are stripped and tinned and color coded to E.I.A. standards. All have copper shorting band to reduce external magnetic field except * All primaries are 117 V . 60 CPS AC except \& which is $117 / 107 \mathrm{~V}$. All are $M$ iype mtg: except t which is $C$ type fisted on previous page

    |  |  |  |  |  |  |  |  |  | wt. |  |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    |  |  | Voits |  |  |  | Its | Amp | Size | bs. | Each |
    | -428 | P. 505 | 675 | 200 | 5 | 3 | 6.3 C | 5 | 456x33/4x4\% | 93/4 | 12.81 |
    | TA.429 | P. 6315 | 740 | 275 | 5 | 3 | 6.3 | 7 | 41/4 $\times 331 / 4 \times 41 / 2$ | 91/2 | 13.42 |
    | TA.430 | P-8159 | 720 | 290 | 5 | 3 | 5/6.3 | 218 |  | 10 | 17.29 |
    | TA-431 | P-8160** | 720 | 185 | 5 | 3 | 6.45 | 12 | $41 / 4 \times 33 / 4$ | 10 | 16.23 |
    | TA-432 | P-8164 | 600 | 225 | 5 | 3 | 6.3 | 9.0 | 41/6x3\%/4x42 | 74 | 15.88 |
    | TA-433 | P. 8166 | 680 | 330 | 5 | 6 | $\begin{aligned} & 6.3 / 6.3 \\ & 6.3 \end{aligned}$ | 2.5/5.0/5.0 |  | 13 | 19.30 |
    | 34 |  |  | 400 | 5 | 6 | 6.3/6.3 | 4.5/8.5 | $6 \times 31$ 1/4 $\times 43 / 4$ " |  | 73 |
    | 35 | P-8169 | 760 | 220 | 5 | 3 | $\begin{aligned} & 6.3 / 6.3 \\ & 6.3 \end{aligned}$ |  | $456 \times 33 / 4 \times 41 / 2{ }^{\text {" }}$ |  | 16.77 |
    |  | P. 817 | 760 | 20 | 5 | 3 | $\begin{aligned} & 6.3 / 6.3 \\ & 6.3 \end{aligned}$ |  |  |  | 16.31 |
    | TA-437 | P-8171 | 50 | 22 | 5 | 3 | 6.3/6 | 2.01 | $5 \times 376 \times 4{ }^{2}$ | 102 | 17.64 |
    | TA-438 | P-8172* | 540 | 200 | 5 | 3 | 6.3 | 8.5 | $436 \times 31 / 8 \times 33$ | 7 | 13.85 |
    | TA-439 | P-8331 | 620 | 240 | 5 | 3 | 6.3/6.3 | 6.4/3 | $41 / 2 \times 31 / 4 \times 44$ | 9 | 14.12 |
    | TA-440 | P.8333 | 590 | 225 | 5 | 3 | 6.3/6.3 | 11.4/.9 | 43/4 $\times 33 / 4 \times 41 / 2$ | 10 | 14.93 |
    | TA-441 | P. 8334 | 550 | 305 | 5 | 5 | 6.3/6.3 | 8.5/1.2 | 51/6x $31 / 4 \times 41 / 2$ | 13 | 16.46 |
    | TA-442 | P-8335 | 600 | 325 | 5 | 6 | 6.3/6.3 | 8.8/1.5 | $51 / 6 \times 31 / 4 \times 41 / 2$ | 13 | 17.00 |
    | TA-443 | P.8337* | 630 | 225 | 5 | 3 | 6.3 | 8.25 | 41/2x33/4x43/2 | 81 | 14.09 |
    | TA-444 $\dagger$ | P.8339** | 650 | 255 | 5 | 3 | 12.6 C. T | 5.25 | 47/x $31 / 4 \times 5^{\prime \prime}$ | 84/2 | 13.93 |
    | TA.445 | P.8340 | 710 | 270 | 5 | 6 | $\begin{aligned} & 6.3 / 6.3 \\ & 6.3 \end{aligned}$ | $\begin{aligned} & 9.5 / 1.65 \\ & 2.4 \end{aligned}$ | 51/2 $\times 31 / 4 \times 41 / 2{ }^{\prime \prime}$ | 12 | 18.40 |
    |  |  |  | 260 | 5 | 6 | 6.3/6.3 | 8.85/1.2 |  |  | 17.57 |
    | TA-447 | P-8352 | 580 | 240 | 5 | 3 | 12.6 C.T | 5.25 | 47\% $\times 33 / 4 \times 47 / 4^{\prime \prime}$ | 81/2 | 13.50 |
    | TA-448 $\dagger$ | P. 8356 | 540 | 260 | 5 | 3 | 6.3 | 8.8 | 31/4x $33 / 8 \times 34 \%$ | 61/2 | 13.5 |

    ## ISOLATION TRANSFORMERS

    Electrostatic shields ape ground internally to core. All have 1500 V insul. 4 Pri. tapped for 125 , 115 and 105 V with 115 V Sec. 117 V . Pri., tapped sec. with sockets for 105,115 and 125 V . $\ddagger 117 \mathrm{~V}$ Pri. to 117 V Sec.

    | Stock No. | Stan. No. | Fig. | Size | Watts | Wt. Lbs. | 1-9 | 10-24 |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | TA-449 | P. 61601 | KA | $43 / 4 \times 4 \times 37 /{ }^{\prime \prime}$ | 100 | 7 | 14.19 | 13.03 |
    | TA.450X | P.6298 ${ }^{+}$ | KA | 75/6x $61 / 8 \times 758^{\prime \prime}$ | 500 | 28 | 42.27 | 38.82 |
    | TA-451 | P.6371: | TE | 5\%8 $\times 4.854^{\prime \prime}$ | 175 | 9 | 18.95 | 17.41 |
    | TA. 452 | P.6410 | K |  | 50 | 4 | 7.77 | 7.14 |
    | TA-453 | P.6415 | KC | 53/4841/2x53/4 | 350 | 17 | 23.05 | 21.17 |

    

    ## C.R.T. POWER TRANSFORMERS

    P-8178 For use with $2 \times 2$ tubes in half-wave voltage supplies, as in scopes, and other test equipment. etc. Primary 117 V $50 / 65$ CPS. Piate 1800 V AC at 2 ma . Rectifier filament 2.5 V at 1.75 amps . Fil. 16.3 V at 0.6 amps tapped at 2.5 V at 2.2 amps . Size: $37 / 8 \times 31 / 2 \times 31 / 4^{\prime \prime}$. Mig. centers $21 / 2^{\prime \prime}$. Shpg. Wt. 5 lbs. TA-454 … 1-9 ea.. 8.86., … $10-24$ ea.. 8.28.,
    P-8151. Similar to above but plate 2400 V at 5 ma , rectifier 2.5 V at $2 \mathrm{amps}, \mathrm{fll} 2.5 \mathrm{~V}$
     TA-469.............1-9 ea., 11.41, ................ 10.24 ea., 10.67, .............. $25-99$ ea., 9.35 P-8150. Fig. TO. Similar to above but plate 1550 V at 1.5 ma , rectifier 2.5 V at 1.75 amp. No filament winding. Size $3 \mathrm{~K}_{6} \times 3 \times 22^{\prime \prime \prime}$. Mtg. ctrs. $2 \mathrm{~K}_{6} \times 1 \mathrm{Y}_{4}{ }^{\prime \prime}$. Shpg, wt., 2 lbs. TA-468 ............... 1.9 ea., 8.66.,
    $10-24$ ea., 8.10.,
    25-99 ea., 7.25

    ## MICROPHONE TRANSFORMERS

    A-4350. Fig. Q. For mike of line to line. Dual primary 500 and 200 ohm sections. C.T. pri. imp. $500 / 333 / 200 / 125 / 50$. Sec. $500 / 333 / 200 / 125 / 50$. Mtg. Centers $2^{1}$ Kis $_{4}$. size $2 \times 3 y / 4 \times 13 / 4$
    TA.470

    $$
    \begin{array}{ll}
    10-24 & \text { ea. } \\
    50.90 \\
    50.99 \text { ea. } & 3.25
    \end{array}
    $$

    Shpg. wt., 1 to.
    1.9 Net. ea. 4.24

    25-49 ea. 3.51
    50.99 ea, 3.25

    100-249 ea. 3.09
    A.4351. Fig. TO. For mike or line to single grid. Dual primary 500 and 200 ohm sections. Pri. imp. 500/333/200/124/50. Sec. Imp. 89000. Turns ratlo 1113.3. Mitg. Ctrs. $23 / 8 \times 1 /{ }^{\prime \prime}$. Size $211 / 4 \times 23 / 4 \times 2 K_{6}^{\prime \prime}$
    TA. 471
    10.24 е.. 4.17
    50.99 ea. 3.47
    1.9 Net. ea. 4.56

    25-49 ea. 3.75
     pedances and tums ratio as A-4351 above, Mtg. Ctrs. $\mathbf{2}^{13}{ }_{4}^{\prime \prime}$. Size $2 \times 34 / 41^{1 "}$
    TA-472

    $$
    \begin{aligned}
    & 10.24 \text { ea. } 4.32 \\
    & 50.99 \text { ea. } 3.60
    \end{aligned}
    $$

    shps. wt, 1 ib
    1-9 Net. ea. 4.70
    $25-49$ еа. 3.89
    A-4705. Fig. A. For singte button mike to single grid. Pri. Imp. 200/70. Sec. Imp. 80,000 . Turns ratio $1: 20 \mathrm{Mtg}$. center. $\boldsymbol{2}^{\prime \prime}$. Size $13 / 8 \times 2 \% / 513 / \mathrm{m}^{\prime \prime}$

    ## JB T SWITCHES FOR INDUSTRY

    

    ## JAN-S-23 and MIL-S-21195 HEAVY DUTY SWITCHES

     nally rated 20 amp at 125 VAC, 10 amps at 250 VAC. Body size including terminals: ST 40 12/axlkoxse";
    Net Each In Lots 04

    | No. | Govt. Type | Cir. 1-29 | 30-99 | $\begin{aligned} & 100 \\ & 249 \end{aligned}$ | $\begin{aligned} & 250 \\ & 499 \end{aligned}$ | $\begin{aligned} & 500 \\ & 999 \end{aligned}$ |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | Single Pold Single Throw-Screw Terminals (Fie. B) |  |  |  |  |  |  |
    | 35w. 509 | ST40A | 11.01 | . 84 | . 67 | . 63 |  |
    | 3SW-510 | ST408 | $3 \quad 1.10$ | . 92 | .74 | . 69 |  |
    | 3SW. 511 | ST40C | 41.10 | . 92 | . 74 | . 69 |  |
    | Single Pole Single Throw With Solder Terminal (Fie. C) |  |  |  |  |  |  |
    | 35W-512 | ST42A | 3.04 | .79 | . 63 | . 59 | 5 |
    | 35W-513 | ST42B | 31.04 | . 87 | . 69 | . 65 | 1 |
    | 35W-514 | ST42C | 411.04 | . 87 | . 69 | . 65 |  |
    | Single Pole Double Throw-Screw Terminai (Pis. B) |  |  |  |  |  |  |
    | 3SW-515 | ST 400 | $2{ }^{2} 1.21$ | 1.01 | . 81 | . 78 | . 71 |
    | 3SW-516 | ST40E | $5{ }^{5} 1.21$ | 1.01 | . 81 | . 78 | . 71 |
    | 3SW-517 | ST40F | $6 \quad 1.31$ | 1.09 | . 87 | . 82 | . 76 |
    | 3SW-518 | ST40G | $7 \quad 1.31$ | 1.09 | . 87 | . 82 | . 76 |
    | 3SW. 515 | ST40H | 811.31 | 1.09 | . 87 | . 82 | . 76 |

    ## JAN-S-23 MEDIUM DUTY SWITCHES

    fig. A. All meet JAN-S-23 specifications. All rear connected, with solder lug terminals. Nominally rated 6 amps at 125 V AC, 3 amps at 250 V AC. Enclosed body
     - are $1 / 4$ " Avg. shpg. wt., 301.

    | Stoct No. | Gort. <br> No. Cip. | 1.29 | 30-99 | $\begin{aligned} & \text { In } 10 \\ & 100- \\ & 249 \end{aligned}$ | $\begin{aligned} & 250 \\ & 499 \end{aligned}$ | $\begin{aligned} & 500- \\ & 999 \end{aligned}$ |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | SINGLE POLE SINGLE THROW |  |  |  |  |  |  |
    | 35W-500 | ST12A 1 | . 69 | . 65 | . 59 | . 59 | 58 |
    | 3SW-501 | ST12C | . 79 | . 74 | . 69 | . 67 | . 64 |
    | SINGLE POLE DOUBLE THROW |  |  |  |  |  |  |
    | 3SW-502 | ST120 2 | . 79 | . 74 | . 89 | . 67 | . 64 |
    | 35W-503 | ST130* 2 | . 79 | . 74 | 69 | . 67 | 64 |
    | DOU日LE POLE SINGLE THROW |  |  |  |  |  |  |
    | 35W-504 | ST22K 2 | . 99 | . 92 | . 86 | . 84 | . 80 |
    | 3SW 505 | ST22M 4 | 1.08 | 1.01 | . 94 | . 92 | . 88 |
    | 3SW-506 | ST23K* 1 | . 99 | . 92 | . 86 | .84 | . 80 |
    | OOUBLE POLE DOUBLE THROW |  |  |  |  |  |  |
    | 3Sw-507 | ST22N ${ }^{2}$ | 1.08 | 11.01 | . 94 | . 92 | . 83 |
    | 35W-508 | ST23N* 2 | 1.08 | 11.01 | . 94 | . 2 | . 8 |

    ## ATTENTION INDUSTRIALS

    We can supply all JBT, JAN-S-23, MIL-S-21195, MIL-S-6745, MIL-S-3550 and MIL-S-3950A switches. Write or phone our Industrial Department for quotations.
    "TAPESWITCH" MATS AND STRIPS
    

    Tapeswitch mats close an electrical circuit whenever anyone - EVEN A SMALL CHILO - steps on them. Actuated by less than 5 lbs. weight! Ideal as door mat annunciators in stores, offices, etc.; used to control automatic door openers in food and department stores; can be used to turn on lights, ring bells, actuate electric counters, etc. Pepfect for alarm systems in homes, stores, and Industry. These units are only $\mathcal{y}_{2}$ " thick, can be olaced under rugs without bulging. Ourable brown textured Vinyl with 6 ft . connecting cord, Size $17 \times 23^{\prime \prime \prime}$ SW-28 (Fig. C) Lots of 6, ea. 7.50 Singly ea. 8.33 $6 \times 23^{\prime \prime}$ with $18^{\prime \prime}$ lead mat for use on stairs.
    SW-29 Lots of 6 , ea. 2.65 Singly ea. 2.94 TAPESWITCH STRIPS (FIg. O) with $4^{\prime}$ connecting cord. SW-31 3/"" $22^{\prime \prime}, \ldots . .$. Lots of 6 , ea, 2.48 Singly ea. 2.75 SW. 32 \%" $\mathrm{K}^{\prime \prime}$. $\quad$ Lots of 6 , ea. 4.28 Singly ea. 4.75 ACCESSORIES
    EL-52 10 volt transformer (Fig. B) for bell or chime OL 53 Single note chime (Fig. A)
    A)

    Ne
    Ne
    Net 1.70 Net 1.95
    $11 / 3^{x} \times 1 / 4$. All others $12 x_{4} \times 1 / 2 x^{x} 3 / 4$. All have ${ }^{2} / 4$ bushing and "Ks" bat handle. Types with binding head screw 3 or . Net Each, in lots of
    $\qquad$
    Sinsle Pole Double Throw-Solder Terminal Lug (Fig. C) Sinsle Pol Double Throw-Solder Terminsi Lus (Fig. C)
    $35 W .520$

    350 \begin{tabular}{l|l}
    3 SW. 521 \& ST42E <br>
    \hline 3SW \& <br>
    ST42F

 

    \hline SW. 523 \& ST42F <br>
    ST42G
    \end{tabular}

    Oouble Pote Single Threw - Screw Terminal (Fig. D)

    | Oouble Pote Single Thrum - Screw Terminal (Fig. D) |  |  |  |  |  |  |  |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | 35W-525 | ST50K | 1 | 1.25 | 1.04 | . 83 | . 78 | . |
    | 3SW-526 | ST50L | 3 | 1.46 | 1.22 | . 98 | . 92 | . 85 |
    | 35W-527 | ST50M | 5 | 1.48 | 1.22 | . 98 | . 92 | 85 |
    | Doubie Pole Single Throw-Solder Lug Terminat (Pit. E) |  |  |  |  |  |  |  |
    | 35W-528 | ST52K | 1 | 1.13 | . 94 | . 76 | . 71 | . 68 |
    | 3SW-529 | ST52L | 3 | 1.27 | 1.06 | . 85 | . 80 | . 74 |
    | 35W-530 | ST52M | 4 | 1.27 | 1.05 | . 85 | . 80 | 74 |

    with solder Jug terminals meet JAN-S-23. Avg. shog wt 3 oz.

    | StochNo. | Govt. <br> Iype | Cir. 1-29 | Net Exch in Lots of |  |  |  |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    |  |  |  |  | 100 | 250. | 500. |
    |  |  |  | 30-99 | 249 | 499 | 999 |


    | Jobule Pele Doubl |  | Throw-Screw |  |  | Terminat (Fis. D) |  |  |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | 3SW-531 | ST50N | 2 | 1.45 | 1.22 | . 98 | . 92 | 85 |
    | 3SW. 532 | ST50P | 5 | 1.46 | 1.22 | . 98 | . 92 | 85 |
    | 35W-533 | ST50R | 6 | 1.66 | 1.39 | 1.11 | 1.04 | . 97 |
    | 35W.534 | STS0S | 9 | 1.68 | 1.39 | 1.11 | 1.04 | . 87 |
    | SW-535 | ST50T | 8 | 1.65 | 1.39 | 1.11 | 1.04 | 97 |

    .5
    .85
    .97
    .87
    .97

    | Double Pole Oouble Throw | Solder Lug Terminal (Fis. E) |  |  |  |  |  |  |
    | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
    | 3SW-536 | ST52P | 5 | 1.27 | 1.06 | .85 | .80 | .74 |
    | 3SW-537 | ST-52N | 2 | 1.27 | 1.05 | .85 | .80 | .74 |
    | 3SW-538 | ST52R | 6 | 1.48 | 1.23 | .98 | .92 | .88 |
    | 3SW-539 | ST52S | 9 | 1.49 | 1.23 | .98 | .92 | .88 |
    | 3SW.540 | ST52T | 8 | 1.48 | 1.23 | .98 | .92 | 86 |

    ## MIL-S-3950A HVY. DUTY SWITCHES

    All meet MIL-S-3950A specifications including seal and water submersion requirements. 20,000 make and oreah cycles, temperature and endurance test at 400 cycles. All have screw terminals and "Ys" bat handle. Dimen-
    Stoc
    No

    35
    35
    35
    35
    35
    35

    3
    35
    35
    35
    35

    3

    Stoch Govt. |  |  |  |  |  | $100-1$ |
    | :--- | :--- | :--- | :--- | :--- | :--- |
    | Cir. | $1-29$ | $30-99$ | 249 | 499 | 500 | SINGLE POLE SINGLE THROW (FIG. B)

    SINGLE POL
    sions MS35058- $11 / 6 \times 11_{6} \times 54^{\prime \prime}$ ", MS35059- $1^{2} 1 / 4 \times 11 / 4 \times 3 / 4^{\prime \prime}$
     AC. Shog rated 20
    Net Each, In Lots of
    Stoc
    No
    No. Cir. $1.29 \quad 30-99 \quad 249 \quad 250-500-100$.
    OOUBLE POLE DOUBLE THROW (FIG. D)

    | 3SW.557 MS35059.23 | 2 | 2.09 | $\mathbf{1 . 5 0}$ | 1.20 | 1.05 | .99 |  |
    | :--- | :--- | :--- | :--- | :--- | :--- | :--- | ---: |
    | 3SW.558 | MS35059-21 | 5 | 2.09 | 1.50 | 1.20 | 1.05 | .99 |
    | 3SW. 559 | MS35059.26 | 6 | 2.38 | 1.70 | 1.36 | 1.19 | 1.12 |
    | 3SW-550 | MS35059-27* | 9 | 2.38 | 1.70 | 1.36 | 1.19 | 1.12 |
    | 3SW. 561 | MS35059.31. | 8 | 2.38 | 1.70 | 1.36 | 1.19 | 1.12 |

    
    
    
    FOUR POLE OOUBLE THROW (Fig F)

     \begin{tabular}{l|l|l|l|l|l|l|l}
    3SW-566 \& MS2 $5068-23$ \& 2 \& 4.38 \& 3.65 \& 2.92 \& 2.74 \& 2.56 <br>
    $3 S W-567$ \& MS $25068-26$ \& 4 \& 3.87 \& 3.23 \& 2.58 \& 2.42 \& 2.26 <br>
    3SW. 568 \& MS25068.27 \& 9 \& 3.95 \& 3.29 \& 2.63 \& 2.47 \& 2.30

 

    \hline 3SW.568 \& MS25068.27 \& 9 \& 3.95 \& 3.29 \& 2.63 \& 2.47 \& 2.30 <br>
    3SW.569 \& MS25068.31 \& 8 \& 3.95 \& 3.29 \& 2.63 \& 2.47 \& 2.30
    \end{tabular}

    

    Rugged, compact foot switch. Rated 6A.-125VaC. Push action, SPST, positive contact. Skid proof rubber base and housing. Efficient switching for tape recorders, dictating machines, musical instrument amplifiers, sewing machines, electric motors. Serves as safety device on many machines. $41 / 2 \times 14 / 2 \times 13 / 4$ overall. Shpg. wt., 6 or. Imported
    $5 \mathrm{w} \cdot 100$......Net ea.. $1.49 \ldots$ in lots of 3. ea.. 1.19

    ## HEAVY DUTY LOCK SWITCH <br> - For Burgiar Alarm Systems - Hidden Auto Disconnect - Power Tool Safety Switch

    Heavy duty bakelite construction insures minimum Internat resistance and greater current carrying capacity. Extra heavy contacts. Terminals set for simple installa-tion-well recessed to prevent shorting, Installs in any hole from $3 / 4^{\prime \prime}$ to $11 / 5^{\prime \prime}$ In ola., in any panel up to $7 / 4^{\prime \prime}$ thick. Two terminal single throw. Key can be removed in both "on" and "off" position. Prevents tampering with automotive equipment-power tools-electrical appliances. Activates alarm systems-only key can shut off. Suitable for marine equipment. With 2 keys. Shpg. wt. 8 ozs.
    SW. 75
    Net 1.29

    #  

    ## MALLORY SINGLE GANG ROTARY SWITCHES

    (Fig. A) Single gang, phenolic wafer. $11 / 4^{\prime \prime}$ diameter and $30^{\circ}$ indexing except * are $1^{\prime \prime} \mathrm{KB}_{0}$ " and have $20^{\circ}$ indexing and adjustable stop. Voltage breakdown 500 v AC or DC. $2^{\prime \prime}$ notched shaft with $7 / \mathrm{m}^{\prime \prime}$ threaded bushing, $7 /{ }^{\prime \prime}$ long. With bar knob, nut and lockwasher. Shpg. wt., 402.
    $\begin{array}{llllll} & \text { Posi. } & 1.4 & 5.9 & 10.24 & 25.49 \\ 50.99 & 100\end{array}$ Stock No. Mig. No. Stock No. Mfg. No. Poles llons Each Each Each Each Each Each

    | 3 SW-351 | 3115」 | SW-362 | 32151 | 1 | 5 | . 99 | 84 | 76 | 72 | 1 | 60 |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | 3 SW-350 | 31112J | SW-363 | 32112J | 1 | 12 | . 99 | . 84 | . 76 | . 72 | . 67 | . 60 |
    | 3 SW-353 | 3122J | SW-365 | 32221 | 2 | 2 | . 99 | . 84 | . 76 | . 72 | . 67 | . 60 |
    | 3 SW-354 | 31231 | SW-366 | 32231 | 2 | 3 | . 99 | . 84 | . 76 | . 72 | . 67 | . 60 |
    | 3 SW-355 | 3126」 | SW-367 | 3226J | 2 | 6 | . 99 | . 85 | . 78 | . 74 | . 68 | . 61 |
    | 3 SW-357 | 3134J | SW-369 | 32341 | 3 | 4 | 1.02 | . 87 | . 78 | . 74 | . 70 | . 63 |
    | 3SW-358 | 3142J | SW-371 | 3242J | 4 | 2 | 1.02 | . 87 | . 78 | . 74 | . 70 | . 63 |
    | 3 SW-359 | 31431 | SW-372 | 32431 | 4 | 3 | 1.02 | . 87 | . 78 | . 74 | . 70 | . 63 |
    | 3 SW-352 | 31117]* | SW-364 | 32117.* | 1 | 2 to 17 | 1.52 | 1.29 | 1.16 | 1.10 | 1.03 | . 93 |
    | 3 SW-356 | 3129]* | SW-368 | 3229)* | 2 | 2109 | 1.53 | 1.29 | 1.16 | 1.10 | 1.03 | . 93 |
    | 3 SW-360 |  | SW-370 | $3236{ }^{*}$ | 3 | 2106 | 1.63 | 1.38 | 1.24 | 1.18 | 1.10 | . 99 |
    | SW-3 | 3163)* | SW-373 | 32631* |  | 2 to 3 |  |  | 124 |  |  |  |

    ## MALLORY MULTIGANG ROTARY SWITCHES

    (Flg. B) Phenolic wafers. $1 / z^{\prime \prime}$ spacing between gangs except 3 and 4 gang is $\mathbf{1}^{\prime \prime}$. In dexing is $30^{\circ}$. Have 1 fixed and 1 adjustable stop. Voltage breakdown 1000 V AC or DC. Contacting members sllver coated. $2^{*}$ notched shaft requires $K_{s}{ }^{*} \mathrm{mtg}$. hole Types with * have additional off position with all clrcuits open. With bar knob, nut and lock washer. Avg. shpg. wt., 802

    | Shorting Type |  | Non-Sherting Type |  |  | $\begin{aligned} & \text { Te } \\ & \text { tal } \end{aligned}$ | Pos |  |  |  |  |  | 100. |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | Stock | MIg. | Stock | Mfg. |  |  | pep | 1.4 | 5.9 | 0-24 | 25-49 | 99 | 498 |
    | No. | No. | No | No. |  |  | Pole | Each | Each | Each | - | ach | Each |
    | 3 SW-275 | 1211L | SW-291 | 1311L | 1 | 1 | 11 | 2.05 | 1.74 | 1.57 | 1.49 | 1.39 | 1.25 |
    | 3 SW-278 | 1215L* | SW. 294 | 1315L* |  | 2 | 5 | 2.05 | 1.74 | 1.57 | 1.49 | 1.39 | 1.25 |
    | 3 SW-277 | 1213L* | SW-293 | 1313L* | 1 | 3 | 3 | 2.05 | 1.74 | 1.57 | 1.49 | 1.39 | 1.25 |
    | 3SW-276 | 1212L* | SW-292 | 1312L* | 1 | 4 | 2 | 2.05 | 1.74 | 1.57 | 1.49 | 1.39 | 1.25 |
    | 3 SW-279 | 1221L | SW. 295 | 1321L | 2 | 2 | 11 | 2.54 | 2.16 | 1.94 | 1.84 | 1.73 | 1.56 |
    | 3 SW-282 | 1225L* | SW-298 | 1325L* | 2 | 4 | 5 | 2.54 | 2.16 | 1.94 | 1.84 | 1.73 | 1.56 |
    | 3SW-281 | 1223L* | SW-297 | 13231** | 2 | 6 | 3 | 2.54 | 2.16 | 1.94 | 1.84 | 1.73 | 1.56 |
    | 3 SW-280 | 1222L* | SW-296 | 1322L* | 2 | 8 | 2 | 2.54 | 2.16 | 1.94 | 1.84 | 1.73 | 1.56 |
    | 3 \$W-283 | 12311 | SW-299 | 1331L | 3 | 3 | 11 | 3.18 | 2.70 | 2.43 | 2.31 | 2.16 | 1.94 |
    | 3 SW-284 | 1235 ${ }^{*}$ | SW-300 | 1335L* | 3 | 6 | 5 | 3.18 | 2.70 | 2.43 | 2.31 | 2.16 | 1.94 |
    | 3 SW-285 | 1241L | SW-301 | 1341L | 4 | 4 | 11 | 3.74 | 3.18 | 2.86 | 2.72 | 2.54 | 2.29 |
    | 3SW-286 | 1245L* | SW-302 | 1345L* | 4 | 8 | 5 | 3.74 | 3.18 | 2.86 | 2.72 | 2.54 | 2.29 |
    | 3 SW-287 | 1251L | SW-303 | 1351L | 5 | 5 | 11 | 4.02 | 3.42 | 3.08 | 2.93 | 2.74 | 2.47 |
    | 3 SW-288 | 1256L | SW-304 | 1356L | 5 | 10 | 6 | 4.45 | 3.78 | 3.40 | 3.23 | 3.02 | 2.72 |
    | 3SW-289 | 12611 | SW-305 | 1361 L | 6 | 6 | 11 | 4.72 | 4.02 | 3.62 | 3.44 | 3.22 | 2.90 |
    | 3 SW-290 | 1266L | SW-306 | 1366 L | 6 | 12 | 6 | 5.40 | 4.59 | 4.13 | 3.92 | 3.67 | 3.30 |

    ## CERAMIC SELECTOR SWITCHES

    (Fig. C) Ideal for Rf circuits. All non-shorting. Ceramic insulation, silver plated contacts. $1 / 2^{\prime \prime}$ spacing between gangs except $1^{\prime \prime}$ on 3 gang. Voltage breakdown 500 V AC or DC. Max. non-breaking resistive load is 10 amps. $1^{\text {m }}$ mtg . radius. Notched shaft $2 \mathrm{Lx} \mathrm{y}_{4}$ " diameter with $\mathrm{F}^{\prime \prime} \mathrm{x}$ $3 \%{ }^{\circ \prime \prime}$ bushing. Adjustable stop. Type with " have added "OFF" position preceding others. With knob, nut and lockwasher. Shpg. wt., 802.

    ## Single gang

    $\begin{array}{lllll} & \text { Poles Pos. } & & 100 \\ \text { Stock Mfg. per per } & 1-4 & 5.9 & 10-24 & 25-4950.99 \\ 499\end{array}$ No. No. Sang Pole Each Each Each Each Each Each $\begin{array}{lllllllllll}3 S W & 374 & 172 \mathrm{C} & 1 & 11 & 2.33 & 1.98 & 1.78 & 1.69 & 1.58 & 1.43\end{array}$ 3 SW-375 173C* $2 \quad 5 \quad 2.331 .98 \quad 1.78 \quad 1.69 \quad 1.58 \quad 1.43$ $\begin{array}{llllllllllllllllllllll}3 \mathrm{SW} .376 & 174 \mathrm{C} & 3 & 3 & 2.33 & 1.98 & 1.78 & 1.69 & 1.58 & 1.43\end{array}$ TWO GANg
    Poles Pos.
    Stock Mig. per per 1-4 5.9 10-24 25-49 50-99 499 No. No. Gang Pole Each Each Each Each Each Each $\begin{array}{lllllllllll}3 & \text { SW-377 } & 176 \mathrm{C} & 1 & 11 & 3.31 & 2.82 & 2.54 & 2.41 & 2.26 & 2.03\end{array}$ $\begin{array}{lllllllllllll}3 S W-378 & 177 C & 2 & 5 & 3.31 & 2.82 & 2.54 & 2.41 & 2.26 & 2.03\end{array}$
    

    ## THREE GANG

    Stock Mfg. Poles Pos. per 1-4 5-9 10-24 25-49 50-99 499 No. No. Gang Pole Each Each Each Each Each Each $\begin{array}{llllllllllll}3 & S W & 380 & 180 C & 1 & 11 & 4.23 & 3.60 & 3.24 & 3.08 & 2.88 & 2.59\end{array}$
    

    ## MINIATURE PUSH-BUTTON SWITCHES

    (Fig. D) Non-locking type, contact made only when de pressed. Silver contacts, cadmium plated frame. Mount in $\mathrm{Kc}_{6}$ " hole on up to $1 / 4^{\prime \prime}$ panels. Mig, radus $1 \mathrm{~K}_{\mathrm{c}}{ }^{\prime \prime}$. Mtg depth $\%_{0}{ }^{\prime \prime}$ min. to $\%_{8 "}$ max. Circult codes: M=make, $B=$ break, $M B B=$ mâke before break, Voltage breakdown 500 V DC. With hardware. Shog. wt., 3 oz.

    ## Stoch Mfs.

    No. No. Circult 3 SW. 3821011 SPST.M 3 SW- 3831012 SPST-B 3 SW-384 1013 SPDT 3 SW-385 1014 DPST-M2 3 SW- 3861015 DPST-B2 3 SW-387 1016 DPDT 3 SW. 3881017 DP-M2 3 SW-389 1018 DP-M28 1
    $\begin{array}{llllll}14 & 5-9 & 10-24 & 25-4950-99 & 499\end{array}$ Each Each Each Each Each Each

    ## 24 POSITION TAP SWITCH

    (Fig. E) Single circuit 24 positions, continuous rotation with no stops. $15^{\circ}$ spacing between positlons. Nonshorting. $2^{\prime \prime}$ notched shaft. $3 / x^{2} x^{\prime \prime \prime}$ bushing. 2 phenolic sections. Voltage breakdown 1000 V AC-DC. With knob, hardware and dial plate. Shpg. wi., 6 oz.
    

    ## DECADE SWITCHES

    (Fig. F) Type 153L capacitor switch and 154L resistor switch for simple constructlon of decade boxes. Phe nolic insulation. The number of positions is adjustable for use as a single decade or with more switches as a multiple decade. Requires only 4 capacitors or resistors for full decade operation. Depth behind panel is $1^{\prime \prime}$ lateral space $2^{\prime \prime}$. Voltage breakdown rating 500 V DC or AC. Shaft $2^{\prime \prime}$ long $x 1 / 4^{\prime \prime}$ diameter. With knob and hard ware. Shpg. wt., 80 oz . Uses SW-324 Dial Plate.

    | Stock |  | 1.4 | $5-9$ | 10.24 | $25-49$ | $50-99$ | 100- |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | No. | Type | Each | Each | Each | Each | Each | Each |
    | 3 SW-393 | $153 L$ | 2.65 | 2.25 | 2.03 | 1.93 | 1.80 | 1.62 |
    | 3 SW-394 | $154 L$ | 2.89 | 2.46 | 2.21 | 2.10 | 1.97 | 1.77 |

    ## CERAMIC "HAMBAND" SWITCHES

    (Fig. G) cell are non- shorting with continuous rotation and $90^{\circ}$ indexing. Rated 1000 VDC and 100 Watts. $2 \times 1 / 4^{\prime \prime}$ notched shaft with $3 / \mathbf{g}^{3} 3 / 8^{\prime \prime}$ bushing 2 gang have $17 / 0^{\prime \prime}$ spacing between other $1^{\prime \prime}$. Mig. radius $1^{\prime \prime}$. with knob, nut and lock washer. Avg, shipg. wt., 8 oz.

    Stock Mfg.
    $\begin{array}{lllllll}\text { Total } & 1.4 & 5.9 & 24 & 25 . & 50-100-\end{array}$
    No. No. Gangs Poles Each Each Each Each Each Each

    | 3 SW. 397 | 161 C | 1 | 1 | 2.12 | 1.80 | 1.62 | 1.54 | 1.44 |
    | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
    | 3 SW- | 1.30 |  |  |  |  |  |  |  | | 3 SW-398 | 162 C | 2 | 2 | 3.00 | 2.55 | 2.30 | 2.19 | 2.04 |
    | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
    |  | 1.84 |  |  |  |  |  |  |  |
    | 3 SW. | 199 | 163 C | 3 | 3 | 3.88 | 3.30 | 2.97 | 2.82 | 3 SW-399 163C $\begin{array}{lllllllll}3 \text { SW-400 164C } & 4 & 4 & 4.76 & 4.05 & 3.65 & 3.47 & 3.24 & 2.92 \\ 3 \text { SW-401 } 165 \mathrm{C} & 5 & 5 & 5.64 & 4.80 & 4.32 & 4.10 & 3.84 & 3.46\end{array}$ Mallory 488 dial plate per above. Snpg. wt., 2 oz.

    3 SW-409.

    ## TYPE 151L "HAMSWITCH"

    (Fig. H) Non shorting, 2 section 5 position, 1 pole per section. $21 / 4^{\prime \prime}$ between sections, $60^{\circ}$ indexing with adjustable stops. Ideal for switching up to 5 transmitter circuits to a single meter. Rated 1000 VAC on 1500 DC . Mtg. depth $34 / 2 \times 21 / 4$ dameter notched shaft, $3 / 6 x^{2 / 2}$
    bushing with knob and hardware. Shpg. wt., 6 oz .
    

    ## CIRCUIT OPENING SWITCH

    (Fig. I) For meter switching or opening of multiple circuits for insertion of one while maintaining others. Phenolic insutation, 2 to 11 position adjustable stop $2^{\prime \prime}$ grooved shaft $3, x^{2} / 2^{\prime \prime}$ bushing. Indexing $30^{\circ}$. Max. volt 500 DC . Mig. depth behind panel $21 /{ }^{\prime \prime}$. Max. nonbushing current resistive load, 10 amp . With knob hardware and dial plate. Shpg. wt., 6 oz

    ## LEVER ACTION SWITCHES

    (Fig. J) Positive action, phenolic sections. $\mathbf{6 0 0 0}$ series have mitg. brackets with round holes $15 / \mathrm{g}^{\prime \prime}$ apart; 5000 series have elongated holes In bracket with $2 \% \%^{\prime \prime \prime}$ centers. Voltage rating 500 VAC-DC. Max. non-breaking current resistive load, 5 amp . at 6 VAC. $20^{\circ}$ indexing with knob and hardware. Shpg. wt., $40 z$

    | Stock No. | Mg. No. |  | $\begin{aligned} & \text { Pos. } \\ & \text { Per } \\ & \text { Pole } \end{aligned}$ | Ea. | $\begin{aligned} & 5.9 \\ & \text { Ea. } \end{aligned}$ | $\begin{aligned} & 10 . \\ & 24 \\ & \text { Ea. } \end{aligned}$ | $\begin{aligned} & 25 \\ & 49 \\ & \text { E2. } \end{aligned}$ | $\begin{gathered} 50- \\ 99 \\ \text { Ea. } \end{gathered}$ | $\begin{gathered} 100 . \\ 499 \\ \text { Ea. } \end{gathered}$ |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | 3SW-402 | 5124 | 2 | 4 | 1.34 | 1.14 | 1.03 | . 98 | . 91 | . 82 |
    | 3 SW-403 | 6142 | 4 | 2 | 1.17 | . 99 | . 89 | . 85 | . 79 | . 71 |
    | 3SW-404 | 6143 | 4 | 3 | 1.17 | . 99 | . 89 | . 85 | . 79 | . 71 |
    | Non-Shorting |  |  |  |  |  |  |  |  |  |
    | 3SW-405 | 5224 | 2 | 4 | 1.34 | 1.14 | 1.03 | . 98 | . 91 | . 82 |
    | 3SW-406 | 6242 | 4 | 2 | 1.17 | . 99 | . 89 | . 85 | . 79 | . 71 |
    | 35W-407 | 6243 | 4 | 3 | 1.17 | . 99 | 89 | . 85 | . 79 | . 11 |

    ## MALLORY DIAL PLATES

    (Fig. K) Etched aluminum on black background. Use $30^{\circ}$ spacing plates for all Mallory 1200 L and 1300 L serles switches and for $11 / 4^{\prime \prime}$ base. 3100 J and 3200 J seples. $20^{\circ}$ spacing for $11 / 1 /{ }^{\prime \prime}$ base swltches in latter series $1^{13}{ }^{"}$ diam. K" hole. Shpg. wt. 2 oz .
    

    Any type above

    ## $20^{\circ}$ SPACING FOR $1110 "$ BASE SWITCHES

    | Stock No. | Mfg. No. | Marking | Stock No. | Mfg. No. | Marking |
    | :---: | :---: | :---: | :---: | :---: | :---: |
    | 3 SW-326 | 453 | 1 to 3 | SW-338 | 474 | $0 f f 1$ to 4 |
    | 3 SW. 327 | 454 | 1104 | SW-339 | 475 | Off 1 to 5 |
    | 3 SW-328 | 455 | 1 to 5 | SW-340 | 476 | Off 1 to 6 |
    | 3 SW-329 | 456 | 1 to 6 | SW-341 | 477 | Off 1 to 7 |
    | 3 SW-330 | 457 | 1 to 7 | SW-342 | 478 | Off 1 to 8 |
    | 3 SW-331 | 458 | 1 to 8 | SW-343 | 479 | Off 1 to 9 |
    | 3SW-332 | 459 | 1 to 9 | SW-344 | 484 | Off 1 to 14 |
    | 3SW-333 | 460 | 1 to 10 | SW-345 | 483 | Off 1 to 13 |
    | 3SW-334 | 461 | 1 to 11 | 5W-346 | 480 | Off 1 to 10 |
    | 3SW. 335 | 462 | 1 to 12 | SW-347 | 481 | Off i to 11 |
    | 3SW-336 | 467 | 1 to 17 | SW-348 | 482 | $0 ¢ f 1$ to 12 |
    | 3SW-337 | 473 | Off 1 to 3 | SW-349 | 486 | Off 1 to 16 |
    | Net |  |  |  |  | 12 |

    ## SWITCHES FOR INDUSTRY-RADIO AND TV

    ## CERAMIC SWITCHES

    Uses military grade L.5 steatite, treated with Dow-Corning 200. Has common contact on ODDosite side of wafer from other contacts. Shpg. wt., 3 oz .
    

    ## MALLORY-GRIGSBY SUB-MINIATURE ROTARY SWITCHES

    

    Glass epoxy wafers per Mil.P-18177. Rated at 150 MA at 125 VRMS. Max. GVAC RMS (resistive load), waters are \%" dia., spacing is $\mathrm{K}_{0}{ }^{\prime \prime}$ between wafers; shaft is $11 / 4^{\prime \prime}$ tong $x^{11 / 4^{\prime \prime}}$ dia. with $3 / 6^{\prime \prime} \times$ $1 / 4^{\prime \prime}$ busning. Has $30^{\circ}$ indexing and Hixed stop. Supplied with knob, washer, and nut. Shpg. wt., $11 / 2$ oz.

    | Shorting Type |  | Nor-Shorting |  |  |  |  |  |  |  |  |  | 50.99 | 100-499 |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | Stock | Mfg. | Stock | Mfg |  |  | Per | of | 1.4 | 5.9 | 10-24 | 25-49 |  |  |
    | No. | No. | No. | No. | Cir. | Pos. | Sec | Sec. | Ea. | E. | E. | Ea. | Ea. |  |
    | 35w. 701 | 12M11111G | 3SW. 713 | 12M21116 | 1 | 11 | 1 | 1 | 4.43 | 3.77 | 3.39 | 3.23 | 3.01 | 2.71 |
    | 3SW. 702 | 12M1211G | 35W-714 | 12M212116 | 2 | 11 | 1 | 2 | 5.47 | 4.65 | 4.19 | 3.98 | 3.79 | 3.35 |
    | 3SW-703 | 12M1215G | 35W. 715 | 12M2215G | 2 | 5 | 2 | 1 | 4.43 | 3.71 | 3.39 | 3.23 | 3.01 | 2.71 |
    | 3SW-704 | 12M11311G | 3SW.716 | 12M21311G | 3 | 11 | 1 | 3 | 6.51 | 5.53 | 4.98 | 4.74 | 4.26 | 3.98 |
    | 3SW-705 | 12M1313G | 3SW. 717 | 12M2313G | 3 | 3 | 3 | , | 4.43 | 3.77 | 3.39 | 3.23 | 3.01 | 2.71 |
    | 35W-706 | 12M1225G | 3SW-718 | 12M2225G | 4 | 5 | 2 | 2 | 5.47 | 4.65 | 4.19 | 3.98 | 3.79 | 3.35 |
    | 3SW-707 | 12M1412G | 3SW-719 | 12M2412G | 4 | 2 | 4 | 1 | 4.43 | 3.77 | 3.39 | 3.23 | 3.01 | 2.71 |
    | 3 WW -708 | 12M1235G | 3SW-720 | 12M2235G | 6 | 5 | 2 | 3 | 6.51 | 5.53 | 4.98 | 4.74 | 4.26 | 3.98 |
    | 3SW-709 | 12M1323G | 3SW-721 | 12M2323G | 6 | 3 | 3 | 2 | 5.47 | 4.65 | 4.19 | 3.98 | 3.79 | 3.35 |
    | 35W-710 | 12M1422G | 3SW-722 | 12M2422G | 8 | 2 | 4 | 2 | 5.47 | 4.65 | 4.19 | 3.98 | 3.79 | 3.35 |
    | 35w-711 | 12M1333G | 3SW-723 | 12M2333G | 9 | 3 | 3 | 3 | 6.51 | 5.53 | 4.98 | 4.74 | 4.26 | 3.98 |
    | 3SW. 712 | 12M1432G | 35W-724 | 12M2432G | 12 | 2 | 4 | 3 | 6.51 | 5.53 | 4.98 | 4.74 | 4.26 | 3.98 |

    ## MALLORY-GRIGSBY MINIATURE ROTARY HAM SWITCHES

    ## $60^{\circ}$ \& $90^{\circ}$ HAM SWITCHES

    Designed for high RF signals. All are non-shorting ceramic type single circult per section. Breakdown velrage between contacts, and contacts and frames.
    $60^{\circ}$ INOEX
    $90^{\circ}$ INDEX
    is 1700 volts R.M.S.. 60 crcle. Contact rating is 350 MA , at 500 volts RMS resistive load. 2 " long by $1 /{ }^{\prime \prime}$ dia. shaft. ${ }^{1 / 2 "}$ spacing between wafers. Overall
    dia. $1 / 0^{"}$. Suppled with knob, adjustable stop, lock dla. 1Ko". Supplied with knob,
    washer and nut. Shpg. wt., 3 oz.

    ## MALLORY-GRIGSBY SUBMINIATURE LEVER SWITCHES

    Same MII, specs. and electrical ratings as series 12 M at left. $30^{\circ}$ Index. Mfr. numbers ending in S are spring return; in $U$ are spring return and positive index. All single section. With two $4-40$ screws and knob. Shpg. wt., 1 11/2 02.

    SHORTING TYPES
     $\begin{array}{lllllllllll}3 S W-411 & 12 L 1213 & 2 & 3 & 3.06 & 2.60 & 2.34 & 2.21 & 2.08 & 1.87\end{array}$ $\begin{array}{llllllllll}3 S W-412 & 12 L 1213 S & 2 & 3 & 3.31 & 2.80 & 2.52 & 2.38 & 2.24 & 2.02\end{array}$ $\begin{array}{lllllllll}3 S W-413 & 12 L 1213 U & 2 & 3 & 3.31 & 2.80 & 2.52 & 2.38 & 2.24 \\ 2.02 \\ 3 S W-414 & 12 L 1413 & 4 & 3 & 3.56 & 3.03 & 2.72 & 2.58 & 2.42 \\ 2.18\end{array}$ $\begin{array}{llllllllll}3 S W-414 & 12 L 1413 & 4 & 3 & 3.56 & 3.03 & 2.72 & 2.58 & 2.42 & 2.18 \\ 3 S W-415 & 12 L 1612 & 6 & 2 & 4.16 & 3.53 & 3.18 & 3.00 & 2.82 & 2.54\end{array}$
     NON-SHORTING TYPE
    3SW-417 12 L2213 $2 \begin{array}{llllllll} & 3 & 3.06 & 2.60 & 2.34 & 2.21 & 2.08 & 1.87\end{array}$ $\begin{array}{lllllllllll}3 S W-418 & 12 L 2213 S & 2 & 3 & 3.31 & 2.80 & 2.52 & 2.38 & 2.24 & 2.02\end{array}$
     $\begin{array}{llllllllll}\text { 3SW-420 } & 12 L 2413 & 4 & 3 & 3.56 & 3.03 & 2.72 & 2.58 & 2.42 & 2.18 \\ \text { 3SW-421 } & 12 L 2612 & 6 & 2 & 4.16 & 3.53 & 3.18 & 3.00 & 2.02 & 2.54\end{array}$

    | $35 W-422$ | $12 L 2612 S$ | 6 | 2 | 4.38 | 3.72 | 3.36 | 3.17 | 2.98 | 2.68 |
    | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

    ## LEVER ACTION

    Phenolic type all are single section type. Contact rating is 350 MA at 500 volts RMS resistive load. $30^{\circ}$ indexing action and spring return. \& are spring return. Supplied with lever knob. Shpg. wi., 3 Oz .

    SHORTING TYPES
    

     $\begin{array}{llllllllll}\text { 3SW-690 } & 6 \mathrm{M} 2213 & 2 & 3 & 1.24 & 1.05 & .95 & .90 & .84 & .76 \\ \text { 3SW-691 } & 6 \mathrm{M} 2213 \mathrm{~S} & 2 & 3 & 1.24 & 1.05 & .95 & .90 & .84 & .76 \\ \text { 3SW-692 } & 6 \mathrm{M} 2213 \mathrm{U} & 2 & 3 & 1.24 & 1.05 & .95 & .90 & .84 & .76\end{array}$ | 3SW. 692 | 6 M 2213 U | 2 | 3 | 1.24 | 1.05 | .95 | .90 | .84 | .76 |
    | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
    | $3 S W .693$ | $6 \mathrm{M} 2412 \mathrm{~S} \dagger$ | 4 | 2 | 1.41 | 1.20 | 1.08 | 1.03 | .96 | .86 |

    $=2$
    GENERAL PURPOSE SWITCMES Single section phenolic type $2^{\text {n }}$ long by $1 / /^{\prime \prime}$ dia. Shaft with 3 " " bushand nut except t uses knurled shaft, no knob furn ished. Spring return feature. Shpg. wt.. 3 oz.

    SHORTING TYPES

    | PES |  |  |  |  |  |  |  |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    |  |  | 1. | 5. | 10. | 25. | - | - |
    | Stock NH. CIr Pos. Ea, Ea, Ea. Ea. Ea. Ea. |  |  |  |  |  |  |  |
    |  |  |  |  |  |  |  |  |
    | 35W. 694 | 4M11140 1 | 41.76 | 1.50 | 1.35 | 1.28 | 1.20 | 1.08 |
    | 35W-695 | 5M1112 | 21.06 | . 90 | 81 | . 77 | . 72 | . 65 |
    | $\begin{aligned} & 3 S W-696 \\ & 3 S W-697 \end{aligned}$ | 5M1113 | 31.06 | . 90 | . 81 | . 77 | . 72 | . 65 |
    |  | $5 \mathrm{M} 1113 \mathrm{~K} \uparrow$ | $\begin{array}{llll} & 3 & .73\end{array}$ | 63 | 56 | . 53 | . 50 | . 45 |
    | 3SW. 698 | 5M1213 | 31.06 | . 90 | 81 | . 77 | . 72 | . 6 |
    | \$Has AC line Switch |  |  |  |  |  |  |  |
    |  | ON | SHORTIN | IG |  |  |  |  |
    | 3SW-699 | 4M2412S* 4 | 11.41 | 1.20 | 1.08 | 1.03 | . 96 | 86 |
    | 35w. 700 | 5 M 22132 | 31.06 | . 90 | 81 | 77 | . 72 |  |

    ## SWITCHES FOR EVERY APPLICATION

    

    ## CUTLER HAMMER SWITCHES

    ## AC－DC TOGGLE SWITCHES LIGHT DUTY－ 3 to 6 AMPS

    For use on small motor－driven tools and appliances where a sturdy switch is required．Long life and high arc resistant．13，dia．threaded stem．Length of stem $1 \%$ except $+1 / 1 / 2$ and＊ 14 ．All have soider fug ter－ minals except＊ $6^{\text {＂}}$ wire leads，\＆screw terminals．All 3 amps at 250 V except $\ddagger 1 \mathrm{amp}$ ．U．L．approved．Avg． shpg．wt．， 302

    |  |  |  |  |  | Net Each |  |  |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | Stock No． | Mfr＇s． Type | Con－ tacts | Fig． | $\begin{aligned} & \text { Amps } \\ & 125 \mathrm{~V} \end{aligned}$ | 1－9 | 10－99 | $\begin{array}{r} 100- \\ 499 \end{array}$ |
    | SW． 471 | 8280．K14＊ | SPST | A | － | ． 52 | 43 | ． 36 |
    | SW－472 | $8280 \cdot \mathrm{K15} \dagger$ | SPST | A |  | ． 52 | ． 43 | ． 36 |
    | SW－460 | 8280－K16 | SPST | A |  | ． 52 | ． 43 | ． 36 |
    | SW． 473 | 8282－K13t\＄ | 3 Way | A | 3 | ． 66 | ． 55 | ． 46 |
    | SW－461 | 8282－K14 $\ddagger$ | SPDT | A | 3 | ． 66 | ． 55 | ． 46 |
    | SW－474 | 8282－K12＊ | SPDT | A | 3 | ． 66 | ． 55 | ． 46 |
    | SW－475 | 8284．K14才 | 2 Circ． | A | 3 | ． 71 | ． 58 | ． 48 |
    | SW－476 | 8290－K15 ${ }^{\text {\＃}}$ | SPST | 8 |  | ． 64 | ． 52 | ． 44 |
    | SW－477 | 8290－K16\＃ | SPST | B | － | ． 64 | ． 52 | ． 44 |
    | SW－478 | $8295-\mathrm{K} 7 \dagger$ ¢ | SPST | C | － | ． 64 | ． 52 | ． 44 |
    | \＄W－479 | 8295－K8 | SPST | C | － | ． 64 | ． 52 | ． 44 |
    | SW－480 | 8360－K6＊ | DPST | A | － | ． 95 | ． 79 | ． 66 |
    | SW－463 | 8360－K7 | DPST | A | － | ． 95 | ． 79 | ． 66 |
    | SW－481 | 8360－K8 $\dagger$ | DPST | A | － | ． 95 | ． 79 | ． 66 |
    | SW－482 | 8363－K6＊ | OPST | A | － | 1.09 | ． 91 | ． 75 |
    | SW－462 | 8363－K7 | DPDT | A | 6 | 1.09 | ． 91 | ． 75 |
    | SW－483 | 8363－k8 $\dagger$ | DPDT | A | － | 1.09 | ． 91 | ． 75 |
    | SW－484 | 8365－k78 | DPDT | D | － | 1.47 | 1.20 | 1.08 |
    | SW－485 | 8370－K7 | DPST | A | 6 | 1.02 | ． 85 | ． 71 |
    | SW．486 | 8370－k8 $\dagger$ | DPDT | A | － | 1.02 | ． 85 | ． 71 |
    | SW－487 | 8372－K78 | DPST | 0 | 6 | 1.25 | 1.04 | 86 |
    | SW－488 | 8373－K7 | DPDT | A | 6 | 1.18 | ． 97 | ． 81 |
    | SW－489 | 8373 － $68 \uparrow$ | DPDT | A | 6 | 8.18 | ． 97 | ． 81 |
    | SW－490 | 8375－k78 | DPDT | A |  | 1.51 | 1.24 | 1.12 |
    | SW－491 | 8381－K7† | SPST | A | 6 | ． 60 | 50 | ． 41 |
    | SW－492 | 8381－K8 | SPST | A | 6 | ． 60 | ． 50 | ． 41 |
    | SW－493 | 8391．K7 ${ }^{\text {\％}}$ | SPST | B | 6 | ． 72 | ． 59 | ． 49 |
    | SW－494 | 8391－K8† \＃ | SPST | B | 6 | ． 72 | ． 59 | ． 49 |
    | SW－495 | 8396－K75 | SPST | C | 6 | ． 72 | ． 59 | ． 49 |
    | SW－496 | 8396－K8＋\＄ | SPST | C | 6 | ． 72 | 59 | ． 49 |

    STANDARD DUTY－ 10 to 12 AMPS
    Quick make，quick break contact mechanism eliminates pitting caused by high areing．These long life switches are primarily designed for use on small motors and similar equipment．All in bakelite case with screw terminals．＂1／2，threaded stem $\times 1 / 1 / 2$ long except＊ $2^{\prime \prime}$ mounting center，$\dagger$ 1／82 stem length．U．L．approved． All 6 amp at 250 V ，except $\ddagger 5 \mathrm{amps}$ ．Avg．shpg．wt． 3 oz

    |  |  |  | Not Each |  |  |  |  |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | Stock No． | $\begin{gathered} \text { Mir's.s. } \\ \text { Type } \end{gathered}$ | Con－ tacts | Fg． | $\begin{aligned} & \text { Amps } \\ & 125 \mathrm{~V} \end{aligned}$ | 1.9 | 10.99 | $\begin{gathered} 100 \\ 499 \end{gathered}$ |
    | SW． 497 | 7320－K2 $\dagger$ | DPST | H | 12 | 1.01 | ． 83 | ． 69 |
    | SW－465 | 7320－к3 | DPST | H | 12 | 1.01 | 83 | ． 69 |
    | SW－498 | 7321－k2 $\dagger$ | SPST | H | 12 | 1.01 | 83 | 9 |
    | SW－464 | 7321－k3 | SPST | H | 12 | 1.01 | 83 | ． 69 |
    | SW－499 | 7330－k2＊＊ | DPST | P | 12 | 1.01 | 83 | ． 69 |
    | SW－750 | 8680－K1†t | DPOT | H | 10 | 3.17 | 2.62 | 2.18 |

    ## HEAVY DUTY－ 15 to 20 AMPS

    Switches contain heavy parts，larger clearances and higher ratings．Handle large motors and heavier loads． Longer life on lighter loads．All Bakelite bodies，screw terminals and quick make and break contacts． $1 / 2$ threaded stem ${ }^{15 / 3 z}$ long except＊ $11 / 22$ stem，$\ddagger$ fush mig． types with $2^{\prime \prime}$ centers．U．L．app．All 10 amps at 250 V except $\$ 20$ amps．Shpg．wt．， 3 oz．

    | Stock No． | Mfr＇s． Type | Con－ tacts | Fig | $\begin{aligned} & \text { Amps } \\ & 125 \mathrm{~V} \end{aligned}$ | Net Each |  |  |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    |  |  |  |  |  | 1.9 | 10－99 | $\begin{aligned} & 100- \\ & 499 \end{aligned}$ |
    | SW． 751 | 7360－K7\％ | DPST | H | 15 | 1.74 | 1.44 | 1.20 |
    | SW－470 | 7360－K8 | DPST | H | 15 | 1.74 | 1.44 | 1.20 |
    | SW－469 | 7361－K5 | SPST | H | 15 | 1.74 | 1.44 | 1.20 |
    | SW．752 | 7370－K2＊ | DPST | P | 15 | 1.74 | 1.44 | 1.20 |
    | SW－753 | 7402－K3 $\ddagger$ | DPST | H | $11 / 2$ H．P． | 2.47 | 2.04 | 1.70 |
    | SW． 754 | 7402－K4 | DPST | H | 11／2 H．P． | 2.47 | 2.04 | 1.70 |
    | SW．755 | 7410－K4＊ | OPST | P | $11 / 2$ H．P． | 2.47 | 2.04 | 1.70 |
    | SW． 756 | 8690－K2 | DPOT | H | 15 |  |  |  |

    ## AC TOGGLE SWITCHES LIGHT DUTY－ 6 AMP

    For use in radios，appllances and other equipment which use snap action mechanism．All rated 6 amps at 125 V and 3 amps at 250 V ．© Center－off position． Threaded stems are $15 / z_{2}$ in dia，stem length $1 / y_{2}$ ．U．L． app．Avg．shpg．wt．， 3 oz．t indicates screw terminals， $\pm$ indicates solder terminals．

    | Stock No． | Mir＇s． Type | Con－ tacts | Fig． | $1-9$ | $10.99$ | $\begin{array}{r} 100 . \\ 499 \end{array}$ |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | SW． 757 | 7580．K4 $\dagger$ | SPST | K | 52 | 43 | 36 |
    | SW． 758 | 7580－K6 | SPST | K | ． 45 | ． 38 | 31 |
    | SW－759 | 7581－K4＊＊ | SPDT | K | ． 60 | ． 50 | ． 41 |
    | Sw． 760 | 7581－K6¢＊ | SPDT | K | ． 49 | 41 | ． 34 |
    | SW－761 | 7582－K4 | SPDT | K | ． 60 | ． 50 | .41 |
    | SW． 762 | 7582－K6 | SPDT | K | ． 49 | .41 | ． 34 |
    | SW－763 | 7590－K4 $\dagger$ | DPST | F | ． 81 | ． 67 | ． 56 |
    | SW－764 | 7590－K6\％ | DPDT | F | ． 66 | ． 55 | ． 45 |
    | SW－765 | 7591－K4＊＊ | DPDT | F | ． 96 | ． 79 | ． 66 |
    | SW． 766 | 7591－K6＊＊ | DPDT | $F$ | ． 73 | ． 61 | ． 51 |
    | SW． 767 | 7592．K4 $\dagger$ | DPDT | F | ． 96 | ． 79 | ． 66 |
    | SW－768 | 7592－K6 $\ddagger$ | DPOT | $F$ | ． 73 | ． 61 | ． 51 |

    ## STANDARD DUTY－ 10 to 15 AMPS

    Slow make，slow break mechanism．All have $11_{2}$ dia meter threaded stem．＂ $1 / 2$ long except $11 / 2 \mathrm{p}$ long， center off，all rated 10 amps at 250 VAC and 15 amp at 125 V AC．U．L．approved．Avg．shpg．wt．，${ }^{3}$ oz．
    $\dagger$ indicates screw terminal，$\ddagger$ indicates solder ter－ minals．

    |  |  |  |  | Nat Each |  |  |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | Slock No． | Mfr＇s． Type | Con－ tacts | Fig． | 1.9 | 10．99 | $\begin{gathered} 100 . \\ 499 \end{gathered}$ |
    | SW． 769 | 7500－K13t\％ | SPST | J | ． 60 | ． 50 | ． 41 |
    | SW－770 | 7500－K14 $\dagger$ | SPST | J | ． 60 | ． 50 | 41 |
    | SW． 771 | 7501－K12\＃ | SPST | J | ． 52 | ． 43 | ． 3 |
    | SW． 772 | 7501－K13 | SPST | J | ． 52 | ． 43 | ． 34 |
    | SW．773 | 7502－K12＋8＊ | SPDT | E | ． 72 | ． 59 | ． 49 |
    | SW－774 | 7502－K13 ${ }^{*}$ | SPDT | G | ． 72 | ． 59 | ． 49 |
    | SW－775 | 7503－K12扲＊ | SPDT | E | ． 60 | ． 50 | .41 |
    | SW－776 | 7503－K13\＃＊ | SPDT | E | ． 60 | ． 50 | 41 |
    | SW． 777 | 7504－K3＋5 | SPDT | E | ． 72 | ． 59 | 49 |
    | SW－778 | 7504－K4 ${ }^{\text {¢ }}$ | SPDT | E | ． 72 | ． 59 | ． 49 |
    | SW－779 |  | SPDT | E | ． 60 | ． 50 | ． 41 |
    | SW－780 | 7505－K4 | SPDT | E | 60 | ． 50 | 41 |
    | SW－781 | 7560－K5 | DPST | F | ． 96 | ． 79 | ． 66 |
    | SW－782 | 7560－K6＋ | DPST | K | ． 96 | ． 79 | ． 6 |
    | SW－783 | 7561－K47 | DPST | F | ． 81 | ． 67 | ． 56 |
    | SW－784 | 7561－K5 | DPST | K | ． 81 | ． 67 | ． 56 |
    | SW．785 | 7562．K4 ${ }^{\text {＊}}$ | DPDT | F | 1.16 | ． 98 | ． 81 |
    | SW．786 | 7562－K5ts＊ | DPDT | F | 1.16 | ． 98 | .11 |
    | SW－787 | 7563－K4キ＊ | DPDT | F | ． 96 | ． 79 | ． 66 |
    | SW．788 | 7563－K5＊＊＊＊＊＊＊＊＊＊） | DPDT | $F$ | ． 96 | ． 79 | ． 66 |
    | SW．789 | 7564－K6 $\dagger$ | DPDT | F | 1.16 | ． 98 | ． 1 |
    | SW－790 | $7564 . K 7+\xi$ | OPDT | F | 1.16 | ． 98 | ． 81 |
    | SW－791 | 7565－K5 | DPDT | F | ． 96 | ． 79 | ． 66 |
    | SW． 792 | 7565－K6 | DPOT | F | ． 96 | ． 79 | ． 66 |
    | SW－793 | $7600 \cdot \mathrm{~K} 31$ | 3PST | L | 1.93 | 1.60 | 1.32 |
    | SW－794 | 7602－K2＊＊ | 3PST | L | 2.42 | 2.03 | 1.69 |
    | SW－795 | 7610－K2 | 3PST | ， | 1.93 | 1.60 | 1.33 |
    | SW－796 | 7611－K2 | SPST | L | 1.66 | 1.35 | 1.12 |
    | SW－797 | 7612－K2 ${ }^{*}$ | SPST | L | 2.42 | 2.03 | 1.69 |
    | SW－798 | 7613－K2 ${ }^{*}$ | SPST | $L$ | 2.04 | 1.69 | 1.41 |
    | SW－799 | 7614－K2 | SPST | L | 2.45 | 2.03 | 1.69 |
    | SW－800 | 7615－K2 | SPST | L | 2.04 | 1.69 | ． 41 |

    HEAVY DUTY－ 20 AMPS
    Rugged Bakelite housings．Switches rated 20 amps at 250 V AC．Screw terminals．U．L．approved． $8320-\mathrm{KI}$ has $1 / \mathrm{m}_{1}$ dia．stem for one hole mtg ． $8337-\mathrm{K} 2$ is flush mtg ． type with $3 \%$ mtg．centers．Shpg．wl．， 3 oz ．

    | Stock No． | Mfr's. <br> Type | Con－ tacts | Fig． | 1.9 | Net Each $10-99$ | $\begin{aligned} & 100- \\ & 459 \end{aligned}$ |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | SW－801 | 8320－K1 | 3PST | S | 3.32 | 2.80 | 2.35 |
    | SW－802 | 8337－K2 | 3PST | R | 3.32 | 2.80 | 2.35 |

    7140－K6 CENTER－OFF AIRCRAFT SWITCH
    SPOT switch with center－off position． 3 amps at 125 V $A C$ and 10 amps at $24 V D C$ ．Screw terminals．Size $17 / 4 x^{15} / x_{1} \times 1 K_{0}$＂．Threaded stem dia．1／32，stem length \％s．U．L．approved．
    Stock No．Mfr．No．Fig．$\quad 1.9 \quad 10.99 \quad 100.499$
    

    Magnet Switch
    Circuit Closes When Magnet Approaches Switch
    －For Industry and Business －Hermetically Sealed
    An ingenious little device that has untold uses in the home－in a burglar alarm system，electric trains，＂magic tricks，＂and many more．As the magnet approaches the switch，the circuit closes．Hermetically sealed；precious metal contacts；$\perp$ millisecond actuation． 15 watts resist Ive max．up to 1 amp to 250 voits．Size： 25 ，＂＂with leats SW－105 Shpg．wt．， 3 ozs．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．Net 1.74

    ## MIDGET－BAKELITE KNIFE SWITCHES

    Compact switches mounted on black bakelite base with insulated knob handle of black bakelite．Plated brass Imported provide positive low－resistance Dverall size $11 / 4 \times 23 \%^{*}$ Shpr．Wi． 6 oz．
    SW－23 Imported OPDT KNIFE SWITCH
    Overall size $1 \% \times 27 \%^{*}$ ．Shpg．wt．， $40 z$
    SW． 24
    Net 19 ea．－ 10 for 1.75

    ## HART AND HEGEMAN MOMENTARY PUSH BUTTON SWITCHES

    Metal base push switches with laminated phenolic sec－ tions，slotted sleeve ${ }^{15}$ 造 diam．by Ks＂long except $\dagger$ are Ko＂．Al have solder lug terminal，and plain tops ex－
    cept＂which have snap on buttons（specify red or black）． cept which have snap on buttons（specify red or
    Rated 1 A－ 125 V AC．Shps wt．， $30 z$ ．，buttons $10 z$ ．
     SW－33 SW－33
    SW－34
    SW－35
    SW－34 SW－37
    SW－38
    $3392 E \dagger$
    $3392 A^{\circ}+$
    3392
    $3392 A E$
    3391
    $3391 G J$

    \section*{| SW． 39 | $3391 E$ |
    | :--- | :--- |
    | SW－40 | 3391 GL |}

    $\left.\right|_{\text {NO }} ^{\text {NOW }}$
    2 C
    2 C
    2 C
    2 C
    SP
    SP
    NORA
    SP
    $\qquad$

    SW－41 3391．194R－Red snap－on button for all switches
    5W－42 3391－1948－Black snap－on button for ai

    ## SWITCMERAPT TIN－SMITCM

    Subminlature push－button switch for use in limited．space applications．Specially useful in minlaturized．transistor devices，microphones，intercoms or wherever an extra small switch is desired．One－plece plastic shaft avallable in red or black．Sultable for low level circuits only． $\mathrm{NO}^{\prime \prime}=$ normally open．NC $=$ normally closed．Threaded $1 /{ }^{\prime \prime}$ bushing．＂Ks＂long，requires $7 \mathrm{H}^{\prime \prime}$ behind panel．Shpg． wt．， 3 oz．

    | Blact | pe | Hed |  |  |  | In | － |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | Steck | Mft． | Stock | Mfs． |  |  |  | 100 |
    | No． | Me． | Mo． | No． | Centacts | $1-49$ | 50－99 | Up |
    | SW－438 | 961 | SW－435 | 951 | SPST－NO | ． 53 | ． 45 | ． 40 |
    | SW－439 | 962 | SW－436 | 952 | SPST－NC | ． 53 | ． 45 | ． 40 |
    | SW－440 | 963 | SW－437 | 953 | SPDT | ． 59 | ． 50 | －4 |

    ## SPST MIDGET SWITCH

    Type 8097．K3．Bat handle $/ \mathrm{Ks}^{\prime \prime}$ from end of threaded stem． 3 Amps at 125 V AC， .75 at 250 V DC．Screw terminals．Flat sides．Threaded stem dia．By，stem length 11／32．Shpg．wt．， 2 oz．Net Each

    | Stock No． | Fig． | 1.9 | 10.99 | $100-499$ |
    | :---: | :---: | :---: | :---: | :---: |
    | SW－466 | $M$ | .41 | 35 | 29 |

    ## 827－228 F3 ON．OFF PLATE

    Switch plate with on－off indicated．Designed to fit slot in threaded stem of toggle switch．Secured in position by mounting nut of switch．Shpg．wt．g 1 oz
    Stock No．
    Fir
    Net Exch
    SW－468
    0
    1.49
    50.249

    # SWITCHES for INDUSTRY-EXPERIMENTERS-HAMS 

    

    HEAVY DUTY 6 AMP DPOT CENTER OFF togele switch as low as $\mathbf{4 5}$

    6 Amp DPDT Center Off:
    cuits. etc. Rated 6 amps 125 V.A.C. 1 or $x 3 / 4 \times 1$ behind panel including screw terminals, Bushing $\boldsymbol{K}_{6} x$ //a". "t" bat handle. Shog. wt., 3 02. Imported \$W. 19
    net, ea. . 49
    

    HEAVY DUTY 6 AMP DPDT SWITCH

    AS LOW AS 2

    Heavy Duty 6 Amp DPOT:
    Rated 250 V at 3 Amos or 125 V at 6 amps. Switch body $1 / 4 \times 3 \times 4 \%{ }^{\prime \prime}$ behind panel including terminals. Bushings $1 /$ son $^{\prime \prime}$ Dia., $/ 10$ long. Bat handle $1 z^{\prime \prime}$ long. Shpg. Wt., 3 oz. Imported SW-22 net, ea. . 32 In lots of 10, ea. 29

    ## AUTOMOTIVE TOGGLE SWITCH

    
    (4)

    AS LOW AS +5

    - Paddle Mandle-Flick Action

    Automotive SPST Toggle: Rated 6 Amp 125 V or 3 Amps 250 V . Mar. Voltage is 1000 V AC with .010 ohm contact resistance. Designed for dash board or instrument installation. Measures $1 K_{0}$ " long $x$ "Ka" W.
    
    Shpg. wh., 3 oz. imported
    Sw. 44 net, ea, 99 in lots of 10, ea, 95
    4 POT MINIATURE SLIDE.SWITCH

    - Printed Circuit Type Connectors
    - Easy Panel Mounting
    with $1 / 2^{\prime \prime}$ SHde Knob
    
    59
    Shpg. wt., 302
    Miniature 4 POT Slide Switch:
    

    Panel Muunt Printed circuit type connectors. Rated current capacity is 800 milliamps at 100 V . AC. Insulation resistance is 100 megohms at 500 V. A.C. Measures $1 \%_{0}$ I I Yto W x $11 / 00 \mathrm{D}$. Mounting center $11 / \mathrm{m}^{\circ}$. slide knob extends $1 / 2$ ". imported
    \$W,91 net, ea. . 59 in lots of 10, ea, 55

    ## ULTRAMINIATURE

    SPDT SLIDE SWITCH
    Exceptionaliy shallow design-only $1 / \mathrm{g}^{\prime \prime}$ deep for panel mounting. Contact resistance: 50 milliohms or less; insul. res., 20 megohms @ 500 V DC., Max. AC current 0.5 amps. Withstands 600 V AC. Size: $56 \times 1 / 8 \times \mathrm{K}_{6}$ ". Size of switch body, mounting ears add $1 / z^{\prime \prime}$ to overall length. Mig. centers $1^{\prime \prime}$
    Sw-109 Shpg. wt., 2 oz. Imported
    Net .29
    4POT MINIATURE

    ## SLIDE SWITCH

    
    $\qquad$

    MINIATURE APOT SLIOE SWITCH: Panel mount. Current capacity 500 ma at $100 V A C$. Contact resistance 500 milliohms at 500 volts. Measures 1 KoLxKo Wrks"D. Mounting center $13 / \mathrm{s}^{\circ}$. Shpg. wt. 3 oz. 1 mported Mounting center 1 .14. Shig. Wt. In lots of 10 , ea. ..... 55
    SW. 54

    3PDT AC-OC SLIDE SWITCH .29
    3 POT AC-DC Slide Switch: Rated at 50 C micro. amps at 100 V . Solder lug terminals. Measures $3 / 4^{\mathrm{\prime} \mathrm{\prime}} \mathrm{Wx}$ $130^{\circ \prime} L x \% \%^{\circ \prime}$. Overall including $X_{0}$. trigger. Mounting centers $11 / 6^{\circ \prime}$. Shpg. wt., 3 oz. Imported
    SW-82

    ## HEAVY DUTY 10 AMP DPDT MOTOR SWITCH - molded phenolic case - metal face plate <br>  Imported

    Heavy Outy 10 Amp OPOT: Rated 10 amps at 125 V.A.C. will easily take current surge of motor start ing. Freeflow solder type terminals. $13 / 4 \times 7 / 8 \times 1^{\prime \prime}$ Bushing 7/8 $\times 1 / 6^{\prime \prime}$ D. 3/4" bat handle. Shpg. Wt., 302. SW-26net, ea. . 79
    Iots of 10 . ea. 75

    ## HEAWY DUTY 10 AMP SPDT CENTER OFF

    ## TOGGLE SWITCH Importe

    

    Heavy Duty 10 Amp. SPST center off: Rated 10 amps at 125 V . Silvered lugs for low loss connections Body size $11 / 8^{\prime \prime} \times 1 / 6 \times 5 / 8^{\prime \prime}$ depth behind panel. Bush. ings $3 / 0^{" D}$ Dla., $1 / 0^{\prime \prime}$ long. Bat handle $1 / 2^{\prime \prime}$ long.
    SW-21 net ea. .39.... In lots of 10 , ea

    ## 6 POLE D.T. MINIATURE SLIOE SWITCH

    

    Tiny sllde switch. Panel mount. Mounting centers $7 / \mathrm{s}^{\prime \prime}$ Current capacity, 500 MA @ 100 V AC. Contact resistance, 10 megohms or less. Solder lug terminals. Size: $1 \times k \times 1 / 2^{\prime \prime}$. Imported
    SW. 110 Shpg. wt., 201
    Net 69

    ## MINIATURE DPDT SLIDE SWITCH

    

    Perfect for ultra-small switch applications. Rated current capacity, 3 amps at 125 volts. Can withstand up, to 1000 V A.C. Solder lug terminals. Measures: $\mathrm{K}_{\mathrm{L}} \mathrm{Lx}$ $1 / 4 W x 38^{\circ} \mathrm{D}$. Mountling centers: $11 \mathrm{~m}^{\prime \prime}$. Impórted SW-104 Shpg. wt., 1 oz .

    ## RUGGED TELEPHONE

    TYPE 4PDT LEVER SWITCH
    ## CHRDME PLATED CAM

    

    Telephone Type 4 PDT. Lever switch: 3 position lever action switch of non induction construction. Has 4 sets of SPDT contacts. Has 3 locking positions Heavy insulated rollers. Panel mount, ${ }^{1 / 1 / w}$ mounting Heavy size 2u* lone behind panel bis wide 1\% high. Shpg. wt., 3 0z. Imported
    SW. 20 $\qquad$ In lots of 10 , ea. 65

    ## 4 POT MINIATURE DUAL

    ## SLIDE SWITCH

    - For Panel Mounting
    - Two Switches

    In Dne single Unit. $-\infty$ ea.
    Miniature 4 PDT Oual Slide Switch Imported Rated at 500 milliamps Panel mount. a wa single unit. Provides four circuits with each section witching two circuits. Positive action. Measures $174{ }^{\prime \prime}$ SW-90

    ## 6 POT SLIDE SWITCH

    ## .79

    

    6POT SLIDE SWITCH: Panel mount. Current capacity 500 ma at 125 VAC. Contact resistance 500 milifohms. DC insulation resistance 20 megohms. Measures $1 K_{0} L \times K_{0} W \times 1 K_{0}^{\prime \prime} D$. Mounting center $1 K_{0}^{\prime \prime}$. Shpg. wi., 302.1 mported

    Sw-99 .......Net ea. .... 79 ...In tots of 10, ea.
    

    PUSH BUTTON ucuas smict AS LOW AS
    

    Push button SPST Locking Switch: Positive ac tion. Normally open push on, push off. Rated 10 amps at 115 V . Overall size $2 \% / \mathrm{L} \times 11 / 4 \mathrm{~W} \times 1 \mathrm{~K} / \mathrm{D}$. Shaft \& Knob extended $11 / 4^{\prime \prime}$. Shpg. Wt., 3 oz . Imported
    SW. 71
    

    - $3 / 4^{\prime \prime}$ Long Bushing
    - Oesigned for Wood Panel Mounting.
    $3 / 4$ " long shaft DPDI: Rated 6 amps at 125 V . A.C. De signed for easy wood panel mounting. Measures
     diam. Bat handte, "1/40" long. Shog. wt., 3 oz.
    \$w-86 ......Net ea. .... 79 ...Lots of 1D, net ea. .... 75
    

    SINGLE POLE SINGLE THROW TOGGLE SWITCH

    - Standard Replacement

    SPST Bat Handle: Rated 3 amps - 125 V . Body size $11 / 8 x 3 / 4 \times 1 / 2^{\prime \prime}$ behind panel. Bushing $\mathrm{K}_{0}$ " diam. $7 / 0^{\prime \prime}$ long Ball handle $1 / 2^{c}$ long. Shpg. wt., 3 oz. Imported
    SW-21 ......Net ea. . . 22 ... In lots of 10, ea, ... 19
    

    4 PDT Audio Lever Switch: Has 4 sets of single pole, double throw contacts. Switch has three position with positive \& spring return. Panel mounting;, mtg. centers $1^{\prime \prime}$ apart. Size. $21 / 4^{" \prime}$ long behind panel. $13 \%_{0}$ " W I" H Shipg. wt., 3 oz. Imported
    SW-68
    net, ea. . 85
    SPST lever action switch: Similar to SW-68 above Has 2 positions with spring return. Size $13 / 4^{\circ " *}$ long behind panet $3 / \mathrm{m}^{-3}$ high. Shpg. wi., 3 oz. Imported 5W. 69

    ## PUSH BUTTON

    ## INTERPHONE SWITCH 89

    6 -pole double throw, non-shorting PB locking switch Use as audio selector, intercom band change switch efc. Contact resistance 10 milliohms or less; insulation res. 200 meg ohms at 500 V DC. Current capacity 500MA@100V AC. Slize: $121 / 8 \times 11 / 4 \times 1 / 2$
    SW-108 Shpg. wt., 2 oz. Imported
    

    SLIDE SWITCHES AT LOW PRICES!
    Compact slide switches in cadmlum steel housings. All rated 125 v. AC. $14 / 2^{\prime \prime} \mathrm{mtg}$. ctrs. Shpg. wt., 302.
    

    Spring loaded for positive action. Rated 0.5 Amp at 1 LOVV Solder terminals. Overall size 2 ' $\mathrm{K}_{0}^{\prime \prime} \mathrm{D} \times 1 \mathrm{Ka}_{0}{ }^{\prime \prime} \mathrm{W}$ overall including 13." shaft and knob. Shpg. wt., 3 02. Imported SW. 85

    # SWITCHES for 

    ## INDUSTRY-EXPERIMENTER-HAMS

    NTM MINATURE PUSH BUTTON

    ## 4 PDT SPRING RETURN MINIATURE PUSH BUTTON SWITCH

    IOEAL FOR HAM OR CITIZENS bano USE .79
    Miniature 4 PDT Spring return: Push button
    Rwitch. Rated at 800 mlliamps for 100 V. A.C. Ideal switch. Rated at 800 milliamps for 100 V. A.C. Ideal
    for transistor application. Heavy duty spring Two circuit operation. Measures $13 / 6^{\prime \prime} \times x_{6^{\prime \prime}} \times 1 / 2^{\prime \prime}$ plus $1 / 2^{\prime \prime}$ plunger. Imported

    | SW. 92 | net, ea. | .79 | Lots of 10 , ea. | .75 |
    | :--- | :--- | :--- | :--- | :--- |

    ## POSITIVE ACTION

    ## PUSH BUTTON SWITCH

    1 Inch Long Actuator for Deep Panel Mounting
    Unique, cam action SPST push bution switch. Positive, lock-in, on-off cycle. Extra long, full $1^{\prime \prime}$, push button permits use in panels up to $3 / a^{\prime \prime}$ thick. Rated 1 A at 125 V . A.C. Contact resis-
    tance - 20 milli at 1 A amp. D.C., in.
    sulation resistance 100 megohms at 500 V.D.C. Mounting centers, 1K:". Overall behind panel depth, 1 ". Width
    
    
    tour pole rotary selector switch, 3 positions per pole Useful in hi-fi preamps and stereo applications. Spring loaded, positive detent action. Shorting type. Over-all diameter $1 \mathrm{Va} \mathrm{\prime}$ ". Depth behind panel, including lugs.
     wt., 3 ozs. imported
    $\mathrm{Sw} \cdot 30$ Net ea., 39 Lots of 10 , ea, . 35
    NEW! MINIATURE 4PDT ROTARY SWITCH

    - $3 / 4^{\prime \prime}$ Long $\times{ }^{5 / 8 "}$ Diam.
    

    Ideal for transistor application. Precision 1 Gang, 4 Pole 2 Position rotary switch. Contact resistance is less than 0.01 ohm . Current capacity is 1 ampere at 6 V DC. Insulation between any two terminals or between any terminal and shell is not less than 100 megohms at 100 V DC. Measures only overall $3 / h^{\prime \prime}$ diam by $3 / 4$ " long including K/nen $^{\text {m }}$ shaft. Shps. wI., 302.

    ## SW-80

    

    ## 3 GANG 9 POLE 3 POSITION MINIATURE ROTARY SWITCH

     ea.
    Designed for subminiature applications in tra sistor circuits. Total of 12 circuits are provided each gang or section. Rated current capacity is 50 ma at 100 V. A.C. Insulation resistance 100 megohms at 500 V . D.C. Contact resistance without load is 10 milliohms at 6 V. D.C. Non shorting type switch. Mig. depth $11 / 2^{\prime \prime}$ Diam 5\%", $3 / \mathrm{m}^{\prime \prime}$ knurled shaft
    SW-88 ..........net . 99
    Lots of 10, ea. . 89

    SUB MINIATURE PUSH BUTTON SWITCH

    ## - $\begin{gathered}\text { ea. } \\ \text { in iots } \\ \text { of } 10\end{gathered}$

    
    of 10 - INDUSTRIAL SPECIAL Momentary contact push button switch. SPST, non snap action. Rated 115 V.A.C. at 100 ma . Over all dimensions $3 / x^{3 / 4} /{ }^{\prime \prime L}$. Bushing $1 / 4^{\prime \prime}$ long. Shpg, wt. 1 cz . Imported
    ${ }_{\text {Sw }} \mathrm{cz}$. 70 mported

    ## MINIATURE PUSH BUTTON SWITCH

    6 Pole U.I. Miniature Push But-
     ers. ham and CB equipment. Contact resistance 10 milli-ohm or less. Insulation resistance 200 meg ohm at 500 VDC. Current capacity 500 milliamps @ 100 VAC. Size $1 x^{7} /{ }^{3} \times 5 / 8^{\prime \prime}$. Shpg. wt., 202 . SW- $107 \ldots . .$. Net .89

    ## MINIATURE 4PDT LOCKING TYPE PUSH-BUTTON SWITCH

    

    Push-"on"-_Pushr-'off" USE FOR HAM OR Citizens band
    Rated 800 milliamps at 100 V. A.C. Insulation resistance is 100 megohms at 500 V. A.C. For all transistorized application. Heavy duty spring. Two ciroult operation. Size $3 / \mathbf{B}^{\prime \prime} \times 1 \mathrm{~K}_{4}{ }^{\prime \prime}$ plus $3 / 4^{\prime \prime}$ plunger. Imported SW-89 Lots of $10, \mathrm{ea} .79$

    ## SPST "SEE SAW" SWITCH

    - Rocker Arm actuated

    Flush Mounting

    ## 36

    "Touch" action rocker arm type, ecuipment switch, Mounts flush in panel up to $1 / 8^{\circ \prime}$ thick. Reouires rec tangular mounting hole ${ }^{5 / 8} \mathbf{g}^{\prime \prime}$ wide by $1^{\prime \prime}$ long. Mtg centers $13 / \mathbf{n}^{\prime \prime}$. Mtg. holes tapped for 4.36 machine
    screws. Overall behind screws. Overall behind panel dimensions 5 " " $5 / 8$ " $\times$ $13 / 4{ }^{*}$. Rated 3 amps at 125 V. A.C. Shpg. wt., 2 ozs.
    

    ## SUBMINIATURE mex <br> 

    -9/16" Diam. $\times 11 / 2^{\prime \prime}$ long.
    High quality 1 gang, 2 pole, 5 position shorting rotary switch. Ideal for construction of transistorized equipment. Current capacity 1 amp per pole at 10 V DC or .1 at 220 V AC. HIgh insulation of 100 meg at 500 V DC between terminalis. Moisture resistant. Dia. K. "x $12 / 2^{\prime \prime}$ Iong overall. $7 / /^{\prime \prime}$ L bushing. $1 / 2^{\prime \prime} L \times 1 / 4$ "D Knurled shaft. Shpg. wt., 3 oz Imported
    SW. 78
    Net ea. . 59
    Lots of 10 , ea., 53 Lots of 100 , ea.. . 48
    

    - 2 gang- 3 position - 6 pole! - Stereo Circuit! New 2 gang (shlelded), 3 position, 6 pole ( 3 stereo) rotary switch. Unilimited audio-stereo-experimenter applications. Exceptionally rugged construction. SIIvered contacts. Positive action. Shaft is $11 / 40 \times 5 /{ }^{\prime \prime} \mathrm{L}$ Shield between gangs. Shpg. wt., 2 ors. Imported SW. 12

    Net .69
    

    Non-shorting type with 12 circuits per gang or section. Rated current capacity is 50 ma at 100 V. A.C. Insulation resistance 100 megohms at 500 V. D.C. Con tact resistance witiout load is 10 milliohms at 6 V. D.C. Perfect for transistor applications. Mounting depth $1^{\prime \prime}$ Diam. \$8", 3/8" knuried shaft. Imported
    SW-87 .... net. ea. . 89 .......... L8ts of 10 ea. . 79
    Lots of 100 , ea. . 69
    

    NEW ILLUMINATED PUSH-BUTTON SWITCH

    A compact illuminated switch which will indicate mode of operation at a glance. Button lights in "IN" position takes no more space than conventional switches. Lamp is built into push handle. SPST Type. Current capacity, 10 Amps @ 125 VAC, 6A (2) 250VAC: Insulation resistance, 100 meg ohms or more at 500 VDC. Solder terminals. Single-hote mig. Mount in $1 \%$ hole, $11 / 2^{\prime \prime}$ behind panel. Imported SW-118
    
    delay action SWITCHES FOR HOME AND CAR for your safety

    For the car. Keeps car lights on for 60 seconds whlle you walk to house then turns them off automatically. Easy to install in any 6 or 12 volt car. 3yaxi\%" diam. SW-25 (Fig. A) Shpg. wt., 6 ozs. Net 2.19 For the home. Install in regular wall outlet. Keeps out side lights on for seconds while you go to car. Rated 10 amps 125 V .
    SW. 79 (Fig. B) Shpg. wt.. 5 ozs.

    DPDT "SEE SAW" SWITCH

    - Rocker Arm Actuated - Flush Mounting giv CTH Flip action, rocker arm type equip.
    ment switch. Mounts flush in panel
    up to $3 / 8{ }^{* \prime}$ thick. Requires rectangular mounting hole $1 / 2 \times 11 / 8^{\prime \prime}$ long. Mig. centers $13 / 0^{\prime \prime}$. Mtg, holes tapped for 4.36 machine screws. Rated 4 amps at 125 V.A.C. Insulation resistance 100 meg ohms or more © 500 V.A.C. Shpg. wt., 2 02s. Imported

    SW-111 . Net ea., 69; Lots of 10 ea., . 82
    EXPERIMENTERS' SWITCH MULTI-GANG

    - 4 Gangs- 12 poles

    3 Positions per Pole

    - 1 Gang Shielded

    Against Stray Field Pictup
    

    Special 4-deck rotary switch for the experimenter. Exceptionally rugged construction-decks easily removed to vary circuit. 4 sections, each with 3 poles 3 positions per pole. Positive spring-loaded indexing. Silvered contact. SPECS: Current capacity -.5 amps Silvered contact. SPECS: Current capacity - .5 amps
    at 125 VAC. Contact Resistance -15 milli at 1 amp $D C$; at 125 VAC. Contact Resistance -15 milli at 1 amp DC;
    Insulation resistance - 100 megohms at 500 V . DC.
     length behind panel. Shpg, wi., 3 ors. Imported
    SW-96 .........Net ea. 1.29 ........... Lots $0^{*} 10$, ea., 1.19

    ## SUBMINIATURE WAFER SWITCH

    ## - Hearing Aid Type

    - Only $3 / 4^{\prime \prime}$ I K." $x 1_{1}{ }^{\prime \prime}$ Overall

    Lever operated, single pole. three position wafer. Mtg. centers $1 / 2^{\prime \prime}$. Contact arrangement shorts 2 circuits in each position. All contacts silvered, lever arm has finger grip. Perfect switch for subminlature work. With mig. hardware. Shpg. Wt. 202.1 imported

    ## SINGLE POLE 4 POSITION

    WAFER SWITCH- only $8 \sigma_{0}^{\prime \prime} \times 1 \%{ }^{\prime \prime} \times 1 \%_{0}^{\prime \prime}$ overall

    Exceptionally flat, single pole 4 position wafer switch. SPECS: Current Capacity . 5 , 125 VAC; Contact resistance - 20 milli at 1 amp DC. Insulation resistance 100 megohms at 500 V. D.C. Non-shorting, silvered contacts. Spring loaded, detent indexing. Mtg. centers. $1 \mathrm{~V} /$ ". Tapped shaft for bar type knob.
     cludes mount hardware and knob. Shpg. wt., 2 ors. SW-95 imported Net ea., 32 ..... Lots of 10 , ea., 29

    # PLUGS, SOCKETS, CONNECTORS 

     Molded high dielectric black bakelite, with molded. in
     filled. $1 x_{2} z_{2}^{\prime \prime}$ mounting hole except " $11 / 3^{\prime \prime}$ mtg. hole, $1 K_{0}{ }^{"}$ Mig. ctrs. $\dagger 1 K_{2}{ }^{" 1}$ mig. hole. Avg. shpg. wt.,

    | Stock | MII. No. | Prongs | $1.49$ <br> Each | $\begin{gathered} 50-249 \\ \text { Each } \end{gathered}$ | $250.499$ <br> Each |
    | :---: | :---: | :---: | :---: | :---: | :---: |
    | CM. 70 | 77-M1P-4 | , | . 14 | 12 | . 098 |
    | CM. 71 | 77-MIP. 5 | 5 | . 15 | . 13 | . 108 |
    | CM. 72 | 77-MIP-6 | 6 | . 18 | . 15 | . 125 |
    | C54. 76 | 77-MIP. 71 | 7 Large | . 19 | . 16 | . 136 |
    | CM. 77 | 77-M1P-7S | 7 Smalf | . 19 | . 16 | . 136 |
    | CM. 73 | 77-MIP-8 | Octal | . 16 | . 13 | . 111 |
    | CM-231 | 77-MIP-8T | Octal | . 19 | . 16 | . 133 |
    | CM. 161 | 88-8* | Octal | . 17 | . 14 | . 118 |
    | CM. 162 | 88-8X* | Locktal | . 22 | . 18 | . 154 |
    | CM. 74 | 77-MIP-9 | 9 | . 18 | . 15 | . 127 |
    | CM. 75 | 77-M1P-11 | 11 | . 21 | . 18 | . 15 |
    | CM- 232 | 77-MIP-12 | 12 | . 21 | . 18 | . 15 |
    | CM-233 | 77-M1P-20 | 20 | . 54 | . 45 | . 38 |
    | (B) AMPHENOL "RS" SOCKETS |  |  |  |  |  |
    | Removable steel adapter plate with retainer ring allows replacement of most socket types. For mounting etrs, from $11 / 2^{\circ}$ to $17 / 9^{\circ \prime}$. Molded high dielectric bahe- |  |  |  |  |  |
    |  |  |  |  |  |  |
    |  |  |  |  |  |  |
    | lite. Mounts in $11 / 4^{\text {n }}$ hole. Avg. shpg. wt., 502. |  |  |  |  |  |
    | Stock | Mfg. |  | 1.49 | 50.249 | 250-499 |
    | Mo. | No. | Prongs | Each | Esch | Each |
    | CM-91 | 78-RS4 |  | . 18 | 15 | . 127 |
    | CM-92 | 78-RS5 | 5 | . 20 | 16 | 139 |
    | CM. 93 | 78-RS6 |  | . 21 | . 17 | . 144 |
    | CM. 95 | 78.RS7S | 7 Small | . 22 | . 18 | . 153 |
    | CM-96 | 78-RS8 | Octal | . 20 | . 16 | . 139 |
    | CM. 97 | 78-RS8L | Locktal | . 27 | 22 | . 189 |
    | CM-98 | 78 -RS9 | 9 | . 23 | . 19 | . 158 |
    | CM-99 | 78-RSII | 11 | . 25 | .21 | . 175 |
    |  |  |  |  |  |  |

    AMPHENOL MINIATURE 7 \& 9 PIN SOCKETS Amphenol sockets for IV, FM, auto radios, efc. 147. series mounts on $5 / \mathbf{y}^{\circ}$ chassis hole with $7 / \mathrm{m}^{\prime \prime} \mathrm{mtg}$. ctrs., $1 /{ }^{\prime \prime}$ screw holes. 59 -serles mounts in $3 / 4^{\prime \prime}$ hole with $11 /{ }^{\prime \prime} \mathrm{mtg}$. ctrs., $095^{\prime \prime}$ rivet holes.

    - Steatite. $\ddagger$ Black Bakellte. $\ddagger$ Mica-filled bakelite.

    Avg., $50 z$

    | $\begin{aligned} & \text { Stock } \\ & \text { Mo. } \end{aligned}$ | Mfg. No. | No. of Contacts | $\begin{aligned} & 1.49 \\ & \text { Each } \end{aligned}$ | $\begin{aligned} & 50- \\ & 249 \\ & \text { Each } \end{aligned}$ | $\begin{aligned} & 250- \\ & 499 \\ & \text { Each } \end{aligned}$ |
    | :---: | :---: | :---: | :---: | :---: | :---: |
    | CM-227 | 147-500 | 7 | . 21 | . 18 | . 15 |
    | CM. 229 | 147-505 $\dagger$ | 7 | 22 | . 18 | . 151 |
    | CM. 57 | 56.409 $\ddagger$ | 9 | . 27 | . 22 | . 186 |
    | CM. 58 | 59-410 $\dagger$ | 9 | . 26 | 21 | . 181 |
    | TOP MOUNTING TYPE - FIG. (B) |  |  |  |  |  |
    | Socket below. | tube sh | base | fit | hields | listed |
    | CM. 230 | 147-905 $\ddagger$ | 7 | 28 | . 23 | . 196 |
    | CM-235 | 147-913 $\dagger$ | 7 | . 28 | . 23 | . 199 |
    | CM-236 | 59.4034 | 9 | . 39 | . 33 | . 28 |
    | CM. 56 | 59-407* | 9 | . 36 | . 30 | . 25 |
    | CM-55 | 59-406 | 9 | . 32 | . 27 | . 23 |

    TUBE SHIELDS - FIG. (C)

    ## For 7-Contact Bases.

    | $\begin{aligned} & \text { CM-10 } \\ & \text { CM- } 11 \end{aligned}$ | $\begin{aligned} & 5-401 \\ & 5-402 \end{aligned}$ | $\begin{aligned} & 12 / 4^{\prime \prime} \\ & 13 / 4^{\prime \prime} \end{aligned}$ | $\begin{aligned} & .16 \\ & .15 \end{aligned}$ | .13 .13 | . 109 |
    | :---: | :---: | :---: | :---: | :---: | :---: |
    | For 9.Contact Bases. |  |  |  |  |  |
    | CM-12 | 5-405 | 11/2" | . 14 | . 11 | . 097 |
    | CM. 13 | 5.408 | 1\%" | . 19 | . 16 | . 134 |
    | CM-14 | 5-409 | 23"' | . 23 | . 19 | . 164 |

    UNIVERS
    UNIVERSAL TRANSISTOR SOCKET

    Latest transistor socket takes transistors with 3 contacts in line, 3 contacts in triangle, 4 contacts in diamond shape (Tefrode). Made of mica tllled phenolic. Contacts are beryllium copper, gold flashed over silver plate. Complete with mounting ring. MS-395 Shpg. wt., 502.

    Stoct
    Stock
    No.

    ## $\frac{\mathrm{N}}{\mathrm{N}}$

    CM-100
    C
    CM-264
    CM-265
    CM. 266
    CM-267
    CM. 268

    ## MS-149

    MS-150 7 Din

    MS-396 7 pin
    $\begin{array}{ll}\text { MS-397 } & 9 \text { pin } \\ \text { MS-398 octal }\end{array}$
    $\begin{array}{lll}\text { MS-399 } & 7 & \text { pin } \\ \text { MS-400 } & 9 & \text { pin }\end{array}$
    MS. 401 octal
    metal tube shield.
    Ms. 4027 pin
    MS.403 9 pín
    MS-403 9 pin
    TOP MOUNTING
    board mounting.
    $\begin{array}{lll}\text { MS-404 } & 7 & \text { pin } \\ \text { MS-405 } & 9 & \text { pin }\end{array}$
    MS-406 octal
    
    (A)

    High grade, very low loss steatite, excellent for high frequency transmitter circuits, etc. All are universal type. Have removable mounting plate. Slotted holes $11 / 2$ to $15 / /^{\prime \prime}$ mtg. hole $11 / 4^{\prime \prime}$ except 49RSS7t which requires $121 / \mathrm{s}^{\prime \prime}$. Av. Shpg. wt., 502.
    
    

    ## NUVISTOR TUBE SOCKET

    Subminiature for 5 contact nuvistor tubes. Low-loss phenolic with cadmiurt plated steel saddle, and cadmiunı plated copper alloy contacts. Shpg. Wt. ${ }^{\text {CN }} 190$

    Net ea. . 14
    

    Molded hakelite cad. plated brass shells, for cables up to $1 / 4^{\prime \prime}$ Diam. PCG series take $7 / 8^{\prime \prime}$ hole. Shpg. Wt.,

    For new work. Single hole mounting. 11/4" dia. Firmly held by tempered steel retainer ring. 9 and 11 prong sochets for Amphenol connectors. Molded high dielec tric bahelite. $\uparrow$ mounts in standard $11 / 60^{\prime \prime}$ sochet hole. | Has miniature socket in center. Avg. shpg. wt., 5 oz. |  |
    | :--- | :--- |
    | Stock Mfg. | $\mathbf{1 . 4 9}$ |
    | $\mathbf{5 0 - 2 4 9}$ | $250-499$ |

    49-RSS4
    49-RSS5
    49-RSS6
    49.RSS7S 7 Large

    49-RSS8 8 Octal

    | .62 | .51 |
    | :---: | :---: |

    acm
    .51
    .53
    .51
    .56
    .58
    .51
    $T S$
    TS dia.
    and 11
    high
    .43
    .45
    .43
    .48
    .49
    .43 20
    

    | Stock No. |  |  |  |  |  |  |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    |  | $\begin{gathered} \mathrm{Mfg} . \\ \mathrm{NO} . \end{gathered}$ | Cont. | ctrs. | $1.49$ | $\begin{aligned} & 50 . \\ & 249 \end{aligned}$ | $\begin{aligned} & 250 \text { - } \\ & 4999 \\ & \text { Ea. } \end{aligned}$ |
    | CM. 87 | 78-PCG-3 | 3 | 11/4" | . 20 | . 17 | . 143 |
    | CM-88 | 78-PCG-4 | 4 | 11/4" | . 24 | . 20 | . 169 |
    | CM-89 | 78.PCG-5 | 5 | 11/4" | 24 | . 20 | . 171 |
    | CM. 90 | 78.PCG-6 | 6 | 11/4" | 29 | . 24 | . 20 | Usable with 91-MPM, 91-MPF and 78-PCG miniature connectors. Supplied with pushon retainer rings. Need

    
    TRANSISTOR SOCKET (A). 5 contact. For use 3 contact in line types. CK-722, 2N107, etc. $1 / 3 \times 13 \times 1 / 4 \times 1 / 2{ }^{\prime \prime}$
    MINIATURE TUBE SOCKET (B) General purpose phenolic sochet. Rapid mount. Snap action contacts.
    MS-151 9 pin
    WAFER SOCKET (C). For rapid assembly. Contacts snap
    into Individual holes.

    MOLDED Octal (0) Mounting tam individuat . 18
    mocoeg Thsertion (0). Mounting tam for individual hole
    insertion. Tube inserts from either end of socke

    SHIELDEO TYPE (E) Water sochet with

    SUBMINIATURE AND TRANSISTOR SOCKETS

    Molded from mica.filled low ioss bakelite. Silver plated beryllium copper contacts. "For printed circuits. Stack is overall. Avg, sbpe. wi.w oz.
    

    Streamlined audio and microphone connectors featuring a push-action latch-iock, quick and secure; resillent insulators on socket side to insure quiet operation and eliminate nolse due to pulling of cables; rugged construction of zinc, aluminum brass and steel: internal cable clamp for cables $\%_{z}{ }^{\prime \prime}$ to $\mathrm{K}^{\prime \prime}$. Contact no. 1 engages first and may be used as a grounding contact. Contacts are brass, sitver plated, rated at 10 amps for 3 contact types, 15 amps for 4 contact types. Satin nickel finish. Average shpg. wt., 5 oz .

    PANEL AND WALL RECEPTACLES

    | Stock No. | Mfrs. No. | Fig. | Cont | pe | Insert | Mount | 1.9 | $10.49$ | 50.99 | 0-249 |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | CM-280 | XLR-3-13 | A | 3 | Female | Socket | Wall | 1.85 | 1.79 | 1.55 | 1.39 |
    | CM-281 | XLR-4-13 | A | 4 | Female | Socket | Wall | 1.93 | 1.77 | 1.61 | 1.44 |
    | CM-282 | XLR-3-13N | 8 | 3 | Female | Socket | Panel | 2.14 | 1.96 | 1.78 | 1.60 |
    | CM-283 | XLR-4-13N | 8 | 4 | Female | Socket | Panel | 2.20 | 2.02 | 1.84 | 1.65 |
    | CM-284 | XLR-3-14 | C | 3 | Male | Pin | Wall | . 83 | . 76 | . 70 | . 63 |
    | CM-285 | XLR-4-14 | C | 4 | Male | Pin | Wall | . 87 | . 80 | . 73 | . 65 |
    | CM-286 | XLR-3-14N | - | 3 | Male | Pin | Panel | 1.73 | 1.59 | 1.45 | 1.30 |
    | CM-287 | XLR-4-14N | 0 | 4 | Male | Pin | Panel | 1.87 | 1.71 | 1.56 | 1.40 |
    | CM-288 | XLR-3-31 | E | 3 | Female | Socket | Wall | 1.93 | 1.77 | 1.61 | 1.45 |
    | CM-289 | XLR-4-31 | E | 4 | Female | Socket | Wall | 1.99 | 1.82 | 1.66 | 1.49 |
    | CM-290 | XLR-3-32 | F | 3 | Male | Pin | Wall | 1.10 | 1.01 | . 92 | . 82 |
    | CM-291 | XLR-4-32 | $F$ | 4 | Male | Pin | Wall | 1.22 | 1.12 | 1.02 | . 91 |
    | CM. 292 | XLR-3-35 | G | 3 | Female | Socket | Wall | 4.03 | 3.70 | 3.36 | 3.02 |

    ## STRAIGHT CORD PLUGS

    | Stock No. |  |  |  |  |  |  | NET | EACH |  |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    |  | Mfrs. No. | Fig. | Cont. Type | Insert | Body | $1-9$ | 10-49 | 50-99 | 100-249 |
    | CM-293 | XLR-3-11C | J | 3 Female | Socket | Zine | 1.29 | 1.18 | 1.08 | . 97 |
    | CM-294 | XLR-3-11SC | , | 3 Female | Socket | Steel | 3.49 | 3.20 | 2.91 | 2.61 |
    | CM-295 | XLR-4-11C | J | 4 Female | Socket | Zinc | 1.64 | 1.50 | 1.37 | 1.23 |
    | CM-296 | XLR-4-11SC | , | 4 Female | Socket | Steel | 3.55 | 3.26 | 2.96 | 2.66 |
    | CM-297 | XLR-3-12C | K | 3 Male | Pin | Zinc | 1.13 | 1.03 | . 94 | . 85 |
    | CM-298 | XLR-3-12SC | K | 3 Male | Pin | Steel | 2.68 | 2.55 | 2.32 | 2.09 |
    | CM. 299 | XLR-4-12C | K | 4 Male | Pin | Zinc | 1.20 | 1.10 | 1.00 | . 90 |
    | CM. 300 | XLR-4-12SC | K | 4 Male | Pin | Steel | 2.87 | 2.63 | 2.39 | 2.15 |
    | PLUGS_90 DEGREE |  |  |  |  |  |  |  |  |  |
    | Stock No. <br> CM. 301 <br> CM-302 | Mirs. No.XLR-3-15XLR-4-15 | Fig. HH | Cont. Type |  |  |  | NET | EACH |  |
    |  |  |  |  | Insert | Body | 1-9 | 10-49 | 50.99 | 100.249 |
    |  |  |  | 3 Female | Socket | Zinc | 3.38 | 3.10 | 2.82 | 2.54 |
    |  |  |  | 4 Female | Socket | Zlnc | 3.41 | 3.13 | 2.85 | 2.56 |

    Bra $\mathrm{B}^{8}$

    I$\begin{array}{lll}\text { Stock Mfr. } & & \text { Milltary } \\ \text { No. No. Fig. } & \text { Number }\end{array}$ CM.135 83-1AC CM-135 83-1AC CM-242 83-1AP CM-136 83-1BC CM-137 83-1F CM-138 83-1H
    CM. 139 83.1HP CM-140 83-1J CM-141
    CM-143
    CM.1
    CM. CM-142 83.1SPN
    CM-144 83.1T CM-146 83.2R CM-147 83-21SP CM-148 $\quad 83-22 \mathrm{AP} \quad \mathrm{D}$
    CM-149 83-22F CM-150 83 221 CM-151 83-22R CM-152 83-22SP CM-153 83-22T
    CM-121 83.58 CM-122 03.58 CM-123 83-185 CM-124 83.750 CM-125 83-756 CM-126 $83-765$ CM-127 83.776 $\begin{array}{ll}C M-128 & 83-786 \\ C M-130 & 83-798\end{array}$ CM-131 83-821 $\begin{array}{cc}C M-132 & 83 \cdot 822 \\ \text { CM-133 } & 83-850\end{array}$ $\begin{array}{lll}C M-133 & 83-850 \\ C M-134 & 83-851\end{array}$

    SERIES 75. PRESSURE TYPE - SINGLE CONTACT
    Polished chrome plated brass fittings with $\$ 88^{\prime \prime}-27$ thread.
    

    SERIES 91. 3. AND 4- CONTACT TYPES
    Polarized microphone connectors for portable equipment. Strain-relieving clamps. *3-contact type. $\dagger 4$-contact type. Shpg. wt. 302.

    |  |  |  | Description | NET EACH |  |  |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | No. | Type | Fig. |  | 1.24 | 25-99 | 100-249 |
    | CM-163 | -91-MC3F | 1 | Female cable jack | . 84 | . 69 | 59 |
    | CM-177 | *91.PC3F | K | Female chassis receptacle | . 72 | . 59 | . 50 |
    | CM-165 | 91-MC3M | L | Male cable plug | . 88 | . 73 | . 62 |
    | CM-164 | +91-MC4F | J | Female cable jack | . 90 | . 74 | . 63 |
    | CM-178 | †91.PC4F | K | Femal chassis receptacle | . 74 | . 61 | . 52 |
    | CM-166 | +91-MC4M | L | Male cable plug | . 90 | . 74 | . 63 |
    | CM-256 | -91-MC3F1 | 1 | Female cable plug | .90 | . 76 | . 64 |
    | CM-257 | 91.MC3M1 | J | Male cable fack | . 80 | . 66 | . 56 |
    | CM-258 | -91.PC3M | $k$ | Male receptacle | . 82 | . 68 | . 57 |
    | CM-259 | +91.MC4F1 | $L$ | Female cable plug | . 98 | . 81 | . 69 |
    | CM. 260 | +91-MC 4M1 | J | Male cable jack | . 82 | . 68 | . 57 |
    | CM-261 | +91.PC4M | K | Male receptacle | . 82 | . 68 | . 57 |

    "QWIK" SERIES 91. 3- AND 4. CONTACT TYPES
    New design. Simply pushed together; released by thumb pressure on lock button while pulling outward. Polarized contacts. Nickel plated shells. *3-contact type $\dagger 4$-contact type. Av. shpp. wt.. $3 \mathbf{0 z}$.

    | No. | Tyoe | Fig. |
    | :---: | :---: | :---: |
    | CM-179 | $* 91.853$ | M |
    | CM-180 | -91.854 | N |
    | CM-181 | -91.855 | 0 |
    | CM-182 | -91.856 | P |
    | CM-183 | +91.857 | M |
    | CM-184 | +91.858 | N |
    | CM.185 | $\dagger 91.859$ | 0 |
    | CM-186 | $\dagger 91.860$ | P |
    | 91-CCC3 | Cap and chain. Used |  |


    |  | NET EACH |  |  |
    | :--- | :---: | :---: | :---: |
    | Oescription | $\mathbf{1 - 2 4}$ | $\mathbf{2 5 - 9 9}$ | $\mathbf{1 0 0 - 2 4 9}$ |
    | Male cable plug | 1.34 | 1.11 | .94 |
    | Female cable plug | 1.54 | 1.27 | 1.08 |
    | Male chassis receptacle | 1.00 | .83 | .70 |
    | Female chassis receptacle | 2.23 | 1.84 | 1.56 |
    | Male cable plug | 1.42 | 1.17 | .99 |
    | Female cable plug | 1.96 | 1.62 | 1.37 |
    | Male chassis receptacle | 1.04 | .86 | .73 |
    | Female chassis receptacle | 2.29 | 1.89 | 1.60 | dirt and dust.

    CM-262
    1.24 ea. . $38 \quad 25-99$ ea. . $32 \quad 100.249$ ea. 27
    CINCH JONES SFRIES $1300^{\prime \prime}$ PDUGS AND

    SOCKETS
    

    Multiple contacts standard duty 10 amperes. 730 volts rms. Plug contacts $x_{2}{ }^{\prime \prime} W \times$ 体" thick. Black bakelite body, encased in black. Av. shpg wt., 3 oz . AB TYPE CHASSIS PLUG (Fig. A) AB TYPE CHASSIS PLUG (Fig. A)
    

    | Sth. No. | Mig. No. | Cont. | Ea. | 50.99 Ea. | Ea. | Sth. No. | Mfg. No. | Cont. | Ea. | Ea. | Ea. |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | CN-145 | P.302-AB | 2 | . 20 | . 17 | . 132 | $\text { CN. } 171$ | S-302-AB | 2 | . 22 | . 18 | . 144 |
    | CN-147 | P.303-AB | 3 | . 25 | . 21 | . 164 | CN-195 | S-303-AB | 3 | 26 | . 22 | . 172 |
    | CN- 149 | P-304-A8 | 4 | . 27 | . 23 | . 180 | CN-196 | S-304.A8 | 4 | . 29 | . 24 | . 192 |
    | CN-151 | P.306.A8 | 6 | . 34 | . 28 | . 224 | CN-197 | S-306-A8 | 6 | . 36 | . 30 | . 24 |
    | CN-153 | P-308-A8 | 8 | . 40 | . 33 | . 264 | CN-198 | S-308-AB | 8 | . 45 | . 38 | . 30 |
    | CN-155 | P-310-A8 | 10 | . 45 | . 38 | . 30 | CN-199 | S-310-AB | 10 | . 53 | . 45 | . 356 |
    | CN. 157 | P-312.A8 | 12 | . 50 | 42 | . 332 | CN-200 | S.312-A8 | 12 | . 62 | . 52 | . 412 |
    | CN- 215 | P-315-A8 | 15 | . 66 | . 55 | . 44 | CN-201 | S-315-A8 | 15 | 77 | . 64 | . 512 |
    | CN-216 | P.318-AB | 18 | . 82 | . 69 | . 548 | CN-202 | S-318-A8 | 18 | . 93 | . 78 | . 62 |
    | CN-217 | P-321-AB | 21 | 1.03 | . 86 | . 688 | CN-203 | S.321-A8 | 21 | 1.15 | . 96 | . 764 |
    | CN-218 | P-324.A8 | 24 | 1.25 | 1.04 | . 832 | CN-204 | S-324-A8 | 24 | 1.36 | 1.14 | . 908 |
    | CN-219 | P-327-AB | 27 | 1.47 | 1.23 | . 98 | CN-205 | S. 327-A8 | 27 | 1.58 | 1.32 | 1.052 |
    | CN-220 | P.330-A8 | 30 | 1.69 | 1.41 | 1.124 | CN-206 | S-330-AB | 30 | 1.81 | 1.51 | 1.204 |
    | CN. 221 | P-333-AB | 33 | 1.90 | 1.58 | 1.264 | CN-207 | S-333-A8 | 33 | 2.02 | 1.68 | 1.344 |
    | CCT | TYPE CAB | CL | P PL | (Fig. |  | CCT | TYPE CABLE | CLAM |  |  |  |
    | CN-146 | P.302-CCT | 2 | . 46 | . 38 | . 304 | CN-172 | S.302-CCT | 2 | . 46 | . 39 | . 308 |
    | CN-148 | P-303-CCT | 3 | . 49 | . 41 | . 324 | CN-173 | S-303-CCT | 3 | . 50 | 42 | . 332 |
    | CN-150 | P-304-CCT | 4 | . 53 | . 45 | . 356 | CN-174 | S.304-CCT | 4 | . 54 | . 45 | . 362 |
    | CN. 152 | P.306-CCT | 6 | . 59 | . 49 | . 392 | CN-176 | S-306-CCT | 6 | . 62 | . 52 | . 412 |
    | CN-154 | P-308-CCT | 8 | . 65 | . 54 | . 432 | CN-175 | S-308-CCT |  | . 72 | . 60 | . 48 |
    | CN-156 | P.310-CCT | 10 | . 73 | . 61 | . 484 | CN. 177 | S-310-CCT | 10 | . 88 | . 67 | . 536 |
    | CN. 158 | P-312-CCT | 12 | . 79 | . 66 | . 528 | CN-178 | S-312-CCT | 12 | . 92 | . 77 | . 616 |
    | CN. 222 | P-315-CCT | 15 | 1.03 | . 86 | . 688 | CN. 208 | S-315-CCT | 15 | 1.15 | . 96 | . 764 |
    | CN- 223 | P-318-CCT | 18 | 1.25 | 1.04 | . 832 | CN- 209 | S-318-CCT | 18 | 1.36 | 1.14 | . 908 |
    | CN. 224 | P-321-CCT | 21 | 1.47 | 1.23 | . 981 | CN-210 | S-321-CCT | 21 | 1.58 | 1.32 | 1.052 |
    | CN- 225 | P-324-CCT | 24 | 1.73 | 1.45 | 1.156 | CN- 211 | S-324.CCT | 24 | 1.86 | 1.55 | 1.24 |
    | CN-226 | P.327-CCT | 27 | 1.97 | 1.64 | 1.312 | CN-212 | S-327.CCT | 27 | 2.08 | 1.73 | 1.384 |
    | CN. 227 | P-330-CCT | 30 | 2.29 | 1.91 | 1.528 | CN- 213 | S-330-CCT | 30 | 2.40 | 2.00 | 1.60 |
    | CN-228 | P-333-CCT | 33 | 2.45 | 2.05 | 1.636 | CN- 214 | S-333-CCT | 33 | 2.57 | 2.14 | 1.712 |

    SERIES "400" PLUGS AND SOCKETS
    Multiple Contact Heary Duty Rated at 15 Amps. At 1100 volts rms. Have polarizing pinst
    
    aB TYPE ANGLE BRACKET PLUB (Fig. E)
    
    

    Standard single contact, cord mounted, nickel plated brass, knuri grips, $5, \mathrm{~b}^{\sim}-27$ thread. Shpg. wt., 3 oz .
     MS-467 Female connector Fig. A
    MS-468 Maie connector Fig. Net .21

    ## MIKE ACCESSORIES

    

    SWITCH
    CRAFT
    CRAFT
    329
    

    329 Switchcraft Microphone Volume Control Adaptel, Designed to reduce or increase relative volume at the microphone to workable level. For high impedance circuits usling shielded single conductor cable only. Employs standard microphone connectors. Shpg. wi. 8 OZ
    ms-860 Net 4.09 male of 75 series connectors Push-to-talk with fe Shpg. wt., 6 oz. CM-67 Amphenol 75-MC1S

    Net 1.89
    Net .85
    MICROPHONE
    VOLUME CONTROL
    

    No more running to the P.A. amplifler to adjust volume. Now, control volume output right at the micro phone. Attached between the microphone and the cable; Can be used at any desired distance. Fitted on one end with a female mike connector and male mike connector on the opposite end. Shpg. wt., 1202. MS. 755 Remote Volume Control

    # DALCO Pilot Light Assemblies \& Sockets 

    

    A
    

    ## SUBMINIATURE SERIES

    ## 2 Terminal - Plastic Dome Types

    For use with T.13/4 bulbs for $1.3-28$ Volts. Bulb replaceable from front of panel. Military grade phenolic assures permanent Isolation from ground. Fully insulated. Black nickel finish. Lockwasher and nut supplled. Less lamp. $136^{\prime \prime \prime}$ long; $3 / 4^{\prime \prime}$ OD. Shor. wt., 2 oz.
    (F) Translucent Series 101-5030. Front Mount and Series 101-3830. Back Mount; Front mounting units mount in $\mathrm{Khm}^{\prime \prime}$ hole; back mounting units, in $15 / 2_{2}^{\prime \prime}$ hole. Solder terminals.
    
    (F) TRANSPARENT series 101-5030. Same as Series 101-5030 above except in transparent colors. Plastic dome for $180^{\circ}$ visibility. Front mounting.

    | Stock No.$\begin{aligned} & \text { PB-254 } \\ & \text { PB-255 } \\ & \text { PB-256 } \end{aligned}$ | Mfr's. <br> Type <br> 931 <br> 932 <br> 935 | Color Red Green Whit | Net Each |  |
    | :---: | :---: | :---: | :---: | :---: |
    |  |  |  | 1. | 10-24 |
    |  |  |  | 1. |  |
    |  |  |  | 1.24 | 1.12 |

    ## MS 25256

    (H) Serles 162-8430. Incandescent type. Front mount, in "3/32" hole. Use T-13/4 Incandescent Bulbs. Fully insulated Size: 1/32x5/8". Shpg. Wt., $11 / 2$ oz. Less lamp. Meets MH Specs MIL-L-6723.

    ## Stock Mtr's. MS Dwg. Net Each

    | Stock | Mtr's. | MS Dwg. |  | Net Each |
    | :---: | :---: | :---: | :---: | :---: |
    | No. | Type | No. | Color | $1.9 \quad 10.24$ |
    | PB. 257 | 931 | MS25256.6 | Red |  |
    | PB-258 | 932 | MS25256-4 | Green |  |


    | PB-258 | 932 | MS25256-4 | Green |  |  |
    | :--- | :--- | :--- | :--- | :--- | :--- |
    | PB-259 | 933 | MS25256-2 | Yellow | 1.19 | 1.07 |
    | PB-260 | 934 | MS25256-12 | Blue |  |  |
    | PB-261 | 937 | MS25256-8 | Clear |  |  |

    $\begin{array}{llll}\text { PB-261 } & 937 & \text { MS25256-8 } & \text { Clear } \\ \text { PB-262 } & 975 & \text { MS25256-10 White } \\ \text { (i) Series } & 137-8836 \text { ME ON SUBMINIATURE MS-25257 }\end{array}$
    (b) Series 137-8836 NEON SUBMINIATURE MS-25257.
    Front mount. in $18 / 32^{\prime \prime}$ hole. Patented built-in resistor; use T-2 Neon Glow Lamp (NE-2D); for $105-125 V$ AC or DC. Less Lamp. $11 / 2 \times 5 / \mathbf{B}^{\prime \prime}$. Shpg. wt., $11 / 202$.

    | Stock | Mfr"s. | MS Dwg. |  | Net Each |  |  |
    | :---: | :---: | :---: | :--- | :--- | :--- | :--- |
    | Mo. | Type | No. | Color | 1.9 |  | 10.24 |
    | PB-263 | 931 | MS25257.4 | Red |  |  |  |
    | PB-264 | 933 | MS25257-2 | Yellow | 2.17 | 1.95 |  |
    | PB-265 | 937 | MS25257-6 | Clear |  |  |  |

    ## 1 TERMINAL LIGHTSHIELD UNITS

    (G) Two types of terminals. For grounded circuits.
     assembly emits lieht on panels. For dials, instrument panels, etc. $11 / 3_{2} \times 5 / 8^{\prime \prime} 0$. D. Mounts in $18 / 12{ }^{\prime \prime}$ hole. Shpg. wt., $11 / 2$ oz. Does not include lamp.

    Net ea. PB-266 Type No. $4-1830$ (Screw Terminal) $1.9 \quad 10-24$ PB-267 Type No. 4.1930 (Solder terminal). $1.59 \quad 1.43$

    ## PILOT LIGHT SOCKETS

    Cadmium plated brackets with tinned brasslugs. Bayonet type with coil spring construction. for Dositive contact. For minlature screw, bayonet, and candelabra base. Av. shpg. wt. 2 oz.
    

    ## DATALITEST.M.

    Ultra-Miniature Indicator lights for Computers, Data Processing Equipment, Automation, etc. With replaceable lamp cartridges or with built-in neon tamps which are not replaceable.
    (N) SINGLE LAMP HOLDER No. 7538. Used with Dialco lamp cartridges, removable from front. 113 ." $\mathrm{L} \times 1 / 2^{\prime \prime}$ O.D., less cartridge: Mounts in $3 / \mathrm{z}^{\prime \prime}$ hole. Two insulated terminals offset for correct DC polarity. Conforms to MIL Specs. Less cartridge. Shpg. wt., 2 oz.
    PB- 243 No. 7538 holder 1.99 Net 1.22
    (N) No. 7545 SINGLE LAMP HOLDER. Similar to 753B, but Kicon $^{\circ}$ longer for 45 and 45 H high brightness neon cartridges.
    PB-268 No. 7545 holder 1.99 Net 1.22

    ## PERMANENT "DATALITES"T.M.

    (0) Datalites with Built-in, not replaceable NE-2E Neon Glow Lamps. Require ballast resistor. Lightweight aluminum design; plastic stovepipe lens. Has 2 insulated terminals. Conform to MIL Specs. Mounts in $3 / \mathbf{B}^{\prime \prime}$ hole. SERIES 249-7840 _-WITHOUT BUILT-IN RESISTOR $125 /{ }^{\circ \prime}$ $\times 1 / 2^{\prime \prime} 0 . D .11 / 202$. Shpg. wt.

    | Stock |  | Lens |  |
    | :---: | :---: | :---: | :---: |
    | No. | Type | Color | NET EACH |
    | PB-215 | 931 | Red |  |
    | PB. 216 | 933 | Yellow |  |
    | P8. 217 | 935 | White | 1.07 |
    | PB-218 | 937 | clear |  |

    SERIES 249.7841, With built-in 100k-ohms resistor. $15 y \mathrm{HLx} / 2^{\prime \prime}$ O.D. Shpg. wt., 2 oz.

    | Stock | Type | Lens Color | NET EACH |
    | :---: | :---: | :---: | :---: |
    | PB-219 | 931 | Red |  |
    | P8.220 | 933 | Yellow |  |
    | PB-221 | 935 | White | 1.34 |
    | P8-222 | 937 | Clear |  |

    ## NEON LAMP CARTRIDGES

    (P) Series 38 Neon Glow Lamp Cartridges. For use with Nu .753 B Lamp Holder. Consists of NE-2E neon bulb mounted in aluminum sleeve, capped with plastic stovepipe lens. $1 / 25$ watt; starting voltage 65 VAC or 90 VCC .
    Requires $1 / 3$ watt external bailast resistor. 11/4'L $x$
    21/4" O.D. Shpg. wt., 1 oz. Transparent lens.
    Stovepipe Long Cylindrical Lens NET EACH
    No. Type Stock
    $\begin{array}{llll}\text { No. } & & \\ \text { PB } 66 & 931 & \text { NB-269 } & \text { Type Color } \\ 1.99\end{array}$
    $\begin{array}{lllll}\text { PB-66 } & 931 & \text { PB-269 } & 1531 & \text { Red } \\ \text { PB-67 } & 933 & \text { PB-270 } & 1533 & \text { Yellow }\end{array}$
    PB-68 $\quad 935$ PB-271 1535 White
    P8-69 937 PB-272 1537 Clear
    (P) Series $45 \dagger$ and $45 \mathrm{H}^{*}$. Neon Glow Carirlages. Similar to No. 38 but \%" longer. Series $45 t$ has bulit-in 56 , 000 -ohm resistor. $45 \mathrm{H}^{\circ}$ is the High Brightness Type with $18,000 \mathrm{ohm}$ bullt-in resistor. Series $45 t$ is for $105-125 \mathrm{VAC} / \mathrm{DC}$; Series $45 \mathrm{H}=105-125 \mathrm{~V}$ AC. Shpg. wt. 1 oz.

    ## Stovepipe Long Cylindrical Net Each <br> Stock Stock Type Lens No. Type No. Typer Cold <br> 1-99 <br> $\begin{array}{lll}\text { PB- } 273 & 931+\text { PB-281 } & 1531+\text { Red } \\ \text { PB- } 274 & 933+\text { PB. } 282 & 1533+\text { Ambe }\end{array}$ <br> $\begin{array}{llll}\text { PB-274 } & 933+\text { PB. } 282 & 1533 \uparrow & \text { Amber } \\ \text { PB-275 } & 9364 & \text { PB- } 283 & 15364 \text { Yellow }\end{array}$ <br> PB-276 937+ PB-284 1537 + Clear <br> PB-277 931* PB-285 1531* Red <br> PB-278 933* PB-286 1533* Amber <br> PB-279 936* PB-287 1536. Yellow <br> PB-280 937* P8-288 1537* Clear <br> INCANDESCENT LAMP CARTRIDGES

    (G) Series $39-6$ Incandescent Lamp Cartridges. Uses

    T-13/4 incandescent bulb mounted in aluminum sleeve and capped with short cylindrical lens. For 6 volt; 2 amp. $17 / 4^{\prime \prime} \mathrm{L} \times{ }^{21} / \mathrm{m}^{\prime \prime} 0 . \mathrm{D}$. Shpg. Wt., 102 . Lens is trans, lucent.

    | Stovepipe | Short Cylindrical |  |  |  |
    | :---: | :--- | :--- | :--- | :--- |
    | Stoch | Stock | Lens |  |  |
    | No. Type | No. | Type | Color NET EACH |  |
    | PB-289 971 | PB-70 | 1471 | Red |  |
    | PB-290 972 | PB-71 | 1472 | Green |  |
    | PB-291 973 | PB-72 | 1473 | Yellow | 1.17 |
    | PB-292 974 | PB-73 | 1474 | Slue |  |
    | PB.293 975 | PB.74 | 1475 | White |  |

    # PILOT LIGHT ASSEMBLIES-PILOT LIGHTS-NEON BULBS 

    

    DIALCO ONE-INCH SERIES 7SC detachable lamp sockets (Fig. R) For candelabra base, 115 volt pllot light assembly with faceted jewel. $1^{\prime \prime}$ hole mounting. Easy adjustment for panel thickness. Less bulb. Shpg. wt., 5 oz . PB-75 Dialco $75 \mathrm{C431}$ Red $\begin{array}{llll}\text { PB-76 } & \text { Dialco } & 75 \mathrm{C} 432 & \text { Green } \\ \text { PB-77 } & \text { Dialco } & 75 \mathrm{C} 433 & \text { Amber }\end{array}$ Any of above ...............Net each . 71 Lots of 10 , ea. Replacement Jewel Cap for 75C Series. Specify color.
    PB-62 Dlalco 31.43 .........Net each 35

    ## DIALCO lenses in threaded HOLDERS (Fig. BB) <br> To panel mount with separate tamp sockets. Up to $\% z^{\prime \prime}$ panels. $3 / 44^{\prime \prime}$, $1 / 2^{\prime \prime}$ and " $1 / 20$ " diameters respectively. Shpg. wt., 2 oz . REO GREEN AMBER Net Stoch No. Stock No. Stock No.Each $\begin{array}{lllll}1 / /^{\prime \prime} & P B-128 & P B-129 & P B-130 & .39 \\ 1 / 2^{\prime \prime} & P B-125 & P B-126 & P B-127 & .14\end{array}$ | $3 y_{2 \prime \prime}$ | $P B-122$ | $P B-123$ | $P B-124$ | .20 |
    | :--- | :--- | :--- | :--- | :--- | MITT BULB REMOVER

    For fast and simple removal and installation of miniature and candelabra lamps. Facilitates mass production, indispensable for hard-to-reach places. will not damage lamps. Made of highgrade rubber. Shpg. wt., 2 oz . PB-241 Dialco NL73
    

    8B
    

    ## DIALCO SERIES $810 \quad 1 / 2^{\prime \prime}$ REMOVABLE JEWEL

    For L-V miniature bayonet ( 810 B Serles) and screw base ( 810 M series) lamps. "Ks" mts. hole. Insulated brackets. Easy replacement of lamps. Shpg. wt., 2 oz. Stock 8108 Stock 810M| No. Mfr. No. | No. Mfr. No. | Color |  |  |
    | :---: | :---: | :---: | :---: | :---: | :---: |
    | PB-103 | -431 | PB-106 | -431 | Red |
    | PB-104 | -432 | PB-107. | 432 | Green |
    | PB-105 | -433 | PB-108 | -433 | Amber | PB-105 -433 PB-108 -433 Amber Any of above …...........Net each . 32

    ## DIALCO series 510-610-710 ANGLE BRACKET ASSEMBLY

    Space saver. LV operation of incandescent buibs. Solder terminals. $1 /{ }^{\prime \prime}$ mtg . hole. Less bulb. Series 510 for miniature screw base, 610 for candelabra base, and 710 for miniature bayo net base. Shpg. wt., 2 oz.
    $\begin{array}{ccc}510 & 610 & 710 \\ \text { stock } & \text { stock } & \text { Stock }\end{array}$ $\begin{array}{llll} & & \\ \text { Stock } & \text { Stock } & \text { Stock } & \\ \text { No. } & \text { NO. } & \text { No. } & \text { Color } \\ \text { PB-86 } & \text { PB-93 } & \text { PB-100 } & \text { Red } \\ \text { PB-87 } & \text { PQ-94 } & \text { PB-101 } & \text { Green }\end{array}$ $\begin{array}{llll}\text { PB-87 } & \text { PQ-94 } & \text { PB-101 } & \text { Green } \\ \text { PB-88 } & \text { PE-95 } & \text { PB-102 } & \text { Amber }\end{array}$ Any of above Lots of 10 , ea.
    

    PERFECT ON-OFF INOICATOR

    - CAN BE USED IN HIFI EQUIPMENT, TV, AROUND THE HAM SHACK, INDUSTRIAL EQUIPMENT-ANTWHERE
    - mounts in an instant
    - OPERATES ON 80-160 VOLTS

    Pllot light mounts through any $1 / 2^{\prime \prime}$ hole quickly and simply. Electrical installation is easy and non-technical. Jiffi-Lite comes complete with two 4/2" insulated leads, speed-nut mount and is housed in durable plastic case. Shpg. wt., 4 ozs.
    MS-695 Red
    MS-695 Amber
    Net 46

    ## E.F. JOHNSON

    ## PANEL LIGHT

    

    For front-of-panel Illumination. Pollshed nickel-plated hood is easily removable for lamp replacement: can be rotated to any position. Fits $1 / 2^{\prime \prime}$ mounting hole. Two models, for $131 / 2$ or G31/2 bulbs. Shpg. Wt., 2 oz .
     base. Net Each PB-21 No. 147-330-Miniature screw base. Net Each

    ## - DASH LAMP ASSEMBLY

    For dashboard, panel, etc. mounting. Simple contact miniature bayonet socket. Mounts in 7/ $^{\prime \prime}$ hole. With $12^{\prime \prime}$ lead, nut and washer. Easy installation. Less lamp and switch. Shpg. wt., 2 oz. Accepts No. 51 or 55 bulb.

    ## LAFAYETTE SPECIAL NEON ASSEMBLY

    For operation on 110 volts AC. Re quires 100 k resistor in series. When quires 100 k 22 resistor in series. When series. AC starting voltage 60 v . Serv icing life, 5000 to 10,000 operating hours. Avallable in 3 colors, red, yel low and amber; specify when ordering Shpg. wt., 202.
    MS-478
    Net 39
    In lots of 10

    ## ORAKE NEON

    INOICATOR LIGHTSType 105 postlite. Molded neon panel light for AC or DC with builit-in resistor. $1 / 2^{\prime \prime} \mathrm{mtg}$. hole. with mig. nut. $2^{1 / 2 "}$ long
    P8. 10 ....Each .63 Lots of 10. Each .57 Type 110 Flushlite Translucent unit with bullt-in neon lamp and resistor. For $110-125$ v AC.DC. $2 / 2 \times 17 / 8$ Kl $_{4}{ }^{\prime \prime}$ with $142^{\prime \prime}$ mig. centers. UL approved. 202. PB-11 ….....Each . 44 ......10, Each 40

    ## 11 SPECIAL SALE! 10 for \#47 PILOT LAMPS 45C

    Most often used pilotlight. Replaces pilot in most electronic entertainment equipment. Shpg. wt., 5 oz. Imported MS. 783
    10 pkgs.

    ## PILOT LAMPS - FLASHLIGHT BULBS - NEON LAMPS

    ## MINIATURE LAMPS

    For radio and T.V. pilot llgnis, panels, flashilights, toys, appliances, coin machines, etc. Base code: 1. single contact flanged, 2- screw, 3. bayonet, 4 special 5 - single contact midget, 6 - single contact bayonet, \%. double contact bayonet, 8. midget AMPS, CP means candlepower. Shpg. wt., box 10 is 4 oz . 1 tamp. 202.
    
    

    ## LAFAYETTE

    ## 2-CONDUCTOR PHONE PLUGS

    ## STANOARO 2.CONOUCTOR PHONE PIUGS

    Phone plugs for a wide variety of applications with choice of handle sizes and materials. All sleeves fit standard $1 / 4^{\prime \prime}$ phone jacks. Avg. shpg. wt., 8 oz . FIG. A. SLIM PHONE PLUG Smooth bakelite handle. Solder terminals with cable clamp. Imported
    MS-453 Net 25 ea. - 10 for 2.15 FIG. B. BARREL PHONE PLUG Ribbed plastic barrel handle. Screw terminals. Imported
    MS-455 Net .22 ea. 10 for 1.90 FIG. C. SHIELDEO SLIM PLUG RIbbed chromed metal handle. Solder terminal with cable clamp. Imported MS-443 Net 29 ea, - 10 for 2.50 FIG. O. PHONE TO PHONO PLUG AOAPTER Adapts from standard phone plug to RCA type phono plug. Overall length $27 /^{\prime \prime} \times 1 / 2^{\prime \prime}$ diam. Imported MS-444

    Net . 39 ea. - 10 for 3.25

    ## STANDARD PHONE JACKS FOR $1 / 4^{\prime \prime}$ PLUGS

    FIG. E. OPEN CIRCUIT JACK Standard open circuit phone jack, $3 / \mathbf{B}^{\prime \prime}$ bushing, $1 / 2^{\prime \prime \prime}$ long. Complete with mounting hardware. Imported
    MS-441 10 for 1.75 FIG. E. CLOSED CIRCUIT JACK Same as above but closed-circult phone jack. Imported
    MS-454 Net 19 ea. - 10 for 1.75 FIG. E. OPEN CIRCUIT JACK Open circult jack for 3 conductors. Imported
    MS-318
    FIG. F. EXTENSION CABLE JACK Fit standar 29 phone plug. Screw terminals. Barrel plastic handle matches MS. 455 Barrel plug. Imported
    MS-442 Shpg. Wt., 10 oz. .... Net .22 ea, - 10 for 1.90
    

    ## PHONO PLUGS AND JACKS

    (A) Single Prong Shielded Plug - RCA type, used extensively for mike, phono, etc.
    MS. 167 - 10 for .35 Shpg. wt., 4 oz. .... singly, ea. 04 (B) Phono Jack - Accepts RCA type phono plug. Mounts in rear of panel.
    MS-168 - 10 for .50 Shpg. wf., 4 oz. ... singly, ea. . 06 (C) Solderless Phono Plug - For phono, coax cables. Pin contacts center conductor, tab wraps around shield. MS-373 - Lots of 10 , ea. . 35 Wt ., 4 oz. singly, ea. . 38 (0) Finger grip plug - Phono plug with handy finger grip.
    MS.471 - 10 for .50 Shpg, wt., 4 oz..... singly, ea. . 06 (E) Semi-Solderless Phono Plugs - Fits std RCA type phono jacks. Needs only spot solder at tip. Plastic shell with finger grip. In black, red, yellow, green, white, blue; specify color.
    Ms.472C - 5 for 1.70 Shpg. wt. 4 oz. singly, ea. . 38 (F) Feed Thru - Accepts male phono plug at both ends.
    MS 96 Shog. wt., $40 z$.
    Ea .53
    

    ## PHONO PIN JACK

    SINGLE HOLE MOUNTING
    ## ULTTRA MINATURE PLUG \& JACK

    - $1 / 2$ The Previous Size - Same Precision Workmanship Tiniest plug and jack avallable. Plug is "s/a" overall. Jack mounts on panels up to $\%_{2}$ " thick. Requires $\mathrm{s}_{3}{ }^{\prime \prime} \mathrm{mtg}$. hole. Extends "X2" behind panel. 3 circuit jack can be used open or closed. Shpg. wt., 1 oz. Imported MS-883 Plug and lack, per set


    ## NEW! SUB-MINIATURE PLUG \& JACK

    Provides Extra Earphone Jack for Transistor Radios
    

    This new sub-miniature plug and jack set is designed for most transistor radios with earphone jacks. Just plug it in and you have 2 jacks for earphones, speakers, etc. can be used in most instruments provided with an earphone jack. Overall size: $21 / 4^{\prime \prime} \times 1 / \mathrm{Ks}^{\prime \prime} \times 3 / \mathrm{c}^{\prime \prime}$ D. Shog. Wt. 6 oz. Imported
    MS-879
    Net pair . 69
    

    ## SUBMINIATURE PHONE

    ## PLUG AND JACK

    Tiniest "phone plug" and jack avallable. Only $1^{\prime \prime}$ long $x 1 / 4^{\prime \prime}$ diameter. overall. Excellent for transistor and subminiature applicatlons. Plug has removable sleeve. Jack can be mounted on panel up to K." thick. Jack can be used for both open and closed circuits. 4 oz. Imported MS-281-Plug

    Net .17
    Net 13 MS-282-Jack
    MS.370-Pluz and Jack Set
    Net .25
    PHONE PLUG TO PHONO JACK ADAPTER
    

    Brass, nickel-plated adapter. Has standard phone jack on one end to take regular phone plug, and RCA-type phono plug on other end. Has threaded bushing with nut and washer so can be panel mounted if desired. Shps. wt., 4 oz. Imported
    MS-535
    Net .52 AND JACKS
    
    (A) Sturdy, heavy brass, nickel-plated phone piugs with screw terminal connections. Threaded insulated cable outlet may be removed for larger cables to pass through. Body dia. $z_{4}^{\prime \prime}$. overall length $3 y / a^{\prime \prime}$. Shpg. wt., 4 oz. Imported
    MS. 534 Plug
    (8) Matchis 10 for 5.30 (b) Matching in-line phone jack, same construction as plug. overall length $2^{\prime \prime}$. Imported
    MS-533 Jack …..................Net ea. . 5510 for 4.95
    NEW! ALL SHIELDED PHONO

    ## PLUG AND JACK

    (A)
    
    (B)
    (A) Removable Shell for easy soldering of wires. Positive ground connection through unlque ground lug reduces hum to a minimum. Extra long handle makes removat from amplifier a snap. Completely shietded in bright nickel plate on brass body and shell. Fits all RCA type jacks. 1 K." long. Shpg. wt., 4 0z. Imported MS. 593

    Net 19
    (B) Extension Cable Jack for use with MS.593 or any other type of phono plug. Shpg. wt., 4 oz . Imported MS.594 Net 19
    3 CONDUCTOR PHONE PLUG \& JACK
    
    (A)
    
    (B)
    (A) 3 Conductor Phone Jack, Open Circuit. Imported.
    (B) 3
    B) 3 Conductor Phone Plug - Black Bakelite Net 25 Solder lugs. Open circuit $1 / 4$ shaft. Imported.
    

    KIT OF 20 INSULATED ALLIGATOR CLIPS
    Two kits of insulated alligator clips. Kit A consists of 20 large size cllps, kit B consists of 20 smatl size clips. All have sturdy nickel-plated jaws with strong clips. All have sturdy nickel-plated jaws with strong
    spring and hard bite. Each kit contains 10 red and 10 spring and hard blte. Each kit contains 10 red and 10
    black alligator clips, carded and bagged. Shpg. Wt., black alligator
    $80 z$. Imported
    MS-569 Kit B ( $11 / 2^{\prime \prime}$ )
    MS-570 Kit A (21/2")
    Net .89
    Net 1.39
     with plastic Insulated thumb rest and insulated barrel. Strong spring with hard bite. Soider lug connection. Overall length $21 / 2^{\prime \prime}$. Shpg.wt. 4 oz. Supplied in Red and Black. Imported
    MS-451-Red Alligator Clip
    Net ea. . 07
    MS-452-Black Alligator Clip $\}$
    20 for 1.17

    ## 2 INSULATED ALLIGATOR CLIPS WITH banana plugs

    ## 

    - Solid Copper Clips With 2 Banana Jacks 2 accurately matched sturdy jaws for a tight grip. Con venient thumb grip with soldering attactiment. Overal size of insulated alligator clip with baketite handle $3^{\prime \prime}$ overall size of banana plug $13 / /^{\prime \prime}$. I red alligator clip and banana plug and 1 black alligator clip and banana plug. Shpg. wt., 4 oz.
    MS-768 2 Alligator Clips and 2 Banana Plugs.... Net . 29


    ## INSULATED ALLIGATOR CLIPS WITH TIP JACK PLUGS

    Set of 2 clips, 1 black and 1 red, that plug into tip jack probes. Permits use of one set of probes there 2 sets are usually required. Clips are $21 / 4^{\prime \prime}$ overall. Shpg. wt., $6 \mathbf{0 2}$. Imported
    MS-842 Set of 2
    Net .19

    ## CROCODILE CLIPS

    

    Nickel plated brass type for low resistance. Quality springs maintain positive action. Provided with rubber insuIation. Shpg. wt., 2 02. Imported
    

    ## INSULATED ALLIGATOR

    TEST CLIPS
    WITH 6 FT. LEAD

    Handy for quick connectlons. Plated brass alligator clip with Insulated handles and 6 ft . of No. 22 strand ed wire attached. Cilp Is $11 / /^{\prime \prime}$ overall. Shpg. wt., 8 oz . | ed wire attached. Cilp is $11 / 2 "$ overall. Shpg. wt.o 8 oz . |  |
    | :--- | :--- | :--- |
    | $\mathbf{M S . 5 3 6}$ Red |  |
    | 50 for 3.25 |  |
    | 5.537 | for .72 |

    

    ## JUMPER LEAD KIT

    

    KIT OF 10 COLOR CODED $14^{\prime \prime}$ LEADS
    10 handy $14^{\prime \prime}$ leads wlth miniature insulated alligator clips attached to each end. Clips and leads color coded. 5 pairs each a different color. Ideal for serv iceman or experimenter. Shpg. wt., 8 oz. Imported MS-479
    1.19

    ## FLAT PLUG

    Uitra-compact type for use where space is limited. Bakelite body. $1 K_{4}^{"}$ dia., $1 / 4^{N}$ thick. Shpg. wt., 4 oz. MS. 599

    ## Dlungs and CRIDE

    ## MUELLER UNIVERSAL CLIPS AND INSULATORS <br> Positive contact. Standard package of 10 contains 5 marked + and 5 unmarked. No. of insulator to fit each clip is shown in charts. Insulation not included in price.

    
    (C) 10

    Smallest made steel, cadmium plated alligator jaws open $\mathrm{K}_{0}^{\prime \prime}$. Lengh $1 \%{ }^{\prime \prime}$. Solder connection. For 20 or smaller wire. Uses No. 32 Insulator. Avg. Shpg, wt i 40 Oz . $\left.\begin{array}{c}\text { Stock } \\ \text { No. No. Each Lots } 10 \text { Lots } 100 \\ \text { Each } 500 \text { up } \\ \text { Each }\end{array}\right]$ CN-250 $30 \quad .06 \quad .04$. 034 . 032
    TEST CLIPS WITH MESH TEETH (B)
    All steel, cadmium plated except * is solid copper. + is bronze. $\ddagger$ has insulation piercing needle in jaw. Avg. shps. wt., 4 oz

    | Stock No. | No. | Amp. | Size | Each | $\begin{aligned} & \text { Lots } \\ & 10 \\ & \text { Each } \end{aligned}$ | $\begin{aligned} & \text { Lots } \\ & 100 \\ & \text { Each } \end{aligned}$ | $500 \text { up }$ |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | CN-251 | 45 | 5 | $122^{\prime \prime}$ | . 07 | . 05 | . 042 | . 04 |
    | CN-252 | 45C* | 10 | 11/2" | . 14 | . 095 | . 08 | . 076 |
    | CN-253 | 48B | 10 | 2" | . 11 | . 074 | . 063 | . 06 |
    | CN-254 | 48C* | 10 | $2^{\prime \prime}$ | . 15 | . 11 | . 092 | . 088 |
    | CN-255 | 50C $\ddagger \ddagger$ | 10 | $21 / 4{ }^{\prime \prime}$ | 27 | 20 | . 166 | . 158 |
    | A for | erence | ly, | insula | - |  |  |  |

    BATTERY CLIPS STEEL ANO COPPER (8)

    - Are solid copper, all others are lead plated. Avg. shpg wt., 4 ozs.

    | Stock No. | No. | Amp. | Size | Each | $\begin{aligned} & \text { Lots } \\ & 10 \\ & \text { Each } \end{aligned}$ |  |  |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    |  |  |  |  |  |  |  | $500 \text { up }$ |
    | CN-256 | 24A | 25 | 27/8" | 23 | . 16 | 1 | 88 |
    | CN-257 | 21A | 50 | $4^{\prime \prime}$ | . 39 | 28 | 24 | 23 |
    | CN-258 | 11A | 100 | $6^{\prime \prime}$ | 1.04 | 75 | . 64 | 61 |
    | CN- 259 | 24C* | 50 | 27/ ${ }^{\prime \prime}$ | . 37 | . 27 | 23 | 22 |
    | CN- 260 | 210* | 100 | 41/2 | . 95 | . 68 | . 58 | . 55 |
    | CN. 261 | 11C* | 200 | $5^{\prime \prime}$ | 1.77 | 1.27 | 1.08 | . 0 |
    | 3 SIDED MESH TEETH CLIPS (C) |  |  |  |  |  |  |  |
    | * Solid copper, others cad. plated steel. Avg. shpg.wt., 4 ozs. |  |  |  |  |  |  |  |
    | Stock No. | No. | Amp | p. Size | Eact | $\begin{aligned} & \text { Lots } \\ & \text { 10 } \\ & \text { Each } \end{aligned}$ |  | $\begin{aligned} & 00 \text { up } \\ & \text { Each } \end{aligned}$ |
    | C | 27 | 20 | 21\%" | 1 | . 0 |  | 3 |
    | C | 27C* | 40 | 2\%。 | 23 | . 16 |  |  |
    | PHOSPHOR-BRONZE WEE-PEE-WEE CLIPS (1) |  |  |  |  |  |  |  |
    | Non-ferrous R.F. test clip. Length $111 / 0^{\prime \prime}$. Jaws open |  |  |  |  |  |  |  |
    | \%/8". Uses | 931 | sulator | Avg | Shpg. | w 4 | 025. |  |
    | stock Lots 10 Lots 100500 up |  |  |  | Lots |  | 100 |  |
    | No. |  |  | Each | Each |  | a |  |
    | CN. 26 a | 8 |  | 22 | 15 |  | 13 | . 124 |

    ## TERMINAL STRIPS

    ## - 18

    Superior quality bakelite terminal strips. Solder lugs mounted on $1 / 0_{0}$ " thick insulation. Available with 2,3, 4 or 6 soider lugs and screw terminals. Mounting holes for 6-32 screws. Avg. shpg. wt., 402.

    | stock No. | Term | Ea. | for | $\begin{gathered} 100 \\ \text { For } \end{gathered}$ | Stock |  | Ea | $\stackrel{5}{5}$ | $\begin{aligned} & 100 \\ & \text { For } \end{aligned}$ |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | MS. 227 | 2 | . 06 | . 25 | 3.40 | MS. 371 | 5 | . 14 | . 65 | 70 |
    | MS-228 | 3 | . 09 | . 40 | 4.80 | MS. 230 | 6 | . 17 | . 75 | 9.10 |
    | MS. 229 | 4 | . 12 | . 55 | 6.20 |  |  |  |  |  |

    
    $y_{2}^{\prime \prime}$ bakelite. $7 / 8^{\prime \prime}$ wide Nickel Plated Brass Screw Terminals, tinned solder lugs. Avg. shpg. wi., 4 oz. $\begin{array}{lllll}\text { Slock NET EA. LOTS OF Stock NET EA. LOTS OF } \\ \text { No. Term } 1.10100 & \text { No. Term } 1.10100\end{array}$
    

    CROCODILE CLIPS (0)
    

    FLEXIBLE INSULATORS (H). Avg. shpg. wt., 4 ozs. SPECIFY RED OR BLACK

    | $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | Ins. | $\begin{aligned} & \text { OR BLA } \\ & \text { Flts } \\ & \text { Clip } \\ & \text { Series } \end{aligned}$ | Net Each | $\begin{aligned} & \text { Lots } \\ & 10 \\ & \text { Each } \end{aligned}$ | $\begin{aligned} & \text { Lots } \\ & 100 \\ & \text { Each } \end{aligned}$ | $\begin{gathered} \text { Lots } \\ 500 \\ \text { Each } \end{gathered}$ |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | CN-274C | 13 | 11 | . 78 | . 56 | 48 | . 45 |
    | CN-275C | 23 | 21 | . 39 | . 28 | . 237 | . 225 |
    | CN-276C | 26 | 24 | . 21 | . 15 | . 13 | . 12 |
    | CN-277C | 29 | 27 | . 13 | . 09 | . 076 | . 072 |
    | CN-278C | 32 | 30 | . 05 | . 03 | . 025 | . 024 |
    | CN-279C | 47 | 45 | . 06 | . 04 | . 035 | . 033 |
    | CN-280C | 49 | 48 \& 50 | . 09 | . 065 | . 054 | . 052 |
    | CN-281C | 62 | 60 | . 05 | . 035 | . 03 | . 028 |
    | CM.282C | 87 | 85 | . 06 | . 04 | . 035 | . 033 |
    | CN-283C | 93 | 88 | 12 | 01) | . 07 | . 067 |

    

    FAHNESTOCK CLIPS
    Brass clips that assure good eiectrical contact without injury to wire. $3^{\prime \prime}$ wide except "which are Ko" Shpg. wt., 402.
    Stock

    | Stock No. |  | Leth | Max. <br> wire |  | $10$ | $\begin{aligned} & 100 \\ & \text { for } \end{aligned}$ |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | WIS-248 | B | $1{ }^{\prime \prime}$ | No. 10 | No. 8 | . 15 | 1.35 |
    | MS-249 | C | 1-1/6" | No. 10 | No. 8 | . 19 | 1.70 |
    | MS. 250 | A | 12/4" | No. 10 | No. 8 | 1.10 | 8.90 |
    | MS-251* | B | 夝" | No. 14 | No. 6 | . 10 | 90 |

    

    GENERAL RAOIO TYPE 274MB insulated double plug
    Attractively designed, Molded-Styrene
    double plug assembly for rapld and
    convenient connections in the laboratory. Jack top permits stacking per multiple connections. Low ca pacitance, low losses, completely insulated for hand protection, polarity indication molded in. A cross hole in the center provides strain relief for attached cables up to $0-2^{\prime \prime}$ Dla. Shpg. wt., 5 oz .

    ## ID. 216

    ## SWITCHCRAFT PLUGS AND JACKS

    

    MIL TYPE PLUGS AND EXTENSION JACK All meet industrial and military requirements. Plugs are made to MIL-P-642A Specs. The extension Jack type 820 meets MIL-J. 641 A specs. Best quality materlal and workmanship assure positive internal interlock. Parts will not shift in position. Black plastic handle. Extension Jack fits type $\mathbf{4 3 0}$ Littel plug. All have screw terminals. Avg. shpg. wt. 5 oz.

    LITTEL.PLUGS AND JACKS
    
    "LITTLE PLUGS" PHONE PLUGS-Compact qualify plugs. fits standard 4 " phone jacks except with 206 diam. sleeve and $\uparrow$ with short sleeve for Revere recorders. In plastic handle or with brass nickel plated corders. In plastic handle or with brass nickel plated
    shells for shielding. Solder terminal has bullt-in shells for shielding. Solder terminal has bulltin
    cable ctamp. Handie ${ }^{1} \mathrm{Y}$, ${ }^{\circ}$ long, $12^{\prime \prime}$ diam. Av. shog. wt., 4 oz.
    
    "TINI-JAX" SUBMINIATURE PHONE JACKS (Fig. D) 2-conductor jacks for "Tini-Plugs." Only N/32" long. Abbrs: OC-open Ckt; CC-closed Cht. Av. Shpg. wt., 2 oz.
    
    PJ-6
    PJ. 68
    41
    42 A
    Schematic

    0z. Imported stock no. KI-18

    KIT OF 48 SOLDER LUG STRIPS
    handy assortment of 48 solder lug terminal strips with 8 of each type from 1 through 6 lugs. Shpg. wt., 12 STOC
    Net
    

    ## SMITH PLUGS AND JACKS

    ## 409?

    K
    

    M
    

    ## NEW! LAFAYETTE

    STRETCH-TYPE TEST LEADS

    Cannot kink or become entangled. $16^{\prime \prime}$ coil extends to 9 feet. Includes red and black plastic handles on each end. Probe 612" long including tips. Shpg. wt., 402. F. 886

    ## BUDGET UNIVERSAL TEST LEAD KIT IN PLASTIC CASE

    This kit consists of color coded 4 5\%" long x $\%$ dia. red and black plastic handle pin prods with heavy duty $37^{\prime \prime}$ kinkiess rubber leads with 5000 v breakdown insulation termin-
     ating in coded $2^{*}$
    long $x$ y"́ dia, plastic grip banana plugs. 3 sets of interchangeable terminals are included. They all slip directly on to the banana plugs. They are spade lugs terminals, phone thps and red and black insulated alligator clips. These ltems have their own handsome and handy compartmentalized flexible plastic case which snaps shut. Shpg. wt., $11 / 2$ los.
    F. 373

    Imported
    Net .77

    ## TEST LEADS

    

    Standard test leads furn ished with plastic prods and pin plugs which with stands chipping or break stands chipping or break
    ing. Extra flexible kink less vinyl covered $60^{\prime \prime}$ red and black leads. Prods are red and black. 4" long $x \quad 3 / 0^{\prime \prime}$ diameter. Suppller in palr of one red and one black. Available with eith er pin or banana plugs imoorted
    Snpg. wt., 802
    F-344 Test Leads With Banana Plugs

    Net .39
    F-345 Test Leads With Pin Pluks
    Net .39

    ## HIGH VOLTAGE LEADS

    For hi-volt testing in TV sets Extra heavy duty. Special finger guards. High tension wire. 22,000 volts breakdown. $48^{\prime \prime}$ long. shpg. Wt., 6 ors.
    MS.538-with phone
    tips .............Net per pair 1.94
    MS-539_with spade
    lugs ...............Net per pair 1.94
    MS. 540 -with alligator
    clips ...... Net per pair 2.35

    ## THIN TYPE- $50^{\prime \prime}$

    CIRCUIT TESTER
    A simple, safe, electrical circult tester for voltages from 60 volts $A C$ to 550 volts $A C$ or DC.
    Used for radio, electrical and automotive testing. Molded plastic. Shpg. wt., 2 oz. MS-257

    For hard to reach places. Extra
    slim plastic handles with long. slim, insulated prods attached. $50^{\circ \circ}, 6000 \mathrm{v}$ test wire. Angle type phone tlps. Shipg. wh.. 4 ozs. MS. 541
    

    ## KLIPZON ADAPTERS

    Convert old test points to self holding prods. Fits over standard phone tips or needle type.
    P-300-Red
    P. 300 -Red
    P. 301 -Black
    202.

    Net Ea. .38
    Net Ea. 38

    # PORTABLE POWER SUPPLIES, PUMPS AND POWER TOOLS 

    ## ZEUS POWER PLANTS <br> 

    - Permanent Magnet Alternator
    - Maintenance-free Design
    - Lightweight for Portability

    A light weight small size, portable gasoline powered electric generator that features a permanent magnet alternator for maintenance-free operation. Trouble factors such as brushes, windings, belts, slip rings and commutators have been eliminated because there is only one moving part, the permanent magnet alternator. A Briggs and Stratton 3 horsepower, 4 -cycle engine gives easy-lo-start, long-life dependable service hour after hour. All units deliver 115 VAC ML-345wX (1250 watts)

    Shpg. wt., 82 lbs
    Net 190.88
    ML-346w ( 3,000 watts).
    Shpg. wt., 195 lbs.
    ML-347WX ( 3,000 watts, electr. starter).
    Shpg. wt., 195 lots.
    Net 431.25
    

    DOUBLE END BALL
    BEARING MANDREL
    

    Ideal for small shop or home. Equipped with hardened ball bearings and races. Threaded $1 / 2$ $x 20$ on each end. $11 / 2$ " pulley for " $V$ " belt drive. Buitd your own grinder, sander, buffer, jack

    Net 2.32
    DOUBLE POWER GRINDER
    Equipped with double tool rests-will accommodate $4^{\prime \prime}$ or $5^{\prime \prime}$ grindstone. Comes with DuPont Nylon bearings. These bearings require liftle or no lubrication and have outstanding abrasion resistant char acteristics. Furnished comolete with coarse and one fine grinding wheel. Shpg. wt., 10 Ibs.
    HG.121

    ## AUTOMATIC SIPHON

    ## - Atos - Power Mower

    Automatic - safe - simple pump for transfer of gasoline or any liquid. Pump-type siphon works without putting tube to mouth. Just squeeze the bulb to start the flow. Transparent inserts permit view of liquid flowing. Use for any gas entgine equipment. Handy in camp - for plumbers -chemical plants-industrials. Shpg. wt., 802. HD-725

    ## 139 <br> S

    ##  <br> No Money Down

    - Permanent Magnet Alternator
    - Compact and Portable
    - 21/2 H.P. Briggs and Stratton Engine
    - 1000 Watt Continuous Duty Rating

    A compact, portable electric power plant for on-the-spot electricity anytime, anywhere. Features a permanent magnet alternator that gives you more power and trouble-free operation - no brushes, armature windings, belts, slip rings or commutators. Dependable Briggs and Stration 2.5 H.P. 4 -cycle engine gives easy-to-start long.llfe service hour after hour. 1-at. capacity fuel tank. Recoil starter. Integraf receptacie; rubber shock absorbing feet. Instruction book. Portable-only 63 lbs . Compact-15"H, $131 /{ }^{\prime \prime} \mathrm{W}, 13^{\circ " \mathrm{D}} .115 \mathrm{~V}, \mathrm{AC}, 1000 \mathrm{watt}$ rating. Shpg. wt., 70 lbs
    ML-355WX
    Net 148.13

    ## HEAVY-DUTY SUMP PUMP

    - RUST-PROOF CAST ALUMINUM

    BASE

    - RUST-PROOF SEAMLESS ALUMI-

    NUM COLUMN

    - 3.920 GALIONS-PER-HOUR TO

    IO-FT. HEAD
    

    No moner $\mathbf{3 7 5 0}$
    A rugged automatic electric pump with a dependable $3 / 3 \mathrm{HP}$ motor with safety-designed ovefload protector. Features a plastic float. non-corrosive in any water; extra large separate screen to prevent clogging; vertical $11 / 4^{"}$ discharge that eliminates base elbow. Lifetime guarantee on all moving parts (1-yr. guarantee on electrical components). Oilite base bearing for long life. Individual pressure plate to assure consistent water flow. Designed 10 operate at top performance

    Gallons Per Hour Discharge Height

    | 3,920 | $10-\mathrm{ft}$. |
    | :--- | :--- |
    | 3,215 | 15 ft |
    | 1,600 | $20-\mathrm{ft}$ |
    | 540 | $25-\mathrm{ft}$. |

    ML-297WX
    Shpg. wt., 25 los. ....... Net 37.50

    ## UNBREAKABLE PLASTIC "JERRY CAN"

    - For Gas, Water, Juice, OilCar, Boat, Barbecue, Lawn Mower - Will Not Rust, Corrode,

    Break or Shatter

    ## Reversible, Self-storage Spout

    Lightweight, unbreakable plastic can ideal for carrying any liquid, for any use. improved spout for easy pouring, reverses for self storage. Air vent for free pouring. Chemically Inert, not affected by oll, acid, etc. Won't dent or break. Built-in carrying handle. 1 -gallon size fits in refrigerator.
    AA-121 One-Gal. Size; Shpg, wt., $11 / 2$ ibs..... Net .99 AA-122 Three-Gal. Size; Shpg. wi., 2 lbs.
    

    Net .99

    - 3-H.P. Engine
    - 90-Day Parts Warranty
    - Regulating Governor
    - 1000 Watts Continuous
    - 1250 Watts Intermittent

    A compact, rugged direct coupled power plant. Supplies 115 V.A.C., 60 cycles at 1000 watts continuous, 1250 watts intermittent cuty. The engine is a 3 h.p., 4 cycle, air cooled Briggs \& Stratton. Operates on regu. ar gasoline tlses standard weight motor olls. Recoil manul start Drip-proof continuous duty self excited manual start. Drip-proof, continuous duty, self excited, pole, 3600 RPM generator. Prelubricated, sealed, ball-bearing commutator, mics insulated. 3 cycle maximum frequency variation. $\pm 5 \%$ voltage regulation. Gas consumption at 1000 watts; 0.2 gal. per hr .; at 1250 watts, 0.39 gal . per hr. Includes instructions, parts lists and 90 day parts warranty. Made in U.S.A. Shpg. wt.. 70 lbs. VIA EXPRESS ONLY.
    ML-266WX
    Net 145.50

    ## 1750 WATT POWER PLANT

    Delivers 115 V.A.C., 60 cycles at 1750 watts continuous duty, 2000 watts intermittent duty. Air-cooled, 4 H.P. 4 cycle Clinton engine, manual start. Uses regular gasoline and standard motor olls. The generator Is a drip-proof, continuous duty, DC self excited, 2 pole, 3600 RPM, revolving armature type. Brushes adjustable. Pre-lubricated, sealed. ball bearing commutator. Max. frequency variation, 3 cycles $\ddagger 5 \%$ voltage. Duplex outlet, 0.150 V. A.C. meter. Includes instruction and parts manual and 90 day parts warranty. Made in U.S.A parts manual and 90 day paris warranty Stpg. Wt.:

    Net 194.50

    ## 2500/3000 WATT POWER PLANT

    A heavy-duty power plant with all the "extra" features 51/4 H.P., 4 cycle, air-cooled Briggs \& Stratton ball bearing engine. Operates on regular gasoline and stand ard motor oil. Produces 2500 watts, 115 V.A.C., 60 cos, continuous duty. 3000 watts intermittent duty Gas consumption is 0.65 gal per hr at 2500 watts Fuel ant holds 6 ats continuous duty drip-proof. D.C. ank holds 6 qts. Continuous duty, drip-proof, D.C self excited generator. 2 pole, 3600 RPM, revolving armature. Pre-lubricated, sealed, ball bearing construction. Self-cooled via a centrifugal blower. Adjustable cooper graphite brushes. Voltage regulation $\pm 5 \%$ 3 cycle max. frequency variation. Voltmeter reads 0.150 V.A.C. Includes instructions, parts list and 90 day warranty. Made in U.S.A. Shpg. wt., 156 lbs. VIA EXPRESS ONLY.
    ML-268WX
    Net 279.95

    ## DELRON SUBMERSIBLE

    PUMP- Will Not Corrode or Rust
    - Hermetically Sealed Motor
    - For Circulating and Dispensing Water

    It's the all-new Delron aluminum pump for underwater use. Guaranteed not to corrode or rust; hermetically sealed motor. Circulates and dispenses water and mildacid solutions for use in fountains, beverage dispensers, aquariums, photo developing, air conditioning, etc. Gallons per hour delivery: 240 1 ft. 180 © 3 ft.: 125 (i) 5 ft . shut off © 12 ft . Outlet $30^{4}$; inlet $1 / 2^{r n}$ pipe $0 . D$. ; height $41 / 2^{\prime \prime \prime}$; depth $41 / 4^{\circ "}$. 6 ft . safety cord. $115 \mathrm{~V}, 60 \mathrm{cy}, \mathrm{AC}, 49$ watts load; .67 amps load. Shpg. wt., $31 / 4$ los. ML. 312

    Net 12.75

    ## WATERFALL KIT

    Enchanting waterfall of cascading water constantly recirculated by electric pump. Gallons per hour delivery: 180 @ 1 ft., 140 @ 3 ft .; 100 @ 5 ft .; shut off @ 10 ft . Outlet $\mathrm{K}_{\mathrm{c}}{ }^{\prime \prime}$; inlet $1 / 2^{\circ \prime}$ pipe 0 . D. Load: amps .65 ; watts 43. No concrete needed; complete with instructions. Kit consists of pump, $8-\mathrm{ft}$. plastic hose, $7-\mathrm{ft}$. sealing poly, pump filfer. Shpg. wt., 4 lbs.
    ML-31i
    Not Illustrated
    Net 15.88

    ## Page 194

    ## MINIATURE EARPHONES AND ACCESSORIES

    SUPER POWER DYNAMIC EARPHONE for transistor circuits

    POWERFUL MAGNET PROVIDES EXCEPTIONAL EFFICIENCY

    This super-power dynamic earphone is not to be confused with run-of-the mill earphones. Extra efficient construction and a powerful magnet provides exceptlonal performance. Lafayette brings you this ideal solution to the problem of low output inherent in transistor circuits. You'll be amazed at the difference in volume when you use this dymamic earphone as well as at its quality of reproduction we have tested thls Item on all kinds of transistorized circuits, and this remarkably efficient earphone functioned so well that in many cases the program was distinclly heard earphone functioned so well that in many cases the program was distinctiy heard
    with the earphone over 2 feet away from the ear! It is of course, not limited in use to low powered devices-it will give delightful performance wherever a high impedance dynamic earphone is required. AC impedance 7000 ohms, DC resistance 1500 ohms. Snap on earplece readily removed for cleaning. Complete with 3 ft . detachable plug.in cord. Shog. wt., 4 oz. Imported.
    MS-260
    Net 2.95
    

    ## ECONOMY ALL-PURPOSE DYNAMIC EARPHONE

    - For Transistor and Subminiature Receivers


    ## For Silent Radio and TV Listening

    A sensitive all-purpose earphone designed with both your listening pleasure and pocketbook in mind. Exlensive range and excellent tone combine, to provide excelfent reproduction. Lightweight, equipped with a practically invisible ear support, that slips comfortably over either ear, from which the earphone can't slip out or fall. Ideal for use with TV and radio sets amplifiers, minlature and transistor receivers, etc. Attractive unit with shiny chrome finish. Complete with a 3 ft , cord. A super value at this price. Shog. wt. 5 oz. Imported
    6 ohm impedance, with subminlature phone plus. ms-591 1/e" Dia.plug ...................... Net. 59 MS. 960 Same as above with $K_{c}{ }^{" 1}$ dia. plug Net .59
    

    ## EARPHONES • HEADSETS • ACCESSORIES

    ## REMOTE CONTROL FOR SILENT TV VIEWING

    - SImple to attach to any tV set or radio - see ano hear-molselessly-con. VENIENTLY - LOOK AT THESE FEATURES!

    FOR LATE LISTENERS: One or two people can both see and hear the program with the loudspeaker cut off. Tops for enjoying the latelate show without disturbing the rest of the household of the neightors.
    FOR HARO-OF-HEARING: They can see and hear without turning the set volume so high that others can't stand the nolse. They can Ilsten elther with the loudspeaker cut off or, If the rest of the family want to hear, with the speaker on.
    3. FOR NOISY PROGRAMS: Don't let the kJds' "Willd Westerns" bother you. Let them view and listen with the speaker off.
    4. FOR NORMAL OPERATION: Does not affect your regu lar use of the T.V. set. Does not have to be disconnected from set.
    CLEVITE-BRUSH HEADPHONES
    

    Model BA-200.1 (Fig. A) Rugged, sensitive. Impedance 45,000 ohms. Response, $100-8,000 \mathrm{cps}$. With $5^{\prime}$ cord and headband and phone plug termination. Shpg, wt., 2 lbs.
    ME. 10
    Net 16.90
    Model BA-200B. Same as above but wired for binaural use. Impedance, 90,000 ohms. With eyelet terminals. ME. 11
    Model BA. 215 Ear cushions. Foam cushions for all Clevite-Brush phones except Model ED-300. Shpg. wt., 502.

    Madel BA-206. For ultimate hi-fl listening pleasure. Flat response $60-8,000 \mathrm{cps}$. Impedance, 50,000 ohms. Shpg. wt., 2 lbs. With eyelet terminals
    ME. 15
    Model BA-2068 As bove but wired for mpedance 100 As ahms bhps wi Impedance, 100,000 ohms. Shpg. wt., 2 lbs. Eyelet lugs. ME-16

    Net 32.54
    Model E0-300 Language Lab Headphones. (Fig. B)Unmatched ability to withstand tough tests of student use and abuse. Lightweight. Removable ear cushions. Can be worn comfortably over glasses. Freq. response: $50-10$ 000 cDS. Impedance: 50,000 ohms. Shpg. Wt., 2 lbs. ME. 17

    REMOTE CONTROL: Comes complete with 20 ft . of cable so it can be operated comfortably from a distance. Has its own volume control, speaker on-off switch, and two sets of jacks so either 1 or 2 ear phones can be connected.
    6. OYNAMIC EAR PHONE: Set is suppiled with one of ARGONNE exclusive HI-FI dynamic miniature earphone. Highly sensitive and efficient. Phone is complete with 3 ft . cord and tips, ready to insert in control box.
    7. CONVENIENT: Size only $37 / 3 \times 2 \times 14 / 2^{\prime \prime}$. Complete with 1 earphone and 20 ft . cabie. Completely wired with instructions. Shpg. wt., 3 lbs
    MODEL MS-125
    Net 6.50

    ## EXTRA EARPHONE

    MS-591 Shpg. wt., 802.
    $10^{\prime}$ extension cord for above.
    MS-590 Shpg. wt., 402.
    Net .79

    LAFAYETTE SPECIAL

    ## GOOO OHM HEADSET DOUBLE MAGNET Dis 59

    A real bargain-the convenience and advantages of earphone listening at an especially low price. This is an extremely efficient, double headset with adjustable headband, for private listening or for greater intelligibillty when there are distracting sounds and ex ternal nolse. 4,000 ohms DC resistance. Has durable permanent magnets, removable earpiece and $31 / 2$ feet of extension cord terminated with standard headphone tips. Shps. Wt., 12 oz. Imported
    

    ## PHONE AND SPEAKER

    CORDS $41 / 2$ Feet LongSturdily made, with cotton brald insulation. 41/2 feet long. Avg. shpg. wt., 1102.
    MS. 35 Double type. 1 end spade $11 p$, other straight .45 MS-36 Double type. Pin tips both ends
    MS. 37 single type. Pin tips both ends

    ## HEAOPHONE CIUSHIONS FOR ELL PHONES

    Made of soft rubber for comfortable listen-
    ing and for earphone protection. Fit all types of headphones. Shpg. wi., 1 to. MS-34 Pair .73 .................... 5 Pairs for 3.35
    

    ## TELEX HEADPHONES AND ACCESSORIES

    

    TELEX MONOSET (Fig. A)
    Under-the-chin lightweight headset for individual IistenIng. Reduces head fatigue. Removable while plastic ear plugs for easy cleaning. Magnetlc type. Weighs 1.2 oz. Complete with 5 ft . cord and standard phone plus. ME-50 HMV-2- 128 ohms ME-51 HMY-2- 2000 ohms

    Net Net 7.75

    TELEX HI-FI DYNASET (Fig. D) Sensitive H1-Fi under-the-chin dynamic headset. 50-8000 cycle response to 25 MW . Midget $3 / 4^{\prime \prime}$ " 6 -hm speaker bullt right into the plug. Light gray finish. Shpg. Wt. 6 oz.
    ME-61 HUP-01-6 ohms-Complete
    Net 8.33
    TELEX CORD SETS (FIg. C)
    All are 5 ft . cords without volume controls. All fit Monoset, twinset, and magnetic pillow speaker except fits dynamic plllow speaker. Shpr. wt., 9 or.

    Plug Type
    ME. 56 CMM.2-Standard Phone Plug
    ME-57 CMM -92-90 miniature phone plug
    ME-58 CMM.98-Stralght min. phone plug
    ME.59 CNM-99-Extension cord
    ME-60 CSD-2-Standard phone pluz

    Net

    ## TELEX TWINSET (Fig. B)

    Banishes headachy ear pressure. Band rests on head and recelvers set gently at temples; tubular sound arms plpe signal to ears. Only 1.6 oz. C.A.A. approved for pllots. Complete with 5 ft . cord and standard phone plug. Shpg. Complete
    ME-54 HTL-2- 64 ohms ME-55 HTX- Net 14.12

    TELEX DYNAMIC PILLOW SPEAKER (Fig. E
    New dynamic miniature pillow speaker gives ultimate in tonal quallty without distortion. For Individual and Institutional use, Stainless steel, moisture proof housing. Size: $374^{\prime \prime}$ dia., $11 / 0^{\prime \prime}$ max, thickness. With 5 ft . core and standard phone plug. Shpg. Wt., $80 \mathbf{0 z}$. ME-62 SDN-2A -3.2 ohm

    Net 6.18 ME-63 SDM-2A- $10,000 \mathrm{ohm}$

    Net 9.22

    ## TELEX MAGNETIC PILLOW SPEAKER (Fig. F)

    Only $21 /{ }^{\prime \prime}$ " diameter and only 5 " $^{\prime \prime \prime}$ thick! Ideal for comfortable radio or television listening through a pillow in bed or in a chair without disturoing others. Maroon 1.82 waterproof plastic. Complete with 5 ft . cord and stand2.04 ard phone plug. Shpg. wt., 8 oz.
    2.09 ME. 64 SNV-2A-125 ohms.

    Net 5.46
    Nel 5.46

    ## 

    Remote Control Radio-TV/Earphone ADAPTER

    - Operates Up To 2 Speakers and/or Earphones
    
    nilax in the most comfortable spot in the room and enjoy the beneffts of private listening to your $\mathbf{T V}$, radio or phonograph. Connect one or two extenston speakers or earphones and control the volume of each separate ly. 25 foot, flat, flexible extension cord on control unit. Includes earphone control unlt and instructions MS-913 Imported 3.29 MS. 591 Extra Earphone for "Private Ear" ......Net . Net 79 MS.590 10 ft. Earphone Extension Cord ….... Net . 39


    ## C. F. CANNON HEADPHONES AND ACCESSORIES

    

    CANNON-BALL" DOUBLE HEADSET
    Low-priced, lightweight, with powerful Alnico $V$ magnets and double coils, Adjustable steel headband. $41 / 2 \mathrm{ft}$. cord.
    ME-30 AM-15-2-2000 ohms D.C.
    ME-31 AM-15-3-3000 ohms D.C
    ME. 32 AM-15-5-5000 ohms D.C

    ## "CANNON-BALL" SINGLE HEADSET

    Single efficient phone with spring steel headband and $41 / 2 \mathrm{ft}$. cord. Shpg. Wt., 1 lb.
    ME-33 AM-15-1-1000 ohms D.C.
    ME-34 AM-15-1500-1500 ohms D.C

    ## "CHIEF" HEADSET

    Similar to above but all - Bakelite phones, double coils, alnico magnets and vinyl headband.
    ME-42 ... CC11-11-ohms D.C.
    Net 2.44

    ## BRANDES "ADMIRAL" HEADPHONES

    "Matched-tone" headset. Large diaphragms. Doubie colls, chrome steel magnets. Adjustable steel headband $42 / 2 \mathrm{ft}$. cord. Shpg. wt., 2 lbs.

    ## ME. 35 BA-2 - 2000 ohms <br> ME-36 BA-3-3000 ohms ........................................... 2.82 <br> ME. 37 BA-5-5000 ohms <br> 3.53

    ## BRANDES "SUPERIOR" HEADPHONES

    "Matched-tone" headset of same general construction as the "Admiral" but with terminals on the outside.
    ME-38 BS-2-2000 ohms

    ## HEARING AID FOR RADIO

    Headphone hearing device increases enjoyment for persons having difficulty hearing radio programs properly. Excellent for private listening. Connects to radio in a few minutes. With switch for listening to phones only, speaker only, or to both. Phones match loudspeaker or to
    coll.
    ME-39 OC-2. Shpg. wt., 2 los. .... 4.70 ME-40 SP.1-Same out with single phone. Shpg. wt., 1 tb. ............... 3.38
    ME-41 K-4-3-way switch only.
    Shpg. wt., 8 oz. ....................... 1.85
    TELEX MINIATURE PHONE PLUG AND JACK
    $1 / 2$ the size of previous small plugs and jachs, yet with all the quality of preci.
    sion workmanship. Plug is $17 / 2^{\prime \prime}$ long by $1 / /^{\prime \prime}$ diameter jack can be mounted on any panel up to $1 / \mathrm{s}^{\prime \prime}$
    PJ-39 TELEX NO. PM01-PLUG. Shpg. Wt., 4 oz.
    PI-40 TELEX NO. JMPOI-JACK (Closed Circuit). 4 oz. 27
    PJ-41 TELEX NO. JMPO2-JACK (Open Circult), 4 oz.

    ## LITTELFUSE FUSES AND MOUNTS

    ## 48को <br> 

    LIMITED CURRENT FUSES

    TYPE 3AG STANDARD FUSES
    Series 312000 . Quich acting for low time-lag applica. fions such as amplifiers auto radios. U.L. approved $1 \mathrm{~V} L \mathrm{x} 1 / \mathrm{a}$ "diam. All rated 250 volt except 8 amp is 125 V . 5 fuses per phg. Shpg. wt. . 6 oz.

    | Stock No. | Amps | $\begin{aligned} & \text { Per I2 } \\ & \text { Phg . } 1 \text { P } \end{aligned}$ | 0 \& up er Phg | $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | Amos | Per Phg. | Phg |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | EL-521 | 1/100 | 1.62 | 1.38 |  |  |  |  |
    | EL-522 | 1/32 | 1.41 | 1.20 | $\begin{aligned} & \text { EL-227 } \\ & \text { EL-228 } \end{aligned}$ |  | . 26 | 22 |
    | EL-217 | \% |  |  | EL-229 | 2 |  |  |
    | EL-218 |  |  |  |  |  |  |  |
    | EL-219 | . 15 | ¢. 65 | . 55 |  |  |  |  |
    | EL-220 | . 175 |  |  |  |  |  |  |
    | EL. 221 | \% |  |  | EL-230 | 3 | 24 | . 20 |
    | [L-222 |  |  |  | EL-231 | 4 |  |  |
    | [6.223 | 3/10 |  |  | EL. 232 | 5 | .33 | . 28 |
    | EL-224 | 7 | 41 | . 35 | EL-233 |  |  |  |
    | EL-225 | $1 / 2$ |  |  |  |  |  |  |
    | CL. 226 | 3/4 |  |  | EL.234 | 8 | . 50 | . 43 |

    ## TYPE 3AG SLOW BLOW FUSES

    Serles 313000 . High time ${ }^{\text {tag }}$ to withstand heavy surges. blows quichly on shorts. Units through 5 amp are rated 125 volts and are UL approved, above 5 amp rated 32 volt. 5 fuses per pkg. $11 / 4 x^{\prime \prime} / 4$ diam. Shpg. wt., 6 oz.

    | Stoch No. | Amps | Per Phg. | 20 \& up Per Phg. | Stock No. | Amps | $\begin{aligned} & \text { Per } \\ & \text { Phg. } \end{aligned}$ |  |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | [L. 235 | 1/100 | 1.21 | 1,03 | CL-253 | 1 | . 88 |  |
    | [1.236 | 13z | 1.21 | 1,03 | EL-234 | $14 / 4$ |  |  |
    | EL-237 |  |  |  | EL. 255 | $12 / 2$ |  |  |
    | CL-238 | 1/10 |  | 75 | EL-256 | $1.6 / 10$ | . 82 | . |
    | EL-239 | 1/8 | . 88 | 75 | [L-257 |  |  |  |
    | EL-240 | . 15 |  |  | EL-258 | 21/2 |  |  |
    | EL.241 | . 175 |  |  | EL-259 |  |  |  |
    | CL-242 | ${ }^{1}$. | . 88 | . 75 | EL.261 | 4 | .65 | . 5 |
    | EL-243 | $2 / 10$ |  |  | El-262 | 5 |  |  |
    | EL-244 | 1/4 |  |  | Cl262 |  |  |  |
    | CL-245 | 3/10 |  |  | EL.263 | 61/a |  |  |
    | EL-246 | 3/6/10 |  |  | EL-523 | 7 | 65 | . 5 |
    | EL-247 | 4/10 | . 88 | . 75 | EL. 264 | 8 |  |  |
    | EL-248 | $1 / 2$ |  |  | $\begin{aligned} & \text { EL-265 } \\ & \text { EL-266 } \end{aligned}$ | $\begin{aligned} & 10 \\ & 15 \end{aligned}$ |  |  |
    | EL-249 | 6/10 |  |  |  |  |  |  |
    | EL-250 | 7/10 |  | . 75 |  |  |  | . 5 |
    | EL-251 | \% | . 80 | . 75 | $\begin{aligned} & \text { EL-268 } \\ & \text { EL- } 269 \end{aligned}$ | 25 30 | 65 |  |
    | EL. 252 | 8/10 |  |  |  |  |  |  |

    ## 3AG STANDARD PIGTAIL FUSES

    Series 318000 . Designed for use in TV receivers and
    other applications where absolute economy in other applications where absolute economy in space is
    necessary. Rated at 250 v . Ul approved throurh 3 amps
     5 fuses per pkg. 602.
    

    Series 332000 . Exact TV replacements. Fuses match
    holders for specific size ranges. Rated 250 volt through
    6 amps and 125 volt above 7 amps. 5 fuses per pkg. Shpg. wt., 602

    ## LITTELFUSE MOUNTINGS

    | $\begin{aligned} & \text { Stock } \\ & \text { Ne. } \end{aligned}$ | Amps | Per $20 \&$ up Stock Pkg. Per Pkg. No. | Amps | Per 20 \& up Pkg. Per Pkg. |
    | :---: | :---: | :---: | :---: | :---: |

    AND EXTRACTOR POSTS
    Mounts and fuse holders for every application. - In
    cludes fuse. Avg, shDg. wh., 3 oz. cludes fuse. Avg. shpg. Wi.. 3 oz .
    

    ## TYPE 8AG INSTRUMENT FUSES

    Series 361000 . Designed for high-speed action 10 prorect delicate electrical equipment. All rated at 250 volis. exced 5 amp rated 32 volt. 5 fuses per pkg.
    

    | No. Stock | Amps | Per Phg. | 20 \& up Per Phg. | Stoch No. | Amps | Per Phg. | 20 \% up Per Pkg |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | EL-341 | 1/100 | 1.26 | 1.08 | CL.354 | 1 | . 91 |  |


    | EL.375 | 1/500 | 4.29 | 3.65 | [L.383 | 1/2 |  |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | EL-376 | 1/200 | 1.79 | 1.53 | EL-384 | $3 / 4.41$ | . 35 |
    | EL-377 | 1/100 | 1.62 | 1.38 |  |  |  |

    

    ## 32 VOLT AUTO FUSES

    307000 Series Medium acting fuses designed for auto use. Sizes to S.A.E. specifications, length according to
    current to guard against over fusing. For Buss specliy SFE. All $1 / 4^{\prime \prime}$ Diam. 5 fuses per pkg. Shpg. Wt., 602.

    | Stock No. | Amps. | Per Pkg. | 20 \& up Per Pkg. |
    | :---: | :---: | :---: | :---: |
    | EL-211 | 4 | . 19 | 16 |
    | EL-212 | 7 | . 19 | . 16 |
    | EL-210 | 7.5 | . 17 | . 14 |
    | EL-213 | 9 | . 17 | . 14 |
    | EL-214 | 14 | . 15 | . 13 |
    | EL-215 | 20 | . 15 | . 13 |
    | EL-216 | 30 | . 20 | . 17 |

    ## 3AG SLOW BLOW PIGTAIL FUSES

    Series 315000 . Widely used in TV receivers. Designed
    to withstand heavy surges and instantaneous peaks yet 10 withstand heavy surges and instanfaneous peaks yet quick acting under shorf circult. All rated 125 volt. UL approved through 3.2 amp . $1 / / a \mathrm{al}_{\mathrm{a}} \mathrm{a}^{\prime \prime}$ diam., pigtails $11 / 2^{\prime \prime}=20$ IInned copper wire. Sfuses per pkg. Shpr. $\begin{array}{lll}12 / . & =22 \\ & 02\end{array}$

    ## 

    .93 $\left.33 \begin{array}{ll}\mathrm{EL}-296 & 11 / 4 \\ \mathrm{EL}-297 & 11 / 2 \\ \mathrm{EL}-298 & 1.6 / 10 \\ \mathrm{EL} .299 & 2\end{array}\right\} .03 \quad .88$ | EL.297 | $1 / 2$ |  |
    | :--- | :--- | :--- |
    | EL.298 | $1.6 / 10$ | 1.03 |
    | EL.299 | 2 |  |

                \(\begin{array}{ll}\text { EL. } 300 & 21 / 2 \\ E L-301 & 3\end{array}\)
    $.88 \quad .75$
    .93

    3 | EL |
    | :---: |
    | EL |
    | $E L$ |

    EL .303
    $\mathrm{EL}-304$
    $21 / 2$
    3
    3.2
    4
    5
    1

    Per 20 \& up Stock

    $$
    \begin{aligned}
    & \text { Sloch } \\
    & \mathrm{No} .
    \end{aligned}
    $$

    Perg. Per Phe Stock
    

    Series 344000 . Fuse holder with foolproof neon indi. cator that lights when the fuse blows. Mounts in $5 \mathrm{~s}^{\prime \prime}$ cluding the inserted fuse. Comes in models for voltages
    belween $24 / 3$ and 250 volts with a maximum curfent
    rating of 20 amps. rating of 20 amps.
    

    ## TYPE 3AB FUSES

    Series 31400 . Steatile enclosed. ARC-Quenching Powder Medium time lag. lypes through 15 Amp UL approved 5 fuses per phg. Shpr. wi.. 6 oz

    | Ampspkg. Per Pkg. No. |  |  | Amps Pkg. Per Pkg |  |
    | :---: | :---: | :---: | :---: | :---: |
    | $\left.\begin{array}{l}1 \\ 2 \\ 3\end{array}\right\} .56$ | . 48 | EL-275 | 10.53 | 45 |
    |  |  | EL-276 |  |  |
    |  |  | EL-277 | $1 5 \longdiv { . 5 6 }$ | . 48 |
    | 88.53 | . 45 | EL-278 |  |  |
    |  |  | EL-279 | 30,65 | . 55 |
    | PLUG FUSES <br> EL-18-10 amperes <br> El-19-15 amperes <br> EL.20- 20 amperes <br> EL-21-30 amperes |  |  | UL approved. |  |
    |  |  |  | WI. |  |
    |  |  |  | PER |  |
    |  |  |  | OF |  |

    ## FUSES-SWITCHES-TIMERS

    ## LITTELFUSE PRODUCTS

    ## MEDIUM LAG FUSES

    362000 Series Littelfuses - Medium lag fuses designed 10 standard N.E.C. blowing specifications. This smaller fuse is used in situations where size is a factor because of space limitation or the need to differentiate physically between two fuses In close proximity. 5 fuses per pkg. U.L. approved Shag. wt., 6 oz .

    ## stock

    
    

    ## EUROPEAN EQUIPMENT FUSES

    Used in European instruments, tape recorders. Radios WiFI equipment and Hickock test equipment. $5 \times 20 \mathrm{~mm}$ Rated at 250 V .5 fuses per pkg. Shpg, wt., 602.

    ## 271 Series Standard Fuse

    

    ## BUSS FUSE MOUNTINGS

    Convenient methods for mounting fuses on equipment radio, V , instruments, etc. fuses easily replaced 602.
    

    ## SNAP. ON FUSE HOLDER

    For fast replacement of pigtail fuses. One side of dual holder clips on to blown fuse. New fuse its into other side.
    MS 259 wt. 4 oz Each oc 10 for $70 c$
    

    - Automatic Time Switch Extension Cord + 3-Way

    Automatic Time Switch g extension Cord + 3-way
    Outlet Controls up to 3 Appliances at Same Time
    outlet Controls up to

    A 3-way combination for every home - an automatic time switch, extension cord. convenient outlet. 0-4 hour time cycle. Easy to operate - plug it into any wall outlet, connect one, two or three devices to be controlled, and turn the knob to the time period desired. At the end of this time period, the electricity is turned off automatically. 6.foot cord. Shag. wt. 2 lbs.

    ## INDICATING FUSE POST <br> 

    Foolproof neon indicator-Hghts when fuse is blown. For $14 / 4 x^{1} / 4^{\circ}$ (3AG. ACC, etc.) fuses. For use in 100 to 250 volt circuits. Mounting centers- $1^{\prime \prime}$. $2^{\text {mo }}$ behind panel with fuse in . $3 /{ }^{\prime \prime}$ mounting hole. Shag. wi, 1 oz . EL -90

    I
    New sub-miniature microfuses designed where space is critical. Ideal for printed circuits. Rated up to 125 volts. Size "Kane ia ${ }^{2}{ }^{2} h_{3}{ }^{\prime \prime}$, 5 fuses per pkg. Shag. wt. 102.

    Pigtail type 278000 Series Fig. A
    $\begin{aligned} & \text { Stock } \\ & \text { No. Amps. Per } 20 \& u p\end{aligned} \begin{aligned} & \text { Stock } \\ & \text { No. Amps. Per } 20 \% \text {. } 4 \text {. }\end{aligned}$
    EL-
    EL-
    E
    E
    EL
    E EL -498
    EL-499 $4 / 10$
    

    EL-471 1/500
    E
    
    (-479 1/100
    (-480 1/32

    | $\mathrm{EL}-481$ | $1 / 20$ |
    | :---: | :---: |
    | EL | -482 |

    $\begin{array}{lll}\text { EL -482 } & 1 / 16 \\ \text { EL -483 } & 1 / 10\end{array}$
    

    | $\begin{array}{ll}\text { EL-484 } \\ \text { EL -485 } & 2 / 10 \\ \text { EL-486 } & 3 / 10 \\ \text { EL-487 } \\ 4 / 10\end{array}$ |
    | :--- |

    Series. Easy ch
    spring nut. Shag. wt.. 102
    EL -488 Type 281001
    100. Up Net ea. . 21

    ## SAG STRAIGHT-ELEMENT FUSES

    Series 517 COO. Specifications same as 4AG straight element fuse except size which is $11 / 2^{\prime \prime}\left(x^{3}\right)_{2}{ }^{"}$ Di 5 fuses per pkg. Shag, wi., 602.
    

    ## PHOSPHOR BRONZE FUSE CLIPS

    Bright nickel plate with fuse stop ears. 10 clips per package. Shag wt., 402.

    EL. 204

    AG SLOW BLOW FUSES
    Series 41300. Designed to meet Aircraft Vibration test requirements. Units through $3-2 / 10 \mathrm{amp}$ are rated at 250 volt. Above $3-1 / 10$ amp rated at 32 volt. 5 fuses per pkg, $11 / 4^{\prime \prime} \mathrm{Lx} \mathrm{K}_{3}{ }^{\prime \prime} \mathrm{Dia}$. Shag. wt., 6 oz
    

    AG STRAIGHT-ELEMENT FUSES
    Series 41700 . Medium lag fuses for applications where a larger size fuse is desirable and vibration is not a factor. All rated 32 volt except 1,2 and 3 Amp rated 250 V . 5 fuses per pkg. $11 / 4 " L x y_{3}$ "Dial. 6 oz.
    
     EL -436
    EL -437 EL-437 EL -438

    $$
    \left.\begin{array}{c}
    5 \\
    10 \\
    15
    \end{array}\right\} .38 \mid .3
    $$

    $\mathrm{EL}-442$
    $\mathrm{EL}-443$
    $\left.\begin{array}{l}35 \\ 40\end{array}\right\} .41$
    

    ## MINI BREAKER

    ## U.L. APPROVED - NOT A

    DON'T REPLACE - JUST RESET
    Lifetime circuit protection-fits in standard edison base fuse receptacle! Trips instantly on overload. Never needs replacing-just reset! Built in InlIne log handles temporary starting leads and lIne surges. Available in $5,10,15,20$ or 30 amps . State amperage required. EL -40
    

    ## BUSS FUSETRON

    ## DUAL-ELEMENT FUSES

    Contains both a thermal cutout and fuse 10 withstand heavy sfarting surge currents yet protect on dangerous overloads or short circuits. For 125 v . Four fuses per pkg. Shag. wt., 5 oz. per pkg. Shag. wt., 602.
    

    ## 

    L
    

    ## TIME SWITCHES FOR WALL BOX

    INSTALLATIONA dependable and versatile time switch to automatically turn off attic fans, porch and garage lights, window lights, heating units, etc. at any preset time. Has special Hot faure: turn of knob cuts out timing special Hots feature: turn of to be used as a regular mechanism and allows unit to be used as a regular
    toggle switch. Capacity 20 amps, 125 volts AC. Satinchrome dial $4 \% / 2 \mathrm{H} \times 3^{-W} W_{i}$ switch $21 / 2 \mathrm{H} \times 13 / 4 W \times 14 / 4{ }^{-1} \mathrm{D}$. Fits any standard rectangular wall box. Shpg. wt., 3 lbs MODEL 9024-time range up to 1 hour

    Net 5.52
    MS-135 9015 -time range up to 12 hours. Shag. wt. 3 los.

    Net 5.52

    ## MODEL 78174 PHOTOGRAPHIC <br> TIME SWITCH

    - UP TO 60 SECONDS AUTOMATIC CONTROL - FOR amateur and professional use it's easy to control accurate timing on photographic developers, enlargers, and photo copy equipment by plugging them Into the convenience outlet on this inexpensive unit. Adjustable stop makes repeated settings - even in total darkness-easy and foolproof. Times up to 60 seconds, then automatically shuts off current. May also be used as "on-off" switch when timing is unnecessary. Rated $10 \mathrm{amps}-125$ volts -A.C. UL and CSA Inspected. Shag. wt., 3 lbs.
    MS. 714
    

    2090

    ## MODEL 2130 PORTABLE 2-SPEED

    PRECISION TIMER- TWO TIMERS FOR THE PRICE OF ONE!
    - FOR PRECISE 1 SECOND TO 1 HOUR TIMING

    IN THE HOME, OFFICE AND LABORATORY
    Indispensable for timing precise, short operations such as boiling eggs, pressure cooking, heat and sun lamp treatment, home permanents, photo developing and printing, long distance calls, etc. Times up to 6 min utes in seconds and up to 1 hour in minutes. Exclusive 2-speed feature permits instant timing speed change by flick of a lever. A clear, resonant bell sounds al end of timing period. Can be attached to any surface with handy wall bracket supplied or can stand upright. Smartly styled in white with dial face a rich copper Smartly styled
    tone. $4 \times 2^{1 / 2}$. Ships. wt., 2 lbs. MS -294

    Net 4.54

    ## MODEL 2090 UTILITY HOUSEHOLD

    ## TIMER

    ## - DEPENDABLE 1 MINUTE TO 1 HOUR TIMING

    This reliable, low-priced timer in a neat durable white plastic case has innumerable household timing uses, plastic case has innumerable household gaming uses, i.e., cooking, baking, home permanents, games, remem-bering appointments. TV and radio programs, etc. Atbering appointments. TV and radio programs, etc. At-
    tractive modern design. Times any interval up to one hour accurately and gives resonant bell signal at end of period. Large easy to set and easy to read dial. $31 / \times 3 \times 12 / 2^{\prime \prime}$. Shag. wt. $14 / 4$ lbs.
    MS -295
    Net 2.90

    # TIMERS for HIME IFFILE \& INIDUSTRY <br>  <br> <br> INTERMATIC TIME SWITCHES 

    <br> <br> INTERMATIC TIME SWITCHES[^8]:    

[^9]:    COPPER BRAID SHIELDING
    Flexible tinned copper braiding to shield conductors from stray fields. Reduces radiatlon. Tubular form lengths below 100 ft . avallable only in sizes listed below. Shpg. wt. per $100 \mathrm{ft}, 3 \mathrm{lbs}$.

    | Belde |  |  | 10 Ft . S |  | 50 ft . Sp |  | 100 Ft . or | More |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | No. | 1.0 | Stranding | Stock No. | Net | Stock No. | Per.ft. | Stock No. | Per ft. |
    | 8660 | $1 / 0$ | $96 \times 34$ | WR-550 | . 50 | WR-556 | 1.47 | WRC-61 | . 026 |
    | 8668 | $11 /$ | $120 \times 34$ | WR-551 | . 76 | WR. 557 | 2.02 | WRC-62 | . 035 |
    | 8663 | 1/4 | $160 \times 34$ | WR-552 | . 79 | WR.558 | 2.18 | WRC-63 | . 036 |
    | 8661 | 3/8 | $192 \times 34$ | WR-553 | 73 | WR-559 | 2.45 | WRC-64 | . 044 |
    | 8669 | 1/2 | $336 \times 34$ | WR-554 | 1.23 | WR-560 | 5.39 | WRC-65 | . 097 |
    | 8662 | $2{ }^{2 / 8}$ | $576 \times 34$ | WR-555 | 1.70 | WR.561 | 6.91 | WRC. 66 | . 146 |

    BELDEN 8415. $91 / 2 \mathrm{ft}$, cable retracts to 11 Inches and stretches to 6 ft . No. 23 tinned cadmium bronze wire, rubber insulated, conductors cabled with black neoprene jacket. Shpg. wt., $1 / 2 \mathrm{ibs}$.
    WR-495
    Net 1.27

    3 CONDUCTOR CABLES FOR
    PA AND INTERCOM
    SHIELDED CABLES
    All except - 3 conductor stranded, tinned copper with polyethylene insulation, cabled conductors, aluminum-Mylar wrapped shield and chrome vinyl outer jacket. Types 8771 has No. 22 and types 8770,8772 have No. 20 tinned copper ground wire. Type 8791 similar but vinyl insulation and tinned copper wrapped shield and no ground wlre

    | Stock | Belden |  |  | Wt. Lb. | Per | Per |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | No. | No. | Gauge | $0.0 . "$ | 100 FL. | Ft. | TOO Ft. |
    | WRC. 33 | 8771 | 22 | .175 | 2 | .035 | 2.94 |
    | WRC-34 | 8772 | 20 | .200 | 3 | .045 | 3.67 |
    | WRC-35 | 8770 | 18 | .236 | 4 | .06 | 4.63 |
    | WRC-36 | 8791 | 18 | .236 | 5 | .06 | 5.29 |

    All are 3 conductor solid \#19 copper, vinyl insulated and cabled. 8487 has chrome vinyl outer jacket. 8483 has no jacket.
    

    BELDEN 8208. 2 conductor No. 18 tinned stranded copper, twisted palr, rubber insulated, braided tinned copper shield, chrome vinyi jacket overall. O.D. .270". Shpg. wt. 100', 4 lbs.
    BELOEN 8209. Identical to above but outer jacket is white cotton braid treated for weather resistance. O.D. .258"
    BELOEN 8735. 3 conductor No. 22 tinned stranded copper vinyl insulated, cabled, tinned copper braid shield chrome vinyl jacket overall. 0.0. .199". Shipg. wt. 100', 3 lbs.

    Lengths under $\mathbf{1 0 0} \mathrm{ft}$. available only in size listed below.

    | Belden | 15 Ft Spool |  | 50 Ft . Spool |  | 100 ft Spool. |  | Over 100 Ft |  |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | No. | Stock No. | Net | Stock No. | Net | Stock No. | Net | Stock No. | Per Ft |
    | 8208 | WR.475 | 1.15 | WR-476 | 3.18 | WR-477 | 5.83 | WRC-58 | . 058 |
    | 8209 | WR-478 | 1.15 | WR-479 | 3.18 | WR-480 | 5.13 | WRC-59 | . 058 |
    | 8735 | WR-403 | . 98 | WR-404 | 2.35 | WR. 405 | 4.21 | WRC-60 | . 042 |

    ## SPECIAL INTERCOM AND <br> P.A. CABLES

    BELDEN 8734. 3 conductor No. 22 stranded tinned copper with vinyl insulation 1 conductor whth tinned copper braid shield, 2 unshielded, cabled with overall chrome vinyl jacket. O.D. 194". Shpg. wt. per $100^{\prime}, 3$ lbs.
    WRC-39 Under 100 ft., per ft
    Net .045
    Over $100 \mathrm{ft}$. ., per ft.
    Net .036
    WR-483 100 ft . spool
    BELDEN 8763. 3 conductors No. 20 stranded tinned copper with polyethylene insulation. 2 conductors with aluminum-Mylar wrapped shield, 1 unshielded. Also has No. 20 stranded, tinned copper ground wire. Chrome viny facket overall. 0.D. $.210^{\circ}$. Shpg. wt. per $100 \%$, $31 / 2 \mathrm{lbs}$.

    WRC. 40 under 100 ft.. per ft. ............................................................................................... . 05 100 ft . or more, per ft.

    Net . 05
    BELDEN 8732. 4 conductors No. 22 stranded tinned copper with polyethylene insulation, 2 conductors with tinned copper braid shield, 2 unshielded. Also has No. 22 stranded tinned ground wire. Chrome vinyl jacket overall. Oval shape 0.D. $.188^{\prime \prime} \times .296^{\prime \prime}$. Shpg. wt. $100^{\prime}, 3$ lbs.
    WR-485 100 ft . spool
    WRC. 41 under 100 ft ., per ft .
    over 100 ft ., per ft
    Net 4.41
    Net 4.41
    Net .055
    Net . 044

    ## VINYL COVERED

    ## MULTIPLE PAIRED CABLE

    For balanced line intercom systems and telephone wiring. Unshielded 22 solid tinned copper conductors, vinyl insulated, cabled in pairs, chrome vinyl outer jacket.

    | Stock | Belden | Conds. | 0.0. | Lbs. | Per | $100^{\prime}$ or more |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | No. | No. | (Pairs) | In. | 100 Ft . | Ft. | Per 100 ft . |
    | WRC-42 | 8740 | 2 (1 pair) | . 150 " | 13/4 | . 02 | 1.76 |
    | WRC-43 | 8741 | 4 (2 pair) | .201" | 21/2 | . 035 | 2.89 |
    | WRC-44 | 8742 | 6 (3 pair) | .240" | $34 / 2$ | . 05 | 3.82 |
    | WRC-45 | 8743 | 12 (6 pair) | .305* | 43/4 | . 07 | 5.18 |
    | WRC-46 | 8744 | 18 (9 pair) | .354" | $64 / 2$ | . 095 | 7.94 |

    VINYL COVERED MULTIPLE UNPAIRED CABLE
    All conductors unshiedded stranded tinned copper except inslude two No. 18 conductors. Each conductor vinyl insulated cabled. Chrome viryl jacket overall. Lengths under 100 fl . avallable only in sires fisted below.

    | Beld |  |  | $\begin{aligned} & \text { Lbs. } \\ & 100 \end{aligned}$ | 15 Ft . Spool |  | 25 Ft . Spool |  | 100 Ft Spool |  | Over 100 pt . |  |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | No. |  |  | ft. | Stk. No. | Net | Stk. No. | Net | Sth. | Net | Sth. No. | Per |
    | 8443 | 3 | 150 | 2 |  |  | WR.486 | . 81 | WR-39 | 2.43 | WhC | . 024 |
    | 444 | 4 | . 168 | $21 / 4$ |  |  | WR 487 | 1.03 | WR-392 | 2.94 | WR | . 029 |
    | 8445 | 5 | . 180 | 21/2 |  |  | WR-488 | 1.14 | WR-394 | 3.63 | WRC-49 | 36 |
    | $8446^{\circ}$ | 6 | 222 | 4 | WR-489 | 1.11 | - | - | WR-396 | 5.29 | WRC-50 | . 052 |
    | $8447^{\circ}$ | 7 | 246 | 41/2 | WR-490 | 1.13 | - |  | WR-398 | 6.03 | WRC-51 | 06 |
    | 8448. | 8 | . 251 | 5 | WR-491 | 1.18 |  |  | WR-400 | 6.87 | WRC-52 | . 062 |
    | 8449* | 9 | . 261 | 5 | WR.492 | 1.40 | - | - | WR-402 | 7.1 | WRC-53 | . 07 |

    # TELEVISION WIRE and CABLE-ROTOR CABLE-ZIP CORD 

    All branded with standard type numbers and meet requirements of RG cabies on Qualifled Products List of U.S. Government. Avallable only in lengths indicated,

    | Type No. | Stock No. | $\begin{aligned} & \text { Net } \\ & 100^{\prime} \end{aligned}$ | Stoch No. | $\begin{aligned} & \text { Net } \\ & 500^{\prime} \end{aligned}$ | Stock No. | $\begin{aligned} & \text { Net } \\ & 1000^{\circ} \end{aligned}$ | Shpg, Wt. Per 1000. |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | RG.8/V | WR.131 | 9.87 | Wh. 132 WX | 47.04 | WR - 133 WX | 89.67 | 115 lbs . |
    | RG.11/U | WR-134 | 9.38 | WR-135WX | 44.77 | WR.142WX | 85.26 | 100 lbs . |
    | RG-58 / U | WR-136 | 4.20 | WR-137WX | 20.09 | WR-138WX | 38.25 | 31 lbs. |
    | RG.59/U | WR-139 | 4.37 | WR-140WX | 20.84 | WR.141WX | 39.69 | 40 lbs. |

    ## ITT MIL APPROVED LOW LOSS COAXIAL CABLE

    For RF applications. Meets all rigid military and commercial specifications. Im pervious to weather, acids, alkalis, oll and gasoline. Shpg. wt. per $100^{\circ}, 12 \mathrm{lbs}$. except RG58/U and RG58A/U, 3 lbs., RG59/U, $41 / 2 \mathrm{lbs}$. Minimum order 25 ft .

    | RG |  |  |  | dod Length |  |  |  |  |  |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | Type | IMP | $\mathrm{P} / \mathrm{ft} \text {. }$ | 0.0. | Sth. No. | Net |  | Net |  | Net |
    | 84 | 52 | 29.5 | .405" | WRC. 106 | . 12 | WR-526 | 11.18 | WR.527wx | 101.25 |
    | 8A/U | 52 | 29.5 | .405" | WRC-107 | . 14 | WR-529 | 12.62 | WR-530wX | 114.75 |
    | 11/U | 52 | 20.5 | .405" | WRC. 108 | .11 | WR-532 | 9.90 | WR.533WX | 90.00 |
    | 11A/U | 52 | 20.5 | .405" | WRC-109 | . 12 | WR-535 | 11.18 | WR-536WX | 101.25 |
    | 58/U | 52 | 285 | .195" | WRC-110 | . 05 | WR-538 | 4.87 | WR-539WX | 44.25 |
    | 58a/U | 52 | 28.5 | .195" | WRC-111 | . 06 | WR-541 | 4.95 | WR.542WX | 45.00 |
    | 59/U | 52 | 21 | .242" | WRC-112 | . 05 | WR-544 | 4.46 | WR-545WX | 40.50 |

    ## NEW! LOW LOSS POLYFOAM COAX RG 8/U

    New foam polyethylene coaxial cable increases signal strength up to $35 \%$. Use whenever low loss 50 ohm cable is required. Attenuation and capacitance approximately $15 \%$ less than standard RG.8U; low loss foam polyethylene cable has same core, brald and jacket as standard RG-8U, but uses a larger center conductor to maintain 50 ohm nominal impedance.
    WRC. 103 Per ft.
    WR-166 100 ft . coil $\quad$ Net 15 WR-167wx 1000 ft spool .... Net 120.00

    ZIP-CORDS
    miniature parallel cable

    Multi purpose miniature zip cord. 2 conduclor, 24 gauge stranded. Extreme ly flexible for Mi-Fi installations, auto speakers, low voltage control, etc Avallable in white, brown, gray, clear. Please specify color. Average shpg. wt., 2 los. per 100 ft .
    WR-157C 25 ft WR-158C 50 ft . WR-159 C 100 ft cord. For tamp cord, speaker exter sions, etc. POT is plastic insulation POSJ is rubber insulation. Shpg. wt 3 los. per 100 ft . Brown. Only in lengths below.
    WR-35 POT 100 Ft WR-47 POT 250 Ft WR-34 POSJ 100 F WR-48 POSJ 250 Ft .................. Net 5.35
    FIBERGLASS GUY LINE - Revolutionizes Ham and TV Antenna Systems - Non-Metallic Guy Line
    

    ## ROTATOR CABLES <br> ——

    4 CONDUCTOR FLAT. Flexible stranded No. 20 copper encased in tough plastic insulation. Shpg.wt., 3 Ibs.per 100 ft .co WR-151 100 ft. coil
    WRC. 104 less than 100 ft .
    per ft
    Net .025
    8 CONDUCTDR ROUND. Vinyl insulated,
    vinyl jacket. In 100 ft . coils only.
    WR-446 100 ft . coll Net 4.20
    

    ## MAGNET WIRE <br> Finest quallity. Avaitable in plain enamel or heavy FORMVAR insulation

    

    HEAVY FORMVAR IN 1 LB. SPOOLS Stock
    

    Heavy duty 300 ohm lead-in. Insulated with "silver" polyethylene. Provides unchanging electrical and physical chap. acteristics and remarkable durability. Blends with home color schemes and assures long, trouble-free service. Shpg. wt., 4 lbs. per 100 ft
    WRC- 105 Per
    Per 100 ft .

    UHF-VHF TWIN-LEAD TV-FM-MPX

    ## SPECIAL SHIELDED FM

    ## 300 OHM TWIN LEAD

    BROWN. High quality, Jow loss lead-in for all TV and FM installations. Polye thylene dielectric - standard copper leads. Per 100 ft , only in lengths listed below. Shpg. wt. 2 lbs.
    WR-25 100 ft .......... Net .90 WR. 146500 ft .................................. 4.25 WR-147 1,000 ft. ..................................... 7.95 CLEAR. Same as above but clear for a better blend with the base boards.
    WR. 128 100"
    Net 1.10 WR. $129500^{\circ}$ Net 4.75 WR-130 1000 ….....................Net 8.95

    ## HEAVY DUTY

    300 ohm brown twin lead with 80 mil thick polyethylene insulation and 20 gauge copper conductors. Shpg. wt.1 2 lbs. per 100 ft . Minimum length 100 ft . WR-152 100 ft . coil ..........Net 1.06 WRC-100 Per ft. (over 100 ft .) Net . 01

    ## EXTRA HEAVY DUTY

    300 ohm brown twin lead with 125 mil thick polyethylene insulation and 18 gauge stranded copper conductors. Shpg. wt., 7 lbs. per, 100 ft . Minimum length 100 ft .
    WR-171 100 ft . coll ..........Net 2.50 WRC. 101 Per ft., over 100 ft . Net .025 WR-172 1000 ft . spool ........ Net 22.13
    

    MULTIPLEX TWIN LEAD

    ## MIPLEX TWIN LEAD

    300 ohm twin lead for FM MPX, shielded with tinned copper for outstanding nolse-resistant performance. Each conductor insulated with heavy, 20 gauge abrasion-proof black vinyl. Delivers noise-free signal from antenna to set efficiently. Only in lengths listed below. Shpg. wt., 7 los, per 100 WR-161 100 ft . coil. Net 8.98 WR.162WX 500 -ft. spool Net 43.01 WR-163WX 1000 -ft. spool ... Net 82.44

    ## TUBULAR <br> UHF-VHF TWIN LEAD

    Very low loss 300 ohm alrspaced tubu lar twin lead, brown polyethylene in sulation, copper conductors, Only avail able in 100 ft . colls. Shpg. wt., 3 lbs. WR-46 100 ft . coil.

    ## SEA <br> COASTER

    300 ohm lead especially designed for coastal areas. 20 gauge copper conductors incased in low loss polyethylene with tough overall poly jacket. Shpg wt., 3 lbs. 100 ft . Only in 100 ft lengths
    WR-170 100 ft . coil .................. 4.65
    

    300 OHM. Lowest possibie line lossperfect impedance match. May be used interchangeably with tubular or 300 ohm flat without mismatching! Attenua tion averages only 1.9 db over entire UHF band. No. 18 copperweld wirepure polyethylene separators spaced at $6^{\prime \prime}$. Spaced only $1 / 2^{\prime \prime}$ between conduc tors - may be used with standard stand-off insulators. Shpg. wt., $2^{1 / 2}$ lbs. per 100. Avallable only in lengths Ilsted below.

    ## WR-22 100 ft

    WP-148 Per 250 Net 2.15 Wr-148 Per 250 ft . Coil ............ Net 4.85
    WR-149 500 ft . Spool 9.70 450 OHM. Similar to above $1^{\text {sp }}$ spacing between conductors.
    WR. $125 \quad 100 \mathrm{ft}$.
    WR-126 250 ft
    Net 1.90
    Net 4.50
    Net 8.59

    ## 300 OHM A

    

    ## BELDEN 300 OHM TWIN LEAD

    Tppe 8225. Fig. A. For TV and FM antennas. Low-loss polyethylene insulation. One lead tinned, one bare. Stranded No. $20(7 \times 28)$. Shpg. wt. $100 \mathrm{ft.} 2 lbs.$,
    WR-352 50 ft . Coil
    
    WR-354 100 ft . Coll
    Net 1.62
    WRC-54 Over 100 ft ., per ft.
    Type 8235. Fig. B. Low-loss 300 .ohm line for UHF or VHF TV antennas. Resists
    oxidation and sun; made with $100 \%$ virgin polyethylene web. 18 gauge ( $7 \times 26$ ) stranded Weldohm wire: copper with steel core for maximum strength.
    WR-358 100 ft . Coil ..........Shpg. wt. $100 \mathrm{ft} ., 5$ lbs................................ Net 4.70
    WRC-56 Over 100 ft ., per ft. 047
    Type 8230. Fig. A. "Weldohm" copper coated steel wire. Polyethylene insulation. Almost twice as strong as plain copper. Perfect for long runs. Stranded No. 20 (7x28). Shpg. wt. 100 ft., 2 lbs.
    WR. 35550 ft. Coil
    Net 1.25
    $\begin{array}{ll}\text { Wr-355 } \\ \text { WR-35 } \\ 75 & \mathrm{it} \text {. Coil }\end{array}$
    Net 1.67
    WR-357 100 ft. Coil
    Net 2.05
    WRC. 55 Over 100 ft., per It.
    Net 02
    Type 8285. Fig. C. Encapsulated in low loss cellular polyethylene. Delivers strong signal on all channels VHF or UMF. A must for color T.V. 2 Conductor $\$ 22(7 \times 30)$ stranded copper weld conductors. Shpg. wt., 4 lbs, per 100
    WR-359 50 ft
    Net 2.79
    WR-442 75 ft
    WR-360 100 ft
    Net 4.12
    Net 5.29

    ## SERVICE WIRE and CABLE－INDUSTRIAL WIRE

    curcoue ALPHA STEREO PHONO PICKUP ARM WIRE

    Stereo wire for all stereo cartridges（ceramic，mag netic，crystal）and tone arms．Extremely flexible，light weight，2， 3 and 4 conductor，iwisted，miniature， color－coded cables．Designed for extremely low hum and noise pickup for best stereo performance．Tops for stereo conversion of monaural arms．Shpg．wt．， 10 ft ．， 5 0z．： 100 ft．， 2 lbs．Available only in lengths listed． ＋Shielded O／A＊Individually shielded

    | Alpha No． | Con | 0. |  |  | $\begin{aligned} & 100 \mathrm{Ft} . \\ & \text { sti. Net } \end{aligned}$ |  |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | 1100 | 2 | ．047＇ | WR－200 | ． 40 |  |  |
    | 1101 | 3 | ．053＂ | WR－203 | ． 52 | WR－314 | 3.85 |
    | 1102 | 4 | ．061＂ | WR－206 | ． 64 | WR－315 | 5.06 |
    | 1105 | 21 | ．055＂ | WR－209 | ． 59 | WR－316 | 4.69 |
    | 1106 | $3 \dagger$ | ． $061^{\prime \prime}$ | WR－212 | ． 67 | WR－317 | 5.37 |
    | 1107 | $4 \dagger$ | ．068＂ | WR－215 | ． 76 | WR－318 | 6.31 |
    | 1110 | 2＊ | ． $063^{\prime \prime}$ | WR－218 | ． 71 | WR－319 | 5.73 |

    ## ALPHA MIL－W76B PLASTIC <br> HOOK UP WIRE

    Tinned copper conductor，color coded .016 nominal wall thickness．Polyvinychloride insulation，$-40^{\circ}$ to $80^{\circ} \mathrm{C}$ ， 1000 volts．Stocked in colors listed below．Also avail－ ble in all standard tracer colors，Write for quotation． Average shog．wt．， $100^{\circ}=1 \mathrm{t} / 4 \mathrm{Ibs} ., 1000^{\circ}=7 \mathrm{lbs}$
    （1）White（4）Green
    （7）Brown
    （10）Violet
    （2）Black（5）Yellow
    $\begin{array}{ll}\text {（8）Orange } & \text {（11）Tan（12）Pink } \\ \text {（9）Gray } & \text {（13）Oark Blue }\end{array}$
    （3）Red

    ## STRANDED WIRE

    | Stack | Alatay \＃ | MIL－W76B | Cond | Ft． | Net |
    | :---: | :---: | :---: | :---: | :---: | :---: |
    | WR－320C | 5110 | MW－C24（7） | 24 | 100 | ． 93 |
    | WR－321C | 5110 | MW－C24（7）U | 24 | 1000 | 5.25 |
    | WR－322C | 5111 | MW－C22（7）u | 22 | 100 | ． 93 |
    | WR－323C | 5111 | MW－C22（19）U | 22 | 1000 | 5.85 |
    | WR．324C | 5113 | MW－C18（10）U | 20 | 100 | 1.05 |
    | WR．325C | 5113 | MW－C18（10）U | 20 | 1000 | 7.15 |
    | WR－326C | 5115 | MW－C16（16）u | 18 | 100 | 1.23 |
    | WR－327C | 5115 | MW－C16（16）u | 18 | 1000 | 9.10 |
    | WR．328C | 5117 | MW－C16（26）U | 16 | 100 | 1.58 |
    | WR．329C | 5117 | MW－C16（26）U | 16 | 1000 | 11.85 |
    | WR．330C | 5119 | MW－C14（41）U | 14 | 100 | 2.03 |
    | WR．331C | 5119 | MW．C14（4）U | 14 | 1000 | 17.25 |
    | WR．332C | 5120 | MW－C12（65）U | 12 | 100 | 2.85 |
    | WR－333C | 5120 | MW－C12（65）U | 12 | 1000 | 24.00 |
    | SOLID WIRE |  |  |  |  |  |
    | WR．334C | 5121 | MW－C22（1）u | 22 | 100 | ． 74 |
    | WR－335C | 5121 | MW－C22（1）U | 22 | 1000 | 4.50 |
    | WR．336C | 5123 | MW－C20（1）U | 20 | 100 | ． 96 |
    | WR－337C | 5123 | MW．C20（1）U | 20 | 1000 | 5.40 |
    | WR－338C | 5125 | MW－C18（1）u | 18 | 100 | 1.15 |
    | WR－339C | 5125 | MW－C18（1）u | 18 | 1000 | 750 |
    | WR－340C | 5127 | MW－C16（1）U | 16 | 100 | 1.35 |
    | WR－341C | 5127 | MW－C16（1）U | 16 | 1000 | 10.15 |

    SHIELDED PHONO PICKUP CABLE

    BELDEN TYPE 8431．Extremely limp and flexible．No 24 stranded（ $16 \times 36$ ）tinned copper，rubber covered， tinned copper shield，brown cotton outer jacket．Only in lengths listed below．Shpg．wt．， $100 \mathrm{ft} ., 2 \mathrm{lbs}$.
    WR． 386
    WR． 387
    WR 388
    WR－387
    WR－388 WR－388

    15 ft ．coil，Net each .73
    25 ft ．coil，Net each 1.11
    BELDEN PHONO PICKUP CABLE
    BELOEN 8430．Flexible，stranded twisted pair．Coded red and black． Small diameter．Shpg．wt．， 402. Small diameter．Shpg．wt．，Net 02.
    WR． 38525 ft ．．．．．．．．．．．．．．．．．．．Net .67

    ## BELDEN TEST PROD WIRE <br> Extremely flexible，limp rubber covered hi－voltage lead．No． 18 stranded，tinned，cotton wrap． 8899 for 5000 working volts． 8898 for 10,000 working volts Specify red or black．Shpg．wt．， 100 ft．， $2^{\prime}$ lbs． <br> Betion 10 ft ． $25 \mathrm{ft} . \quad 100 \mathrm{ft}$ ． No．Sth．No．Net Stk．No．Net Stk．No．Net 8899 WR－421C 58 WR－422C ． 88 WR－423C 2.50 8898 WR－418C 78 WR－419C 1.47 WR－420C 3.92

    ## BELDEN ACETATE HOOK－UP WIRE

    Excellent quality hook－up wire 1000 V ．AC insulation breakdown rating．Tinned copper conductor，heavy cel－ lulose acetate yarn wrap and cellulose yarn braid． Lacquer coated tor fungus and flame resistance．DC insulation resistance is 200 megs minimum，Colors： 8938 and 8942 in red and black only．Others in red， black，blue，preen and yellow．Soecify color when ordering．Available only in lengths listed below
    8941 OD ． $072^{\prime \prime}, 8943$ OD ． $076^{\prime \prime} .8945$ OD $.080^{\prime \prime}, 8947$ OD ．087＂， 8942 OD ．099＂， 8938 OD ． $115^{\prime \prime}$ ．Average shpg．wt．， 1202 ．per 100 ft ．Only in lengths listed below t Stranded wire Solld wire
    Beld $\quad 25 \mathrm{Ft}$ ． 100 Ft ． 1000 Ft.
     $\begin{array}{llllll}8941 & 20 才 & \text { WR．425C．62 } & \text { WR－426C } 1.59 & \text { WR－427C } 11.76 \\ 8943 & 20^{\circ} & \text { WR－430C．} 62 & \text { WR－431C } 1.62 & \text { WR－432C } 12.54 \\ 8945 & & \end{array}$
     8938 14＊－－WR－424C 2.89 WR－429C 16.37

    ## BELDEN 8817 LITZ WIRE

    Copper Celenamel insulated nylon wrap． $5 \times 44$ stranded O．D． $008^{\prime \prime}$ For rewinding RF colls，antenna primaries， etc． $100^{\prime}$ spool．Shpg．wt．， $40 z$.
    WR－417 $100^{\circ}$ spool

    BELDEN CATHODE RAY TUBE CABLE

    BELDEN 886日 CRT cables with No． 22 stranded tinned copper polyethylene insulation．Reduces corona．Long life construction．Red vinyl jacket．O．D．．150＂．Working voltage 25，000；breakdown voltage 50,000 ．Dnly in lengtns listed below．
    WR． 49325 ft ．spool
    Net 73
    WR－494 100 ft ．spool
    Net 2.35

    ## ANTENNA WIRE

    COPPER AND COPPERWELDFinest grade high tensile strength copper for al antenna requirements．Avg．shpg．wt． 1 lb ．Dnly in lengths listed below．
    WR． 6475 ft ． $7 / 22$ bare ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．Net 1.11 WR－65 100 ft ． $7 / 22$ bare ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 1.47 WR－63 $75 \mathrm{ft} .7 / 24$ bare WR． $66100 \mathrm{ft} .7 / 24$ bare WR－62 $75 \mathrm{ft} .7 / 26$ bare WR． $67 \quad 100 \mathrm{ft} .7 / 26$ bare WR－68 100 ft ． 12 solid enamel WR－69 100 ft ． 12 solid enamel Net .75

    OPPERWELO Steel clad copper for ham antennas， commerclal installations，non－stretch，hard drawn hish conductivity copperweld wire．

    NR－155 75 ft .12 sotid copperweld WR． 156100 ft ． 12 solid copperweld | WR－153 |
    | :--- |
    | WR－154 |

    Net 1.85
    Net 2.40
    Net 1.96
    －conductor Twisted Flexible，tinn
    2－conductor Twisted：Flexible，tinned copper with plastic insulation over each conductor．Shpg．Wt．， 2
    lbs．per 100 ft ．Available only in lengths listed below Ws．per 100 ft ．Available only in lengths listed below． WR－12 100 ft ，coll

    Net .89
    Net 1.95
    3 conductor twisted．Same construction as above．Shpg． wt．， 3 lbs．per 100 ft ．
    WR－14 100 ft．coil
    Net 1.25
    WR－15 250 ft．spool Net 2.59
    3 conductor twisted．Same construction as above but with outer plastic jacket overall．Shpg．wt．， 3 Ibs．per 100 ft ．
    WR－16 100 11．coil
    coil
    spool

    ## PUSH－BACK WIRE

    No stripping necessary．Just push back double cotton covered paraffin damp－ proofed braid and wire is exposed．No． 20 gauge stranded or soltd．In red， green，black，blue or yellow．Specify color．Shpg．wt．， $100 \mathrm{ft} ., 1 \mathrm{lb}$ ．
    WR－110 C 25 ft．stranded ．．．．．．Net -35
     WR－112C 25 ft ．solid WR－113C 100 ft ．solid

    Net 1.23

    ## ALPHA FIT＂SHRINKABLE＂TUBING

    Irradiated polyvinylchloride fubing with a shrinking ratio of $2: 1$ ．Will shrink $50 \%$ upon application of $163^{\circ} \mathrm{C}$ heat． Shrinks in 7 seconds highly flexible，insures snug fit． Ideal for cable jacketing．

    | Nom Size Inch | $\begin{gathered} \text { Shrini } \\ \text { 1.0. Prior } \end{gathered}$ | kage I．D．After | Nom Wall Inch | $\begin{gathered} 25 \mathrm{ft} . \\ \text { stock } \end{gathered}$ | Net |  | 100 Ft. Stock \＃ | Net |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | 多 | ． 046 | ． 023 | ． 020 | WR－618 | 2.45 |  | WR－619 | 8.90 |
    | \％ | ． 062 | ． 031 | ． 020 | WR－620 | 2.54 |  | WR－621 | 9.25 |
    | $3_{2}$ | ． 093 | ． 046 | ． 020 | WR－622 | 2.89 |  | WR．623 | 10.65 |
    | 1／3 | ． 125 | ． 062 | ． 020 | WR－624 | 3.04 |  | WR－625 | 11.25 |
    | $x_{0}$ | ． 187 | 093 | 025 | WR－626 | 3.64 |  | WR－627 | 13.65 |
    | 1／4 | ． 250 | 125 | ． 025 | WR－628 | 4.48 |  | WR－629 | 17.00 |
    | \％ | ． 375 | ． 187 | ． 030 | WR－630 | 4.91 |  | WR－631 | 18.75 |
    | 1／2 | ． 500 | 250 | ． 030 | WR－632 | 5.54 |  | WR－633 | 20.75 |
    | $3 / 4$ | ． 775 | 375 | 035 | WR－634 | 7.29 |  | WR－635 | 27.75 |
    | 1 | 1.000 | 500 | ． 040 | WR－636 | 10．35 |  | WR－637 | 40.00 |
    | $11 / 2$ | 1.500 | ． 750 | ． 045 | WR－638 | 16.79 |  | WR－639 | 65.75 |
    | Nom Shri | inkage | Nom |  |  |  |  |  |  |
    | Sire I．D． | 1.0 | Wall | 10 Ft ． |  | 25 Ft ． |  | 50 Ft |  |
    | Inch Prior | After | Inch | Steck | Net | Stech 1 | Net | Steck | Het |
    | 22.000 | 1.000 | ． 050 | WR－640 | 9.93 | WR－641 | 24.54 | WR－642 | 48.37 |
    | 3.000 | －1．500 | ． 055 | WR－643 | 16.00 | WR． 644 | 39.72 | WR－645 | 78.75 |
    | 4.4 .000 | 2.000 | ． 060 | WR－646 | 23.00 | WR－647 | 57.22 | WR－648 | 113.75 |

    HOT AIR GUN FOR ABOVE
    Net 41.25

    ## ASSORTED SPAGHETT

    24 plece assortment． $8^{\prime \prime}$ lengths．Various colors and diameters MS． 46 Shpg．wt．， 4 ozs．

    ALPHA TEFLON HOOK UP WIRE MIL－W．168780－TYPE E EXTRUDED
    Stranded silver plated copper，．008＂min－ imum wall thickness extruded TFS Teflon insulation．$-65^{\circ} \mathrm{C}$ to $+200^{\circ} \mathrm{C}$ ，voltage rating： 600 volts，Stocked in solld colors： white，black，red，green，yellow，light blue，brown，orange，gray，and violet．Also avallable in tracer colors．Write for quotation．Avg．shpg．wt．， $100 \mathrm{ft}=1 / 2 \mathrm{lb}$ ．， avallable in tracer colors．Writ
    $500 \mathrm{ft} .=3 \mathrm{lbs.} ,100 \mathrm{ft} .=5 \mathrm{lbs}$.

    | Alpha | $\begin{aligned} & \text { Cor } \\ & \text { Size } \end{aligned}$ | uctor Strand | $\underset{\text { (Inch) }}{\operatorname{Min} \text { D.D. }}$ | 100 ft ． Stock | Net | $\begin{aligned} & 500 \mathrm{Ft} . \\ & \text { Stock } \end{aligned}$ | Net | $\begin{aligned} & 1000 \mathrm{Ft} . \\ & \text { Stock } \end{aligned}$ | Net |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    | 5851 | 30 | 7／38 | 028 | WR－342C | 3.66 | WR－343C | 16.98 | WR－344C | 32.75 |
    | 5852 | 28 | 7／36 | ． 031 | WR－345C | 3.54 | WR．346C | 16.35 | WR－347C | 31.50 |
    | 5853 | 26 | 7／34 | ． 035 | WR－600C | 3.75 | WR－601C | 17.48 | WR－602C | 33.75 |
    | 5854 | 24 | 19／36 | ． 040 | WR－603C | 3.92 | WR．604C | 18.30 | WR－605C | 35.40 |
    | 5855 | 22 | 19／34 | ． 046 | WR．606C | 4.39 | WR－607C | 20.67 | WR－608C | 40.13 |
    | 5856 | 20 | 19／32 | ． 054 | WR－609C | 5.44 | WR－610C | 25.92 | WR－611C | 50.63 |
    | 5857 | 18 | 19／30 | ． 064 | WR－612C | 7.02 | WR．613C | 33.79 | WR．614C | 66.38 |
    | 5858 | 16 | 19／29 | ．073 | WR－615C | 8.70 | WR－616C | 42.22 | WR．617C | 83.25 |
    | Shrinkable tubing，sealed at one end，to act as termination cap． |  |  |  |  |  |  |  |  |  |
    |  |  |  |  |  |  |  |  |  |  |
    | Miphlex I． No． |  | Prior I．D．After Shrinkage |  | Nom | Stocks Color | Ping．of 100 Stock | Net | Pkg．of 1000 Stock |  |
    |  |  | $\begin{aligned} & \text { Wall } \\ & \text { Inch } \end{aligned}$ | Net |  |  |  |  |
    | CAP |  |  |  | ． 063 | ． 025 | 016 | White | WR． 649 | 4.14 | WR－650 | 35.50 |
    | CAP |  | ． 125 | ． 050 | ． 020 | Red | WR－651 | 5.09 | WR－652 | 44.00 |
    | CAP |  | ． 250 | .100 | ． 025 | Slate | WR－653 | 6.19 | WR－654 | 54.00 |
    | CAP |  | ． 500 | ． 200 | ． 030 | Black | WR－655 | 7.61 | WR－656 | 66.80 |

    ## ALPHA SHRINKABLE WIRE MARKERS

    Each assortment contains 100 markers．Asst．with has 2 each，numerals 1.50 ， others contaln 4 each．Complete alphabet．all black．

    | Stock \＃ | Alphlex \＃ | Shrinkage |  | Net |
    | :---: | :---: | :---: | :---: | :---: |
    | WR－657 | MRK－A－NS ${ }^{\text {a }}$ | ． 098 | 049 | 3.00 |
    | WR－658 | MRK－8－NS＊ | ． 122 | ． 061 | 3.00 |
    | WR－659 | MRK－C－NS＊ | ． 178 | ． 089 | 3.00 |
    | WR－660 | MRK．A．LS | ． 098 | ． 049 | 3.00 |
    | WR－661 | MRK－8－LS | ． 122 | ． 061 | 3.00 |
    | WR－662 | MRK－C－LS | ． 178 | ． 089 | 3.00 |

    # G.C. and WALDOM Radio \& T.V. Hardware and Chemicals 

    
    

    r

    ## LAFAYETTE "Sprazon"-

    ## SPRAY PAINT

    Modern fast way to paint. Give a lasting finish to all types of surfaces. Time tested alkyd resin spray enamel base. Made by dependable chemists under the strictest quality control, superior in quality and performance. Can be used on garden tools, furniture, boats, appliances, tools, putomobiles, furnaces, kitchen cabinets. Picture frames and etc. 16 oz . can. Shpg. wt., $11 / 2$ lbs.

    | Stock No. | Color |  |
    | :---: | :---: | :---: |
    | P-480 | Glossy White | - If it Can be Painted |
    | P. 481 | Flat White | You Can Use Lafayette |
    | P-482 | Ivory | "Sprazon" |
    | P-483 | Glossy Black |  |
    | P-484 | Flat elack | - For Indoors and |
    | P. 485 | Machine Gray | Outdoors |
    | P.486 | Dove Gray |  |
    | P-487 | Cherry Red | - Ories in Minutes |
    | P-488 | Baby Pink |  |
    | P-489 | Regal Blue | 16.02. can, |
    | P-490 | Alpine Blue |  |
    | P-491 | Hunter Green |  |
    | P. 492 | Mist Green | - ea |
    | P-493 | Orange Flame |  |
    | P-494 | Bright Yellow | Any 3 |
    | P. 495 | Pastel Yellow |  |
    | P. 496 | 8 rown |  |
    | P. 497 | Bright Silver | ea. |
    | P. 498 | Bright Gold |  |

    ## ENAMEL \& PROTECTIVE SPRAYS

    CRYSTAL CLEAR PROTECTIVE SPRAYforms a clear protective coating on metal, wood, paper, etc. Has high weather proofing qualities. 16 oz. can. Shpg. wt., $11 / 2$ lbs. P. 493

    ## ALL PURPOSE PRIMER

    Provides excellent bond on bare metal surfaces. Available in gray only. 16 oz . can. Shpg. wt., $14 / 2 \mathrm{lbs}$. p .500 P-500
    

    WALDOM HARDWARE KITS 159

    SELF-TAPPING SHEET METAL KIT
    Contains balanced assortment of plated self-tapping, slotted hex head sheet metal screws in slzes: $44 \times 3 / 8$, $\# 6 \times 1 / 4, \# 6 \times 1 / 2,{ }^{7} 6 \times 3 / 4, \# 8 \times 1 / 4,48 \times 3 / 4, \# 8 \times 1 / 2$, and $\$ 8 \times 5 / 6$. Total of 165 pieces in handy compartmented plastic box with hinged cover. Shpg. wt., 1 lb. p. 317 Dox 1.59 MACHINE SCREWS, NUTS ANO SHEET METAL SCREW KIT Packed as above. Contains round-head steel plated machine screws in sizes: $4-40 \times 1 / 2,6 / 32 \times 1 / 4,6 / 32 \times$ $1 / 4,8 / 32 \times 1 / 2$, sheet metal screws, $\# 6 \times 1 / 2$ and assortment of nuts. Total of 265 pleces. Shpg. wt., 1 lb .

    ## P. 318

    BINDER HEAO ASST.
    Same as above but machine screws have binder heads. P. 319

    WOOO SCREW KIT
    In same handy box. Contains assortment of 131 round head and flat head plated wood screws in 8 sizes for \#4, 6 and 8 holes. Shpg. wt., 116 .
    P. 320

    ## DUPONT NYLON NUT KIT

    - Fits over 250 combinations of Thread Sizes
    - Self Tapping! Self Locking

    A selection of 21 tough Du. Pont Nylon nuts for hundreds of uses in the home or shop. Fits sizes from
    i/un, to , , diameter. The nylon nut is strong, durable and lightweight with outstanding resistance to vibration, impact, corrosion, hot and cold temperatures, and chemical erosion. Fits over 250 combinations of tread screws. Seif tapping, self locking.
    screws. Seif tapping, sel wt., 3 oz
    H0.789 .......... ShpR.
    MASTER NYLON NUT KIT
    Mechanic's assortment of over 70 nylon nuts described above. Covered, compartmented plastic case. HG-202

    ## ALIGNMENT TOOLS AND SERVICE AIDS

    ## G. C. ALIGNMENT TOOLS

    

    ## LAF MO.

    Average Shipping Weight of all below: 80 oss. P.10-Alignment Screwdriver-General Purpose P. 11 -Short Alignment Screwdriver
    P.13-K.Tran Aligning Tool

    P-14-Channel Tuning Screwdriver with $1 / 0^{\prime \prime}$ blade
    P.15-Short Recessed Blade Aligning Tool or TV \& FM
    P-16-Television Core Aligner (Motorola.
    Stewart-Warner, etc.)
    P. 17 -IV Long-Reach Aligner (Admiral, Zenith RCA, etc.)
    P-18-TV Zenith Universal Aligner
    P-19-TV All-Purpose Duplex Aligner
    P-20-TV "Shorty" All-Purpose Duplex Aligner P-21-TV Tuning Wand
    P-22-Zenith TV Wrench \& Aligner P.24-Zenith Nylon Hex Wrench
    P.30-Slug Tuner Adjusting Tool
    P.35-Westinghouse Tool
    P. 39 - TV I.F. Oscillator Tool (RCA, G-E,

    Philco, Admiral, etc.)
    P-40-TV All-Purpose Allgner, recessed Dlade
    P-42-Universal Screwdriver Aligner
    P.43-Nylon TV Long-Reach Aligner
    P. 44-6" Non-Magnetic Beryllium Aligning

    Screwdriver 1 ,
    P. $50-\mathrm{X}-57 \mathrm{Slim}$ Line Aligning Screwdriver $7^{\prime \prime}$ P. 51 - X. 57 Stim Line Allgning Screwdriver 12 P-53-TV Long-Reach Insulated Screwdriver (1/9" blade)
    P-54-TV 12" Long.Reach Insulated Screwdriver (1/8" blade)
    P-56--Transistor I.F. core alignment tool
    P-305-Shorty Alignment Tool Recessed Oriver with $1 /{ }^{\prime \prime}$ " Blade
    p.j06-5". 125 Hex Nylon Double End iron Core Tool
    

    ## general cement

    TEL-A-TURN ALIGNMENT TOOLS

    ## Q

    General Cement brings you the most sen sational alignment tool ever developed it automatically counts the turns right or left. Just insert the tool in screw head or slug. line up calibrator sleeve in center scale, and while holding sleeve steady in one hand rotate tool in either direction as required, read the number of turns on calibrator sleeve and use as a reference. Tools, are made of lough, durable, polyester fiberglass with clear plastic calibration sleeve. Shpg. wt., 2 02. If Aligner, double ended. One end fits a \#4 stud, the other end fits a \# 6 stud.
    P. 76

    An alignment screw driver with standar metal tip at one end. The other end has very thin $7.64^{\prime \prime}$ metal blade for small can openings.
    P. 77 Tel.a.Turn Tool Net 96 A doubleeended Hex aligner that turns both top and bottom slugs. One end has $.100^{\prime \prime}$ hex, other is $.125^{\prime \prime}$ hex.
    P. 78 Tel-a-Turn Tool Net 96
    

    Made of metal shaft with $1^{\prime \prime}$ dia. glass
    mirror and plastic handie. Length $7 \%{ }^{\prime \prime \prime}$. Shpg. wt., 5 oz.
    $\frac{\text { 24" PICK-UP TOOL }}{28^{2}}$

    Has mechanical fingers that will pick up and hold screws, nuts, and bolts. Just press button to open, release button to close. Flexible shaft. Shpg. wt., 4
    P. 514

    Net .96
    

    Contains 9 essential tools in roll-type case. One each P.13. P.14, P.15, P-16, P-17. P-18, P-19, P-21, P-39.
    P. 307 Shpg. wt., 8 oz.

    ## G.C. TV ALIGNMENT TOOL KIT

    A handy, all-purpose TV hit pul up in a convenient plastic container. Kit contains four basic essential tools that will service the majority of TV sets. Contains one each P.40, P-41, P.42, P-305. Shpg. wt., 1 lb .
    P. 75

    Net 1.91
    GC ILLUMINATEO MIRROR

    ## 198

    Battery powered, hinge mounted, inspecting tool with insulated shaft; perfect for inspecting in out-of-the way places. Locking switch for on-off and one-hand operation. Comes with bulb but less batteries ( 2 standard penlight cells). 121/4" long.
    P. 70 Illuminated Inspection Mirror,

    Shpg. wt.. 1 lb .
    Batteries for above
    BA-155
    Net 1.98

    ## CODING KIT

    4.4
    

    Complete kit of all standard RETMA colors. Black, brown, red, orange, yellow. green, blue, purple, gray and white. Brilliant - durable colors. Complete with brushes and RETMA color code chart. Shpg. wt., 2 lbs.
    P. 260

    ## G.C. SERVICE TWEEZERS AS LOW AS

    Made of polished nickel-plated spring steel. Handy in shop or laboratory for starting nuts and screws, holding wires, clamping cemented items, installing dial cords, etc. Shpg. wt., 402. P.71-Self-Closing Type. 61/2" long, with blunt points slide lock and blunt points
    P. 73 - Precision Type. $41 / 2$ " L.
    pointed
    P.74 - All 3 above in leatherefte
    case 2.23

    ## G.C. RADIO PHONO <br> CHASSIS <br> REPAIR CRADLE 485

    

    DELUXE CABINET REPAIR KIT

    Comes in handy metal box Contains ten shades of shellac sticks, bottles of light and dark oil stain, botlles of metal shading varnish, polish, General Scratch Stik, alcohol lamp (with alcohol), spatula, small brushes, steel wool. sandpaper, and wiping cloth. No special skill required. Directions. Sbpg.
    .44

    ## SCRATCH REMOVER KIT

    Combination wit of 6 colors, popular shade of wood Scratch-Stick flllers and 2 bottles scratcy remover liquid walnut and clear. Works on all light and dark wood.
    P-258 Shpg. wt., 2 lbs.
    Net 2.21
    

    Fig. C. Small precision tube pin straighteners for miniature tubes. Steel die construction for rugged service. Shpg. wt., 602.
    P-518 For 7 pin miniature tube Net . 73 P-519 For 9 pin miniature tube Net .73

    ## DUPLEX TUBE PIN STRAIGHTENER

    Fig. B. Combination 7 and 9 Din min. lature tube stralghtener constructed of molded plastic with hardened steel in. serts. Can be mounted. Shpg. wt., 6 P. 520

    Net 1.47 TUBE GADGET
    Fig. A. Combination 7 and 9 pin min lature tube straightener and tube pull. er. Made of rubber with phenolic inserts. Shpg. wt., 4 cz.
    P-515
    Net .90

    ## SERVICE AIDS - CHEMICALS - SOLDERLESS CONNECTORS

    ## WALDOM "KRIMPTITE" AND "INSULKRIMP" SOLDERLESS TERMINALS AND CONNECTORS

    

    WALDOM MAINTENANCE TOOL
    

    Avaitable both in "KRIMPTITE" non-insulated or "INSUL. KRIMP'0 which have permanently attached rigid v/nyl plastic insulating sleeves. Sleeves will not slip off, fracture or unravel. Both types are functionally designed to crimp on rapidly and make positive, uniformly reliable connections. Constructed of annealed electrolytic copper with an electro-tin finish. Other features include strength
    NON-INSULATED TYPES INS.TYPES
    1

    | Type | Fig | NON-INSULATED TYPES |  |  |  | .TPPES |  |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    |  |  | Wire Range | Stud Stze | va'ntgt | Stock , H : Na . | Lgth.: | Stock No. |
    | ST | A | 22.18 | $5 \cdot 6$ | 1/4x ${ }^{\text {\% }}$ /8 | P. 521 | 13/6 | P. 538 |
    | ST | A | 22-18 | 8 | 1/64 $\times 5$ | P. 522 | 136 | P-539 |
    | ST | A | 22-18 | 10 | $5 \times 1 \times 3 / 4$ | P-523 | ' $\%_{1}$ 。 | P-540 |
    | ST | A | 16.14 | $5 \cdot 6$ | 19,4x5 | P. 524 | ${ }^{1}$ | P. 541 |
    | ST | A | 16-14 | 8 | 126x ${ }^{5}$ \% | P-525 | 1\%6 | P. 542 |
    | ST | A | 16.14 | 10 | $2 \mathrm{~m} \times 3 / 4$ | P.526 | \% | P. 543 |
    | HT | B | 22.18 | 5-6 | ${ }^{2 / 32}{ }^{2}{ }^{3}$ | P. 527 | 2\%/22 | P. 544 |
    | FS | C | 22.18 | 5-6 | 164x598 | P. 528 | 13/6 | P. 545 |
    | FS | C | 16-14 | 5-6 | 124x5/8 | P-529 | 1\% | P. 546 |
    | RT | D | 22.18 | 5-6 | \% $2 \times 41 / 4$ | P. 530 | 53/4 | P. 547 |
    | RT | D | 22.18 | 10 | K0x ${ }^{2}$ | P.531 | 23\% | P-548 |
    | RT | D | 16.14 | $5 \cdot 6$ | 1/4 ${ }^{1} 3^{2}$ | P. 532 | \% | P. 549 |
    | RT | 0 | 16.14 | 10 |  | P. 533 | 5 | P-550 |
    |  | N |  | . | 100 | NY | ABO |  |

    ## NON-INSULATED TYPES 1.9 pkgs., ea. INSULATED TYPES $\begin{array}{lll}1.9 \text { pkgs., ea. } & 1.79 & 1.9 \text { pkgs., ea.............. } 4.16 \\ 10 \text { or more pkgs., ea. } 1.43 & 10 \text { or more pkg., ea. } 3.32\end{array}$

    gusset, one piece construction, serrated contact area, beveled edge, stamped wire range. Sold only in pachages of 100. Column heads: ST is spade tongue; HT is hook tongue; $F S$ is flanged spade; $R T$ is ring tongue; $B$ is butt; QDM is quick disconnect push-on-type male; QDF is female and NI is nyylon insulated closed end.

    BUTT CONNECTORS. (FiG. $E$ ). Length of non-insulated $\mathrm{Kin}_{6}$ insulated ${ }^{5} \mathrm{Ki}_{4}$. "For $22-18$ sine wire, others for 16-14.
    P.534* Non-insul. 1.9 pkg., ea. 2.00; 10 or more, ea 1.59 P.551* Insulated 1.9 pkg., ea. 4.91 ; 10 or more, ea. 3.92 P. 535 Non-Insul. 1-9 pkg., ea, 2.00; 10 or more, ea. 1.59 P. 552 Insulated 1.9 pkg., ea. 4.91; 10 or more, ea. 3.92

    QUICK DISCONNECT PUSH-ON-TYPE. (FIG. F). For H-14
    size wire.
    P. 536 Male, non-ins., $/ 4 x^{31}, \mathrm{~L}$, 1.9 PKGS. 10 or More $\begin{array}{lll}\text { P. } 537 & \text { Female, non-ins., } 1 / 4 x^{4} \% \text {, } \\ \text { P. } 553 & \text { Male insul. } 1 / 4 x^{27} / \text { al } & 1-9 \text { PKGS. } \\ \text { P. } 554 & 10 \text { or More }\end{array}$ $\begin{array}{llcc}\text { P.554 Female insul. } 1 / 4 x^{3} / / 4 \mathrm{~L} & 4.46 & 3.56\end{array}$

    NYLON INSULATED CLOSED END CONNECTORS. (FIG. G). *Wire Range 22-14, $\uparrow 16 \cdot 10$. Tin plated seamless brass.

    | Stock No. | O.D." | I.D.* | LGTH | Net Pk 1-9 Pkgs. | of 100 10 or More |
    | :---: | :---: | :---: | :---: | :---: | :---: |
    | P-555* | K。 | 1/4 | 3\% | 3.03 | 2.41 |
    | P. 556 | \% | 3/8 | ${ }^{23} \%$ | 4.51 | 3.60 |

    ## NEW-CRIMPING TOOL

    - Crimps insulated and non-insulated terminals - Cuts Bolts - Strips Wire

    New model also crimps solderless terminals and connectors. Three tools in one! Cuts and strips wire from sizes 22 to 10. Cuts brass or steel machine screws without damaging the threads; size $10-24,10-32,6-32$ and $4-40$. Has accurately sized stripping notches and precision threaded cutter holes plus stud size gauge stamped on tool. Hardened steel, shock-proof plastic handle.
    H0-66 Shpg. wt., 1 tb.
    Net 3.03

    ## NEW! <br> DO-IT-YOURSELF PLATING KIT $3^{98}$

    Now you çan replate even metal parts that have never
    been plated before. Your finished plating is a combination of cadmium for rust-proofing, nickel for protection and luster, chromium for hardness and brilliance. Ideal for any métal surface except aluminum. Kit consists of 4 oz. copper chelate, 4 oz . chrome chelate, $1 / 2$ pint plating sealer, sponge, catalizer wool, $1^{\prime \prime}$ brush, sandpaper, steel wood, 4 oz. rust remover. Shpg. wt., 2 lbs . AA-106

    ## SUPER PLATING KIT

    Similar to above but in larger quantities. 1202. copper chelate, 1202 . chrome chelate, 12 oz . spray can of plating sealer (no brush needed), 12 oz. rust remover, sponges, catalizer wool, sandpaper, steel wood. Shpg. wt., 4 los.
    A 1.107

    ## SWISH! ENGINE CLEANER AND DEGREASER

    Just spray SWISH on-hose off with water. Will not harm paint or stain metais. Safe on aluminum. Cleans off oil-grease-grass clippings-mud-road tars-dried salt spray, Contains no acids or alkali. Can be used on painted surfaces-clothing, upholstery. Aerosol can delivers wet spray-not a mist-at 40 IDs. pressure. Particularly adaptable to marine equipment. Works as well with salt water as with fresh. Shpg. Wt., $11 / 2$ ibs. HD. 72116.2 oz. can

    Net 1.44

    ## SWISH! ELECTROKLEEN

    Powerful solvent especially designed for cleaning electronic and electrical equipment and parts. $1602 .-$ $1 / 3$ more than 12 oz . can! Non-combustible, non-toxic non-corrosive, leaves no rosidue. Shpg. wt., $11 / 2$ libs. HD. 720

    Net 1.44

    ## "RUSTY" RUST REMOVER

    - Dissolves Rust from Iron and Steel
    A few drops of Rusty and rust dlssolves without affecting the sound metal. No more heat or torches necessary; no more long waits. Use for car or home-anywhere there is rust, corrosion, stained porcelain and cement. Frees frozen nuts and bolts, loosens frozen pipe joints. Non-flamable; safe to use. Shpg wt., 8
    $\mathrm{AA}^{2}-102$

    Net . 86
    

    ## G.C. TRANSISTOR SILICONE COMPOUND

    Conducts heat from transistor to chassis. Apply to chassis and tran. sistor whenever transistor replacements are made. Shpg. wt. 10 oz . P-67
    

    NEW! INSTANT LETTERING

    - Instant Dry Transfer
    - Meticulous Lettering

    Quick, simple pressure transfer that leaves no trace of adhesive to sully artwork. Works on wood, paper, card, glass, mefal or any other smooth surface. Sharply defined letters, words, and numerals. Package contains 24 sheets. 1 sheet of over 600 numerals and + or $-; 1$ sheet of prox 400 letters, both prox $10^{*}$ high; and 22 sheets of most often used electronic words, with popular ones repeated. Letters and numerals are in black Shpg.wt., $6 \mathbf{0 z}$ P-478 per package
    Same as above except letters and numerals are in white P-561 Per Package ........................................................ 4.95

    ## "Liqua Gold" <br> Chemical Plating Solution <br> - No Electricity-No special equipment <br> - Plates by lonic displacement <br> - WIII not tarnish-needs no polishing

    Gold plate practically any metal object. Not a painttrue gold plating by chemical solution. Uses no elec-tricity-piates by lonic displacement-a tried and true method long used commercially. Plates all common metals-copper, brass, bronze, nickel, Iron, steel, tin, pewter, cadmium solder, zinc, efc. Piate novelties-ornaments-ash trays-door knobs-jewelry -buttonsbuckles. Plate electrical contacts to end corrosion forever. Printed circults-connectors-terminals-sockets _-plugs-switches-relays. The plating deposit is 24 K pure gold . Includes complete instructions. Will plate 300 sq. in. Shpg. wt., 4 ozs.
    HD. 686
    Net 1.66
    Enough to plate 600 sq. In. Shpg. wt., 8 ozs.
    HD-687
    Net 3.32

    ## CHEMICALS - CLEANERS - CEMENTS

    

    Service Cement. For repairing speakers and general radio work. Vibration-proof, water-proof-fast drying.
    P. 2692 ozs. Shpg. wt., 5 oz. ... Net .47 P. 27040 ozs. Shpg. wt., 8 oz. Nel . Net 71 P. 2718 ozs. Shpg. wt., 1 lb... Net 1.24

    8akelite Cement. The only practical ce ment for bakelite. Cements bakelite to bakelite and other materials.
    P-275 2 ozs. Shpg. wt., 5 02. Net 69
    Plastic Cement. For all types of plastic
    Fast drying-waterproof-strong bond.
    P. 2762 ozs. Shpg. wt., 5 or. ... Net . 44 Pil-o-Bond Cement. Sticks anything to anything. Dries rapidly waterproofsvery high strength.
    P-281 2 ozs. Shpg. wt., 5 02. ...Net . 52 Red-x Corona Dope. Prevents corona shorts in Hi-Voltage circuits. Flexiblefast Irying.
    P-282 2 ozs. Shpg. wt., 5 oz. Net . 71 Creme-0-Wax Polish. For TV and radio cabinets. Hard glassy, durable finish. P. 288 1/2 pt. Shpg. wt., 1 lb. . Net 59

    Efectronic Contact Cleaner. New red cleaner-made with Lube Rex. Fast dry-ing-universal contact cieaner.
    P-289 2 ozs. Shpg. wt., 502.
    Lquid Mon-Slip Penetrating ing. Prolongs life of cables and bells. Prevents slipping.
    P. 2922 ors. Shpg. wt., 502 .... Net . 47 Phano-Lubricant. Special lubricant for phonos. Will not thin out. Clings to metal surface. 2 oz. tube. Shipg. wt., $50 z$. P- 233
    Dial and Appliance Oll. Free punning oll for dials controls, small motors, etc. In handy spout can
    P.294 4 ozs. Shpg. wt., 8 oz. Net .66 Phono Non-Slip. Prevents slippage on turntables, changers, tape recorders, etc. P- 295 Shpg. wt., 1 th.
    

    ## CONTACT

    ## NEEDLE INJECTOR

    Made on the hypodermic principle to Inject cleaners and oils into shafts, controls and tight places. Supplled with a 2-0z bottle.
    -P. 262
    Shpg. wt., 5 02......... Net . 47

    ## Polystyrene cement and

    ## COIL DOPE

    Pure polystyrene dissolved in thin ner, for coating, doping, scaling coils, and for cementing poly. styrene to polystyrene. 2 oz . bot styrene to polystyrene. 202 . bot-
    tle. Shpg. wt., 4 oz. P. 203

    THINAER FOR ABOVE. 2 oz.
    -. 303

    # Eloskor POCE POPULAR PRICED 

    ## GENERAL PURPOSE OMNIDIRECTIONAL DYNAMIC MIKES

    ## 636 "SLIMAIR" DYNAMIC

    Slim omni-directional mike for PA or recording. Acoustatloy dlaphragm. Output level - 58 db . Response 60 . $13,000 \mathrm{cps}$. Selection of $\mathrm{Hi}-\mathbf{Z}$ or 150 ohm impedance made at plug. On-Off switch; satin chrome finish. Swivels $90^{\circ}$ on base, tapped for $5 / /^{\prime \prime}-27$ stand. With 18 ft . cable and connector. 11/a" dia., 101/4" long. Shpg. wt., $21 / 2 \mathrm{lbs}$.
    M-31
    636G-Same as above but gold finish M-226

    Net 42.63

    ## 630 HI-FI, HI-OUTPUT OYNAMIC

    A quality microphone resistant to heat and humidity. $60-11,000 \mathrm{cps}$. output level -55 db . On. Off switch tilt: able head, chrome finish. High impedance output. 2" dia. $61 / 4^{\prime \prime}$ long. Shpg. wt., 3 lbs. M-32

    Net 30.87

    ## 647 PA LAVALIER DYNAMIC

    Small, rugged mike complete with neck cord and support clips. $60 \cdot 10,000$ cps. output level 57 db . Gray enamel finish. 18 ft . cable. $5^{\prime \prime}$ long, $1^{\prime \prime}$ dia. Shpg. wt. 1 lb .
    M-33 Hi $\mathbf{Z}$ output
    Net 48.51

    ## 623 SLIM DYNAMIC MIKE

    Ideal for PA, recording and general use, on stand or in hand. Non-directional, $60 \cdot 12,000 \mathrm{cps}$, output level - 56 db. adjustable for high or low impedance. Tiltable chrome head, On.Off switch. 5/8"-27 thread, removable 18 ft . cable. Shpg. wt., 2 lbs. M-38

    Net 33.52

    ## NEW! 676 CARDIOID DYNAMIC

    Radically new design brings professional quality to public address, recording, communications and other general purpose applications. Continuously-Varlable-0 principle assures uniform, symmetrical cardiod pattern at all frequencies. Response 40 to $15,000 \mathrm{cps}$. Highest discrimination against feedback and unwanted sound. Exclusive 3 -position switch offers controlled low. frequency attenuation to overcome rumbie and feedback when microphone is used at a distance. Silm designfull view of speaker. Use hand-held or with stand clamp supplied. Rugged die-cast case. Acoustalloy diaphragm. 150 ohms or $\mathrm{Hi}-\mathrm{Z}_{\text {; }}$ impedance changed by moving one wire in cable connector. Output -58 db . Satin chrome finish. $18^{\prime \prime}$ cable. Size: $73^{\prime \prime \prime}$ long $\times 11 / 4^{\prime \prime \prime}$ dia. Shpg. wt., 3 lbs.
    M-238
    M-238
    M-239
    

    CRYSTAL AND CERAMIC MICROPHONES

    951 VARIABLE "D" CRYSTAL
    An excellent wide-range all-purpose mike for eliminating background nolse and reverberation. Highly directional. Response $50-11,000 \mathrm{cps}$, output -60 db . Hi-Z, On-Off switch. Satin chrome finish. Swivel base with standard $5 /{ }^{\prime \prime}$ "-27 mount and cable connector. $18-\mathrm{ft}$ cable is removable. $51 / 2^{\prime \prime}$ long, $13 / 4^{\prime \prime}$ dia. Shpg. wt.; 3 lbs.
    M-34

    ## 911 "MERCURY" CRYSTAL

    High output omnidirectlonal unit for general use. 50 9000 cps , high impedance, -50 db output level. OnOff switch, chrome case, 18 ft . cable, standard thread. $63 / 4^{\prime \prime} \times 236^{\prime \prime} \times 31 / \mathrm{m}^{\prime \prime}$. Shpg. wt., 3 lbs .
    M-35

    ## 926 SLIM CRYSTAL

    General purpose mike for stand mounting. Response $60-8000 \mathrm{cps}$, output level -60 db . Hi-Z. Chrome finished case, tiltable head, standard thread. $6 \frac{3}{9}{ }^{\prime \prime} \times 1 \mathrm{~K}_{6}^{\prime \prime}$, 18 ft . cable. Shpg. wt., $11 / 2$ lbs. M. 36

    ## 924 CRYSTAL LAVALIER

    Omni-directional crystal lavalier for chest or hand use, supplied with neck cord and support clips. High impedance, $60-8000 \mathrm{cps}$, autput level -60 db . $35_{2}{ }^{\prime \prime}$ long, $11 / z_{2}$ " diameter. Shpg. wt., 1 lb . long,
    $\mathbf{M}-37$

    ## 712 CERAMIC

    Fits need of PA, home recording, etc. Handheld. Moisture sealed ceramic. Response 70.7000 cps . High output-55 db, Hi-Z. Size: $3 \times 21 / 4 \times 13{ }^{\prime \prime}$. $5^{\prime}$ cable. Shpg. wt., 6 oz M-54

    ## 721 SLIM CERAMIC

    Smart new mike with desk stand and floor stand coupler Heat resistant ceramic element. 60.8000 cps , output -55 db ; $\mathrm{Hi}-2,5 \mathrm{ft}$. cable. $8 \times 11 / 2 \times 12 / 4^{" 1}$. Shpg. wt., $11 / 2 \mathrm{lbs}$. M-41 with $81_{2}^{\prime}$ Shielded Cable

    Net 10.58
    727SR Same as above but with leaf switch to close relay circuit and 3 cond ( 1 shielded) cable. H. 42

    ## 118 CERAMIC

    Improved replacement for home recorder mikes. 60. $6000 \mathrm{cps},-55 \mathrm{db}$ output, Hi.Z. 5 ft . cable with phono plug and adapter plug. Shpg. wt., i ib.
    M. 45

    Net 7.06

    ## 920 SPHEREX CRYSTAL

    All-directional crystal mike for home use. Wire mesh head acts as wind screen and blast filter. 60.7000 cps output - 50 db. HI.Z. satin finish, 5 ./"-27 thread 18 ft . cable. Shpg. wt., 1 lb .
    M-46
    Net 16.17

    ## 428 TOUCH TO TALK DESK STAND

    Accepts microphones with standard 5 .6". 27 threads. Blade type switch, DPDT with locking button. Satin chrome finish. Size $7^{\prime \prime} \mathrm{H}$, base $5^{1 / /)^{\prime \prime}}$ dia.
    m-56 ... Shpg. wit, 2 tbs.
    

    Net 4.41

    # ElectroZorics QUALITY MICROPHONES 

    

    ## FOR BROADCAST-TV-RECORDING

    ## 666 SUPER CARDIOID DYNAMIC

    New variable "D" microphone for exacting radio and N broadcast applications. Cardioid pattern extra sharp for high attenuation of sound from sides and rear: oniy sound from front of microphone is plcked up. Can be used twice as far away from sound source as many other microphones. Frequency response is uniform from 30 to 16,000 cps. Output level - 58 db , output impedance as supplied is 50 ohms, but is easily changed to 150 of 250 ohms. Acoustalloy diaphragm used for better performance. Cast Aluminum case is linished in non-rpslecting gray. Complete with 20 ft . shislded cable and Cannon UA.3 connector. and 300 detachable stand coupler for $1 /{ }^{\prime \prime}$ and Model 300 detachable stand
    S/e". 27 stands. Shpg. wt., 2 lbs.
    $\mathrm{M} \cdot 10^{27}$
    Net 149.94

    ## OMNI-DIRECTIONAL DYNAMIC <br> 655C "SLIM-TRIM" TV DYNAMIC

    This slender hand or stand microphone covers the entire audio range, from 40 to $20,000 \mathrm{cps}$. Omnidirectional. Output level - 55 db , impedance 50,150 or 250 ohms. Light and smalt-11/4" dia., $101 / z^{\prime \prime}$ " long. Complete with adapter for $12 z^{\prime \prime}$ and $5 \mathrm{~m}^{\prime \prime}-27$ stands and with 20 ft . shielded cable. Shpg. wt., $11 / \mathrm{m}^{\prime \prime}$ lbs
    M-13
    Net 117.60

    ## 654A "SLIM-TRIM" DYNAMIC

    Response $50-16,000 \mathrm{cps}$. Output -55 db . Use on stand, in hand or as a lavalier. Matches all low impedance. $3 / \mathbf{y n}^{\prime \prime}-27$ thread. XLR-3 connector. $18^{\prime}$ cable. Gray Hinish. Size: $7^{\prime \prime}$ long $\times 11 / /^{\prime \prime}$ dia. With clamp and neck cord. M. 14 Shpg. wt., $11 / 2 \mathrm{los}$.

    ## 647A MINIATURE DYNAMIC

    Tiny size with big performance. $60-12,000 \mathrm{cps}$. Hi-Z or 150 ohms balanced impedance. Output level, - 58 db 150 ond neck cord. Size: $21 / 4 x^{3 / 4}$ Dia. Shpg:wt., 1 to.
    M.233 ............ No Money Down

    ## SPECIAL PURPOSE MIKES

    ## 715SR MOBILE AND CB

    Model $715 S R$ has been designed specifically for moblle communications use. Omnidirectional ceramic type. Frequency response $60-7000$ cycles. High impedance output - 5 db . Relay actuating switch for push-to-talk. Hanger button on back of case - with dash panel hanging bracket. Gray case, $3 \times 2$ Kox $^{\prime \prime}$. With $5 /{ }^{\text {" }}$. 27 Adapter and $5-\mathrm{ft}$. cable, Shpg. wt., 1 lb . M. 55

    Net 10.29 MODEL $715 S$. Similar to above but with on-off switch.
    MODEL 415. Desk stand for above.
    M. 53 Shpg. wt. 602.

    Net 8.82

    114 CR CERAMIC COMMUNICATIONS
    A. new high output, ceramic moblle communications microphone for paging, ham radio, and citizen's band use. Molded, tough "Cycolac" case assures long life and protection from accidental shock damage. Response tailored for maximum intelligiblity. High level. high impedance output -55 over range of 60 to 7.000 cos . DPDOT switch shorts microphone in "off" position and DPDT switch shorts microphone "h position and cioses relay circuit in "on position. 3 -conductor colied cord $10^{\prime \prime}$ retracted. Complete with hang. up bracket.
    M .235 Size: $24 / 2 \times 1 / 40 \times 3 /^{\prime \prime}$. Shpg. wt., 1 ib . .... Net 9.70

    ## 717 CARDIOID

    Simitar to 714 SR but closetalking cardioid pattern to reject background nolse and feed back. Apertures on sides attenuate sounds from rear and sides. Output - 55 db. Response 100 to 7000 cps. Shpg. wt., 1 ib .

    502A CABLE MATCHING

    ## TRANSFORMER

    Matches 50,250 , or 500 to Hi .2 ampllitier input. 40. $20.000 \mathrm{cps} \pm 1 \mathrm{db}$ MC. 4 connectors, $27 / 8 \times 2^{\prime \prime}$ dia. Shpg. wt. 1 lt.
    M-49

    644 "SOUND SPOT" UNI•DIRECTIONAL LINE MICROPHONE
    A combination cardioid and distributed front opening makes this the most difectional microphone ever. Has better than 2.5 times the working distance of .pfessure types. Canceilation from the rear and sides exceed 20 db giving virtually complete relection of unwanted sound. The effective front acceptance angle is $45^{\circ}$ each side of center glving best isolathon of individual performers. High reduction of wind noise and low sensitivity to shock. Smooth response from 40 to 12,000 CDS, high output-53 db, dual high and low impedance selective. The case is high-pressure diecast zinc. Rear diameter $2 \%_{s}$ ", length $16^{\circ}$ cable is $18^{\circ \prime}$. Shpg. wt.. 3 lbs.

    ## M-25

    Net 64.68

    ## 602 NOISE-CANCELLING DYNAMIC

    For use in areas with high background noise. 100-7,000 cps. Output, -55 db . Press-to-talk switch. 6 it. retract. able colled cord. Low imped. Shpg. wt., 1 ib.
    M-57 ............... Money Down
    Net 33.81

    ## 205KK DIFFERENTIAL CARBON

    Close-talking, noise cancelling. single button carbon for private aircraft and emergency communications. Blastproof, waterproof, shock-resistant. Output at $144^{\circ}-50 \mathrm{db}$ Black phenolic case. Press to talk switch. Mig. bracket, $6^{\prime}$ coiled cord. $21 / 4 \times 24 / 4 \times 4^{\prime \prime}$. Shpg. wi.. 1 Ib.
    M-225
    Net 26.46

    ## 600TR TRANSISTORIZED MIKE

    Has 2.stage transistor amplifier built Into case. Amplifier gain 34 db . Press-to-talk switch, colled cord, 4 -wire lead. Output - 23 db. Size: $21 / 4 \times 2 \times 4^{\prime \prime}$. Black case, mig, bracket, $6^{\prime}$ cable. Shpg. wt., 1 lb

    Net 48.51

    ## UNIVERSITY MICROPHONES

    

    401 OMNIDIRECTIONAL DYNAMIC
    Especially designed for broadcast, TV and quality public adoress systems. Feaures resilient Unitar diaphragm. Response $30-20,000 \mathrm{cps}$. Choice of 3 im pedance ranges $30 / 50,150 / 250$ and 20.000 ohms. Output - 55 do (low imp.), $16 \mathrm{my} / 10$ dynes $/ \mathrm{cm}^{2}$ (high imp.) Hum reference - $120 \mathrm{db} / .001$ gauss. Finished in acrylic silver-gray and non-reflectin acrylic silver.gray and non.refiact $\mathrm{M}-200$ Shpg. wt. 2 los. ...... Net 42.63

    ## 4O2S OMNIDIRECTIONAL SHOCK MOUNTED DYNAMC

    Identical in specifications to Model 401 but with rugged internal shock mounting that makes it exceptionaliy wellsuited to night club application. Size: $814^{\prime \prime \prime}$ long $x 11 /{ }^{\prime \prime \prime}$ dia. M-201 Shpg. wt., $21 / 4$ lbs. Net 46.75

    ## 70 OMNIDIRECTIONAL DYNAMIC

    Rugged, high quality, general purpose microphone for schools, Industry, public address, improved home recordings, etc. Re sponse $50 \cdot 14,000 \mathrm{cps}$. Impedance $30 / 50$ and 20,000 ohms. Output - 50 do (low imp.), $28 \mathrm{mv} / 10$ dynes $/ \mathrm{cm}^{2}$ (high $i \mathrm{mp}$.). Hum reference - $120 \mathrm{db} / .001$ gauss. Sliver-gray and black finish Size: $6^{\prime \prime}$ long $\times 1.5 / 23^{\prime \prime}$ dia. With $15-\mathrm{ft}$. 3-conductor cable and SA10 slide-on stand adapter. M- 212 ShDg. wt., $21 / 4$ lbs. MODEL 71. Same as above out with on-off slide switch M-213

    ## 501 CARDIOID DYNAMIC

    Ultra-high discrimination against unwanted sound - virtually eliminates backeround noise. Response 30-16,000 cps. Impedance $30 / 50,150 / 250$ and 20,000 ohms. Output - 54 db (low imp.), 20,000 ohms. Output - 54 do (low imp.),
    $17 \mathrm{mv} / 10$ dynes $/ \mathrm{cm}^{2}$ (high imp.). Hum reference - $120 \mathrm{db} / .001$ gauss. Finished in acrylic silver-gray and non-reflecting black. Size: $63 /{ }^{\prime \prime}$ long $\times 11 / 2^{\prime \prime}$ dia. M-204 Shpg. wt., $21 / 4 \mathrm{lbs}$.... Net 73.50

    502S CARDIOID SHOCK MOUNTED DYNAMIC

    Identical in specifications to Model 501 but with rugged internal shock mounting to Isolate it from spurious sound and extraneous noise. Size: $73 \%^{\prime \prime}$ long $\times 17{ }^{\prime \prime}$ dia. Shpg. wt., $21 / 2$ los.
    M-205
    Net 85.26
    

    ## ACCESSORIES

    For Use with modular Models 401, 402S, 501, 5025.
    SA10. Slide-on stand adapter provides quick removal for hand use.
    M. 209 Shpg. wt., $1 / 4 \mathrm{lb}$.

    Net 4.12
    CC10. Cable adapter with $18 . \mathrm{ft}$. cable. For use when neither switch nor quick-disconnect needed.
    M. 206 Shpg. wt., $11 / 4 \mathrm{lb}$. ...............Net 5.88

    CA10. Cannon XLR-3.11C plug with $18 . \mathrm{ft}$. cable. Has push-action latch lock.
    M. 211 Shpg. wt., 1 tb.

    Net 5.88
    PA10. Adapts microphone to use CAlo above or Amphenol 91-854. Allows quick disconnect.
    M. 208 Shpg. wt., $1 / 4 \mathrm{lb}$.

    Net 6.17
    SP10. Same as PA10 above plus heavy-duty on-olf slide switch.
    M-207 Shpg. wi., $1 / 4 \mathrm{lb}$.
    Net 6.75
    SSP10. Connects directly to basic module. Includes on-off switch, receptacle for CA10, Cannon XLR-3-11C plug or Amphenol 91-854. Permits tilting thru $90^{\circ}$ arc. Mounts on any /2"-27 stand.
    M. 210 Shpg. wt., $1 / 2 \mathrm{lb}$. ................Net 10.88
    

    403L OMNIDIRECTIONAL LAVALIER
    Uttra-compact unobtousive dynamic mi. crophone gives freedom of movement Ideal for nightclubs, churches. schools ldeal for nightclubs, churches, schools
    and location broadcasting. Response 60 . and location broadcasting. Response 50 . 20,000 cps. Impedance $30 / 50$ and $150 / 250$ ohms. Output -55 db . Hum reference $-120 \mathrm{db} / .001$ gauss. Size: $37 \mathrm{~B}^{\prime \prime}$ long $\times 1 \mathrm{H}_{2}^{\prime \prime}$ dia. Antique bronze finish. With adjustable neck cord and clip and integral $25-\mathrm{ft}$. flexible cable. M. 202 Shpt. wt., $21 / 4$ lbs. .... Net 51.45

    ## 404L OMNIDIRECTIONAL LAVALIER

    Broadcast dynamic microphone. Re sponse 50-20,000 cps. Impedance 30/50 $150 / 250$ and 20,000 ohms. Dutput - 55 db (low imp.) $16 \mathrm{mv} / 10 \mathrm{dynes} / \mathrm{cm}^{2}$ (high imp.). Antique bronze. Size: $5 \%{ }^{\circ}$ long $x$ $11 /{ }^{\prime \prime}$ dia. With neck cord, clip and $25-\mathrm{ft}$. cable.
    M-203 Shpg. wt., 21/4 lbs. .... Net 55.86

    # SHURE -MICROPHONES 

    
    $55 S$ CARDIOID DYNAMIC MIXE
    Sturdy dynamic mike, withstands shock, high heat and humidity. 2 low or hi-2 output. Response: $50 \cdot 15,000$ cps; output is -60 db . Swivel mounted case, with standard $1 / 8^{\prime \prime}-27$ thread mount and 20 ft . cable. Size $3 K_{0} \times 2 \%_{6} \times$ 340". Shpg. wt., $42 / 2 \mathrm{lbs}$. M- 100

    Net 48.80
    55SW. Same as above with on-off switch. M- 88

    Net 49.98
    5565 Specially constructed deluxe version of above.
    Rated response $\pm 22 / 2 \mathrm{db}$ from 40 to $15,000 \mathrm{cDs}$. Has Cannon XL-3.11 cable connector and special rubber mounting to reduce vibration plckup. M-101

    Net 79.38

    ## 576 BROADCAST.TV MIKE

    An omnidirectional dynamic probe microphone. Ultra slim for on camera use. Smooth, wide-range response $40 \cdot 20,000 \mathrm{cps}$. Dual impedances 50 and 150 ohms. Output. 60 db . Unique "feel" and "balance" in the hand. Rugged steel non-reflecting gray case provides effective magnetic shielding. With swivel adapter to provide $90^{\circ}$ tilt for stand use; 25-ft. 3-conductor shielded broadeast cable. $3 / 4^{\prime \prime}$ diam. $\times 833^{\prime \prime}$ long. Net weight $101 / 202$. Shpg. wt., 3 lbs.

    Net 102.90
    

    ## $275 S$ VERSAPLEX CERAMIC

    Smart, modern design with rupged. lightweight con struction in a low-cost unit. Wide freq. response 40 12,000 cps for tape recording. PA, ham and many other applications. Built-in filter reduces voice "pop" Hi-Z ( 1.5 megohms). Output -59.5 db . Complete with locking slide-to-talk switch, cable plus lavaller assembly and stand adaptor. Shpg wt., 8 oz
    M-175 Less Base
    Net 8.82

    ## $575 S$ VERSADYNE DYNAMIC

    Simllar to $275 S$ but dynamic type. Frequency Response $40 \cdot 15,000$ cps. Output: - 59 db . Impedance: 100,000 ohms or more. For use with moderate lengths of cable to amplifier. With $7 \cdot \mathrm{ft}$, single conductor shieided cable, locking slide-to-talk switch, lavalier assembly and stand adapter. Shpg. wt., 1 lo. M. 184

    Net 14.11

    ## 575SB VERSAOYNE DYNAMIC

    Identical to 575 S but low impedance, $150 / 250$ ohms. Output: - 62 db . Same accessorles. For use with long cables. Shpg wt., 1 lb
    M. 185

    Net 12.35

    ## RETRACTING MICROPHONE CABLES

    Rubber covered colied cord for 505T and other carbon mikes. 4 conductors for mike and press-to-talk switch. mikes.ches from 1 foot to 6 feet. Shpg. Wt., $11 / 2 \mathrm{lbs}$.
    Stre M-130 Type C15C............................................Net 3.67 3 conductor ( 1 shielded) used with 404C M-89 Type Ci2C
    4 conductor (2 shielded) used with 4048. M.90 Type C14C

    Net 5.73
    Net 5.88

    545

    ##  <br> $\underbrace{}_{578}$

    (7)

    545 UNIDYNE 1.
    An unusually handsome, cardiold for fine quality recording and PA namic microphone 15.000 cos . Cardioid pattern increase. Response 50. and reduces nolist and feed back possibilites distanc impedance: $50 / 250$ ohms and high impedance. Dual output: HI-Z, $=55 \mathrm{Jb}$; Lo-Z, -57 db . Detachable $18 . \mathrm{ft}$. 3 -conductor shlelded caile Satin chrome and black ${ }^{-1}$ sh. $5 K_{0}^{\prime \prime}$ long $x{ }^{1} \%_{4}^{\prime \prime}{ }^{\prime \prime} 3 \mathrm{~m}$. With A-258 : vivel adapter. Shpg. wt., 3 lbs.
    M. 93

    Net 48.98 45S. Similar to above with in-off switch

    Net 52.85

    ## 578 OMNIDYNE ULTRA.SLIM PROBE

    Omnidirectional, dynamic public address microphone Response $50 \cdot 17.000 \mathrm{cDS}$. Dual impedance; high or low Output: high impedance, - 59 db ; low, -60 db . Built-in "pop" filter reduces breath noises. With 18 ' 3 -cond shielded cable. swivel stand adapter. switch with cover plate. Satin chrome case. Size: $3 / \mathbf{a n}^{\prime \prime}$ diam, x $7 \neq{ }^{\prime \prime}$ long. Shpg. wt., 3 los.

    ## M-181

    Net 48.51

    ## 560 LAVALIER DYNAMIC

    Oual impedance dynamic mike with response "tallored" for lavalier applications. Black satin metal case, clip grip lavalier assembly, Ilghtweight, $\mathbf{1 8}$-ft. 2 -conductor shielded cable. Frequency Response: $40-10,000 \mathrm{cps}$ Output: 60 db . Impedance: dual-high, and $150 / 250$ ohms, $12 / 2^{\prime \prime}$ diam. $\times 37 y_{2 " \prime}^{\prime \prime}$ long
    M-182 Shipg. wt., $141 / 22$ OZ. ............................ 24.99

    ## 570 DYNAMIC LAVALIER MIKE

    Professional quality response $50-12,000$ cps, shaped for lavalier performance. Omnidirectional. Impedance 150 ohms. Output - 59 db. With "flex-grip" cord and belt clip for cable; $30^{\prime} 2$-cond, shielded cable Nonreflecting gray case. Size: $3 / 4^{\prime \prime}$ diam. $\times 2 \frac{1}{2 \prime \prime}$ long. M-183 Shpg. wt., $11 / 2$ lbs. Net 55.86
     MODEL 245 UNIPLEX
    

    A low price probe-type mike with true unidirectional characteristics employing the same uniphase principle found in higher priced mikes. Its wide, useful pickup angle at the front and virtual elimination of pickup at the rear provide the ideal solution to feedback prob lems in low cost P.A. systems. A natural for home recording, base station, paging and language labs Rugged ceramic cartridge pefforms from - $-40^{\circ}$ to + Rugged ceramic cartr
    $170^{\circ} \mathrm{F}$. Shpg. wt., 1 lb .
    M-176 Model 245. Complete with A25B swjuel/stand adantor and removable cable ..................Net 20.58 M-117 Model 245S. Same as above but includes on/of switch .................................................... 21.75

    ## 777 "SLIM-X" CRYSTAL MIKE

    A small unit welghing only 6 ounces, this is the ideal microphone for hand-held use, $60 \cdot 10,000$ cps, -62 db output into high impedance. Includes lavaller cord, stand adapter, 7 ft . removable shielded cable Satin chrom finlsh, $42 / 2^{\prime \prime}$ long, $1^{\prime \prime}$ dia. Shpg. wt., $11 / 4$ lbs. M. 120

    Net 14.70
    777 S Same as above, but has added On-Off Switch Net 15,48

    ## 51 "SONODYNE" DYNAMIC MICROPHONE

    The ideal moderately priced mlcrophone for public ad. dress and recording. Semi-directional dynamic element is immune to heat and humidity. Response $60-10,000$ cps. Screwdriver adjustment for low, medlum, or high Impedance output. - 52 db output level. Swivel mount and standard $1 / \mathrm{s}^{\prime \prime}-27$ thread. Satin chrome finish, 15 ft cable and connector. Shog. wt., $31 / 2 \mathrm{lbs}$. M. 124

    Net 29.11
    51S. Same as above with built-In on-off switch.
    Net 30.28
    

    ## 715 "STARLITE" CRYSTAL

    Semi.directional unit for home recording and inexpensive P.A. Systems. $50 \cdot 10,000 \mathrm{cps},-50 \mathrm{ob}$ output into high impedance. Case is durable polystyrene with builtin retractable stand and 5 ft . shielded cable. $31 / 6 \times 21 / 4 \times 11 / 4^{\prime \prime}$ Shpg. wt., $12 / 2$ lbs.
    M-113
    Net 4.70

    ## 215 "STARLITE" CERAMIC

    Ceramic version identical with Model 715, except: 50 . 8000 cDS response, - 56.5 db sensitivity. Insensitive to heat. M-114
    $710 S$ "REX" CRYSTAL
    A crystal mike for amateur and PA use. $60-9000 \mathrm{cDs}$, - 50 db output, Mi-Z. semi-directional. With On-Off switch, stand adapter, 7 ft cable. Burgundy red case, $31 / 4 \times 21 / 4 \times 12 / 2^{\prime \prime}$. Shpg. wt., $11 / 4$ los.
    M-115
    710 A Same as above, but less switch M. 116

    ## A86A LINE TRANSFORMER

    High quality transformer for connecting low impedance mikes to high impedance amplifiers. $35 / 50 \cdot 0 \mathrm{hm}$ o $\mathbf{1 5 0 / 2 5 0 - 0 h m ~ i n p u t , ~ H i z ~ o u t p u t . ~ P r e s e r v e s ~ h i g h ~ f r e - ~}$ quencies and cuts hum pickuo in long lines. 20.20.000 $\mathrm{cps} \pm 1 \mathrm{db}$. $7 / 6^{\prime \prime}$ diam. $\times 15 \mathrm{~m}^{\prime \prime}$ long. $2 . \mathrm{ft}$. of cable M. 129 Shpg. wt., 2 lbs. .... Net 10.29

    ## S.36A DESK MOUNT

    Simbar in appearance to base of 520SL on facing page. Fits Models 51. 55S, 540 S , and 545 S . Shipg. wt., $11 / 4 \mathrm{lbs}$

    Net 8.23
    Net 8.23
    Net 7.06
    

    510
    Specially designed for miniature and transistorized equipment. Magnetic, 1000 ohm impedance, 400.3000 cps, 71 do output. Circular case with eyelet solder terminals. Cadmlum plated case. $1^{\prime \prime}$ dia. $3 /\left.1\right|^{\prime \prime}$ thick. Shpg. wt., 6 oz.
    M-125

    ## MC-20AI $1^{\prime \prime}$ MINIATURE MIKE

    Similar to MC11, but rectangular, $400-4500 \mathrm{cps},-75 \mathrm{do}$ output into 1100 onm impedance. $1^{\prime \prime}$ wide. $1^{\prime \prime}$ long Kr $^{\prime \prime}$ thick, $12 / 2^{\prime \prime}$ long leads. Metal cased. Shpg. wt., 602. $\mathrm{N} \cdot 126$

    ## MC-30J MINIATURE MIKE

    Square $1 / 2 \times 1 / 2 \times 1 / 4^{\prime \prime}$. Output - 76 db , impedance 1850 ohms, 400.3500 cps. Cad-plated brass case, eyelet solder terminals. Shpg. wt., 6 oz. M-132

    ## R5 REPLACEMENT CARTRIDGE

    Magnetic replacement cartridge for Models 510C, 510MO, M.127 520, 520SL and 505C. Shpg. Wt., 402.

    ## R7 REPLACEMENT CARTRIDGE

    Crystal replacement cartridge for Models 707A and 708A M. 48 db output. Shpg. Wt., 502

    M-128

    ## S-388 DESK STAND

    Net 4.85
    For Models 245 S , 275 S . 415, 430, 575S B 777 S
    M. 122 Shpg. wt., $14 / 4$ lbs... Net 2.65 A-25B SWIVEL ADAPTER
    For use with Models 777 and 777S with standard floo or desk stand. Shpg wt., 802.

    ## SHURE-ASTATIC MICROPHONES

    

    SHURE COMMANDO SERIES MODEL 415 Handsome, but rugged controlted magnetic microphone for general purpose use. Response from $60-10,000 \mathrm{cps}$. Output level - 52 db , high Impedance. With 7 ft . nondetachable cable and swivel adapter. $6 \mathrm{~K}_{6}^{\prime \prime}$ long, $11 /{ }^{\prime \prime}$ dia. Shpg. wt., 1 lb.
    M-133
    Net 16.17 MODEL 420. Same as Model 415 except High/Low Impe. dance; $20^{\circ}$ non-detachable 2 -conductor shlelded cable dance;
    $31 / 0^{* \prime}$ long, $13 / 4^{\prime \prime}$ dia. With lavaller cord. Shpg. Wt., $11 / 2$ Ib.
    $\mathrm{M} \cdot 134$

    Net 17.64 MODEL 425.G6. Same as Model 420 except has $6^{\prime \prime}$ flex. ible gooseneck and mounting flange; $7^{\circ}$ non-detachable 2 conductor shielded cable. Shps. wt., $13 / 4$ lbs

    ## M- 135

    MODEL 425-G12 Same as Model 425-c6 but flexible gooseneck. Shpg. wt., $21 / 4$ ibs.
    M-136
    MODEL 425-G18. Same as Model 425-G6 Net 19.74 gooseneck. Shpg. wt., $23 / 4$ lbs.

    ## M. 137

    hODEL 430 Same as model 415 except Net 20.58 pedance with 15 ft . detachable 2 -cond, shield cable and on-off switch.
    on-off
    M-138

    ## ASTATIC MICROPHONES

    SHURE COMMUNICATIONS MIKES MODEL 4048 Sturdily built for hand-held mobile applications. Con trolled magnetic element tallors characteristics for max. imum readability. Response 200.8,000 cps. Output level - 50 db ; $150-250$ ohms impedance. High Impact. ArmoDur case. Includes 5 tt. 4 conductor ( 2 shieided) coiled cord. Push to talk switch normaliy closed may be changed to open: and mounting bracket. 3'Ks"Hx25/8"Wxl"\%"D. M-85 ShpR. wi., 1 lt. Net 19.40

    MODEL 404C. Same as Model 404B but high impedance. M. 86

    Shpg. wt., 1 ib .
    Net 19.40

    ## 520SL "DISPATCHER" MAGNETIC

    The ideal mike for busy radlo operstors or for dis. patching and paging. Conslsts of Model 520 mike mounted on special stand. Push large bar to talk, stide down permanent connection. Easy to operate. Chrome and green ifnish. 7 ft . Cable. $942 \mathrm{Hr} 5 \mathrm{Wx} \mathrm{P}^{\prime \prime} \mathrm{D}$. Shpg wi. 5 lbs.
    M. 106

    Net 26.46

    ## SHURE CB AND HAM PALM MICROPHONES

    For CB amateur, fixed station or mobile uses. "Shaped" voice response patterned after professional moblle and SSB a mateur response curves for maximum intelligibility. Frequency Response: $200-4000$ cos free from undesirable peăks. Omnidirectional polar pattern. Push-to-talk, nonlocking switch. Shatter-proof plastic case. Kinkproof 5.ft. extended colled cord. Hang-up bracket. Size? $23 / /^{\prime \prime} \mathrm{W} \times 1$ 5/8"Ox4"H. Mounting bracket furnished.
    Shure Model 201-Ceramic type, Impedance: High. Output Level: 55.5 do below 1 v. per microbar. Threeconductor (one shielded) cable Shipg. wt., 2 lbs.

    ## M-18B

    Net 10.58
    Shure Model 401A-Controlled magnetic type. Imped. ance: High. Output Level: 49 db below 1 v , per microbar Three-conductor (one shielded) cable. Shpg. wt., 2 lbs. M-187 Net 12.94
    Shure Model 4018 -Controlled magnetic type. Impedance: Low. Output Level. 48 db below 1 mw per 10 microbars. Four-conductor (two shielded) cable. Shpg. wt., 2 lbs.
    M.188

    Net 12.94
    

    ## JT. 30 CRYSTAL MIKE

    Dependable high output crystal micro. phone for PA and recording use. Respanse $30 \cdot 10,000$ cps. Output -49 db , high impedance ( $1-5$ megohms). Complete with base and detachable $8 . f t$. cable. Streamline die-cast case with gray Hammerlin finish. Size $8^{\prime \prime}$ high (with stand), 2K" dia. grille, $5^{1 / 8^{\prime \prime}}$ dia. base. Shpg. wt., 3 lbs. M. 152

    Net 10.82

    ## MODEL D. 104 MICROPHONE

    Used extensively by radio amateurs for its high intelligiblifiy and "punch." Responds with rising characteristics from $500-4,000$ cps. High output sealed crystal element is impervious to moisture. Output level -46 db . Chrome finished mesh grille and body. With 5 -ft. single conductor, shielded cable and adaptor to 5t"" - 27 thread. Shpg. wt.. 174 lbs. M. 162 Less Stand Net 18.23 MODEL GD-104. Same as D-104 except with pustrto-talik stand. Shpg. Wt., 4 lbs. M-161

    Net 30.11

    ## MODEL 150 RECORDER MIKE

    Low cost, high output microphone weighing only 3 ounces. Response $30-10,000$ cps. Output -44db, high impedance (1.5 megohms). Grey impact-resistant case, aluminum anodized grille. 5 ft . single conductor cable. Size 2Kdyx $2 \%_{1} W$ K11/4"D. Shpt. wt., $3 / 4 \mathrm{lb}$.
    M-156
    Nel 3.82

    ## 

    MODEL 151 CERAMIC MIKE
    Similar to Model 150 but ceramic type Output - 48 db . Response $30-8000 \mathrm{cps}$ Shpg. wt., $3 / 4 \mathrm{lb}$.
    M-160
    Net 3.82

    ## Model 332 CRYSTAL MIKE

    Popular Iightwelght crystal microphone for general purpose use. Response 30 15,000 cps. Output -54 db , high Im pedance. Ideal where size and weight are a premium but good quallty is required. Tapered die-cast housing. Satin chrome finish, chrome cap and black grille. 8 ft . single conductor cable. Bulti-in ON-OFF switch with lock-on provision. With lavalier and stand adapter for $56^{\prime \prime}-27$ thread. $41 / 2^{\prime \prime}$ long, adapter for $5 \mathrm{~b}^{\prime \prime}-27$ threa
    $1 \mathrm{M} / \mathrm{dla}$. Shpg. wt.. 1 lb .
    M-158
    Net 10.53
    A7 Stand For Model 332, microphone. Shpg. wt., $1 / 4 \mathrm{lb}$. M-159

    Net 1.44

    ## MODEL 331 CERAMIC MIKE

    Voice range ceramic for communications CB \& paging. Momentary-on, spring-re. turn switch. $300-5,000 \mathrm{cps}$. High im pedance. Output -56 db . Cable for audlo \& pelay connections. Hang-up audio s pelay connections
    bracket. Shpg. wi.. 1 lb. bracket. Shpg. wt.
    $\mathrm{M} \cdot 157$ Less Stand

    Net 10.53

    ## SHURE 444 HAM MICROPHONE

    New modern design controlied magnetic type, ideal for voice. Sharp high and low frequency cut-offs. Response $300-3000$ cps. Output -52.5 db . High impedance. Adjustable stand with push-To-talk switch with optional locking feature to operate relay control and muting circuits. Separate switch to disable relay control circuit for vox operation. Gray case. 7-ft. 2-cond. shlelded cable. $4^{\prime \prime} \mathrm{w}^{\prime} 5^{\prime} \mathrm{Ks}^{\prime \prime} \mathrm{Dx} 10 \mathrm{5} / 6^{\prime \prime} \mathrm{H}$. Shpg. Wt., 4 lbs.
    M. 189

    SHURE 450 "DISPATCHER" MICROPHONE
    Simillar to 444 above. Switch selected high or low impedance, $100-9000 \mathrm{cps}$. 7.ft. 4-cond. cable ( 2 shielded) Push-to-tath switch with optional locking feature for independent mike and relay circuits; relay portion normally open, mike portlon adjustable to open or closed. Shps. wt., 4 tos. M-190

    Net 29.11

    ## LAFAYETTE DYNAMIC CB <br> PUSH-TO-TALK MICROPHONE <br> - Specifically designed for CB use <br> - Lightweight Spring Return Sw <br> New top quality dynamic microphone at a price you can afford. Specifically designed for citirens band and communication transcelvers. Attractive design in black and chrome; tapered styling to fit the hand easily. High impedance dynamic transducer will not be adversely affected by heat and smooth frequency response of 100 to 11,000 cycles make it most suitable for communications work-indoors or out. Comes equipped with a momentary push-to-talk switch, coiled rubber cable with a 5 -prong plug and a convenient hang-up bracket. Shpg. wt., 1 lbilmported Sprong PA- 274 <br> NEW! LAFAYETIE PUSH-TO-TALK NOISE CANCELLING CERAMIC <br> - For Citizens Band, Amateur and PagIng <br> MICROPHONE

    Net 8.95

    Lafayette's new nolse cancelling, high output ceramic push-to-talk microphones are designed to reproduce clean, crisp audio with full modulation with as little noise pickup as possible. High level, high impedance output. Molded, lough, gray Cycolac im case assures long life and protection from accidental shock dam. age. DPDT switch. Wired for standard Relay Swliching as used in Lafayette HE-20, 20A, 208, HE-43, 43A. 43B, H8-111, HB-222, etc. of for Electronic Switching as used in Lafayette HE-20C, HE-90, etc; Slize: $21 / 2 \times 7 \% \times 35$, 6 ". 3 -conductor coiled cord. $10^{\prime \prime}$ retracted, 1 conductor shielded. Complete with hang-up bracket and Amphenol 91-MPMSL plug attached for Lafayette Transceivers. Shpg. wt., 1 lb . MADE IN U.S.A. $\mathrm{M}-243$ For Relay Switching

    5

    ONLY

    Net 6.95

    ## Page 326

    # LAFAYETTE FINE QUALITY MICROPHONES 

    ## LAFAYETTE <br>  <br> CRYSTAL <br> MICROPHONE

    Excellent for PA systems, home recorders and general applications. Frequency response 30 to 10,000 cycles. Output level - 52 db provides ample output for use with low gain ampliflers. Uses quality moisture sealed crystal; Die cast case in rich green baked enamel finish with chrome grilt. Completely equipped with 5 feet of Shielded cable. Mike may be used on any stand with $5 /{ }^{* *}-27$ thread. Grill diameter $2 y^{\prime \prime}$, depth $4 y_{4 " \text { ", helght }}$ $41 / 2{ }^{2 \prime}$ Shpg, wt., $31 / 2$ lbs. Imported.
    PA. 24
    Net 3.95
    

    Here Is a microphone with a $360^{\circ}$ pickup, and the added power and sensitivity of two individually shock mounted and phased crystal cartridges. This arrange. ment assures you of maximum pickup from all sides, Swivel mounted to glve fuller flexiblity. Case is chrome plated, Standard $58^{\prime \prime \prime}-27$ thread, Overall size $7 \mathrm{H} \times \mathrm{J}^{\prime} \mathrm{W}$ complete with 4 ft. cable. Shpg. wt., 2 lbs. Imported PA-17

    Net 4.95

    ## NEW REMOTE CONTROL HAND DYNAMIC MIKE

    

    - Built-in Remote Control Switch
    - High Sensitivity
    - For Field or Home

    Now, you may control your tape recorder by a handy, built-in push-to-talk switch that also features a slide-to-record position. Press to record for on-the-spot recordings or slide switch for more lengthy material. Case is of high-impact plastic for rugged, lifetime use. Perfect for either home or field use. Specs: 200-9,000 cps; Impedance 600, 50 K ; sensitivity - 77 db @ $600 \mathrm{r},-57 \mathrm{db}$ @ 50 Kll : Size: $11 \mathrm{~K}_{2} \times 5 \frac{1}{3} \mathrm{x}^{1} \mathrm{~K}_{4}{ }^{\prime \prime}$. Perfect for the Lafayette's RK-126L Technicorder. Imported RK-131

    SLIM CRYSTAL MICROPHONE VERSATILE DYNAMIC MICROPHONE
    

    A slim crystal microphone for desk top or hand-held use that is uniquely designed for universal application, smartly styied and attractively finished. Changes in temperature and humidity do not affect Its efficiency, nor does increasing the cable length increase noise or change frequeney characteristics. Ingenious swivel mounting permits horizontal and vertical rotation for most conventent angle of use. Microphone easily removed from base for holding in hand, Microphone, base, grill and all fittings are chrome finished. Has a wide range smooth frequency response and an omnidirec tional polar pattern. Built-in tocking type on-off slide switch. Microphone is only $5^{\prime \prime}$ long $x 1^{\prime \prime}$ max. dia. Shps, wt., 2 lbs. Imported
    PA-45 Microphone Complete with Stand
    Net 3.95

    ## "DYNA-SLIM" MICROPHONE

    - HIGH IMPEDANCE - 50,000 OHMS
    - ON-OFF SWITCH
    - "QUICK-SLIP" ADAPTER


    ## 695

    Oynamic, high output microphone with streamlined styling. Output level -55 db . Smooth response from 60 to 10,000 cycles. Omnidirectional head. External on-off switch. Silps on or off stand adapter in a wink. Standard 5 " 8 " 27 adapter permits tilting mike for multi-angle use. Satin black and chrome finish. Complete with detachable cable and connector. $8^{\prime \prime}$ long, $11 / \mathrm{a}^{\prime \prime}$ max. dia. tapered barrel $7^{* s}$. Shpg. wt., 2 lbs.
    PA-43 Imported
    Net 6.95
    

    HI-IMPEDANCE CRYSTAL MIKE

    - exceptional performance at this LOW PRICE
    - IDEAL

    REPLACEMENT
    MIKE FOR TAPE RECORDERS

    ## 295

    

    An attractive high quallty microphone that is outstand. ing for tape recorder as well as countless applications requiring a reliable hi-impedance crystal microphone. Has a frequency response of $30-10,000 \mathrm{cps}$ and an output level of - 51 db . Can be used as very neat desk microphone or can be conveniently héld in hand. Housed In neat plastic case and is supplied with 8 foot flexible, singfe conductor shlelded cable. $3 \times 24 /{ }^{* \prime}$. Shpg. wt. 1 lb .
    

    FOR DESK-TOP, HAND HELD, OR LAVALIER USE
    

    - high impedance-50,000 ohms - RESPONSE-40-9,500 cps

    Beautifully designed and aftractively finished high Impedance, light weight dynamic microphone with swivel mount that permits horizontal and vertical rotation for most convenient angle. Microphone quickly and easily released from felt-lined base clamp for holding in hand of for clamping to neck band for use as lavalier microphone. Baked enamel case with chrome finished base, grilie and fittings. Ruggedly constructed to withstand plenty of handing. $3^{\prime \prime}$ long $\times 11 / /^{\prime \prime}$ diam. housing with 5 ft . shlelded cable. Imported
    PA-48 Shps. wt., 2 ibs.
    Net 6.95
    

    Here is a fine slim-line design, only $45 / \mathrm{Lx}^{2} 11 / \mathrm{s}^{\circ}$ diam. Comes complete with swivel adapter to fit all standard mike stands, and lavalier cord and brackel which leaves both hands free Smooth wide range response lockin's type on-off sllde switch detachable 7 ft . cable and con Detachable 7 ft. cable and con nector. Shipg. wt., 2 lbs. Imported.
    Pa-31 Singly Each
    3.95

    ## HIGH IMPEDANCE DYNAMIC MICROPHONE FOR HOME RECORDING <br> 2 $4^{75}$ <br> 2 for 895

    

    - Ideal Mike for Home Recording Use
    - Frequency Response: 60-10,000 CPS
    - Impedance: 50,000 Ohms

    An outstanding value in a microphone for home use Frequency Response: $60-10,000 \mathrm{CPS} \pm 10 \mathrm{db}$. Output Level: - 57 db (o) 1000 CPS. Impedance: 50,000 Ohms. Complete with $61 / 2$ ' shlelded cable with plug. Size. $15 / 8 \mathrm{~W} \times 21 / 4 \mathrm{Hx} 7 / \mathrm{s}^{\circ \mathrm{D}} \mathrm{D}$. Shpg. wt., 8 oz . Imported
    PA-401
    Net ea. 4.75
    2 for 8.95

    # LAFA YETTE DELUXE MICROPHONES 

    LAFAYETTE STEREO DYNAMIC MICROPHONE
    

    ## AT A PRICE YOU CAN AFFORD

    2 Separate Omni-Directional Patterns $90^{\circ}$ Apart Give Full $360^{\circ}$ Pickup

    - Compatible for Stereo and Monaural Operation
    - Stereo-Monaural Switch
    - Satin Chrome.Plated
    - All Metal Construction
    - Excellent for Orchestras. Combos. Concerts and Theatrical Groups

    Lafayette offers a new, outstanding Flexible stereo dynamic microphone. Designed by leading audio engineers, the PA. 263 cifers you outstanding performance at a price you can afford. Completely ellminates need for two mikes, Constructed and designed to obtain the optimum in stereo effect and monaural pick up. Alsoexcellent for oick-up of "reverberation" for full dimensional sound. Mounted on toople-proof, heavily weighted, all metal base. Uses gland type swivel joint. Also adaptable to all type floor stand mounts. Frequency response $50-15,000$ cos. Practically flat $80-10,000 \mathrm{cps}$. Impedance 50 K ohms. Polar Pattern-2 omnidirectional patterns $90^{\circ}$ apart-comes complete with mike cable, Shpg. wt., 6 lbs. Pa-263 Imported

    Net 17.95
    

    ## NEW! LAFAYETIE'S PA-400 UNIDIRECTIONAL

    

    ## EASY BUDGET PLAN SEE PAGE 412

    A carefully engineered, unidirectional dynamic microphone designed to meet the highest standards of PA or communications users. Highly desirable cardioid pattern provides a significant front-to-back signal ratio to suppress nolse, reverberations, and feedback. Front switch is provided to switch from a high to a low impedance output (HI $\rightarrow 50 \mathrm{~K}$, low 600? ). Comfortable hand-held design or may be mounted on any standard thread stand ( $5 \mathrm{~s}^{\prime \prime \prime}-27$ thread). Frequency response is from 90 to $10,000 \mathrm{cDs}$ for excellent sound reproduction qualities. Comes complete with 10 feet of 2 -conductor shielded wire (balanced type). Attractively finished in contrasting black and silver. Shpg. wt., 21/2 Ibs. Imported
    PA. 400
    Net 21.50

    ## ARGONNE ALL-PURPOSE DYNAMIC MICROPHONE

    - ideal for tape recoroing, paging, communications
    - DUAL IMPEDANCE-250 \& 50,000 OHMS
    - USABLE RESPONSE 50-18,000 CPS
    - for hand-helo, oesk or flodr STAND USE
    Here is a flexible dynamic microphone with characteristics suitable for almost any application. Ruggediy constructed, with tapered cast-metal body and removable base for desk use. Mounts to the base by means of a $360^{\circ}$ swivel adjustable ball joint and fitted with an adapter for standard 5 /a"-27 foor stand. SPECIFICATIONS: FREQUENCY RESPONSE-Practlcally flat 80-10, $000 \mathrm{cps} ; \pm 5 \mathrm{do} 70-13,000 \mathrm{cps}$. OUTPUT- 70 db below 1 volt/microbar at $1,000 \mathrm{cps}$. DUAL IMPEDANCE: LOW ( 250 ohms), High ( 50,000 ohms) unbalanced. Size $9^{\prime \prime}$ high (with base), $\mathbf{2}^{\prime \prime}$ dlam, at head, tapering down to $3 / 4^{\prime \prime}$. Base diam. $4^{\prime} \mathrm{K}_{1}{ }^{\prime \prime}, 1^{3 / /^{\prime \prime}} \mathrm{high}$. Shpg. wt., 6 lbs.
    AR.j Dynamic microphone, complete with base, floor
    AR. 3 Dynamic microphone, complete with base, floor
    stand adapter, and $8^{\prime}$ cable Imported


    ## DYNAMIC MIKE

    - Switch for Hi or Low Impedance
    - Unidirectional Pick-up Pattern
    - Hand-held or Stand Mounted
    

    STUDIO DYNAMIC MICROPHONE FOR HOME, OFFICE OR STUDIO USE

    OXLY

    ## $11^{95}$

    - frequency bes. PONSE 50.11,000 CPS. - HIGH IMPEDANCE 50,000 OHMS - HIGH OUTPUT

    This high quality omni-directionai microohone has a swirl rigeed aluminum diaphrasm completely sealed and gasketed against high humidity and temperature and gasketed against high humidity and temperature
    conditions, the PA-49 proves ideal for a wide variety conditions, the PA-49 proves ideal for a wide variety
    of applications, such as tape recording, church, choral troups and theatrical use. The $360^{\circ}$ slirruped shaped bracket provides for mounting with any 5 "" -27 thread floor, desk stand or boom mount. Finished in an attractive gunmetal grey the microphone is supplled with $41 / 2{ }^{2}$ shielded cable. Shpg. wt., 1 lb .
    Ph-49 MICROPHONE Imported
    Net 11.95

    ## SLIM DYNAMIC <br> MICROPHONE

    - dual impeoance 50,000
    AND 250 OHMS
    - high Dutput
    - 50.11,000 CYCLES
    - use on stand or as HAND MIKE

    The latest design In slim type microphones. A high-output dynamic mike of exceptional ouality. Has very smooth response from $50-11,000$ cycles. Bullt-in response from $50-11,000$ cycles. Bullt-in
    external switch gives you choice of external switch glves you choice of
    either high impedance ( 50,000 ohms) or low impedance ( 250 ohms). Omnithonal tilable head. Bracket has standard sta". remoread for use on stand. This bracket is instanily removable so mike can be hand heid. Has cast case with satin-chrome finish and acoustically correct grille head. Ruggedly constructed. Size: $8^{\prime \prime}$ long, $114^{\prime \prime}$ diam. barrel. Shpg. wt., 2 lbs. Imported
    PA-29

    # Lafayette Musical Instrument and Miniature Microphones 

    NEW! TIE CLASP SUBMINIATURE
    

    DYNAMIC MICROPHONE 295 This tiny dynamic microphone can easily be concealed in ordinary clothing -ideal for detection and investiga. tion purposes. May be used with a pocket recorder or transmitter for a completely concealed system to record or relay conversations. Microphone is only $1 \times 5 / 9 \times 3 / 8{ }^{\circ \prime}$. mounted on a $2 \frac{1}{8}$ " clasp. Frequency range, 200 to 5.000 cycles - more than adequate for perfect speech Intelligibility. Impedance, 3000 ohms $\pm 25 \%$ at 1 Kc . Intelligibility. Impedance, 3000 ohms $\pm 25 \%$ at 1 Kc.
    Pa. 289 Imported Shpg. wt., 3 oz .
    

    MAGNETIC TYPE AlNico $\checkmark$ MAGNET 695

    FOR GUITAR
    WITH F HOLES
    Complete with Individual Volume Controls

    High impedance contact type microphone specially designed for use with gultar. Easily mounted under strings without special attachments. Separate variable tone and volume controls permit wide adjustment to suit personal requirements. While in mounted position, microphone unit can be ralsed or lowered easily on rod to create varying tonal effects. Supplied with 8 ft . cable and attached standard size phono plus for connection to ampllfier. Shpg. wt., $2^{1 / 2}$ los.imported
    PA-38 Gultar Microphone
    Net 6.95
    

    ## CRYSTAL MICROPHONE CARTRIDGE

    - Replacement for Astatic Shure, and Many Other Popular Microphones

    A universal crystal microphone cartridge with heavy flexible rubber cushioned rim designed for speedy, eco nomical repair. Fits tens of thousands of the most popular microphones such as the astatic JT30 etc. Overall diameter $21 / \mathbf{g}^{\prime \prime}$. depth $1 / 2^{\prime \prime}$. Output- 52 db . Excellent frequency response. Shpg. wt., $8 \mathbf{0 z .}$ Imported PA. 27

    Net 1.49
    

    MINIATURE CRYSTAL
    MICROPHONE

    Here's a typlical Lafayette special for the experimenter student or dealer. An extremely sensitive and smali crystal microphone used in hearing alds and other small apparatus. Can be used as lapel mike-miniature trans. mitter mike-for concealed locations, etc. Its size and performance gives it Joint versatlity. Size only $11_{10}^{\prime \prime \prime} \times$ Ko $_{6}^{\prime \prime}$ deep. Shpg. wt., 6 ozs. Imported MS-108

    Net 1.49
    

    - Specially Designed Ceramic Element
    - Frequency Response: 30 10,000 CPS
    - Requires Only 15 Minutes Assembly Time
    The ideal microphone for audio enthusiasts, amateurs, education and sound laboratorles. Employs an attractive lightweight cast aluminum housing with a specially de. signed. rugged ceramic element which is unaffected by signed, rugged ceramic element which is unaffected by
    temperature and humidity. Frequency Response is $30-$ temperature and humidity. Frequency Response is $30-$
    $10,000 \mathrm{CPS}$. Sensltivity at 1000 CPS is -52 do . As 10,000 CPS. Sensitivity at 1000 CPS is - 5200 . As:
    sembles easily in only 15 minutes. Complete with $36^{*}$ cable. Size: $174 \times 41 / 2^{\prime \prime}$.
    M-70 Shpg. wt., $11 / 2$ ibs.
    s. ...

    Met 6.88

    ## GUITAR MICROPHONE

    

    ## - FOR F HOLES

    Add brilliant rich tone to your present guitar. Features controlled output power for each string, separate tone and volume controls and removable amolifler cord Complete with mounting accessories with mounting accessories. $101 / 2^{\prime \prime}$ long. Shpg. wt., 10 oz . Imported
    $\begin{array}{ll}\text { PA-296 } & \text { Net } 6.95\end{array}$

    $$
    \text { Ner } 6.95
    $$

    

    SUBMINIATURE CRYSTAL MICROPHONE

    ## Only

    $13 / 8 \times 1 \times 1 / 4^{\prime \prime}$ Deep!

    Extremely sensitive and small rectangular microphone for concealed locations, hearing aids, and other minlature equipment. Also suitable as a lapel or miniature transmitter mike. Experimenters, students and hobbylsts will find many applications for this useful, low cost Item. Shpg. wt., 4 02. Imported
    PA-40

    MINIATURE DYNAMIC MIKE Specifically designed for use in miniaturized equipment. 600 ohm impedance matches most transistor circuitry calling for dysistor circuitry caling for dy-
    namic microphones. Ruggednamic microphones. metal encased-to resist mech. anical shock and variations in heat and humidity. Measures oniy $1 \mathrm{~K}_{6}$ " dia. $x K_{0}^{\prime \prime}$ thick. High sensitivity in the voice range. Frequency response 300 to 5000 cps. Output $=73 \mathrm{db}$. Includes $4^{\prime \prime}$ flexible lead terminals. Shpg. wt., 4 ozs. Imported
    
    

    - Tone and Volume Controls
    - Ideal for Beginners and Professionals Now accordion owners may enjoy all the advantages of electronic amplification previously limited to stringed instruments. The PA-101, coupled with an amplifier-speaker of P.A. system. provides flexibility impossible with an accordion aione. Alone, it provides a direct pickup for tape recording, eliminating the extraneous noise picked up by a conventional microphone. Included are a case-mounted control bracket containing the volume and tone controls, an output jack, a 10 foot connecting cable complete with phone plugs on both ends, and installation in structions. Shpg. wt., 2 Ios. Imported
    PA-101
    Net 5.95
    


    ## LAPEL

    MICROPHONE

    - Full-55 db. Output Level! Ideal Ceneral Purpose Mike

    195

    Ideal general purpose mike. Speclally engineered crys. tal Microphone. Allaches to lapel. Only $156{ }^{2}$ " In diameter. Exceptional frequency response. Output level -55 db. Chrome plated case and clip for attaching to lapel. Includes 5 ft . of shielded cable. Shpg. wt., 1 lb . PA-9 Imported
    

    ## MUSICAL CONTACT MICROPHONE

    Easily Attaches to All String Instruments This low priced. high qualt. ty contact microphone Is ideal for amplificaztion of single stringed instruments such as guitars, Danjos, mandolins, cellos, ukeleles, etc. Provides rich, natural reproduction of the actual tone with sufficient amplification to be heard in a large halt. The clamp bar on the mike slides directly under the sounding board cutout to give a secure fit. Comes equipped with 8 ft . cable for connection to public address amplifiers, tape record. ers or radios. Frequency response $40-9,000$ cos. High Impedance. Size: $14 / 2 L x^{1 / 6}, W x \%_{0} " O$. Shpg. wt., 12 ozs. Pa-41 importedNet 1.95
    

    ## HARMONICA CONTACT MICROPHONE

    ## This is a fline quality, sensi.

    tive, crystal contact micro. phone with a high output that is especially designed to fit harmonicas. When the relatively weak sound of arent harmonica is amplified, the results are astonishing. The microphone may be connected ta any P.A. system, the audio section of a phonograph, or radio. Installation is simple. The microphone brarket slips under the screw on the bass end of the harmonica and the leads connect to the amplifier system. It is sturdily bullt and measures only $15 / 8 \mathrm{Lx} 5 / 6 \mathrm{~W} x^{3} / 6^{\prime 0} \mathrm{D}$. Complete with 7 ft . shielded cable. Shpg. wt., 12 ozs. Imported

    # MICROPHONE STANDS-CONNECTORS-PA ACCESSORIES 

    

    Model MS-10C Full Grip Mike Stand. Ecomonical mike stand teaturing "Full-Grip" clutch mechanism for fast quiet adjustments without sllpping and wear. Functionally designed base assures maximum stability and includes self-leveling, shock-absorbing pads plus 3 "antitip" points. Full chrome plated tube assembly. Terminates in a $5 / 0^{\prime \prime}-27$ thread. Base dia. $10^{\circ}$, finished In gray shrivel. Helght adj., 35 to $64^{\circ \prime}$. Shpg. Wt., 9 lbs. MA. 35

    Model MS-12C. As above but with tube extension to $65^{\prime \prime}$. Shpg. Wt., 12 lbs.
    MA-27
    Model MS-11C. As above but with full chrome finished Dase.
    MA- 28
    Net 8.09
    Model MS-12S "Sleeve Action" Mike Stand. New mike stand featuring a fully automatic means of height adjustment. To lower the stand, just press on the 'sleeve Action" controt. To raise the stand, any point on the tube can be grasped. Quiet and smooth action. Hit. 35 to $65^{\prime \prime}$. Base dia. $10^{\prime \prime}$. Standard thread. Shpg. wt., 12 los. MA. 29 .
    

    Attractively styled crystal microphone for all general applications such as public address and home record. ing. Frequency response $30 \cdot 10,000$ cycles. Output level- 52 db . Tilting head, attractive plastic case. level- 52 sib.
    Can be used on any stand ${ }^{\text {with }} 5 / /^{\prime \prime}-27$ thread. Completely equipped with 5 - ft . plastic covered shleided cable. Grill diam. $21 / 4^{\prime \prime}$, depth $31 / 2^{\prime \prime}$, height $4^{\prime \prime}$. Shps. wt. 2 lbs. Imported
    PA. 42
    Net 2.95

    NEW LAFAYETTE GENERAL PURPOSE CRYSTAL MIKE
    

    - For Desk-Top, Hand-Held Use - Full -55 DB Output Level
    - Excellent Frequency Response An attractive, specially engineered general purpose crystal mike for desk-top or hand-held use. Excellent frequency response. Output level - 55 db . Only $15 / \mathbf{a}^{\prime \prime}$ in diameter. Includes $5 . \mathrm{ft}$. of shlelded cable for connection to tape recorders, public address ampliconnection to tape recorders, public address ampli-
    fiers and radios. Chrome plated stand. Shpg. Wt., fiers and radios.
    $11 / 4$ los. Imported
    PA. 404
    Net 1.95

    Model CS-32 Demountable Stand. Revolutionary in design, this mike stand is fully collapsible to fit in amplifler or speaker carrying case. No tools needed. Self-levelling legs are skid-proof. Features "Full-Grip" and "Velvet Action." Adjustable from 36 to 64 in. Fully chrome plated. 5""-27 thread. Shpg. wt., 5 los. M-21

    Net 7.35
    Model CS 33. As above but with ht. adj. of $26-64^{\prime \prime}$. Collapses to $221 / 2^{\prime \prime}$
    MA-22 Net 8.53
    Model DS.5. "Velvet Action" Desk Stand. Same qualIty as floor models. Base dia. $6^{\prime \prime}$. Finished in gun metal shrivel. Fixed ht., $4^{n}$. Shpg. wt., 2 los.
    MA. 23
    Net 1.91
    Model DS-7. As above but with ht. adj. 8 to 13". Shpg. wt., 3 lbs.
    M. $\mathrm{M} \cdot 24$

    Net 3.23
    Model TS. 8 Adjustable Stand. A decorative and fine appearing stand, suitable for use on a banquet table. Features qulet "Full Grip, velvet Action" control. Adjustable from $141 / 2^{\prime \prime}$ to $26^{\circ}$. Base diameter $8^{\prime \prime}$. Fully chrome-finished base and tube assembly. Shpg. wt., 5 lbs.

    Net 6.03

    Model BS. 36 Professional Boom Stand. Offers a removable 62" boom. "Safety Air-lock Cushion" ellmimates slippage. The gyromatic swivel joint at end of Boom always keeps mike in proper position. Base is $17^{\prime \prime}$ in diam., with shock mounted pads. Vertical adj. 48 to $72^{\prime \prime}$. All tubes super-chromed plated. Finished with "Snap-On" hangers for holding cable to boom. Shpg. wt., 33 lbs. Shipped express only.
    MA-20 WX
    Net 39.10
    Model BE-1 "Baby Boom" Attachment. Use with any mike stand. $32^{\prime \prime}$ long. $3 / 6^{\prime \prime}-27$ thread. Chrome plated. All swivel parts are precision die castings. Shpg. wt., $31 / 2 \mathrm{lbs}$.
    MA. 19

    ## FLEXO MIRESTER

    Model 1. Versatile mike stand with an extremely flexible arm, providing wide range of adjustment. Swings out $36^{\prime \prime \prime}$ in any direction. Ideal for use in radio broadcast or recording studios, offices, airport, switchboard, theatres, night clubs, school's, hotels. Handles any mike up to 4 libs. In weight. Clamps or screws to any horirontal or angular surface up to $3^{\prime \prime}$ thick. Shpg. wt . $41 / 4$ lbs.
    M. 141

    Net 8.23SWITCHCRAFT "MINI-MIX"AUDIO MIXER
    

    Miniature 2 -input hi-impedance mike and phono mixers. Separate gain controls for mixing. Shielded housing. Ideal for use with tape recorders, musical instruments, phonographs, microphones. Size: $21 / 6 \times 1{ }^{\prime} K_{1} \times 1 K_{4} "$. Shpg. wt., $11 / 4 \mathrm{lbs}$.
    320 - Microphone connector inputs and outputs.
    MS.858 Microphone connector inputs and outputs. 4.67
    310 - Phone jack inputs and phone plug output. MS. 856

    Net 4.67
    A compact microphone mixer capable of providing professional results. Mixer controls from one to four signals from hi-impedance microphones, tuner, phonograph and/or recorder. Permits amplifying or fading of any channel while holding the volume of other channels. Inputs accept standard 2.circuit phone plugsoutput jack accepts standard circuit phone pin plugs. Requlres single 9-volt battery (not supplied). Size 6 Wx $21 / 4 \mathrm{H} \times 31 / 22^{\prime \prime} \mathrm{D}$. Shpg. wt., $11 / 4 \mathrm{lbs}$. Imported
    PA-292
    Net 4.85
    BA-2 Battery for above

    ## TRANSISTORIZED MIKE MIXER

    

    - Up to 4 Channels
    - Matches Hi Impedance Microphones

    311 - Same as above but with longer plug to fit re. cordërs with recessed jacks.
    MS-929
    Net 5.26
    315 - Phone jack inputs and microphone connector output.

    Net 4.67
    316 - Phono jack inputs and phono plur output.
    MS.930
    
    

    HI-FI WEATHERPROOF COAXIALS MOOEL MLC COAXIAL SPEAKER SYSTEM - For music and paging. Exceptionally natural sound. 15 watts; 150 . $15,000 \mathrm{cps} ; 120^{\circ}$ dispersion 8 ohms; $127 / 4 \mathrm{Wx} 91 / \mathrm{hHx}$
    

    ## INDOOR/OUTDOOR WEATHERPROOF

    HI-FI SPEAKER MODEL CLCDesigned for natural voice and music reproduction. Response: $55-14,000 \mathrm{cps}$ Power Rating 30 watts. Imped. 8 ohms. Dia. $221 / 4^{\prime \prime}$ Depth, $12^{11 / 2 .}$. Shpg. wt., $191 / 2 \mathrm{lbs}$. PE-186WX.........NO MONEY DOWN................... 68.50

    ## UNDERWATER SPEAKERS

    Completely waterproof speakers for use in swimming pools. Excellent speech and music reproduction. Stainless steel protective cover for special nyion diaphrasm and siticone treated gaskets. Heavy 18 foot connection cable with third wire for grounding. 25 watts. 16 ohms. MM-2UW-For bracket mig: $6^{\prime \prime} 0.0 .5^{\prime \prime}$ deep. Shpg. wt., $51 / 4$ lbs
    PE-119
    Net 43.66
    MM-2FUW-For flush mtg. $65 / \mathrm{m}^{\prime \prime}$ dia, circle $71 / 4^{\prime \prime} 0.0$. $33 / 4$ " deep. Shpg. wt., 6 lbs.

    Net 43.66
    

    EC-10

    ## PAGING

    SPEAKERA powerhouse of crisp sound for a wide variety of applications. Ideal where space, weight and appearance are factors. Advanced speaker technology includes, hi-impact, tough-plastic horn and throat sections, vibration-free and weather-proof; ceramic magnet in driver unit for high efficiency; adjustable steel mounting bracket. Power 6 watts
    imped. 8 ohms; Response. $400 \cdot 10$, 000 cps 0 arall imped. 8 ohms; Response: $400 \cdot 10,000$ cps. Overall length $63 /^{\prime \prime}$. Bell dia., $61 / 4^{\prime \prime}$. Shpg. wt., 3 lbs. PE-63

    Net 14.25
    

    ## "BARD" OUTDOOR

    HI-FI SPEAKER- For Patio, Pool, Garden Capable of producing high quality distortion.free sound. Rigid hemispherical steel encloseure enhances the response of the enclosed Bozak B-800 speaker unit with its fully waterproof cone. Size $18^{\prime \prime}$ diam. $x$ $21^{\prime \prime} \mathrm{H} \times 12^{\circ} \mathrm{O}$. Phone jack input (plug supplied). impedance 8 ohms. 40 watts max. Range $80-15,000 \mathrm{cps}$. with carrying handle, adjustable trunnion, base.
    PE-175WX Shpg. wt., 28 lbs.
    

    Net 79.50

    ## COMMERCIAL AND INDUSTRIAL LOUDSPEAKERS AND ACCESSORIES

    

    DIRECTIONAL REFLEX TRUMPETS
    High efficiency directional projector horns made of heavy gauge spun aluminum. Weather proof; gray finish. With universal "U" type mounting bracket, less driver unit.
    Type GH: 85 cps cut off for music. Types LH and PH: 120 and 150 cps cut off for general use. Type SMH: 200 cps cut off for voice only. Stock No. Mal. Diam. Lng. Air Col. Wh. PE-75WX GH $307 / 8^{\prime \prime} 271 / /^{\prime \prime} 61 / 2^{\prime} \quad 22 \mathrm{lbs}$. 4446
    
    

    ## UNIVERSITY ACCESSORIES

    MODEL 5433 LINE MATCHING TRANSFORMER - 30 watt.
    Primary 45/165/200/250/500/1000/2000 ohms; second. ary 4,8 and 16 ohms. 70 volt line laps $30 / 25 / 20 / 10 / 5 /$
     housing. Shpg. wt., I 10 . Not illustrated. PE-108

    Net 4.53
    MOOEL 5434 LINE MATCHING TRANSFORMER - 15 -watt. Primary $45 / 325 / 500 / 1000 / 2000 / 4000 / 8000$ ohms; secondary $4 / 8 / 16$ ohms; power taps with 70 volt line 15/10/5/2.5/1.25/.65 watts. $15 / 4 \times 11 x_{0} \times 15^{\prime \prime} 8^{\prime \prime} 2^{\prime \prime}$ centers. fits CTR and PB.l housings. Shpg. Wt., $3 / 4$ it. Not illus. Prated.

    ## E-109

    Net 3.88
    

    PAGING 8 TALK-EACK SPEAKERS
    Small, weatherproof highly-efficient horns and drivers for maximum penetration in noisy and farge areas. Model $18-A-8$ - Response $250-23,000 \mathrm{CDS}$; power capacity 15 watts; 8 ohm voice coil; $90^{\circ}$ dispersion angle; $10^{\prime \prime}$ diam. $91 / 4^{\prime \prime}$ deep. Shpg. wt., 4 lbs,
    PE-90
    Net 20.29
    Model 18-A-45-Same as abore with 45 ohm voice coil. PE-91 .............................. 217
    Model 1B-A-4-Same as above with 4 ohm voice coil. PE-92

    Net 21.17
    Model MIL-A-Similar to 18 -A-8. Rated at 7.5 watts. $120^{\circ}$ dispersion. $7{ }^{13}{ }^{" \prime}$ Olam. $6 \%$ " Deep. 8 ohm voice coil. Shpg. wt., $31 / 4$ lbs.
    PE-93
    Net 16.67
    PE. 94 Same, 45 ohm
    m Net 17.74 Net 17.74

    ## WIOE ANGLE SPEAKERS

    Model CIBA-8 "Cobra" horn with uniform wide angle $\left(120^{\circ}\right.$ x $60^{\circ}$ ) dispersion. 250 to $13,000 \mathrm{cps}, 25$ watts. Omniswivel mig. $73 / \mathrm{HHxl} 4 \mathrm{~W} \times 12^{\circ \prime} \mathrm{O}$. 8 ohm voice coll. Shpg. Wt., $54 \%$ lbs.
    PE-123 8 ohm
    PE. 124 Same, 45 ohm
    Net 27.05 Net 28.02 Net 28.02

    ## DELUXE SERIES OF DRIVERS FOR UNIVERSITY TRUMPETS

    Outstanding drivers for all University trumpets. 10.20 is ideal for low-cost general PA work; $10-30$ is recom. mended for maximum speech intelligibility. $10-40$ is recommended for critical PA. and industrial require recommended for critical P.A. and industrial require. ments. 10-40T is the same as the $10-40$ with a bullt-in transformer; 10-60 is a superb new driver with exira power handing capacity combined with maximum sensitivity: $10-60 T$ same as $10-60$ with matching trans former. This deluxe line is avallable in a striking acrylic paint finish

    | Stock <br> No. | Model | Response <br> (CPS) | Watts | Shpg. Wt. <br> Lbs. | Net |
    | :---: | :--- | :---: | :---: | :---: | :---: |
    | PE-69 | $10-20$ | $120-6500$ | 20 | 3 | 14.70 |
    | PE.70 | $10-30$ | 100.7500 | 30 | $37 / 4$ | 18.50 |
    | PE.71 | $10-40$ | $80-12,000$ | 40 | $41 / 2$ | 23.23 |
    | PE-72 | $10-40 T$ | $80-12,000$ | 40 | $54 / 4$ | 31.02 |
    | PE.73 | ID-60 | $70-12,000$ | 60 | $53 / 4$ | 31.02 |
    | PE.74 | ID-60T | $70-12,000$ | 60 | $67 / 4$ | 37.19 |

    ## FOURJAY-OUTDOOR PATIO SPEAKERS

    

    10-20
    

    10-40T
    
    $10-30$
    
    10.60
    
    $10-40$
    
    10.601
    

    ## THE PATIO PAIF

    The Patio Pair consists of a separate loudspeaker baffle with weatherproof speaker, and a separate patio lamp. Identical in styling in green and white fiberglass with plpe fitting for $1^{\prime \prime}$ pipe. Speaker provides even dispersion of sound. Accepts up to 100 -watt bulb.
    Model S-OFI \& WG Speaker Baffle. Includes 10 -watt, $8^{\prime \prime}$ weatherproof speaker with $40-11,000$ cycle range, $s$-ohm voice coil
    ME-160 Shpg. wt. 6 lbs..... 17.05 Model LMP 60/100wG attractive Patio Lamp less bulb.
    PE- 161 Shpg. wt., 4 lbs.
    PE-161 Shpg. wt., 4 Ibs. ......Not Illustrated.............. Net 10.05

    ## FOURJAY MELODY BELL

    ## FOR OUTDOORS - FOR INOOORS

    Hang it from trees, overhangs, wires, posts, etc. All fiberglass construction and design assures even dispersion of sound as well as fine tonal quality. Includes efficient 10 watt $8^{\prime \prime}$ weatherproof speaker with $40-11,000$ cycle range, $8 \cdot 0$ ohm voice coil. PE-162 White and green finish-Shpg. wt. 5 lbs.
    

    ## PAGING SPEAKERS

    Model 844 -Compact, general purpose paging projector speaker system featuring natural voice reproduction and high intelligiblity. Rugged diecast horn. Freg. response 250 to $13,000 \mathrm{cps}$, EIA pressure rating: 56 db . Power handing capacity - 30 watts. Impedance 8 ohms; dispersion $90^{\circ}$; for mounting: universal " $U$ " bracket. Dimensions: $97 / 8 \times 83 / 0$ " deep. Shpg. wt., $81 / 2$ Ibs.

    Net 21.46 Model $844-45$-Same as 844 , but with 45 ohm voice coll. Shpg. wt., $81 / 2$ ibs. PE. 11 Net 22.34 Model 147 -Utilizes famous CDP Principle. Frequency $250-10,000 \mathrm{cPs}$. Uniform Dispersion $120^{\circ} \times 90^{\circ}$ area. Has two Fibreglass molded horns-each covering only hall the voice range. Rated 25 watts; 16 ohms. Size $113 / 4 \times 73 / 4 \times 10 \frac{1}{r^{\prime \prime}}$. Shpg. Wt., 10 lbs.
    PE. 12.
    Net 29.99
    Model
    847.45 -Same as 847 , but with 45 ohm voice coll. Shpg. wt., 10 ibs

    ## PAGING PROJECTORS

    Model PA-15- Compact weatherproof paging projector in rugged diecast housing. Features 15 -watt power handiing capacity and wide angle coverage, with unique swivel mount for easy installation almost anywhere. Impedance, 8 ohms; frequency response, $350-13,000$ cycles; dispersion, $120^{\circ}$. Colored in mesa tan, $9 \times 6 \times 94 / 2^{\prime \prime} 0$.
    PE-49 Shpg. wt., 6 lbs.
    Net 17.64
    Model PA-15-45-Same as above, except with 45 ohm voice coll. PE-50

    Net 18.13 Model PA-15T-Same as PA-15, but includes high quality transformer for matching the oriver to 70.7 volt line. Includes $11 / 2,21 / 2,5,10$ and 15 -watt taps. PE-51
    Model PA. 7 Attractively styled horn is constructed completely of Cycolace virtually indestructible. None-resonant horn won't dent, finish cannot wear off. Ruggedness assures greatest dependability. E-v exclusive ring diaphragm eliminates loading problems. Handies a full $71 / 2$ watts over a range of 40 to $13,000 \mathrm{cps}$. Wide $120^{\circ}$ problems. Handies a full $71 / 2$ watts over a range of 40 to 13,000 cps. Wide $120^{\circ}$ dispersion angle provides excellent coverage. 8 on
    mobile applicatjons. Size: $63 / 4$ " diameter by $6^{\prime \prime \prime}$ deep.
    PE.53 ShDg. Wt., $31 / 4 \mathrm{lbs}$.
    Net 15.88
    Model ARI50 Reentrant Horn. Round, aluminum concentrating horn for maximum penetration at Jowest cost. New exponential desisn achieves extremely wide range with remarkably natural voice and music quality. Rubber-edge damping ring eliminates resonances. Accepts any standardodriver. Specifications: low frequency horn cut-olf 150 cps ; taper, 150 cps ; air column length $41^{\prime \prime}$; sound distribution $85^{\circ}$; diameter 12"; depth (less driver) $17^{\circ}$. Shpg. wt., 8 lbs. PE.38WX

    Net 19.99

    ## PROJECTOR HORNS

    Model 848 Compound Diffraction Projector-a wide range horn ano driver system using Electro. Voice DC30A single driver unit plus high and low frequency horns coupled to both sides of diaphragm. Delivers wide angle sound with extremely low distortion. Outer horn is fabricated of fiberglass \& polyester resin for strength and resistance to corrosion. Rating: 52 db . Power capacity 30 watts program. Response $150-10,000$ cps. Impedance 16 ohms, low freq. horn taper 100 cps. Dispersion $120^{\circ}$. Universal U Mounting bracket. Dimensions: $101 / 2 \times 201 / 2 \times 20^{\prime \prime}$ PE.3Jwx Shpg. wt., 17 lbs.

    Net 48.51 Model 848-45-Same as 848 , but with 45 ohm voice coll. PE-34WX

    ## HIFI OUTOOOR WEATHERPROOF SPEAKERS

    MUSICASTDR - Designed for superior voice and music reproduction. Provides unusual bass response and balanced highs in a compact diecast aluminum enclosure. Rugged $8^{\prime \prime}$ Radax speaker, weather-proof cone. Ideal for schools. clubs, churches, and general auditorium use. Freq. response $60-13,000 \mathrm{cps}$, EiA rating 48 db . Power handling capacity 30 watts, impedance 8 ohms. Dispersion: $120^{\circ}$. Dimen. sions: $211 / 2 \times 211 / 2 \times 81 / 2$ ". Universal " $U$ " mounting bracket. Shpg. wt., 34 lbs . PE-14WX

    Ne1 52.92
    Musicaster II-Same as above, except wider coverage up to $18,000 \mathrm{cps}$. Has built in Range Extender with crossover. Shpg. wt., 36 lbs.
    PE-15WX
    Net 73.49
    Model ME-1 Bracket to mount Musicaster flat against wall. Shpg. wt., 1 lb.* PE. 16

    Net 2.65

    ## PORTABLE COLUMN LOUOSPEAKERS

    Model PC7 Utilizes Six $5^{\prime \prime} \times 7^{\prime \prime \prime}$ cone speakers. Compact and lightweight make it truly portable. Wide smooth horizontal dispersion, eliminates crithcal placement. Response: $100 \cdot 10,000 \mathrm{cps}$; handles 30 watts program material, 60 watts peak; vertical dispersion, $40^{\circ}$, horizontal dispersion, $160^{\circ}$; Imped. 16 ohms. Size: $42 L \times 81 / 2 \mathrm{~W} \times 5=1 / 4^{\prime \prime} \mathrm{D}$. Shpg. wit., 19 lbs .
    PE-54WX
    Net 57.04
    Model thas Straight Line Radiator-Utilizes tweive $4^{\text {T }}$ speakers. Features $160^{\circ}$ horizontal dispersion with only $30^{\circ}$ vertical dispersion, to keep sound off floor and celling indoors, and keep sound confined to audience outdoors. Filter acoustically shortens length of radiator with increasing frequency to maintain unform datiern. Flat frequency response from 100 to $10,000 \mathrm{cDS}$. Completely weatherproof in a $52^{2} \times 71 / 2^{\prime \prime} \times 4^{5 / 5^{\prime \prime}}$ tan metal cabinet. Impedance, 8 ohms. With mounting krt.
    PE-48wx Shpg. wt., 16 lbs.
    Nef 73.50
    

    ## CEILING AND WALL BAFFLES

    Type M8 - Designeo to match and replace standard $12^{\prime \prime} \times 12^{\prime \prime} \times 1 / 2^{\prime \prime}$ acoustlc tile blocks. Permits a completely $12{ }^{\prime \prime} x 12 " x / 2{ }^{\prime \prime}$ acoustic tile blocks. Permits a compietely
    hiden speaker system - for $8^{\prime \prime}$-speakers - speaker hidden speaker system for $8^{\prime \prime}$-speakers - speaker
    mounting hardware is furnished - Baffle is zinc chrom. mounting hardware is furnished - Bafle is zinc chrom-
    ate undercoated and finished in flat white lacquer ate undercoated and finis
    $12 \times 12 \times 1 / 2^{\prime \prime}$. Not Illustrated. PE.133 Shpg. wi., $11 / 2 \mathrm{lbs}$.

    Net 3.11

    ## SURFACE MOUNTING BAFFLES

    RS and AL Wall and Ceiling Baffles - Aluminum baffles with "" mig flange finished in satin for installations in oftices restaurants, etc. RS types for recessed wall mtg. AL for recessed ceiling mtg. Require flush-mounting baffle enclosures, Type CP \& XCP.
    

    ## FLUSH-MOUNTING BAFFLE ENCLOSURES

    CP \& XPS Series - Designed for mounting AL and RS baffles CP for new constructions, XCP for existing ones. All have steel can, plastic ring and sufficient speaker back pressure. Shog wi, CP6 and XCP6, $31 / 2 \mathrm{lbs}$, each: CP8 and XCP8, 41/4 lbs. each: CP1012 and XCP1012; 71/2 lbs. each.
    S

    Stock Mfr.
    No. Type
    PE-140 CP6
    PE-141 CP8
    PE-142 CP1012
    PE-143 XCP 1012
    PE. $144 \times$ XCP
    PE. 145 XCP1012

    For
    AL6A, RS6A
    AL8A, RSBA
    AL12A, RS12A
    AL6A, RS6A
    AL8A, RS8A
    AL12A, RS12A

    ## Size

    |  | O.D. De |
    | :---: | :---: |
    |  | $111 / 4$ " 4 " 3.28 |
    | 81/2' | 13 " 41/2" 4.05 |
    | 21/2 | 171/0" 7 " 5.54 |
    |  | 7 " 4 " 3.33 |
    |  | 8 " $41 / 4$ " 3.62 |
    |  | $121 / 2 " 7$ " 4.89 |

    ## LAFAYETTE TEN-WATT TRANSISTORIZED SHOULDER MEGAPHONE

    - One Self-Contained Unit - Light Weight-7 tbs. With Battery
    - Can Be Shoulder Held - 10 Watt Transistor Amplifier
    - Unlimited Applications: Community Events, Auctions, Construction Operations, Emergency Werk
    - Uses 6 " $D$ " Flashlight Cells

    This powerful sound broadcaster is completely self-contained in one compact, light-weight unit. It has the portabitity and flexibllfy needed for all field operalions. Power amplifier, battery, and speaker are housed in an attractive carrying case which can be supported from the shoulder while operation is controlled with one hand. Hand-held microphone is a high gein crystal type with detachable spiral cord. Transistorized amplifier employs a trouble free printed circuit with push-pull output stage. The reffex horn speaker can be taken out of carrying case. Comes with 15 ft . attached cable. Jack for external speaker use. Convenient operation is provided with controls within easy reach of each other on top of case. Features 3 inputs- 2 high impedance for dynamic or crystal microphones and 1 low impedance for radio or tape recorder use. Mixing circult permits all three inputs to be
    used simultaneously. Amplifier is powered by 6 inexpensive used simullaneously. Amplifier is powered by 6 inexpensive "D" type flashlight cells or from external 9 or 12 volt battery Comes complete with leather covered carrying case, microphone. leather carrying strap, microphone case, 2 input plugs and battery. Specifications: Output-10 watts max; Battery current drain- 1.6 amp. at max. power output, 0.16 amp at 0 power output. Output impedance 8 ohms, aux speaker output impedance- 8 ohms. Input impedance-(mic 1) 50 K ohms (mic 2) 150 K ohms, (radio) 4 size- $746 \times 4^{\prime \prime}$ mouth, $77^{\prime \prime}$ long. Carrying Case Size- $11 \%$ Lx4 $4 / 2 \mathrm{Wz}$ 8 PhH Shpg. Wt., $111 / 2$ tos. Imported
    PA-102
    Net 59.95
    

    ONLY
    

    ## ALL-TRANSISTOR BULL HORN

    - Weighs only $21 / 2$ los. - Range up to 400 feet - For Hunting, Camping, Boating, Sports

    A fully transistorized directional megaphone at a special low price. LIghtweight, it carrles your voice hundreds of yards or above noise. Just press the trigger and talk. features variabie volume control and carrying strap. Uses 4 -standard "D" celis mot supplied with unit.. Uses 4-standard D' celis mot
    11 inches long. ShDg. wt., 3 lbs.
    11 Inch
    Net 6.85
    BA. 157 112/-Volt 0 batteries, $\&$ required

    ## LAFAYETTE PISTOL-GRIP POWER MEGAPHONE <br> - WEIGHS ONLY $41 / 4$ LBS. COMPLETE WITH BAT. TERIES - COMPACT ALUMINUM REFLEX HORN PROIECTS SOUND A CONSIOERABLE DISTANCE - IDEAL FOR LIFEGUAROS, COACMES, CONSTRUC. IION GANGS, SPORTING EVENTS - PLUS HUN. DREOS OF OTHER APPLICATIONS! <br> A IIghtweight new megaphone notable for its extreme economy in battery power despite its high sound volume output. Uses 4 large size 0 flashlight batteries and has a patented non-linear current-limiting device to give maximum possible battery life. Weighs only $4 \mathrm{~L} / \mathrm{a}$ lbs. just pick It up, a im, press the pistol-grip switch and talim! The reflexed air column in the horn plus its special shape serve to concentrate and direct the amplified sound and throw it for a considerable distance! The rubber-fimmed horn is of Iightweight spun alumi num and construction is extremely sturdy throughout Microphone is bullt into the base of the horn. Batter les are simply replaced by loosening a single screwdone easify with a coin. Unit measures $12 \mathrm{~V}^{\prime \prime}$ long; mouth diameter is 81/4". Shpg. wt., 6 lbs. Imported. PA-182 Power Megaphone BATTERIES FOR ABOVE-Burg. No. 2 or equlv 29.50 GATTERIES FOR ABOVE-Burg. No. 2 or equly. $(4$ required.) Shpg. wl., 1 oz. ea. 8A.157 <br> 

    ## LAFAYETTE 25-WATT DRIVER UNIT

    ## BOGEN VP SERIES PORTABLE TRANSCRIPTION PLAYERS

    HI-FI PIAYER FEATURES OF THE VP2O/VP4O SERIES CUEING VARIA-pole motor, takes up to $16^{\prime \prime}$ discs. AUTOMATIC TOME ARM db, $50 \cdot 50,000$ cycles. INPUTS: phono (internal), tuner or tape recorder, 2 high Impedance Microphones. CONTROLS: Master Power, Bass, Treble, Input 2 Volume, Mic 1 Volume, Scratch fitter, input 2 Selector, Speech Filter (VP40). FINISH: Grey and Black Vinyl.

    VP20 TRANSCRIPTION PLAYER
    Includes 850 hi.fl player and 40-watt PA amplifier In one compact portable case "Break-Apart" design. Amp/. compact portable case ${ }^{\text {Preak.Apart }}$, design. Amp/25 ft . of cable in other. For 117 V 60 cycles AC. Sire: $164 / 3 \times 153 / 4 \times 1214^{\prime \prime}$. Shpg. wt., 50 lbs
    PA-307WX .... No Money Down ........... Net 140.90 VP-10 10-watt Portable Transcription Player (not Illustrated).
    pa.330wx
    Net 96.50

    ## VP40 TRANSCRIPTION PLAYER

    Contains famous B50 hi-fi turntable and 40 -watt PA amplifier in one compact case. 2 heavy-duty $12^{\prime \prime}$ speakers and 25 ft . of cable mounted in "break-away" speaker cases. Size: Amp/Phono case- $181 / 2 \times 161 / 2 \times 81 / 2 \sim 0$. Speak er case- $16 \times 153 / 4 \times 111 / 2^{\prime \prime}$. For $117 V 60$ cycies AC. Shpg. Wh., 55 Ibs pä-304WK

    No Money Down
    Net 204.95
    
    bogen versatile
    MX-6A MIXERPREAMPLIFIER
    

    ## collocect Cathode <br> - Mic and 2 Phono Inputs

    FEATURES: Self-powered. 4 Microphone and 2 radio-phono inputs. Any 4 channels may be used at the same time. All channets individually con trolled for mixing and fading. Cathode follower output-permits long cable to amplifier. Con nects to high impedance radio/phono input of any amplifier or tape recorder. . 5 volt output Low hum level.

    SPECIFICATIONS - OUTPUT VOLTAGE: .5 volt FREQUENCY RESPONSE: $50-15,000 \mathrm{cpS} \pm 2 \mathrm{db}$ GAIN: Mike- 59 db , Phono- 30 db . HUM: 70 db below .5 volt. OUTPUT IMPEOANCE: Less than 1000 ohms. CONTROLS: 2-mike volume, $2-$ mike or phono volume; on-otf. TUBES: 2-12AX7. 12AT7. DIMENSIONS: $8 \times 43 / 4 K 61 / 2^{\prime \prime}$. POWER CON. SUMPTION: 10 watts, 117 volts, 60 CDS AC. Shpg. wi.. 3 lbs.
    PA-324 BOGEN MX-6A
    Net 40.50

    ## OUTSTANDING LA LAFAYETTE $8^{\prime \prime}$ 10-WATT PREFWIRED SPEAKER- BAFFLE COMBINATION <br> 

    - For Public Address, Paging, Music Distribution Use - Built In 70-Volt Line Matching Transformer with Taps for 10. 5, 2.5, 1.25 and .625 Watts - Buitt-In Individual Volume Controls - Only A Screwdriver Needed to Connect Speaker Lines
    An 8-ohm speaker baffle combination for any type of indoor sound system. Perfect for schools, stores, offices, churches. Each unit is completely pre.wired. The heavy-duty $8^{\prime \prime}$ speaker with 4.64 oz. Alnico $V$ Magnet rated at 10 watts, is installed in the beautifully styled acoustically-designed plywood baffle; the matching transformer is mounted directly on the sturdy warp-free speaker frame. Transformer taps are $10,5,2 \frac{1}{2}, 11 / 4$ or $5 / 6$ watts, for connection to 70 -volt amplfier output, and any individual speaker laps can be changed without the need to change transformer connections on remalning speakers of the PA system. A terminal board with screw terminals is provided at the rear of each baffle for easy connections. Each speaker has its own volume control for setting volume levels as desired at each speaker location-extremely important in most school, department store, etc., paging or music distribution system installations. Size is $11 \mathrm{Wx}^{\circ}$ 亿 $\mathrm{Hx} 64^{\circ \prime \mathrm{D}}$. Shpg, wt., 7 lbs . Imported
    PA.79W Speaker Baffle Combination
    Net 13.95


    ## LAFAYETTE HI-FI "THIN LINE" <br> CEILING \& WALL <br> BAFFLE SPEAKER

    - Measures Oniy 21/4" Deep
    - Employs New Inverted Magnet
    - Perfect for Hi-fi Extension Speaker or PA Use
    


    ## Outstanding Sound Quality! Superb Value!

    The perfect speaker to furnish music or paging throughout your home, office or factory, this unique ceiling and wall baffle speaker offers damaling audio reproduction. Advanced design employs an inverted magnet, placing the 12 oz , magnetic structure in front of the speaker rather than behind as in conventional speakers. Only $2 \mathrm{~L} / \mathrm{h}^{\prime \prime}$ deep with its own metal baffle plate, the SK. 175 easily mounts in any wall, celling, closet or ordinary wood enclosure. Two are perfect for stereo. Voice coil is $1^{\prime \prime}$ Diam. Frequency Response: $90-9,000 \mathrm{cDs}$, Impedance: 8 ohms. Overall size including metal baffle is $9 \frac{1 / 22^{\prime \prime}}{}$. Requires $69 \mathbf{h}^{\prime \prime \prime}$ wall culout. Shpg, wt., 3 lbs. Imported
    5K-175
    Net 5.95
    

    ## LAFAYETTE AUXILIARY

    ## PA SPEAKER

    

    - Ideal for Outdoor Use
    - Excellent as a Paging Speaker

    Specially designed speaker and housing for superior voice reproduction. Versatile mounting base, easily installs on any flat surface. Excellent as a paging speaker or extension speaker. Gray and finished chrome color combination matches most modern equipment. Frequency response 150 to $10,000 \mathrm{cps}$. Rapid drop beyond cut-off point. Perfect for mobile installations. Input impedance 4 ohms. Measures $51 / 4$ dia. $\times 5$ deep $\times 7^{\prime \prime}$ high including base. Shpg. wt., $4 \frac{12}{2}$ los. Imported. HE-13

    Net 6.95

    ## LaFAYETTE PORTABLE PA CASE

    A sturdily constructed case for amplifier and two $12^{\prime \prime}$ speakers. Made of heavy plywood with reinforced metal corners. Case splits into 2 baffles, each with leather carrying hande. Strong wire mesh grilles covered with attractive cloth. Has $Z$ hooks in each half for carrying speaker cables and provision for mike and mike base. 4 snap locks. in addition to room for two $12^{\circ \prime}$ speakers, there is ample space for any ampilfier and phono top measuring up to $173^{\circ "}$ wide $x+12^{\circ}$ deep $x$ 12" high. Includes blocks to prevent smalter amplifiers from shifting while being carried. Shpg, wt., 22 lbs.

    Net 16.25
     PA-407WX

    ## NEW LAFAYETTE TELEPHONE AMPLIFIER

    

    - 4.Transistor Circuit
    - 21/4" PM Speaker
    - Several People Can Listen In on Conversation Simultaneously
    - Battery Operated

    An efficient battery operated telephone amplifier which can be applied to and used with any type of telephone. Amplifies Incoming voice and projects It through a 21/" PM speaker. Suction cup on pickup coil attaches easily to telephone and makes permanent installation unnecessary. Volume control (with on-off switch) permits adjustment of volume to appropriate level for up to several people to listen in on conversation at the same time, 4 -transistor amplifier is powered by inexpensive. long-lasting 9 -volt battery (supplied). Unit is housed in a two-tone ivory and grey high-impact plastic case measuring $3 K_{0} W \times 3 \% / 3 \times 2 K_{4}{ }^{\circ} \mathrm{D}$. Shpg, wt., 1 lb , Imported
    F. 938

    Net 10.95
    BA-2 Replacement 9V Battery

    ## LAFAYETTE PA VALUES SPECIAL $12^{\prime \prime}$ \& $8^{\prime \prime}$ P. A. SPEAKERS

    - $12^{\prime \prime}-F U L L 15$ WATTS OF POWER • $8^{\prime \prime}-F U L L 10$ WATTS OF POWER - HEAVY ALNICO V MAGNETS


    ## TWELVE-INCH MODEL

    12* MODEL - Fine quality throughout, these speakers were designed especially for public address work. Will handle 15 watts of power-making them ideal for use singly for medlum power systems or in multiples for higher power. Rugged mechanical construction, dust-proofed and rust-resistant. Have 6.8. oz. Alnico 5 magnet, 8 ohm voice coil. Shpg. wt., 5 lbs. SK-118

    ## EIGHT-INCH MODEL

    $\boldsymbol{\sigma}^{\prime}$ MODEL - Ideal for larger scale, lower power pag. ing systems. Same quality as $12^{\prime \prime \prime}$ speaker above, but $8^{\prime \prime}$ diameter, rated at 10 watts, with 3.16 oz. Alnico $\checkmark$ magnet. 8 ohm voice coil. Shpg. wt., 3 lbs. SK-119

    ## LAFAYETTE MINIATURE HORN PAGING SPEAKER

    - Mounts Easily
    - $90^{\circ}$ Dispersion
    - Weatherproof

    795

    An excellent general purpose paging speaker of amazingly compact size. Ideal for portable PA systems, patlos etc. Long throw projection of $90^{\circ}$ dispersion offers maximum speech Intelligibility in high noise areas. Compact size enables it to be mounted anywhere In almost any positton. Frequency response $400-12,000 \mathrm{CPS}$. Impedance 8 ohms. Power handling capacity 5 watts, 8 watts maximum. Complete with mount-
     PA-295 Shpg, wt., 1.4 lbs.

    90․ DISPERSION PAGING SPEAKER
    The hish power handling capacity combined with maximum intelligibility make this a superior unit for paging and talk-bach applications. Frequency Response $250-15,000$ CDS. Powel capacity 30 watts. Impedance 8 -ohms. $90^{\circ}$ Dispersion. Equipped with a universal mounting bracket, weather proofed, tropicalized with hermetically sealed driver unlt. 9\%e" diam, x 8"M" deep the spesker lends itself to use in any P.A. sttuation. Shps. wt., sye los. PA-55 $90^{\circ}$ DISPERSION PAGING SPEAKER

    Net 15.50
    
    

    ## NO MONEY DOWN

    

    ## 11-WATT PA AMPLIFIER MODEL PA-420

    FEATURES: Provides extensive coverage for store demonstrations, clubs, churches, offices, classrooms, auc. fion sales, entertainment. Incorporates latest circuit features for improved performance. Separate volume controls permit mixing microphone and phono. 2 speaker output sockets. Housed in attractlve rugged cablnet with four rubber bumper feet
    SPECIFICATIONS. TUBES: 12AX7, 6L6-CC, GV4/E280 Rect). Power Output: 11 watts ( 22 watts peak). FREQUENCY RESPONSE: $30-20,00 \mathrm{C}$ cps $\pm 2 \mathrm{db}$. INPUT GAIN: MUENCY RESPONSE: $30-20,00 \mathrm{C}$ cps 2 db . INPUT GAIN:
    Microphone 120 db . Phono 85 db . NUM \& NOISE: At least 65 db below rated output. DUTPUT IMPEDANCES:

    4, 8,16 ohms, $25 \mathrm{v} \& 70 \mathrm{~V}$ lines. High Impedance output for coupling booster amplifier. CDNTROLS: Microphone, Phono-Radio, Tone, Power on-off. MISCELLANEOUS: Fused AC input, AC convenience outiet, 2 speaker sockets, plug supplied for 70 volt ourlet and for $4,8,16 \mathrm{ohm}$, 25 volt outlet. Takes Amplenol \#5MCIF MIC plug. POWER CONSUMPTION: 60 watts at 117 volts, 60 cycles AC. Size: $137 / 8 W \times 53 / 4 H \times 91 / 2^{\prime \prime} D$. Shpg. wt., 15 lbs. PA420wX

    Net 31.50
    4-SPEED PHONO TOP FOR AMPLIFIER ABOVE
    PA-425W
    Net 17.95

    ## 20-WATT PA AMPLIFIER MODEL PA-421

    FEATURES: New improved circuit features ensure top performance. Uses 7189A hi-fi output tubes and de. signed to give wide-range response. Meets power re quirements of chapels, clubs, schoois, restaurants and industrial plants. Covers up to 50,000 square feet when used with trumpet type speakers. Chassis equip when used with trumpet type speakers. Chassis equip rugged cabinet with four rubber bumper feet. SPECIFICATIONS. TUBES: (2) 12AX7, (2) 7189A, (1) 6CA4/EZ81, plus sillcon rectifier POWER DUTPUT: 20 watts ( 40 watts peak). FREQUENCY RESPONSE: 30$20,000 \pm 1 \mathrm{db}$. INPUT GAIN: Microphone 126 db . Phono 88 db . HUM in NOISE; At least 65 db below rated
    output. DUTPUT IMPEDANCES: 4, 8, 16 ohms, $25 V$ and 70 V lines, High Impedance output for coupling booster amplifier. CONTROLS: Microphone, Phono-Radio, Tone, Power on-off, plus internal bias adjust. MISCELLANEOUS: Fused AC input, AC convenience outlet, 2 speaker sock. ets, Plug supplied for 70 volt outlet and for $4,8,16$ ohm, 25 volt outlet. Takes Amphenol $\# 75 \mathrm{MCIF}$ Mic olug. POWER COMSUMPTION: 70 watts at 117 volts, 60 cycles AC. Size: $137 / 8 W x 91 / 2 D=53 / 4{ }^{\prime \prime} \mathrm{H}$. Shpg. wt., 15 lbs. PA-421WX

    Net 41.45
    4-SPEED PHOND TOP FOT AMPLIFIER ABOVE
    PA-425W
    Net 17.95

    ## 35-WATT PA AMPLIFIER MODEL PA-422

    FEATURES: Ideal for usē in churches, schools, smal theaters, lecture halls and industrial plants. Priced extremely low to give extra profits to rentals and sales. Separate bass and treble tone controls, permits sales. Separate bass and treble tone controls, permits
    adjustments to meet all acoustic requirements. Two adjustments to meet afl acoustic requirements. Two
    mike inputs. 70 volt constant voltage output tap. Provides coverage up to 100,000 square feet when used with trumpet type speakers. Chassis is equipped with 2-speaker plug-In output sockets. Unit is housed in attractive, rugged cabinet with four rubber bumper feet.
    SPECIFICATIDNS. TUBES: (2) 12AX7, (1) 6AV6, (2) 6L6GC, (1) SAR4/GZ34, plus Silicon rectifier. POWER OUTPUT: 35 watts ( 70 watts peak). FREQUENCY RESPONSE: 30 -
    $20,000 \mathrm{cDS} \pm 1 \mathrm{db}$. INPUT GAIN: Microphone 128 db . phono 90 db . HUM \& NOISE: at least 65 db below rated output. OUTPUT IMPEDANCES: 4, 8, 16 ohms, 25 V and 70 V lines, Migh impedance oitput for coupling booster amplifier. CONTROLS: (2) micraphone, Phono-Radio, Bass, Treble, Power on-off, Magnetic-Ceramic phono switch (rear), Bias Adjust (internal). MISCELLANEOUS: Fused AC input. AC convenience outlet, 2 speaker sockets, Plug supplied for 70 volt outlet and for $4,8,16 \mathrm{ohm}$, 25 volt outlet. Takes Amphenol $\# 75 \mathrm{MCIF}$ Mic plug. POWE CONSUMPTION: 115 watts at 117 volts. 60 cycles AC. Size: $171 / 2 \mathrm{~W} \times 61 / 3 \mathrm{H} \times 10^{5} / \mathrm{m}^{\prime \prime} \mathrm{D}$. Shpg. wt., 25 lbs
    AC. Size: $17 / 2 W \times 6 / 2 H \times 10^{2} / \mathrm{O}$. Shpg. Wt., 25 lbS .
    PA-422WX
    4.SPEED PHONO TOP FOD AMPLIFIER ABOYE
    PA.425w
    Net 17.95

    ## IOO-WATT PA AMPLIFIER MODEL PA-423

    

    FEATURES: Conservatively rated for long life in continuous operation. Uses popular high fidelity high power tubes type 6L6.GC and has extremely wide range response. 1 -phono and 2 -mike inputs. Separate bass and treble tone controls. Input for magnetic phono cartridge. For large industrial paging and music systems, stadiums, amusement parks, airports raliroad yards, church carillon systems. For groups of up to 10,000 persons or areas up to 200,000 square feet. Housed in attractive, rugged cabinet with four rubber bumper feet.
    SPECIFICATIONS. TUBES: (2) 12AX7, (1) 12AU7, (4) 6L6GC, (1) 6 CY , plus full-wave bridge silicon rectifier and singie dlode silicon rectifier. POWER OUTPUT: 100 single diode silicon rectifier. POWER OUTPUT: 100
    watts (200 watts peak). FREQUENCY RESPDNSE: 30 -

    ## 27-WATT TRANSISTORIZED PA AMPLIFIER MODEL PA-424

    

    NO MONEY DOWN
    UP TO 24 MONTHS TO PAY SEE PAGE 412

    - Oesigned for 12 V Mobile Operation
    - Fully Transistorized

    An exceptionaliy compact transistorized mobile PA amplifier operating from any 12 volt DC source. Ideal for use in Sound trucks, cars, boats or any place where AC power is not avaliable. Small size cars, boats or any place where AC power is not available. Small size
    permits simple Installation under dash or in glove compartment. permits simple instaliation under dash or in glove compartment. (below) for operation on 117 volts, 60 cycles AC.
    SPECIFICATIONS. POWER DUTPUT: 27 Watts. FREQUENCY RESPONSE: $100 \cdot 10,000 \mathrm{cDs}, 3 \mathrm{db}$. INPUT GAIMr MICrophone 110 db , Phono 70 db HUM \& NOISE: 70 db below rated output. OUTPUT IMPEOANCES: 4, 8 16 ohms. CONTROLS: Mic volume, Aux-Radio volume. Tone, Power on of switch. TRANSISTORS: (2) 2N408, (3) 2N669. POWER CONSUMPTION: 3.5 smps at 12 volts.DC. INPUTS: Mic-takes amphenol plug \#91-MCAM, 3.adioscrew terminals. Aux-takes RCA-type phono plug. Size: $61 / 2 \mathrm{Wx}$ $31 / 2 \mathrm{Hx} 43 / 4^{\prime \prime} \mathrm{D}$ (less knobs). Supplied with power plug and 7 ft . cable with battery clamps.
    Ph-424wX Shpg. wt., 4 lbs.
    Net 57.50
    AC POWER SUPPLY FOR PA. 424
    Enables operation of PA-424 on 117 Volts AC, 60 cyctes. 12.6 volts output. Shpg. Wt., $31 / 4$ lbs.
    Pa.427w
    Net 36.95
    $20,000 \mathrm{cps} \pm 2 \mathrm{db}$. INPUT GAIN: Mlcrophone 136 db , Phono 97 db . HUM $\&$ NDISE: at least 65 db below rated output. OUTPUT IMPEOANCES: $4,8,16$ ohms, 25 V and 7ov lines, High impedance output for coupling to booster amplifier. CONTROLS: MIC-1, MIC-2, Phono-Radio Bass, Treble, Power-on-off, Magnetic-Ceramic phono switch (rear). Bias and screen voltage adjust (Internal). Takes Amphenol $\# 75 \mathrm{MCIF}$ Mis plug. MISCELLANEOUS: Fused AC input, AC convenience outlet, 2 speaker sockets, plug supplled for 70 volt outliet and for 4. 8, 16 ohm , 25 volt outlet, POWER CDNSUMPTION: 300 watts at 117 volts. 60 cycles AC. Slze: $171 / 2 \mathrm{~W} \times 1 / \mathrm{BHz1058"D}$ volts. 60 cycies AC. Si
    PA-423 shpg.wt., 35 lbs

    Net 89.30 4-SPEED PHONO TDP FOR AMPLIFIER ABOVE PA-425W
    

    4-speed (16, 331/3, 45 and 78 RPM) phonograph turntable Is designed to flt on top of the amplifier and is easily mounted with 2 thumb screws. Takes records up to $12^{\prime \prime}$. Features a heavy duty motor with uniform speed and dynamically balanced turntable. High quality ceramic pickup-turnover tupe with dual synthetlc sapphire stylus. Power requirements: 15 watts, 117 volts, 60 cps . Ourable finish. Size $12 \times 91 / 4 \times 41 / 2^{\prime \prime}$. Shpg. wt., 8 tbs.
    FOR PA-420, PA-421, PA-422 AND PA-423.
    PA-425W
    Net 17.95
    PNONO TOP FOR DC AMPLIFIER PA-424
    Similar to AC type above but with a 12 VDC motor for use with transistorized mobile ampllifers, 4 speeds $16,3343,45$ and 78 RPM . Qcality ceramic cartridge with dual stylus. $12 \times 91 / 4 \times 41 / 2^{\circ}$. Slopg. wt., 8 lbs PA-426W

    Net 32.40

    # LAFAYETTE 40-WATT PUBLIC ADDRESS AMPLIFIER 

    

    A New Standard for Performance and Design in the Industry

    ## - Power Output Sufficient to Drive Many

    Speakers Simultaneously- Flat Response from 30 Cps to 15 Kc
    - Two Microphone Inputs, One Phonograph Input
    - Separate Volume Control for Each Input
    - Excellent Hum and Noise Suppression
    - Attractive New Styling

    $$
    6995
    $$

    Here is a powerful new public address amplifier suitable for use in large depart. ment stores, stadiums, amusement parks, industrial plants, summer camps, etc Power output is a full 40 watts. Three Inputs are provided: Two microphone inputs for crystal or dynamic mikes, and one phono input for a crystal or ceramic pickup a tape recorder, tuner or other high level program source. Frequency response: $\pm 2$ db from 30 cycles to 15 Kc . Input sensitivity: mike inputs, 5 mv for full output; phono 300 mv . Input impedance: mike, 1-megohm; phono, 500,000 ohms. Hum and noise are 64 db below rated output with mike inputs and 74 db below with phono input. Hum balance control provided in rear. Each input has its own volume controt to permit proper blending and balance when two or three inputs are in use simul-
    taneously. Separate bass and treble controls. Output impedances: 4, 8, 16 or 250 ohms, taken elther from a terminal strip in the rear, or from two 6 -prong sockets provided for rapid connection and disconnection. The $\mathbf{2 5 0 - 0 h m}$ output is a constant voltage tap for a 70 wolt tine. Groups of speakers may be connected directly to the amplifier in various series, parallel, and series-parallel conflgurations. Tube complement: 1.12AX7/ECC83 microphone preamplifier, 1-6AV6 tone control, 2-6A08's and $4-6805 / E L 84$ output tubes (two parallel pairs operating push-pull). For $110-120$ volts, $50-60$ cycles $A C$. In an unusually aftractive, sturdy metal cabinet with modern black and gray panel, $51 / 4 \mathrm{H} \times 131 / 4 \mathrm{~W} \times 91 / 4$ "D. Shpg. wt., 30 lbs . Imported. PA-268WX

    Net 69.95
    

    - Lafayette Powerful 40-Watt Public Address Amplifier
    - 2 University or Electro-Voice Horns For Outdoor Systems
    - 2 25-Watt Speakers \& Wall Baffles For Indoor Systems
    - Choice of Deluxe Oynamic Mikes
    - 70 Ft. of Speaker Cable


    ## 40-WATT PA SYSTEMS WITH DUAL SPEAKERS

    Highly efficient permanent sound systems for large halls, department store music and pagink systems, rallroad stations, restaurant music, etc. The outstanding Lafayette PA-268 40 watt amplifier assures top performance under all operating conditions. For 117 volts, 60 cps AC.

    ## 40-WATT PERMANENT INDOOR SYSTEM

    Consists of the PA- 268 40-watt amplifier, two $12^{\circ} \mathrm{PM}$ speakers. two attractive walnut wood baffles, "two $35^{\circ}$ speaker cables with plugs, an Atlas MS-10C floor mike stand and Argonne AR-3 dual impedance dynamic microphone with ball-joint desk stand, for hand-held, dest stand or floor stand use. Shpg. wt., 75 tbs.
    PA. 284 WXM
    Net 117.50
    Same as above, except with Electro-Voice 664 mike. in place of AR-3
    Net 141.50
    40-WATT OUTOOOR PA SYSTEM
    Consists of a PA-268 40-watt amplifler, two Lafayette PA-57 driver units and two University PH trumpets, two 35' speaker cables with plugs, and an Argonne AR. 3 dynamic mike with desk stand. Shpg. wt., 75 lbs.
    PA-282wXM
    PA-282WXM.
    Net 131.50
    Same as PA-282WXM except with Electro-Volce 664 dual impedance cardioid dynamic mike and MS-10C floor stand. In place of AR-3 PA-281 WXM

    Net 159.50
    Same as PA-282WXM except with 2 Electro-Voice 848 projectors In place of PA. 57 and University PH.
    PA-280WXM
    Net $\$ 49.50$
    Same as PA-280WXM with Electro-Voice 664 mike and floor stand in place of AR-3 PA-279WXM

    Net 178.50
    For the Musician Who Cares
    

    ## INSTRUMENT CONTROL PANEL RECESSED FOR EASY ACCESSIBILITY

    Here is a music amplifler which will deliver 20 watts of clean power, to a built-in 12"" heavy-duty 20 watt speaker or to an external 4,8 or 16 ohm speak. er. There are 3 inputs: two instrument inputs and one microphone input for voice. The two instrument inputs have volume and tone controls separate from the corre. sponding controls on the volice Input. Buitt-In tremolo circult super-imposes an oscillator signal 'on the audio signal to create a periodic fluctuation or "quiver'" whose frequency and amplitude may be adjusted by the "speed" and "strength" controls, respectively. There is a jack provided for turning the tremolo on and off by
    means of a foot switch (avallable as an accessory). Fre. means of a foot switch (avallable as an accessory). Fre.
    quency response: $\pm \mathbf{3} \mathrm{db}$ from 33 cycles to 20 Kc on volce

    - 20-Watt High-Fidelity Amplifier
    - 2-7189's in Push.Pull
    - Adjustable Tremolo for "Quivering" Effect - Built-in 12" Heavy.Duty Hi-Fi Speaker
    - Separate Volume and Tone Controls for Instrument and Voice Inputs

    Input; $\pm 3 \mathrm{db}$ from 33 cycles to 15 Kc on instrument inputs. Mike input sensitivity is 9 mv RMS: mike jack is shorting type to minimize hum pickuo when mike is not plugged in. Tube complement: 2-12AX7's, 1-6AU6. 2-7189 output tubes, 1-6CA4 recthier. Dimensions: $153{ }^{\circ} \mathrm{CH} \mathrm{H}$ (in. cluding rubber feet) $x 191 / 0^{\prime W} \times 8^{1 /} \mathrm{K}^{\prime \prime} \mathrm{D}$. With carrying handle. Shpg. wt., 30 lbs. Imported
    LA. 75 WX
    Net 69.50
    FOOT SWITCH to remotely controt the tremolo in the LA.75. Equipped with cable terminated in standard phone plug to fit corresponding jack on LA-75. Shpg. wt., 112 lbs
    SW. 103
    Net 5.95

    ## Page 336

    

    - ChOICE OF 3-waY LAVALIER OR DESK-STAND CRYSTAL MIKES
    - HEAVY-DUTY 12' SPEAKERS - AVAILABLE WITH 4-SPEED PHONO TOP A complete 20-watt Dual Speaker (heavy-duty 12"PM Speakers) Portable System, packed with features. Gives yol more value and power for your doltar-a price that beats all competition. Ideal for lectures, auctions, taverns, orchestras; excel that beats all competition
    lent as a rental system.
    COMPLETE PORTABLE SYSTEMS, READY TO OPERATE, INCLUDE: $\mathbf{2 - 1 2}$. heavy-duty PM Speakers rated at 15 watts each; the feature-packed 20 -watt Model PA-421 amplifier; your choice of the popular Electro-Voice Model 727SR crystal mike complete with desk stand and $5^{\circ}$ cable, detachable from stand for use as a hand mike, with floor-stand coupler and on-off switch or the Lafayette Model PA-31 high impedance slim crystal microphone with $7^{\circ}$ cable and connector, removable swivel-type stand adapter. lavaller cord and bracket, and on-off switch; $2-35^{\circ}$ speaker cables and adapter, lavaluer cord and bracket, and on-of switch; ${ }^{2-35}$ speaker cabies and plugs; plus sye famous atias msile carrying and for use; covered with high quality dark blue leatherette; size $221 / 2 \mathrm{Hx} 16 \frac{1}{2} \mathrm{~W} \times 15^{\prime \prime} \mathrm{D}$. For $110-130$ volts, 60 cps AC operation. Shpg. wt., 65 lbs. (All systems available with any other microphone at additional cost. For other mikes, see mike pages in index). PA-464WXM 20 -watt Portable System, less Phono Top, complete as described with E-V 727SR microphone

    Net 13.50 PA.465wXM Same as above with Lafayette PA-31 lavaller mike.......... Net $\mathbf{7 8 . 5 0}$ PA-466WXM Same as PA-464WXM with 4 -speed phono top. wt., 75 lbs . Net 101.45 PA-467WXM Same as PA-465WXM with 4 -speed phono top. wt., 75 tbs. Net 96.45

    ## LAFAYETTE SUARANTEE

    If you are not satisfied with your Lafayette Sound System you may return it within 30 days for full refund less only transportation charges.
    I YR. DMPLIFIER GUARANTEE. All parts guaranteed against defects in material and workmanship for 1 year. Ship defective part to us prepaid for prompt replacement.

    ## II-WATT FIXED P.A. SYSTEMS

    

    - COMPLETE PERMANENT SYSTEM
    

    E-V 727

    High quality, low cost system engineered for smalter permanent installations. For areas up to 5500 sa. Ht. For office, store, garage, small factory paging and music systems. THE COMPLETE SYSTEMS INCLUDE: The new Lafayette Model PA-420, 11. watt amplifier complete; your choice of either the Electro-Voice 727 crystal microphone complete with detachable desk stand and $5^{\circ}$ cable or the new Lafayefte Model PA-29 weatherproof, blast-proof slim dynamic mike complete with high or low impedance selector switch and detachable swivel-type stand adaptor; $8^{\prime \prime}$ heavy duty PM speaker; $3^{\circ}$ speaker cable and plug; and attractive polished wainut finish duty PM speaker; 35 speaker cable and plug; and attractive polished wainut (in
    speaker wall bafile. For $110-120$ volts, 60 cps AC operation. Shpg. wt., 25 Ibs. (Any speater wall bafie. For $110-120$ voits, 60 cps ac operat ion. Shpg, wt., 25 ibs. (Any
    other microphone may be substituted in alt systems at additional cost. See microphones in index.)
    PA-472WXM Complete 11-watt Permanent System as described with E-V 727 Crystal Microphone. Shpg. wt., 24 lbs.

    Net 46.50 PA-473WXM Same as above, with Lafayette PA. 29 dual impedance dynamic micro-

    - choice of caystal 3-way lavaller or desk-stano mimes
    - TWO HEAVY-DUTY 12 SPEAKERS - TWO POLISHED WALNUT WALL BAFFLES Excellent for a great many public address, paging and sound reinforcement applications, the Lafayette 20 -watt permanent system is an exceptional value, Speakers and paging horns may be added for wider area coverage or for multiple small areas such as offices, loading platforms or stockrooms. Easy to install in small dance halls or dance sfudios, school auditoriums, Junday school rooms, mission meeting halls of gymnaslums. Provides excelient ceverage for audiences up to 2000 or areas up to 12,000 square ft .

    THE COMPLETE PERMANENT SYSTEMS INCLUDE: One 20 -watt Model PA- 421 amplifier, complete with tubes; 2-12"' heavy-duty PM 15 -watt speakers; $2-35 \mathrm{ft}$. speaker cables and plugs; 2 pollshed walnut wooden wall baffles; your enoice of either the ElectroVolce 727 SR Crystal microphone complete with detachable desk stand for desk, table top or hand use, and with on-off switch, or the Lafayette Model PA-31 slim crystal mike with on-off switch, lavalier cord and bracket and complate with $7^{\circ}$ cable and connector and removable swivel.type stand adaptor; you aiso get the popular Atlas $\mathrm{MS}-10 \mathrm{C}$ mike floor stand for a complete, convenient oublic address "package." For $110-130$ volts, 60 cDS AC use. Shpg. wt., 57 lbs .
    PA-468wxM 20-watt Permanent System, less Phono Top, cemplete as described PA-469wxM Samp as above, with Lafayette PA-31 Microohone instead of EV-727SR. PA-470wXM Same as PA-468WXM, with 4-speed phono top. PA-471wXM Same as PA-469WXM, with 4- speed phono top

    ## DELUXE BACKGROUND MUSIC

    SYSTEMS

    For Banks, Doctors, Dentists, Schools, Restaurants and Homes
    

    TR-111 Consists of:

    PA-268 Deluxe 40.Watt PA Amplifier LT-808 Quality Lafavette FM Tuner 3-Sk175 Lałayette Mi-FI "Thin Line" Cetling wall Eaffle Speaker 3.TR-111 Matching Transformer
    $\$ 5$ monthly
    As Low As
    

    No Money Down

    A highly efficient indoor background music system engineered to give you top quality voice or music reproduction. Provides glorious FM background music with the station of your choice selected on the quality Lafayette LT. 808 FM Tuner. System features top notch components such as the Lalayette PA-268 public adoress amplifler, a ver. satile unit with 40 watts output, 2 mic. inputs, auxiliary inputs for phono. funer, Individual volume controls, a frequency response 30 to $15,000 \mathrm{cps}$ and 4, 8, 16 ohms, plus 70 volt output for multiple speaker connection; LT. 80 B FM tuner is an extremely sensitive unit with low distortion and frequency response of $50.15,000$ cps. Three $21 / 4^{"}$ deep $\$ k-175$ hi-fl ceiling and wall baffle speakers that reproduce music realistically and three TR. 111 matching transformers. Easily mounts in any wall, ceiling or standard wood enclosure. Shog. wt., 51 lbs.
    PA-3's2WXM
    Defuxe Ahternate System
    Net 122.50
    Same as PA-382 above, but with 3 SK-119 $8^{\prime \prime}$ quality speakers, 3 Lowell RS-8A wall and celling baffles, and 3 lowell XCP8 flush-mounted baffle enclosures (instead of 3.SK-175's). Shpg. wt., 55 lbs.

    PA-383WXM
    Net 136.50
    WR-159 $2 \cdot$ conductor speaker cable (brown) 100 ft . rolls
    Net 1.20

    # LAFAYETTE roconumemeal PUBLIC ADDRESS SYSTEMS 

    Our Low Prices and 1-yr. Amplifier Guarantee Make These Systems "BEST BUYS" in P.A. (sef Pace 336)
    

    35-WATT PERMANENT SYSTEMS With DUAL SPEAKERS
    
    

    LAFAYETTE
    PA. 57 DRIVERS
    AND UNIVERSITY ELECTRO.VOICE SAR CDP PM TRUMPETS 30.WATT PROJECTORS
    

    - CHOICE OF DELUXE DYNAMIC MIKES 70-FT. DF SPEAKER CABLE - 2-25-WATT SPEAKERS E WALL BAFFLES FOR INDOOR SYSTEMS - 2-ELECTRO-VOICE DR UNIVERSITY HORNS FOR OUTBOOR SYSTEMS Designed for large halls, airports, loading platforms, department store music and paging systems, restaurant music, and railroad stations. COMPIETE SYSTEMS CONSIST OF: The PA-422 35 -watt ampliffer complete, avallable with or without 4 -speed phono top; choice of $2-25$ watt $12^{\prime \prime}$ PM speakers for indoor paging and music dis tribution; or 2-Electro-Voice B48 CDP wide-angle 30 -watt projectors or 2 Lafayette PA-57 drivers with University PH trumpets for best noise penetration: 2 35 speaker cables and plugs; your choice of the Electro-Voice 664 dual-impedance cardioid dynamic microphone with on-off switch and $18^{\prime}$ cable or the popular Argonne AR 3 dual impedance dynamic' with ball-joint desk stand for hand-held, desh or floor stand use; the highly useful Atlas MSIIOC floor mike stand; and, for the indoor systems, 2 wood wall baffles handsomely finished in walnut. For $110-130$ volts, 60 cps AC. Shpg. wt., 65 lbs . Iess phono; with phono 73 lbs


    ## 35-WATT PERMANENT INDOOR SYSTEMS

    PA-489WXM Consists of PA-422 35-watt ampilfier less phono top, 2-12" PM speakers 2 walnut wood baffles, $2-35^{\prime}$ speaker cables and olugs, MS.10C floor mike stand and Argonne AR-3 microphone
    PA-4)OWXM Same as PA-489WXM except with-E-V 664 mike
    PA-491WXM Same as PA-4B9WXM plus 4 -speed phono top
    PA-49WXM Same aS PA-490WXM plus 4 -speed phono tod
    Net 108.50
    Net 126.45

    ## 35-WATT OUTDOOR SYSTEMS

    PA-493WXM Consists of PA-422 35-watt amplifier less phono top, 2-Lafayette PA-57 driver units and 2 University PH trumpets, $2-35^{\prime}$ speaker cables and plugs, and Argonne AR. 3 dynamic mike with desk stand. 65 lbs. less phono, 73 lbs. with phono
    PA-494WXM Same as PA-493WXM except with EV-664 mike and
    MS-10C floor stand
    Net 122.00
    Net 151.00
    projectors
    Net 140.50
    PA-496WXM
    Same as PA-495WXM except with 2 E.V 664 mike and MS. 100 floor stand floor

    Net 189.50
    PA-497WXM Same as PA-493WXM plus. 4-speed phono top
    PA-49aWXM Same as PA. 494 WXM plus 4 -speed phono top
    PA.499WXM Same as PA.495WKM plus ispeed phorio top
    PA.500WXM Same as PA-496WXM plus 4-speed phono top
    Net 139.95

    ## 27-WATT MOBILE OUTDOOR SYSTEMS

    - With Lafayette PA-424 27-Watt All-Transistor PA Amplifier
    - Operates Off 12 Volt Storage Battery

    Complete monile systems include: Latayette Model PA.424 27-watt All Iransistor Mobile amplifier complete with power plug and 7' cable with battery clamps; your choice of 2-Latayelte PA.57 driver units and University PH reflex trumpels, on 2-Electro-Voice 848 CDP 30 -watt compound diftraction projector wide-angte hoins or l-Electro-Voice 844 Trumpet: your choice of Lafayette PA-31 wide range crysta microphone with on off switch. lavalier cord and bracket and $7^{\circ}$ cable and connector, and with swivel-type mike stand adapter, for chest, hand-held or stand use-or the defuxe Electro.Voice 647Alavalier dynamic mite with nech cord: sup port clips and $18^{\circ}$ cable, for chest, hand or desk use: Plus $35^{\circ}$ speaker cables and plugs.
    PA-475WXM Complete 27 -watt mobile outdoor system with PA-424 27 watt tran sistor mobile amplifier less phono top; with DC battery cable, plus Electro-Volce
    844 trumpet, Lafayette PA-31 dynamic mike, 1-35' speaker cabte and necessan connector. Shpg. wh., 19 tbs..................................................................... 77.50 PA-476wXM Same as PA-475WXM except with 2 Lafayette PA. 57 driver units ard 2-Unlversity PH trumpets, instead of E-V 844, with 2-35' speaker cables Shpg. Wt., 69 los.

    Net 119.50 PA-477WXM Same as PA-476WxM except with E.V 647A mike .......................... Net 14s.50 PA-470WXM Same as PA-476WXM except with 2 E-V 884 CDP projectors Net 137.50 PA-479WXM Same as PA-477WXM except with 2 E-V 848 CDP projectors Net 168.50 Pa-480WXM Same as PA-475WXM plus 12 volt phono top

    Shpg. Wt., 27 lbs.
    Net 109.90
    PA-4itiox Same as PA-476WxM plus separate 12 volt phono top Shpg. wt., 77 los.
    PA-482WXM Same as PA-477WXM plus 12 volt phono top
    Pa-483WXM Same as PA-478WXM plus 12 volt phono top PA-484WXM Same as PA-479WXM plus 12 volt phono top
    

    # LAFAYETTE PUBLIC ADDRESS EQUIPMENT 

    ## 100-WATT HI-POWER OUTDOOR SYSTEMS

    

    LAFAYETTE PA. 423
    100-WATT AMPLIFIER
    \& 17950
    $\$ 9$ monthly NO MONEY ODWN FOR BUDGET TERMS SEE PAGE 412

    LAFAYETTE 100.WATT
    SYSTEM COMPONENTS
    Thls ruggediy.designed equipment is recommended for all high power heavy duty requirements, such as church steeple systems, railroad yards, airports and industrial plants. COMPLETE 100-WATT OUT-DOOR SYSTEMS INCLUOE: The conservatively-rated Lafayette Model PA-423 100 -watt amplifler complete: your choice of 3 University Model PH trumpets with 3 Lafayette PA. 57 driver units or 3 Electro-Volce 848 CDP ComDound Diffraction Projectors with 30 -watt drivers; your choice of the Electro-Volice 641 durable high output dynamic microphone with $18^{\circ}$ cable and with E-V 428 "touch-to-talk" desk stand with dpot switch, or the Lafayette PA-43 high impedance dynamic mike with removable swivel-type stand adapter, talk switch and $7^{\prime}$ cable and plug. For $110-120$ volts, 60 cps AC. Shpg. wt., 100 lbs. less phono; 110 lbs . with phono.
     LAFAYETTE
    PA-43 OYNAMIC MIKE

    CHOICE OF MICROPHONES
    

    ELECTROVOICE 848 CDP PROJECTORS WITH 30 WATT DRIVERS
    

    PA-57 DRIVER UNITS
    

    ## 100-WATT INDOOR <br> 

    LAFAYETTE PA-423
    100-WATT AMPLIFIER
     MIKE
    E.V 641 OYNAMIC MIKE ON EV-428
    TOUCH-TO.

    TALK STAND CHOICE OF MICROPHONES
    

    LAFAYETTE 8" 10-WATT
    SPEAKER GAFFLE COMBINATIONS PRE-WIRED WITH MATCHING TRANSFDRMER \&
    VOLUME CONTROL

    ## PAGING SYSTEMS <br> COMPLETE SYSTEM <br> 

    ## NO MONEY DOWN

    ## up 1024 months to pay see page 412

    An ideal system for heavy-duty, high powered continwous performance; for paging or indistrial music distribution, and for extra-large auditorlums, schools churches, department stores, airports, etc. Included in these systems are 6 of the new Lafayette pre-wired speaker-baffle combinations with $8^{-}$heavy duty speak. ers rated at 10 watts each, prewired matching transformer for 70 -volt line with taps for $10,5,2.5,1.25$ and . 625 watts per speaker, and Individual volume controls. A screwdriver is all you need to connect speaker lines. You can add more speakers, if you wish, at any time - up 1080 for a $11 / 4$-watt-per. speaker department store or school Installation, etc. In addition you get the great new Lafayette PA-423 conservatively-rated 100 -watt amplifier; your choice of either the Electra-Voice Model 641 hish output dynamic microphone with $18{ }^{\prime}$ cable and with E.V 428 touch-to-talk desk stand with dodt switch or the well-known Lafayette PA-43 "Dyna-Slim" high output dynamic microphone with on-off switch, omni-directional head, "quick-s $11 p$ " swivel-type stand adapter, and plug-in cable. For 117 volts, 60 cps AC. Shpg. wt.. 95 ths. PA-458WXM Complete 100 -watt Indoor sustem as de scribed, less phono top, with E-V 641 microphone and 428 desk stand ......................................... Net 197.50 PA-459wXM Same, with Lafayette PA-43 "Dyna-SHim" microphone, less stand
    Additional speaker Baffle Units.
    PA.79w Imported. Shpg. wt., 7 lbs. ...... Net ea. 13.95

    ## PHONO TOP SYSTEMS

    These systems are identical to the above but include a 4 . speed phono top which mounts easily on top of the amplifier. Shpg, wt., 105 lbs.
    PA-460WXM Same as PA-458WXM with 4 -speed phono
    graph top
    Net 215.45
    PA-461WXM Same as PA-459WXM with
    4 -speed phono top
    

    Exceptionally versatile P.A. system for paging, music distribution and for meetings. Just righi for large auditorlums, schools, gymnasiums, churches, faclories, etc. Includes Lafayette outstanding PA-268 40watt P.A. amplifier; 4 Lafayette PA-79 $8^{\circ}$ heavy duty speaker-baffle combinations rated at 10 watts each. You can add more speakers at a yy time-up to 32 for a $1 / 4$-watt per speaker installation, speaker combinatlons have individual volume controls; your choice of Electrovoice Model 641 high output dynamic microElectrovoice Model 641 high output dynamic micro-
    phone with E-V 428 touch-to-tark desk stand or the phone with E-V 428 touch-to-taik desk stand or the on-off switch. 117 volts 60 cps AC. Shpg. wt., 70 tbs. PA-452 WXM with E-V'641' microphone and 428 desk stand ....................................................... 141.50 PA. 463 WXM Same as PA. 462 WXM but with Lafayette PA-43 microphone, less stand

    Net 122.50
    Additional Speãker-Baffle Combinations.
    PA-79w Shpg. wt., 7 lbs.

    ## A5/Y5 5 orfhrs outstanding valubs IN MUSICAL INSTRUMDNTS

    

    A lot of guitar at a little price. Smart double cutaway style with solid ma. hogany body. Dark reddish brown finish shaded to light mahogany; sunburst on top, dark-brown high-gloss finish on back. Rosewood fingerboard with eight inlaid position markers. Three-piece laminated neck; adjustable metal bridge. Powerful single magnetic pickup unit, with individual magnetic tuners for each string, has separate volume and tone control. $36^{\prime \prime}$ long. $10^{1 / 22^{\prime \prime}}$ wide. Shpg. wt., 12 lbs. Imported.
    v.10wx

    Net 37.50
    Carrying Case for above. Shpg. wt., 3 lbs.
    V.14WX

    Net 7.95
    

    Smartly designed solid mahogany body with double cutaway style. Two mag. netic pickups with indlvidual magnetic tuners for each string. Two volume and one tone control, plus 3 -way selector switch to permit use of each pickup or both simultaneously for instant change from rhythm to melody. Body finished in high-gloss lacquer. Dark, reddish brown finish shaded to light mahogany sunburst on top; dark brown finish on back. Three piece laminated neck; rosewood fingerboard with eight inlaid position markers; adjustable metal bridge. $36^{\prime \prime}$ long. $101 / 2^{\prime \prime}$ wide. Shpg wt., 12 lbs. Imported. V-11wx

    Net 52.50
    Carrying Case for above
    5hpg. wt., 3 lbs
    v-14wX
    Net 7.95
    

    A truly outstanding professional gultar. smart in design, exciting in sound - must for the guitarist who demands brilliant performance. Dramatic double cutaway style-selected mahogany solid body with contour-cut back. Highly polished, hand-rubbed shaded finish. Special thin cut blonde maple reinforced neck with adjustable steel rod. Oval rosewood fingerboard with 20 frets and inlaid pearl position markers. Two magnetic pickups with individual tuners for each string. Two volume and one tone control. Two slide switches for pickup control. Chrome-plated tremolo tailplece; adjustable bridge; individual machines, $381 / 2^{\prime \prime}$ long, $12^{\prime \prime}$ wide. Shpg. wt., 15 lbs. $381 / 2^{\prime \prime}$ lon
    imported.
    ${ }_{\substack{\text { I } \\ \mathbf{y} \\ \text { I } 15 \mathrm{wx}}}$
    v-15wx ......................... Nel 92.95
    Carrying case for above.
    V-21wX Shpg. wt., 3 los.
    Net 7.95
    

    A carmencita classic-type guilar combining outstanding craftsmanship and materials. Concert size in the true clas. sic design. Bach, sides and neck are of genuine mahogany and top is of spruce. Rosewood fingerboard, bound with while celluloid, has four peari positions and heavy frets. Steel relnforced neck and nyion strings. Narrow graln white spruce top with fan bracing. Top edge is bound with heavy sparkling brown celluloid and decorated with black and white trim. Bach edge is bound with heavy spariling brown celluloid. The sound hole is decorated with inlaid mother-of-peari Inlay and black and-white lines. Slotted headpiece; white button machines. Shpa. wt., 11 lbs. Imported.
    V.16WX

    Net 32.95
    

    COMAETE 7PC. "VALUE" GUITAR OUTFIT Consists of all items shown and listed above, including "Value" Gultar, V-10wx. Shpg. wt., 35 lbs. v -12wx
    

    Consists of Electric Guitar: 5-watt Speaker-Amplitier this page; laminated chipped board carrying case with imita. tion alligator covering, flannel lining, nickel-plated fasteners, plastic handle; flannel-lined leather neck strap; celluloid pick; electric cord; Easy-Method Guitar instruction book.

    COMPLETE T.PC. "SPECIAL" CUITAR OUTFIT 19.95

    ## 5-WATT SPEAKER AMPLIFIER

    

    Features $8^{\prime \prime}$ speaker for faith. ful reproduction. Top-mounted control panel has tone and volume control and inputs for three instruments. Three.tube chassis. Housed in 2 -tone cabi chassis. Housed in 2 -tone cabi-
    net with attractive lattice-work net with attractive lattice-work
    grille cloth. Case size: $16 \mathrm{~W}, 6 \mathrm{D}$ grille cloth. Case size: $16 \mathrm{~W}, 6 \mathrm{D}$
    $13^{\circ} \mathrm{H}$. AC-DC 60 -cycle operation Shpg. wt., 18 lbs. 4-233Wx

    Net 29.95
    

    A professional-style set complete with accessories for exclting drum playing. Features a $14 \times 20^{\circ \prime \prime}$ singletension bass drum with permanent-type tom-tom and cymbal holders. $14 \times 542^{\circ "}$ snare drum with sepand cymbal holders. $14 \times 5 y_{2}{ }^{\prime \prime}$ snare drum with sep-
    arate tension, flanged hoop, metal snare, professional throw-off. $12 \times 8^{\prime \prime}$ matching tom-tom with sep. arate tension, flanged hoops. Accessories include a $12^{\text {n }}$ cymbal, drum pedal with adjustable beater and springs. disappearing spurs, sturdy snare drum stand, holder for fom-tom and sticks. All metal parts are highly nickel plated. Bright sparkle finish. Shpg wt. 45 tbs. Imported.
    V-11พx
    

    Lafayette offers a truly outstanding value in wireless intercoms. Handsomely styled, these units offer quallty performance for home or business use. Each unit features a 3 -position bar-control lever: Dictate (for use as "baby sitteri. lengthy talking), Taik (has spring return to Listen position), and Listen. No wires to connect-simply plug position), and Listen. No wires to connect-simply plug
    into any $117 V$ AC/DC ouliet. Front panel volume control
    and pilot light; adjustable squelch control at rear reduces. Interierence during quiet periods. Dependable $3^{\prime \prime}$ speaker. Add as many remotes as needed. Shpg. wt., 10 Ibs. Imported.
    PA.406M 2.Station System
    Net 32.50
    Extra Remote. Shpg, wt., 5 Ibs. Imported.
    PA-405

    2-Station Wireless Intercom System

    ## NEW! LAFAYETTE 2, 3 \& 4 STATION TRANSISTOR INTERCOM

    

    - Instantaneous 2-Way Communication - No Waiting For Warmup, No Heat, Nó Hum
    - Portable as Well as For Desk or Wall Mounting
    - You Can Start With 2-Station System and add on Additienal Remote and Door Remote Later
    Lafayette's new transistorized intercom can be used anywhere for 2,3 or 4 -station communications. Master has printed circuit board in well designed 3 -transistor plus diode circult for plenty of output. Master also has volume control, 3 OFF-ON slide switches for calling or listening to up to 3 remote stations, and a spring return ${ }^{\text {sTALK." "HEAR," and "OFF" (battery saving position) lever switch. Master can call }}$ and talk to each, any 2 . or all 3 remote stations at the same time. With system in "OFF" battery saving position, remote can initiate a call to Master by transmitting a tone signal indicating that he wishes to speak to master. Perfect for baby sitting by simply placing lever switch on Master to "Hear." Absolutely no danger of shock since unit is 6 -volt battery operated.
    Neatly designed in sloping ivary cases with attractive blue front panels. Complete with battery holder, $44^{"} 7^{\prime \prime}$ " type cells and $50^{\circ}$ of 2 -conductor wire. Units have rubber feet and can be placed horizontally on desk or table top or hung on vertical surface (wall, side of desk, etc.) $434 \times 5 \frac{3}{3} \times 23 / 4$ " max. dimensions of master and remote. Imported.
    PA- 285 Shpg. WT., ${ }^{2} 4$-Sthris.
    
    Net 19.95
    Net 4:95
    PA. 286 Additional Remote as above Shpg.
    PA.287 Door Remote. Shpg. wt., $1 / 2$ los.
    Net 4.95
    REPLACEMENT BATTERY
    BA-155 $11 / 2$. Volt Battery ( 4 required)
    ea. Net . 13
    WR-12 Additional 2 -Conductor Wire 100 ft . coll


    ## NEW! LAFAYETTE SOUND-POWERED HANDSETS

    ## 2-Station Telephone System

    - Voice Transmission Over Several Miles
    - Builf-in Signalling Facilities
    - Simple 2-Wire Connection Between Units

    Lafayette brings you a unique sound-powered telephone handset which does not require battertes or external source of electrical power. Piezo-electric elements built Into mouthpiece and ear. piece enerates power for voice transmission over several miles on 2-wire cable. Each handsel has bulit-in push-button buzzer on 2 -wire cable. Each handsel has buit-in push-butlon oprate
    for calling other party (range 500 ft .) 2 penlight cells operate for calling other party (range 500 ft .) 2 penlight cells operate
    the buzzer which has adjustable tone. Each unit constructed of rugged, high-impact, heavy molded plastic. Piezo-electric elements are specially treated to provide resistance against shock, humidity, and corrosive fumes-will last indefinitely. Complete with batteries and instructions. Shpg. wt. per pair, 3 lbs . Imported.
    PA-299 2-Station Telephone System ( 2 units)
    PA-299 2-Station Telephone S
    PA-298 Extra Single Handset
    Net 19.95
    Net 10
    Pent WR-221 Alpha 1172 2.Wire Cable per Nation Net each Alpha 1172 2.Wire Cable for $2-$ Stat
    System. Shpg. Wt., 1 Ib. per $100-\mathrm{ft}$.

    Net 2.41
    

    A low-cost, fully.fransistorized intercom system comA low-cost, pully.rransistorized 50 feet of interconnecting cable. Operates plete with 50 -feet 9 inexpensive 9 -volt battery or can be adapted for use on AC house current with optional power supply. Master unit has a volume control and press-to-talk switch. Remote has a press-to-cal! switch and can signal even though the master is turned off. All-metal cabinet is finished in sandalwood tan with gold trim. Easy-to-install: simple two-wire hock-up. Size: $41 / 4 \mathrm{Lx}$ $31 / 4 \mathrm{Wx} 1^{3 / 4}{ }^{* H}$. Shpg. wt., $21 / 2 \mathrm{lbs}$.
    31/a Wx
    PA-391
    Net 11.93
    BA-i78 g.v battery for above ...................... Net , 48
    Special power supply for use with above AC operator. PA-392

    ## TELEPHONES FOR INTERCOMS \& PRIVATE PHONE SYSTEMS

    

    Why keep running over to the receiver to maintain con tact with the other party? Instead, place the receiver on the Easy.Phone telephone amplifier and then proceed with important business while still within earshot of the telephone party. There is no need to use up one hand to hold phone, or grab receiver between neck and shoulder. With the receiver cradled on the Easy-Phone, there is complete freedom to take notes the party dictates, using either long hand, short hand or typewriter When engaged In long distance conversation, Easy.Phone will clearly amplify the communication so relatives or business associates can hear every word as it is sald. On occasion the search for some pertinent article of information prevents "holding on to the wire". EasyPhone permits the information to be sought while keeping an ear "on the wire
    Easy-Phone can be kept at office or at home - ready at all times for instant action. A four transistor, battery powered amplifier and inductive pickup, compactly in

    ## EASY-PHONE TELEPHONE AMPLIFIER

    - Lends A Valuable Helping Hand
    - Amplifies Telephone To Room Volume
    - 4 Transistors + Varistor
    - No Dangling Wires, Pickups To Connect
    - A Reminder That Caller is Waiting On The Wire
    - No Warm-Up, Instant Operation
    stalled in a most attractive plastic case, compose the Easy-Phone. Completely self-contained with no protruding plugs and twisted hook-up cords, it will not dlsarrange the orderliness of work space.
    Operation is this simple: Placting the receiver on Easy. Phone turns amplifier on. then adjust volume to the proper tevel. Volume control is independent of on/off switch (which is depressed by receiver's weight). SPECI. FICATIONS: 4 transistor circuit with 1 varistor; powered by 4 pen-light, 1.5 volt cells, self-contalned; $3^{\prime \prime}$ dynamic speaker, out of view under amplifier; battery life 6 months with moderate usage. Welght 25 ozs. Heavy black bakelite case measures: $84 / 4 \mathrm{La} 31 \mathrm{~K}_{0} \mathrm{~W} \times 2 \%_{0}{ }^{\prime \prime} \mathrm{H}$. Easy-Phone rests on two sturdy chrome plated runners. With minia. ture plug and jack for recorder input. Shpg. Wt., 3 lbs F. 759 With Batteries .......Imported ....... Nef 17.50

    EXTRA BATTERIES FOR ABOVE
    BA-155 Penlite cell
    Net .13

    ## DIAL PHONE

    ## - For Intercoms

    - Extensions -

    Private Systems

    ## 695

    Popular, modern dial phone. Can be used to make complete private systems. Equipment taken from service, reconditioned and ready to work. Simple, 3 -wlie hook-up. Complete with handset, dial, bell, Induction coil and connecting cable. General appearance may vary slightly from catalog illustration. Shpg. wt., 8 lbs, PA-J81

    Net 6.95

    ## WALL-TYPE DIAL PHONE 895

    Popular, self-contalned wall-type telephone taken from service and reconditioned like new. ldeal for intercom and private phone systems. Includes bell, induction coil and dial. Size and appearance may vary slightly
    Pa-360 Shpg. wt., 7 lbs
    Net 8.95
    6 PUSH-BUTTON TELEPHONE $14^{95}$

    - Made by Western Electric
    - Complete with Dial and Ringer
    - 6 Illuminated Type Buttons
    

    Popular cradie-type phone with 6 push-buttons that can be Illuminated. Reconditioned like new and guaranteed to work. Ideal for Intercom and private phone systems. Size and appearance may vary slightly. Complete whth dial, bell. induction coll and connecting cable. PA. 377 Shpg. wt., 10 lbs.

    ## 3 CONDUCTOR COILED CORD

    

    Exceptlonal value in tough, 3-conductor coiled cord with strain rellef. Excellent for phones in private phone systems, intercoms, etc. Extends to $6^{\circ}$. Shps. wt., 1/2 to PA.378

    ## CRADLE PHONE

    385
    ## 2-for-7.50

    Popular type Stromberg-Carlson cradle phone. Can be used as private telephone intercom. Reconditioned and ready to work. Consists of handset and cradle. less dial General appearance may vary slightly from catalog plefure. Shpg. wt., 6 lbs
    PA. 359
    Net ea, 3.85 2-for- 7.50

    ## PORTABLE SIGNAL CORPS

    FIELD TELEPHONEPortable fleld phone in durable metal housing. Complete with heavy carrying case. Consists of handset. generator, induction coil, ringer and condenser. Used, but in good condition. Requires 2 standard flashlight cells. Shpg. wt.i 13 lbs, PA. 358 Net ea. 11.75

    ## Ba. 157 Batteries for above (2 req.

    

    ## TELEPHONE PICKUP

    ## FOR RECORDING TELEPHONE CONVERSATIONS

    

    Induction telephone pickup. Telephone conversations can now be picked up with no tapping of wires or special telephone circults. Simply place the phone base, either cradie or upright iype, on the pickup platform and connect the leads to the high impedance input of any me. nect the leads to the high impedance input of any disc
    dium gain audio amplifier, or directly to any tape, disc dium gain audio amplifier, or dir
    or wire recorder. Shpg, wt., 8 ozs. MS.16 Net 1.95
    

    COMBIMATION MALE \& FEMALE TELEPHONE PHONE PLUG $\&$ PHONE JACK
    Ideal for hooking up telephone extensions and inter coms. For use with PA-377 and PA-381 phones listed above.
    PA. 384
    Net each 2.e5 100 ft - 2 conduct or twlster phone wire 2 conductor - twisted palr-unshletded tele. phone wire

    Ner 1.55

    WESTRER ELECTRIC TYPE SG-1 SOUND  , d 5 92 POWERED HANDSETS.

    Simple 2-way communications for miles. No batteries required. Just connect phone clips to two conductor wire. Excellent for Private Intercom System, Construc tion, TV Instalter Motels, Camps, Farms, Factories Stores. Homes, Sul Resorts, etc. Any number of hand sets can be instalied on one line. Complete with re tractable cord and alligator clips. Shps. Wt., 4 Ibs. PA-375
    PA.376 Set of two Handsets with 100 ft . of 2 Conductor Inside.Outside Wire

    Net 12.75
    

    ## WESTERN ELECTRIC HANDSET <br> $4^{25}$

    Dependable, rugged Western Electric F.l Handset. Has count. less valuable applications for intercom, private phone, etc. Reconditioned for fool-proof ser. vice. Complete with retractable cord. Shpg. wt., 1 lb .

    Net 425
    30 FT . TELEPHONE EXTENSION CORD
    

    - Ideal Extension Cord for
    

    Your Telephone Intercom
    Phone Listed Use with Dial Phone and Cradle Phone Listed on this Page
    add flexibility to your telephone intercom. Now be able to move vour telephone intercom from room to room 30 feet of telephone extension cord with standard 4 -pin olue and lack. Cotor-coded cord to match screw term. inals on plug and socket. Imported
    PA. 398
    Net 3.25
    PA. 399 Extra Phone Jack
    Net 1.45
    

    ## - Inter-Unit Tone Calling - Beautifully Styled - Battery Operated - Simple Plug-in Connecting cord - Push-Button Operation

    ## deluxe Bogra Series t TRANSISTORIZED OFFICE INTERCOMS

    
    a compact light weight intercom system with natural voice reproduction and very high output level. For offices, stores, homes or any location where voice intercommunication is needed. Features: rugged transistorlzed design; trouble.free clrcuitry; low profile and tri-stage amplification. In addition, Series $T$ Intercoms provide the simplest method yet devised to modify systems at will so that all remotes can be operated privately (for inter-office situations) or non-privately (for nursery or slock-room areas where a remote must reply or be heard withoul operating any controls). Single Master-Multiple Remote System uses up to 5 RIA-1 remote stations with one TIA- 6 master or 11 remotes with a TIA. 12 master. Remotes may originate calls to master and master can silence background noise of remotes with "mute" switch. All-Master System, up to six TIA-6 or twelve TIA- 12 masters may be used. TIA-6 can talk to all stations at once, or permit separate conversations simultaneously up to the number of stations used. Model RIA-1 remotes have press-totalh bap. Sturdy phenolle plastic cabinet. size: $73 / 4 \mathrm{~W} x$ $31 / \mathrm{H} \times 7 \boldsymbol{\circ} \mathrm{D}$. ShDg. WI. master 4 lbs . Remote 3 lbs . PA.332 TIA-6 Master Station …................ 34.45 PA. 333 TIA- 12 Master Station ..........................Net 38.25 PA. 334 RIA-1 Remote Station ….............................. 10.45

    ## WIRING REQUIREMENTS, FOR Bogen INTERCOMS

    For single master-multiple remote systems, use a three conductor unshieided cable between master and each remote. For an all-master system, the total number of unshielded conductors common to all stations is one more than the total number of masters in the system; i.e., a six-master system will be interconnected with a seven-conductor unshleided cable.
    CABLE PRICES PER $100^{\circ}$ FOR BOGEN INTERCOMS

    | No. | Description | Par $100{ }^{\circ}$ | NET |
    | :---: | :---: | :---: | :---: |
    | WR.115 | 3-wire unshielded | libs. | 2.45 |
    | WR-116 | 5-wire | $31 / 2 \mathrm{lbs}$. | 3.65 |
    | WR-117 | 7-wire | 4 lbs. | 5.25 |
    | WR-118 | 9.wire | $51 / 2 \mathrm{lbs}$. | 5.78 |
    | WR.413 (Belden 8743) | 12-wire | 6 lbs. | 5.88 |
    | WR-415 (Belden 8744) | 18-wire | 7 lbs. | 7.94 |

    Master and remote can call each other even when master is switched off-pressing any of the push buttons slgmals the person at the other end by means of a tone. Each unit is housed in a highimpact plastlc case and supplien complete with interconnecting cord and 9 -volt battery. Dimensions (each unit): $3 W \times 13 / 4 \mathrm{H} \times 4^{* \prime D}$. Shpg. wt., $11 / 2$ Ibs. Imported. PA-410 2-Station Transistorized intercom .... Net 9.95 BA. 2 Extra 9-volt battery

    A beautlfully styled, miniature 2-station intercom that is fully transistorized and operates from one Inexpensive 9 -volt battery. The system consists of one master and one remote with 66 feet of light. weight interconnecting cord. Plug at each end of cord lets you hook-up system fast-no tools or wiring connections required. Master unit has power on-otf/ volume control and listen-talk push-button. Remote has push-button for calling only-you can ilsten or
    talk to the master without operating any buttons.

    ## Boger TELEPHONE INTERCOM EQUIPMENT

    

    Bogen-Phones are the perfect answer to tled-up switchboards. Wonderful for inter-office calling while holdIng customers on the regular telephone line. Just press a button.a a buzzer sounds at the station or stations called. You are instantly connected when the recelver there is lifted. Selective ringing. common talming: allows only 1 conversation at a lime. "Conferencev feature lets you talk to as many stations at once as there are recelvers in the system. Three models are avaliabie to handle up to 13 stations, All stations are housed in Impact-resistant gray plastic. Rubber feet on the base prevent sllding. Each handset has a 4 -ft. cord. self-colling to prevent snarling. Each station is supplied with a 6 -ft. master cable and a junction box for easy wiring and supplled ready for desh or wall mounting. An adhesive push-button-directory tape is supplied with each station.
    PA-350 (TQ1-8) operates on 4 self-contained flashlight batteries ( 2 for each phone). The 6 and 12 -button models operate on 110 VAC and require use of power supply Hsted below. Shpg. wt., 5 Ibs. per unit.
    PA-350 TQ1-B I-Bufton, 2-Station Twin-Phone System with 50 ft. of cable less batterles ............... Net 34.35 PA-341 TO-6 6-Button, 7 -Station Handset (up to 7 may be Used in a system) Less wire PA. 349 TO- 12 12-Button, 13 -Station Handset (up to 13 in a system) iess wtre PA-342 PRS-1 Power Supply for TQ.6 and TQ-12. Shpg. wt., 4 lbs.

    Net each 20.95
    

    ## WIRE REQUIREMENTS FOR TQ SERIES

    Use 3 conductor unshelded cable for connecting PRS-1 power supply to system of phones (connected at any junction box in system). Cable listed below is for "between-phone" use.
    WR-115 3 conductor unshielded per 100' 3 lbs.
    2.45

    WR-413 12 conductor unshielded per $100^{\circ}$ for TO-6, 6 Ibs.
    WR-415 18 conductor unshlelded per $100^{\circ}$ for TO-12, 7 lbs

    ## DeLuxe NEW Bogen HOME "COMMUNO-PHONE" INTERCOM

    

    HCR-1
     HCR-2
    

    A new defuxe home intercom system for bult-in Fully transistorized HCA-1 amplifier powers complete mounting in walls. Any comblnations of master con- system. Output of any AM or FM radio may be con. trol stations and HCR remotes totaling up to 9 in a nected from its speaker voice coil into the music jack system may be used. Master control stations may of the amplifler. Any HCM-9 control station can call any other control station or remote. Control pick up broadcasts thru HCA- 1 amplifier Dimensions statlons can enjoy complete privacy when desired. HCM-9, HCA-1: $11{ }^{13} 1 \times 421 / 2^{\prime \prime}$, HCR-1. HCR-2: $63 / 4 \times 41 / \mathrm{m}^{\prime \prime}$.
    PA. 430 HCM-9 Master control station. Shpg. wt., 2 lbs.
    Net 25.50
    PA. 431 HCA-1-Transistorized amp. - i for each system for $110-120 \mathrm{~V}$. Shps. wt., 3 lbs.
    PA. 433 HCR- 1 Remote Shpg. wt., 1 ib.
    PA. 432 RBM-F Flush Mounting box for HCM-9, HCA-1. Shpg, wt., 2 lbs.
    PA-434 HRC-2 remote with doorbell button. Shpg. wt., 1 ib. 1 lb.
    PA-435 RBR-F Flush Mounting Box for HCR-1, HCR-2. Shpg. wt., 1 lb .
    Net 29.25
    Net
    8.85
    Net 3.55

    Run on unshield. cable in which the number of twisted control station run a 3 palr iwisted cable; between pairs is 4 more than the total of control stations and each remote station and the most convenient control remotes in the system. Between amp. and closest station run an unshield. pair.
    WR-12 1 pair, 100 ft . coils only, net per coil
    WRC-43 2 pair, per it. .035; per $100^{\circ}$ up
    WRC-43 2 pair, per ft. . 035 ; per $100^{\circ}$ Up
    WRC. 443 palr, per ft. . 05 ; per $100^{\circ}$ up
    $\begin{array}{ll}\text { WRC-44 } & 3 \text { pair, per ft. } 05 \text {; per } 100^{\circ} \text { up } \\ \text { WRC-45 } 6 \text { pair, per } \mathrm{ft} .07 \text { per } 100^{\prime} \text { up }\end{array}$
    WRC-45 6 palr, per ft. .07 ; per $100^{\circ}$ up
    WRC-67 11 palr, per ft. . 13 ; per $100^{\circ}$ up

    # FANON-MASCO 

    ## FLUSH-WALL AM-FM RADIO INTERCOM SYSTEM

    

    Model 5509 beautifully styled master radio intercom system provides up to 9 remotes for MI-Fi AM or FM reception plus phono music or voice throughout your home. Remotes can call each other by switching at master and master and remote can call each other at any time. Each remote has volume control. Sensitive, nolse free, wide band AM-FM Tuner with AFC. AMP. rated at 2 watts, has 7 tubes, 2 diodes, 1 silicon rectifier. Master may monitor all remotes. Inputs for tape or record player. Satin chrome finish. Front panel: $151 / 4 \times 7 \times 1 "$. Rough-in dimen: $13 \% / 6 \times 5 \% /{ }^{\circ} \mathrm{D}$. Supplied with back bor. Shpg. wt., $124 / 2 \mathrm{lbs}$.
    PA-388WX No Money Down 104.95 Model 56 Indoor Remote for 5509 - High styted indoor remote with back box, talk-listen switch and volume control. $5^{\prime \prime}$ speaker, satin chrome finish. Panel: $6 \times 81 / 2^{\prime \prime}$. Rough-in dimen: $47 / \mathrm{gax}^{\circ "}$. Shpg. Wt., $21 / 2 \mathrm{lbs}$. PA-389

    Net 9.75
    Model 80. Flush wall remote with back box for outdoor use PA-199 Shpg. wt., 2 lbs

    Net 5.95 Model BDR Flush Wall Mount Remote - Same as 80, with bell push-button. Pa-200 Shpg. wt., $21 / 2 \mathrm{lbs}$.

    Net 7.50

    ## BUILT IN WALL SYSTEM WITH AM RADIO

    MODEL MC-Master Intercom control combined with powerful 6 tube AM radio. Will control up to six remotes. BC remotes provide instant two way communication between any two or more locations. Size: $111 / 2 \times 71 / 4$ PA. 195 Model MC. Shpg. wt., 2 lbs.

    Net 52.50
    MOCEL MCL-Master control same as MC except less radio but with bult in phone.jack. Lets you play records or tapes through intercom. Size: $111 / 2 \times 71 / 4^{\prime \prime}$ Pa. 196 Model MCL

    BC Flush Wall Mount indoor remote for MC Serles With back box. PA-197 Shpg. wt., 1 lb., 10 oz.

    Net $3 \mathbf{2} .95$

    Net 5.95
    BI Same as BC except with phono jack. Shpg. wt., 1 lb. PA-198

    Net 8.95
    BO Flush Wall Mount remote, for outdoor use, with back box PA. 199 Shpg. Wt., 1 tb.

    Net 5.95
    BDR Flush wall Mount remote, same as 80 , with Bell Button
    Net 7.50
    WIRING REQUIREMENTS
    For 5509 -MC Serles Separate 3 conductor unshielded wire for each remote used Wr-115 in 100 ft . coils only. Shpg, wt., 2 lbs.

    Net 2.45
    

    ## FANON-MASCO 2-STATION INTERCOM

    Ideal as a "baby-sitter." Provides modern communication between offices, departments, living quarters, etc. Remote has "talk-listen" switch for privacy where required. Master unit has volume control, on/aff switch. separate press-to-talk switch and pilot light. Cabinets of 2 tone beige styrene. Supplied with 50 ft . of cable. Size of each station, $8 \times 4 \times 4^{\circ \prime}$. Shpg. wt.. 6 lbs.
    PA-208 Fanon FX-2B
    Net 23.90
    PA-209 Fanon FS-B (extra Remote) also supplied with 50 ft . of cable ... Net 7.95 WR-115 additional cable per 100 feet. Shpg. Wt., 1 lb . per $100^{\circ}$

    Net 2.45
    MODEL RB-1 FANON-MASCO WIRELESS
    ELECTRONIC NURSE
    no installation

    - no wiring - just plug in - COMPLETELY PORTABLE

    No installation completely portable just plug in and flick the switch. Wireless Electronic Nurse then picks up any sound in its vicinity and transmits to your radio, up to 300 feet away. Use with any radio set-home, car, portable, transistor. Use the Electronic Nurse anywhere-at home, visiting neighbors, work Ing outdoors, even sitting in your automoblle. Your baby is absolutely safe, anytlme. Adjustable to any clear radio channel between 1100 and 1600 kc . Tubes: 12AX7, 50C5, selenium rectifier. Controls Power ON-OFF and pilot light. Power 18 watts at $110-120$ volts AC or DC. Size $81 / 4 \times 41 / 2 \times 3 y / 4^{\prime \prime}$. Attractively finished metal case. Shpg. wt., 4 lbs .
    PA. 215
    Net 14.95

    ## FANON-MASCO MULTI STATION INTERMIX INTERCOM MODEL FIM 12B

    Can use up to 6 Masters and up to 36 Remotes in Master-to-Master and Master-to.Remote intermix system 1 Master and up to 11 remotes in Master-to-Remote system only; up to 12 Masters in Master-to-Master system only; FC remote has talk switch and can call master only. On private operation, remote must depress switch to talk. The FC-6 Remote can be connected to up to 6 different Masters. The FIM- 12 Master has a volume control wi'h on-off switch, a 12 -station rotary selector switch with "Stand by" position, and a spring-return Talk-Listen switch with "Dictate" position for extended talking. Master power output - $21 / 2$ watts. Hum and noise are extremely low. For 117 volts $A C$ or DC. Dimensions: Masters and Remotes, $8 \times 4 \times 4^{\prime \prime} 2$ tone beige styrene. Shpg. wt., Master: 4 lbs. Remote: $21 / 2 \mathrm{lbs}$.
    PA-203 FANON FIM-12B Master
    PA. 204 FANON FC-8 Remote
    Net 31.20
    PA. 205 FANON FC.6B Remole
    Net 8.40

    1. For interconnecting WIRE REQUIREMENTS
    2. For interconnecting the masters, use twisted pairs of wires; the number of pairs being the same as the total number of masters in system
    3. For interconnecting masters with FC-68 remotes, use twisted pairs of wires; the number of pairs being equat to the sum of the masters and FC-6B remotes which communicate with each other.
    WR-12 2 conductor twisted with plastic installation. Shpg. wt., 2 lbs.
    In 100 ft . coils only. Net per coil.
    Net 89 3. For interconnecting a master with FCB remotes, use a cable consisting of one shielded conductor and a number of individual conductors; the number of Individual conductors being the same as the number of FCB remotes.
    WR-265 3 wire with 1 wire shlelded. Shpg. Wt., 3 lbs. per 100 ft .
    Net 4.74

    ## FANON-MASCO DUAL PURPOSE 6 STATION MASTER

    FX-6B Econofone - A dual purpose master, for use
    with up to five FC remotes in a Master-to-Remote
    system, or up to six masters in an All Master sys.
    tem. Five individual station selector switches. "Dictate-Talk-Listen" switch. In all master systems, 3 private conversations or conference of all stations may be held. 3 tubes, 30 watts power consumption. Weight 6 lbs. Size: $83 / 4 \times 43 / 4 \times 53 / 4^{\prime \prime}-$ two tone belge styrene.
    PA. 213 FX-68
    PA- 204 FC8 remote for FX-68
    Net 23.90
    FM-5B ADD-A-CALL.
    NEW 5-STATION MASTER
    Master to remote system or Remote to Remote
    

    May be used with up to four remotes. Master can speak to any one, several or all remotes. Direct remote-to.remote communication between any iwo or more remote stations when 'set-up' by the master. Master can monitor (Ilsten-in) to any one or more of the remote statlons at will Remotes can originate calls to the master and to other remotes. "Busy-light" flickers during conversations. Shpg Wt., 6 lbs. Size : $83 / 4 \times 47 / 4 \times 5 \frac{1}{4}$

    ## MODEL FW-40 2-STATION TRANSISTORIZED WIRELESS INTERCOM

    

    Extremely sensitive, this new system is free from hum or noise due to an exclusive Fanon-Masco squeich circuift. Plugs into AC outtet. No warmup period required. No shock-no heat-safe around children. SPECS: RF output - 150 mw audio output: 120 milliwatts; 3 transistors. 1 crystal diode and 1 full-wave selenium rectifier: $31 / 2^{-2}$ speaker. Durable high impact styrene case finished in speaker. Durable high impact styrene case finished in
    beige with black and gold appointments. Overall size: $83 / 4 \mathrm{~W} \times 43 / 4 \mathrm{H} \times 53 / 4^{\prime \prime} \mathrm{D}$. For $105-125 \mathrm{~V}$ AC-DC.

    Net 53.95
    PA- 211 fW-40 complete 2 -station system Shpg. wt., 7 lbs.
    Model FW-41 Additional Single Station
    PA-212 Shpg. wt., $31 / 2$ lbs
    Net $27 . .75$
    Model FW. 50 B 2 Station Wireless Intercom. A deluxe 4 -tube unit for 105.125 V AC or DC. Size: $8 \times 4 \times 4^{\prime \prime}$. Shpg, wt.. 7 lbs
    PA-206 Fanon-Masco FW-508 2-station wireless Net 49.95
    PA- 207 Fanon-Masco FW-51B Extra station. Shpg. wt., 31/2 Jbs..
    Net 25.45

    ## INTERCHANGEABLE CORD SETS (WITH PLUG)

    Instantly adapts iron to any 2 or 3 wire outlet. Wire is $6^{\prime}$ long, 18 ga, 65 strands copper.

    | Stock No. | $\begin{gathered} \text { Mfg. } \\ \text { Type } \end{gathered}$ | Wire | 1.9 | 10.98 | $\begin{gathered} 100 . \\ \text { up } \end{gathered}$ |
    | :---: | :---: | :---: | :---: | :---: | :---: |
    | HG.16 | 6102 | 2* | 1.28 | 1.07 | . 96 |
    | HE-19 | 6103 | 3 $\dagger$ | 2.15 | 1.80 | 1.62 |
    | BEIGE |  |  |  |  |  |
    | HG-17 | 6102 | 2* | 1.28 | 1.07 | 96 |
    | HG-20 | 6103 | 3† | 2.15 | 1.80 | 1.62 |
    | IVORY |  |  |  |  |  |
    | HG. 18 | 6102 | 2* | 1.28 | 1.07 | 98 |
    | H6. 21 | 6103 | 3 $\dagger$ | 2.15 | 1.80 | 1.62 |
    | $\begin{aligned} & \text { * With } \\ & \text { Grou } \end{aligned}$ | Standa <br> Plug | $2 \cdot W$ | Pl |  |  |

    "PERMA.CDOL" HANOLES 16100
    Three coot pastel colors; virtually inde. structible finely ribbed handies. Ole-cast aluminum heat sink bulit in. U/L app. $0.8^{\prime \prime} 0 . D$. at grip; $4.7^{\prime \prime}$ igth. Wt. 102 . slock Color 1.9 10.99 100 -up Sto
    No $\begin{array}{lllll}\text { HG-11 } & \text { Beige } & 1.28 & 1.07 & .96\end{array}$ HG-12 Turquoise

    ## HEAT CARTRIDGES

    New reduced watt density; stainiess steel, sealed cartridge, interchangeable; threaded. U/L approved - 71/2" Igth. $.363^{\circ}$ dia 1.1 oz.- Color coded.
    Stock Mirs. Watts $1.9 \quad 10.99100$ up $\begin{array}{cccccc}\text { No. } & \text { No. } & & \text { ea. } & \text { ea. } & \\ \text { HG. } 13 & 6200 & 40 & 3.28 & 2.73 & 2.48\end{array}$ $\begin{array}{llllll}\text { HG.13 } & 6200 & 40 & 3.28 & 2.73 & 2.48 \\ \text { HG.14 } & 6201 & 30 & 3.28 & 2.73 & 2.46 \\ \text { HG.15 } & 6203 & 25 & 3.28 & 273 & 2.46\end{array}$ $\begin{array}{llllll}\text { HG-14 } & 6201 & 30 & 3.28 & 2.73 & 2.46 \\ \text { HG-15 } & 6203 & 25 & 3.28 & 2.73 & 2.46 \\ \text { HG.75 } & 6206 & 15 & 3.28 & 2.73 & 2.48\end{array}$
    

    The most effective method for removing oxidation and cleaning soldering tips. Clean tips last twice as long. KLEEN.TIP eflminates burning rags, flying solder. Complete with phenolic tray, 2 specially processed sponges tray, 2 specially processed sponges
    and bracket for attaching to work bench. Shpe. Wt., 602.
    H0. 872
    Net 98
    ANTI-SEIZE LUBRICANT \#800t
    Leng thens soldering tip anu heating unit life. Guards against freezing; protects against corrosion. 2 oz. can.
    H6.69 ..... Shpg. wt., 3 oz. ... Net .54
    

    Protects operator against "hot tip" burns; protects iron against breakage. Attaches easily in top or underside of bench, or to wall. Angle adjusts to your convenience. Shpg. Wt. 802 H6.67 \$8800 For Imperial line

    Net each, 1.9
    Net each, 10-99
    Net each 100 up
    HD- 777 * 8000 Fir Standard Line
    Net eact, 1.9
    Net each, 10.49
    Net each 50 -up

    ## 42 INTERCHANGEABLE MINI-TIP ${ }^{\text {® }}$ THREAD-ON UNITS

    Completely interchangeable with the Imperial line (not interchangeable with Ungar "Standard Line'). Thread onto heat cartildge (elther 25,30 or 40 watt models) with fingertip ease.

    | Stock No. | Ungar No. | Shape |
    | :---: | :---: | :---: |
    | HG-25 | 6304 | Micro-chisel* |
    | HG. 26 | 6305 | - Micro-spade* |
    | HG-27 | 6312 | $\dagger$ Penclt |
    | HG. 28 | 6313 | -Pencil |
    | H6.30 | 6316 | Offset pencil |
    | सढ-3 | हJI | flong taper chisel |
    | HG-32 | 6318 | - Long taper chisel |
    | HG-33 | 6324 | +Long taper pyramid |
    | HG-34 | 8325 | Long taper pyramid |
    | HG. 36 | 6331 | - Screwdriver |
    | HG-37 | 6335 | - Needle |
    | HG-39 | 6336 | Spade |
    | HG-41 | 6366 | Long taper chisel |
    | HG-45 | 6372 | Screwdriver |
    | H6. 52 | 6390 | - Screwdriver |
    | He. 58 | 6424 | -Long taper chisel |
    | HG.j2 | 6474 | - Long taper chisel |

    ## 776 SOLDERING HANDLE

    

    Meets every industrial soldering requirement. Virtually fatigue-free-llightweight and desirably cool. New spiting sochet holds tip firmly for full electrical contact. Ceramic and glass insulator heeps handle temperature way down. Softtouch cork grip for all-day comfort. Plated socket terminals; stainless steel Plated socket terminals; stainiess steel therm-stabillzed phenolic housing. UL 3 pproved, $6-\mathrm{ft}$. Insulated cord with conforming cord protector. Overall length $5^{\circ}$. Shpg. wt., 4 oz.
    HO-751
    Net ea 1.22
    DE-SOLDERING TIPLETS
    
    Will remove components $70 \%$ faster than ordinary iron tips by melting solder on all terminals simultaneously. All DeSoldering tiplets are used with Ungar 4045 heating Unit. Shpg. wt., 2 oz .

    ## Stock

    No. Type Fig. Description 1.9 each
    10 up $\begin{array}{llll}\text { HD-754 } 854 & \text { A } \\ \text { HD. } 755 & 855 & \text { Cup tiplet }\end{array}$ MD-755 855 A $3 / 4$ Cup tiplet HO.756 856 A $\%$ Cup tiplet .59 .49 HD-757 857 B Slotted tiplet MD. 758861 D Triangle tiplet H0.759 862 E Offset Slotted tlplet HD-760 863 F Cube tiplet

    | $\begin{aligned} & \text { size in. } \\ & 0.0 . x L \end{aligned}$ | Temp. $\left({ }^{\circ}\right.$ F) $\$$ With Cartridge Rated |  |  | Nat Esch, |  |
    | :---: | :---: | :---: | :---: | :---: | :---: |
    |  | 25W | 30w | 40w | 1.8 | 110.98 |
    | $36 \times 1 / 2$ | 750 | 800 | 890 | \$.85 | \$ 71 |
    | Kx 412 | 750 | 800 | 800 | . 05 | . 71 |
    | 1/6x 7 | 750 | 800 | 910 | . 32 | . 27 |
    | 1/6x $7 / 4$ | 690 | 750 | 860 | . 85 | . 71 |
    | $3 \times 1 / 4$ | 690 | 750 | 860 | . 85 | . 11 |
    | 10x ${ }^{16}$ | 750 | 800 | 890 | . 32 | . 27 |
    | 1/0x ${ }^{\text {\% }}$ | 690 | 750 | 860 | . 85 | . 71 |
    | 1/6x $3 / 4$ | 750 | 800 | 890 | . 32 | . 27 |
    | 1/6x $3 / 4$ | 690 | 750 | 860 | . 85 | . 71 |
    |  | 690 | 750 | 860 | . 85 | . 11 |
    | 4\% 5 | 690 | 750 | $860^{-}$ | . 85 | . 11 |
    | 1/8x $3 /$ | 690 | 750 | 860 | . 85 | . 71 |
    | K6x $3 / 4$ | 680 | 730 | 850 | 1.00 | . 84 |
    | 30x 3/4 | 680 | 730 | 850 | 1.00 | . 84 |
    | $31 \times 11 / 2$ | 600 | 650 | 750 | 1.00 | 84 |
    | 1/4x ${ }^{3 / 4}$ | 680 | 730 | 850 | 1.00 | 84 |
    | $3 / 0 \times 3 / 4$ | 670 | 730 | 840 | 1.20 | 1.00 |

    ## NEW MICRO-TIPS

    Designed for Micro-Miniature soldering. These tips have a maximum diameter, at the point of work, of .05 inch.

    | Stock No. | Ungar No. | Shape | $\begin{gathered} \text { Size } \\ \text { O.D. } 1 . \end{gathered}$ | $1.9 \stackrel{N e t}{10}_{10-00}$ |  |
    | :---: | :---: | :---: | :---: | :---: | :---: |
    | H6.71 | 6550 | Tapered |  |  |  |
    |  |  | Screwdriver | . $04 \times .40$ | 1.00 | . 84 |
    | HG-72 | 6551 | Stepped Spade | . $05 \times .40$ | 1.00 | . 84 |
    | H6. 73 | 6553 | - Stepped |  |  |  |
    | HG. 74 | 6554 | Chisel Stepped | . $05 \times .40$ | 1.00 | . 84 |
    |  |  | Pencll | . $05 \times .20$ | 1.00 | . 84 |

    † Tellurium Copper; V Solid ARMCO Iron, Silver plated; Iron Clad 25K Gold गated; *User can bend to make Offset; $\ddagger$ Slight varlation in voltage and line vollage will give $\pm 25^{\circ}$ F deviation.

    WRITE FOR PRICES OF 100 OR MORE UNITS
    "Expert" soldering gun rated at $100 / 140$ watts. Exclusive instant dual-heat feature adapts gun to varying needs immediately. New high-efficlency tip for superior heat transfer and long life. Shpg. wt., $21 / 2 \mathrm{lbs}$. HG-220
    Lots of 3, ea., 4.26
    Lots of 12, ea. 4.07

    ## WELLER <br> PROFESSIONAL SOLDER GUNS

    "Expert" soldering kit featuring the 8200 gun plus 3 soldering tips, tip changing wrench, flux brush, solder. ing aid and all-purpose solder-all included In a high impact plastic utility case. Shpg. wt., $3 \not y / 4$ lbs NC-231
    Lots of 3, ea. 3.83 Lots of 12 ea. 3.54
    WELLER REPLACEMENT
    TIPS \& PARTS
    Avg. shpg. w.,. 3 or.

    Avg. shog. wt
    TIPS
    Stock Mf

    | No. No |
    | :---: |
    | HD-802 7300 |

    HD-804 8125 Plated Tip, pkg. of 2, for 8200 ,
    HG-234 8125N Tip Nuts with Tip for 8200,81008 HO-800 7135 Copper Tip, pkg. of 2, for WS-100,

    MG-235 7135 N . Tip Nuts with Tip for WS-100.
    HD.801 7250 Copper Tip, pkg. of 2, for WS-200,
    H6-236 7250N Tip Nuts with Tip for WS-200.
    HD-821 7550 Plated Tip, pkg. of 2, for WS-200. 81008 S. 500 , D. $550,8250 \mathrm{~A}$

    Models
    Heavy-duty soldering kit. Everything needed for hundreds of jobs. Contains 0.550 gun, solder, cutting tip, smoothing tip, tip changing wrench-alt included in handsome plastic case. Shpg. wt., 5 lbs.
    H6-233
    Lots of 3. ea. 8.50
    Lots of 12 , ea. 7.89

    ## WEN "75" SOLDERING

    

    New single-etement soldering gun featuring space-age element-more heat at less current. Has built-in spotIIght for lllumination of hard-to-reach places and finer tip for micro-sotdering. Complete with tip and 6.ft. cord with moided plug. For $110-120$ volts, 60 cps AC. Shpg. with molded HG-260

    Net ea, 3.76 Lots of 3

    ## WEN HEAVY-DUTY 250-WATT SOLDER GUN

    - Industrial Standard
    - Heats in 3 seconds
    Built-in Spotlight

    The standard by which other soldering guns are judged! This heavy-duty model withstands hundreds of hours of continuous use. Heats in 3 seconds; under normal use tip remains tinned indefinitely. Built-in spotlight llluminates even the hardest-to-reach places. Streamlined design is easy to handle. Black high impact shatter proof housing. U.L. approved. 250 watts, 120 v. A.C. only. 6y2" long overall. Shpg. wt. 4 lbs.
    Ho. 710 Lot of 3 ea. 8.47
    HD-918 Tip for above
    Singly ea., 9.52

    WD-135, S-400, 0.440, 8100 WD-250, S. 500 , D. $550,8250 \mathrm{~A}$ WD-250, S.500, D-550, 8250A WD-250, S-500, D-550, 8250A
    Cutting Tip for WS. 100 , WD-135, S-400, D-440, 8100, 8200, 8100B Smoothing Tip for WS-100, WD. 135, S-400, D.440, 8100, 8200,

    Cutting Tip for WS-200, WD-250,
    Smoothing Tip for WS-200, WD. 250. S. 500 , D-550, 8250A

    Switch for all single-Heat
    Low-cost, lightweight soldering iron especially designed for miniature type soldering, kit building and production line work. Rated at 25 watts, it is extremely efficient and ruggedy constructed. Impact-resistant plastic handle remains cool durling operation. For $110-120$ volts, 60 cps AC. Complete with tip and $2 \cdot$ wire power cord. Shpg. Wt., 4 OZ 0 .
    

    ## WELLER MAGNASTAT <br> SOLDERING IRONS

    New Magnastat temperature control in tip prevents overheating - constantly maintains proper soldering temperature. Result-more reliable soldering. Less down time, too, because tip redressing is minimized. Ali magnastat soldering lrons are guaranteed against defects in material and workmanshlp. Complete with tip and two-wire cord. For 110.120 volts, 60 cps . AC. Avg. shpg. wt. 12 oz.
    lots of

    | Stock |  |  | Net. |  | Lots of |  |
    | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
    | No. | Troe No. | watts | ea. | 6 | 24 |  |
    | HD-808 | TC552 Std. | 55 | 6.61 | 5.88 | 5.29 |  |
    | HD.809 | TC602 Std. | 60 | 7.35 | 6.54 | 5.88 |  |
    | H6-237 | TC1202 Std. | 120 | 8.46 | $\mathbf{7 . 5 2}$ | 6.76 |  |

    INTERCHANGEABLE LINE CORDS FOR
    MAGNASTAT IRONS
    Converts frons from standard two-wlre ground to indus trial three-wire ground. Shpg. Wt.; 5 oz .
    HG-238 For Models TC552, TC602
    Net 1.47 HG-239 For Model TC1202 .......................... 1.47
    REPLACEMENT MAGNA STAT TIPS
    Average shpg. wt., 3 oz .

    | Stock | IYAPNA. | For Iran | Size | Net <br> ea. |
    | :---: | :---: | :---: | :---: | :---: |
    | HD-813 | 5.CIN. $750{ }^{\circ} \mathrm{F}$ | TC552 | 1/8* | . 56 |
    | HD-814 | 6-E1N-750 ${ }^{\circ} \mathrm{F}$ | TC602 | $1 / 4{ }^{\prime \prime}$ | 1.12 |
    | HD-815 | 12-G4N-750 ${ }^{\circ} \mathrm{F}$ | TC1202 | 3/8* | 1.49 |

    ## ORYX SOLDERING TWEEZERS

    - Separate Heating Elements

    Separate 6 -watt, long-life heating elements in each arm with 1/a" diameter tips of a nickel-plated copper alloy. Tweezer finger pressure against the point insures rapid heat conduction. Shpg. Wt., ${ }^{4}$ oz
    HD-547 TW-6 6-Watt AC/DC
    Net 14.65
    HD. 548 TW-12 12-Watt AC 10 C
    Net 14.65
    ORYX
    MINIATURE
    

    IRONS

    - World's Lightest-Only $1 / 4$ Ounce!
    - Incomparable for Transistor Work!
    - Only $\mathrm{g}^{\prime \prime}$ Long!

    Heats in 30 seconds-long Ife-low voltage element. Prevents damage to small assemblles-pin point heat concentration. Sturdy-no ceramic or mica formers. Operates from any 6 -volt source-including dry cells, wet cells, filament or step-down transtormer. Shog. wt. 402.

    | Stock Ne. | Iype | Watts | Tip | 1.11 | 12 or More |
    | :---: | :---: | :---: | :---: | :---: | :---: |
    | H0.530 | 6 | 6 | Fixed | 5.34 | 4.85 |
    | HD. 531 | 6 A | 6 | 8 | 5.34 | 4.85 |
    | MD-532 | 9.6 | 8.3 | A | 5.34 | 4.85 |
    | N0-533 | 11* | 10 | 0 | 6.81 | 6.32 |
    | H0.534 | 12.6 | 12 | C | 5.34 | 4.85 |
    | HD. 535 | 12.6 | 18 | F.G | 7.34 | 6.91 |
    | H0.536 | 25-12 $\uparrow$ | 25 | G. H | 7.84 | 7.40 |

    - Develops $800^{\circ} \mathrm{F}$. $25 \quad$ G.
    + Develops $1000^{\circ}$ F., uses 12 -volt source.
    Replacement Tips
    Type marked * are solid nickel others are nlckel-plated copper.

    | Stock No. | Type | Size | For Model | Net |
    | :---: | :---: | :---: | :---: | :---: |
    | HD.537 | A | 32 | 64, 9-6 | . 49 |
    | HD. 538 | B | 为" | 6 A, 9.6 | . 49 |
    | HD. 538 | C | Ks" | 12-6 | . 49 |
    | H0.540 | 0* | $\%_{12}{ }^{\text {en }}$ | $12 \cdot 6$ | 1.76 |
    | H0.541 | E* | 32* | 12-6 | 1.76 |
    | HD. 542 | F | \% ${ }^{\prime \prime}$ | 18 | 1.22 |
    | MD. 543 | G* | $\%_{6}{ }^{\prime \prime}$ | 18.25 | 1.81 |
    | NO-544 | H | $1 /{ }^{\prime \prime \prime}$ | 25 | 2.30 |

    ORYX TRANSFORMERS
    H0-545 Type 54203 6-Volt
    Net 5.39
    Net 6.32

    ## AMERICAN BEAUTY IRONS C)

    MODEL 3138-100 Watt (A)
    America's most famous iron for those who want the best. Heavily chrome plated and polished metal parts. Cooling baffle, with stand, 6 it . cord and $3 / \mathrm{m}^{\prime \prime}$ tip. length $127 / 8^{\prime \prime}$
    HD-556 Shpg. wt., $21 / 4 \mathrm{lbs}$
    HO. 567 No. 3738 Extra 3/" tip wt., 302.
    7.70 MODEL 3128-60 Watt
    Sight duty model with $1 / 4$ tip. With cord and stand. H0-568 Shpg. wt., 1 ib
    HD. 569 No. 3728 Extra $1 / /^{* \prime \prime}$ tlp wt., 3 oz.
    5.04
    

    ## UNGAR ELECTRIC PENCIL SET

    MDDEL 217One complete set for home craftsmen and hobbyists. Set contalns six interchangeable tips; four for burning and embossing of wood, plastic, leather, cork, etc., and two for soldering. Five sheets of embossing foil, abrasive cloth, complete set of instructions for working wood, plastic, leather and cork. Illustrated catalog of plaques and projects. Heating unit is UL approved and guaranteed for 10 . 000 hours. Shpg. wt., 1 lo.
    HO 448

    ## HAND VISE <br> 

    The only practical way 10 grip and hold small parts and preces. $11 / 4^{\prime \prime}$ die cast jaws open to $7 / 8^{\prime \prime}$. Mounted on a $4^{\prime \prime}$ comfortable ferruled wooden handle. Holds work for drilling, marking, filing, sawing, etc. Endtess uses in shop and handiwork. Shpg. wt. 1 to. HD. 96

    ## PIN VISE <br> 

    Has standard $1 / 4$ " chuck with 3 hardened jaws. Chuck opening from 0 " to $1 / 4$ ". Set on "easy $-\mathrm{g}^{\prime}$ ip" ferruled wood handle $4^{\prime \prime}$ long. Holds small drills, reamers, screw bits, files, etc. A "natural" for the hobbyist and craftsman. Shpg. wt., $1 / 2 \mathrm{lb}$. HO.95

    ## PRECISION DOUBLE-END PIN VISE

    - Quality Hardened Stee!
    - Precision Accuracy
    - Knurled Chucks, Grooved Handle

    Double-end pin vise. Chuck opening of 1,2 to $2.5 \mathrm{~m} / \mathrm{m}$; jaw opening of 0 to $1.4 \mathrm{~m} / \mathrm{m}$. Non-slin grooved handle, knurled chucks. Shpg. wt., 4025 HG-200

    Net 1.29

    ## ERSIN Multicore Solder

    Maximum flux action at correct solder melting polnt. Fast melting, non-corrosive, non-sticky, non-toxic. 5 . core construction insures constant flux. Has excelient cleansing action. $40 \%$ tin, $60 \%$ lead. No. 16 gauge.
    

    $$
    \begin{aligned}
    & \text { HO. } 585 \text { 1 } \\
    & \text { HO. } 586 \\
    & 7
    \end{aligned} \text { lb. spool }
    $$

    11.65
    11.55 $40 \%$ lead. \#16 gauge.
    H0-587 1 lb . spool
    Net 2.07
    Ho-588 7 ib. spool
    Net 14.49
    Ersin Multicore 6040 Solder \#18 gauge, HG-183 1 lb. spool HG.184 7 ib. spool Net 2.12

    SERVICE PACK: 18 Gauge 60/40 5 core solder. Approxi. mately $20^{\prime}$ on wooden spool. ERSIN 6018. HD. 589 Shpg. wt., 1202.

    Net . 49
    11]
    "SAL-MET" FLUX

    A non-corrosive flux that will solder all metals cleanly and permanently--copper to aluminum; aluminum to aluminum, copper to steel, etc. No special treatment of metal required. Packed in 102 . tubes. H0.427

    Net .72

    ## AUTOMATIC SOLDERING IRON

    

    Features automatic feeding of solder-gives you a "3rd hand." Tip AND solder are placed at exact spot needed. Any required quantity of solder can be automatically fed to the soldering tip by adjusting the feed rolter. Tip is made of special alloy for longer service life. Use with standard solder or with special spool listed below. Rated at 30 watts. Operates on 117 volts AC. Shpg. Wt., 2 lbs. Imported.
    HG-218
    WG-219 Extra Tip for HG-218
    Net 4.99
    SPECIAL SOLDERING KIT
    

    The "Mighty Mite" soldering kit-does the work of many larger Irons. Includes 35 watt Iron-steel scraper - spooi of solder-iron stand-sandpaper-solder. ing instructions and data. Shps. wt., 1 lb . HO. 198

    Net 1.10

    ## BEAU-TECH SOLDERING AIDS

    

    - No.Slip Handles
    - Stralght or Angled Tlos

    Non-stipping, non-rolling "hex" handles. Twist-proof, hard chrome plated tips to shed solder with both ends insulated from one another. Straight or angled tips for hard-to-reach areas; spade end for scraping joints, connections or reaming out lug holes. Shpg.
    

    ## KESTER SOLDER AND FLUX

    Uniform compound of $40 \%$ tin and $60 \%$ lead with evenly distributed and free-flowing flux.

    HD-572 Resin core 0.573 Resin cor "Dia.-3 az. Tín H0-574 Resin core $3_{2 \prime \prime}^{\prime \prime}$ Dia.- 1 lb . Sp. 40.575 Resin core $3_{2}^{\prime \prime}$ Dia.- 5 lb . Sp. Ho. 576 Resin core Ko" Dia.- 1 tb. Sp. 10.977 Acid core K. Dia.-5 lo. Sp. HD-578 Acid core 4/9" Dia.-1 lb. Sp. H0.579 Acid core $1 / 6^{\prime \prime}$ Dia.- 5 lb. Sp. KESTER RESIN-FIVE SOLOER
    very active resin core flux. Non-corrosive and nonconductive. Easily solders zinc, brass, nickel plate and ferrous metals.
    
    HD-582 久i" Dla.- 1 lb . Sp
    Net 1.21

    HD- 583 K" Dia.- 5 lb . Sp.

    > KESTER PASTE FLUX

    Net 1.24

    HO-584 Non-Corrosive 202.
    Net . 12

    ## 1-LB. ROSIN CORE SOLDER

    Colled on metal spool. Standard $40 / 60$ quality-Ideal for home or shop use. Shpg. wt., $11 / 2 \mathrm{lbs}$. HD-9i7

    ## WALL PENCIL IRONS

    

    ## THERMOSTATIC BRAIN

    Built to take "production-line punjshment." Quick heating-thermostatic action prevents tlp burning. Draws heaviest current to heat-drops to ide current when taken from work. 18HD, industrial type. 25 watts. Weighs only 1 oz . 14 T has range of 125 to 40 watts, weighs only $11 / 202$. Shpz. wt., 8 oz.
    HD.555 $18 \mathrm{HD} 1 / 0^{\prime \prime}$ tip
    HO.555 18HD $1 / \mathbf{n}^{\prime \prime}$ tip
    H0.556 $14 \mathrm{~T} 1 / a^{\prime \prime}$ tip
    HD. 557 Tip for 18HD wt., 202
    HD-558 Tip for 14T wt., 2 oz.
    Net 6.65
    Net 6.65
    Net 6.85
    Net 6.85
    $\begin{array}{ll}\text { Net } & .20 \\ \text { Net } & .29\end{array}$

    ## LENK LP TORCH MODEL 295LP

    ## 1602 . Fuel Container

    - Solders - Removes paint

    An all purpose liquifled petroleum torch. Does regular soldering-sweat fittings-silver soldering-removes finishes, paints and putly. Self sealing valve permits safe removal of torch head. Lights Instantly-no priming, no waiting. Clean-sostless-odoriess flame. More than $2200^{\circ} \mathrm{F}$. Shpg. wt., 11 L Ibs.
    More th
    HD. 564
    Net 2.47
    HD. 56
    P Torches.
    ShDg. wt., 1 tb.
    HD-563
    Net 73

    ## SPYRALINE SOLDER

    ## Sate:Athen

    ## - 60\% TJN - 45 \% LEAD

    11 ft . of high quality, Ko $^{*} 60 / 40$ actlvated rosin core solder in handy dispenser. Container is non-inflam-mable--affords insulation wherr working a "hot" circuit. Eliminates waste-pull out only what you need Keeps solder clean and unsnarled. Shpg. wt., $1 / 2$ tb. keeps solder clean and uns naried. Shpg. Wt., 12
    HD-228 Special, Singly, Each . 40 Pkg. of 3.32 SPYRALINE PRINTED CIRCUIT TOUCH UP SOLOER dO signed for a fast bond withoul overheating. Meiting range of $240^{\circ}-320^{\circ} \mathrm{F}$; for low wattage soldering Iron. Safe for silver ceramics and transistors. Shpg. wt., L/2 Ib.
    1/2 lb
    $\mathrm{HD}-418$
    Net .82 , ea. Phe. of 3
    3 PRINT-KDTE SOLDER, NON-COrrosive flux with low melting solder combined with pure sifiver, 2 oz. coil. Shpg. wt., 4 ozs.
    P. 312 GC-9131 Net . 37

    PRINT-KDTE SILVER PRINT. Pure siliver compound. Alr drylng. Used to repali printed circuit "wires" and touch up connections. 1/2 Troy 02.
    P.313 GC-21.1 Shpg. wt., 402.

    Net 2.42

    ## JET KING

    Blow Torch Kit- Pencir Sized-3500 Heat - Solders--Brazes: Softens Paint and Putty - New Soldering Tip
    Extremely useful-highly efficient-miniature blow torch. High heat, $3500^{\circ}$, pin point flame. Less than $7^{\prime \prime}$ Jong from end to end. Charged by a butane cartridge which gives 30 minutes of continuous service. May be turned on or off at any time. Entire unit weighs approx. 4 oz . Economical throw-away cartridges can be stored indefinitety. Ideal for repairs on wiring - radio - TV installstions - appliances
    pipes and plumbing. Complete with 3 chargers, soldering tip and coll of rosin core solder. Soldering tip and coll of
    HD-315 Shpg. wt. 1 th.
    HD-315 Shpg. wt., 1 tb. Net 2.85 HD-226 Torch only, w/1 charger, wt. 12 ozs. Net 1.69 HO-227 Extra chargers, Pkg. of 2, wt. 8 ozs. Net .39


    ## $\square$ CHEMALLOY <br> FLUXLESS <br> ALUMINUM SOLDER

    New, Improved, fluxiess aluminum solder will solder, braze, or weld aluminum, zinc, potmetals, copper, brass, galvanized metals, aluminized-copperizedtinned surfaces. Solders and "flims" die cast parts. HD. 5594 oz. Bar, $500^{\circ}$ Net .59 $\begin{array}{lll}\text { HD.559 } 4 \\ \text { HD-560 } 4 & \text { oz Bar, } 500^{\circ}\end{array}$
    HO-561 1 ib. Bulk. $500^{\circ}$
    Net .59
    Net .59

    ## PRECISION TOOLS FOR INDUSTRY

    ## CONTOURED SANDER KIT

    

    This useful new kit is sturdily constructed of aluminum and offers fine separate scientifically designed sanding bases and interchangeable grip-ight handtes. Kit includes an assortment of pre-cut sheets of plastic backed sandpaper. Excellent for the hobbiest, do-lt. yourself fan, and industry. Shpg. wt., $4 / 2 \mathrm{lb}$. H6. 304

    Net 3.48
    

    Extremely handy and completely safe pocket knlfe. When not in use, blade slldes into handle to facilitate easy withdrawal and positive cutting actlon. Shpg. Wi., 402.

    HG-306
    Net .88

    ## KNIFE CHEST <br> 

    

    Handy knife chest comes complete with X-Acto nos. 1, 2, and 5 knives plus 9 assorted extra blades. Chest has a natural wood finish. Shpg. wt., 1 lb. H6.308

    ## RAZOR SAW BLADES

    Razor saws for fine and accurate cross-cutting, trim. ming and notching of metal, wood and plastic. When mounted in handle, blade with angled shank provides longer tool reach and prevents barking of knuckles (overall length of $91 / 2^{m}$ ). Shpg. wi., 2 oz .
    HG-302 "34, 3/4" wide
    Net ea. . 35
    HG.303 \%35, $1^{\prime \prime}$ wide
    Net ea. . 39
    PORTABLE ILLUMINATED MAGNIFIER

    - EXTREMELY BRIGHT FIELD
    - 


    ## 295

    - COMPOUND LENS TYPE


    ## - 2" FIELD!

    A fine fixed-focus llluminated magnifier-magnities work 5 times. Field of vision is $2^{\prime \prime}$ at $11 / 0^{\prime \prime}$ working distance. Magnified area easlly accessible through cut out. Invaluable in hobbies such as stamp or coin collecting, photography, entymology-minerology, etc. Excellent map reader. Completely portable-uses two No. 2 cells ior power, Weight $3 / 4 \mathrm{lb}$. Length $81 / 2^{\prime \prime}$ overall. Shpg. Wt. $11 / 2 \mathrm{lbs}$. Imported
    BA. 157 Baltery (2 required)
    Net 2.95
    

    Allows free use of both hands-ideal for close tolerance work by engravers, watchmakers, etc. The crystal-clear cross cylinder, magnifying lens rotates a full $360^{\circ}$. The large, coloriess, $31 / 2 \times 13 / 4^{\prime \prime}$ lens mounts in a chromed brass stand. Legs fold for storage. Shpg. wt., $1 / 2 \mathrm{lb}$. F-551 Folding Magnifier imported

    ## K.ccto precision tools

    

    These X-ACYO interchangeableblade, precision kalves are ideally sulted for: carving, cutting, etching, hollow. ing, scribing, stripping, trimming, etc. Constructed of heavy-duty handles for pugged, trouble.free service. Avg. shipg. wt., 2 oz.
    No. 1 Knife.for light to medlum work. Aluminum handle ( $5^{\prime \prime}$ long, K ${ }^{\prime \prime}$ dia.) complete with No. 11 blade.
    (5"1 long, K" dia.) complete with No. 11 blade.
    $\mathrm{HG} .290^{\prime \prime}(1)$ No. 2 Knife-for medium to heavy work. Aluminum handle ( $5^{\prime \prime}$ long, Kh" dia.) complete with No. 22 blade. HG-291 (*2)

    Net ea. . 67
    No. 37 Pen-Knife_Clips to pocket. Complete with No. 10 blade. Length closed- $41 / 2^{\prime \prime}$. Also accommodates No. 11 and 16 blades.
    HG-292 (*37)
    Net ea. . 88
    No. 5 knife-For heavy work. Plastic handle with metal blade lock ( $43 / 4$ " long), complete with No. 19 blade. HG-293 (*5)

    Net ea. 1.06

    ## X-acto PRECISION BLADES

    

    No. $23 x$
    

    Mo. 1
    Replacement blades that fit all X-ACTO tools listed above. Avg. shp. wt. 2 oz.
    No. 10 for small, fine general cutting or carving. HG-294 10 phg. of 5 ....................................... $5 ?$ No. 11 for fine angle cutting? deep cuts, narrow spots. HG-295 \#11, pkg. of 5 ................................... 53 No. 16 for smali holes, notches, stencils-in thin ma. terials.
    HE-296 16, pkg, of 5 ......................... 53
    No. 19 Broad blade for light chiseling, rough shaping. H6-297 \#19, phg. of 5 ... ................................ Net . 53 No. 22 for long cuts, close corner cutting, whittling. HG-298 \$22, pkg. of 5 Net . 53 No. $23 x$ Double-edged for close quarters, angled corners.
    HG-299 23X, pkg. of 5 ..................................... 67 No. 24 for close corner cuts; templates, mats, trim. ming.
    MG-300 24, pkg. of 5 ............................................. 53
    No. 25 for general carving, whittling, heavy cutting.
    HG-301 \#25, pkg. of 5 .......................................... Net . 53
    

    ## DREMEL MOTO-TOOL KIT

    Designed for light grinding, nolishing, drililing, carving, sanding, sawing, engraving, routing, etc. Handies as easily as a pen cil. Does fine detail work with pinpoint accuracy. Ideal in shop industry, lab. hobby, model mak ing, home work shop, efc. Automatic chuck lock-oilless bearings-bakelite housing. Works in wood-meta plastics-glass-leathers-etc. Includes steel cutters, emery wheels, drum sander, mandrels, brushes, cutooff wheels, polishing wheels, dressingstone, polishing and sanding accessorles, etc. All in steel case, $110-120 \mathrm{~V} . \mathrm{AC} / \mathrm{DC}$. Shpg. wt., 5 lbs. HD-292

    ## NEW X-CCTO SOLDERING AID KIT

    ## - Hard Chrome.Plated Steel

    Contains five tools and a universal, double-chuck handle-all in an always handy, see-thrcugh carrying case. Individual tools can be quickly replaced as need. ed. All tools are made of hard chrome-plated steel, to which solder will not adhere. The hox-shaped, double. chuck handle is pugged and comfortable to use. Shpg. WI. $1 / 2 \mathrm{lb}$.
    HC-305

    ## LOCKGRIPLIER 245

    

    Speclally designed as a multiple-service tool for small assembly work; plicks up and securely holds small parts for soldering or other operations. By pushing the locking key forward, the jaws are automatically locked. Ruggedly constructed of metal with casehardened steel jaws. Overall length is $51 / 0^{\prime \prime}$. Shpg. wt., $1 / 2 \mathrm{lb}$.
    H6. 307
    Net 2.45

    ## WOODCARVING <br> SET <br> 318

    

    Comes in useful vizl-dome container that lets you see where your tools are. 6 gauge blades, 4 regular blades, $2-3$ Inch blades, No. 5 knife handle (takes all blades). Shpg. wt., 1/2 Ib.
    HC-309
    Net 3.18-

    ## FLEXI-SHAFT HOBBY TOOL

    ## - A real hobby

    work horse
    ## - Powerful-

    ## Versatile

    - Hi Speed-Hi Torque

    Flexible shaft and motor combination to do all your hobby grinding-polishing-drliling-sawing-buffing-etching-engraving-pouting-carving. Musky, 1 amp motor dellivers plenty of power for hard, continuous use. Will not stall under normal usage. Lightweight finger tip control-for intricate hobby work. $36^{\circ \prime}$, easily handed, shaft is a sealed tamper proof unit. Will not heat up under prolonged use. Chuck accommodates standard $z_{2}$ nd and $1 / 3$ th inch tool shanks. For use on wood-metalsglass and plastics. $110 / 120 \mathrm{~V}$. AC or DC. Shpg. wt. 3 ibs. glass and plastics. 110/120V. AC op DC. Shpg. Wt " 3 ibs.
    HD-849

    ## 6-PC. MOUNTED STONE SET

    ## - Ideal Accessory For The Flexi-Shaft Tool

    

    Six assorted grinding stones and wheels. Selected set of mounted grinding points. stones, wheels. For carving -routinggrinding - sharpening - debupfing - sawing - buffing polishing. Mounted on $1 / 3^{\circ \prime}$ and $3 .{ }^{3} 00$ shafts. Shps wt 8 oz M2. 00 shafts: Shpg. Wt., 802.
    Net 1.20
    "LITTLE SMITH" ANVIL

    ## The perfect companton for

    the hobbyist-tinkerer-model mak ep-or just plain foolin' arounder. Measures only $42 / 2 x$ 21/9x249"overall. Rugged enough for heavy poundingsized right for home or hobby. Makes a perfect paper weight for the craftsmen's bench or desk.Imported HD-460 Shpg. wt., 2 ths.
    # STANLEY POWER TOOLS 

    

    The perfect drill for use with drill attachments. Designed for continuous duty-ease of maintenance. Ad vanced styling for comfort and balance. Dependable bronze bearings-extra long brush life. 2500 RPM noload speed. 1600 RPM under full load. Capacity $1_{4}$ " in steet, $1 / 2^{"}$ in hardwood. Trigger switch with locking pin for intermittent or continuous run. Accurately machined precision gears. High speed airflow ventlation. 8\%" overall length. Weighs only $31 / 4 \mathrm{lbs} .3$ Amps, $115 v$. AC only. Shpg. wt., $41 / 2$ lbs
    H0-702
    Net 13.50

    ## STANLEY SABRE SAW <br> MODEL H-452

    - Exclusive

    Flush Cuttin!

    - Twe-Position Stationary Base
    - Quick blade

    Change

    ## Only

    

    NO MONEY DOWN $\$ 5$ monthly
    A truly fine saw for the cost-conscious home craftsman. Top handie for positive control. Powerful air blast chip ejector and special antl-vibration mechanism for smooth, precise work. Will cut scrolls, curves, pockets, intricate patterns in wood, plastics and vencers. Outstanding features include exclusive flush cutting, 2 -position station. ary base, precision sleeve bearings and cool comfortable switch handle. Easy handling-cut of way cord. Exclusive "window" brush holders permit instant check and replacement of brushes. Quick blade change .... only one slotted chuck screw. Maximum cut 2\%". 115-125y A.C., $230 V$ A.C., D.C.

    HG-163 Shpg. wt., $51 / 2$ lbs.
    Net 22.48
    STANLEY
    Extra Heavy-Duty BUILDERS SAW
    

    ## NO MONEY OOWN

    - 8" Blade
    $\$ 5$ monthly
    
    - Universal motor-operates on DC or AC

    A powerful heavy-duty saw that is a real workhorse Exclusive blade mounting protects motor against damage when blade hits knots or nalls. Has new locking lever for fast, easy depth adjustment. Tru-view window for clear view of cut-exclusive Notch-line guide for $45^{\circ}$ and $90^{\circ}$ cuts. Rear position control panel-big knobs for depth or bevel adjust. Handle directly over saw center-of-gravity for perfect control. Precision self. center-ot-gravity
    lubricating ball and needle bearings. Motor draws 13
    
     cross cut $8^{\prime \prime} \times 5 / \mathrm{s}^{\prime \prime}$ blade. For $110-120$ volt DC or AC, 60 cycles or less.
    HG-165 Shpg. wt., 22 lbs
     NO MONEY DOWN - $1 / 3$ H.P. MOTOR 3.5 AMPS - NEW COMPACT DESIGN

    - more power - torque VERSATILITY

    A new all-purpose drill combining greater power, advanced engineering and compact design. Powerfut 1/3 H.P. 3.5 aini. motor with ball and bronze bearings has $1 / 2^{\prime \prime}$ capacity in steel. Design features include special ribbed front housing and neoprene bumper for extra shock-protection; exclusive "window" brush-holders for constant checking of brush wear; 2 handles-removable auxillary aluminum handle can be mounted in 3 different positions, plus a removable spade handle. A compact $53 / 4^{\prime \prime}$ from chuch to rear housing to fit in the smallest areas. $115 \mathrm{~V}, \mathrm{AC}$. Shpg. Wt., 10 lbs . H0. 661

    Net 38.15

    ## STANLEY

    "SWIRLAWAY" 2-WAY SANDING ATTACHMENT
    

    - Flexible Ball-Joint Action
    - Rlgid Sanding Plate

    Orill attachment uses new principle in disc sanding. Has flexible ball-Joint action disc always lies fiat on work. Complete control-won't gouge or score. Adjusts to standard plate in seconds. Complete with 3 abrasive discs (coarse, medium, fine). Shpg. wt., 1 ib.
    HG. 164
    Net 2,94

    ## NEW! 10-INCH ELECTRIC $13 / 4$ h.p. CHAIN SAW

    
    $\$ 5$ monthly

    - Prúning-Trimming-Felling Small Trees - Cuts Cord Wood-Joists-Heavy Beams A powerful, top quality portable chain saw designed for professional or industrial use. This rugged, multi-purpose tool will also do dozens of jobs for the home craftsman, carpenter, contractor or on the farm. Positive chain adjustment eliminates slack. Chain travels at 1300 feet per minute for fast, true cuts up to 10 inches deep. Cool running, quiet helical cut gears in a sealed grease chamber. Self lubricating bearings. Beautifully balanced, weighs only 12 lbs . Motor develops $13 / 4 \mathrm{hp} ., 8.0 \mathrm{amps}$. 115 V . 25-60 cy., AC/OC. 3-wire, 6-ft. cord. Shpg. wt., 14 lbs.
    HG-181
    EL-108-25 ft., 3-wire ext. cord
    EL-109-50 ft., 3-wire ext. cord
    EL-110-100 ft., 3-wire ext. cord

    Net 54.95
    Net 2.13 Net 3.51

    An advanced pouter design which features excellent balance and control. This tool provides both outstand. ing safety and fine performance. Cuts dovetails-dadoes-tenons-mortises-rabbets-beading-molding -joints-grooves-decorative cuts-inlays-cuts soft metals. Built in spot-light increases brightness as work load increases. Recessed switch automatically locks shaft when changing bits. Precision micro-depth adjustment as fine as .004 irch. Cantilevered base and advanced design grips for stablity and balance. Clamping lever holds or releases motor with a flip. 6 amp., 23,000 RPM, $115 \mathrm{v}, \mathrm{AC} / \mathrm{DC}$. Shpg. wt., $91 / 2 \mathrm{lbs}$.
    HO.700
    Net 48.97
    Basic Bit Kit: Includes inree most useful router bits $1 / 4^{\text {" }}$ stralght. $3 / /^{\prime \prime}$ pounding ower, $3 / \mathrm{m}^{n} \vee$ grooving. Atso includes a Silicon Carblde hone to keep cutting edges keen. Shpg. wt., $1 / 2 \mathrm{lb}$.
    H0.709
    Stanley Heavy-Duty Builders Saw - $11 / 4$ H.P. MOTOR SELF-LUBRICATING

    - 9 AMPS-

    5000 RPM
    $\qquad$

    ## 4897

    NO MONEYV automatic shat LOCK-NEEDS ONLY 55 monthly 1 WRENCH

    5000 RPM
    

    Power-packed 9 amp motor provides high cutting force. Wrought steel base is connected to motor housing by spring steel beam. Rear position control panel, Rear-position wing-nuts for depth and bevel adjust, "Free Start" ball bearing guard-moves at slightest pressure. Big "window" for wide open view of cut. "Motor Saver" drive protects motor against damage when blade cuts nails or knots. Weighs only $93 / 4$ 10s. Cuts $3 / 4^{\prime \prime}$ to $2^{\prime \prime}$ at $45^{\circ}$, $3 / 3^{\prime \prime}$ to $21 / 8^{\prime \prime}$ at $90^{\circ}$. Blade size $7 \times 5$ ". 5000 RPM no load speed. Ball and bronze bearings. 9.5 amps. 115 volts AC Shpg. wt., $131 / 2$ lbs.

    Net 11.15

    ## STANLEY Heavy-Duty

    ## BELT SANDER

    

    NO MONEY
    DOWN 55 monthly

    - Positive Drive! No Slipping!
    - With Gear Tooth Drive Belis

    Heavy-duty sander for use on vood, metal or plastics. Removes old paint, varnish, elc. Can also be placed upside down on bench-lets you use both hands to sand small pieces fast. Easy tracking adjustment, quich belt changing, out-of-way cord. Air-cooled motor has sealed ball bearings. Special carblde protective strip to prevent belt cutting into housing. Belt size $3^{\prime \prime} \times 21^{\circ}$. Motor dévelops $1 / 2 \mathrm{HP}$, araws $51 / 2$ amps. Speed: no load 875 RPM, full load 750 RPM. Takes belts up no $10 a d 875$ RPM, full load 750 RPM. Takes belts up
    to $1 / 2^{\prime \prime}$ thick. Vacuum attachment for dustfree sanding. For $110-120$ volts AC. Shpg. Wt., 12 lbs.
    HC. 166
    

    SPEEDWAY $1 / 4^{\prime \prime}$ DRILL

    ## 966

    ## - Self-Oiling

    Bronze BearingsA value-packed $1 / 4$ ' 4 drill with a universal series-wound motor that won't burn out. Special alloy self-oiling bronze bearings. $1 / 4^{\prime \prime}$ capacity in steel, $1 / 2{ }^{\prime \prime}$ in wood. 2.5 amp 115 V AC motor has no-load speed of 2400 rpm full-load of 1500 rpm . Precision geared chuck. Momentary contact switch with locking pin. Gleaming hi-pollsh finish. 6-ft., 3 -wire cord. Entire tool UL industrially rated and CSA approved. Shpg. wt. 5 lbs. HG-93

    SPEEDWAY ORBITAL
    

    - Ball and Bronze Bearings Throughout Motor-driven power sander for home and shop use. ldeal for rough or finish sanding. Lightweight and easy to handle it produces periect fintshes ever easy to hande. time, Uses 2-pole induction-type burnout-proof motor rated at 1.8 amps. No-load speed is 3450 rpm ; push-
    button switch. Spectal alloy self-olling bronze bearbutton switch. Special alloy self-olling bronze bear-
    ings; teffon coated thrust washer and ball bearing ings; teflon coated thrust washer and ball bearing
    on sander drive plate. Sanding area $41 / 2 \mathrm{x} 51 / 0$. Sturdy cast aluminum alloy housings with attractlve metallic finish and black crackle trim. 6.ft. 3-wire cord. For 115 volts, 60 cpS AC only. Shpg. wt., 6 lbs. HG-170

    Net 10.99
    HD-865 Lambswoof Pollshing Pad Net . 79 Ho-856 18 Sheets Assorted Sandpaper ....... Net . 98
    

    - Die-Cast Aluminum Housing

    Ideal for sharpening all workshop, hobby and garden tools-drill bits, planes, knives, chlsels, hoes, etc. Base equipped whith rubber feet: drilled for bolting to bench or truck. Heavy-duty steel wheel guards; adjustable tool rests; bullt-in front water cooling tray; castin top oarts tray; rear duct exhaust. Bronze alloy bearings. Two $41 / \mathrm{px}^{2 / 2 "}$ wheels (one 40 -grit, one 70 -grit). 25-amo $115 \mathrm{~V}, 60$-cycle AC motor; no-load speed 3450 ipm. 6 -ft., 3 -wire cord. Shpg. wt., 10 bs W6. 95

    ## SPEEDWAY 3/8" ELECTRIC DRILL

    ## $10^{99}$

    - Powerful 2.5-Amp Motorthat Won't Burn Out!

    Get the balance and feel of a $1 / 4 \mathrm{in}$, drill-with the power and work capacity of a husky \$th. Industrially rated to handle really rugged work. Special bronze alloy bearlngs. Precision-geared chuck and key. Noload speed 1750 rpm , full-ioad about 1150 rpm . Locking trigger swlith. Cast aluminum alloy housing. 6 -ft. 3 -wire cord and plug. UL and CSA approved. 115 V ., $\mathbf{2 5 - 6 0}$ cps AC. Shpg. wt., 5 Jbs
    HG. 188
    Net 10.99

    ## THOR E-100 COMPACT $1 / 4^{\prime \prime}$ ELECTRIC DRILL

    

    - Sensationally Small


    ## -Only Half The

    ## Size of Conventional Drill

    ## - Diode Input Circuit

    - Stator Guaranteed for Life

    The compactness of the new Thor Compact Drill comes from a completely new approach to electric drill design. Built-in diode rectifier reeds only DC to the motor, which, because of its unique construction, is rated without quallicication as the most efficient electric motor ever built into a portable electric tool. Uses a permanent magnet solid stator (no wire windings) which is guaranteed for Ifife. Capacity $1 / a^{\prime \prime}$ in steel, $1 / 2$ in hardwood. Free speed 1250 rpm . Spindle offset ' $32^{\prime \prime}$. Supplied complete with 3 -jaw geared chuck and key, 3 -cond. cord with 3 -prong grounding plug. For 115 volts, $25-60 \mathrm{cps} A C$ only. Overall length $6 \%{ }^{\prime \prime}$ Shpg. wt., 2 los. HG-120 55 monthly ...................... 29.25

    UNIVERSAL DRILL PRESS STAND
    

    - ADJUSTABLE DEPTH STOP
    - SPRING RETURN TENSION
    - ADJUSTABLE-CRADLE
    - ADJUSTABLE DEPTH GAUGE DIAL
    10.44

    Can be used for any $1 / 44^{\prime \prime}$ pisto grip electric drill. Features rack and pinion gear feed, and ad justable depth stage. 15 to 1
    leyerage Drill press head is clamped in rigid position. $21 / a^{\prime \prime}$ stroke. Square base is provided with slots for drill bit and for bolting work to base. Other features include spring return tension, fast hand-action, head clamps and adjustable depth gauge dial. Snpg. wt., 6 lbs. HD 464

    ## SPEEDWAY

    ## JIG SAW

    ## $13^{88}$

    - With 3 Assorted Wood and Metal Cutting Blades
     Enjoy new versatillty sawing curves, scrolls, straight and rip cuts. Powerful 3 -amp motor cuts $2^{\circ}$ in wood, $1 / \mathbf{B}^{\prime \prime}$ in steel. Adjustable plate permits accurate angle cutting to $45^{\circ}$ on elther slde-cuts $2 \times 4^{\prime}$ s at $45^{\circ}$. Noload speed 3000 strokes per minute; AC/OC positive push-through switch. self-oilling bronze bearings. Aux push rongh swale; ip guide 3 blades Base tills to illary knob hande; rip guide: 3 blades. Base tilts to $45^{\circ}$. 6-ft., 3-wire cord. Standard 115 V . Shpg. wt., 5 los. HG-96
    ND-439 Pkg. 5 Wood 8
    Metal Cutting gtades
    Net 59
    SPEEDWAY 7" SAW
    - Safety Slip
    

    Ideal for construction work, farm and home. Features a burnout-proof armature. Powerful, safe 8 -amp motor has no-load speed of 5000 rpm . Depth of cut $1 / 4^{\prime \prime}$ to $21 / \mathrm{mm}$. at $45^{\circ} 13 /{ }^{\circ}$. With self-lubricating bronze bear. ings; rip guide; Safety slip clutch; 5/8" round arbor; ings; rip guide; Safety slip clutch; $3 / 8$ round aroor; combination blade; auxiliary knob handie. 6 -fi., 3-wire
    cord. Mi-polish finish with black crackle trim. 115 V , cord. Hi-polish finish with
    AC.DC. Shpg. wt., 15 lbs.
    AC.DC.
    $\mathrm{HG}-57$
    Net 21.88
    

    Top quality circular saw with full $6 \frac{1}{2 \prime \prime}$ hard-tooth combination blade. Cuts $2^{\prime \prime}$ dress lumber at 45 level -handles any job from minor home repairs to major remodeling projects. 1 hp motor with Burn-Out protec. tion and rugged helical gearing. Has safety clutch, depth and bevel controls, sawdust ejection and bindfree lower blade guard. Depth of cut 1 K"" $2 \%^{\prime \prime}$ " at $90^{\circ}$; $1 y_{4}{ }^{* \prime}$ at $45^{\circ}$. No-laad speed 6300 RPM, draws 9 amps. Supplied with blade, blade wrench. 3 -wire cord and plug, 2-prong adaptor, U.L Approved. For $110-120 \mathrm{~V}$ AC or DC. Shpg. wt., $121 / 2 \mathrm{lbs}$ Nc-3is

    Net 36.46

    ## ACCESSORIES FOR SKILL 6 $1 / 2^{\prime \prime}$ SAW

    MG- 316 Saw Carrying Case. Shpg. wt., 12 Jbs. Net 11.95 HG-317 Rip. Fence. Shpg. wt., 4 or. MG-318 61/2" Combination blade Shpg. wt., $1 / 4$ lbs. HG. 319 61/2" Rip Biade. Shpg. wt., $7 / 416$.

    Net 2.33
    HEAVY-DUTY $1 / 4^{\prime \prime}$
    DRILL
    

    Heavy-duty drill develops up to $1 / 4-H P$ to handle toughest drilling jobs. Has 3 ball and 1 needle bearing construction-stands up under heavy loads, gives longer service-free operation. Precision helical gears large cooling fan. Has trigger switch, lock pin. No-load speed 2500 RPM. $8 \not / \mathrm{M}^{*}$ long. Complete with geared chuck and key, 3-wire cord and 3 -prong plug with 2 -prong adaptor. U.L. approved. For $110-120 \mathrm{~V}$ AC or DC. Draws 3 amps. Shpg. wt., 4 lbs HG-321
    ABRASIVE CUT-OFF BLADES
    

    Saw through Concrete, Brick, Stone, Metal
    2510.4
    

    General purpose and metal cutting blades for all portable saws. Fit all "Diamond" arbors and $5 / 8$ " and $1 / 2$ "round arbors. Extra-bonded resinoid blades, arbors metal-reinforced-shatterproof. Will not burn or load. Cut smoothly.

    > GENERAL PURPOSE BLADES

    HC-329 $6^{\prime \prime}$ Dla.
    MG. 330 64/2" Dia.
    HG-331 $7^{\prime \prime}$ Dia.
    FOR ALL TYPES METAL
    MG. $3336^{\circ \prime}$ Dia.
    MC. 334 64/2" Dia.

    HC-335 7" Dia.
    HG-336 8". Dia

    Net 1.88
    Net 1.95
    Net 2.07
    Net 2.25
    Net 1.99
    Net 2.07
    Net 2.1
    Net 2.37
    t's the brand new Skil Model 577 Recipro Saw the amazing tool with a virtually unlimited cutting capacity...from $6^{\circ}$ logs to the thinnest plastic sheeting. Cuts any material from soft wood to steel or plaster. Makes tough rip cuts, intricate scroll work, miter and bevel cuts, flush cuts without attachments, pocket cuts with its own starting hole, cross-cuts. Features Universal 3 -amp motor with self-tubricating bearings. no load speed of 2000 strokes per minute Stroke $1 / 4 " ;$ overall length $111 / \mu^{\prime \prime}$. 3 -wire cord with 3 -prong and 2 -prong adapter. Doubie reduction gears; 3-prong and 2-prong adapter. Doubie reduction gears; etc. Complete with 3 blades (HO-784, HD. 785, HD-786). UL approved, $115 \mathrm{~V}, 60$ cycle AC. Shpg. wt. $6 \frac{1}{2} \mathrm{lbs}$. HD. 721

    ## ACCESSORY BLADES

    ## stock teeth cength

    Net 36.95

    | STOCK | TEETM LENGTH |
    | :---: | :---: |
    | MO. | PER (M. INN.) |


    | 10. | PER AM. | ( N .1 ) | USE | EA. |
    | :---: | :---: | :---: | :---: | :---: |
    | HD-782 | 10 | 4 | Metal cutting - ferrous $1 / 4^{\prime \prime}$ or thicker; non-fer. | . 40 |
    | N0.783 | 10 | 8 | rous $1 / 8^{* \prime}$ or thicker | . 80 |
    | H0-784 | 6 | 4 | Fast scroll cutting in wood. | . 60 |
    | H0. 785 | 8 | 4 | Hollow ground for smooth wood cutting. | . 67 |
    | H0.786 | 10 | 4 | Multi-purpose - rough-in cuts in wood with nalls, | . 20 |
    | N0.787 | 10 | 12 | soft metals, under $1 / 2^{\prime \prime}$ thick | . 47 |
    | H0.788 | 6 | 6 | Plastic cutting or wood, bullding tile | . 27 |

    ## DELUXE $3 / 8^{\prime \prime}$ DRILL

    - Durable-Reduction Gears $\$ 5$ monthly
    - Removable Side Handle
    for Extra Control


    ## - Powerfas

    3 amp Motor

    Reliable F'" drill with oversize fan for cool-running operation even during continuous use. Drills holes to $3 / \mathbf{c}^{\prime \prime}$ diameter in steel. $y^{\prime \prime}$ in wood. Side handle removable for use. in tight spots.

    ## -

    Powerful 3 amp motor provideshigh toraue through double-re.
     high torque through double-re- NO MONET DOWM duction gears. No-load speed 1000 RPM. Geared chuck, trigger switch, lock pin. $9 y_{4}{ }^{\prime \prime}$ long. With key, 3 -wire cord and 3 -prong plug with 2 -prong adapter. U.L. approved. For $110-120 \mathrm{~V}$ AC or DC. Shpg. wt., $41 / 2 \mathrm{lbs}$ Mc-323

    Net 24.47
    

    Five sizes for making fast, accurate holes from $11 /{ }^{\circ}$ to 2\%" diameter in wood wall board fiberboard plas tic, plastic laminates, compositions and plaster. Pilot screw actually pulls bit through work-bits require no pressure to bore. Perfect for tight spots. Individually replaceable cutter, blade, and pllot screw. Shpg. wt., $1 / 2 \mathrm{fb}$.
    
    HG. 327
    HG-328
    HG-328 2\% ${ }^{\circ}$
    4.16

    # TOOLS DELUXE 71/4" SKILSAW 

    

    - Over $11 / 2$ HP Motor - Has All Top Skil Features

    Deluxe circular saw with over $11 / 2-H P$ for the home craftsman and professional user. Handles even toughest rip cuts. Full $71 / 4$ " blade for extra cutting capacity. Features easy-set depth and bevel controls. Varitorque safety clutch. helical gears, sawdust ejection system, bind-free lower blade guard. Etc. Cuts vertically from $K_{10}{ }^{\prime \prime}-2 \% \%^{\prime \prime}$, maximum depth of cut at $45^{\circ}$ is $1 \% / 8^{\prime \prime \prime}$. No. load speed 5150 RPM. $12^{\prime \prime}$ long. Motor has ball bearing construction, draws 10 amps. With hard tooth combla. ation biade, blade wrench, 3 -wire cord with 3 -prong plug and 2-prong adaptor. U.L. approved. For $110-120 \mathrm{~V}$ AC or DC. Shpg. wt., $161 / 4$ lbs.
    HC. 320
    Net 49.95

    ## COMPACT $1 / 2$ " DRILL

    

    - 3-Amp Motor
    - Big Drill Performance - Small Drill Handing Ease - True Double-Reduction Gears
    Rugged $1 / 2^{\prime \prime}$ drill gives big drill performance with small drill handling ease. True double-reduction gears deliver full drilling power and torque from 3-amp motor. Multiball thrust bearing on chuck spindle for moavy use. Modern design with removable side handle. heavy use. Modern design with removable side handie.
    Has trigger switch. lock pin, geared chuck. No-load speed 750 RPM. 934 " long. With chuck key, 3-wire cord and 3-prong plug with 2-prong adaptor. U.L. approved. For 110.120 V AC or DC. Shpg. wt., $41 / 2 \mathrm{fbs}$. HC. 322

    Net 25.17

    ## "SPEEDIAL" MOTOR SPEED CONTROL <br> Varies Speed of Any AC-DC Motor From Zero RPM To Full Speed Ideal for <br> Electric Drills, <br> Saws, Sanders <br> 

    Allows slow drill speeds to start holes - prevents "dancing." Provides proper speed for drilling or sawing brass, aluminum, iron and steel. Allows sand. ers to be slowed down to eliminate ruts, gouges. Numerous other applications-just plug in and adjust speed as desired. Maintains speed, will not stall. Rugged cast aluminum housing. Fused ( 5 amp.). For universal (AC-DC) and DC motors only. May be used on Electric Clutches and Brakes requiring OC voltage from $0-90$ volts. For all motors crawing up to 5 amps. from $0-90$ volts. For 811 motors crawing up to 5 amps.
    Output of control is 0.90 volts DC, input required 110 . 120 V .60 cycles AC. Shpg. wt., 2 lbs .
    EL-113

    # POWER TOOLS SELECTED FOR QUALITY-VERSATILITY 

    NEW! RAM "FURY" $1 / 4$ " DRILL RAM "FURY" 7" HEAVY-DUTYELECTRO $3 / 8$ " SUPER-POWER DRILL

    OUR TOP DRILL VALUE

    - 2ヵAMP. MOTOR


    ## - U/L APPROVED

    - Jacobs geareo

    CHUCK ANO KEY

    - multiple thrust ball bearings
    

    Lafayette's top drill value. $1 / /^{\prime \prime}$ geared chuck drill rated at a full 2.0 amps . U/L approved. $1 / 4^{\circ "}$ capacity in steel $1 / 2^{\circ \prime}$ capacity in hardwood. 1200 rpm speed under fuli load, 2000 rpm no load speed. Precision anti-friction bearings Automatic trigger switch. Specially designed gear train for maximum torque transfer. Overall teng MD-708
    EL-109 50-ft. 3.Wire Ext. Cord
    Net 7.88

    ## NEW! WEN ZIPP SAW

    

    - Cuts Anything-Anywhere-Fast
    - $1 / 3$ HP, 4.25 Amp Motor
    - "Free Hand" Cutting

    The new Wen Kipp Saw handles like a keyhole saw, but the motor does the work. Uniquely designed base plate permits cutting flexiblity without adjustments. Cuts metal up to $1 / 2^{\prime \prime}$ steel and wood up to $6 \times 6^{\prime \prime}$; flush cuts; fine scrollwork. Powerful $1 / 3$ MP motor delivers 3200 1" strokes per minute. Heavy-duty roller and oillite bearstrokes per minute. Heavy-duty roller and oliote bear-
    ings; heavy-duty hardened gears. Conventional saw grip with finger control trigger switch. Use it anywhere from a construction joD to a hobby shop. $115 \mathrm{~V}, \mathrm{AC}$. Shpg. wt., $81 / 4$ lbs.

    ## HG. 99

    Net each 33.05
    In lots of 3
    Net each 29.37
    WEN 3-INCH BELT SANDER - Extra-Duty $41 / 4$ Amp Motor MODEL 910
    

    - Forced Ventilation - Coois Motor and Removes Dust
    - Compact, Balanced, Lightweight

    Wen Belt Sander provides 850 square feet of abrasive material/minute. Universal self-cooling motor will not overheat. Contour grip, 2 position knob, vibration-free bearings, balancing and lightweight f los.) remove fatigue from sanding. Belt changing in seconds. Flush design for close work. Complete gear drive with sealed bearings. Die cast polished aluminum housing. With 3 belts (coarse, medium, fine) and 6 ft .3 conductor cord. Size: $51 / 4 \mathrm{H} \times 51 / 2 \mathrm{~W} \times 101 / 2^{\prime \prime} \mathrm{L}$. For 115 V AC. Shpg. Wt.. $83 / 4$ lbs. HD-937

    In lots of 3, Each
    no-990 Coarse Sanding Belt (60) H0-991 Med. Sanding Gelt (80) HD-992 Fine Sanding Belt (120)

    Net each 33.05
    $\begin{array}{lr}29.37 \\ \text { Net } & .49 \\ \text { Net } & .49 \\ \text { Net } & .49\end{array}$
    

    Only

    - 7 Inch Combination Blade
    - Universal $11 / 2 \mathrm{hp}$ Motor
    - Safety Retracting Handle
    - Heavy Duty 3 Conductor Cord


    ## - Approved by UL and CSA

    4 powerful 8 ampere motor provides this big $7^{\prime \prime}$ circular saw plenty of reserve power to zip through stralght or 3 angle ceuts. Cuts vertically to $2 K_{0}^{\prime \prime}$ at $90^{\circ}$, to $2 \frac{1 / 0^{\prime \prime}}{}$ at $45^{\circ}$. Features self-lubricating bronze bearings, floating blade guard, safety retracting handle, combination rip and cross-cut blade and 3 wire cord and plug. No load speed, 5000 rpm . Motor is a universal $11 / 2 \mathrm{hp} A C-D C 115$ volts. UL Approved. Shpg. wt., 15 lbs.
    H6. 185
    Net 19.8s
    SAW TABLE. Perfect complement to the " $88-3$ "Saw. Al lows cutting at any angle between $45^{\circ}$ and $90^{\circ}$. Complete with miter gauge and rip fence. Shpg. wt., 12 lbs. HD-360 Saw table
    COMBIMATION BLADE for up or crosscut work.
    HD- 361 Shpg. Wt., $12 / 2$ lbs
    Net 11.65

    FLOORING CUT-OFF BLADE for smoother crosscut than combination blade.
    HD-362 Shpg. wt., 1 1/2 lbs. ................................ 1.69
    plamer blade will cut off, mitre, and rip smooth enough to eliminate sanding.
    HD. 363 Shor. wt.. $11 / 2$ lbs.
    Net 4.13

    ## WEN 'SOUPED UP' SABRE SAW <br> MODEL 909

    

    HEAVY DUTY-FULL 6 AMP.

    - 1/2 H.P. MOTOR-1" STROKE
    - LARGEST CUTTING CAPACITY - $6^{\prime \prime} 90^{\circ}$ CUT - $4^{\prime \prime} 45^{\circ}$ CUT


    ## 2937

    NO MONEY OOWN
    Bigger - more powerful - more versatile - faster cutting. Super-long blade easily cuts through $6 \times 6^{\prime \prime}$ lumber. Cuts $4 \times 4^{\prime \prime}$ at a $45^{\circ}$ angle! Power enough to cut steel plate up to $1 / 2^{\prime \prime}$ thick-iron pipe up to $2^{\prime \prime}$ in diameter. Comfortable-conventional saw grip with auxiliary knob for 2 hand control. Saw tilts $45^{\circ}$ sole plate always remains flat. Finger control trigger-switch. Constant air stream flows dust from line of cut. $3400 \mathrm{~B}^{\prime \prime}$ strokes per min. Includes seven blades for cutting wood - steel -. hardooard - sheet metal - pipe - leather - rubber formica - etc. Equipped with rip guide and circle
     H0-466
    9T2 Saw Table - Makes the "909" a Bench Saw
    Heavy duty, rugged table for stralght cuts, circle, curve bevel and angle cuts. An aid to safe, efficient, profes sional type work. $18 \times 18 \times 81 / 2^{\prime \prime}$. Shpg. wt., 14 lbs.
    HD-852
    Net 11.21

    ## Extra Blades for " 909 " and " 920 "

    Rough work blades of high carbon, high chrome steel Metal cutting blades of high speed steel. Average shpg wt. 402.
    ND. $8531 / 2 \times 7 \times 1 / 2$ " - Very fast rough cuts,
    pkg. of 3
    H0-854 $1 / 2 \times 31 / 2^{\prime \prime}$-Fast rough cuts,
    phg. of 3
    H0-855 $\%_{6} \times 2 x_{4}$ "-Medium cuts, pkg. of 3
    HD. $856 \mathrm{~K}_{6} \times 2 \frac{1}{2}{ }^{2}$-Fine scroll cuts, pkg. of 3
    ND-857 $1 / 2 \times 4^{4}$-Kifife blade, pks. of 3
    HD. $858 \%_{6} \times 3 \times 1 / 4$ "High speed steel,
    HD. 858 sty $x$
    pkg. of 3
    ND. $859 \mathrm{~K}_{6} \times 3 \psi_{4}^{*}$-High speed-extra fine
    pkg. of 3
    mo-705 One each of above blades, pkg. of 7

    Net 1.26
    Net 1.05
    Net 4
    Net 84
    Net 84
    Net 1.28
    Net 1.26
    Net 2.38
    
    (NO LOAD) $11 / 2^{\prime \prime}$ CAPACITY IN HAROWOOO, \%" IN STEEL Mere's a rugged professional $70^{\circ}$ drill with EXTRA power for the TOUGH jobs that a $1 / 4^{\prime \prime}$ cannot handle. Will go through practically any material - concrete, plaster, brick, hardwood-even tough $3 \mathrm{hm}^{\prime \prime}$ steel. Its precision. built, dynamically balanced 3.8 amp motor is cool running, trouble-free and stall-proof. Has convenient pistol grip handle, ball-thrust bearings, die-cast aluminum housing, micro-machined alloy gears and sparkllng mirror finish. Precision keyed, geared chuck. 6 ft . 3 conductor power cord. $81 / \mathrm{z}^{\prime \prime}$ overall length. For 115 volts AC/DC. Shpg. wt., $41 / h^{\prime \prime} \mathrm{lbs}$.
    HG-182
    Net 13.20

    ## WEN 2-SPEED $3 / \mathbf{8}^{\prime \prime}$ POWER DRILL

    - Delivers


    ## Maximum Torque

    Under Load

    - Hi Speed- 3000 RPM-Low Speed 1000 RPM
    - Capacity in Wood Ko" to $21 / 2^{\prime \prime}-1 n$ Steel $Y_{6}^{\prime \prime}$ to $1 / 2^{\prime \prime}$
    - Ball Thrust Bearings
    

    One drill with the proper speed and torque for every job. Musky-powerful-but not bulky. Hi speed for sand-ing-sawing-grinding-brushing-bufting. Low speed for polishing - waxing - screwdriving - paint mixing masonry drilling. Ingenlously wound motor delivers maximum torque under load. Auxiliary handle can be inserted at top or bottom. Change speed by shifting $3 /{ }^{\prime \prime}$ geared chuck to other power take off. Trigger switch with locking oin. 6 ft . rubber covered cord. UL approved. Overall length $12 y_{4}-110-120 \mathrm{~V}$. AC/DC. Shpg. wt., 5 lbs . HD.467
    wh., 5 lbs.
    Nei 19.07

    ## WEN ELECTRIC HAND PLANE

    

    - Souped-ud 1.2 H.P. Burnout-Proof Motor
    - Balanced, Lightweight Polished Aluminum Housing
    - Industrially Rated for Heary Duty Use

    Ruggediy buitt for years of precision work, the Wen electric hand plane offers professional quality features-air cooled cog belt drive; heavy-duty ollite bearings; separately adjustable twin cutters; welded burnout-proof armature. finger control trigger switch. Cutter speed 14,500 R.P.M. Mitre guide plate angle adjusts up to $45^{\circ}$. Guide plate is removable for surface planing. Cutting width $21^{\prime \prime}{ }^{\prime \prime}$; depth adjustable to $\mathrm{Ko}^{\circ}$ " Polished aluminum housing with air stream chip ejector. Shoe length 16". 3-wire 8 - ft . cord.
    HG. 191 ShDg. wt., 9 Jbs
    Net each 33.05
    in lots of 3, each, 29.37
    $\begin{array}{lll}\text { Net } & 2.13 \\ \text { Net } & 3.51\end{array}$

    ## Page 352

    ## MAKE YOUR 1/4" OR 3/8" DRILL A PORTABLE MULTI-TOOL

    
    s
    

    H

    ## $1 / \|^{\prime}{ }^{\prime}$

    

    N
    
    (A) SANDING AND POLISHING KIT - USE WITH ANY DRILL - 9 DURABLE PIECES

    High quality sanding and polishing kit for use with any standard drill or drill press. Cuts working time to a fraction, white taking the work out of sanding. Ideal for alt types of sanding, removing rust-paint, and polishing hobby-craft, auto, etc. Klt contains fiexible rubber $5^{\circ \prime}$ backing disc, 7 assorted-grain sanding discs, and $6^{\text {¹ }}$ lambs woot polishing bonnet. Shpg.wt., I lb. HD 270
    (B) 10 PC. POWER BORING SET

    For $1 / 4^{" 1}$ electric drill or drill press. 8 different bits. plus shank and wrench. Sizes $1^{\prime \prime}$ and $11 / 4^{\prime \prime}$. Fast. clean bore at any angle. Shpg. wt 116. HD-181
    1.97
    (C) 4 PC. UTILITY KIT

    Grinds, polishes, sharpens, cleans, finishes. Kit contains $3^{\prime \prime}$ grinding wheel $12^{\prime \prime}$ thick, $3^{\prime \prime}$ double thick muslin buff, $3^{\prime \prime}$, wire wheel. Flanged arbor with $1 / 4^{\prime \prime}$ shank. All wheels have $1 / 2^{\prime \prime}$ bore. Shpg. wt., 1 lb . HD-392

    Net 99

    ## (D) 29 PC. DRILL SET:

    29 chrome vanadium twist drills with indexed metal stand. Sizes Ko" to $1 / 2^{\prime \prime}$ "by 64 ths. Shpg. wt., 4 lbs. HD-214 imported

    Net 5.40

    ## TURNED DOWN SHANKS

    Same as aboye, but with shanks turned down for $1 / 4$ drill. Imported H C .440

    Net 5.99

    ## (E) "SHOP KING" HEDGE TRIMMER

    ## - $14^{\prime \prime}$ BLADE

    Converts any $1 / /^{\prime \prime}$ drjil into an easily handled hedge trimmer. Cuts, trims and shapes hedzes and shrubbery. Extra long 14" blade of hardened tool steel. Keen edges for fast shearing action. Steel drive gear-permanently lubricated. Long, comfortable handle. Locks in any of 10. different positlons. Light welght-compact. Shpg. wt., 3 lbs. HD. 723

    Net 6.99
    (F) SHOP-KING SAW WITH DADO ARBOR

    - CUTS $2 \times 4$ 'S IN ONE CUT

    Revolutionary new "SHOP KING" with Adjustable "DadoArbor" cuts any groove up to $1 / 2^{\prime \prime}$ wide $\times 1^{\prime \prime}$ deep on ONE CUTI Arbor swivels sawblade to cut large grooves with little power-no heavy duty drlll needed. "DadoArbor" easily removed for straight and angle cuts with precision Depth-Bevel-Rip Gages. Has $5^{\prime \prime}$ Safecut blade. Fits any $1 / a^{\prime \prime}$ drill in 1 minute. With instructions and factory guarantee. Shpg wt., 4 los HD- 197

    Net 7,98
    HD-115 Safecut Blade
    HD-116 Hycarbon Crosscut Blade HD-117 Hycarbon Rip Blade
    HD-118 Hycarbon Combination Blade
    (G) NEW! "JIFFY" JIG SAW

    - Automatically Blows away Sawdust
    - Self-lubricating Lifetime Bearings
    - Blades Easily Changed

    Ideal for home craftsman, carpenters, plumbers, electricians, cabinet makers. Cuts straight lines, Intricate patterns, or circles-no matter how large - in wood, wallboard, plastics, metals. It even cuts $2 \times 4{ }^{\circ}$ s! This hand lig-saw finds many uses around the house or on the job. Use for cutting openings for plumbing, switchboxes, etc., without boring starting hole. Actually does the work of a lig, keyhole, coping, rip, crosscut, band or hacksaw. Blades easily changed with ordinary screw driver. Complete easily changed with ordinary screw driver. Complete
    with $1 \mathrm{j} i g-\mathrm{saw}$ blade, instructions and 1 -year factory guarantee. ShDg. wt., $11 / 2$ los.
    HG-278
    Net 4.88
    Replac
    Net 1.30

    ## (H) CARBIDE MASONRY DRILLS

    Premier carbide tipped masonry drilis, made in Holland. For use on concrete, brich, tile, plaster, etc. Packed in red plastic kit. Fits any electric drill. Imported Type Size L Shank Dia. Wt. NetEa. HD-393
    HD. 394
    HD. 395

    ## HD-396

    
    4.Plece Set. Consists of sizes: $K_{10}{ }^{\prime \prime}, 1 / 4{ }^{" \prime}$, Ko ${ }^{\prime \prime}$ " HD-397 Shpg. wt., 6 ozs.

    Fits any electric drill.
    Net 2.56

    ## (J) WOOD SCREW COUNTERSINK <br> - 24 COUNTERSINK COMBINATIONS <br> - FITS ALL DRILLS AND DRILL PRESSES <br> - AUTOMATIC STOP FOR 3 DEPTHS

    Set contains 4 cold forged bits and "Depth-a-Dapter" Exactly profiled for 8 most popular screw sizes. Adjusts for flush, putty or dowel plug countersink. For wood screws 6 and $7 \times 3 / 4^{* \prime}, 8$ and $9 \times 1$ ", 8 and $9 \times 11 / 4^{\prime \prime}$. 10 and $12 \times 11 / 2^{\prime \prime \prime}$. Permits fast, multiple boring of duplicate holes exactly alike. Shpg. wt., $1 / 2 \mathrm{lb}$.

    Net 1.27

    ## (K) FOAM DISC SANDING KIT - rubber-flex swivel drive

    NEW POWER SANDING DRILL ACCESSORY. Fits any $1 / 4^{\prime \prime}$ or larger electric drill. The sanding surface floats on a poly-foam pad. Sands flat or curved surfaces. Can't gauge-no swivel marks. Soft foam backer pad forms easily-even to compound curves. Changing angle of flexi-drive causes pad to "walk" automatically. Complete with pad, flexi-drive, 6 assorted sanding discs and in. structions. Shpg. wt., 8 ozs.

    Net 1.67

    ## (L) DRILL SAW BIT

    Four jobs with one bit. Use with any electric drill or drill press. Cuts circles, ovals, squares, etc. Withstands severe continuous use. Cuts wood, plastic, bakelite, steel, brass, copper, etc. Shpg. wt., 4 oz . Imported HD. 75 Wood Bit

    Net .59
    (M) BABCO GRASS TRIMMER

    - FAST SHEARING ACTIONS SAFE OPERATION WITH BLADE GUARD - SMOOTH, CLEAN CUTTING Now you can take advantage of that electric drill in your work shop to trim grass with this unit. Attaches to any $1 / 4$ " electric drill. Ideal for cutting grass grown over sidewalk. stepping stones or close to wall. Neat and fast cutting. Ten times faster than hand shears. The rotary blade is well guarded, top and sides, to insure safe operation. $51 / 2^{\prime \prime}$ blade can be easily re-sharpened with any kitchen knife sharpener. Stapg, wt., 1 lo.
    HD-399

    Net 2.62

    (N) FLEXIBLE SHAFT ATTACHMENT

    - DRILL WHEREVER YOU WILL
    - TAKES UP TD $1 / 8^{\circ}$ SIZE DRILLS

    Operates off any fixed or portable $1 / 4^{\prime \prime}$ power drilli; enables you to drill at any angle anywhere. Capacity up to $1 /{ }^{\prime \prime}$ " size drills; $36^{\prime \prime}$ overall length with chuck. Comes in box with complete Instructians. Shpg. wt. 1 ib.
    H0.389
    imported.
    (P) HIGH SPEED COUNTER SINK

    Fast cutting-IIve flutes- $82^{\circ}$ angle. Made of fine grade hi-speed steel. For use in any machinable material such as metal, wood and plastic. Has five carefully ground as meta, wood and plastic. Has five carefuliy ground
    flutes for cutting an $82^{\circ}$ angle to receive wood and flutes for cutting an $82^{\circ}$ angle to receive wood and
    machine screw heads. Has $1 / 4^{*}$ shank for use in any electric drill or drill press. Length overall, $21 / 2^{\prime \prime}$. Shpg. Nt. 6 oz.
    ND-76
    Net 1.10
    (Q) TWIST DRILL SHARPENER-

    - Sharpens Drills from Ko" to $1 / \mathrm{g}^{\circ}$
    - Sharpens Many Househald Tools

    Fits any electric drill whose chuck can handle the $1 / 4^{\prime \prime}$ shank. Includes $3^{\prime \prime}$ aluminum oxide grinding wheel, twist drill holder for sharpening any bit up to $12^{\prime \prime}$ dia., and adjustable tool rest for sharpening chisels knives, scissors, plane blades, etc. Shpg. wt., $11 / 2$ lbs
    HG-279
    Net 1.88

    ## (R) SCREWORIVER ATTACHMENT

    ## FOR ELECTRIC DRILLS

    Can be fitted to any fixed or portable drill, to drive up to $1 / 4^{\prime \prime}$ diameter wood screws quickly and easily. Bit idles until pressure is applied, powerful "non-slip" industrial type clutch disengages itself when screw is driven home. Special bit holder prevents blt from slipdriven home, Special oit holder wevents bit of screw slot. Includes two hardened tool steel $1 / 2^{-1}$ hex bits for No. 2 Phillips mead and for No. 6 to No. 14 slotted screws. Shpg. wi., $11 / 2 \mathrm{lbs}$. Imported HD-463

    ## (S) ROTARY RASP

    Net 2.24
    For use with any $1 / a^{\prime \prime}$ electric drill or drill press. Made of hardened steel, It is ideal for shaping of wood, plas. tic, flibre, etc-planing of floors and boards-mixing of paints, olls and other heavy liquids. Extremely handy for the home craftsman, hobbyist, handyman, etc. $23 / 4^{\text {. }}$
    diameter. ${ }^{1 / 10}{ }^{\prime \prime}$ wide. Shpg. wt., $1 / 2 \mathrm{Ib}$. Imported

    ## HO.458

    Net .99
    -(T) CHUCK KEY HOLDER
    Keeps your geared chuck key right with your drill. No more fumbling or lost keys. Key snaps freely in and out of holder. Always ready to use. Fits all drills and chuck keys, Quickly installed. Shpg. wt is it
    H0-271
    HD-271 Net 69
    2 for 1.20

    ## HANDY POWER TOOL ACCESSORIES

    ## GYRO-DRIVE

    

    Full.Power Full-Speed Drilling Up to -52 Degrees Off Center

    - A Must For Electricians, Plumbers, Mechanics, TV Men, Telephone In-

    Here is the amazing drive which converts any $1 / 4^{\prime \prime}$ or $1 / 2^{\prime \prime}$ drill into a variable angle tool dills in the tightest quarters, "around corners." Immediate angular positioning of the bit at angles up to $52^{\circ}$. Can be mounted into any $3 / \mathrm{m}^{n} .24$ male or female drill spindle. Threaded sleeve for $1 / 4^{\prime \prime}$ or $1 / 2^{\prime \prime}$ chuck, (chuck not supplied). May be permanently installed on drill or mounted in drill chuck, with additional chuck added on operating end. Removable hand grip bar for applying vertical pressure when drilling is difflcult. Shps.

    Net 6.07

    ## JACOBS TYPE DRILL CHUCK

    Comparable to Jacobs 18 Key type geared tooth chuck. Capacity $0.1 / /^{\prime \prime}$ thread $3 / 4 \times 24^{\prime \prime}$. Ruggedly constructed. Polished finish. Used as standard equipment on most electric drills. Made to rigid specifica. thons. Compare our really low price. You'll find this same chuck selling for twice as much! Imported HD-186 Shpg. wt., 1 lb .

    ## MODEL 4100 VERSAMATIC <br> 1125 <br> 

    ## - WITH YANKEE STYLE BIT HOLDER

    - TURNS $1 / a^{\prime \prime}$ DRILL INTO HIGH POWER TOOL
    - REVERSES-INCREASES POWER-


    ## REDUCES SPEED

    Seven to one speed reduction develops tremendous torque! Hand cluten control tor easy, instant stop-start action! Look at these fabulous features! Power screw driver - handles largest screws - reverses to extract them! Power drill tapping head! Plenty of power for oversize drilling! Perfect for concrete or any kind of masonry drilling! Low speed and high power for hole saw attachments! A professional tool that anyone can use! Comes complete with screwdriver bit-Philitips bit--1/a socket set adapter-wrench pin and instruction book. Shpg. Wt., 5 lbs.
    ND. 195
    Net 11.25

    ## 1/2" CHUCK FOR VERSAMATIC

    Geared chuck-x"" to $1 / 3^{\prime \prime}$ capacity- 33 taper to fit Supreme Versamatic. Shpg. wt., $1 / 2 \mathrm{lb}$. HD. 268

    Net 7.38

    ## ZORON ADJUSTABLE Z-SAW HOLE CUTTER

    ## 388

    A quickly adjustable tool for cutting holes $11 / \mathrm{c}^{\prime \prime}$ to $21 / 4^{\prime \prime}$ in diameter in wood, plastic, aluminum, etc. For use with tools having $1 / 4^{\prime \prime}$ chuchs. Only light pressure exertion is required, less than with a drill. To adjust shank, lock-nut is loosened, bottom plate rotated for dasired diameter, and lock-nut tightened. Removable combination blades.
    HD-949 Shipg. Wt., $11 / 2$ los.
    ARCO NO. 20 ADJUSTABLE $82^{\circ}$ COUNTERSINK
    Adjusts to exact depth with automatic stop... no need to judge the depth with each cut. Single-flute, chatter-free design assures round clean cuts. Tempered and hardened manganese tool steel constructlon. Quickly countersinks in steel, wood, plastic and other materials. $1 / 4^{\prime \prime}$ shank fits any drill, drill press, elc.
    HD. 948 Shpg. wt., 4 oz.
    Net .98
    

    ## 7-in-1 HOLE SAW

    Fits any electric drill, drill press, motor arbor, rotary sander of lathe. Cyclindrica saw blades cut holes from l' to $21 / 2^{\prime \prime}$ diameter in any $3 / 4$ stock. Hole sizes are $1^{\prime \prime}, 114^{\prime \prime}$ $11 / 2^{\prime \prime}, 134^{\prime \prime}, 2^{\prime \prime}, 21 /^{\prime \prime}, 212^{\prime \prime}$ True size carbon steel saw blades fit into deep ma chined grooves in tool head and are locked into place by a full length lock screw. Cuts wood, plastics, metals, sheet-rock, wall-board, masonite, formica, etc. Has guide bit and automatic slug ejector. Imported
    HD-225 Shpg. wt., $11 / 2 \mathrm{lbs}$ $\qquad$ Net .99
    $1 / 2^{\prime \prime}$ CHUCK FOR $1 / 4^{\prime \prime}$ DRILLS
    

    Converts $1 / 6^{\prime \prime}$ electric drill to $1 / 2^{\prime \prime}$ capacity. Properly machined to insure correct balance. May also be used on standard $1 / 2 \times 24$ motor arbor or shaft. Imported Ho- 203 Shpg. wt., 1 to
    

    Net 99

    You'll find this the handiest tool set in your workshop. Consists of 5 sereen hole drills ( $11 / 2,11 / 4,1,3 / 4 \& 6{ }^{2}$ ), plus a drill saw for use with a standard $1 / 4^{\prime \prime}$ electric drill chuck. Screw hole drills will fit flat, round or oval head screws in the 10 most popular sizes. Allows fast easy countersinking and screw tuning without splitting material. Drill saw is of hardened, tempered, drop forged steel for use in wood, plastics, masonite or soft metals, Drills, saws, reams and cuts any shape or hole in any direction. Shps. wt. 1 lb . Imported
    HD-885
    Net .79
    

    Contains 4 high-carbon steel twlst drills. SIZES: $1 / 4{ }^{\prime \prime}$ $4_{0}^{\prime \prime}, 3 " \prime 1 / 2^{\prime \prime}$. Drills have $1 / 4^{\prime \prime}$ shanks for use with $1 / /^{\prime \prime}$ max. chucks. Allows owner of small drill to make larger holes without tedious flling of reaming. Made of precision ground speed steel. Comes complete with clear plastic pocket-case. All four drlils $5^{\prime \prime}$ long. Imported HD-869 Shpg. wt., 1002
    

    ## ARCO SCREW \& NUT DRIVER ELECTRIC DRILL ATTACHMENT

    - Complete 15 Piece Screw and Nut Driver.
    For rapid fastening of both screws (slotted and Phlllips) and nuts (hex and square head). Has mon-slip Industrial type clutch for last easy driving. Bit holder prevents screw head slippage. Includes flat blts and bit holders for "4-8 and "8-14 screws, "1-2 Phililos head bit, 6 hex socket wrenches ( $3 / 4^{n}, X_{4}{ }^{\prime \prime}, ~ " 1 / 2^{\circ}, 3 /{ }^{\circ \prime}$ "
     Ko when holder with ball lock
    wrench holder with ball lock
    HD-944 Shpg. wt., $11 / 2 \mathrm{lbs}$.
    


    ## ARCO ROTO-FORM

    Shapes-cuts-forms-mills. Fits all electric drills, drill presses, lathes, etc. Never clogs, or dulls-Cuts wood, plastic, rubber, aluminum, brass, etc. Avallable in 3 different sizes. All have $11 / 2^{\prime \prime}$ long drums and $1 / 4^{\prime \prime}$ shanks.
    HD-945 No. 1250 3/4" diam. Shpg. wt. 4 oz. Net 69 MD-946 No. 1251 11/4" diam. Shpg. wt., 6 oz. Net 1.02 HD-947 No. 1252 17/0" dlam. Shpg. wt., 8 oz. Net 1.35

    13-PC.

    ## TWIST DRILL SET

    Set of 13 high quality chrome vanadium twist drills, complete with metal index. Sizes: $K_{0}^{\prime \prime}$ to $1 / 4^{\prime \prime}$ by 64 ths. Shpg. wt., 8 oz. Impori HD-113 …....Net' 99
    

    ## RIGHT ANGLE DRIVE - HALVES OR DOURLES DRILL SPEED

    Close coupteo-right angle attachment for working in contined spaces. 2 to 1 gear ratio permits halving or doubling drill speed. Migh speed for drilling and sand ing-slow speed for polishing-large hole drillingmasonry drilling, efc. Fits $1 / 4^{\prime \prime}$ chuck of may be screwed directly to drill spindle. Includes $\mathbf{3} \mathbf{\$ - 2 4}$ male and ferrale adapters-and $1 / /^{\prime \prime}$ plain shaft adapter. Shpg. wt., 1 lb . HD-26s

    ## SANDING PLATES

    New tools for rasping-sanding -smoothing. These plates outlast thousands of granular abrasive discs and quicken formerly tedious work. Special steel construction. Each tool fits $1 / /^{\prime \prime}$ drill chucks. Imported. Avg. shpg. wt., 8025.

    HD-941 Disc Rasp (Coarse) Net 1.49
    Paint Remover, Smoother (Dual Purpose)
    HD-943
    Net 1.49

    ## ARCO ADJUSTABLE BEVEL CUTTER 147

    

    Fits any electric drill, dilll press, etc. to make fast, clean corner bevels. Adjusts from 1/ri" to $X_{1 " \prime}^{\prime \prime}$ wide bevels. Dual guides assure accurate 45 bevels along entire length and width of workpiece. Cuts wood, plastics and soft metal. Made of hardened, tempered manganese alloy tool steel. Shpg. wt., 2 oz.
    HG.271
    Net 1.47

    ## ARCO RADIUS GUTE? <br> 

    

    For fast, clean corner rounding when used with sny electric drill, drill press etc. Available in 3 sizes for $14^{\prime \prime}, K_{6}^{\prime \prime}$ or $1 / 4^{\prime \prime}$ radlus cuts. Accurate radius cuts assured by exclusive dual guides. Cuts wood, plastics, soft metals. Tempered and hardened manganese alloy tool steel construction. Shpg. wt., 2 oz.
    HG. 272 1/8" Radjus
    Net 1.10
    HG-273 K" "Radius
    Net 1.10
    NG-273 Ki Radius
    NG-274 $1 / 4$ Radlus
    Net 1.10
    

    Contains 38 abrasive discs and rubber holders for use with most $1 / 4^{\prime \prime}$ and $1 / 2^{\prime \prime}$ portable drills and grinders. Ideal for home work shops and hobby shops. Works equally well on steel, wood or plastic. Pressure sensitive discs are easy to apply and replace on rubber nolder. Shpg. wt., 1 lb .
    HC-277

    # TOOLS FOR LAB, INDUSTRY AND WORKSHOP 

    UNIMAT MINIATURE MACHINE SHOP
    ## ATTACHMENTS \& ACCESSORIES

    

    - Tolerances to .0005" - Only 16" Long, 5" High - 11 Spindle Speeds New, Improved, Calibrated Hand Wheels

    A complete 10 -in-one machine shop in 16 inches! Although basically a precision lathe, UNIMAT quickly converts to a vertical milling machine, orill press, surface grinder or pollsher-all on a singlo base. Moto (directly attached to headstock) may serve as a handtool. Belt drive is adjustable for 11 different speeds from 900 RPM to 7200 RPM. Detachable headsfock rotates $360^{\circ}$ for off-center operation; straight or tapered turning. Adaptable for threading, mililing, sawlng. Cast iron lathe bed swing Is $3^{\prime \prime}$; center-to-center distance $6-9 / 10^{\circ}$. Includes 1/10 HP Brush Type fan cooled motor, drill press vent. column and hand lever, face piate, lathe dog, grindsione arbor, tool post. 2 dead centers, 3 jaw universal lathe chuck with reversing jaws, $1 / 4$ " Jacobs chuck and key, Allen wrench roughing tool bit, and a spindle return spring. $171 / 2 \times 104 / 2 \times 53 / 4^{" 1}$ wood chest. 40 -page manual. For 115 V AC/OC operatlon. Imported.
    HD-957WX Shpg. wt., 30 Ibs. No Money Down ............................................... 138.50

    Model DE 1210 MIIIIng Table. Steel, $5 \times 3^{\prime \prime}$ with 2 sets of ciamps HC-104 Shpg. wt., 3 libs. ........................................Net 10.50 Model DB 1010 Clamping Vise. Reach of jaws: 14". Mounts on cross slide on Milling table.
    HG-105 Shpg. wt., $12 / 2 \mathrm{Jbs}$. ................................. Net 7.95 Model OB 1130 T'ool Kit. Consists of 2 tooi blts, 4 drill bits, grindstone w/cup, single-end cutting key seat cutter, counter sink blt, center drill bit and 2 wood zhisels. In box. HG-106 Shog. wt., $11 / 2$ lbs. Model DB 1100 set of 6 tool bits.

    Net 15.50 HG-107 Shpg. wt., 1 lb .

    Net 9.50 Model DB 1290 Power Feed Attachment. 1:50 reduction, feed rate of $.0008^{\prime \prime}$ per revolution.
    HG. 359 Shpe, wt. 7 lbs.
    Net 19.95
    Model DB 10012 -law Independent Lathe Chuck. Capacity $21 / a^{\prime \prime}$ HG- 360 Shpg. wt., $14 / 4$ lbs. ................................Net 22.50 21/2" Circular Saw Attachment. $31 / 2 \times 4^{*}$ table, rlp fence, arbor. Max, depth of cut $1 / 2^{\prime \prime}$
    HG-361 Model DB 1230 Saw. Shpg. wt, 21/2 lbs. .... Net 0.15 HG. 362 Model DB 1231 Blade (wood). Snpg. wt., 3 oz. Not 1.50 HG-363 Model DB 1232 Blade (metal). Shpg. wt., 3 oz. Net 2.25 Model DB 1070 Jlg Saw Attachment. Cuts to center of $16^{\circ}$ circle. With 12 assorted blades
    H6. 384 Shpg. wt., $61 / 2$ lbs.

    SPRANIT 600
    PROFESSIONAL-STYLE SPRAY UNIT

    - Integral Compressos Motor
    - All-Aluminum Spray Gun
    - Sprays Dil.

    Paints; Stains
    With 1/4 H.P. General Electric Motor built right in. This machine is permanently set up to operate. Has exclusive "Parallel Motion" design which assures Syap" between the cutting knife and table edge at any depth of cut. All Ball Bearing construction. Dutieed as well as infeed table adjustable. Maximum cuts: width $42 / 2^{\prime \prime}$ depth $3 / 8^{\prime \prime}$. Rabbet depth $3 / \mathbf{s}^{\prime \prime}$. Over-all length $305 \%^{\prime \prime}$ Cast iron tables and base. Comes complete with builtin $1 / 4$ H.P. Motor, Cord, Plug and Switch, and 2 -way Tilting Fence.
    HD-s50wX Shpg. wt., 53 lbs.
    Net 71.50

    ## STEEL FRAME WORK BENCH

    sothlilinnaidS
    Includes Tool Rack.
    Peg Board Back Panei and Bottom Shelf
    

    All-purpose spray unit that gives pro. fessional results from the start. Adjusts pattern from small-as-a-dime to justs pattern $10^{\prime \prime}$ wide -4 times fasier than
    a brush, and cleans easier too. Easy.
    
    to-use 2 -finger trigger gun. Never needs lubrication. air delivery: 1.5-2.0 CFM @ 15-20 lbs. Complete with $6-\mathrm{ft}$. cord with plug, 8-1t. hose with connections. MD-933 Shpg. wt. 11 tbs.
    MUITI-CDLOR Kirs: For best aesults in spraying multi color paints.
    HO-675 Shpg. wt., 4 oz. ..........................Net 2.10 AIR TODLS KIT: For inflation and dusting. Includes chuck for all tires-footballs, basketballs, toys, air mattresses, "dusting" attachment.
    HD. 676 Shpg. Wt., 402.
    Net 1.70
    

    - Two Tools in One


    ## - A Combination Polisher Bufter \& Sander

    A rugged all-purpose polishing and sanding tool half the weight of similar units. Ferfect for sanding of polishing furniture, cars, floors and walls. Engineered to operate at 500 rpm to avcid hi-speed heat and friction on working surfaces. Lniversal AC-DC motor employs thrust bali bearings for smooth rotary action. Supplied with heavy duty 3 -concuctor cord, $71 / 2^{\prime 2} 0 . D$. lambswoot bonnet and 24 sanding discs. Overall length $131 / 2^{\prime \prime}$. Shpg, wt., $51 / 2 \mathrm{lbs}$.
    HD-93i
    Net 23.73
    RAM 2-WAY ELECTRIC SANDER MODEL R-120
    Orbital or Straight Line

    - $3_{0}{ }^{\prime \prime}$ Stroke Orbital


    ## or Straight

    - Positive Slide Switch
    

    A heavy-duty electric sander with $K_{0}{ }^{"}$ stroke in orbital or straight line. Features 2.4 amp, universal series wound motor. Heavy-duty ball bearing and self-lubriwound motor. heavy.duty sleeve bearings. Pad size: $3 K_{6} \times 71_{1}^{\prime \prime \prime}$; sandpaper
    
     H6-98

    # TOOLS for the TECHNICIAN and HOBBYIST 

    

    Five most often needed round hole punches. Do the jot In minutes-save hours of ledious hand labor. Cuts smooth accurate holes for sockets - plugs ~ controls - panel lighis -. switches _terminals - most radic parts. Works equally well with sheet metal - sheel plastics - composition board, etc. Drive with any wrench $1 / 0^{\circ}$ or with $T$ handle included. Punch sizes included are punches, dies, $T$ drive handle, tapered reamer, fitted wooden case and instructions. Shpg. wt., $21 / 2 \mathrm{lb}$ : H5-471 Net ea., 5.49, Net ea., in lots of 3, 4.94
    

    9 PC. SQUARE PUNCH SET - 3 NEEDED SIZES $1 / 2^{\prime \prime}-H^{\prime \prime}-1 \prime \prime$
    SMDDTH, ACCU.
    RATE, EASY TD
    USE
    

    Save time - save effort - cutting square notes in chassis - panels - sheet metal up to 1/6". Most often needed sizes for square chassis components. Multiple cuts allow any size square hole. Drive punches with any wrench or with $T$ drive handle included. Cuts smooth, accurate square holes in metal - bakelite - plastic - composition board, etc. Complete with $1 / 2^{\prime \prime}, 5 / 0^{\prime \prime}$, $1^{\prime \prime}$ punches - dies - drive screw, $T$ handle and wooden case. Shpg. wt., 2 lbs. Imported HD-480
    

    ## 5 PC. ASSORTED .98

    Five flles selected for utility and durabillty. Good qualify-equal to flles selling for far more. Each one a different pattern-three standard shapes-two triangular. Sites $6^{\circ}$ to 12". Shpg. wt. 2 lbs.
    HD-455
    GREENLEE CHASSIS PUNCHES $B$ B
    Cut holes in metals up to 1/e" thick with the turn of an ordinary wrench. No sawing, reaming or filing. TYPE 730 Round Holes, AVG. Shpg. wt., $11 / 2$ los. ea
    
    

    Made of exceptionaily high grade steel. Designed to meet the requirements of Tool Rooms - Instrument Makers - Machinists and Engineers. Used wherever the demand is for fine work within accurate limits. All are approximately $g^{\prime \prime}$ long overall -. parallel (machine type) tang Sel includes: Three square, crossing, dovetail (verge). half round, warding, pillar (one safe edge), square and round. All are Dead Smooth (No. 3) Cut. In heavy plastic case. Shpg. wt., 1 lb. Imported

    ## D-473

    Precision Engineers Files: Similar to above files. Dead smooth (No. 3) cut. All are approximately $\mathbf{9}^{\prime}$ long. Slightly heavier stock. Set includes 3 square, half pound, pillar (one safe edge), square and round. In heavy plastic case. Shpg. wi., 1 Ib. Imported HD-472

    ## $=-3$ TUNGSTEN SPEED 12 PC SET TAP \& DIE <br> 5 NATIONAL CDARSE SIZES

    Ten taps and dies - most popular natlonal coarse size. High quality - low cosi set for servicemen, hobbyists, experimenters, repair shops and handymen. Set includes one tap and one die of the following sizes: $1 / 4-20, k_{4} \cdot 18$ $3 / 16,1 / 14-14,1 / 2-13$. Complete with die stock, lap wrench and fitted wooden case. Shpg. wi., 4 lbs. Imported HD-635

    Net 2.69

    ## 20.PIECE TAP AND DIE SET

    ## - mational coabse sizes

    Twenty of the most offen needed taps and dies. Sizes populaply used in radio, hobby, home. shop and Ifght industry. Contains one tap and one die in each of the following sizes: $6.32,8-32,10-24,12-24,1 / 4$ 20. $\mathrm{K}_{-}-18,3 / 4-16, K_{-}-14$, and $1 / 2-13$ Includes die stock and adjustable tap wrench. Entire set contained In a fitted metal case. Shog. wt., 4 lbs. HD-252 ..... Imported ....... Net 5.59

    ## HAND TAP SET

    

    - american standard THREAD
    - 5 MOST NEEDED SIZES
    - RUGGED TAP WRENCH

    Handy lap set includes most often used sizes. Consists of $6.32,8.32,10.32, K_{0} .24$, and $1 / 4-20$ taps, rugged tap wrench with $i$-bar handie; all in heavy plastic pouch. All threads are American Standard. Extremely useful for re pair and servicemen. Shpg. wt., 1 lb. Imported HO-410

    Net .99
    HANDY WARDING FILE SET
    

    - 6 individual files
    - SPECIAL STEEL.DEEP CUT-HARDWOOD HANDLES

    Perfect for shop - home - hobby work. Kit consists of flat, half round, triangular, square, round and taper files. All with individual hardwood handes. Sturdy plas tic packet case included. Shpg. wt., $1 / 2 \mathrm{lb}$. imported HD-215 Net .89

    ## 12 NEEDLE FILES

    ## - SWISS PATTERN

    Handy set for the hobbyist. Used by jewelers, watchmakers, ioolmakers etc. all over the world. Consists of 12 assorted flat, oval, round, triangular and edge files to fif every need. Shpg. wt., 1 IV. Imported
    HD-88

    ADEL HAND "NIBBLING" TOOL

    - Cuts any shape or epenim. by hand
    - In sheet steel up to is gauge-in seft metals up to Ko thick.
    Easlly operated hand "Nibbler" cuts any shape hole in sheet steel-aluminum - Copper - or plastic. Metal remuins flat and straight sfter cutting. Does not add strain or distortion to edges. Cuts holes in preformed sheet metat (air-ducts, chassis, etc.) without distorting original form. Cuts in all directions. Any design-angle-radius. Follows scribe' lines easily. Best possible fool for cutting template and model parts from thin metal. Shpg. wt., 8075
    HD-436 ... .............. Net 1 to 11, 3.8512 to 71.0 .60
    HD-437 Replacement part for above ................ Nei 1.87


    ## 4 TOOLS

    ## IN ONE

    ## for industalals

    EXPERIMENTERS
    REPAIR SHOPS
    MODEL WDRKERS SCHOOL SHDPS HOME WDRK SHOPS
    

    An ideal fool for plant, shop or home use. Used extensive Iy in industrlal piants on small jobs. Handles stock up to $1^{\prime \prime}$ wide to 16 gauge. Punches clean, sharp, smooth burr-free holes - up to $1^{\prime \prime}$ from edge - $1 \mathrm{t}^{\prime \prime}$, 为 $2^{\prime \prime}$, K" $^{\prime \prime}$, z $\mathrm{in}^{\prime \prime}$ and $1 / 4^{\prime \prime}$ round. Forms bends up to $90^{\circ}$ in rod of bar stock. Cleaniy shears metals up to $1^{\prime \prime}$ wide, 16 gauge, without distortion. Rivets easily with any. type solid of hollow rivet. Rivets up to a maximum combines thickness of $7 \mathrm{~m}^{\prime \prime}$. Shpg. Wt., 15 los
    HD-233

    ## EXTRA PUNCH SETS

    Avg. shpg. wt. 402
    HO-234 Hex- $K_{0}{ }^{\prime \prime}, 1 / \psi^{\prime \prime}$ and $1 / 4$
    Net 9.55

    H0-235 Square-i/s and $3 \%$
    Net 1.45
    H0-235 Square-1, Net . 95
    

    ## 18' BENDING AND FORMING BRAKE

    - FOR EXPERIMENTERS
    SERVICEMEN-SHOPS
    - CLEAN SMOOTH BENDS
    - FORMS UP TO 90
    - HANDLES UP TD $10^{\circ}$

    WIDTH IN UP TO 16 GAUEE
    WIDTK NN UP
    THICKNESS
    Unique design permits forming chassis, boxes, covers, trays, etc. by means of 1 " deep slots in brake-bar which allow corners to told in. Provides flange edges up to $\mathbf{1}^{\text {N }}$ high. Easy to adjust for thickness, accuracy, angle of bend. Rugged construction offers a life time of service Shpg. wt. 20 lbs.
    Shpg. wt.
    HO-232WX
    Net 14.95
    4 PIECE COLD
    CHISEL SET

    - SIZES $1 / 4{ }^{\prime \prime} 1 / 6^{\prime \prime}$ - $1 / 2^{\prime \prime}$

    Rugged, well balanced chisels. Designed for long lasting performance and for lasting sharpness. Four popular sizes in a convenient carrying pack. Shpg. wt., 2 lbs. HD-831 Imported.

    Net . 59

    ## $\Rightarrow$

    ## TOOL STEEL TAPERED REAMER

    Removable " $T$ " for use in orill chuck Enlarges holes to $1 / 2^{\prime \prime}$ in diameter in metals, wood and plastic. Gradual taper down to $1 / \mathbf{g}^{\prime \prime}$ point. Will fit any $3 / \mathbf{k n}^{\prime \prime}$ drill chuck. Machined cutting edges. Overall length 4 \%". Length of "T" handle 4 " Shpg. wt., $1 / 2$ to. Imported.
    HD-357
    Net each . 59

    ## 3-PC. CALIPER SET

    77
    

    Set contalns inside, outside and scribes. Good quality. tempered springs; solld brass nuts; hardened points empered springs; solid brass nuts; hardened points
    Shpg. wt., $1 / 2 \mathrm{tb}$.
    
    (A) STEELMASTER CURVEO-CLAW HAMMER, All-steel hammer with "rim.tempered" face - minimizes chipping, assures greater safety. Chrome-plated handie; neoprene rubber grip, $13^{\prime \prime}$ long.
    HG. 125 Shpg. wt., $14 / 2$ lbs.
    Net 3.95
    (B) STEELMASTER CAMP AXE w/SHEATH. All-steel with contoured and perforated neoprene-rubber grip. Beveled nail slot. $3^{* *}$ sharpened cutting edge. Overall 137/8" long.
    HG. 126 Shipg. wt., 2 bss.
    Net 5.77,
    (C) SMOOTH BOTTOM RDJUSTABLE BENCH PLANE, of finest Iron castings, with hardwood handle and knob. Cutter adjusts for thickness and evenness of shaving. "" long overall; cutter width $2^{\prime \prime}$
    HG-127 Shpg. wt., 33/4 lbs.
    Net 8.25
    (D) HANOYMAN AOJUSTABLE BENCH PLANE. Tempered tool steel, fully adjustable cutter. Nichel plated lever; black hardwood handle and knob. Overall length $9^{\circ \prime \prime}$; cutter width 2
    HG-128 Shpg. wt., $34 / 2 \mathrm{lbs}$
    Net 4.88
    (00) MAGNEIIC TACK HAMMER-Sturdy, popular-priced magnetic tack hammer for the homeowner, hobbyist and handyman. Forged head has baked enamel finish, polished faces. Hickory handle stained and lacquered and wedged securely to head. Head length $33 / 4^{\prime \prime}$. Over alf length $101 / 2^{\prime \prime}$
    HC-240 Shpg. wt., 80
    Net $\boldsymbol{\$} \mathbf{2 0}$
    (EE) CIRCLE CUTTER-FFor use in drill press chucks. Cuts circles in sheet metal, mild steef, laminated materials. hardboard, wood, plywood, etc. Cuts circles "Ka". to $5{ }^{(1}$ dia. Fits $1 / 4^{\prime \prime}$ and larger drill chucks. With $1 / 4^{\prime \prime}$ pilothote drill
    HG.241 Shpg. wt., 4 oz ............................... 1.95 Cuts circles $13 / 4^{\prime \prime}$ to $81 / 2^{\prime \prime \prime}$ dia. Fits $1 / 2^{\prime \prime}$ and larger drill chucks. With $1 / 4$ " pilot-hole guide. Adjustable bit of high speed steel held in arm with set screw. HG. 242 Shpg. wt., 402.

    Net 4.05

    ## MAGNAGRIP MAGNETIZED <br> 

    Muttipurpose Magnagrip. Model 85 . Use in kitchen. garage. bathroom, workshod or many other places in your home. Heavily plated magnetized surface. White enamel or natural hardwood finish. Complete with mounting screws. (Tools not included).

    ## Stock

    | Stock Ne. | Length | Finish Color | Shpe. Wt. | Wet <br> ea. |
    | :---: | :---: | :---: | :---: | :---: |
    | MC. 108 | $10^{*}$ | White | 3/4 lbs. | 1.69 |
    | He-109 | $12^{\prime \prime}$ | Natural Hardwood | 1 lb . | 2.10 |
    | We 110 | 18" | Natural Hardwood | $11 / 2 \mathrm{lbs}$. | 2.98 |
    | WC-111 | 24* | Natural Hardwood | 2 lbs . | 3.95 |

    PRECISION STUD FINDER

    - GUARANTEED TO FIND STUD CENTER
    This new, easy to use, patented carpenter's precision stud finder utilizes a geometrical prin cipal to find the center of any stud. Constructed of high car bon steel and die-cast which is chrome plated to insure years of hard use. Shpg. wt. i $40 z$. He-112 .
    (E) ADJUSTABLE BLOCK PLAME. Adjustable cutter rests at an angle of $21^{\circ}$. Convenient "Handy" grip. Overall length $6^{\prime \prime}$; cutter width $1^{15 / 8}$
    HG. 129 Adjustable Throat. Shipg. wt., $11 / 2 \mathrm{lbs}$. Net 4.70 HG. 130 Regular Throat

    Net 3.57
    (F) KEYHOLE SAW. Quick-change locking head holds blade in 8 positions. Pistol grip handie. With 3 blades maod, metal, pruning.
    Mg-131 Shpg. Wt., $11 / 4$ Ibs
    Net 2.70
    HG. 132 Replacement Wood Blade
    Net 45
    HG-133 Replacement Metal Blade
    Net . 53
    (C) WOOOWORKER'S VISE. Clamps on bench up to $21 / 4^{\prime \prime}$ thick. Gray iron with replaceable pressed wood face plates. Steel parts nickel-plated. Jaw width $5^{\prime \prime}$, opens to $312{ }^{\prime \prime}$
    HG-134 Shpg. wt., $55 / \mathrm{l}$ lbs.
    Net 5.63
    (H) ALUMINUM WOOOWORKER'S VISE. Lightweight alu. minum alloy. Mounts to bench up to $214^{\prime \prime}$ thick. Full turn handle clearance from any position. Jaw width $5^{\prime \prime}$ : opens to $31 / 2$
    HG. 135 Shpg, wt., 3 lbs.
    Net 4.13
    (HH) PROFESSIONAL POCKET RULE-Slim, trim pocket size rule. Mylar-clad rule blade outlasts regular blades up to 10 times longer. Resists most oils, acids and alkalies. Bold black numerals on yellow background for maximum visibility. Graduated in 16ths entire length, in 32 nds for first six inches. Rule $1 / 4^{\prime \prime}$ wide, 6 ft . long
    HG-243 Shpg. wt., 3 oz
    Net .75
    (IJ) "POWERLOCK" MEASURING RULE-POWer return rule with "Powerlock." Lets you lock biade with thumboperated control knob-no blade creep on slippage. Mylar-clad rule blade lasts up to 10 times longer Bold black numerals on yellow background for easier reading-virtually indestructible. Graduated in 16 ths entire length, in 32 nds for first six inches. Rule $1 / 2^{\prime \prime}$ wide, 6 ft . long.
    HG-244 Shpg. wL. 6 oz ............................... 1.20 Same as above, but 10 ft . ru
    HC-245 Shpg. wt., 6 oz.
    Net 1.58
    (J) "SURFORM" FILE. Die casi aluminum body; black hardwood handle. Ribbed section on front of body fer 2-hand use. With regular cut, flat Sheffield tool steel blade, $165 / 9^{\circ "}$ long.
    HG. 136 Shpg. wt., $1 / 2 \mathrm{lb}$
    Net 2.10
    (M) SURFORM" PLANE, Die cast aluminum body; hardwood handie and knob. For surface forming wood, plastics, leather, soft metals. With flat regular cut Sheffield tool steel blade. $10^{\prime \prime}$ Iong.
    HG-137 Shpg. wt., t/4 lb.
    Net 2.85
    (L) MANOYMAN ALUMINUM LENEL. Rigid, warp-proof, lightweight aluminum body. 6 vials permanently set in plaster; unbreakable plastic magnifying vial protectors. $24^{\prime \prime}$ tong.
    HG. 138 Shpg. wt., $11 / 2$ lbs.
    Net 3.95
    (M) HANOYMAN MITRE BOX. Rigid all-metal; use with back or panel saw. Saw guide sets at $90^{\circ}, 60^{\circ}, 45^{\circ}$ and $30^{\circ}$. Adjusting screw for proper saw tension. Bolt slots in base. Overall $123 / \mathrm{sx} 35 / \mathrm{s}^{-}$
    HG. 139 Shpg. wt., 41/4 lbs.
    (MM) AVIATION SNIPS-Metal cutting snips with tough alloy steel blades. Cutting edges ground and olled. Compound-leverage action delivers maximum cutting power. Lock keeps self-opening handle in closed position. Contoured handles corered with tough plastic grips. Overall length $10^{\circ \prime}$. Shpg. wt., 12 oz .
    HG-246 For left-hand curves
    HG-247 For straight cuts
    Net 3.93
    HG-248 For right hand curves
    Net 3.93
    FASTWAY HAM-R-TOOL AND DRIVE PINS DRIVES STUD PINS INTO: ERICK - MORTAR CONCRETE V" STEEL No. H-50 Mam-R-Tool when used with a hammer drives fasteners into build. ing construction material. Hardened ing construction material. Hardened
    steel body. Overall length: $61 / 2^{\circ \prime \prime}$. Shpg. wt. 1 Ib .

    ORIVE PINS FOR ABOVE
    

    ## "HOPPY" <br> SPLIT-IMAGE TRANSIT

    Low cost. Precision Level
    and Inciline Measure

    - Prism-Like Optical
    - System Plate Girrors

    Net 3.93

    - External Sights

    Amazingly accurate instrument that will indicate level and measure a minimum of $1 / 6^{\prime \prime}$, rise or fall at $25^{\circ}$ Makes present day bubble and string type levels obsolete. It not only indicates level but shows exactly how much correction is needed. One man can perform any leveling or incline measuring job quickly, easily, and accurately. Makes any complicated measuring/leveling job simple. Use it for patio layout, bricklaying, flooring, surveying, terracing, fencirg, plumbing. shelving. guttering, drainage, irrigation. Indlspensable as a leveling and grading tool for model railway pike. Shpg. wt., 6 ibs.
    HO. 690
    Net 6.72

    ## MAGNICATOR - wall stuo located

    Hang shelves, cabinets, beffles, ple tures, mirrors, etc. to wall area backed by stud. Magnicafor locates nails or other metal within as" of nails of Other metal within in of
    indicator. Points out nails in studs ito pin point best hanging area. Shpg. wt., 4 ozs.
    HD- 285
    Net ea. . 69
    Net ea., in lots of 3 . 59
    
    
    (N) YANKEE PUSH DRILL w/8 DRILL PJINTS. TOUgh plastic and polished aluminum handle. Flange on lower handle for thumb rest when using drili. Eight drill points, Ka" to "1/4" store in magazine handle simply unscrew aluminum cap. HG-140 Shpg. wt., $1 / 2 \mathrm{lb} . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . N e t ~ 4.47 ~$ Set 4 Orill Points. ${ }^{3}{ }^{\prime \prime}$, 7/4"
     (P) YANKEE SPIRAL RATCHET SCREW DRIVER with 3 Bits. Quick return spring keeps blade in screw and pushes handle back quickly. For regular use. Length bit extended $2014^{\prime \prime}$, blt closed $15^{\prime \prime}$. With 3 bits -
    
    (0) YANKEE-HANOYMAN SPIRAL MATCHET SCREW DRIV. ER. Complete with extra mone $^{\prime \prime}$ screw diver bit and 3
     plastic magazine handle, Length bit extended $10^{\prime \prime}$, bit losed $73 \mathrm{~m}^{\prime \prime}$. Quick-return
    HG. 143 Shpg. wt., $3 / 4 \mathrm{lb}$.
    Net 3.74
    (R) HANDYMAN HAND DRILL. All-steel frame; hardwood handle; 3-jaw steel chuck, $1 / 4^{\prime \prime}$ capacity. Smooth running gears and single pinion. Nickel plated steel trim. overall $11^{\prime \prime}$ long.
    HG. 144 Shpg. wt., $11 / 1$ Ibs.
    Net 2.40 8 DRILL POINTS. $\mathrm{K}_{0}{ }^{\circ}$ to $11 / \mathrm{co}^{\prime \prime}$. In acetate vial.

    Net .83
    (RR) SOFT-FACE HAMMER-For forming soft metals. Ideal for calking boats, for automotive repairs, in home work shop. Replaceable plastic tips will not mar finely finished surface. Hickory handle securely locked in steel center body, Mahogany stained. Head wt., 8 oz. Handle length $113 / /^{\prime \prime}$. Shpg. wt., 12 oz .
    HG-249
    Net 2.66
    (S) "handYman" open ratchet bit brace. steel ratchet, ball bearing head, spring alligator jaws, hardwood head and handle. Nickel-plated finish on steel parts. $10^{\circ}$ sweep.
    HG-146 Shpg. wt., $21 / 2$ lbs.
    Net 4.88
    (I) "HANOYMAN" EXPANSIVE BIT w/2 CUTTERS. Tem. pered tool steel body. For hole size, set cutter to dimension desired and tighten screw. 2 interchange. able steel cutters, $1 / 2 \cdot 1^{\prime \prime}, 1-122^{\prime \prime}$.
    H6. 147 Shpg. wt., $1 / 416$.
    Net 2.45 As above but with 2 cutters, $7 / 4-13 / 4^{\prime \prime}, 13 / 4-3^{\prime \prime}$
    HC. 148 Shpg. wt., $1 / 2$ lb.
    Net 2.93
    (U) "HANDYMAN" 4.PC. WDOO CHISEL SET. One-plece, tool steet blade and boister, heat treated and beveled. Tough plastic handies. Thin blades- $21 / 2^{\prime \prime}$ long. Sizes: $1 / 4^{\prime \prime}, 1 / 2^{\prime \prime}, 34^{\prime \prime}, 1^{\prime \prime}$.
    HC. 149 Shpg. wt., $11 / \mathrm{lbs}$.
    Net 5.40
    (V) FOLDINE 6-FT. WOOD EXTENSION RULE. Features brass slide for extended $6^{\circ \prime}$ measure. Long lasting yel. low finish; graduated in 16ths. Extra thick hardwood sticks; brass-plated non-stretching joints. HG-150 Shpg. wt., 8 oz.

    Net 2.03
    (W) "HANDYMAN" WRENCH SET. Five double.end drop forged wrenches with handy, nickel-plated holding clip. Satin chrome finish. Size openings from $k_{4}{ }^{\prime \prime}$ to $1 / 4^{\prime \prime}$. HG-151 Shpg. wt., 116.

    WW) BRASS CALIPER RULE-Brass callper accurately graduated in 16 ths and 32 nds of, an inch. Heads are machined for inside and outside callpering-hole diameter from $1 / 32^{\prime \prime}$ to $5^{\prime \prime}$; outside diameter up to $3^{\prime \prime}$; overall length up to $5^{\prime \prime}$. Shpg. wi., $1 / 2 \mathrm{Jb}$. HG-216

    Net 1.99

    ## "FOREMAN" LAYOUT TOOL <br>  <br> - DOES ANY LAYOUT WORK WITH EASE - SCRIBES CIRCLES UP TO 20 FEET IN DIAM. <br> Not just another rule--but a mutit-purpose 10 ft . layout

    tool. Does any layout work-marking, scribing, squaring out rooms; scales plans; marks any material with hair line accuracy; accepts knife blade for ripping sheetrock, etc.; marks radius up to 10 ft . locks in at any place on scale. 10 ft . $x 4^{\prime \prime}$ white tape includes scales for 32 nds . 16ths., Inches, foot plus inch; architects scales, tile lay. out scale, automatic lock, scribing pin. Shpg. wt., 1 lo. HD- 310
    ## WHITE-FACE STEEL TAPE

    

    6 ft . White blade with easy-to.read black markings. Unbreakable die-cast case with bright-plated finish. Case is squared to permit inside and outside readings. Blade is $1 / 2^{\prime \prime}$ wide best spring steet. Baked white enamel finish
    HO.79 Fig. A Shpg. wt., 6 oz. 10 ft . tape: (A) Similar to above but 10 feet long-for that added convenience when extra length is needed. HD-178 Shpg. wt., 602 . ................................. Net .75 50 ft tape: (8) New 50 ft . white steel tape in nonbreakable case. Non-Rust. Clear black numerals on white. Light weight. Easiest rewind- $30 \%$ less turns HD-179 Shpg. wt., 1 lb .

    MASTER Direct Reading Caliper

    - Read size directly from scale!
    - Measures round, flat, or irregular to $4^{\prime \prime}$ thick!
    - Precisely calibrated in inches by 32nds!
    - Throat accommodates up to $3^{\prime \prime}$ !
    

    Measures round, flat, or Irregular shapes up to four inches thich. Size is read directly on a $0-4$ inch black on white scale calibrated in inches by 32nds. Squeezing handle opens caliper-a spring closes it gently on work. Long, curved legs reach over obstructions to measure up to 3 inches in from the edge of a part Penetrates to the bottom of grooves and slots only Ko" wide. Knurled thumb-screw locks the calipep at mid-scale position for use as a gauge. Shpg. wt.. 1 lb. HO-339

    Net 98

    ## 100 FT. FIBERGLAS TAPE

    - Tougher than steelmore flexible than cloth
    - Non-conducting-easily cleaned-
     always accurate
    An extremely accurate, dimensionally stable, non-con ducting measuring tape. Lighter and stronger than steel tapes. Unaffected by water. Wipes clean with a damp cioth. Rust proof-no oliling. Can not "kink," bend or break off. Markings can not rub off-extremely resistant to abrasion. 100 ft . tape, $1 / 2^{-2}$ wide. Foot mark. ings in red. Extra heavy case.-chrome plated brass ings in red. Extra heavy case-chrome plated
    rewind hande. Shpg. wt., $21 / 2 \mathrm{lbs}$. Imported. rewind
    HD-347
    $\mathrm{HD}-347$
    $\mathrm{HD}-847$


    ## Page 358

    ## LAFAYETTE has MORE PLIERS LOW PRICES bETTER QUALITY

    

    Heavy duty chrome plated pliers. Tough. ilted vinyl handle grips will insulate up to 10,000 volts. High leverage with easy-grip handles. Hand honed cutting edges and machine milled teeth. Guaranteed. Average shipping welght, 1002 . Imported
    NO. $8376^{\circ}$ Long curved nose cutter-stripper.... Net 1.29 HO. $83851 / 2$ diag. cutter with stripping notch Net 1.29 HD. $83951 / 2$ " "Ground down" diag. cutter....... Net 1.29 H0-840 $6^{\circ}$ Long reach-beveled nippers..

    Net 1.29 H0. 873 Complete Kit of above pliers

    Net 4.59

    ## LAFAYETTE

    

    The long reach provided by these quallty pliers will afford maximum convenience through leverage and abllity to reach into hard-10-get-at places. Jaws are precision-matched, cutting edges hardened and speclally honed, Constructed of the finest steel, heattreated and brought to a smooth polished finish, these pliers are as attractive as they are rugged. Mandles are covered by green plastic grips. Overall length, 8 "" imported, Avg. shpg. wi., 8 ozs.
    $\mathrm{HO} .9248^{\prime \prime}$ Round Nose (Fig. A) NO-925 $8^{\prime \prime}$ Flat (Duck-Bill) (Fig. B) HO-926 8" Transverse End Cutter (fig .... Net ea. 1.99 HD-927 8. Dlamonal Cutters (Fip O). C) Net ea. 1.99 HD-951 4-plece set, one ea of above

    ## ARC JOINT PLIERS

    189
    

    - Fully Chrome Plated

    Heavy duty, slip-groove jointed water pump pliers. Fully chromed and polished. 5 adjustments. $11 /{ }^{\prime \prime}$ parallel opening. Forged steel. Deep milled jaws. $942^{m}$ long overall. Shpg wt., $11 \mathrm{lb}, 1$ mported
    H0. 896
    Net 1.89

    ## 51/2" SPRING-RETURN CUTTERS

    ## - High Grade Steel

    A high quality diagonal culting plier most often used in service shops, labs, and production lines. Sturdy spring return-can't catch fingers. Custom honed edges will provide trouble-free service. Size: $5 \frac{1}{2} 2^{\prime \prime}$ overall. Shpg. wt., 6 ozs. Imported. H0.779

    Net 1.49
    

    LIGHT WEIGHT LONG NOSE PLIER
    .94
    Ideal for all types of delicate work and for reaching Into hard-to-get-at places. Spring closing-holds wires, nuts, screws, etc. Handy for mechanics, assemblers, hobbyists. $81 / 4^{\prime \prime}$ long, with soft plastic colored handles. H0-462 Shpg. wt., 402.

    PRECISION PLIER SET
    

    - JEWELERS TYPES
    - INSULATED HANDLES
    - FULL POLISHED CHROME PLATED
    Matched set of precision pliers for the technician-hobby-ist-model maker-craftsman. Particulariy suited to minia ture electronic work. Size and handle shape matched for accurate exacting work. Overall length approximately $41 / 2^{\prime \prime}$. Set includes combination side cutters - flat nose - charn nose - round nose - round/flat nose - di agonal cutters - and cutting nippers. Alt have insulated, cushioned handies. Drop forged from tool steel. Preselected types for a diversity of use. Extra heavy, polyvinyl, roll wo case. Clear view pockets. Can be rolled vinyl, foll uo case. Clear view pockets. Can be rolled
    for easy carry-or hang above bench. Shpg. wt., 1 ib. 6 ozs. Imported 6025.1
    HD-68

    Net 3.89
    

    ## LOCKING

    PLI-RENCH
    Super power loching combination pfiers, wrench, clamp and vise. Exerts over 1,000 lbs. of pressure. Heat treated, drop forged jaws. Machine milled teeth. Length $10^{\prime \prime}$ Shpg. wt., 1 it. Imported
    HO. 126
    Net $\mathbf{\$ . 2 0}$

    ## $\left(\begin{array}{c}\text { ( } \\ \text { ( } \\ \text { ( }\end{array}\right.$

    Precision made, of heat treated, tempered and hardened steel, these are rugged, rust resistant tools which will withstand years of rough service. Shpg. Wt. fcr each. 1 it . Imported.

    Fig. A. 6" oiagonal sioe Cutting pliers. Custom honed and fltted cutting edges.
    HO-49
    Net .79
    FIE. B. E' LONG NOSE PLIERS WITH SIDE CUTTERS. With provision for stripping wires.
    With
    HO-51
    Net .89
    Fig. C. 5" CHOME PLATEO DIAGONAL CUTTERS. AISO de-
    signed for crimping wire. Sclentifically honed and Iltted cutting edges.
    HD-355
    Net .79
    FIE. D. ADJUSTABLE WATER PUMP PLIERS, $812^{\prime \prime}$ versatile, adjustable phers with 5 -position wrench type action.
    H0-52
    Net 79

    ## CURVE <br> NOSE <br> PLIERS

    
    versatile long-nose pliers bent $45^{\circ}$ at midpoint of jaws. Forged from special heat treated, alloy steel and chrome plated to resist rust. Hand honed side cutters. Shpg. wt. 10 oz. Imported. Shpg,
    HD .834

    Net .79
    

    ## PLIER GRIPS

    Tough non-skid insulation. Bright red for easy locating in tool box. Molded rings at end afford length desired. With instructions for applying. Shpg. wt., 6 oz.
    $\mathrm{HO}-125$

    VINYL INSULATED "PROFESSIONAL" PLIERS
    

    ## - Tested Beyond Professional Specifications

    Professional quality-heavy duly-forged from special heat treated, alloy steel. Chrome plated to resist rust. Insulated with fitted, vinyl, mon-silt handle gripsprotects up to 10,000 volts. Hand honed cutting edges. Machine milled teeth. Handles shaped for easy grip and maximum leverage. Short fulcrum distance for greater gripping power. Unconditionally guaranteed by Lafayette. Average Shpg. wt., 10 oz. Imported
    HO-350 $6^{\prime \prime}$ Dlagonal cutter-wire stripper
    $\begin{array}{lll}\text { HO-350 } & 6^{\prime \prime} & \text { Diagonal cutter-wire stripper...... Net } 1.29 \\ \text { HD-351 } 6^{\prime \prime} \text { Long nose-side cutter-wire stripper Net } 1.29\end{array}$ HD- $3526^{\circ}$ Electronic oblique cutter-wire stripper

    Net 1.29
    HD. $3536^{\prime \prime}$ Long chain nose-side cutter-gripper Net 1.29
    H0.354 7" Linesman's slde cutters-beveled nose
    HD-836 51/2" Transverse end nippers ............ Net 1.29

    ## KRAEUTER "INDUSTRIAL" PLIERS <br>  <br> All With Cushion Grip Handles

    Fine quality-hammer-forged from high grade tool steet. Individually fitted, tempered and zdjusted. Fully polished heads. Rusi-resistant cushion grip handles.

    ## Stock

    No. Type Fig. Description Net
    NO.650 4501-5CG A $5^{\prime \prime}$ Diagonal Cutters $\quad 2.50$
    HO-651 4501.6CG A $6^{\prime \prime}$ Olagonal Cutters 2.94 HD. 652 5601CG B $5^{\prime \prime}$ Needie Point Diagonals 2.94 HO-653 1661CG C $6^{\text {" Long Nose Side Cutter } 2.94}$ $\begin{array}{llll}\text { Ho-653 } & \text { 1661CG } & \text { C } & \mathbf{b}^{\prime \prime} \text { Long Nose Side Cutter } \\ \text { HO-654 } & \text { 1631CG } & \text { D } & 5 \% 2^{\prime \prime} \text { Curved Long Nose } \\ 3.05\end{array}$ HO-655 1830CG E 621/2" Side Cutters
    H0.656 710 CG F $10^{\prime \prime}$ Joint Pliers
    H0.658 2612CG H $61 / 2^{\circ \prime}$ Wire Stripper Diag
    HD-659 4610CG $1 \quad 7^{\prime \prime}$ Heavy Outy Diag.

    ### 2.58

    ## CHANNELLOCK ELECTRONIC PLIERS

    

    ## - SPECIALLY DESIGNED

    Forged from high grade steel. properly heat treated, precision machined for precision work. Speclally de. signed for fine efectronics work, these four pliers will satisfy more than $90 \%$ of service, repair and construction needs. Do hundreds of jobs easier. faster. Long, slender reach . . . precision-matched jaws . . . handhoned, specially hardened cutling edges. Bive plastic grips. The 748 -long reach, ent cutters are fine enough to cut a human hair-rugged enoegh to cut 12 gauge copper wire. The 738 -long reach, round nose will pich up a human hair with its precision machined parts. The 728-long reach diagonal cutters have a patented wire stripper that really works. The 718 -long reach, flat nose has a bulldog grip with walchmakers precision. Length $8^{\prime \prime}$. Avg. Shpg. Wt., 8 ozs.
    HD-640 748 Long reach-end cutter
    Net 2.53
    H0-641 738 Long reach-round nose
    MD-642 728 Long reach-diagonals.
    Net 2.33
    No-643 718 Long reach-Flat nose

    # Depend on 

    ## 6 PIECE RATCHET SCREW DRIVER SET

    Three-way ratchet with brass gear mechanism. Five interchangeable fully polished, hardened and tempered tool steel blades. Untreakable, shockproof, non-Inflammable amber handie. Consists of $1-31 / 4 x$ L/8 cabinet, 1-31/2 $\times K_{6}$ cabinet. $1-51 / 2 \times 1 / 4$ mechanic, 1 -. Philips $\$ 1 \times 1 / 4 \times 7$. 1 Philips $\$ 21 / 2 \times 1 / 4,1$-Amber ratchet handle with chuck. In plastic roll up hit. Shpz. wt., 1 lb . MD-159
    

    159
    10 PIECE NUT AND SCREW DRIVER SET
    Fully polished, hardened tempered, tool steel blades and hex-drivers fine chromite plated for tong life. Slx nut
     bades- $6^{\prime \prime} \times 1 / 4^{\prime \prime}, 31 / 2^{\prime \prime} \times 1 / 8^{\prime \prime}$, Philips $\# 251 / 2^{\prime \prime} \times 1 / 4^{\prime \prime}$ Unbreakable, shochproof, non-inflammable amber handle with flanged chuck. Complete with heavy plastic roll up kit. Shpg. wt., 1 lb . HD. 160

    Net 1.59

    ## AUTOMATIC SCREWDRIVER-DRILL

    - 6 SCREWDRIVER AND DRILL BITS

    A three way spiral ratchet screwdriver with 6 replaceable blades. Ko", and $1 / a^{\prime \prime}$ standard screwdriver blades; 1 cross point blade; $1 / 4^{\prime \prime \prime}, 1 / /^{\prime \prime}$ and $\mathrm{K}^{\text {" }}$ drill bits. All blades and bits are stored in the clear plastic handle for convenience. $101 / 2$ " long. Shpg. wt., 1 lb . Imported HD. 842

    Net 2.39

    ## 2-PC. MAGNETIZED "TWO-FISTER" SCREWDRIVER SET <br> - Over 14" Long

    - For 2-Handed Use on Phillips-Type and Regular Screws
    - Unbreakable Ebonoid Plastic Handles
    Big "Two-Fister" screwdrivers for the really tough jobs-one for Phillips. type screws and one for regular. Each over $14^{\prime \prime}$ long with 61/" Ebonoid plastic double handie and $33^{\prime \prime}$ tool steel blades with giant $8^{\prime \prime}$ extension. Magnetized to pick up and hold screws. Shpg, wt, $14 / 2 \mathrm{lbs}$ HD-929

    Net 1.79

    ## 8-PC. PRECISION DRIVER SET

    - 6 Interchangeable Blades4 Screwdriver, 2 Hex Mut 29

    Six interchangeable blades fit quichly and securely into handle. Phillips head, $.100^{\prime \prime} .055^{\prime \prime}$ and $.030^{\prime \prime}$ screwdriver blades: $x_{32}^{\prime \prime}$ and $1 / 4^{\prime \prime}$ hex nut bladesprecision machined, hardened steel. Handle has swivel tod. Excellent for model hit builders. Complete with up. right case with transparent dust cover Shpg. wt., 6 ozs. Imported.

    H6-201

    Net 1.29

    ## MINIATURE

    SCREWDRIVER-NUTDRIVER SET
    

    Five indispensable tools for the hobbyist and technician. Includes slim shaft $1 / a^{\prime \prime}$ and Kor $_{6} \times 3^{"}$ hex nut drivers, 1. miniature cross point, 1 . $3_{3} \times 3^{\prime \prime}$ standard, and one
    .100 jeweler's screwdriver. Comes with case holding all five tools. Fits easily in any pocket. Shps. wt., 402.

    ## WATCHMAKERS PRECISION

    ## SCREWDRIVER SET

    Handy set of 6 precision screwdrivers with nickel. plated knurled handles. swivel heads and ternpered steel blades. One each from No. 0 to 5 blade sizes: .025" to $.100^{\prime \prime}$. In plastic hit. Shpg. wi., 3 02. Imported

    ## MINIATURE SCREW HOLDING SCREWDRIVER SET

    A tiny SCREW HOLDING Screw Driver Set that contains a swiveltop driver handle whose solld locking chuck takes either the $21 / 2^{\prime \prime}$ or the $13 / "^{\prime \prime}$ length blades. Each that holds all tiny screws betler than fingers. All four parts are cleverly contained in a plastic case. Shpg.

    WO-645 4.
    HD-646
    

    PRECISION SCREWDRIVER SET Five interchangeable blades insert quickly and firmily Into chuck. Blades are precision machined, hardened steel In sires $100^{\prime \prime}, .080^{\circ}, .070^{\prime \prime}, .055^{\circ \prime}$ and 1 awl. Handle has swivel top. Perfect for repairing radios, appliances, cameras, electric razors, musical instruments, etc. Excellent for kite and model bullders. Complete with base and transparent dust cover. Shpg. wt., 8 ozs. HD-42

    NEW XCelite PS7 Double Duty Too Set
    

    Complete with a remarkable "piggyonack" torque amplifier (Included) which may be slipped over the top of each tool handle, thus providing a larger gripping surface, extending the reach, and increasing the driving power of the tools. Enclosed in a sturdy, see-through plastic case for easy size identification. Nut-drivers; hex openings: $1 / 4^{* *}$ and $K_{1}^{\prime \prime}$. Screwdrlvers, blade sizes: Kxl", Kaxl", "0 Philips and $\$ 1$ Philips. All tools are $31 / 2^{\prime \prime}$ in length. Shpg. wt.o $1 / 2 \mathrm{lb}$. HC. 187

    Net 3.15
    

    ## NO. 99 PR MULTI-PURPOSE

    SET11 interchangeable nut drivers and screwdrivers in a durnble roll plastic kit. 9 nut drivers from $k_{0}$ to $1 / 4$ " double ended standard screwdriver - double ended Phillips screwdriver-single handle for all blades All blades interchange easily. Shpg. wt., 2 lbs HD-525

    ## XCELITE-HIGH QUALITY TOOLS

    First quality - rugged - skillfully made - screwdrivers and hex nut drivers. Forged of Chrome Vanadium electric furnace steel. Shock proof-break proof Xcelite plastic handles. Winged end of shaft prevents turning of blade in handle. Perfect burr-free sockets, deep enough to hold two nuts at once. Nut driver handles are color coded. Average shpg. wt. of screwdriver is 6 ozs.-of nut driver 8 ozs.

    SCREWDRIVERS
    ROUND BLADE-polished, flanged blades

    | No. | Type | Shaft Size | Overall | Net |
    | :---: | :---: | :---: | :---: | :---: |
    | HD.484 | R144 | $4^{\prime \prime} \times 1 / 4{ }^{\text {* }}$ | $8^{\circ}$ | . 78 |
    | MD-485 | R146 | $6^{\prime \prime} \times 1 /{ }^{\prime \prime}$ | $10^{\prime \prime}$ | . 4 |
    | HD-486 | R148 | $8^{\prime \prime} \times 1 / 4^{\prime \prime}$ | 12' | . 90 |
    | ND. 487 | R182 | $2^{\prime \prime} \times 1 / 8^{\prime \prime}$ | 21" | 33 |
    | H0-488 | R183 | $3^{\prime \prime} \times 1 / 8{ }^{\prime \prime}$ | $5{ }^{\prime \prime}$ | 27 |
    | H0-489 | R184 | 4" ¹/8" $^{\prime \prime}$ | 61/8" | . 39 |
    | HD-490 | R186 | $6^{\prime \prime} \times 10^{\prime \prime}$ | 81/2" | . 42 |
    | HD-491 | R188 | $8^{\prime \prime} \times 1 / 8^{\prime \prime}$ | 101/2" | . 54 |
    | SET-SCREW | TYPE-with | pocket clip |  |  |
    | HD-492 | R1841/2 | $4^{\prime \prime} \times 1 / s^{\prime \prime}$ | 6" | . 27 |
    | HD-493 | R3323 | $3^{\prime \prime} \times$ 为" | 5" | . 27 |
    | PNILITPS | CREWORIVET | 5 altoy ste |  |  |
    | HD-498 | K101 | 3"\#1 pt | 61/2" | . 69 |
    | HD-499 | $X 102$ | 4* ${ }^{\prime \prime} 2 \mathrm{pt}$ | 73/4* | . 87 |
    | HD. 500 | $\times 103$ | $6^{\prime \prime} 3 \mathrm{pt}$ | 10" | 1.17 |
    | HD. 501 | X108 | $6^{\prime \prime} 1 \mathrm{l}$ pt | $10^{\prime \prime}$ | . 75 |
    | HEX NUT DRIVERS |  |  |  |  |
    |  | - Used as Volume Control Wrench |  |  |  |
    | No. | Type \# | Nut Size | Length | Net |
    | HD-502 | 6 | $16{ }^{\prime \prime}$ | $6^{\prime \prime}$ | .75 |
    | HD-503 | 7 | \%" | $6 "$ | 75 |
    | HD-504 | 8 | $44^{\prime \prime}$ | $6^{\prime \prime}$ | 7 7 |
    | HD. 505 | 9 | $8 \%^{\prime \prime}$ | $6^{\prime \prime}$ | 75 |
    | HD-506 | 10 | $\mathrm{Kb}^{\prime \prime}$ | 6" | . 75 |
    | HD-507 | 11 | $11 / 20$ | $6^{\prime \prime}$ | . 75 |
    | HD-508 | 12 | 36" | 6" | . 75 |
    | HD. 509 | A8 | 1/4" | 9"' | . 87 |
    | H0.510 | A10 | \%6" | 9"' | . 87 |
    | HD-511 | 412 |  | 9"' | . 87 |
    | HD-512 | S | 1/" | 31/4" | . 63 |
    | HD.513 | 510 | \%" | 31/4" | -63 |
    | HD-514 | S12 | 3/4 | 31/4" | 63 |
    |  | HOLLOW | AFT NUT |  |  |
    |  | Type \# | Nut Size | Length | Net |
    | MD. 515 | HS8 | $1 / 4$ " | 67/8" | . 93 |
    | HD-516 | HS10 | \%** | 67\%" | . 93 |
    | HD-517 | HS11 | $11 / 32$ " | 6\%" | . 3 |
    | HD-518 | HS12 | 3/1 | 67\%" | . 93 |
    | HD.519 | H\$14 | K0" | 67/ | 1.05 |
    | HD. 520 | HS16 | 1/' | 67\%" | 1.08 |
    | HD. 521 | HS18 | 16 | 67\%" | 1.14 |
    | HD-522 | H\$20 | 56" | 67/8" | 1.26 |

    ## NEW! 4-WAY

    ## POCKET TOOL

    

    Extremely handy tool for assembing and disassem bling. It's a $1 / 4$ and Ka" nut driver, a no. 1 Phillips screwdriver. and a Kom slotted screwdriver. $^{\circ}$
    H0. 882
    Net 1.35

    ## XCELITE HOLLOW-SHAFT BENCH SET

    

    Perfect for all nome workshops, garages, or any do-ityourself repair jobs. Constructed of heavy, hollow-shaft steel for maximum tool llfe. Co.otains all the most used stee for maximum tool iffe. Contains all the most used
     wt., $21 / 2 \mathrm{lbs}$
    HC. 186
    Net 7.98
    NO. 137 BENCH SET
    Sturdy, handy, metal bench set. The most frequently used nut drivers. color coded handles-highly polish. ed blades. Size: $1 / 6,1 / 4$, $1 / 1 / 1 / 20$ H1/. 1/2. K." Shpg. wt., 2 ibs. HD. $527^{\circ}$

    # Depend on Safayette For Outstanding Values! 

    ## 

    - Easy To Operate


    ## Makes Permanent Self-Sticking <br> Raised-Letter Plastic Labels!

    ## LAFAYETTE VIBRO-ENGRAVER

    - Easy To Use As A Pencil Writes Dn Glass, Gold, Silver, Chrome, Wood Complete-Ready to Use With 2 Hardened Engraving Points and Gold Filter

    A handy featherweight marking and engraving tool with a hundred and one applications. Permanent idenilficafion because marks are actually engraved. Can't be erased, wiped off or rubbed out. Ideal for industrial and hobby use to engrave names on tools, name plates. silverware, decorate glass, identity jewelry or radio chassis, efc. In lact you can engrave just about any thing with this remarkable tool. Features a pencil thin plastic body completely enctosing the durable vibromechanism: interchangeable tips. speed adjust and a handy AC line cord. On/off switch. Complete with 2 handy AC line cord. On/off switch.
    points and gold filler. Shpg. Wi., 802 . points
    HD-986

    ## WIRE BENDING JIG

    

    Handi-Bender forms wire sizes up to $1 / 4^{\prime \prime}$ dia. Steel slots and steel bending pins make basic bends such as eyes, angles, curves, circles, and for straightening wire. Makes dozens of useful and decorative articles. Complete instructions included. Shpg. wt., 1/2 lb. HG-124

    Net 89
    

    NEW! ONE-PIECE MOLDED TOOL HOLSTER .99

    - No Rivets or Seams to Give. way
    - Impervious to Rot, Mildew, Moisture
    5 Pochets
    Here's a one-piece molded tool holster that will give you years of service. No more seams to tear, rivets to pop; no more rotting due to mildew or moisture. 5 pockets - center pocket, 2 front pockets, 2 deep side loops. Double belt loop. Overall $94 / 2^{\prime \prime} \times 63 / 4^{m}$ MD-734 Shog. wt.. 8 oz.

    Net .99
    

    ## LEATHER

    TOOL HOLSTER

    Heavy, pliable, top grain leather. Stitched and riveted. 5 pockets and tape sling. Practical, rugged tool carrier. Overall size $81 / 2 \times 10^{\circ \prime}$. Shpg. wt., 1 10. Imported HD-86D

    Net 1.59

    A revolutionary new precision tool designed especially for nome use. Just dial letters, numbers, symbols- then squeere embossing hande, pull cut-off trigger-that's all. Embossing wheel has 44 characters. Prints crisp white message on colorful $1 / 4^{\prime \prime}$ vinyl plastic tape. FinIshed labels are ready to be applied instantly-anywhere inside or outside the home. Tape colors: Black, Red, Brown, Blue, Green and Clear. All tapes have dirti moisture-resistant high gloss finish, will stick to most smooth surfaces and will withstand temperatures up to $140^{\circ} \mathrm{F}$. Tool cuts tab on end of each label for easy removal of the backing strip. Made of heavy-duty plastic to withstand hard, family use, Size $61 / 2 L \times 6^{\prime \prime} \mathrm{H}$. Shpg. wt. 2 lbs. HC-222 Model M-4 Labelmaker

    Net 6.64
    Embossing Tape Magazines for use with model M-4 above. Each contains $72^{\prime \prime}$ of $1 / 4^{\prime \prime}$ wide glossy finish vinyl plastic tape with adhesive backing. Shpg. wt., vinyl $p$
    $1 / 410$.

    | 1/4 IV. |  | 8 | ar |
    | :---: | :---: | :---: | :---: |
    | HC-22s | Green | H6. 229 | Brown |
    | HC-227 | Red | HG-230 |  |

    ## SHEAR MAGIC

    - Cuts EVERYTHING!
    - From Metal to paper!

    High grade, compound leverage, multi-purpose shears. Cuts just about everything that needs cutting. Papercloth - asphalt tile - rubber tile - wallboard wire - sheet metal - cable - shingles - flowers vines - shrubs - plastic linoleum - canvas carpet - metal foil - fibre board - corel shingles - and hundreds more. $81 / 2^{\prime \prime}$ long, chrome shingles - and hundreds more. ${ }^{81 / 2 " \text { long, chrome }}$ plated handes, tool steel blades with black oxide finish. plated handles, tool steel blades with black oxide finish.
    H0-678 Shpg. wt.. 1 lb .

    ## 

    REVOLVING LEATHER PUNCH

    Has 6 standard punching tubes. Made of long-lasting tempered steel. Shpg. wt., 12075.
    40.914.

    Net .99
    

    Punches holes and sets eyelets in fabric-canvas-leather-paper. Use it on belts, shoes, sneakers, tarpaulin, luggage, sports equipment. flags, banners, shower curtains. Prevents tearing of materials-actually strengthens them. Complete with 300 assorted eyelets and instruction. Wt., 1 ib.
    HD-906M
    HD- 669 P
    Net .99
    Net .99
    

    Eliminates tiresome button sewing - No more need to search for matching buttons. Simple to operate-Works every time. Comes complete with 8 sets of brass and 8 sets of nickel positive grip fasteners. Many usesPerfect for shirts, dresses, playthings-Ideal for gloves, shoes. belts and many more. Shpg. wt., 1 lb . HD-907M
    HD-83D Package of 10 nickel and brass snap fasteners

    Net .29

    ## 89 UTILITY-SWIVEL MIRROR <br> 1

    - $14^{\text {" Reach }}$ - $21 / 4^{"}$ Diameter Mirror
    - Comfortable-Grip Handle - Swivel-Head

    A handy little aid for mechanics at home or in the shop. Large $21 / 4^{\prime \prime}$ dlameter mirror on a swivel arm enabies you to look into hard-to-see places-no need to "work in the dark". Brishtiy chrome-plated with zasy-to-grip plastic hande. Overall $14^{\prime \prime}$ long. Mo-996 Shpg. wi., s ozs.

    Net

    Cloth Printer Kit. Provides a clean, fast and easy way to mark all clothing when used with your Dymo Home Labelmaker. Use directly on clothing or use the lron-on label provided. Shpg. wt., $1 / 2 \mathrm{lb}$.
    HE-223
    HE-224 72 Assort Iron-On Tapes for above Net as Ne 22 Assort. Iron-On Tapes for above .... Net . 25
    $\iint_{\substack{\text { No Money } \\ \text { Down }}}^{7}$

    Down $\$ 5$ monthly
    Model M-55 Tapewriter. New chromium plated, die-cast aluminum tool for all office and protessional uses. Transparent 44 -character embossing wheel lets you see letters as they are made. Message is centered on label automatically. Tab cut-off for easy removal of protec live backing. Less $36^{\prime \prime}$ wide tapes (see below). He-221 Shpg, wt., $11 / 4$ los.

    Net 17.97 Embos sing Tape Magazines for use with Models M-5 and M-55 above. Each contains $120^{\circ}$ of $34^{\prime \prime}$ wide glossy finish vinyt plastic tape with adhesive backing. Shpg. Wd., $1 / 4$ lbs.
    

    ## 285 <br> ALL-PURPOSE aluminum plane

    - 4-Edge Disposable Blade Never Needs Sharpening
    - Nickel-Plated Screws and Clamp

    An all-purpose plane with a tough aluminum rust-proof body. Features a unique disposable chrome-vanadium blade with four factory-sharpened and tempered cutting edges-simply rotate the numsered blade as used edge dulls; no sharpening necessary. Accurate vertical ad. fustment for tissue-thin to crarse planing; new clamp design prevents shatter. Formfitting handle and knob. Gold hammertone finish, $10^{\circ \prime}$ owerall length. $1 \frac{\%}{}{ }^{\prime \prime}$ blade.
    

    ## NAIL DRIVER/SCREW STARTER

    ## S—B

    Starts nails and screws straight, anyplace. Heat-treated steel driver rod; rubber sleeve. $81 / 2^{N}$ long. Shpg. wt., 1 lb .

    Nef, ez. . 99

    ## 

    Rugged, tang type, well balanced chisels. Tang extends well into plastic handle. Tough plastic handies outlast wood. Won't mushroom or break. Hand forged hardened Swedish steel, heat treated for lasting sharpness. Shpg. wi. 1 1/2 Ibs.
    142 ibs.
    $40-426$
    Net 2.85

    ## ELECTRICIAN'S POCKET KNIFE

    

    Two-blade knife with safety locking device. Blades: screwdriver, wirescraper; spearshape. Overall size: Screwdriver, wirescraper; spearshape. Overall size:
    31/4". Complete with belt loop. Sinpg. wt., 6 oz .
    HD-9i2 HD-9 12

    Net .99

    ## UTILITY KNIFE SET

    - Includes Keyhole Saw Blades
     encountered nuts in the automotive-TV-radio-appllance and hobby fields. Sizes range from $\mathrm{KMn}^{\prime \prime}$ to $\mathrm{KiO}_{0}{ }^{\circ}$. Set includes case with transparent cover. Shpg. wt., 8 oz. HO-405 Imported.


    ## NEW! 6-IN-1 HEX KEY

    WRENCH SET

    ## - Six Popular Sizes

    Combined in One Teol
    

    A handy six-in-one hex hey set, including the most popular sires found in set-screws, and other recessed hexhead screws. No longer is it necessary to search for a particular wrench-no longer is the desired size misplaced. Any of the six sizes can swivel out of the handie for instant use. Shpg. wt., 3 ors. Imported HO. 694

    ## 18-PC. HEX KEY WRENCH SET

    - Handles $99 \%$ of Hex Key Needs!
    Set consists of 9 short arm wrenches from $.050^{\prime \prime}$ through $1 / 4^{\prime \prime}$, and 9 tong arm wrenches $\mathrm{Ko}_{0}{ }^{\prime \prime}$ through ${ }^{7 / 2 "}$ " Wrenches are made of fine quality tool steel. Bright plated-quallity controlled. Packed in 18 -pocket plastic roll up kit. Handy kit for shop. garage, home workshop. Shpe. wt. ${ }^{11 / 2} \mathrm{ibs}$ ibs

    Net .99
    MINIATURE WRENCH SETS
    

    Five, tiny, offset open end wrenches. All interchangeable use one handle. Tough, heat treated steel. Easily remove or attach the tiny nuts used in sub-miniature electronic work, hobby, aeronautical, automotive, etc.
     HD-645
    

    ## HEX SOCKET WRENCHES

    Five interchangeable, tiny hex socket wrenches. All fit the same handle. Hoid tiny nuts for $\$ 00, \# 0$ and "1 thread. Easity gets into recessed holes.
     $k_{n}{ }^{\prime \prime}$. Magnetized to hold those tiny ones firmily. Complete with dust proof, stand up case. Shpg. wt., 6 ozs.

    ## HD. 644

    Net 2.61
    PHILLIPS DRIVER \& ALLEN WRENCH SET Chuck-type knurled steel handle accommodates 00 and 1 Phillips drivers and $\$ 4$, $\$ 6, \$ 8$ Allen wrenches. Mandle has torque lever for quick tightening. Handle plus 5 tools. H0-952 Shps. wt., 7 ozs. ...... Net $\$ .64$

    ## AUTOMATIC PUNCH

    Speedy, automatic, and adjustable - a single-hand operated punch gives light or heavy impressions with just the turn of a screw. Shpg. Wt., 8 oz . Imported MD-171

    Net 1.98
    GIZMO - 9-WAY
    COMBINATION TOOL

    - 9 way Combination tool!


    ## - A teol bax in your pecket?

     cutter, wrench, small screwdriver, large screwdriver, awl, scriber, tack hammer, tack lifter. Screwdrivers can be used offset for leverage, or on end of handle for additional length. For fishing, hunting, auto, workshop, toolroom, etc. With vinyl case. Shpg. wt., $11 / 2 \mathrm{lbs}$. HD. 666

    Net ea. .69;

    ## TOOLS AT THE RIGHT PRICE

    the house or workshop. Kit consists of 1 plastic screwdriver handle with aluminum chuck; 4 screwariver blades ( $1 / \times 42 / 4^{\prime \prime}, K_{0} \times 4 Y^{\prime \prime}, 1 / 4 \times 5^{\prime \prime}$ flat drivers and one No. 1 Philips blade;) 8 open and box end wrenches \$e, $\left.1 / 1 \cdot x_{1}\right) ; 2$-way fat ratchet handle; 2 -way flexible
     venient roil pouch with handy pocket for each tool. N0-681 Shpg. wt., $12 / 2$ lbs.... Imported :.......... Net 2.79

    ## RATCHET HEAD SOCKETOOL

    

    Handles-carriage bolts, machine bolts, lag screws, stieet metal screws, machine screws, wood screws, cap screws-any style of head - slotted, recessed, square or hex. Operates in straight or offset position handy for hard-to-reach places. Universal ratchet head works right, left or locks. Contains Shelton suregrip ratchet handle; straight hex adapter; offset hex adapter; 5 hex sockets-1/is"
     sockets- $K_{0}{ }^{" \prime}, 3_{6}^{\prime \prime}$, $K_{0}{ }^{"}$; tool steel screwdriver bit for slotted screws; tool steel screwdriver bit for recessed head (Phillips) screws. IComplete, in durable plastic case. HD-45t Shpg. wt., 1 lo. Net 2.25

    ## 7-PIECE SUPER NUT-DRIVER SET

    Most popular socket sizes-polished, hardened steel detachable shafts. Plastic handle with pre:
     clsion clutch. Contains: 1-Ko" hex nut shaft, $1-\mathrm{V}^{\text {" }}$ hex nut shaft. 1-Ke" hex nut shaft, $1-1 / 22^{\prime \prime}$ hex nut shaft, $1-2 / 0^{\prime \prime}$ hex nut shaft, 1-K." hex nut shaft, 1 -amber handle with chuch. Mo. 14 Shpg. wt., 2 lbs.
    

    ## Eight sockets $\mathrm{Kn}_{0}^{\prime \prime}$, $1 / \mathrm{m}^{\prime \prime}, 1 / 4{ }^{\circ}$

     hard to reach spots. Flat, reversible ratchet drive. $31 / 2^{2 \prime \prime}$ ertension bar. Unbreakable, amber plastic handle. Shos. wt., 1 lb .
    MO-119
    Net 1.59

    ## ADJUSTABLE END WRENCHES

    Drop forged steel. Hardened jaws--Polished noses.
    N0-43-44/2". Shpg. Wh. 4 oz .
    ND-44-61/". Snpg. wt., 6 oz.
    MD-45-8" Shos wt wio 10 oz
    WD-193-10 ${ }^{\text {'. Shpg. Wt., } 1 \text { ib. }}$
    ND-45 M - Set of 4 above. Shpg. wt., $21 / 4$ los...... 2.49

    ## 5-PIECE <br> OPEN END WRENCH SET <br> 

    Streamlined panel bar wrench set. The best designed carbon steel wrench on the market. Ten different openings $W_{1}$ to $3 / 4^{\prime \prime}$ embossed in wrench. Velco rust resistant finish. With hinged container. Shpg. wt., $1 \mathrm{lb}, 1 \mathrm{mported}$ f0-162
    HOM...............................Net 1.49

    ## SAW DRILL

    Quickly and easily saws any shape hole in wood plastic, plaster, wall board, plywood, etc. Gimlet tip starts hole-"teeth" cut quictiy in any direction. Drilis-routs-enlarges holes. Does the work of a drill and a keyhole saw on many jobs. Shpg, wt., 4 ors. drill and a keyhole saw on many jobs. Sipg. Wi. . 4 ot 025 . 39
    HO-679

    ## 7" COMBINATION TIN SNIPS

    ## ecter cuts cunves

    Made of forged steel, hardened tempered and ground. Highest quality polished steel blades retain keen cutting edges. Handles have blue lacquer finlsh. Shpg. Wt., 2 lbs. imported
    HO-411
    

    ## 20 TUBING CUTTER

    A quality cutter for copper, brass, or aluminum tubing. Provides up to $1^{\prime \prime}$ capacity. Equipped with alloy steel cutting wheel and slide-lock reamer. Ideal for light plumbing. etc. Shpg. wt., 8 oz. HD-346 ....... Imported.

    ## FLARING TOOL

    High grade plated tool steel die stock. Rapid opening hinge for swivel cone yoke. Flares all most often encountered tubing. Sires: $K_{6}{ }^{\prime \prime}, 1 / 4^{\prime \prime}, K_{0}{ }^{\prime \prime}{ }^{\prime \prime} 3^{\prime \prime \prime}$ " $1 / 2^{\prime \prime}$ and $5 / /^{\prime \prime} 0.0$. Shpg. wt., $21 / 2$ los. H0. 716

    ## 5-PC. SCREW EXTRACTOR SET

    ## - FOR Y" TO 4/4" SCREWS

    Five piece, chrome vanadium, screw extractor set. Removes broken and mutilated screws-bolts-studs, even $1 / s^{\prime \prime}$ and $1 / 4^{\prime \prime}$ pipe. Simply drill damaged screw-twist extractor in-and back screw out. Set consists of 5 extractors in wooden case. Shpg. wt., 1 lo. Imported
    HD-273
    Net 1.59
    NEW! LAFAYETTE CLOSE-QUARTERS HACKSAW

    ## 

    - For Hard To Get At Places
    - Only $11 / a^{-\cdots}$ From Blade Teeth To Top of frame Now-a heavy duty hacksaw for hard to get at places. Using standard $10^{\prime \prime}$ hacksaw blades, the height of this handy saw has been reduced to only $11 / 8$ " for "cramped corner" work. Chrome plated frame-with positive grip wooden handle, Overall length $163 / 4^{\prime \prime}$. Shpg. Wt., 2 lbs. H0-897 Imported

    Net . 55

    ## HEAVY DUTY HACKSAW

    Tubular frame. Adjusts for
    $8^{\prime \prime}-10^{\prime \prime}-12^{\prime \prime}$ blade. Contoured $8^{\prime \prime}-10^{\prime \prime}-12^{\prime \prime}$ blade. Contoured
    handle and thumb rest for firm grip and comfort. Chrome plated tubular steel frame. Imported
    

    HB-211-Snpg. wt., 2 tbs.
    Net 8.35 NO-212-10" Blade 24 teeth per in. 6 oz ..... Doz. .59 MD-213-12" Blade 24 teeth per in. 6 oz. .... Doz. 69
    Standard Hacksaw. Accommodates $8^{\prime \prime}$ to $12^{\prime \prime}$ blades. HO-170 Shpg. wt., $12 / 2$ lbs.

    ## FOLDING CAMPERS SAW

    

    Mandy, compact folding saw. Nine-inch spring steel blade folds back into polished, hardwood handle. Special snap lock keeps btade in sawing position ldeal companion for campers, hunters, or as a gar dener's pruning saw. Overali size only $101 / 2 \times 2 x^{1 / 4 "}$ Shpg. wt., 8 oz. Imported.
    MD-482
    Net .98

    ## NEW! SLIDING TEE BEVEL

    

    5" Chrome Plated Blade Calibration Marks at $30^{\circ}-45^{\circ}-60^{\circ}-90^{\circ}$
    Complete with $5^{\prime \prime}$ calibrated scale (marked in inches) angle markings, and locking adjustment. The versatile tool for carpenters and nobby. ists. Positive grip- $4^{\prime \prime}$ metal handle. Shpg. wt., 8 oz MD-E95

    The "ULTRA"
    Electro-Tool Kit

    - Designed with the Technician in mind
    - Professional Quality Throughout - All the most often needed tools
    Each component toot chosen to offer utility and quatity. The "ULTRA" kit contains the following: $51 \mathrm{Y} \mathrm{V}^{\prime \prime}$ insulated side cutters, $5^{\prime \prime}$ insuiated chrome plated diagonals, $6^{\prime \prime}$ insulated chrome plated long nose, 30 -watt soldering Iron, 3 offset open-end wrenches coverling from $14^{\circ}$ to $12^{\prime \prime \prime}, 5^{*}$ chrome plated tweezers, shockproof amberoidjchuch handle, Kas $^{2}$ screw driver blade, $x_{2}^{*}$ screwdriver blade, 1 recessed screwdriver blade, punch-awi blades, $1 / 4$ nut driver blade, solder and flux, punch-aw blades, insulated for 10,000 volts, hand honed cutting edges. Side cutters have beveled nose, diagonals have provisions for wire stripping, long nose has "wrench" grip jaws and cutters. The entire sel is nested in a zlppered, fitted, lined book type carrying case with handle. Measures a scant $9^{\prime \prime} \times 5^{\prime \prime} \times 2^{\prime \prime}$. Shpg wt., 242 lbs. MD-345
    


    ## - DESIGNED FOR RAOIO/T.V. SERVICE

    All the most popular service tools in one handy, rolt. up kit. Man sized $4 y^{\prime \prime}$, chuck type amberoid handle with built-in neon tester. Six hardened tempered nut
     drlver blades-two standard and one Phillps type. $41 / 2 "$ diagonals with insulated handies and stripper noteh. $51 / 2^{\prime \prime}$ long noise pliers with insulated handles and stripper notch. Lightweight pencil-type 30 -watt soldering Iron. All in a tough plastic, roll-up kit. Imported ND. 664

    Shpg. wt., 2 lbs.
    Net 5.39
    A versatile precision instrument for A versatile precision instrument for the
    workshop. this universal square can be used as a vertical level, horizontal level, $45^{\circ}$ level, or as a square and sllding bevel. 7" steel blade is calibrated in inches and centi. magers, can be accurately set at any angle from 0 to $270^{\circ}$. Length is adjustable. Equipped with scriber. Imported from Ger many.

    ## COMBINATION SQUARE

    Has many uses-tri and miltre square. depth gauge, marking gauge, level and scriber. Graduated 8 ths and 16 ths on one side, 16 ths and 32 nds on the other. $12^{\prime \prime}$ blade. Shpg. wt., 1 lb .
    HD-92
    Net . 98

    ## VERNIER SLIDING CALIPER

    .95
    Sharp pointed projections for accurate dividing, scribing, etc. Lock nut insures against errors caused by sliding gauge. Rule graduated in 16 th and 32 nds plus 5 . depth gauge. Precision-made. Shpg. Wt., 1 Ib . imported HD- 221
    
    "EVER-LEVEL"

    - Measures Pitch in Oegrees.
    - Measures Inch Rise Per Foot.
    - Floating Pointer
    for Hairtine Accuracy.
    Floating pointer gives true level. or inclination at a glance. Oniy. $2^{\prime \prime}$ square by $1^{\prime \prime}$ thick. Molded case of specially selected plastic. Pointer bob floats in oil. Reads any angle instantly. Case design allows leveling
    from top-bottom-op sides. Nothing to break or get out of order. Imported.
    HD-185 Shpg. wt., 402 s .

    \section*{| NEW Swingline |
    | :--- |
    | $\# 101$ Stapler Gun | \#101 Stapler Gun}

    - HIGH COMPRESSION MODEL
    - STAPLES WITHIN KG OF CORNER
    - 100\% JAM PROOF


    ## - OPEN CHANNEL LOADING

    Delivers as much dfiving power as ma chines twice its slize and weight. Highly maneuverable -perfectly balanced-extremely IIghtweight. All case hardened steel construction. Rust proof, bonderized finish. No oiling required at any time. Uses two staple. sizes- $4 / 16^{\circ \prime}$ and $\mathrm{K}_{8}{ }^{\circ \prime}$-with no mechanical changes. Used in carpentry-woodworking-fencing-upholstery display work-insulating-screening - weather stripping -etc. Built in staple extractor. Visible staple load indicator. Hande locks flush when not in use. Shpg. Wt., $11 / 2$ lbs.

    ## HD. 322

    HD-323 Pkg. $10004 / 16^{\prime \prime}$ staples
    HD-324 Phg. 1000 X." staples

    ## HEAVY-DUTY

    STAPLE GUN KIT

    - cun Uses 5 Sizus of Staples
    - $100 \%$ Jam-Proof
    - Ideal for Industrial Uso
    

    New Swingllne heavy-duty staple gun Kit. Includes 1000 staples in 5 sizes from Ko" to Kow, Swingline's 900 super-drive staple gun and easy-lift staple removerall in sturdy all-metal utlility case. For light or heavy. duty work. Perfect for ceiling tile, Ifght metal, upholstering, carpentry, plus many other Industrial uses. Gun has fast, exclusive open channel loading, is $\mathbf{1 0 0 \%}$ jam-proof. Loads 84 staples.
    Wg-193 staple gun kit. Shpg. wt., 5 tbs. ........ Net 11.87 Extra Staples, 1000 per pkg.
    
    HG-196 Leg lensth K K.". Shpg. wt, 6 oz.
    HG-197 Leg length $12^{\circ \prime \prime}$. Shpg. wt., 7 oz.
    Net
    Net .42 WG-198 Leg length Koc". Shpg. wt., 8 oz .

    Net
    Net

    ## CABLE TACKER <br> 

    

    Swingline fast-action staple gun for fastening low voltage electric and telephone wire, cable, rods, barbed wire, etc. Fires arched crown staples, $1 / 4^{\prime \prime} \times 3 / 0^{\prime \prime}$ " Features last, exclusive open channel loading, visible staple load indicator, high-powered spring action. Nas. row wldth permits reaching into tight places. Tacker handle locks to fit in pocket and prevent accidental firing. Shpg, wt, 3 libs.

    Net 11.25
    Extra staples for above, 1000 per pkg.
    H6-200 Shpg. wt., 807.
    Net .59

    ## "LEVEL-UP" UNIYERSNL SURFACE LEVELER

    

    - Keep your Equipment on the level.

    3 for 1.20
    

    Level anything - anywhere - anytimel Shelves record changers - shop tools - cameras - stoves trailers - and many more tiems; Simply center the bubble in the ring. The "Level-Up"' may be mounted on a larger base, of, trued up board, for spanning large areas. A professional tool - a home craftsmen necessity. Shpg. wt., 4 ozs. Imported
    MO-cio
    3 for 1.20

    ## 4-PIECE PAINT BRUSH

    KITIdeal for "Do-ll-Yourself"' painters. All pure bristle vulcanized in rubber. For touch-up, trims, furniture, sash and moulding. Consists of $1^{1}$ each- $1 / 2^{\prime \prime}, 1^{\prime \prime} 112^{\prime \prime}, 2^{\prime \prime}$ brushes. Packed in a polyethylene bag. Shipg, wt., 6' ozs.
    HD-398. HD-398 1

    ## FORGED

    STEEL HAMMER
    All steel - curved claw stylf - one plece construction. Eliminates broken handles and flying heads. Well balanced for non-tiring use. Non slip - suede finish - rubber grip. Shaped like conventional wooden handle.
    MO-4at Shpg.wt.. 2 lbs- Imoorted

    ## CLAW-HEADED TACKHAMMER

    - CHROME

    PLATED
    Balanced high quality forged steel 702 . tackhammer with steel shaft. Chrome plating enhances appearance and protects against rust. Non-slip rubber grip shaped to hand contours. Shpg. wi., 1 lb. Imported ND. 844

    Net 79

    ## MILLER WIRE STRIPPER

    .87
    A really good wire stripper and cutter. For any slze wire, stranded or solld. Adjustable arm on handle for varying wire sizes. Cuts and strips at any point along wire. Made of hardened tool steel-linely ground cutling edges. For serviceman-strip-or production work. HD-188 Shpg. wt., 402.

    ## SELF OPENING STRIPPER:

    Similar to above except has built in spring device to hold cutter open. Speeds wark on production line. Has ring-latch to hold blades in closed position. HD-189 Shpg. wt., 402.

    Net 1.13

    ## Deluxe Automatic Wire Stripper

    - "Delayed Action Return"


    ## - 4 hole precision ground blades

    - Strims sizes 12 ts 20

    Automatic - efficlent - easy to use. Delayed insula tion from all wires, 12 to 20, neatly and quickly. De. layed return action prevents crushing fline wlres. A real time saver for servicemen-electrical workersproduction lines-etc. Narfor spaced handles for easy grip. Lightwelght and easy astion for less fatigue. No
    bother of changing blades or adjusting cutter for varybother of changing blades or adjusting cutter for vary-
    ling wire sizes. Extremely well built for years of servIng wire stzes, Extremely well built for years of
    ice and uniform performance. Shpg. wt., $11 / 4 \mathrm{lbs}$.
    H6: 36 .
    Net 3.45
    HG. 367 -Replacement Blades for Above. Shpg. wt., 6 oz.
    Der pr. Net .97

    ## NEW-CRIMPING TOOL

    - Crimos insulated and


    ## non-insulated terminals

    ## - Cuts Bolts - Strins Wire

    

    New model also crimps solderiess terminals and connectors. Three tools in onel Cuts and strips wire from sizes 22 to 10 . Cuts brass or steel machine screws with. out damaging the threads; size 10-24, 10-32, 6-32 and 4-40. Has accurately sized stripping notches and pre. cision threaded cutter holes plus stud size gauge stamped on tool. Hardened steel, shoch-proof plastic handle.
    H0. 66 Shpg. $\boldsymbol{w t}$, 1 lb .
    Net 3.83

    ## WIRE

    .59 STRIPPER-CUTTER - insulateo handles

    Tempered steel-handy-easy to use wire stripper. Pawl cam lock sets to wire gauge. Designed to fit your gripuses minimum pressure. Specially ground cutting edges Cuts and strips at any point along wife. For service or light production work. Shpg. wt., it Ib.
    MO-264

    TORPEDO AND LINE LEVEL SET
    $(C-99$
    Nine way aluminum torpedo level with chrome plated top. Has three level vials; horizontal, vertical plumb, and $45^{\circ}$ Precisely machined base, Rust proof-can't warp. Line Precisely machined base, Rust proof-can't warp. Line
    level is hex shaped for use as surface level; aluminum level is hex shaped for use as surface level; aluminum
    for light weight-less than in oz. 2 hooks hold level securely on line. Shpg. wt., 1 lb . Imported
    MD-241-Set of 2 levels.

    ## LAFAYETTE'S LEADING TOOL VALUES

    
    (B)
    

    VERSA.VISE (C): All the features of a regular vise-plus-locks in any position, just tighten jaws. Turns to any work position. Use standing or laid flat-turns $360^{\circ}$ either way. Larger jaw surfaces- $31 / 2^{\prime \prime} \times 21 / 2^{\prime \prime}-$ plus removable plpe jaws. Jaws open 5". Shpg. wt.. 17 1bs. HD- 282

    Net 10.49
    Right Angle Adapter: Adds bench attachment for holding work at any angle. Shpg. wt., $21 / 2 \mathrm{lbs}$

    Net 2.18
    No-283 Net 2.18
    SWIVEL CLAMP.ON VISE (0) $21 / 2^{\circ}$ wide jaws-open to a maximum $2 \frac{1 / 2^{\prime \prime}}{}$. Twin guide rods and precision drive screw assure smooth action-rigid grip. Jaws accurately machined, polished and lacquered. Unex. celled for ordinary jobs in shop, home or garage. Shpg. wt., $31 / 2^{\prime \prime}$ lbs. Imported
    WT. 107
    Net 1.99

    ## IRON MIKE JR.-POWER HACKSAW

    - Power By Any $1 / 4$ " Electric Drlil - Works Unattended
    - Cuts Up To 3" Steel Bars

    A truly portable vise-holds firm and fast to any smooth non-porous surface. Uses vacuum power to hold, attaches or releases in seconds with simple lever movement. 214 " wide jaws with double "v" grooves hold all work securely without damage. Jaws open to $244^{\prime \prime}$. In metallic green, shpg. wt., 4 lbs.

    Net 4.98

    ## $\stackrel{8}{1}$ <br> 24" HEAVY-DUTY BOLT CUTTER $5^{2}$ 25

    Cuts bolts, spikes, cable, fencing. Comoound leverage for tremendous cutting power-wlll sheer through $3 / 0^{\circ}$ bolts. Cutters made of drop forged hardened and tempered steel. Has polished head and jaws. Alloy steel handles have rubber bumpers on inside. HG-342

    Net 5.25

    ## GRA-TITE

    Multiplies Your Strength
    More Than 20 Times

    - Over 2000 Lbs. Capacity
    - For Home, Farm, Shop, Autos,

    Camping, Civil Defense

    - Lightweight Sturdy Construction

    The Mighty Muscle provides you with tremendous lifting or pull. with Tremer with an over pull ing power with an over 2000 pound capacity. Actually multiplies a man's strength more
    then 20 times. Cannot be accihas oversengaged. Steel aircraft cable of $X_{10}{ }^{-1}$ diameter for handle tions. Lightweight, the complete assembly weighs only 6 ibs. Complete assembly includes cable, hook and $12^{\prime \prime}$ steel handle. Shpg. wt., 7 los.
    HD. 989
    Net 22.50

    ## "STANDBY" HANDY STAND <br> 

    Adjustable butane torch holder that cradles torch at an desirable angle. Avoids dropping, breaking, reduces fire hazard-acts as a third hand. Heavy gauge, satin finish aluminum and fully adjustable. Will stand almost anywhere, workench, step adder, uneven ground etc. Safe, practical. Shpg. wt., $1 / 2 \mathrm{IV}$.
    vesigned to be driven by any standard $1 / 4$ " electric drill. Can be fastened to bench or attached to a board for portable use. Saws up to $3^{\prime \prime}$ steel shafting, pipes, angle irons, etc. Ruggedly constructed of steet with bearing materials at all polnts of wear. Has built-in vise to hold work. Uses standard $10^{\prime \prime}$ blades, works unattended, and produces clean cuts. Completely reliable and will never overload drill motor
    HG. 343 Shpg. wt., 9 los.
    Net 18.95

    ##  <br> DRILL STAND <br> - Fits All $1 / 4^{\prime \prime}$ or $3 / 8$ Electric Drills <br> 

    Stand attaches easily to workbench with screws provided. Ideal for buffing, grinding, sanding, wire brushing, etc. Clamp fits all electric drills. Sturdy, compact. Holds drill vibration-free-leaves both hands free to hold work. Shpg. wt., 302.
    HG. 345
    Net .88
    

    KIt includes: large 24 0i, throw-away fueltank; general utility torch head giving powerful flame for heavy work (sweats up to $4^{\prime \prime}$ copper tubing joints); flame spreader attachment for above head that spreads flame for burning paint, thawing pipes, etc; pencll flame torch head that concentrates high heat in small area; utility flame adapter for pencil flame head that provides small general purpose flame. Heads and attachments installed easily in seconds-give you the right flame for every use. Complete with full instructions. Shpg. wt., $2 \frac{1}{2}$ lbs. HG. 347 Torch KIt Net 4.41 HG. 348 Extra tank torch fuel. 2402 Net 98

    WOOOWORKERS VISE (E) A fine, practical tool for the small shop-home-farm or garage. Guides are of finely machined cold rolled steel. Gray iron laws-face ground and finished. $5 / 8^{\prime \prime}$ diameter screw- 6 thread per inch. Shpg. wt., 6 los. Imported. HD-182

    Net 1.99
    TEKNI-TOOL SWIVEL TURRET VISE (F) Precision, swivel, turret vise for the machinist-technician-hobbyist. May be clamped-on or bolted to bench top. Twin, smooth faced laws open to a maximum of $2^{\prime \prime}$. One set $11 / 2^{\prime \prime}$ wide, the other set $238^{\prime \prime}$ wide. Smalt, stationary jaw is V-grooved for gripping round stock. tionary jaw is V-grooved for gripping round stock.
    Positive lock in both swlvels. Shpg. Wt., 5 los . Im . ported.
    HD-848
    Net 5.49

    ## NUT CRACKER

    - Handles Every Size Nut From Koro-11.16"
    - Fast Positioning-Never Fails
    

    Handy tool for cracking "frozen" nuts from \$/o" to 1/10" across flats. Cannot damage bolts. Never tails-set chisel at the right-angle to the flat of the nut, grip firmiy and swing your ratchet on forcing screw. Applies

    HG. 344 Shpg. wt., $11 / 2$ lbs
    Net 5.95
    

    A complete socket set for auto, marine, etc. Made of carbon tool steel, chrome plated. In durable, enameled metal case. Contains: $4 / 2$ DRIVE TOOLS-Ratchet, screw. driver adapter, L handle, and Ko, 1/2, Ko, 5/8, 11/1., 1/4, \%/8. $1 / 16$ sockets. $3 / 8$ " ORIVE TOOLS-Ratchet, adapter, I handle, and $1 / 1 / 2,1 / 1_{1} 1 / 2, K_{6}, 5 / 6$ sockets. $1 / 4^{* 1}$ DRIVE TOOLS-Unbreakable fiex handle, $7 / 6$ to $1 / 4$ reducing
     included, 14 MM spark plug socket, crosshandle. im. ported. Shpg. wt., 5 lbs
    Wg. 346
    Net 4.39

    ## - <br> $24^{03}$

    $1 / 4$ HORSE POWER ELECTRIC HEDGE TRIMMER

    - 1800 Cutting Strokes

    Per Minute

    - 14" Tempered Steel Blade


    ## No Money Down

    ## $\$ 5$ monthly

    SEE PAGE 412
    A full $1 / 4$ horsepower hedge trimmer ideal for straight or angle shrub trimming. A 14 -inch tempered stee blade with "vari-action" design delivers 1800 cutting strokes per minute. Handle is adjustable for right or left hand use. Mirror finish housing contains a Dowerful, alr-cooled 115 V AC-OC stall-proof motor. Complete with heavy-duty 50 -foot 3 -conductor cord. Shpg. wt., 10 lbs.
    H0.932

    # SELECTED FEATURE VALUES 

    WELLER SABRE SAW, MODEL 88

    - 4.8-Amp

    Reciprecating
    Motor

    - Ulita

    High Speed

    - With 4

    Wood-Cutting
    Blades
    and Blade Wrench
    A versatile portable saw cuts up to $112^{\prime \prime}$ thickness in soft wood, $3 / 6$ " in hard wood. Rips, cros 3 -cuts, scrolls, notches. Blade retraction frees blade of friction and chips. Ultra high speed with short stroke-excellent for cabinet and finish work. Easily handled, doesn't buck. Air-cooled 4.8 amp reciprocating motor. High impact thermoplastic housing. Complete with 8 - ft . cord, 4 wood-cutting blades, blade wrench. $120 \mathrm{~V}, 60$ cycle, AC. Shpg. wt., 61/4 lbs.
    HC-100
    Net 18.08
    NEW SELF LOCKING HASP-LOC
    

    Security's new self locking unit is self contalned; no need to purchase separate padlock. No keys required to lock; heys used for opening only. Meavy-duty and rust proof. Takes dittie effort to install all you need is a screwdriver. Size 412". Shpg. wi., I lb. NG-350
    

    Rugged, pin tumbier type for positive locking action and smooth release. Made of solid brass-not die cast. for extra rellable operation. Extremely useful for converting drawer to safe keeping place. Shog. wt., 402.
    Me-351

    Net .79
    

    Cylinder type padlock for extre strength and ease of operation. Entire body is made of solid brass for extra operation. Entire body is made of solid brass for extra
    long life. Chrome plated hardened shachle. Shpg. Wt. 402.

    NG-352 142" padlock
    Net 1.15
    MS-353 2' padlock
    Net 1.85

    ## DIE CAST DOOR STOP

    Double strength zinc die cast construction with scuff free chrome finish prevents chipping
    peeling ... or rust ing. Mar and scratch proof neoprene stop pad will not mar floor. Fits any door ... $11 / 4^{\prime \prime}$ plunger accommodates any stll height. Shpg. wt., 1 lib. Mc. 357
     jobs with this power-packed, yet compact and lightweight saw. Use it as a rip. crosscut, coping or a keyhole saw. Tilts up to a $45^{\circ}$ angle. Cuts up to $\boldsymbol{2}^{\circ}$ In wood, plastic, metals and most other materials. Saw. dust blower removes sawdust as you cut. Motor runs at 4800 strokes per minute. Instant top control switch for extremely easy operation. Three wire cord for extra safety. Shpg. wt., $41 / 2$ bs. HG-355

    Net 14.00
    ELECTRIC SCROLL SAW
    

    This new scroll saw is the latest innovation in "free hand" cutting saws. Easily cuts intricate scroll work saws wood up to $3 / 4^{\prime \prime}$ thick, asphalt, rubber and plastic floor or wall tiles, aluminum and light metals. Its wide range of uses make it indispensable for home owners, hobbyists, carpenters, and craftsman. The thin, tast cutting blade saws so smoothly, no sanding is required. High-speed reclprocating motor produces $\mathbf{7 , 2 0 0}$ strokes per minute. Unique 4 -way blade holder permits cutting in any directlon. Shpg. wt., 3 lbs.
    HC-35s
    Phg. of 12 replacement blades for above
    HD- 294

    ## SAFETY LOCK

    

    Intruder proof, one-piece heavy casting construction will not snap or break under force. Heavy-duty triple chromed finish prevents unsightty chipping, peeling or rusting. Can even keep door securely open for ventilation on hot days, Quichly secured or released. Shpg. Wt., 1/2 lb . WC-358

    Net 1.4
    WORE
    Easy to install. Replaces A.C. plug on any equipment
    you choose lo keep "locked". Prevents accidental or
    unauthorized use of any electrical equipment. Use on
    fans, power tools, soldering equipment, hot plates,
    photo equipment battery chargers, even the TV-If you
    want it kept off! Shpg. wt., 6 ozs.
    wstit

    Net 1.38

    WELLER HI-POWER PRO SANDER MODEL 77

    - 4.8-Amp Motor
    - 14,400 Strokes

    Per Minute

    - Straight Line Action
    - 26 Sq. In.

    Sanding Surface
    Dynamic new heavy-duty reciprocating 4.8 -amp motor (ives 14.400 strokes per mirute. Professional straight line action; sands flush to perpendicular surfaces on either side by simply moving knob to other side. Maintenance free-lubricaled for life. Large 26 sq . in. sanding area. Handle, housing and plate of rugged plastic. Stroke length $y_{2}{ }^{\circ}$. 8 -ft., 3-wise cord. $120 \mathrm{~V}, 60$ cycle, AC. Shpe. wi. $6 \frac{1}{2}$ ths.
    HG. 101
    Net 14.68
    

    Do away with outmoded chains and ropes, give your dog a larger area of freedom with no tangling or blnding. This new Dog Terda extends or retracts automatically with your pets' movement. Rotates $360^{\circ}$ both horizontally and vertically. 15 ft . nyton $360^{\circ}$ both horizontally and verticaliy. 15 ft. nyion
    covered flexible steel cable allows 30 it. of running covered
    room and a roving area of over 700 sq . ft. Feather light tension with freely rotating snap bolt flls any dog collar. Complete with all mounting hardware for both wall and inground mourting. Shpg. wt., 342 lbs, HD-660

    ## MAGNETIC PICK-UP TOOL

    ## - Flexible Shatt Bends Around Corners

    Ideally sulted for the home, workshop, or the professional. Magnetically "plcks up" Iron and steel objects. Flexible shaft actually bends apound corners-reaches hard to get at places. Fully two feet in length. Grip get at places. Fully two
    is of shockproof vinyl.
    Me-354
    Net .89
    

    Puts a drop of a squirt of oll where you want it. The only practical instrument for precision oiling. Spout is only $.003^{\prime \prime}$ dia. Made of stalniess steel and butyrate. Fitled with clear, non-staining machine oll. Can be re flled. Hypo action prevents messy, harmful overolling of precision equipment. Shps. wt., 4 oz.
    NB-311
    Net . ES

    ## GRINDING \& POLISHING HEAD

    285Equipped with double tool rests. Has DuPont nylon bearings that insure quiet, smooth running and require little or no lubrication. $2^{\prime \prime}$ Pully-universal, for "v"' and round belt. Shaft-te" dia $x 99 / 4{ }^{-1}$ long - $1 / 2 \cdot 20$ thread. G4/ overall height. Shpg. ni, 7 los.
    M-122.
    Net 3.65

    ## LAFAYETTE LAB AND SHOP ESSENTIALS

    ## TWIN-WELD EPOXY ADHESIVE <br> - Attach Anything to Anything-Anywhere <br> - Steel-hard permanent repairs in minutes <br> - Won't shrink-can't expand <br> - Can be shaped.cast. drilled-sawed-sanded

    An advanced, flexible epoxy formulation. Engineered for permanent adhesive use for metal-wood-glass-ceramics-concrete-hard rubber-fiberglass-brick and many other materials. Qulck, easy, professional repairs. Mends anything. Ideal production line "filler." Can be molded to any shape-no sagging or draping-perfect for duplicating and shape-making. Use as a "tool-holder"-as coating or filler-as a gasket-as caulking-as a dielectric. Chemically and dimensionally stable. Safeno solvents. Non-toxic, non-allergenic. Shpg. wt., I lb HD-685TWIN-WELD "Super-Pak": Giant size package of famous epoxy adhesive. 15 ozs. In a poly twin pack. Enough for small Industrial demands. Will not "age" in the container If properly capped. Shog. wt., $11 / 2$ lbs. HD. 919

    Net 3.67

    ## ECCOBOND 26

    ## STICKS ANYTHING 10 ANYTHING FOREVER!

    - New epoxy resin patch kit handiest bonding agent ever for the lab bench or production line. Many industrial applications epairs tools, hardware-furniture-boats. A resilient epoxy polymer - features permanent adhesion to metals, plastics, paper, ceramics, etc. Patches and bonds anything! Cures in four hours at room temperature - in minutes at 150 F . Chemically inert - physically extremely strong. Forms a permanent part of the repaired Item. Can be sanded or worked - takes paint readily, White color. Mixes easily - use only as much as you need. Shpg wt., 8 ozs. HD-663

    Net 1.96
    Lots of 6. Net ea. 1.45

    ## NEW! NYLON MINICLAMPS

    ## - Reaches Areas Whers No Dther Clamp will work - For Home, Hobbylsts. Electronics, Workshops - Featherlite - Frather itte-

    

    A completely new. lightwelght clamp for those small and Impossible clamping jobs. Constructed of tough, durable nylon and as useful as a third hand. Miniclamps are ldeal for most soldering jobs requiring normal tem perafures, are unaffected by most giues and cements used In model making, etc. The larger Miniclamps are husky enough for heavier lobs. You get 5 clamps (\%" $1 / 2^{\prime \prime}, 1 / 4^{\prime \prime}$. $1^{\prime \prime}, 112^{\prime \prime}$ jaw sizes), 4 platens, and rubber binders. Shpg. wt., 6 oz. Mo. 649

    Net .95

    ## HIGH QUALITY CLAMP SETS

    

    Indispensable to the do-if-yourselfer, hobbyist or pro fessional repairman. These screw-type clamps are made of malleable tool steel, and are available in 1" $212^{\prime \prime}$, and $3^{\prime \prime}$ jaw sizes, in sets as follows: 1-3" and $1.1^{\prime \prime}$ clamp or $1-212^{\prime \prime}$ and $2-1^{\prime \prime}$ clamps.
    HO. $8701.3^{\prime \prime}$ and $1.1^{\prime \prime}$ clamp. Shpg. wt., 20 oz. Net .69 H0.871 1.21/2" and $2.1^{\prime \prime}$ clamps. Shpg. wt., 18 oz. Net .69
    FILE RASP
    Files Twice as Fast! Works twice as fast as old fashioned flies. Cuts on forward and back strokes. Even sldeways or circular motions. Excellent for shaping-notehing-finishingand fast stoch removal. For use on wood, plastic, com position, glass, plaster, porcelain, etc. Two abrasive surfaces-one slde coarse (46) grit-other side medium (80) grit. Resists loading-cleans easily with solvent, hot water or wire brush. 14 inches long-flat face. Shpg. wt., $1 / 2 \mathrm{lb}$ HD. 673

    ## PLASTIC ASSOCIATES EPOXY

    PENCIL APPLICATOR
    ## - Unusual Adnesive Strength

    - Tough, Permanent, Waterproof Bond

    Environmental Protection

    ## THERMA-BLEND EPOXIES

    Now epoxy resin may be applied as easily as solder is applied with an iron. Simply - remove all dirt and oil from bonding surfaces and apply Cetron Epoxy Pencil to warmed surface. May be cured (warmed) from 245-420 ${ }^{\circ} \mathrm{F}$. Cures in 7 minutes @ 420 ${ }^{\circ} \mathrm{F}$, 12 hours @ $245^{\circ}$ F. Dry shear strength is $4110-5470$ PSI. Dielectric constant 3.5. Solid at room temp; softens at $105^{\circ} \mathrm{F}$, bonds at $200^{\circ} \mathrm{F}$. Instantly usable without storage. $105^{\circ}$ F bonds at $200^{\circ}$ F. Instantly usable without storage.
    Shelf life-1 year @ poom temp. Aluminum collet holder and 3 refills of amber epoxy filier. Shpg. wt. 4 oz.
    Stock
    Net Each
    No.
    Description $\qquad$
    s
    $1.9 \quad 10.99 \quad 100.4 p$
    N.934 Pencil w/3 Sticks

    HD.935 Stlick Refill (Pkg. 10)
    MD. 969 Liquid (1 pint)

    ND.983 Tape- $1 / 2^{\prime \prime \prime} \times 36$ yd.
    $\begin{array}{lll}1.95 & 1.50 & 1.35 \\ 1.80 & 1.50 & 1.30\end{array}$
    $\begin{array}{lll}1.80 & 1.50 & 1.30 \\ .95 & 1.50 & 1.35\end{array}$
    $\begin{array}{lll}1.50 & 1.35 & 1.35 \\ 4.00 & 3.40\end{array}$
    HD. 984 Tape- $1 " \times 36$ yd.
    $\begin{array}{lll}5.40 & 4.59 & 4.405\end{array}$
    ND-981 Spray Can-6 oz.
    $\begin{array}{rrr}10.80 & 9.18 & 8.10 \\ 2.70 & 2.30 & 2.02\end{array}$
    ND. 970 Sheet- $12^{\prime \prime} \times 12^{\prime \prime}$
    $1.95 \quad 1$
    REDI-BLEND EPOXIES Sq. Yd.
    Two-component cements in unique, self-contained Pa kit mixer package. Contents are mixed on-the-job, just pour to use; after use package is thrown away. RediBlend epoxy contains precise amount of each compo nent for perfect use and maximum strength. Shpg. wt. 3 oz .

    Net Each Kit
    Stock
    Description
    $1.9 \quad 99 \quad 100.0 \mathrm{up}$
    HG. 102 Kit of $10(1 / 10$ oz. $)$ 1-shot pkgs. $2.45 \quad 1.95 \quad 1.70$ HG-103 Kit of 10 ( $1 / 5$ oz.) 1 -shot pkgs. 3.903 .002 .70

    ## NEW MASTER FINISHER

    A master tool for all hand finishing jobs, both coarse and fine; also for grinding, polishing and other uses in home and shop. Hoids sandpaper and abrasive, quickly replaceable. $5 \frac{12}{} \mathbf{2}^{\prime \prime}$ long body, tapered
    Hn-414 Shpg. wt., 8 oz. ..................................... 72

    ## 2 INSULATED TUBE PULLERS <br> 

    

    Straight type (about $8^{\prime \prime}$ long) and bent type (about $7^{\prime \prime}$ long). Shpg. wt., 1 lb . Imported

    ## HD.911M.

    ## VINYL PLASTIC ELECTRICAL TAPE

    - 60 Ft. $\times 3 / 4^{\prime \prime}$
    - . 008 in. THICK
    
    - 10.900 V. BREAKDOWN

    First quality, pressure sensitive polyvinyt chioride tape. Extremely high dielectric strength of $10,900 \mathrm{~V}$ breakdown. Insulation resistance of one million megohms Over $150 \%$ elongation at break. Excellent resistance against acids, alkalis, olls, salt water, etc. Tensile strength of 15 lbs. per in. Wigh conformability. Forms strength of 15 lbs. per in. High conformability. Forms
    tight. smooth protective wrap. Shpg. wt., 4 oz. Import tisht. smooth protective wrap. Shpg. wt.,
    HD-216
    LARGE PLASTIC TAPE KIT: 10 rolls of vinyl plastic tape. Each roll 33 ft . by $3 / \mathrm{m}^{2} .1$ ea. of Red, white, sky tape. Each roll 33 ft . by $1 / 2.1$ ea. of Red, white, sky
    blue, blue grey, yellow, brown, green, black and orange. blue, blue grey, yell
    Shpg. wi., 142 los
    HD.478
    Net 2.65
    SMALL PLASTIC TAPE KIT: 6 rolls, $7 \mathrm{ff} \times 1 / 2^{\circ \prime}$ vinyl plastic tape. 1 ea. of red, yellow, blue, green, black and transparent. Shpg. wt., 5 ozs.
    HD-477
    Net . 59

    ## INSL-X TOOL DIP

    ## Extremely high dielectric strength for

    maximum protection. No more tedious taping of tool handles. Just dip and let dry. Resists acid alkall, water and oll. Bright red color locates your insulated tool at a glance. Also recommended for tool at a glance. Also recommendeduse on Radio \& TV parts. 6 oz. can. MS. 50

    Quick, easy, permanent repairs for home, auto, farm boat, industry - a 1001 handy uses. Ready-10-use paste form, sticks to almost any material.
    EPOXY STEEL. Combines strength of epory resin with hardness of steel. No heat or pressure needed. Can be sanded, filed. drliled when dey. 14 oz. "Shop size kit". P-414 Shpg. wt. 110 .

    Net 2.69
    PLastic aluminum. Dries metal hard in 3 hours Waterproof, heat proof to $600^{\circ} \mathrm{F}$. $54 / 2$ oz. tube. Shpe. Waterproo
    wt. 8 oz.

    ## P. 415

    Nef . 75
    WACIC STEEL. No heat or mixing, dries tough steel hard. 61/2 07. tube. Shpg. wt., 902
    P. 416

    Net .75
    MAGIC METAL. Cold solder works like putty. hardens into metal. Unaffected by water, gas, oil. $11 / 2 \mathrm{lb}$. can. P. 417 Shpg. wt., 2 lbs.
    

    All stainless steel $6^{\prime \prime}$ long. They have unusual holding qualities necessary in many servicing situations. Shpg wt. pkg. of $10,11 / 2 \mathrm{lbs}$
    HO.528 Straight Nose .................................... Net 2.45
    HD-529 Curved Nose
    Net 2.45

    ## ELECTRA-SPRAY

    - FOOLPROOF SpRAY PAINTING
    - INCLUDES NEW VISCOMETER


    ## 746

    

    Sprays every kind of sprayable paint or liquid-adjustable, jeweled nozzle provides fine, medjum or coarse spray. Completely rustproof construction. Brass and stainiess steel parts. High impact plastic housing. 22 ounce interchangeabte mason-type jar. Electro-magnetic motor never needs olling or adjusiment. Comfortable pistol grip handle with self-releasing trigger switch. The new VISCOMETER insures perfect paint consistency -regardless of brand-every time. Complete with 8 ft . heavy duty cord, 22 ounce jar, viscometer, wrench and instructions. For 115 V. A.C. only. Shps. Wt., 5 lbs. Instruct
    HD-691

    Net 7.46

    ## AERO/MATCH SPRAY BRUSH

    

    - can spray mixed colors
    - COMPLETELY PORTABLE-NON-ELECTRIC

    Now you spray and match exactly the same palnt you buy for brushing. Since you fill the sprayer with your own paint, you can match anything-even multi-colors. The 15 oz. power unit is bigger, more powerful-outlasts about three aerosol paint cans. Operates on a non-toxic, non-inflammable, pressurized gas. Unsurpassed for small or medium paint spraying. Spray brush requires no special skill ... easy to use .... easy to clean. Precision spray needle is made of metal and set in metal. Not affected by paint solvents. Can spray any liquid paint. Insecticide, polish, antiseptic, etc., and many powders
    H0.972
    

    MULTI-DRAWER (B) -Convenient storage for small parts. Constructed with tongue and slot designed 10 interloch with other units at top, boltom or side. May be fitted around existing fixtures for economy of space. Handy pull and holder for contents card. Alumi num construction. Size: $2 \% \times 21 / 4 \times 5$
    MC- 11 Wt. 10 ozs.
    In lots of 10, Ea. $\begin{gathered}\text { ea. } \\ \text { Ea } \\ \text { Ea }\end{gathered}$
    Ea. 03
    PIN-UP WORKSHOP UNIT

    - 12 SQ. FEET OF
    - STORAGE SPACE! SET UP IN SHOP
    -GARAGE-HOME

    TOOL AND UTILITY BOX (C) - $14 \frac{1}{3}$ lonn tool box. Cantilever tray with four compartments. Room enough for soldering iron, pliers, screw drivers, wrenches. etc Push-bution catch with hasp for lock. Folding, recessed handle. Baked enamel finish in glossy green. 141/2" long, $61 / 4^{\circ "}$ wide, $41 / 2^{-\prime}$ deep. Shpg. wt., 3 ibs.
    MC. 12

    SUPER TOOL CHEST (D) A steel chest built to last Pe movable tote-away. Double loch seamed construction, reinforced corners, continuous hinge, steel $r$ andle, regu lar key lock plus hardware. Baked enamel interior. Steel gray outside finish. Size $16^{\prime \prime} \times 7^{\prime \prime} \times 7^{\prime \prime}$. Shpg, wt., 8 lbs. MC-22

    Nel 5.50

    ## STEEL STORAGE

    STAK-UP STORAGE CABINETS (E) Convenient, logical small parts storage. Add units as you need them. Stackup as high as you choose-take apart easily. See thru drawers with "slop" to prevent spilling. 2 dividers with each drawer. Units slide together and lock. Shpg. wt., $11 / 2 \mathrm{lbs}$
    MC-23- 1 double and 2 single drawers
    Net 1.15
    MC.24-4 single drawers

    Net 1.15
    TRANSPARENT UTILITY BOXES (I) -Attractive plastic bokes ideal for storing screws, nuts, bolts and hundreds of other small parts. With hinged cover and built-in partitions.
    

    UNITS
    

    ## For 4 Sheives <br> $30^{\prime \prime} \times 12^{\prime \prime} \times 60^{\prime \prime}$

    - Triple Bent Shelves
    - Heavy Angle Posts
    - Shelves Adjustable on $11 / 2^{\prime \prime}$ Centers
    - Braced on Back 2 Sides

    For stores, offices, garages, basements, pantries closets just what you need to solve your storage problems, you'll find dozens of uses for these rugged racks. And now, Lafayette offers them at a bargain - $30 \mathrm{~W} \times 120 \times 60^{\prime \prime} \mathrm{H}$ with 4 sheives, or $36 \mathrm{~W} \times 12 \mathrm{D} \times 72^{\prime \prime} \mathrm{H}$ with 5 shelves. Corner post and all edges are rounded and snag-proof with back and side braces providing added strength and rigidity. Gray enamel finish. Shlpped unassembled with all necessary hardware for fast easy
    assembly, size $12 \times 30 \times 60^{\circ}$. Shpg. Wt., 25 tos. assembly, Size $12 \times 30 \times 60^{\prime \prime}$. Shpg. wt., 25 lbs. ML.306WX

    Size $12 \times 36 \times 72^{\prime \prime}$. Shpg. wt., 33 ibs . mL .305 mx
    ML-305WX
    Net 5.95

    ## AMAZING NEW "ADD-A-DRAWER"

    - Fits Under Any

    Flat Surface

    - Installs in Seconds
    - Prime Coated White-
     or Repaint Any Coler
     hooks-spices-anything, anywhere Permits visible inventory. Costs less than drawer of bin storage units.
    Ho. 190 Set of 2
    ars for use with Vis-A.Part Clips
    MD. 191
    
    
    
    
    
    Tlat suffeconds you get a permanent orawer under any flat surface-table, bench, cabinet, shelf, desh, etc. Completely assembled-comes with' 2 brackets and 4 screws for easy installation. All-steei drawer with handy anob. Prime coated white-can be repainted any color of your choice. Drawer slze: $12 \times 12 \times 31 / 2^{\prime \prime}$
    SPACEMASTER STORAGE SHELVES
    - Make Doors and Walis Do Double Duty


    ## 479

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    The Lafayette VECTORLOG Slide Rule provides a new concept in scientific calculation, incorporating scales and arrangement designed for quick-easy-maniputation. Twenty-seven (27) scales incorporate the many problems encountered in Electrical Engineering and Physics. The unique $P$. $P^{\prime}$, and $Q$ scates allow direct right angle vector addition. No longer are several settings reP. P', and otales to obtain right angle vector sums-these scales work in the same manner as the $C$ and D for multiplication. The two Hyperbolic Sine and one Hyperbolic Tangent Scale, the voltage db scale, and the five Log Log scales, provide maximum coverage of these dymanic flelds. VECTOR. LOG is the result of extensive tests for ease of manipulation-the many "HUMAN FACTORS" incorporated in this rule, truly provide a NEW EASE IN SCIENTIFIC CALCULATION. Several of these features are: C and D scales on both the front and back of the rule; Sine scales in both degrees and radians, removing the necessity of bothersome conversion of units; A problem-tested location of scales; and adjustment screws to allow variable tension on the slide. Scales include: (FRONT) Tr-1, TR-2, P', P, Q, ST, S-r, S-0, C, D, LLO1, LLO2, L03, LII'; (REAR) Sh-1, Sh-2, DF, ${ }_{A, B, C l}, C_{F}, T h, C, D, L L 3, L L 2$, db. With instruction book, lesther carrying case, and belt carrying loop. Shpg. wt., $11 / 2$ los. Imported F-686

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    - Pocket Version of Lafayette's Most Popular Slide Rule P Scale (Pythagorean) permits direct "readout" of Cosine Values - Includes Leather Case With Pocket Clip 24 Scales including 8 Log Log Scales
    Designed to answer the demand for a pocket version of our $10^{\circ} \log$ Log Dupli Decimal Trigonometric slide rule ( $F-428$ ). Contains all the scales of the 10 rule except the "ST" scale. Two color scales-positioned for ease in use and rapid calculations. "C" and "D" scales on both sides of the rule. "p" scale for direct, cursor line reading of cosines of angles. Scales included, front face: LL1, LL2, LL3, DF, CF, CIF, CI, C, D, LL3, LL2, LL1. Back face, LLO, L, K, A, B, S, I, C, D. DI, P, LLO. Engine divided rule of laminated, non-hygroscopic bamboo. Complete with instruction book and leather case with pocket clip. Shpg. wt., 8 oz. Imported
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    Snodgrass

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    ## 39

    

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    Iine, pralessional grade triangtes. Ex. ceptionally well marte, accurate, highiy tanspasent, not easily scratched. Will
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    30/60"


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    Comes complete with-11, 2x $3 / 4$ " tubes of oll palnt; jumbo $3 \times l^{\prime \prime}$ tube of zinc white; 5 bristle brushes; 2 bottles linseed oll and turpentine; steel palette knife and cup; $121 / 4 \times 9^{\circ \prime}$ wood paint palette; and $12 \times 87 / e^{\prime \prime}$ mounted, canvas panel. This complete set is in a sturdy $13 \times 10^{\prime \prime}$ wood box. Shpg. Wt., 41/2" Ibs. Imported F-532 Oll Paint Set
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    24 CAMEL HAIR BRUSHES - SIZES 1 ThROUGH 6 - rustproof aluminum ferrules
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    Magna-Sighter is a precision optical instrument enabling anyone to do very close work and see it clearly in 3 dimensions. Adjusts to any head size comfortably. No moving parts to replace or wear out. Ideal for hobbyists repalrmen, inspectors and technicians. Avaliable in 4 sizes. Shog. wt., $1 / 4 \mathrm{lb}$.
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    F. 859 3.5X, 4" Working Distance

    Net 7.88
    Net 7.88
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    - Converts linear and volume measurements to metric system
    - Converts HP to watts
    - Miles to Nautical Miles
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    This $6^{\prime \prime}$ Convertisor is a calculator performing conversions from the English to the Metric System in weights and measures both linear and liquid. Performs multiplication and division. It consists of two discs, one opaque printed in black and one clear transparent printed in red. Directions for use and list of conversions on back of opaque disc. Shpg. wt., 4 ozs.
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    FRACTION OF AN INCH ADDING MACHINE

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    This new tool permits contlnuous adding or subtracting of fractions, decimal equlvalents, or mixed fractions and decimals. Answers are shown instantly. Only one moving part -extreme simplicity of operation. Invaluable for part-extreme simplicity of operation. Invaluable for
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    - Messures Dia meter, width,


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    - For Student,

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    The mazing lafayetto slide triangle combines five instruments in one - triangie, T-square, protractor, ruler and caliper. Use it to measure diameter, thickness, depth, length, angle as well as drawing paraltel and vertical lines. Constructed of color-soft, clear, x, vertical lines. Constructed acrylic that is dimensionally and chemically stable. Smooth bevelled edges. Shpg. wt., 5 oz .
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    Newest "Dial-A-Matic" adding machine. Great for dally calculation-small businesses-homeworh-etc. Automatic clearing bar clears all dials instantly. Poiyethylene, shidproof base for conventent one hand operation All moving parts of Dupont Nylon. With dialing stylus and instructions. Shpg. wt., 1 lb.
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