

Safayette Radio nutio mis riension, nv. catalog no. Hane in 88
100 SAXTH WENUE, MEW YORK 13, N. Y 110 fideral street, Boston 10, mass. 542 E FORDTAM ROAD, BRONX 5B, N. Y.


## Safayette

Good entertainment is less expensive than ever beforel Avoiloble now....for the first lime since 19a1. . a new idea in cobinetry for a personalized rodlo. Sturdy, rugged durable plostic molded info a modern design and color. Beautiful "Marbelized" pastel shade and lvory to choose from. Shades that blend into their surroundings. When you see and hear, this set, you'll want if. Thercfore, we are extending to you our 30 day home irial offerat our isk. The good tone quolity selectivity characteristics, high sensitivity, the extra power are all mode possible by the evcellently engi neered superheferadyne circuit which includes neered superhereradyne circuil whing Lofoyelle feotures:

FINE SENSITIVITY: By using the lotest most odvanced circuits and fubes, improved operoting charocteristics have been provided. "BEAM POWER OUTPUT": This results in vir volly distortionless power outpul-the reoson or the excellent tone quolity afforded. Mulfi unction fubes weed are the $125 A 7$ Convarter 125Q7 2nd Detector and Ist Audio, 125K7 IF Amplifier 50 L 6 Beam Powef" Ouppuf, and 3525 Rectifier
BROADCAST COVERAGE is from 550 to 1600 c including all domestic stations in the orea A NICO 5 SPEAKER fop exceptionally good hanal reproduction which mokes for better lis lening ond smoother response.

NO ANTENNA NECESSARY! The J. 50 comes equipped with an ontenno hank - on aeria which you can set oul in any room when ond where you wont. There is no need 10 string outside oerials
AUTOMATIC VOLUME CONTROL compensotes or weak and distont slofions
PLASTIC CABINET for tabie, shelf or desk meosures $81 / 4^{\prime \prime} \times 4 \frac{17}{}{ }^{\prime \prime} \times 53 / 4^{\prime \prime}$
Direct Drive Dlal for full view luning.
MODEL J50-M: LAFAYETTE 5.Tube Plostic Superhet complete with lubes. For operotion on 110 Volis AC-DC. Code: AUKER.
MODEL JSO-Y: Same as above but Ivory. Shpg. wt. 8 lbs. Code: ANNOY
Yoúa cost
EITHER ABOVE EACH
s 16.25
20 Voll adopier cor

- Including Rectifier.


## Safayette 5-TUBE* AC-DC TABLE SUPERHET

Here is the rodio styled right to the minute! Here is the set with "personality"-the radio you'll choose for your den, bedroom or office. lis styling is so distinctive and the entertainment it offers so voried you'll acclaim it the moment il arrives of your door. During our 30 day home trial plan you too will discover its doy home irial plan you 100 will discover its high performance and design. The fine Tones, sensitivily and selectivity eharacieristics, the extra power -oll are made possible by Lafoyette engineering. The MC. 10 is the s-tube* set thot is the small "extra" set you have been looking for.

GOOD SENSITIVITY, greoter station getling ability is provided by the superhet circuit. tubes are modern ond ese new mulary tubes previously used. This circuit uses the 128 Eb previously uses. Converter, 12B. 46 if Amplifier 12AT6 2nd De.
 rector and st Audio o PLASIIC CABINET: The receiver is housed in a beoutiful case that is avoilable in either a beoutilul case that is avoilable
gleaming Black or livory. $8^{\prime \prime} \times 5^{\prime \prime} \times 5^{\circ}$ gleaming Black or ivory. $8^{\prime \prime} \times 5^{\prime \prime} \times 5^{\circ}$.
SPEAKER: The Alnico 5 PM $^{\prime \prime}$ speaker affords fine tone quality and exceptional volume.

AVC, for a more even audio response. BROADCAST BAND covering from 540 10 1720 kc includes all domestic progroms. BUILT-IN ANTENNA of loop design practically guarantees noiseless reception. Lugs for outside oerial for finer rural reception. BEAM POWER OUTPUT in the circuir of the MC. 10 odds volume and cuts distortion.

MODEL MC.10B: LAFAYETTE 5-Tube Super complete with pubes in gleoming Black. For operotion on 10 Volis AC.DC. Shog. wt. 8 lbs. Code: ANODE.
Code: ANOSE.
MODEL MC-1OY: Some in Ivory
Code: ANTHO YOUR COST
220 Volt adaoter cord

- Includina Rectifier.



## Safayette

If's neat-it's durable-and it's a good performer. That's why this new Lafavelte Silube* table model is so well suited to every modern hame. It is housed in a beautiful cobinet of half inch thick American walnut which odds remarkably to the fine tone of the receiver. The appearance of this smort looking set will harmonize with all surroundings. We wanl you to campare this set with athers in the same price range-so take advantage of our 30 dav hame irial plan ta examine it. Check all of its outstanding features and prave to yourself that the FA-15 is the Laforette you want. It employs mony advanced fealures amang which are the following

5 MODERN MULTI-FUNCTION TUBES: The I2SA7 MERN MULTKK7 IF Amplifier i2SO7 2nd delectar and Ist Audio 50L6GT' 'Beam 2nd delectar and 151 Audio Power" oulput and 3525 Recritier. ALNICO 5 PM SPEAKER which makes for
ter listening and smoather cancert tones, ter listening and smoather cancert tones.
MODERN CIRCUIT DESIGN, for durability and MODERN CIRCUIT DESIGN, for durabilisy and efficiency. 110 Volt AC-DC $50 / 60$ cycles for universal operation,
ANTENNA: The built-in laop assures virtually noiseless receplion. Lugs bre provided for on autside caerial. The oulside aerial gives smoother and clearer reception in rural and aullying if TR
IF TRANSFORMERS for increased seleclivily

ILLUMINATED VERTICAL SLIDE RULE DIAL for occurote luning and full-visibility.
AMERICAN WALNUT CABINET with fully enclosed back. Size: $5 \times 6^{\circ} \times 91 / 2$ BROADCAST BAND: $540-1720 \mathrm{KC}(220$ to 530 meters) includes ofl domestic stalions. AUTOMATIC VOLUME CONTROL for an even MODEL FA-ISW: LAFAYETTE 5-Tube* Super. het complete with tubes in walnul cabinet. Far operolian on 110 volis AC-DC. Shpg. wi. 10 lbs YOUR COST.
YOUR COST
s20.45
MODEL FA-15Y: Same as above bul with boked
on lvory enornel finish. Cade: ANTRE.
YOUR
COST
COST.
220 Vols odapler cord
\$21. 25.5 - Including Reclifier.


## Lafayette 6-TUBE* AC-DC SUPERHET

If modern lines are yaur forte-if rich, and mellow tones thrill yau-if spoce and budgel are limited.. this is your rodio. Cambining all the features you'd expect to find in a Lafoyelte radia - including tone control - the MC. 11 is now available 19 yau on our 30 day home trial plan. A handsame molded plastic case that comes in two brilliant colors-aleam ing Black and sparkling lvory with knobs to match. The MC-ll is nat madern far modern. ness alane-it cambtres modernness with tech nical advancement. A radio that will iruly 2 del 2

MODERN CIRCUIT DESIGN: Leads to dupa. bility and arealer efticiency of aperation and bility and grealer ehiciency of aperation and vears of ocpendable lisiening-a grand value AUTOMATIC VOLUME CONTROL: Eliminaies fading and makes far even audio respanse. ALNICO 5 PM SPEAKER: Far o full-range freguency response and exceptional tane quality. BEAM POWER OUTPUT: In the circuit of the MC-1I adds valume and culs distartion. Il alsa assures fine tone.
THE ADVANCED SUPERHET CIRCUIT: 2 125K7's os ist and 2nd 1F, 12507 Mixer-Converter, Ist -RF $12 S A 7$ 2nd Delecior, Ist Audio
$35 \mathrm{L6}$ Beam Power Anmplifier, 3525 Rectifier. 8ROADCAST BAND: 550 to 1600 Kilocycles. TONE CONTROL is leulured lor greaier lis. LOOP ANTENNA assures yall virtually naiseree receotion. Lugs for oulside aerial. CABINET measures $111 / 2^{* \prime} \times 7^{\prime \prime} \times 61 / 2^{\circ}$ depth. MODEL MC.11B: LAFAYETTE 6-TUbe* Superhet complete with tubes. Black plastic, for oprotion on 110 valis AC.DC. Shpg. wi. 12 lbs Cade: ANURA
YOUR COST EACH IODEL MC IY Sam as abover 3 Code: ANVIL.

## EACH

For 220 volt adopier, add
s 25.50
including Rectifier.
ALL LAFA YETTE Radios are R. C. A. and Hazeltine Licensed


## Safayette 6-TUBE* 2-BAND AC-DC SUPERHET

Once hore Lofoyette engineering hos taken the lead in the parade towards tomorrow's "big set" table radio. A splendid 6 -tube" 2 . band superhet that cames in a smartly deband superhet that cames in a smartly designed ond finished modern walnut cabinet
that is anly $81 / 4^{"}$ high. Take advantage of aur That is anly $81 / 4^{" 1}$ high. Take advantage of our
30 day home trial plon to exomine its fine features and see for yourself why the J62 is a radio of which we ore justly proud. The J62 is the Lafoyette leader af the year.
IMPROVED CIRCUIT DESIGN: Madern engineering advancements are incorporated to assure efficiency, dependability and long pange. AUTOMATIC VOLUME CONTROL: The AVC circuit eliminates fading and mokes for a more even oudio response.

FOREIGN TUNING: Tunes from 6 mc to 21 me ( 18 to 49.5 meters) and receives Europe, South America, amateur, police, aircraft, shios, and weother stations.
ALNICO 5 PM SPEAKER: For fine frequency response and gyod tone quality and bettor listening
"BEAM POWER OUTPUT": With Beom Power in the circuit you are assured of fine tanes with excellent volume and a minimum of dis. portion on all stations.
THE ADVANCED SUPERHET CIRCUIT uses the fallowing tubes: fwa 14A7's as 1st and 2nd IF, 1407 os Mixer-Converter and Ist RF, 1486 2nd Detector and lit Audio, 35A5 Beam Power Amplifier and $35 \times 4$ Rectifier.

QROADCAST BAND covers from 550 to 1650 kilocyctes for domestic reception.
IONE CONTROL is featured in the 162 to insure listening pleasure.
ANTENNA: This set contoins a built-in-loop antenno that brings in domestic broodeosts. Lugs provided for outside oerial, required for best short wove and rural reception in most areas.
CABINET: The hond.rubbed walnut cobinet meosures $13^{\prime \prime} \times 81 / 4^{\prime \prime} \times 71 / 2^{\prime \prime}$ deop.
MODEL J.62: Lafoyetle 6-Tube ${ }^{\circ}$, 2.Bond Superhot complete with tubes. For operation on 110 volts AC.DC
Shpg.wt. 13 ibs. Code: AORTA.
YOUR COST
EACH
For 220 volt adapter
$\$ 34.95$ - Including Rectifier.

## Cafayette 6-TUBE* 2-BAND SUPERHET

Housed in an attroctively molded plastic case that adds charm to its surroundings, the MC-12 is a radio Latavette is proud ta offer and which you will be proud to own. Nof only will you be able to hear yaur fovorite domestic pragroms but fareign stations as well. Praclically all forms of rodio entertainment are yaurs for this fine radio is capoble of picking up most of the best and powerful transmitters from all over the warld. The complete cabinet of this set and all comoonents have been thoroughly tropicalized. Try the MC-12 in your oughly tropicalized. Try the MC- 12
home on oup 30 doy home iriol plan.

TONE CONTROL: The MC- 12 feafures o fone cantrol for your listoning, pleasure.
TUBE COMPLEMENT: The advanced superhef circuit uses the following-2 125K7's. ! 12507. I 12SA7. I 35L6, and I 3525 rectifier, Circuit de: sign is on oulgrowth of long time "know how." ALNICO 5 PM SPEAKER: For good frequeney response and fine tones.
2.BAND RECEPTION: In oddilion lo the requlap domestic 550.1650 ke band the secand band ranges from $6-21 \mathrm{mc}$ ( 18.49 .5 meters) for Eupapanges from 6.21 mc ( 18.49 .5 meters) for Eurapean, omateup police and aircroft

ANTENNA: Terminal lugs for connecting on outside ontenno are included for best shont wave and rural reception with the MC. 12 . circuit eliminates foding.
THE MC. 12 IS TROPICALIZED: The ontire receiver and cabinet have been treated so as to be moisture and fungus proaf.
MODEL MC-12B: LAFAYETTE 6-Tube* 2-Band in Black Plostic complete with tubes. 110 voits AC-DC. Shpg. wr. 12 lbs. Code: APACE.
 MODEL MC. $12 Y$ : Some os abo MODEL MC. 12 EACH.

53075
20 volt odopler, odd.

ALL LAFA YETTE Radlos are R. C. A. and Hazeltine Licensed

## Safayette

Play the record of your choice or tune in your fovgrite comedian, commentalor, dromotic show of any of the popular bands that make radio listening time-radio pleosure lime. The Lafayette J6I provides you with oll of these and then some. You will oppreciote its com pact construction-the set can be placed an any convenient table and it is easy to move from place to place. The wainut cabinet houses a truly fine Superhet radio, and a modern high auality phonograph portion that will give you mony untold hours of joy and entertoinment We'd like you to prove to yourself that it is fine performer-liy one for 30 days on our hom liial plan. The J6) is truly a ans on our home lifal plan. The J6I is truly a wonderful set

日EAM POWER OUTPUT: Beom Power in the circuit means added volume with o minimum of distortion. Tube complement of the J 61 in cudes two 14A7's as 1st and 2nd IF 1407 Nixer, Converter and Ist RF, 14B6 2nd Delectior and Ist Audio, 35A5 Beam Power Amplifier and 35 Y4 Rectifier.
BROADCAST BAND: The J6I carries the stand ard domestic stations band of 550 to 1650 Kc AUTOMATIC VOLUME CONTROL compen. AUTOMATIC VOLUME CONTROL compen sales for weak and distont stations fading. ALNICO 5 PM SPEAKER: For the discriminoting listener-fine, smooth fones.
MODERN WALNUT CABINET MODERN WALNUT CABINET meosures $141 / 4^{\prime \prime}$
$\times B^{\prime \prime} \times 171 / 4^{\prime \prime}$ deep for lable, desk of shelf.

PHONOGRAPH: Crystal pickup, of the latest featherweight iype. Reproduces your mos cherished $10^{\prime \prime}$ and $12^{\prime \prime}$ records with fine fidel ity. Has a rim driven molor with $9^{\prime \prime}$ flocked lurntable. Tones are sharp, clear and highly accurole
ANTENNA: A built-in-loop ontenno which fur nishes you with excellent, virtually noiseless reception. Terminals are provided for connecting an outside aerial for best reception in outling districts
MODEL J61: LAFAYETTE 6-Tube* AC Phong Radio combination complete with tubes. For operation on $105 / 125$ volts AC only. Shpg. wt 25 lbs. Code: APEAK.

## YOUR COST

## EACH

For 220 volt operation, add
547.50

- Including Rectifier.



## Cafiyette

Easy on the eye-easy on the earl That's the JSIP. Lafoyelfe 1947 3-way portable superhet. Compact construction and expert enginearing. have combined construction and expert engineering have combined to make this three power set 0 desirable companion wherever you go. Let this fine little receiver provide you with good en serfainment at all times, and because of the self-contained batteries and built-in-loop an tenng there are no connections to make. Ai home you merely plug in the lime cord ficon cealed in case when not in use) to ony 110 voli line AC-DC. Leatherette case with locking snap Use our 30 day home trial plan to examine it
"BEAM POWER": Law droin, multi-purpose lubes are used in the highly sensitive and selective superhel circuit. IA7 or IR5 Mixer Oscillator. INS or IT4 IF Amplifier. IH5 or IS5 Detector-RF Amplifier-AVC, 3Q5 Power Ampli. fier or Audio Amplifiep, and 11723 Rectifier LOW BATTERY DRAIN: A pock consisting of 9 volt " $A$ " and 90 volt " 8 " is given long life by low drain tubes provides given long life 200 to 250 listening hours with narmal usoe CARRYING CASE: This truly modern cose lights the eve with its coloring, sturdy struc-

MATCHED PM SPEAKER reproduces voice and music with good fidelity. Speaker is fronted by o neal perforated grille.
TUNING RANGE covers standard American broadcast band from 550 to 1700 kc .
OTHER FACTORS: AVC to cut foding, lugs for external antenna, legible dial, 6 to 1 reduction drive tuning ratio, and automotic power shift culs off battery pock
MODEL J51P: Lafayefte 5-Tube* 3-In-I porlable superhet complete with tubes and battery pack. 110 voits AC.DC. Shpg. wi. 18 lb
Code: APHIS
YOUR COST EACH
Additional botlery pack. Each
s37.95
220 volt adapler cord

- Including Rectifier.
.$\$ 4.50$
$\$ 1.10$



## Lafayette 6-TUBE* AUTOMATIC PHONO-RADIO

Glorious tone reproduction, graceful cabinetry design are yours with this new de-luxe Lafayelle combination phono-rodio. A table model which stands only $81 / 4^{"}$ high, this hand-rubbed walnut cabinet houses a truly fine fwo band radio (American broadcasis plus short wave), and a modern Iwin-post iecord changer of the most advanced desig". For the living roorn that is missing "just one piece"-for the record lover who desires top eproduction and fidellover who desires top eproduction and hidelautomatic Phono-Radio Conibination that hos everything a combination slould hove. Our 30 everything a combination should hove. Our day opportunity to see it and liear it perform.

ANTENNA: The built in-loop antenno furnishes excellent virlually noise-free reception. Terminals for conrocting oulside aerial for beller short wave and rural reception.
GEAM POWER OUTPUT in the circuit for add. ed volume with minimum distortion. Tubes used are Iwo 14A7's as 1 s1 and 2nd IF. 1407 Mixer-Converter and Ist RF, 14B6 2nd Detector and 15 : Audia. 35A5 Beam Power Amplifier and 35 Y 4 Reclifier.
SHORT WAVE RECEPTION: In addition to the regular domes ic $550-1650$ kilocyeles bond the second ranges from 621 mc ( 1 A-49.5 meters). for European, amateur, police, aircraff, ond tor European, arnaleur, police, aircrafi, ond

ALNICO 5 PM SPEAKER: True speaker tones AUTOMATIC RECORD CHANGER: Troubleproof, velvet-smooth, rugged and noiseless proof, velvel-smooth, rugged and noiseless. Plays, changes twelve 10 inch or ten 12 inch
records in one selling with top down. The records in one selting with top down. The
featherweight erystal pickup uses ony standard needle. Reject, selector, and aviomatic-manual switches are on the changer base.
MODERN WALNUT CABINET measures $16^{\prime \prime} \times$ $81 / 4{ }^{\prime \prime} 0^{20}$ 2 deep for desk. toble, or shelf. MODEL J.62C: Lafayelle 6.Tube', 2.Band, A.C. aulomatic phono-rodio complete with tubes. For operaliou on $105 / 125$ vol
only. Shipg. wi 40 lbs . Code. APORT
Your COST ${ }^{\text {w }}$
EACH
for 220 voll operation, add
$574 \cdot 50$

- Including Rectifier.



## Caffiyette 5-TUBE AC AUTOMATIC PHONO-RADIO

[^0]ALNICO 5 PM SPEAKER provides good volunie and exceptional reproduction of tone. MULTI-PURPOSE TUBES are used in the mod. ern superhel carcuil: 12 BA 6 IF Amplifier, 12 BE 6 ern superhel circuil: 12BA6 if Amplifier, $12 \mathrm{BE6}$ 5085 Beorn Power Output and a 35 Wa Rectifier. STANDARD BROADCAST BAND ranges from STANDARD BROADCA
550 to 1650 kifocycles.
550 to 1650 Kifocycles.
BUILT-IN-LOOP ANTENNA eliminates the need for an aerial and ground for good reception. Terminals for an outside aerial are provided to give belter and clearef reception itl rural areas.

EXCELLENT RECORD CHANGER is fully aulo malic. The changer is of the newest design ond ploys twelve 10 inch of ien 12 inch records af a single stacking withour relooding. FEATHERWEIGHT PICKUP affords wide reAUONS and reduces record wear. even audio response. MAHOGANY VENEER CABINET stands $161 / 2^{\circ}$ MODEL MÓ ${ }^{2}$ I3. LAFAYETTE 5Tube Superbep MODEL MC. 3 . LAFAYETYE 5-TUbe Superher aulomotic phono.radio with iubes. 10 Volts AC only. Code: APPAL. Shpg. wi. 30 Ibs.
YOUR
COSt EACH ..................
For 220 Volt operalion. odd.
Including Rectifier.

## DESIGNPD FOR GRACIOUS



MASTERPIECES OF CRAFTSMANSHIP-to please the oracilng con nolsseur of lime lurnliture of devotees of the modern cult. Besides the models shown. we hove many others in Ilnish or trim you prefer bleaches, pastels, vorious woods, dilferently shoped knobs of brushed chrome, oluminum or bronze, models with ongled faces, arocelul contouts, hall or full hinge top IIIIs, efc. Really o custom-bullt Ilnel If you hove a penchont for the unlque, let us hnow-we will surprise you with our talent for crystalliting your original ideas. At nominal cost you con hove a custom-bullt coblnet to blend with your home surroundings to best odvontage. Crotling and out-of.town dellvery charges enfre.


## Model P-2005

An outstonding exomple of superior wood craftsmanship. superior wood crafismanship. thick stock and natural grain


MODEL No, P2005 mahogany venears. Access to the rodio Is from the front-a top lift exposes the rec. ord changer, The radia comportment measures $233 / 4^{\prime \prime} \times 26^{\prime \prime}$, $16^{\circ \prime}$, record changer space is $2314^{\prime \prime} \times 61 / 7^{\prime \prime} \times 16^{\prime \prime}$. $251 / 2^{\prime \prime}$ I $18^{\prime \prime}{ }^{X} 39 /^{\prime \prime}$ "overall, Mahogany. Model P. 2005 -
$\$ 122.00$
Crolling and delivery extre. Prices for other woods and finishes sent on request.


## Model P-2006

Modern and graceful, this 2-door model is typleol of our superior cobinet art. Made by master eraftsmen of chaicest ertrathick oak wood and veneers - hond rubbed to a bril. liant satin glass. Radio and record changer compartments each meosure $166 / 2^{\circ}$. $~$ I $12^{\circ \circ} \times 16^{\circ "}$. Overall size is $361 / 4^{\prime \prime}$ I $371 / 4^{\prime \prime}$ = $17 y_{4}{ }^{\prime \prime}$. Notural Oak.
Model P.2006-
Your Cost.
$\$ 135.00$
Croting and dellvery artre. Prices for other woods ond Ilnlstes sent on request.

## Model P-2009


ures $36^{\prime \prime} \times 61 / 3^{\prime \prime} \times 151 / 2^{\prime \prime}$. Overall site is $39^{\prime \prime} \times 471 / 2^{\prime \prime} \times 1512^{\prime \prime}$. Two buili.in compartments hold your favertte record al. bums. Four gracefully contoured wood supports add charm and dignity to this splendid cabinet Madel P.2009-
Mahogany.
Your Cost
$\$ 145.00$
Crating and dellvery eafra. Prices for other woods and finishes sent on request.


MODEL No. P2003

## LIVING

## Calinuctry

A LAFAYETTE EXCLUSIVE



MODEL No. P2007


Six Months Guarantee
All Lafoyetle and Radiotron tubes are guar. onteed for 6 months from dofe of pureh
(except burnouls and broken tubes).

| Tube Type | Net Price | Tube Type | Net Price | Tube Type | Net Price | Tube Type | Net Price | Tube Type | Net Price | Tube Type | Net Price |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OA4G | \$1.33 | 2×2/879 | \$1.60 | 6F7 | \$1.10 | 6U7G | \$ . 68 | 12K7GT | \$ 68 | 35/51 | \$ . 68 |
| 024 | 1.10 | 304 | 1.10 | 6F8G | . 90 | 6V6 | 1.33 | 12K8 | 1.10 | 35A5 | . 90 |
| O24G | 1.10 | 3Q5GT | 1.10 | 6G6G | . 90 | 6V6G | . 75 | 12K8GT | . 90 | 35L6GT | . 68 |
| 143 | . 90 | 354 | 1.10 | 6H6 | . 75 | 6V6GT | . 75 | 12Q7GT | . 63 | 35W4 | . 68 |
| 1A4P | 1.10 | 3V4 | 1.10 | 6H6GT | . 75 | 6V7G | . 90 | 12SA7 | . 68 | $35 W 4$ $35 Y 4$ | .58 1.10 |
| 1A5GT | . 75 | 5T4 | 1.33 | 6.5 | . 63 | $6 \times 4$ | . 75 | 12SA7GT | . 90 |  |  |
| 146 | . 90 | 5U4G | . 68 | 6J5GT | . 63 | $6 \times 5$ | 1.10 | 12SC7 | . 90 | 3523 | . 90 |
| 1A7GT | . 90 | 5V4G | 1.10 | $6 J 6$ | 1.33 | 6X5GT | . 68 | 12SF5 | 75 | 3524GT | . 55 |
| 184P | . 90 | 5W4 | . 75 | $6 J 7$ | . 90 | 6Y6G | 1.10 | 12SF7 | . 90 | 3525GT | . 58 |
| 185(185/25S) | ) .90 | 5W4GT | . 63 | 6J7G | . 75 | 627G | 1.33 | 12SG7 | . 90 | 36 | . 68 |
| 1B7GT | . 90 | 5×4G | . 75 | 6J7GT | . 75 | 6ZY5G | . 90 | 12SH7 | . 90 | 37 | . 58 |
| 1C5GT | . 90 | 5Y3GT | . 48 | 6K6GT | . 68 | 7A4 | . 90 | $125 J 7$ | . 75 | 38 | . 75 |
| 1 C 6 | . 90 | 5Y4G | . 53 | 6K7 | . 75 | 7A5 | . 90 | 12SJ7GT | . 75 | 39/44 | . 68 |
| 1C7G | . 90 | 523 | . 75 | 6K7G | . 75 | 746 | . 90 | 12SK7 | . 68 | 41 | . 58 |
| 105GP | . 90 | 524 | . 90 | 6K7GT | . 68 | 7 A 7 | . 90 | 12SK7GT | . 75 | 42 | . 58 |
| 107G | 1.10 | 6A4/LA | 1.10 | 6K8 | . 90 | 7A8 | . 90 | 12SL7GT | 1.10 | 43 | . 75 |
| 1D8GT | 1.33 | 6A6 | 1.10 | 6K8G | . 90 | 7AG7 | 1.10 | 12SN7GT | . 1.90 |  |  |
| 1E5GP | 1.10 | 6A7 | . 68 | 6K8GT | . 90 | 784 | . 90 | 12SQ7 | . 68 | 45 | . 55 |
| 1E7G | 1.60 | 6A8 | . 90 | 6L5G | . 75 | 785 | . 90 | 12SQ7GT | . 75 | 4523 | . 75 |
| $1 F 4$ | . 90 | 6A8G | . 68 | 6L6 | 1.33 | 7B6 | . 90 | 12SR7 | . 90 | 4525GT | . 75 |
| 1F5G | . 90 | 6A8GT | . 68 | 6L6G | 1.33 | 787 | . 90 | 12SR7GT | 90 | 46 | . 75 |
| $1 F 6$ | 1.10 | 6AB5 6N5 | 1.10 | 6 L 7 | 1.10 | 788 | . 90 | 1273 | . 90 | 47 | . 75 |
| 1F7G | 1.10 | 6AB7 1853 | 1.33 | 6L.7G | 1.10 | $7 \mathrm{C4}$ | 1.60 | 14A4 | 1.33 | 48 | 1.95 |
| 1G4GT | . 90 | 6AC5GT | . 75 | $6 \mathrm{N7}$ | 1.10 | $7 \mathrm{C5}$ | . 90 | 14A5 | 1.95 | 49 | . 90 |
| 1G5G | . 90 | 6AC7/1852 | 1.33 | 6N7GT | 1.10 | 7C6 | . 90 | 14A7/12B7 | 1.33 | 50 | .90 1.60 |
| 1G6GT | 1.10 | 6AD7G | 1.10 | 6P5GT | 55 | $7 \mathrm{7C7}$ | . 90 | 14AF7/XXD | 1.10 | 5045 | 1.33 |
| 1H4G | . 68 | 6AE5G | . 90 | 607. | . 90 | 7E5 | 1.33 | 1486 | 1.10 | 50B5 | . 90 |
| 1H5GT | 75 | 6AE6G | . 90 | 607G | . 63 | 7E6 | . 90 | 1488 | 1.33 |  |  |
| 1H6G | . 90 | 6AE7GT | . 90 | 6Q7GT | . 63 | $7 E 7$ | 1.10 | 1465 | 1.33 1.33 | 50L6GT | . 75 |
| 115G | 1.33 | 6AF5G | . 90 | 6R7 | 1.10 | 7F7 | 1.10 | 14C7 | 1.33 1.33 | 50Y6GT | . 75 |
| 1/6G | . 90 | 6AF6G | 1.10 | 6R7GT | . 63 | 7 F 8 | 1.33 |  |  | 53 | 1.10 |
| 114 | 1.10 | 6AG5 | 1.60 | 6S7 | 1.10 | 7G7/1232 | 1.33 | 14E6 | .90 1.10 | 55 | . 75 |
| 12.4 | 1.60 | 6AG7 | 1.60 | 6S7G | 1.10 | 7H7 | 1.33 | 14E7 | 1.10 | 56 | . 55 |
| 12A6 | 1.60 | 6AK6 | 1.10 | 6SA7 | . 68 | $7 \mathrm{J7}$ | 1.33 | 14H7 | 1.33 |  |  |
| 12B4 | 1.60 | 6AL5 | . 90 | 6SARGT | . 75 | 7K7 | 1.33 | 14J7 | 1.33 1.33 | 57 58 | . 63 |
| 12C5 | 1.60 | 6AQ5 | . 90 | 6S87Y | 1.33 | 7L7 | 1.33 | 14N7 | 1.33 | 59 | 1.10 |
| 1LC6 | 1.60 | 6A Q6 | . 90 | 6SC7 | . 90 | 7N7 | 1.33 | 1407 | 1.10 | 70A7GT | 1.60 |
| 1205 | 1.60 | 6AT6 | . 75 | 6SC7GT | . 90 | $7 \mathrm{C7}$ | . 90 | 14R7 | 1.10 | 70L7GT | 1.60 |
| 1LE3 | . 90 | 6AU6 | . 90 | 6SD7GT | . 90 | 7R7 | 1.33 | 1487 1457 | 1.10 | 70L7GT | 1.33 |
| 12G5 | 1.60 | 6B4G | 1.33 | 6SF5 | . 68 | 757 | 1.33 | 14W7 | 1.60 | 71A | . 63 |
| 12H4 | 1.60 | 685 | 1.33 | 6SF5GT | . 68 | 7V7 | 1.60 | 14 Y 4 | 1.33 | 75 | . 58 |
| 12N5 | 1.60 | 686G | . 75 | 6SF7 | . 90 | 7W7 | 1.60 | 15 | 1.33 | 76 | . 63 |
| 1N5GT | . 90 | 6B7 | . 90 | 6SG7 | . 90 | 7X7/XXFM | 1.33 | 19 | 1.33 .90 | 77 | . 63 |
| 1P5GT | 1.10 | 6BA6 | . 90 | 6SH7 | . 90 | 7Y4 | . 90 | 24A | . 63 | 78 | . 63 |
| 1Q5GT | 1.10 | 6BE6 | . 90 | 6SH7GT | . 90 | 724 | . 90 | 25A6 | 1.33 |  | . 63 |
| 1R5 | 1.10 | 688 | 1.33 | 65.77 | . 75 | 10 | 1.95 | $25 L 6$ | 1.10 | 79 80 | 1.10 |
| 154 | 1.10 | 6B8G | . 90 | 6SJ7GT | . 75 | 12A6 | 1.33 | 25L6GT | 1.75 | 80 | 48 |
| 155 | 1.10 | 6C4 | . 75 | 6SK7 | . 68 | 12A6GT | 1.33 | 25L6GT | 75 | 81 | 1.33 |
| 174 | 1.10 | 6C5 | . 75 | 6SK7GT | . 75 | 12A7 | 1.33 | 2525 | . 68 | 82 | . 90 |
| 1T5GT | 1.10 | 6C5GT | . 68 | 6SL7GT | 1.10 | 12A8GT | . 68 | 2526 | . 90 | 83 | . 90 |
| $1 \mathrm{U}_{4}$ | . 90 | 6C6 | . 68 | 6SN7GT | . 90 | 12AH7GT | 1.10 | 2526GT | . 68 | 83 V | 1:33 |
| 1 V | . 68 | 6C8G | 1.10 | 6SQ7 | . 68 | 12AT6 | . 75 | 26 | . 53 | 84/624 | . 75 |
| 2 A 3 | 1.33 | 6D6 | . 68 | 6SQ7GT | . 75 | 12AU7 | . 90 | 27 | . 48 | 85 | . 63 |
| 2A4G | 1.60 | 6D8G | 1.10 | 6SR7 | . 75 | 128A6 | . 90 | 30 | . 68 | 89 | . 68 |
| $2 A 5$ | . 68 | $6 E 5$ | . 75 | 6S57 | . 68 | 128E6 | . 90 | 31 | . 68 | 117L7/M7GT | 1.60 |
| 2A6 | . 68 | $6 F 5$ | . 75 | 6577 | 1.10 | $12 \mathrm{C8}$ | 1.33 | 32 | . 90 |  |  |
| 2 A 7 | . 75 | 6F5GT | . 68 | 6527 | 1.10 | 12F5GT | . 68 |  |  | 117N7GT | 1.60 |
| 2B7 | . 90 | $6 F 6$ | . 75 | 677G | . 90 | 12H6 | . 75 | 32L7ET | 1.33 | 117P7GT | 1.60 |
| $2 E 5$ | . 90 | 6F6G | . 63 | (6Q6G) | . 90 | 1215GT | . 68 | 33 | . 90 | 11723 | . 90 |
| 2V3G | 1.95 | 6F6GT | . 58 | 6U5/6G5 | . 90 | 12J7GT | . 75 | 34 | . 90 | 11726GT | 1.10 |





## BURGESS BATTERIES

Used for many years by leading labors tories, governmental departments, com mercial organizations and others demanding tops in quality. All Burgess cells are made of the best material obtainable. Each cell has a seamless drawn zinc can of $99.9 \%$ pure zinc which resists perforation. The cells are separated by moistureresistant egk-crate partitions and a wrap ping of paraffined paper. Individual cells
are totally covered with pitch to seal each cell and to bind them together into a rugged unit. Chrome preservative is included in each cell to preserve the zinc surface and retard corrosion when not in use. To insure uniformity only high quality cells pass acceptance tests. These features plus rigid laboratory control make Burgess batteries the accepted standard.


Farm "A" Batteries The Burgess batteries listed here are of a heavy-duty type radio service. America' farm know the Burgess well.

| No. | Burgess | Voltage | Dimensions | We. | Each |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\times 20675$ | 19 G | 11/2 |  | 9 lbs . | \$2.05 |
| K20500 | 20 F | 11/2 | 7x7318211n | 8 lbs | 2.05 |
| K19828 | 20F2 | 3 | $11^{13} \times \times 3{ }^{15} \mathrm{mx} 6^{\text {x }}$ | 16 lbs . | 3.31 |
| 19891 | 12F3 | 41/2 | 311811近×6 | 15 lbs. | 3.19 |

## Portable "B" Batteries

## Universal Types

Burgess portable " $B$ " type batteries are extremely light and compact. The XX45 is the battery for all "personal" or camera type port ables. The A 30 M primarily for Garod.

| No. | Burgess | Voltage | Dimensions | $W_{t}$. | Each |
| :---: | :---: | :---: | :---: | :---: | :---: |
| K20646 | A 30 | 45 | $31 / 2 \times 214 \times 4 / 2$ | 2 2, ins. | 51.50 |
| K20645 | A30M | 45 | $4{ }^{\text {a }} \times 3$ ) $2 \times 2{ }^{11}$ | 21/2 lbs. | 2.45 |
| K20614 | B30 | 45 |  | 4 libs. | 1.50 |
| K20616 | 230 | 45 | $31{ }_{16 \times 2} \times 1 / 84$ | 1/2 ibs. | 1.80 |
| K20617 | M 30 | 45 |  | 3 lbs . | 1.50 |
| K19837 | $\times 30$ | 45 | ${ }^{2}$ | 2 lbs . | 1.23 |
| K20627 | XX45 | 6712 | $2^{1!}, 6 \times 1: 4 \times 3{ }^{11} 16$ | $11 / 2 \mathrm{lbs}$. | 1.71 |



Stock No.

| K19901 | Burgess No |
| :--- | :--- |
| K20619 | 17600 |
| K19902 | $17 G D 60$ |
| K19903 | 398 |
| K19904 | 739 |
|  | F90D6 |

Farm Combination Packs
No longer need you struggle along with a hit-or-miss combination battery pack. Here is an outstanding opportunity for you to get big city high-powered reception on your Zenith. Emerson. Cronley and Grunow farm sets. No longer will you have to endure interrupted ser vice or periodical breakdowns because of faulty and exhausted butteries.
$K 19903$
K19904
F90D6

Shpg. Wt.

$$
\begin{aligned}
& 4 \times 814 \times 14 \\
& 13 \text { K7 m } 68
\end{aligned}
$$

$$
\begin{aligned}
& 25 \mathrm{lbs} . \\
& 24 \mathrm{lbs} . \\
& 29 \mathrm{lbs} . \\
& 29 \mathrm{lbs} .
\end{aligned}
$$

$$
29 \text { libs. }
$$

|  |  |
| :---: | :---: |
| Wt. Your cost |  |
| Ws. |  |
| bs. | 5.62 |
| bs. | 6.60 |
| bs. | 6.60 |
| bs. | 7.84 |

$$
\begin{aligned}
& \begin{array}{l}
\text { Dimensions } \\
8!\min ^{15} \mathrm{w}: \mathrm{x}^{4} / 4
\end{array} \\
& 153 / 4 \times 4^{\circ} \text {, } 16 \times 711
\end{aligned}
$$

## BURGESS Hearing Aid Batteries

We can now make available to you at this time, a full assortment of Burgess hearing aid batteries. Burgess engineers have produced a series of small lightweight batteries that provide hearing aid users with maximum personal comfort in addition to maximum quality. Every Stock
N19905
K19905

## K19907

 K29908| Metal | Plug | Burgess |
| :---: | :---: | :---: |
| Cap | In | NO. |
| Complete | Kit | K20E |
| Cita |  |  |


| Voltage | Dimensions <br> $11 / 4 x 7 / x^{23}$ <br> 30 |
| :--- | :--- |
| Hearing-Aid Assortment |  |

Burgess battery in this series was built to provide the tops in operating economy. They are packaged in subdued label shades to be less conspicuous on the person. Dealers, cut your selves in on this battery bonanza. Kit HA73 contains an assortment of 73 fast selling batteries.


| Shpg. | Each |
| :---: | :---: |
| Wt | Your Cost |
| li lb. | $\$ 1.05$ |
| 19 lbs. | $\mathbf{1 3 . 3 5}$ |


| 3 lbs . | .061/2 |
| :---: | :---: |
| 6 lbs. | . $061 / 2$ |
| 4 lhs. | . 16 \% |
| 3 lbs . | 1.15 |
| $11 / 2 \mathrm{lbs}$ | . 96 |




A name that has been in the public eye ever since the word＂radio＂became known，RCA batteries have aided battery operated radios to more efficient reception and clearer tones．For a dependable source of power supply
the RCA can＇t be beat．You need have no fears when you purchase in RCA you get one of the finest batterics made toduy．Construction of the RCA batteries is ezcellent．

Portable＂A＂Batteries



## BURGESS BATTERIES



## Ignition Batteries

## Flashlight Batteries

Guaranteed by the date mark on ever cell． Burgess batteries are fresh－dated at the factory and stay fresh for long and economical service． Avaitable in all popular sizes．

Stock Burgess Volt－Shing．Wt．Cost No．No．age Dimensions Qty．Lis．Esch
 Burgess 4FH and 4F2H are both of a new modern design．Eliminates complex connec tions． 4 F 411 and 4 F 5 H are assembled in rug ged metal containers for outdoor use．Poste


## Standard Battery Plugs

Fit any dry battery．Check specifications carefully．When in doubt，give make and mine correct type of plug you will require．

| Stock No． | Hlus． | Description | Used With | Each | 10 for |
| :---: | :---: | :---: | :---: | :---: | :---: |
| K20591 | （1） | 3－prons＂B＂ | 45V．＂B＂Batteries | 91.2 | 85 |
| K20592 | （2） | 3－prong＂C＂ | HSV．＂C＇Batteries | 91／26 | 85 |
| K20593 | （3） | 5－prong＂C＂， | $221 / \mathrm{V}^{\text {V }}$＂C＂Batteries | 16 | \＄1．44 |
| K20590 | （4） | 2－prong＂A＂ | $4^{1} / 2$ V．＂$A$＂${ }^{\text {P }}$ Batteries | 61 | 59 c |
| ＜20595 | （5） | 2－prong＂A＂， | 1．V．＂A＂Batteries | 6.78 | 596 |
| $\times 20596$ | （6） | 3－prong＂ B ＂ | Portable＂$B$＂Batteries | ${ }^{6}$ | 59 e |
| K20597 | （7） | 4．prong＂A \＆B＂ | Comb．1＇2V．＂A＂\＆M0V．＂B＂Packs | 8 c | 720 |
| K20598 | （8） | 2－prong＂A＂ | 6 F ．＂A＂Batteries | 6， 2 Cc | 59 c |
| K20599 | （9） | 4．prone＂A \＆B＂ | Comb．6V．＂A＂\＆90V．＂B＂Packs | c | 12 c |
| $\times 20566$ | （10） | 3－prong＂$B$＂${ }^{\text {P }}$＂ | 45 V ．Portable＂B＂Batteries | $6^{13}$ | 59 c |
| $\times 20567$ | （11） | 8 －prong＂A \＆E B＂， | 71 V ．＂A＂\＆90V．＂B＂Port．Batteries | ${ }_{80}^{138}$ | 1.17 |
| K20568 | （12） | 4－prong＂A \＆B ＂$^{\text {a }}$ |  | 86 $61 / 20$ | 726 |
| $\times 20570$ | （13） | $2 \cdot p r o n g$＂$A$＂ | 3V．＂A＂Batteries | 63 |  |

## Industrial and Test Equipment Batterles

Small light weight batteries particularly de signed for use in portable equipment including radios，test equipment，aircraft，etc．All with binding post terminals．Some have insulated erminals others plain brass．All give excep－ tionally long service for their weight．Burgess No． $5360,2370,5540$ ，and 5156 are standatd

C＂batter ies designed for receivers and ampli fiers，etc．Also used in test equipment． 2370 and 5156 are uvailable with either knurled top bindink posts or with sockets to take standard battery pluys．Z30NX recommended for port． able medical equipment

|  | Plug．Io | Burgess No． | Voltage | Dimensions | Shpg．We． | Your Cost |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K19849 |  | 2 FBP | 1／22 | 2 解 ${ }^{\text {d }}$ is $\times 41$ is | 11b． | \＄0．48 |
| K19644 |  | F2BP |  |  | 1 lb ． | ． 48 |
| K19845 |  | 2 F 2 H | 3 | 25025 $5 \times 3$ \％ | 2 lbs. | ． 60 |
| $\times 20603$ |  | 422 | 3 | $214 \times 1 x^{11} x^{10}$ | 316. | ． 21 |
| K20604 |  | 432 | $41 / 6$ | $29.4 \times 2 \mathrm{x}$ 11 | $2 / 4 \mathrm{lb}$ ． | ． 31 |
| K20602 |  | 532 | 413 | $29.10{ }^{27} .14 x^{13} \cdot 16$ | 1 lb | ． 31 |
| K19867 | K19827 | 2370 | 41 | $4 \times 3$ \％$\times 1$／8 | 2 lbs. | ． 52 |
| K19866 |  | 5360 | 41. | 322\％\％${ }^{13}$ | 2 lbs. | ． 30 |
| K19868 |  | 5540 | 71 |  | 2 lbs ． | ． 63 |
| K19863 |  | 4156 | 221. | 3x3积2＇ | 3 lbs． | ． 91 |
| K19862 | K19826 | 5156 | 22 准 |  | 2 lbs ． | 1.19 |
| K19860 |  | A15ST | 2215 | $3.6{ }^{2}{ }^{3} \times x^{19}$ 年 | 2 lbs． | 1.07 |
| K19861 |  | 5308 | 45 |  | 4 lbs． | 1.50 |
| K19865 |  | 230NX | 45 |  | 2 lbs． | 1.65 |

## record players and accessories



A comprehensive lineup of replacement turers. Each cartridge is precision made carkidges for all standurd makes of crystal
and individually tested for rated frequency pickups as recommended by the manufac. response and output voltage.


FREE IAbsolutelyfree with purchase of an ASTATIC cartridge or pickup, on request. the publication "The Crystul Phonograph Reproducer Its Application and Care.
M166-NO CHARGE.

## SHURE Crystal Cartridges



Wireless Phono Oscillator Kit


Permits your record player to play through your radio without connecting wires. Kit consists of: punched giuminum chassis, two EF- 50 tubes, two tube sockets, and all necessary parts and instruc tions. Shipping weight 2 lbs.
s5.45 K142-Complete Kit wired and tested. Cost

S6.25

## Build-Your-Own Record Player Kit



Complete Outflt Motor, ) \$ $\$ .75$ Turn-table, Crystal Pickup
record player It's fun to build your own all-electric record player money doing it! Can be mounted in a console cabinet with your present radio. It's so simple to put together that anyone can do it in jiz-timel Kit consiste of: (1) Constant speed (78 rpm) rim-drive motor with 9 -inch flocked turntable for rim-drive motor with g-inch hocked turntable, for (2) Offet heod latest onpe serfatarting type: (2) excelle resolt plays all ten inch and twelve inch inches long: unit plays all ten inch and ewelve inch records. Shng. Wt, 5 lbs.
Your Complete K


Record Player Swltch
A complete unit consisting of a panel-mounted switch und juck complete with cables, suppression condensers and resistor sion condensers and resistor,
Emsy to install. Shpe. wt. $11 / 4$ M22006-
s1.32


Vour Cost

## Junior Microphone

Easy to attach to any radio. and it works. In brown fin ished metal case with attach ment cord. Has a push switch to cut radio out whenever desired. Wt. 1
K13.
Elish

## Hand Microphone

Same mike as above, with sturdy black wood hendle for hand use.
M13832 Your Cost

- $0^{c}$


## CR-1-A Crystal Cartridge


placement cartridue for pickups using lightweight Shure. Astatic, Webster, and other curtridges, Its improved design prevents ruining of the crystal while soldering leads. Just remove lugs from terminal pins, solder leads to lugs. and replace lugs
K23962 Shpu. wi 1
Your Cost
s2.35


## GARRARD Table Cabinets

A beouriful hond-rubbed toble model phono case. Striking mohogany finish. Will look well in any room. Motor boord cut to toke Gorrard Model 60 Record Chonger Shpg. wt. 9 lbs.
K19462-Model TM-6.
Your Cost
$\$ 25.30$
X19643-Madel TM-1 with blonk motor boord for ony chonger. $\$ 25.11$
Your Cost...............


## De-Luxe Changer Case

Altroctive compoct, lightweight. De-luye case of solid wood construction with covering of extro fine simulated-alligator fobrikoid. Sewn leother-covered edges. Nicheled locking snops with key. Blank cov. ered motor boord. Inside dimen. $17^{7}$ k $141 / 3^{\circ \prime} \times 11^{\prime \prime}$.
$\times 22343-5 h p g . w f .10 \mathrm{lbs} . \$ \leq 3.95$
Your Cost, Cose Only......... $\$ 3.95$


## Portable Record Changer And Ampllfier Case

An excallent buy for those who want both record ehonger and omplifier in one unit. Takes ony recard changor. All wood. Alligotor leotherelle cover with motching hordwore. For $5^{\prime \prime}, 4^{\prime \prime}$ or $8^{\prime \prime}$ spegher. Ovaroll size $21^{\prime \prime}=161 / 2^{\prime \prime}=93 / 4$. Motor boord $15^{\prime \prime}$ " $16 \%^{\prime \prime}$. Below ponol depth $3^{\prime \prime}$. above ponel $5 y_{4}{ }^{\prime \prime}$. Shpg. wt. 9 lbs.
K22360-R MS PALC. 300 . S
Your Cost, Cose Only


## Waad Table Madel Cabinet For Phono And Amplifier

Brown-erackle, for record ployer or chang-- re, room for omplifier, spsoker. $15 \psi^{\prime \prime}$ " 39 . * $71 / 0^{"}$ high. $81 / 2^{\prime \prime}$ opening in top. Removoble bottom. $41 / 2^{\prime \prime}$ diam. grille. K19452-shpg.wi. 6 lbs. Your Cost.

## automatic record changers

## GARRARD RC-60

This de-luye "mirer" outomolic record changer is of radically different design. You can adjust to perfect operoling speed ( 78 p pm ), or occelerote or retard the tompo. $10^{\prime \prime}$ and $12^{\prime \prime}$ 'records moy be mixed in ony sequence. Swift, gentle chonging regardess of record warpoge. The non-slip spindle is availoble only on Gorrard. The true-tangent pick-up has a boll beoring, jawelled mount and pival. Cabinet measures $15^{\prime \prime} \times 13^{\prime \prime} \times 91 / 2^{\prime \prime}$ overall cleorance. Shpg. wt. 20 lbs.
Model $60 /$ LC - AC Model, $110 / 130$ volts, $50 / 60$ eycles: with law pressure ciystal pickup and permanent stylus.
$k 20985$-Your Cost
$\$ 66.50$
Model $60 / L R$ - AC Model os obove, with erystol pickup for use with reploceoble needies. Your Cose
Your Cost . $\$ 3.50$
Model 60/LM-AC Model os obove, with Gorrard magnotic pickup for use with reploceable needles. $\times 20986-$
$\$ 66.50$
Model $60 / U R$-Model $60 / L R$ modified. Hos AC-DC dual voltoge. $110 / 130$ ond 2 2ro/250 V., $25-60$ cye. K20992-
$\$ 79.51$

## WEBSTER

## Madel 70 Mixer-Changer

Ploys full 11/" stock of $10-12$ inch records inter-mixed-or a stack of elther size. And for the first time-automatic release of drive mechanism when the mochine is not running-0 long-awolted solution for thumps coused by long periods of non-use Madel 70 oufomatically turns off ofter the last recard hos been played. Monual conirol switch permits playing home recordings or "Inside-out" records. The cushioned spindle protects records. It is eosily removoble for eosy honding of ployed records. Concealed mounting hardware. $14^{\prime \prime}$ "square mounting base. Overall depth $101 / 2$ inches. Shpg. wt. 25 lbs.
K20908-Less needle ond bose.
Your Cost
Mefol mig. bose. $14^{\prime \prime} \times 14^{\prime \prime} \times 4^{\circ}$
${ }^{4} 4334$

## Model 56 Record Changer

Here's o now record chonger in the fomous Webster trodition. Ploys ton $12^{\circ}$ or iwelve $10^{\circ}$ records of one looding. Automolic stop ofter lost record. Feother-light erystol pictup. Volvet-soft furntablegentle on your records, quiet in oction. Only one gentie on your records, quiel in oction. Only one record life-no crocked or chipped edges. Cushion: mounted motor eliminates rumble or "wow." Heovr-duty parts for losiling performonce. $14^{\circ \prime}$ squore mounting bose. Overoll depth obove and below mounting boord, 9 inches. Shpg. Wi. 21 lbs. K20909-Model 56, less needle and base. Your Cost
26.66 Mefol Mounting Bose for Model 56. K19464-14" $=14^{\prime \prime} \times 4^{\prime \prime}, w t .6 \mathrm{lbs}$. Your Cosi
$\$ 3.45$

## Model 50 Recard Changer

Compact and efficient. Fast change cyele-obout 4 seconds. Feather-light horizontol and vertical naedle pressure. Automatically ploys all stondord records; twolve $10^{\prime \prime}$ or ten $12^{\prime \prime}$. Quial recard drap on velvel soft heavr-pile furntable covering. Duroble sloinless steel spindle. cushioned for record protection. Heory duty ploied metol ports. Ideol In small radio-phonogroph combinotions. $12 \%^{\prime \prime}$ square mig. base. Depth obove and below mounting boord, 9 inches. Shpg. w1. 20 lbs. K20903-Madel 50 less needle and bose. Your Cost
Metal Mounting 8ase for Model 50 K19465-12\%" $127 / 3^{\prime \prime}$ (4', wt. 4 lbs.
$\$ 21.17$ $\$ 3.45$

## DETROLA 550C

Trouble-free., simple and foolproof. Ideal for orig. inal installation or replacement. Perfect for recon. version of older models and, with suitable connections, will serve to moke on outomatle record changer oul of the average radio set. Silent operchonger oul of the average "adio set. Silent oper-
 R.P.M. motor requires no oilling. High quality eryitol cortridge pickup hos excellent irequency response. Mig. boord is $12^{\prime \prime}$ z $11^{\prime \prime}$, $b 1 / 2^{\prime \prime}$ depth. Shpg. Wt. 17 lbs
K20914-Model 550C, less bose Your Cost
$\$ 18.26$
Metol bose for obove. $12^{\prime \prime} \times 11^{\prime \prime} \times 4^{\prime \prime}$. Brown crockle.
K19466-Shpg. wf. 4 lbs.
Your Cost.
$\$ 3.30$


## phono mofors and furniables



## Find

## G-I RIm Driven Motors

Made by Ceneral Industrics? Insulation between motor and mounting plate and turn table for quiet operation. Oilless bronze bear ings. Two-pole high-speed motor. $9^{\prime \prime}$ turntable. 78 rpm. 110 V .60 cyeles AC. Wt. 8 lbs. Model LX.
K101-Your Cost Each Model MX. Sume as above bui arrangement. Shpg. Wt. 4 lbs K123-Your Cosit Each Model RX. Similar to above, K124-Shipping Weight 5 lbw Your Cost Each K135-Automatic Stop Switeh

S 400
$\$ 4.23$
but 4 -pole $\$ 5.53$

## Standard Two-Speed Motors

Incorporate silent laminated spiral cut bakelite gears completely enclosed and run in oil. Oversized self-lubricating bearings. Will not overheat in closed cabinet. With speed dial hardware, and speed indicator. Will operate on 110 V . $50 / 60$ cycles AC
K100-Two-Speed ( 78 and $331 / 3 \mathrm{rpm}$ ). With $10^{\prime \prime}$ turntable. Shipping $W_{t}$. $\$$ T 13 lbs . Your Cost Ench... $\$ 5.58$ K188-Two-Speed (for 78 and $331 / 3 \mathrm{rpm}$ ). Equipped with a $12^{\prime \prime}$ turntable instead of the $10^{*}$ turntable as listed directly above. Ship-
ping Weinht 13 tbs. Ping Weisht 13 tbs .
Your Cost Each.

## ALLIANCE "Even Speed" Phono Motors

Model 80: Rim drive phono motor, $9^{*}$ turntable. Constant speed $(78 \mathrm{rpm})$. The motor in self-starting and forced draft air-cooled. Equally well suited for 10 or $12^{\circ}$ records. Will opernte on 110 volts, 60 cycles AC only. The durable heavy-duty turntable is smoothly covered with brown flocking. Since it is synchronous motor, the speed is maintained constantly at 78 rpm . The shipping weight is 4 Ibs. Model 80 Alliance "Even Speed" Phono Motor and Turntuble.
$K 176$
Vour Cost Each
s3.83


## E-L Phono Motor Inverter

The Model 2120 phono motor inverter will convert 115 volts DC to 110 volts 60 eycles AC. Masimum output capacity is 3.5 voltamperes and the unit w!11 operate over normal power range of 12 to 24 watts at 60 to $80 \%$ power factor. Built on a channel-type chassis with all components securely fastened. Has a normal life of 1000 hours, for the vibretor which is the only moving part. Vibrator is a plug-in type. eusily removable for replacement. Mounts out of sight in radio eabinet. Sire: $45 x 4 \times 2$ lim. Shpg. wt. 2 lbs. M15704-Phono Motor Inverter St.


## GARRARD Model 201-V

The new Garrard dual-opeed motor is the improved post-was model of the internation. ully famous Model 201T. Operates at either $331 / 5$ or 78 rpm with sbsolute constancy and without waver or rumble. Governor-controlled and equipped with apeed resulator, Self atarting induction type. Because of its, Selfrotor. which is slow running the resulting torque makes this motor amazingly smooth and silent. Lubricate all main bearings in the gears through single oiling point in spindle gears through single oiling point in spindle top. Shippg. wt. 22 lbs.
K20984-AC, $110 \mathrm{v}, 40-60 \mathrm{c}$
\$54.00

## WEBSTER Model M-15

 PhonomotorDesigned, to operate on $105-125 \mathrm{~V} .60$ cycle AC. and can be made to operate on 50 cycle by replacing the 60 -cycle drive on 50 cycle by replacing the 60 -cycle drive sleeve with a
50 cycle drive sleeve. The heavy kauge steel so cycle drive sleeve. The heavy kauge steel
turntable has an accurately made drive rim to turntable has an accurately made drive rim to live it smooth speed and continuous power Covered with soft heavy-pile electrostatic flock. A mounting template is supplied with each assembly. Shpg. Wt. 12 lbs. Turntable 9 inches. Shaded, 4-pole heavy-duty motor K127-Model M-15.
Your Cost Each
$\$ 5.00$


## BALLANTINE Phono Motor

The Russell-Bellantine phono motor is rim driven motor combining low cost and high quality. The two-pole high-speed motor drives the turntable at a constant speed of 78 rpm . Oilless bearings guarantee long. trouble-free operation. Rubber shock insulation between motor and mounting plate and between motor und turntuble insures silent action; forced draft air cooled. $9^{\prime \prime}$ diameter turntable is covered with brown flock. For 110 volts 60 cycles AC. Shipping weisht 3 iths. volts, 60 cycle K105-Ballantine Phono Motor Your Cost Each
s 4.35

## Constant Speed Motor Model CX

A gear-driven motor. Operates at 78 rpm for $10^{\prime \prime}$ and 12 " records. Self-starting induction type. Fully enclosed helical cut gears in oil. Fan cooled. Dimensions: $4 / 1 \times 4,113$ H. Will turntable on 110 voits, 60 cycles AC. With $10^{-}$ turntable and all necessary hardware. An escellent motor for eeneral phono use. This is a constant speed motor, free of all "wow" or
waver. The turntable is of the heavy duty waver. The turntable is of the heavy duty type, well flocked. Will equa! performance of many higher priced types of phono motors. Your Cost Model CX. Wt. 6 Ibs. Your Cost Each


## pick-ups and accessories



## F) WEBSTER "T"

 Lightwelght. Low in. erlic. Braced for ri. gldity. Uses N-1t cartidge. Iv of 1000 cps. 1 oz. min. trock. ing pressure. Flat to 6000 cps. Cartridge weighs 25 groms. Arm ollractively fluled. Grey-tan enamelold finish. Flowless per. finish. Flowless per. formance, maximum sotistoction.K243-Webster T.
Yaur Cost
$\$ 3.82$

G) CLARKSTAN Gouge
Meosures phano needle pressure. Has only one moving part. Reads sither grams of ounces up to 4 oz Completely visible and ruggedly built indispensable to engi neers, manufocturers, servicers and radio solesmen. Warns af excessive weor lo valu-
oble recordings.
KZ19 Your Cos 81,80

## H) ASTATIC Model 508 Nylon

 Impraved appearance and performance Seml - permanent sap. phire-lipped replace able needle. Response 50-8500. Needle pres. sure $11 / 2$ ounces. Arm is spring counter-bal. anced. Finished in light brown enamel. Shpg. $\mathbf{x t} .11 / 2 \mathrm{lbs}$.$K 224-$


N

## N) ASTATIC

## Studio Master

Crystal pickup for uso on lateral transcrip. llons and intended primarily for broad. casting and recording sludio use. Response: 50 to 7000 cps. Nylon Model 400 response 50 to 8000 cps. Wi. 2 lbs. K238-Model 400. Your Cost ......... 514.70 K236-Nylon 400.
Your Cos!
$\$ 14.70$
P) BRUSH PL. 20 Designed for use with dateral cut rocords in cluding broodcost transcriptions. Flat +21/2 db to 6000 cps . $+21 / 2 \mathrm{db}$ to 6000 cps :
stighty rising to 10000 sighny rising to 10,000
cps. $1.7 V / .001^{\circ "}$ sitylus displacement for const asplacement for const. amp. recordings. Force rocords up ig for diom. Black plostic diom. Black plostic satin chrome. K13462-PL. 20. Your Cost.
$\$ 10.79$ Yaur Cost

## J) ASTATIC Low-Pressure Crystal Pickups

 Designed for high. standard perfarmance. With permonent builf. In jewel-tipped styli. Response: 50 to 4500 FF. $10-50$ to 7000 cyeles. K239-FP. 2 l bs Your Cost Each $\$ 1$ Your Cost Each $\$ 10.79$K223-FP.18 $216 s$ K223-FP. 182 lbs
Yaup Cost Each Yaup Cost Each $\$ 10.79$ K228-FL. 482 lbs.

AB.8M Wide range perform. ance. Offiset head. Model AB-EM hos : hinged head. Ideal for sound trueks and mo. bile units. Employs B-2 crysial cortridge. Smooth enomel finish. Response: 50 to 4000 cps. Wh. 2 lbs. K119-Madel AB.8. Your Cosp … ...... $\$ 6.56$ K242-Model AB.8M.
L) ASTATIC S.8. S. 12

Emplays type B corf. ridge. Standard black wrinkle finish. Re sponse: 50 to 4000 cps . Needle pressure $21 / 4$ ozs. Shpg. WI. 2 lbs. Equlpped with oxial cushioning.
K161-Model S-8.
For records up to $12^{\prime \prime}$. Your Cost .......... $\$ 6.56^{\circ}$ K147-Model \$.12. For records up to $16^{\prime \prime}$. Your Cosp 8.17

## M) G.E

Reluctonce Pickup
A variable reluctance plekup cartridge de. signed for high fidelity reproduction. Reduced peproduction. Reduced mechanical imped. ance and smooth hi. frequency. Low level frequency, Low level
oulput of il mili-volis). Natural sapphire tip stylus.
K218-
Your Cost
$\$ 3.47$

$$
a
$$

## Q) ASTATIC <br> Model B-16

An especially fine crys. pol pickup. Offset head reduces tracking error. Uses a $8-2$ crystal cart. ridge. Free from me. chonical resonance throughout audio range, Response: 50 to 4000 cycles. Wi. 4 lbs. K173-Model B.16. For records up to $16^{\circ \prime}$. Your Cost $\quad 514.70$ K172-810-records 10 12". Your Cost.. $\$ 11.47$

## R) AUDAX Pickup Assemblies

Model L-Flat $\pm 21 / 2 \mathrm{db}$ to 6500 cyc .48 gms. press. -25 db . High imped. Withstonds temp. and press.
K210-618. To $18^{\prime \prime}$ records. $131 /$ " " I I ........ $\$ 23.70^{\text {K }}$ K210-L18. To $18^{\prime \prime}$ records. $131 /{ }^{\prime \prime}$ " Ig...... $\$ 23.70$
K13457-LI7. To $12^{\prime \prime}$ records. $12^{\prime \prime}$ Ig...... $\$ 16.50$ Micradynes - Flat $+21 / \mathrm{db}$. $7500 \mathrm{lg} . . . . \quad \$ 16.50$ Micradynes-flat $\pm 21 / 2 \mathrm{db}$ to 7500 cyc .43 gms . press. - 25 db output. Imped. 200 ohms. May be used with lowel pl.
$\mathrm{K} 217-\mathrm{D} 39 \mathrm{H}$. To $18^{\prime \prime}$ records. $141 / 2^{\prime \prime}$ ig.... $\$ 38.85$ K13458-D38H. To $12^{\prime \prime}$ records. $12^{\prime \prime}$ Ig... $\$ 29.85$ Pro.5-Designed for and equipped with special sopphire needle. Small maving mass reduces vibrafory momentum. Flat $\pm 2 \mathrm{db}$ to over 10,000 cps. 35 db oulput. 35 gms. press. 200 ohms. K208-Pro.5-Your Cost

## | phono needles, albums and recording dises

## Long Playing Phono Needles For Commercial Records

(A) Sapphire needle with offset shank for minimum wear and low scratch level. Shadowgraphed. Play about 2500 sides without need for change.
(B) Lafayette. Excellent 4000 play needle. noise.
K43-Your Cost Each
(C) Norris flame-tipped

Mlays.-Your Cost Each - Card of 10.
(C) Norrls all-sapphire needle

K180-Your Cost Each
(b) - Card of 6
(D) RECOTON Supra-finest quality sapphire shuft minimizes record weat.
K113-Your Cost
(D) RECOTON Primus-lons-life sapphire

K114-Your Cost
(D) RECOTON sapphire playback needle. igned for plastic records or home recordings. K116-Your Cost


## Playback Phono Needles For

 Standard Commercial Records(E) High fidelity shadow tested steel needle. Each
(E) High

K430A Packnge of 12, Your Cost
K4308-Package of 30, Your Cost
E) RCA steel phonograph needles.

K159 Soft Tone (Pkge. of 75) Any Package
$K 153$ Full Tone (Pkge. of 100) TOC
E) RCA Chromium (Pkee, of 100 ) $K 557$ Pa 10 Pack 357 -Package of 6 (E) Lafayette Chrome plated individually shadowgraphed neediles. Good for 15 plays each
(E) Green shank shadow graphed
each.
$\times 432$-Puckaue of 100 , Your Cos
K432-Pucknge of 100. Your Cost (F) RCA Red Seal needl records. 10 Packages for
K141-Package of 50 , Your Cost


Playback Needles For Home Recordings
(G) Sapphire point needle for home recordings only. Fine high frequency response. 6000 perfect plays with almost no record wear
K429-Vour Cost Each
53.60
(E) Transcription metal alloy needle. Long life, high-fidelity. Semi-permanent self-lubricating point. 40 to 50 hours on standard records, longer on home rec.
(E) Red shank steel needles for acetate recordinge. Individually shadow tested. K433-Package of 100 , Your Cost

## General Purpose Playback Needles

For playing either home recording discs or atandard commercial records (Victor, Decca, Columbia, Bluebird, etc.).
(E) Transcription steel needle. Shadow tested. Fine responae, little wear. Play 5 to 10 records, K346 Packare of 10 , Your Cost K347-Package of 25 , Your Cost K 319 Puckage of 75 , Your Cost
(F) Filter point highly polished surgical steel needle. Shadow tested. Low surface noise. $10-15$ pluys.
K 222 Package of 10 , Your Cost
$\times 226$ Package of 25 , Your Cost
(H) Cactus Nectles: Cour Cost
H) Cactus Needles: Cause no wear..................... 88 c 0 Packages for $\$ 1.89$ K35 -Package of 12, Your Cost
$\qquad$
$21^{\circ}$ (3) Greythorn Needles: Special thorn. Ideal for cryatal N262 Packuge of 15, Your Cost

JENSEN Needle Pack


A bargain for aervicerst Here it kit of phonograph needles which includes three JENSEN Royal Jewel needles (retailing at $\$ 2.50$ each) and three JENSEN Concert needles (retailing at $\$ 1.00$ each). Can be conveniently carried in pocket for immediate use on service calls. Printed matter alongside the needles tell you the selling points. K 181 Kit of 6, Cost. $\$, 25$

## afayette



Needie Sharpener A new and improved
type of needle sharptype of needle sharpener that makea. smooth accurately shaped point on cac cus or thorn needles $\mathrm{H}_{\text {as }}$ record bruah ${ }_{K 274}{ }^{\text {Wt. }} 1 \mathrm{lb}$.
Your Cost
$95^{\circ}$


Peter Grey Pointer Famous "Kacti" harpening coctus needles. Well made and easy to use. brush. Beautifully packed-an excellent gift. Wt. 2 lbs.
K293
Your Cost $\times 271$
10 For
$\$ 1.25$

## Stroboscopic Speed Checker

 Placed on turntable and illuminated with a bulb (AC) indicates correct speed


Record Lubricants RENEWER: For acetate records. Cleans. lubricates and protects. Thin film of lubricunt reduces friction. Hardens and preser ves acetate records. 2-ounce bottle Your Cose
RENEWER: Same for comniercial records such as RCA Victor, Columbia, Deeca, etc. K 394 - 2 -oz. bottle.
Your Cost
$K 395$ - $1 / 2$-oz. trial size Your Cost cording blank before Applied to re makes the shavings fluffy and reduces cutting friction K424-2-oz. bottle Your Cost

## Needie Cups

Convenient needle receplacle. Has antique bronze finish. $14{ }^{\prime \prime}$ diam Kour Cosen type Your Cost caeh
Kour coited type Eoch IIc


Phono Motor Lubricant and Grease
An indispensable item for the home or ser vice shop carefully compounded as protection for al phono motors, record changers, automatic tunera. etc. Insure your
phono equipment asainst wear and phono equip
breakdown

|  | Gro |
| :---: | :---: |
| Lubricant | Stock Your |
|  | No. Ois. Cost |
| K15194 ${ }^{\text {2 }} 21 \mathrm{c}$ | $\mathrm{K} 152014^{4} \mathrm{29c}$ |
| $=\sqrt{3}$ | Needle |

## For Phono Pickups

## And Recorder Heads

 Needle set screws (thumbscrew and slotted head) for all popular phono pickups and reeordink heads. Specially made and thor ouxhly hardened. Kit of ten assorted types, especially handy for all service shops. Includes all K13981 types.Sevicer kit of 10 as sorted screws.
Your Cost

RECORDING DISCS


Paper Base
Yellow label. Coated both sides K $21969-$ SIX $612^{*}{ }^{*}$ Dlscs. . 600 $K 11970-$ SIX $8^{\prime \prime}$ Discs ... $\$ 1.00$ K21971-SIX $10^{\circ}$ Discs ... $\$ 1.40$

## LAFAYETTE Glass Base

Has a perfect uniform coating of highest grade nitrate on smooth klass base
K11986-10" Size in lota of 12, Each
in lots of 12 , Each EACH 8569c
Red Label Alum. Dises
Conted both sides on hervy gauge alum. base. Suitable for all types of home recording. Labeled. No. Size 1 to 24 Up


 | M11984 | $10^{\prime \prime}$ | $40 c$ |
| :--- | :--- | :--- |
| M11978 | 12" | 35 c |

PRESTTO Recording Discs Orange Seal: Compares favorably in appearance and perform ance with commercial discs. Recommended for schools and studios. Coated both sider. No. Coet Size Each K 11955
K 11956
K 21957
K11957
K11958
Green Seal: Professional model. Alum. base. The finest grade of recording blank. Coated both

## sides.

No.
K 21961
$K 21960$
$K 21959$
"Protect-O-Flap" Album


Saves you the harrowing experience of having your fa vorite records slip out of the album accidentally. A protective flup on each pocket bossed mast such accidents. Elope No. Size Pockets Lbs. Each $\begin{array}{llll}\mathrm{K} 20207 & 10^{\circ} & 12 & 2\end{array} \mathbf{\$ 1 . 1 0}$ | $\mathbf{K 2 0 2 0 8}$ | 12 | 12 | 2 | $\$ 1.29$ |
| :--- | :--- | :--- | :--- | :--- |



## De-Luxe Album

 Gold embossed. Beautiful rich beautiful rich brown fabrikaid cover. Sturdyconstruction. 12 pockets. 12 P........8.89 89

K21892- $10^{\prime \prime}$ size
$\qquad$ $\$ 1.05$

Economy Model: Brown cover, sturdy construction. Index. 12 pockets. Shps, Wt. 21 bs .
$\left.K 21886-10^{\circ} \quad .69 \mathrm{c}\right\}$ ( 6 \{ $\$ 3.59$
K21887-12"..85c\}Ea. for 4.59

## LAFAYETTE Record

## Carrying Cases

The best protec-
 tion for your rec. ords. Strong all wood cases cov. ered with attractive. durable fabrikoid. Sturdy handle and hardware. 4 lbs .
$\times 22345$ Holds 50 ten-inch re

## ords.

Your Cost
ecords
Vour cost

## recording equipment

## REK-O-KUT Professional Recording Equipment

 Master-Pro Overhead Recording Mechanism Crystol Cutter - Master Design Mastor Performance The "Master.Pro" is precisely machined meticu. lously inspected and rigldly tested to give you a allows instant levelling of the mechanism by raising, lowering, ar tilting the unil. Universal cuttor maunt for inferchonging most mognetic or erystal cutters. Any length spiral. steep or shallow, in one motion. Drive gears totally closed to prevent fouling br loose chips. Potented "holf nut drive" prevents grouping if ane or iwo threods are forn or chipped. Stainless steel load screw furns on hardened steel balls which need no lubrication. Standard screw cuts 120 lines/inch, outside-in. For any turntable with standard center pin. Block wrinkle and pollshed chrome finish. Shpg. wt. 15 lbs. Ki39-Including crystal culter.Your Cost Your Cost

## $\$ 175.00$

Dual Speed 16" Recording Motor Assembly A precision-constructed instrument. Used by many leading
ducational institutions. broodcasting stations and educational institutions. Lothefurned 25 lb . cast-iron turniable, dynamically balanced, with disoppeoring drive pin and rubber turniable pad. Uses poweriul constant speed motors turntable. Machined mountina base has integral lathe bored and lapped turntable bearing. Designed for best use with "Master-Pro" $16^{" 1}$ overhead record. ing mechonism. Shpg. wt. 52 lbs. ing mechonism. Shpg. Wh. K 22533 -Model V.Standard. K22533-M
Your Cos!
${ }^{5} 165.45$


Recording Level Meter Enobles artist to waten volume while recording. Dial readable up io 25 feet. Parmits full groove utl. need for second person to operate need for second parson to operate amplifier contrals. Operales from

output of $8,15,200$, or 500 ohm | omplifier. J lbs. $\$ 29$ |
| :--- |
| 20.50 |



## Matching Transtormer

 Designed to match the High Impedance. High Fidelity crystol cutter. Input laps at 8 and 500 ohms for tapping high impedance culter on the voice coll or a 500 ohm amplifier line. Color coded pin jacks. Shpg. wt. 3 lbs.K132-Model T.
Your
Cost
59.50


Sapphire Cutting Needles
(A) Lapped edge. For acelate discs. Precision cut jowal ossures low surface noise ond high fidelily. Over 5 hrs. cult.
lin life
kig1-Your Cost Eoch $\$ \mathbf{3 . 2 3}$ K181-Your Cost Each (A) Like above with Long Shonk for Presto Professional and Brush cutting
heads. Your Cost Each $\$ 3.2,3$
$\mathrm{~K} 198-$ Yau (B) Sapphire cutter ground 10 W.E. specs. For acetate discs. 10 hours life. Can be reground. \$4.25

## Steel Cutting Needles (C) Stellite culs hundreds of acelate

 discs. Can be reground. \$1.18 K337-Your Cost Each. (D) Polished steel cutters$15 \cdot+0$ Pen inch acepate discs. K348-Pockage of 4. Your Cost D) 110 Polish while they cut. Hand lopped. K434A-Poctray cut. H Your Cost

## PRESTO Model K Recorder

- Magnetic cutting head and pickup of highest grade. Full size b-tube amplifiar with push-pull triodes. Equalizer and tone control suppress needte scratch - Safety cam lever protects needles against damage. - Loudspeaker may be operated af a distonce from unit. - Quick change from cutting outside-in to inside-aut. - Exclusive rubberatired furniable with direct drive. Exceptianally light and compact. Ideally suited for sales tralning, industrial schools, speech leachers, and for professional actors and musicians. Records or plays back 15 minules of $331 / 3$ RPM for 78 RPM when internal adiustment is made), on one side of a $131 / 4^{"}$, disc; also makes
$6,8,10$ and 12 inch records. Warks in $110 \mathrm{v}, 60$ eycle AC . Amplifier serves an audience of 5000 . K22500-Shipping weight 59 lbs
K 22500 -Shipping weig
Your Cost. Complete
$\$ 348.00$
GENERAL INDUSTRIES RECORDERS


## Single Speed Home Recorder

And Phono Assembly
Cuts records ta $10^{\prime \prime}$ diam. Plays records' 10 12 $2^{\circ \prime}$ diam. Cul-depth odiustment on, retractable driving pin permits ploying of stondord records without adiustment. Heary-duty rim drive Induction motor. Self starting -unifarm speed ( 78 RPM). Works on 110 V . 60 eycles AC. Assembly includes motor; $10^{\prime \prime}$ furntable; culting mechonism; law press, crystal pickup; cutter arm rest; pickup rest: and $15^{\prime \prime} \times 10^{\circ}$ base plate. Shpg. wh. 16 lbs. K22535-Model GI.R70L. Your Cost.
\$24.02

## Dual Speed Home Recorder

 And Phono AssemblyHas same features as model above plus speed change dial which permils operollan at 78 or $331 / 3$ RPM. "Repro. ducer" and "Recorder" engraved on pickup and cutter orms. Dynamically bolanced motor. Compensating switch operated by speed change dial. Works on 110 V , 60 cycles AC. Plate measures $15^{\circ "}: 111 / 2$ K 22537 -Model GI.R9OL. Your Cost. $\qquad$
$\qquad$ $\$ 28.37$

## Combination Record Changer-Recorder

Cuts records to $10^{\circ \prime}$. plays 10 or $12^{{ }^{\prime \prime}}$ records automaticolly. With lever in extreme position, all slzes of records easily removed. Non-iomming record handling fingers. Handles records with either runin or oscillailing trip grooves. Provision for gulding plekup needle on records without load-in grooves. Shock mounting permilts isolotion of antire assembly. Furnished with low pressure erystal pichup; weighted 78 RPM furntable; on-off switch ond sping mounfed hardware. $14^{+1} \mathrm{z} 14^{\circ 1}$ baso plote. Brown iridescent finish. Streamillned plastic trim on pickup and culter arms with identification engroved. Shpg. ${ }_{w t} \mathrm{up}$ and 25 lbs .
K22536-Model GI-RCI3OL
Your Cost
539.34

## Recording Motor And Turntable

Constont speed (78 RPM) self-starting motor. Weighted $10^{\circ}$ turntable. Motor insulated from plate and rable. Retractable drive pin. Rim driven. Driving pulley, ider wheet and turntable allgned in one plane. Oilless branze bearings throughout. Furnished with mounting plate: turntable: mounting serews, nuts and washers. Depth from mounting plate to boitom, $218^{\circ \prime}$. Works on 110 V , 60 cycles AC. Shpg. wt. 11 lbs
K104-Model GI-RM4.
Your Cost
s8.88


## TECHNO-CRAFT

## Overhead Recording Mechanism

> A professionol type everhead record culting mechanism. Cuts 110 lines inch. Avallable with Astatic $\times 26$ crystal cutter or Astatic M4I magnetic cutter. Instantaneous lock on up position. Positive engaging gear. Positive drive connat be position. Positive engaging gear. Positive drive connot be
clogged by chips. Black wrinkl finish. Magnetic cutlers clogged by ehips. Black wrinke finish. Mag
$12^{\prime \prime}$ diom. models-wl.
S60.00 16" diam. models-wl. 6 lbs.
K115-Crystol cutter
K 129 -Magnetic cutter
$\$ 70.00$


## ASTATIC Mag-

 netic Cutter A superior, low impad-ance ( 8 ohms) magnetle ance ( 8 ohms) mognetic
recording head. Excel. or as a replacement for lent as a new unit or af a replacement for existing equipment. Wide frequency range and excellent power sensifivity. Driving volf-
age, $3 Y$. RMS. Useful Upper limit, 7000 age, $3 V$. RMS. Useful Upper
c.p.s. Oxidized
finish. Net weight $31 / 2$ ounces. Smipping weight 2 lbs. K13727-Model M.41-8 Your Cost

excellent power
exceltent power 31/4". Shipping weight 2 il
K13767-Model X-26. Driving voltage 75 V RMS. Usoful upper limit 5000 eps K 13768 -Model X-29A. Driving voltage 120 V RMS. Useful upper limit 6500 cos . Either Type,

ASTATIC Crystal Cutters
Heavy die-cost car. iridge assemblles. Wide frequency range and



For Audiences Up To 500 Indoors-Areas Up to 3000 Sq. Ft. Outdoors
Can Be Used With 1 Microphone And 1 Record Player-Mixing And Fading
A Low-Cost Amplifier Of Excellent Quality-Many Werthwhile Features

More than fust a starting point in selecting the right amplifier tor the right job. A high quality, sturdy ampllitior which can be used by sore deman srocors, coleterios, testcums ond simillar applications rystems ond similar applications. include saporate mike and phono controls, three output impedonces of 8,15 and 500 ohms, ond a basstrable acoustic compensator. Op. erating controls are on front ponal. distinctively loboled, simple to use. Input and output socthets are ploced of reor. Consideration for the non. technical "laymon" will appear obvious in the eosy-to-moke con. noctions. All wiring and smaller -lectricol parts may be exposed by removal of the bottom panal. Spacial cirreuft and separate controls permit any voriotion of mix.
ing ond foding. All inputs may be used at the same time. Thus, announcer moy speck while phono level of music may be or voluma level of music moy be diminished verse negotive leadbock circuil used for better trequeney and min mum distortion. Ampla ports for ropid heat dissioption and longer life of tubes ond other somponents. Finished in handsome lon wrinkle with dark brown ponel and red plastic knobs. A pleasant yet subdued color combination to satisify the discriminating eye. For those who want an efficient low power omplifier at minimum cost, this is a real buy! MODEL 708-8.woll amplifiar, com. plote with tubas. Code FLOCK. 10 lbs . Your Cos
$\$ 27.60$

## SPECIFICATIONS

Normal Power Output. s Watts Mierophone Channel Phono Channel. Pone Control Microphone Goin $\quad 117 \mathrm{db}$

Phono | Phono Goin |
| :--- |
| Frequancy Response: 4010 |
| 72 |
| 1000 | C.p.s. Level Below Normal Out. Hum Level Be

Put: -58 db put: -58 db . Normal Output:
Distorion Ai Less thon $5 \%$. Normal Output. Output Impadancers: 8, 15, and
500 ohms. 500 ohms. Seporate Mike \& Phono Controls
sass-T Sass-Trebla Tone Control Current Requirements: 110.120 Tube Lineup: 1.7C7. 1.784 1.6L6G 1.5Y3G (rectifier). Dim.: $91 / 2^{\prime \prime} H \times 6^{\circ " W} W \times 7^{\prime \prime} D$.

## Lajayette FOR SOUND VALUE

LAFAYETTE 8-Watt Indoor System
Lafoyefte's outstonding value-isader in the low-power field. A perfectly bol-
onced combination. Lightweight mike anced combination. Lighiweight mike. speoker. Attractive wall battle. An unusual bu
MODEL 7015 -Complete unit ineludes: 1-Model 708 Ampllfier, completo with lubes.
-10 inch -Fabrikoid Speaker K19290. I-Combination Ciffle K20064.
Siond with $71 / 2$ Crystal Mike and Stand with $71 / 2$-foot cable and end
cannector attached $K 13623$. connector attached K 1323
$1-25$-foot coble K20920. READY TO OPERATE. Complete with instruction and plugs. Code FLORA.
27 lbs.


Your Cost.
s 44.60

LAFAYETTE 8-Watt
Outdoor System
Perfect for outdoor lectures, demon. strations, sideshows, paging systems, Cle. Dessigned for simple instollation. Clear sound output overcomes bockin outdoor systems. MODEL 703 H -Complate unit includes: 1-Model 708 Amplifior, complete with Uubes.
1-University Speaker K19348
I-Combination Crystal Mike and Stand with $71 / 2$-foot cable and end con. nector atrached K13623. 1-25-fool coble K20920 READY TO OPERATE. Complere with 17 tbs. Cost .................. $\$ 5 \mathbf{3} 00$
Your


## LAFAYETTE 8.Watt

## Economy Portable

The Ideal ouffit for demonstrators, solesmen, lecturers, ele. Ampllifier is, remavable as a unit from the spurdy carrying case. Cose has wire mesh be. hind speaker opening to prevent domMODEL 702 P -Comple 1-Model 708 Amplifier, complete with Jubas.

- la-inch PM Speaker K19290.

1-Porroble Speoker Case K19445.
with $71 / 2$ foot cabla and and con. nector attached K13623
1-25-foo cable K20920.
READY TO OPERATE. Complete with instructions and plugs. Code FLUID. Your Cost $\quad \$ 5$. 00



## afayette FOR SOUND VALUE

LAFAYETTE 18-W0中t Indoor System
A speciolly chosen combinalian suliduol speokers gives greoter power hondling capocity and distribution of sind gag and -52 db output. Adius! oble stand provided with sure-arip outomatic friction clutch. Wall battes ore mode of hordwood with brown leatherelfe covering. Easy to install MODEL $705 \$$-Complete unit includes -Model 718 Amplifier, complete with lubes, less phono record ployer. 2-12-inch PM Speakers K 19272. 2-Fabrikoid Woll Batfies K20006 $1-$ Adiustoble Mike Stond K13647. - Turner $22 x$ Crysiol Mite K13445. READY TO OPERATE. Supplied com plete with instructions and plugs. Microphone has 7 -foot coble with en
connector artache lbs. shpg w. 75.00
Your cost MODEL 706 SP-Same system as above but with built-in phono record ployer Code FOIST.
Shpg. wl. 80 lbs Your Cost
Y83.00


## LAFAYETTE 18-Wot

 Oupdoor SystemA superior outdoor system with cover. weatherprool speokers hove extremely high proiecting efficiency due to the spectally designed reflex feoture. This gives the some effect as added "boosi iustoble from 35 to 68 inches. Miero phone has buill-in wind gog and -52 db output. Optionol system hos built in phono record ployer records up 1012

- Model 718 Amplifier, complete will Subos, less phono record player 2-Universiry 18.8 Horns K 19348 . -Turner 22 X Cryslol Mike K13445 - Adjustoble Mike
-50-coot coble K20920.

READY TO OPERATE. Microphone ho -foot coble with end connector on oched. Complete with instruetions ond plugs. Code
Shpg. wf. 48 lbs . Shpg. Wi. ${ }^{48}$
$\$ 87.00$
MODEL 711 HP -Some os obove with built-in phono record ployer. Cod FOR8Y Shpg. w. 53 lbs. $\$ 100.75$



- For Audiences Up to 3,000 Indoors-Areas Up to 20,000 Sq. Ft. Ouldoors - Can Be Used With Two Microphones And One Record Player-Mixing and Fading - A Quality-Buill Amplifier Ideal For Most Applications Yet Very Reasonably Priced

Lafoyatte's lotest model of this very popular amplifier size. Ideal for use in churches, smoll halls, pestouants, elc. Especially sultable for dance bonds. Another of our modwill consider for its quallity and performance efficiency. II is also on Ideol outdoor omplifier which will cover arsos up to 20,000 squor feel with ease. For flexible opero tion, it has twa separate micro phone channels in addition to o stondard record player chonnel. Individual controls for each channel. Output is topped of 2, 4, 8, 15 and 500 ohms for impedonce moreh. ing. Boss-treble tone equolizing circuil ollows for variation in frequency response. Multiple mixing circuit permits the use of both microphones and the phono record 2

Inverse feedback ossures excellent audible range. Larger cabinet and chassis permit wider spacing for proper ventilation and use of more costly components. All ports have ultra-conservative ralings with respect ta over-load capacities. Optional model has bullt-in phono record ployer. Record player has Astatic pickup and takes records up 12 inches in diameler.
MODEL 726 - 25-woft omplifier complete with tubes less phono record ployer. Code FARAD Shpg. wh. 30 lbs. $\$ 53.85$ MODEL 727-Same as above but with built-in phono record ployer. Code FARCE.


SPECIFICATIONS Normal Power Output. 25 Wolls Normal Power Output. 25 Watl
Microphone Channels Phono Chonnel
Tone Conlrol
Mierophone Gain ....... 125 db
Phono Gain Phono Gain
Frequency Response: 50 to 10.80 db C.P.s. Hum Level Below Normal Out. Put: -57 db .
Distortion Ai Normal Oulput
Oess than 5\% Impedances: 2 4, 8,15 , and 500 ohms. Seporote Mike \& Phono Controls Mixing ond Fading
Boss-Treble: Tone Control. Current Requirements: 1io-120 V. A.C. 60 cycles, 135 W Tube Lineup: 2.784 1.7N7.
2-6L6G. 1.5U4G (rectifier). 2-6L6G.: $15^{\circ} \mathrm{H}$ \& $81 / 4^{\circ " W}$ W $81 / 4^{" D}$ D.

## Lajayette For SOUND VALUE

## LAFAYETTE 25-WaH

Indoor System
A complate indoor system of a surfull oudio output; dust-proof voice coils and mognets covered by pressed fibre housings. Twa speakers provided to achieve full usefutness af amplifier microphone with buills-in wind gag are further assets to this sound system Flexibility and power at an ecanamical level!
MODEL 712S-Complete unil inciudes: - Model 726 Amplifier, complete wil 2-G.E. 12 -inch PM Dynamic Speakers 2-Fabrikold Wall Bottles K20066. 2-Fabrikold Wall Baffies K20066
1-Microphone Stand K13647. - Mucrophone Crystal Mihe K13445. - $100^{\circ}$ cable K20920.

READY TO OPERATE. Complete with instrucions, plugs and 7.foot micro phone cable with end sonnestor at
rached. Code FAURD. Yhpg. wh. 85 Ib
MODEL 713 SP-Same as with builrin phono record player. Code FAUSE.
Shpg. wh. go lbs. $\$ \$ 10.40$
LAFAYETTE 25-WaH
Outdoor System
A Lafayatte sound system that includes components, which odequately moteh the amplifier for rated power ond effi. with highest quality Alnico magnels and one-plece molded phenolic diaphragms. Drivers and trumpels immune to entreme temperalures and corroslon.
The reflez horns are compact and com. pletely weotherproof. Mierophone hos - 52 db output and mike stand is adIustable $1068^{\prime \prime}$
MODEL 717 H -Complete unit includes: - Model 726 Amplifier. complete with

2-University SMH Horns K2004s
2- University MAH Drivers K21305
I-Adiussoble Mite Stand K13647.
1-Turner 22 X Crystol mike KI3445.

- 100 .foot coble K20920

READY TO OPERATE. Complate with phone cable plugs and 7 -fool microFIAME connecior or-
Shpg, wt. 68 lbs . S
Your Cost 9.85
MODEL $720 \mathrm{HP}-$ Same as above. but with buill-in record ployer. Cod FLANK.
Shpg. wt. 73 lbs Your Cost $\$ 130.50$


## 35 WATTS

## - For Audiences Up To 4000 Indoors-Areas Up To 30,000 Square Feel Outdoors <br> - Can Be Used With Two Microphones And One Record Player-Mixing and Fading - A Sturdy Power Ampliiier-Easy to Operate-Still Easier To Buy

$\qquad$ A high-quallity amplifier perfected With enough power for indoor oudiences up to 4000 people it is on ideal unit for the lorger donce halls, churches, school auditorlums theatres and concert holls. D signed to fill the "gop" between medium power and high power sys. lems. One of the oufstonding feo tures is the electronic boss ond treble boost through use of two in. dividual tone controls. Inverse leedbock reduces harmonic distortion, stabilizing the omplifier ond improving the wave form on overall response. Both microphones and phono moy be used of the same ine. seporate conirois being pro output imper purpose. Muples and 500 ohms allow for tlevibility and speoker orrangement. Proper
spocing of components gives minidissipation All and maximum heot chasen for their high overload sofety foctor. Quality craftsmon. ship in all connections gives odded protection ogoinst rough hondling and lang use. Pilot light lets you know when set is on. Exterior is finished in our new ton wrinkle. No superfluous frills which domoge easily or only serve to add undesiroble bulk. Ample grillework pro vides rapid heat elimination, thu lengthening the life of the fubse ond other components. With this high power, precision engineered omplifier, you get quolify plus per formonce at nominal cost1
MODEL 735 - 35-wot1 amplifier complete with tubes. Code FACIL Shpg. w. 30 lbs Your Cost
Y

SPECIFICATIONS Normol Power Output. 35 Wotts Miehophone Channols Phono Chonnel Tane Controls
Microphone Gai Microphone
Phono Gain. Mono Gain Gain ........... 125 db Srequency Response: 50 000 c.p.s Response: 50 to 10 , Hum Level Below Normal Our. Distortion Ai Normal Output: Output Impedances: 2, 4, 8, 15 ond 500 ohms.
Seporafe Mike \& Phono Contrals. Indlviduol Bass and Treble Tone Controls. Current Requirements: 110.120 Tube Lineup: 4-7C7, 1-7N7, L6G, 1.504 G (rectifier). Dim.: $151 / 4^{\prime \prime} H \times 81 / 2^{\prime \prime} W^{\prime \prime} \underbrace{\prime \prime} D$

## afayette FOR SOUND VALUE

LAFAYETTE 35-WoH Indoor System
The complete indoor system with power plus. Auggedy ossombled 12 -inch side area coverage. High efficiency erystal mierophone with 7 -foot coble and connector. Dual speakers and extro length cable provide maximum power distribution. Adjustoble microinches. All the "musts" fon perfect indoor operation. No technical experiance necessary to make the simple con. actions. High power at extremely low
MODEL 7215-Complete unit includes: 1-Model 735 Amplifier, completo with Mubes.
-12-inch Permanent Magnet Dynamic Speakers K19306.
all Dafles K20066.
1-High Quality Adjustable Mierophone Floor Stond K13647. - Furner 22 X Crystol Microphone - 100 - foot coble K 20920.

READY TO OPERATE. Complote with instructions and all plugs necessary for moting connections. Cods FAGOT. Shpg wi 85 lbr . 5108.50
Your cost........


LAFAYETTE 35-Wott Outdoor System
Intended particularly for ouldoor use or for high noise leval indoor areo. reflex horns. Exponentiol oir column results in high efficiency. Reflex footure gives projectors ocoustic length of 42 phragms ond heat dissipoling voice coil. Crystal microphone has built-in wind 909 and -52 db oulput. Adjustoble microphone stond. Extro length coble supplied. A complete, well. matched outdoor unit
MODEL 723 H -Complete Unit Ineludes
I-Model 735 Amplifier complete with tubes.
University Reflex Projectors K20049
2-Universiry Drivar Units K21301
I-Turner $22 \times$ Crystal Mike KI3445.
1-High Quality Adiustable Mierophone Floor Siond K13647.

- 100 . foot coble K20920.

READY TO OPERATE. Complete with instructions, plugs ond 7 -foot m cable with end connector atroched
Code FAINT.
Shpg. wf. 81 lb
\$151.65



- For Audiences Up To 7000 Indoors-Areas Up To 50,000 Sq. FI. Outdoors
- Can Be Used With Two Microphones And One Record Player-Mixing And Fading
a High Power Amplifier For "Exira" Quality Installations-Nominal Cest

Lolayette's nowest ond finest enginetring focilitios were used to proUses oopush-pull powallel omplifier. ment of 6L6's to obloin artro power. Excellont for controlized public oddross systoms in hotels, industria perminols, bolliooms, foirs, theatres. dance holis, elc. Designed for great volume ond large coverage. Can be used simultoneously with rwo ployer. Separote controls are ovall. able for each channel. permitting
Ind degree of mixing and fading. individual bass and treble equalizers ossure highly sensitive tone
correction. This omplifer will give a substantially flat response over the entire frequency range of 50 to 10,000 cycles per second. Distortion is kept well bolow the
oudible minimum. Highly dependoble ond foolproot in operotion. All controls have large legible
identification and wide range call. verse teedbock circuil reduces har verse te distortion and stoblizes overoll response. All components designed for highest overlood soffety foctor. Multiple output impedonces
of $2,4,8,15$ and 500 ohms-oll you need for flesible outpur moteh. ing orrangements. Other feolures which you will oppreciote ore the easily occessible protective fust and ample heat dissipating grilteclearly identified. Voriable controls ore colibroted for convenient use. Connections ore mode on oul-of-the-way rear panel. Finished in con wrintle with matching brown knobs. Craftsmanship and style of MOOEL 750 Cost 50 complet with tubes. Code Forte Shpg. wt. with lbs. $\$$ Your Cost............ $\mathbf{S 4}$.60

SPECIFICATIONS Normal Power Output. 50 Walts Microphone Channels
Tone Controls
Mierophone Goin ......... 125 db
Phono 125 db
80 db Frequency Response: 50 to 10,000 c.p.s. $\pm 2$ db.
Hum Leval Below Normal Output -56 db . Normal Output:
Distortion Al Distortion At Normal Outpur
Less than $5 \%$. Less thon 5\%. Normal Oupur: Ond 500 ohms. Contrals. Boss and Treble Tone Controls. Buill in Protective Fuse. 110.120
Voltage Requirements: ${ }^{1120}$ Y. A.C. 60 cycles $200 \mathrm{~W}_{\text {i-7N7. }}$
 Dimonsions: $16^{\circ} \mathrm{H} \times 10 / \mathrm{s}^{\prime} \mathrm{W} \times$ Dimensio.
©


## 75 WATTS

- For Audiences Up To 10,000 Indoors-Areas Up To 70,000 Sq. Fi. Ouldoors
- For Use With Two Microphones And One Phono Record Player-Mixing and Fading - Exceptionally High Power Output Yet Very Compact And Easily Operated

keop the lube filaments worm with
negligible current droin. You can negligible current droln. You con moment's notice withoul a proliminapy "warm-up" period. Amplifier circuit employs inverse feedboek to insure unilorm response along the
entire oudia range. Moticulous design of chassis and plocement of ports represents o significant Lafoyette ochievement. There is omple heat dissipating grillework ond en easily occessible protective fuse. five, buill for sturdy and convenient use. Finished in ton wrinkle with red plostic control knobs on a dork brown ponel. Caraful angimethods give you a prower-plus amplifier Cl modest cost.
MODEL 775 - 75.Watt amplifier


SPECIFICATIONS Normal Power Oulput. 75 Wall Mierophone Channels Phono Channel Tone Controls Microphane Gain ........ 124 db Prean. Resin ㄷ............ 94 db Hum Level Below Normol Out put: -59 db Normal Out Distortion Ai Normol Output: Output Impedonces: 4. 8, 15 ${ }^{250} 125$, and 500 ohms. "Stond by" swifch.
Sep. Mike \& Phono Controls. $80 s s$ and Treble Tone Controls.
Current Requiroments: $110-120$ V.A.C. 60 cycles, 350 W . Tube Linaup: 2.7C7, 2-7F7 $2.6 \mathrm{~V} 6 \mathrm{G}, 46 \mathrm{L6}, 2.83 \mathrm{~V}, 1.5 \mathrm{Y} 3 \mathrm{C}$ (rectifier).
Dim.: $17^{\prime \prime} H \times 131 / 2^{\prime \prime} W \times 83 / 4^{\prime \prime} D$.

## afayyette <br> FOR SOUND VALUE

## LAFAYETTE 75. Watt

 Indoor System All the components to do full iustice to he poaerlul 75 -molt amplifier. Foureouy duly and high.quolily speakers. Mierophone has on outomatic baromeiric compensator, a bulli-in wind gag, and is thoroughly impregnoted cientifically tilted for best results when all mounted. Microphone floor stand $5^{\circ}$ plied with this unit extends from ip outomatic friction cluten which locks firmly at the desired height. MODEL 7295-Complete unit includes -Model 775 Amplifier, complete with tubes.

- 12 -inch FM Speaters K19306.

I-Adiustoble Mierophone Floor Stond
K13647. - Turnar 22X Crystal Microphone K13445. 200-100t cable K20920
READY TO OPERATE Complete with instructions, plugs and 7.tool cable
with end connector already attoched. Code FLIER. 160 lbs S 579.055
Your Cost

## LAFAYETTE 75.Wat

Outdoor System
An outdoor system which literolly the attention of anyone within its tre mendous range. Four ready-to-maunt Migh efficiency reflex projectors ore amployed. Each is used with a perfectly overcomes considerable incidentol noise. Mierephone has built-in wind agg and - 52 db output. The micro. clutch which locks firmly ot any height between 35 and 68 inches.
MODEL 730 H -Complete unit includes
-Model 775 Amplifier, complote with Tubes.
-University Reflex Projectors K20049. 4-University Driver Units K21301
-Adjustoble Mierophone Floor Stond
K13647

- Turner 22X Cpystol Microphone -200-fool coble K20920
READY TO OPERATE. Complete with instructions, plugs and 7 -foot cable wh end connector already atlached Code FLIRT. I52 lbs. $\$ 2$ K2 2




## - Covers Outdoor Areas Up To 3000 Sq. Ft.-Up To 20,000 People Indoors

- Can Be Used With One Microphone And One Record Player-Mixing and Fading Operates From Standard 6-Voit Storage Battery Or 115 Volts 60 Cycles AC

Designed for both indaor and outdaor use, this new Laforette Mobile Amplifisi will operote equally well from either 115 valts 60 cycles $A C$
of fram on ardinary 6 -valf starage of fram on ardinary 6 -volf starage
bollery. If is ideol for use in trucks ond passenger cars for advertising. police, electioneering and similor wark. Ample power, simple aperofion ond oftroctive design plus o
surprisingly low price moke this on surprisingiy low price moke this on meets oll operating canditions. Provision is mode for the simultoneaus use of twa microphones. A "bottery saver" or "stand-by"
switch is incorporated for uss on car bollery. Tubes stay worm with negligible current drain, and the amplifier is ready for instant use. Immediofe conversion from line to
bottery aperotian without supertlubattery aperovan without superituduty vibrator permits lang, hord dependoble service under alican direns. Lotest inverse feedback



## Lafayette FOR SOUND VALUE

LAFAYETTE 25.Watt Mobile Phono Top Economy System An excellent indoar os well as autdoar system. Attroctive metal proiectops
with brackels for easy maunting. Nonbreatablie high impact microphone has - 47 db output ond a high capocity $7 / 2$-foat cable with end cannector attoched and reodr for immediate plug. in. G.E. $12^{\circ}$ PM Speakers have peak watroge rating of 15 -wotts woch and output impedances for tone or vaice coil connections.
MODEL 731E-Complere unit includes: 1 -Madel 725 M omplifier campleto with tubes and built-in phana.
2-Ecanomy Projectors K20054 with
mounting brackets K2009s.
2-12-inch PM Speakers K19384
1-Electro-Voice Crystol Micraphone
$K 13623$.
1-50-fool coble K20920.
READY TO OPERATE. Furnished complete with instructions ond plugs. Code
FLASH. 3 hpg wh. 5 lbs.
Your Cast
\$133.85


LAFAYETTE 25-Waft Moblle Phono Top De-Luxe System For sound truck use, palitical rollies electioneering and all-oround sound bollery current are to be used interchangeably. No finer 25 -watt mobile system oblainable. Reflex pralectors hove high efficiency expanential oif
calumns. Drivers handle 25 watts af audio pawer. Drivers ofe rim centered for perfoct alignment. Crystal hond microphane hos excellent respanse ond autput, push-fo-talk switch, and 7 -foo shielded coble with end connector af Built-in recard ployer takes $12^{\prime \prime}$ diam tep. pecards.
MODEL 732D-D.-Luxe unit includes:
1-Model 725 M phano top omplifier complete with tubes.
-SMH University Proiectors K20045.
2-MAH University Drivers K21305.
I-SHURE Hond Mike K13649.
-SO.foot coble K20920
READY TO OPERATE. Furnished complete with instructions ond plugs Cad

Shpg. wt. 66 lbs.
s 152.60

## afayette DE-LUXE PORTABLE SOUND SYSTEMS

SINGLE CASE - COMPACT



DUAL SPEAKERS - POWERFUL


A Dependable Low-Power Dual Section Portable System

- Complete With 8-Watl Amplifier Removable From CaseEasy to Carry-Prolessional Appearance-New Low Cost

Mare partable system far your p.a. dallor
than has ever been offered before. Just than has ever been offered before. Just
compore with any other model available today and see for yoursell. Feafures the new Lofoyetle 8 -woll amplifier which con be removed fram the dual carrying case os a complete self-cantained unit. Amplitrol to compensate far all acaustic condithans. 8uilt to following specifications: Normal pawer output 8 watts; ane micro. phane and one phana recard ployer inputi microphone channel 90 in 117 db ; db ; less thon $5 \%$ distortion at normol aupput: separole output impedances of 8 , 15 and 500 ohms: hum level is below normal
output -56 db: tube complement 1.7 C 7 .
 sions $91 / 2^{\prime \prime} \mathrm{H}^{\prime} \times 6^{\prime \prime} \mathrm{W} \times .7^{\prime} \mathrm{D}$. Amplifier easily reaches an indoop audience of 500
and covers on outdoor areo of 3.000
io the omplifier for finest results include having high permeability magnets, oach piece seamless canes, "' diam. vaice cail with 8 ohms impedance. To complete this Dortable system Lafarefte supplies the streamlined Turner 22 X erystal micraphone crystal, built-in wind gag and a 7 -foot cable with and connector. The milke is mounted an a smoothly adiustoble stond which extends from 35 to 68 inches ond has sure-grip automatic friction clutch action.
Durable carrying case to hause speakers and omplifier described on page 28. A camplate and efficient partable p.o. system of ecnnomic-1 cost!
MODEL $7040 \mathrm{P}-\mathrm{C}$
MODEL 7040P-Complete portable system described above, including plugs, ins'rucCade FAKIR. Shpg. wh. 46 lbs.
s65.50

SINGLE SPEAKER

## CARrying case

Here is on outstonding buy in carrying coses to fill rour portoble
amplifier system needs. Lightwaight yet sturdy, this corrying cose will
occommodate on omplifier system using o 10 -inch of $12^{\prime \prime}$ speaker. covered with duroble black cambric. Prolective wire mesh behind grifle cloth prevents damage 10 speaker canes. Hos leather cavered
steel carrying hondle. Twa snap. lock fasteners on top of case and ane on boltom of each side insure rigidify when unit is clased. Ample shelf space permits maunting af metal supports prevent domage from rough handling. Two metal brockels hold lang speaker cabling. $181 / 2 \mathrm{l}$ h
deep. $81 / 2 \mathrm{lbs}$
deep. B1/2
K19445
$\mathrm{K} 19445-$
Your Cost
Oual Speaker cose 59.95
above. $11^{\prime \prime} \mathrm{D} \times 12^{\circ} \mathrm{W} \times 17 / 2^{\circ} \mathrm{H}$.

The Country's Finest Medium Power Dual Speaker Portable System

- Available With Built-In Phono Record Player
- Ideal For Âll Average Portable P.A. Requirements

The mast papular sized omplifier in o an poge 28). Nucleus of this fine deribed system is the Model 718 I 18 -woll Laforetle cystem is the Model 71818 -wott Lafoyetle
amplifier which is entirely remavable from the dual section carrying case, completely described an page 28. The amplifier was built to the following exacting specifico. hons: Narmal pawer output 18 watts; sep.
orate microphone and phana inputs and cantrols: boss.treble acoustic tane concantr mierophone channel goin 120 db :
tral
phono channel phono channel goin 75 db ; overall fre: quency respanse 50 to 10,000 c.p.s. -2 db :
less thon $5 \%$ distartion at narmal autput five output impedances ta motch any setup 2, 4, B, 15 and 500 ohms; hum level below normal outpul -55 db ; tube comolement 1.7C7, 1-7F7, ${ }^{2.6 L 6 G}$ I.5Y3G
(rectifier); dimensions ope $12^{\prime \prime}$ high (rectifier); dimensions ore $12^{\prime \prime}$ high, $7^{\prime \prime}$
wide, $73 / \mathrm{deap}$. Coverage is for an indoor audience of 1,500 people or 5.000

PM speokers have I" diom. voice coils with $6-8$ ahms impedance. Narmal woltoge of each speaker is 9 walls. A Turner 8 X crystal mike is supplied and has -55 db
outouf: $7 . \mathrm{ft}$. cable and cannectar ore oftoched. High quality mike stond is adiustoble from 35 ta 68 inches. A medium pawer partoble system bult in the traditional Lafoyette manner-yau get mare service more performonce thon is ovailable any

MODEL 707 P -Complete system described taot speoker coble. Less phono. Cade

Shp3. wh. 62 lbs.
MODEL TO9PP-Same as above
buill-in recard ployer. Cade Fove but with

## Lafayette High Power Portables • Simple to Sef Up • Easy to Operate

UNEXCELLED REPRODUCTION


STURDY AND DEPENDABLE


CARRYING CASE FEATURES
The portoble systems illustroted on this page utitize a slurdy two sec. tion combination corrying cose. Construction is all wood with a
durable block combric covering. internolly re-enforted on speoker ends with plywood. Cose opens into two holves, each surving os a sepa. role boffle. The grille-cloths ore well designed and onhonce. The Protective wire mesh behind the cloth prevents damage to speoter cones. Two leather-covered steel corrying handles combine os one
when entire unit is locked. Two when entire unit is locted. Two top of case, and an extra fostener on the side insures rigidity when case is completely locked. Four metol supports on boltom of eoch
section prevent domage from rough
pomen section prevent domage from rough els obove the speoker oreo permif winding extro-long ${ }^{2}$, peoker cobles.
$26 / 4^{\prime \prime} \times 161 / 4^{\prime \prime} \times 14 / 3^{\prime \prime}$
$\mathrm{Kl}_{19446} \mathrm{~K}^{2}$
K 19446 -
Your Cost
ohms $1^{1 \prime}$ diam. voice coils; one Turne $22 \times$ crystal mike hoving complete with 7 ft . coble ond connector o heory-gouge rriple-chrome ploted odiustoble mike stond which has friction clutch locking action and 10 -1nch diom. crockle finished bose; and 100 feet of with or without builtin phono record plaver.
MODEL 714P-Portoble system complate less phono record ployer. Code FATA Shpg. wl. 73 lbs
s99.45
MODEL 716PP-Same os obove with built in record ployer. Code FAUST.
Shpg. wt. 76 lbs . Your Cost....

S110.20

This 25 -woll complete portoble system sur portobles hove enioyed wide occioim by orchestra leoders, troveling shows, demon. strotors, etc. Built oround the Model 726 power output: two seporate microphone power output; two seporate microphone control; 125 db microphone chonnel goin: 80 db phono chonnel goin; 50 to 10,000 5 c.p.s frequency response $\pm 2 \mathrm{db}$; less thon $5 \%$ distortion at normal output; output -57 db hum level below normal output: Pube lineup $2.784 .1 .7 \mathrm{~N} 7,2.66 .6 \mathrm{G}, 1.5 \mathrm{U} 4 \mathrm{G}$ (reclifier). Amplifier size $15^{\prime \prime}$ high $81 / 4^{\prime \prime}$ wide, $81 / 4^{\circ}$ deep. To form o well-inte,
groted portable unit, Lofoyetfe supplies groted portable unit, Lofoyetre supples ${ }^{12} 2^{\prime \prime}$ Cinoudagraph PM speokers using 6-8

A Low Cost High Power Portable Lalayelle Amplifier
Dual Speaker System-Excellent Unit For Traveling OrchestrasAvailable With Buill-In Record Player For Real Versatility


## 12-WATT PHONO

## XPANDER AMPLIFIER

- Exceptionally Fine Tone Quality and Volume
"Beam Power" Oulpul-Full Range Tone Control
Latoyette angineers have developed this pociol expander omplifier with the pri mory purpose of getting the best posings. With uction rrom your fine record. wotts plus volume expansion, record re. production assumes an amazingly life. like quality. This is due to the foct thoi culting of ite original, record includes
compression" of certain frequancles: comprossion, of certain frequancies
this meons that when the dynomic ronge of the solection erceeds a certoin point bevond the normol width of the record groove, " "compressor" circuit comes into play to keep the groove within nor
mal confines. When the focording ployed bock. through this rocoryerting ek. ponder amplifier, the "exponder"." eir cult automoticolly replaces the "com pressed" "trequencies ond the reproduc.
fion duplicotes the originol sound in all lion duplicotes the originol sound in all
its dynamic and fonal brillionce. The omplifier incorporates the most modern circuit design feotures. A speciol tone control permits the operator to compen
sote for ocoustic conditions peculito sote yor ocoustic conditions peculior to
individual instollations. No power loss or distortion is entailed in its operotion. Two separote controls are used to oc complish volume exponston ond volume
erse. feadback for flat overall response and five output impedonces for connectpull "beam power" output sloge insures high powor with minimum disfortion. MOOEL 700 X -Complete 12 watt phono Code FAUNA.
Shpg. wh. 20 lbs.
Your Cost
${ }^{5} 44.00$


## SPECIFICATIONS

 Normal Power Output 12 Waths Phono Input ChannelPhono Channol Gain Exponsion Frequency Response: 50 to 10,000 Hum Level: -30 db below zero leval. Distortion At Normol Output: Less thon $5 \%$. Output impedonces: 2, 4, 8, 15, and 500 ohms
Power R Power Requirements: $110-120$ V. A.C., Tube Lineup: 1-7Q7, 2-7F7, 2-6V6, 1.5Y3G (reetifier).
Dimansions: $12^{\prime \prime} \mathrm{H} \times 7^{\prime \prime} \mathrm{W} \times 734^{\prime \prime} \mathrm{D}$

DE-LUXE
WALNUT BAFFLE


Accommodotes 12-inch speoker. Scientifi colly designed and tilted lo provide ox
callont response. This fine boftie is con structed with beouliful hardwood vencer. honds on each side result in excellen bass pesponse without occomponying boominess Dimensions ore $1334^{\prime \prime}$ wide $133^{\prime \prime}$ high $81 / 2^{\text {" }}$ deep. Wall thickness $1 / 2^{\prime \prime}$. Shipping weight 4 bs.
${ }^{K} 20053-$
$\$ 5.49$
NEW! G-E ALNICO 5
12" PM LOUDSPEAKER


A poweriul 12 -inch permanent mognet loudspeaker designed to provide foithfu tone reproduction of high volume lovals electro-dynamic speokers of the some size. Utilizes moulded curved cone and has cover for the mognet assembly. Dustproof and moisture free. All weld constuction mini mizes distortion of moximum operating ing perfect olignment of voice coil and cone ossembly. Requires no oxternal field or exciting voltage. Magnet weighs or re impedance ohos. Nominal power cycles. Shipping wi 15 lbs K19306-G.E TYPO 1203C. Your Cost
K19306-G.E Trpe 1203C. $\$ \mathbf{S 2 . 0 5}$
Youtconter


## afayette 15-WATT MUSICAL INSTRUMENT PORTABLE AMPLIFIER

High Fidelity Reproduction of All Musical Instruments Three Inputs -For Solo Work or Orchestra

Unsurpossed high.quality reproduction over the entire register for thase with discriminating musical raste, This ampli fier folthfully reproduces the full ronge Designed for solo work or any combina tion of instruments and voice. The three seporate inputs permit the use of uo to three instruments, singly or in combina-
tion. And for complete flexibility, one of the inputs moy be used with o micro phone for vocals while instruments com in at the same time on the remaining channels. You con use the complete roted power of 15 watts with o minimum of distortion. Scientifically designed case port at reor insures clear reproduction of all bass and percussive sounds withoo annoying boominass. Amplifier circuips mploy invers feedbock or overall "ha aporoting in push-pull for minimum dis. portion. A heovy duty 12 -inch electrodynomic spealier is carstully housed wh. in the cose for best resulis. The case is mort appeorance. The contral panel is sloped and on atfoctively designed panel plote Ahances the beouty of the
on this panel and inelude such practica feotures as an ossily occessible protec ve fuss, a pilot light, separate volume MODEL 715 -Complete 15 -wall portable amplifier. including fubes and cose Code FEVER.
hhpg. wt. 28 lbs.



## TALK-A-PHONE Multiple Master Intercommunication Syslem

The KS-6010 system is mode up axclusivaly of Master stotions. This highly fioxtble system provides extremely officient intercommunicotion for ony office or foctory. The insignificont cost is immediotely compensoted for by on effective solution of the ever present relephone swischboord problem of inside calls. by keping he winclide colls ore hondled for more quiekly and cosily Communicotion inside the building is also speeded ond becouse each user becomes his own aperotor with this system any station can call any other station in the system ond sysfom, ony sinh can two-woy conversations can be corriad on at one time. You can begin with two masters ond add up to a total of 10 , in which cose up to's complete two-way conversotions can be mointoined simultoneously. The 11 -conductor cable is stondord for the use of 10 Moster stotions. If your complete system is to consist of fewer thon 10 stotions, specify
comer coble with one common conductor ond one conductor for eoch stofion. Quotations given on request. This system embodies storion. "Silent Feature" which assures complete silence of every stotion between conversotions. Stotions moy call one onother regordless of whather the station baing called hos power on or off. The volce volume is odjustoble of eoch stotion and con be voried from o whisper to o volume which con be heerd os for os 25 feot oway from the unit. Individual unifs moy be ploced os much os 2000 fest aporf. KS-60 cy syiversolly on $110-115$ volts AC or DC. Tubes consist of: $1-12517$
 wide by $7^{\prime \prime}$ high by $6^{\prime \prime}$ deop. Shlpping welight per unit is 8 lbs KS-6010-Master Stalion
Your Cost Eoch.
K16328-11-conductor coble for obove, per fi..
$\$ 31.50$


The KR-4010 master To Remote System consists of one
master stotion controlling up to 10 substotions. A parfect intercommunication system of on economicol price. Excellent for uses in offices. plants, etc. where the Moster is locoted af the telephon, switchboord so thot the operotor can page ony desired person in-
stonfly onywhere in the bullding. The Master station stonily onywhere in the buliding. The Master station
can talk pivately to ony of the substations if desired, can talk privetely to any of the substations if desired, your system with o Moster stotion and a single sub. stotion ond increose this number to as mony as ten substotions. The Master hos complete privocy: sub-
stations connot listen in on the Moster. They can heor only when the Master is tolking to them. The exclusive TALK-A-PHONE "Silent Feoture" shuts out all sounds originating ot the substotion, yet substotions ore oble to originate calls to the Moster of will. Substations
operote as far as 3000 foet away from the Moster staoperote as for as 300 foet away from the mostor stations to onswer the Moster whon colled without leoving their work locotion seen though they moy be up to 50 feet away from the substotion ltsalf. The volume level
is controlled from the Master station. KR- 4010 systems is controlied from the Moster station. KR-4010 systems complement of Moster consists of one 125J7, one 50L6, and one 3525 rectifier. One three-conductor cable is required for connection between the Master ond eoch
substation. The Master station walnut finish cobinet meosures $0^{\prime \prime}$ Master station wation housing is oll. metol, wrinkle fintsh and meosures $6 x$

KR- 40 MASTER-TO.REMOTE SYSTEM
Only One Master Can Be Used With This System
Moster Con Tolk To
Any Sub-Stotion Of
To All At Once
Sub-Station C
Coll Masier
Shuts Out Sounds Originating At
Sub-Stations


Sub.Station Conn Coll Other Sub-Stotions
Conversotion with Master Con Be Held Up To 50 Feet From Sub-Stotion

KR-40'10-Mostar Station.
Shpg. wt. 8 Ibs. Your Cost
RU. 433 S -Substotion. Shpg. wt .4 lbs .
16089-3
K $16089-3$ -
Per 100 f
s29.95
58.25

2000 Feet Awoy
From An
Master


TALK-A-PHONE Master To Romoto Intercommunication System

## SHURE microphones



## Cardioid Crystal

A true uni-directional mike-senslitve at the front, deod at the rear. Salves feedback, roam and backgraund naise and reverberation problems. Ideal for use in theatres, night clubs, restauranis, churches, tc. Cose piv. oled at rear and may be pointed in dirsetion of desired sound, or painted zontal plon pietup. Frequencr hori. zontal plan pickup. Frequeney response 40 to 10,000 eveles. Output level 63 db below I voll per bar. Has especially maisture-proafed Grophoil Bimorph Crystal far lang llfe. Built-in cable connector. Stand. ard $5 / \mathbf{l}^{"}-27$ threod. Case dimensions $31 / 3^{\prime \prime}$ diom. ${ }^{17 / 0^{\prime \prime}}$ deep. Shipping wight $1 / 2$ bs.
K13679-Model 730日. \$2? \&

## Stratoliner Crystal

 An expensive looking high-quallt mike at low cost. High impedance. Genuine Bimorph crystal. High oul put-53 db below I volt per bar with 7-f. cable, 56 db with $25-\mathrm{ft}$. cable. Wide range response glves good reproduction of either volce or music. Semi-directional in horlz. plane, nondirectlonal when used vertically Swivel pravides $90^{\circ}$ tilt. $21 / 2^{\prime \prime}$ diam $43^{3}$ " long. Slandard theeod siam Shipping weight $21 / 2 \mathrm{lbs}$. Kilpping weight $21 / 2$ lbsKI3633-Model 708A, $7^{\prime}$ cable.
K 13634 -Model 708A, $25^{\prime}$ coble. 2.55 K13634-Model 708A, 25' coble.
Your Cost ................................... $\$ 13.49$

## Super-Cardioid Dynamic

For high-quality braadeasting, record. ing and P.A. work. 14 to I front-to-rear pickup ratio. Unwanted noise reduced by $73 \%$. Swivel allows $90^{\circ}$ tilt so that mite can be almed af saurce of sound Moving-coll and high flur magnet proride smooth response from 40 to 10,000 cycles. Quiet outdoor operation. Spring. susponded pickup unif floated in live rubber. Models 5568 . 556 C include in ternal transformer. Fits $/ /^{\prime \prime}-27$ stand. $41 / 2 \mathrm{lbs}$.

| Stock No. | Shure <br> Model | Imped. <br> (Ohms) | Output (db) | $\begin{aligned} & \text { Your } \\ & \text { Cest } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 35-50 | 56.1 ${ }^{\circ}$ |  |
| K13564 | 3568 | 1.50-250 | 36 |  |
| K13563 | 556C | 35,000 | 5 |  |

- Below I mw: for 10 bar signal.
- ${ }^{\text {Below } 1 \text { volit per bar. }}$



## Military Carbon

Ideal response for situations where of ders directlons and reparts require imnediate understanding. Fits into palm of hand. Heovy duty push.to-tolt switeh Haak for suspension, brackel for wall nig. Output 32 db below I volt for il oar slgnol. Madel 1018 has 2-wire reloy switch narmally open. Model 1028 hos combined reloy and mike switch. $4-\mathrm{ff}$. second. coble. Wp. I lb.
$\left.\begin{array}{ccc}\text { Stock } & \text { SHURE } & \text { Your Cost } \\ \text { No. } & \text { Modal } & \text { Ench } \\ 113655 & 1018 \\ 13656 & 102 \mathrm{~B}\end{array}\right\}$

## Super-Cardioid Unidyne

Specified by outstanding acoustic engi neers for nationally-known artisis and importani events. Reduces unwanted noise by $73 \%$. Pepfect for high-quality p.o. broadcasting and alf types of re. cording. 14 to 1 front-to-rear plekup ratio. Gives freedom of movement to Derformers. Response 40 to 10,000 cycles. Models $558,55 \mathrm{C}$ include internal tronsformer with $25-\mathrm{ft}$. shielded cable mite plug. $5 / 4 "-27$ thd for floor or dest stand mig. $41 / 4^{\prime \prime} \times 31 / 4^{\prime \prime} \times 31 / 2^{\prime \prime} \operatorname{cose}$. Shpg. wf. $41 / 2$ ibs.

| Stock | Shure <br> No. | Imped. <br> Model | Output <br> (Ohms) | Your <br> (dh) |
| :---: | :---: | :---: | :---: | :---: |


| K13672 | 55A | 35-50 | $56.1{ }^{\circ}$ |  |
| :---: | :---: | :---: | :---: | :---: |
| K13664 | 5518 | 150-250 | $36.8{ }^{\circ}$ | 31.87 |
| K13688 | 55C | 35,000 | 35** | 31.88 |


| K 13688 | 55 C | 35,000 | $55^{\circ \circ}$ |
| :---: | :---: | :---: | :---: |
| $\bullet$ | 31.87 |  |  | - Below 1 volt ver bas 10 bignal.

 Your Your Cost


## Stratoliner Dynamic

A beautiful micraphone and an an callent piece of equipment. Coreful onginearing has given if respanse characteristics for high quality re. production. Its ruggedness qualifies it for heavy duly work on police transmitters at airports, and in office and industriol paging systems. Proclically unatiected by heat ar humid. ity. Moving canductor system. Dit cast case, swival head, built-in cable connector. High impedance. Outpul loval is 67 db below 1 volt per bar Siandard $\%$ " $2-27$ thread for mount. ing. With $25 . \mathrm{ff}$. single conductor shielded cable. Diam. $1^{1 / 2^{\prime \prime}}$, length $47^{\prime \prime}$ Shpg. wf. $23 / 4 \mathrm{lbs}$.
$\$ 58.9$

## Crystal Microphone

Good-quality performance of low cost. Ideal for voice and music re production, P.A. and coll systems omateur use. etc. Good response, free from peaks, semi-dir. pickup Maisture-proofed Bimorph erystat mechanically isolated. Shielded cablo with spring cannector. Output level 53 db below I volt per bor. Case is a heovy die costing, finished in Iridescent gray. Diam. $2^{31 / 2}$. Standord K" ${ }^{\prime \prime}-27$ thd. Shipping wight $11 / 4 \mathrm{lbs}$. Y13630-Model 707A, 7 cable. Your Cost K13631-Madel 707A, 25' cobl. $\$ 7.94$

## Lapel Microphone

Parmits user to move frealy. Designed for public-address installations, broodcasting from porlables, ond wherever cleor, intoligible speech reproduction is of primary Importance. Pressuro-actuoted diaphragm.type crystal mike. Grophoil (high copacity) Bimarph moisture-seoled unit. Froquency re. sponse filat from 40 to 6000 c.D.s. Freo sponse peaks Provided with 25 -foot shiold. -d rubber lacketed cable. Handy lapal clip. Only $1 \%{ }^{\prime \prime}$ diometer. Shipping weight 1 lb . K13638-Model 768.
Your Cost. \$5.88


Modern Desk Stand
Beoutiful, stramlined desk mount with stable support at correct height. Fits SHURE Con-nector-type microphones, can. cooling plug in base. Remor. able butlon at front for instal. lotlon of "3" standard bustine switch or volume control. descent groy finith Bane:
 ping weight $11 / 2$ lbs.

K13602-Model 536A.
Your Cont.
(30)


A high quolity cable-type trans. former. Matches 35 to 50 ond 150 to 250 ohm microphones to high impedonce amplifier input. Com. pact and sturdy. Case diometer 1s/" lenoth 2y,", 7-loot coble Shpg. wf. $11 / 2 \mathrm{lbs}$. K13673-Modol AB6A. $\$ 7.71$
Your Cost...............

## Microphone Switches

 to ony cable-conn. type SHURE mike. Bakelite knab. K13594-Your Cost. Model A84A (8)-Mor $\$ 2.56$ "On-OH" switch. Press-total bokellit disc.
K13651-Your Cost ......... $\$ 2.88$ Madel A858 (C)-Momentory reloy-type switch. Norm. open switch for use with 2-cond shiolded cable and with erystal ond hiah imped. dyn. mites only. Chrome fin. $1 / 4 \mathrm{lb}$. K13652Your Cost

## ASTATIC microphones




#### Abstract

The CONNEAUT sireomlined atlractiveness, plus grand performancel Semi-direc. lional crystol microphone with relo. lively high output and wide frequency range mater il Ideol for P.A. systems in night clubs, donce holls, public auditoriums and sim llor applications. Unmatched for lor applicamons. Unmaichad for poging systems in offices, hoteli and factories, for omateur rigs and general communication uses Frea. response from 30 to 10,003 c.p.s. High impedonce. "Mitre" head may be tllipd on iwivel mounting, for a semi-directional pickup in horizontal posifion, a non-directional in vertical posifion. Cortridge incorporales "Ebonite treated Bimorph crystal. Corrosior proof protected diaphragm. Floo. pre cortrldge reduces "vibiophon ics" " 5 " db oulput level Chrom and blond plostic. 25.ft. coble. Model $600-6 \% "$ \& $5, " 4$ lbs K13657Your Cost s17.64 Model 600.5 - Has On. Off switc?. $61 /{ }^{\circ "} \mathrm{~h} \times 5 \mathrm{~m}^{\prime \prime} \mathrm{d}$ d. $21 / 2$ lbs. (1)3662- $\$ 19.23$


## WR-Series Microphones

Multi-unit crystol microphones for studio use and P.A. Installation os well os high quolity recording purposes. Built with dual-diophragm cirstol, cortridges in multi-unit or. rongements. Model WR-20 hos 2 crysial units, model WR. 40 hos 4 crystal units. Overall trequency response is oxceptionally smooth from 30 to 10,000 c.p.s. Oulput level is 30 to 10 c.000 c.p.s. Oulput hevel is -56 db below voit/bar. Interior assembly dosign prevents ony por sibility of acounte overlo Ming, Sup. plied with $25-100$ coble. Model Wh.
40 permits uso of extro long coble. Both hove filling heod ond self. locking odiustmont. High impod Chrome finlsh, $61 / 4, " h x 25 / h^{\prime \prime}$ d. 3 lbs. Model WR-20-2-cartridge
 $113796-$ Your Cost
s25.43


Model N Microphones
Exceplionolly smooth posponse. Expecially suitoble for P.A. instollo. tions. In wide or volce rang. models. N. 30 output leval -52 db below one volt per bar, N-80 10,000 db. Both cover $30-$ from 1000 to 3000 c.p.s. Both ore high imped. Ovarall height 5in. depth 3in. Gray finish, oright chrome grille, 15 -foot coble. 2 lbs. Stock No. Model No. $K 13401$
$k 13413$ N. 30 N-80

## \$11. 26

## D-104 Series Microphones

The first proctical crystol microphone ever develaped. Preferrad phon used by a has of veleron ama. and used by holl ol veleron ama. touri. Chte to its procticability ond its procticobility ond faithful performonce. High imped. once. High outpul level of -48 db below I volt/bor. Possesses defin. trely reduced RF feed-bock. Iendencies. Yoke-driven, bridge-mountad Graphoil crystol element with improved shock-proof mounting and baromatric compensation. Model D-104-7 cable.
 Madel GD. 104 - With Grip-To-Talk dask stand, 8 cable. 4 lbs. Mi3358-
$\$ 17.70$

## The GLOBE

Engineered to ponder highest de. gree of service in a wide field of opplications-for high fidelity studia work, qualliy hame recordings, truetone paging systems and many similar uses. Non-dirsctional; proctical for close speoking or distont pickup. Eliminates turbulence at the diophragm which in furn prevents acoustic overload. Frequency response from 30 to 10,000 c.p.s. Uillizos two dual-diophragm crystol cortidges with lour diophragms. Furnished with 25 .fool coble length. tilting head and self-locking hinge conceals, shields and protects leod wires. An output lovel of -56 db betow I voli/bor mokes these models odoptoble for use with conventionol high goln amplifiers. Both models ore high impedonce Model 820 -Overoll helight $101 / 4^{\prime \prime}$, depth $45 /{ }^{\prime \prime}$. Shpg. wt. $3 / 4$ lbs. K 13666 Your Cost
\$23.52 Model 820.5 - Astolic lype 5 OnOff switch. Height $93 a^{\circ}$ Wp. $31 / 2$ lbs. K13667-Your Cost.
$\$ 25.11$


## T-3 Series Microphones

For studio hookups, amaleur rigs, inter-communicating systems, P.A. Installallons ond recording purposes. Ideal frea. response ( 30 to 10,000 c.p.s.) appeals to both professionols and amoleurs. Tilting heod, with self-locking hinge provides semi-directional or non-directional pickup, and convenient conhonol pickup, tic con noch control of acoustic feed-bock. High imped. Output -52 db below I volt/ bor. Highly polished all-chrome finish.
Model T-3-25.ff. coble. Shpg. wt. 2 lbs.
K13670-Your Cost SI6.0! Model GT-3-Supplied with Grip. To-Talk desk stond. 8 -foot coblo. Shpg. wt, 4 lbs.
$\mathrm{K} 13525-\mathrm{Your}$ Cost $\mathbf{S} 9.32$


## The DYNAMIC

hugged construction and excellent performance under the most difficult canditions. Incorporates advanced deas in operotion ond design. High y fovored for general use where temperatures vary or high, relative humidity is encountered. Semi-direcional. Unisory moving cail system and carefully propartioned ocoustle circult to highly damp the notural cesonance of the moving system and provide flot response from 50 to 7000 cycles. Unique tilting heod permils cycles. Unique tilting heod permils non-directional as well as semidirectional usage: alsa a sure meth od of effectively controlling ocoustic feedback. High impedance. -55 db oufpup level (below I voll/bar). $6 \%{ }^{\circ}$ overall height, 4y/s deep. Opales cent gray finish, bright chrome grille. Supplied with $15 \cdot \mathrm{ft}$. coble. WI. 3 lbs. M13671-Model DN.HZ
Your
Cost
${ }^{5} 14.46$

## Lapel Mierophone

 Devaloped to meet difficult pickup conditions. -quipped with lapel spring cllip, ond overshoulder cord to permit wide lotitude of move. ment. Unilizes duol-dio. phrogm principle employ- Phrogm principle employ. diophrogms driving the crystol element through dual yoges- 62 db output (beloment miltough duol yokes. 62 do ourput (below roithor). 30 to 10.000 c.p.s. rosponse. High impedonce deep. Shpg. wt. l1/2 lbs. \$16.08 K13429-Model L-1
e Prices

## Musician's Mike

 Model MM gives immense volum from any stringed instrument without feedbock. New circuit design incorporates an ALNICO 5 magnet, which permits greoter goin with excellent response. Installed in o few seconds without tools or adhesives. Works direct to grid. Level response $\pm 2 \mathrm{db}$ from 30 to 10,000 eveles per isecond. Optionol model has variable valume control built in. Complete with coble. Model MM. less volume control. K13543-Shpg wf. 2 lbs. $\$ 9.26$Your Cost Model MM, with built-in vol, cont. | K $13541-W i .2 \mathrm{lbs}$. |
| :--- |
| Your Cost |
| O |

## U9S Dynamic

Whatover impedance you need-50 ohms, 200 ohms, 500 ohms or high impedance. you can get it quictily impedonce. you can got quitily on the Turner U9S. One microphone does the job of four units. Handles loughest jobs. Withstands elimate and lemperature changes. Fifs any standard stand. Adjustoble saddle permits semi- or non-directional aperation. Won't blast from closo speaking. Speclfied by broadcost sfudios. large city police departments and internalionally famous manufacturers for crisp, clear results. Ronge 40.9000 creles. Level plete with 20 f removable cabis slet and diagrams. Shpg. wt. 6 lbs. K13455-Model U95 S 23.323
Your Cost.


## 22X Crystal

22X Crystol gives cleor reproduc. tion. Smartly engineered design euts feedback 10 minimum. 90 do. gree tilling head and removable 7 -loot coble set. The buill-in windgog permits ourdoor operotion of the 22X. Crystal impregnoted ogainst moisfure in mechanical. shoek proof mounting. Auromatic borometric compensator protects ogoinst ony variotion in humidily. Hos high output level of -52 db . High impedance. Has a frequener range from 30 io 7000 cycles par second. Chrome iype finish. Sup. plied complete with cable set and diograms. Shipping weight 3 lbs .




## BX Crystal

An ideal semi.directional crystal microphone. Designed for recording, public oddress systems, industrial paging systerrs, and all-around amapour work. Smortly engineered for minimum leedback. Has high output lovel of -52 db . Level freaueney re. loval of -52 db . Level frequeney re-
sponse over range from 50 to 6000 sponse over ronge fom 50 to 6000
evelos per second. High impedance. Fils ony stand with standard thread. Highly polished streamlined construetion. Will withstand rugged use for long period of time. Supplled complete with 7 -fool connection coble. Shlpping weight 2 lbs .
K13446-Model EX
Your Cost
\$6.38

## BRUSH microphones

## Lapel Microphone

A superior lodel microphone, doveloped especially for public speoking use. It may be conveniently pinned to coat lopel or elothing, thus allow. ing the speoker to move obout the platform noturally with both honds free. SOUND.CELL construction provides good pickup fram oll direc. vides good pickup from oll direc.
lians. Special internol cushioning and protective soff rubber jocket in. and protective soft rubber jockel in. sure quiel operation and absence of hondiling noise. Con olso be used as a hand microphone. Because of its mall size ( $11 / 3^{\prime \prime} \times 21 / 4^{\prime \prime}$ ) it can be held comfortably in the palm of the hand. It is excellent as a single instrument plekup in on orchestra (easily attoched directly to the music stond). High impedonce. Output level 68 db below I volt/bor. Virtually llat frequency response up to 10,000 c.p.s. (slightly rising from 1100 to 10.000 c.p.s.). 25 cable supplied. Shipping waight 2 lbs K 13872 -Model BL-1 $\$ \mathrm{~S}$ Your Cost



## Crystal Microphone

A high quality non-directional mi erophone incorporating the hermeticolly sealed Acousticel with sinlered bronze domping disc. Unexlered bronze domping disc. Una1cellud response from 50 to 6000 c.p.s. Vibrotion, shoek or low trethe performonce of not ofrec phone The practical this micro phone. The procilical buy for home hocording, public oddress systems, hom shocks. monitoring and institutional and industrial applications. Recommended lood resistance, 5 megohms. Output level 50 db below I valt per bar. Microphone supplied complete with B.foot shislded cable, plug, and desk stond with removoble base. Shipping weight $31 / 4$ lbs.
K13601-Madel BA. $106 \$ 9.85$
Your Cast.


## Vibromike

A minialure contact-lype microphone designed especially for use with stringed musical instruments. Used widely for special archestral effects. Also suitable for the detection of mechanical vibrations. The erystal generating element is hermetically seoled in a black rubber covered cose making it rugged and moisture proof. The VIaromike is exception ally smoll, $1 \%^{\prime \prime} \times 14^{\prime \prime}{ }^{\prime \prime}$ in Any omplifier hoving a high impedance input is solisfoctory for use with this milie. High sensitivily; output volt oges range from . 05 voll to.$f$ volt or higher on stringed instruments. Recommended load resistance, 5 megohms Wide range frequency response from 30 to 6,000 c.p.s. Provided with soringlype clomp to facilltate mounting on the bridge of a stringed in. strument or directly under the toll. piece. $25^{\circ}$ coble supplied. Shpg. wt. pioce
K13647-Model VM.I SI
Your Cost


## ELECTRO-VOICE microphones

## cardyne DYNAMIC <br>  <br> CARDAX CRYSTAL

## Electro-Volce Cardioid Microphones

True unidirectional performance with smooth, wide-range response, high output, and other features. Through the E-V Mechanophase principle, the new Cardyne and Cardax microphones eliminate interference from background noise and reflected sound-stop feedbackpermit more loudopeaker volume-simplify sound installations and assure more accurate pick-up and reproduction of spoken word and music indoors or outdoors. Has a wide-angle front pick-up over a wide frequency range. Dead at rear. Attractive, trim modern designs, finished in rich satin chromium. Tiltable heads. With or without "On-Off" switch. Cable connector. $5 / 8 "-27$ thread. With 20 ft . cable.

## Cardyne Dynamic

E-V Model 731-Has new Acoustalloy diaphragm. Substantially flat response $30-12,000$ c.p.s. Output -53 db . Voltage at speech pressure . 0024 . Wt. 3 lbs.
K13701-High Impedance.
K13702-50 Ohms.
Your Cost
Each


E-V Model 726 Same outstanding features as the 731, with a fre quency response $40-10,000$ c.p.s. Has special control on back for dual frequency response. Wt. 3 lbe.
K13703-High Impedance.
K1370 - 50 Ohms.
Your Cost
$\$ 32.34$

## Cardax Crystal

E-V Model 950 Cardioid microphone with Dual Frequency Response. Selector awitch for high fidelity sound pick-up or extra crispness of apeech. Output -57 db . for wide-range high fidelity (speech pressure voltage .014 ) and -48 db . for wide-range riting characteristic (upeech pressure voltage .033). Rugged, portable. High capacity moisture-sealed crystal. 20 ft . cable. Wt. 2 lbs.
$K 13622$ E-V Model 950
Your Cost Each
s21.76


Model 610-New, smart, modern design, fine performance at a low price, dependable dynamic. New Acoustalloy diaphragm. Frequency response substantially flat $50-8000$ c.p.s., for music and speech. Output -53 db . Voltage at normal speech pressure .0224 volt. Upright put case at $15^{\circ}$ fixed tilt. Cable connector. s/8" 27 thread. With 20 ft . shielded cable. Satin chromium finish. Shpg. wt. 2 lbs. 20 ft . shielded cable. Satin
K13706-50 Ohms.
K13706- 50 Ohms.
\$16.17
Each, with 20 ft . cable
Model 910 Same design and features of Model 610 but with a high capacity, mointure sealed crystal. Output-48 db. Voltage devel oped by normal speech .0394 . Shpg. wt. 2 lbs.
K1370才-Each, with 8 ft cable.

## $k 13708$ Each, with 20 ft . cable

\$1I.6?

## Hand-Held Dynamic and Carbon Mlerophones

Model 600-D-Compact, hand-held dynamic. Response flat 1006000 e.p.a. Output -55 db . Pressure voltage .177 volts. Black phenolic case with panel mounting bracket. Press to talk switch Shpg. wt. 1 lb . With 6 ft . cable. Acoustalloy diaphragm.
K13736-High Impedance.
K13709-50 Ohms.
Your Cost Each
SI7.70
Model 210-s Single-button carbon hand "Mike." Similar to 600 D . Flat reaponse $100-4000$. Output -27 db . Speech pressure at .32 volts. 10.50 ma button current. Wt. 1 lb .5 ft . cuble.

K13710 - Your Cost Each
STI.26 K13711-With switch lock
512.23

E-V Model 902 "COMET" Crystal
Crystal microphone and stand in one perfectly balacned unit. High impact molded plastic, in deep lustrous gray. Easy to use as hand mike or on desk. Response $70-7000$ c.p.s. for voice and music in recording. p.a., paging, etc. Output -47 db . Speech pressure voltage 0394. High impedance. High capacity moisture-sealed crystal. With 71/2 ft. shielded cable. Shpg. wt. 1 造 lb . $K 13623$
Your Cost Each



## Widely Used Electro-Voice Dynamles

Model 640--High quality reproduction of voice and music. Reaponse flat from $35-10,000$ e.p.s. Output -53 db . Speech pressure voltage .0224 . Acoustalloy diaphragm. Cradie mounting gives $135^{\circ}$ tilt. Cable connector. "On-Ofi" switch. $8 / 8$ " -27 thread. Satin chrome finish with 20 ft cable. Shpg. wt. $21 / 2 \mathrm{lbs}$.
K13712-High Impedance.
K13713-50 Ohms
${ }^{5} 20.87$
Model 630 - High fidelity dynamic. Exceptionally smooth response Model 630 - High fidelity dynamic Ezceptionally smooth response
$40-9000 \mathrm{c} . \mathrm{p} . \mathrm{s}$. for voice and music. Output -53 db . Voltage at speech $40-9000$ c.p.s. for voice and music. Output -53 db . Voltage at speech
pressure .0224 volts. New Acoustalloy diaphragm. Head tilt to $90^{\circ}$ are for directional pick-up. Cable connector. "On-Of" switch. s/8" -27 thread. Satin chrome finish with 20 ft . cable. Shpg. wt. 1 ib. K13505-High Impedance.
K13714-50 Ohms.
Your Cost
Each.
\$19.32
Model 605--Durable low-cost dynamic. Substantially flat response 50.7500 c.p.s. Output -57 db . Voltage at normal speech pressure .014 volts. Acoustalloy diaphragm. Head at $22^{\circ}$ fixed tilt. Cable connector. $8 / \%^{\prime \prime}-27$ thread. Satin chromium finish. Shpg. wt. 1 lb . K13785 High Impedance.
K13715-50 Ohms.
Your Cost Each-With 20 ft. cable
s 13.82

## Electro-Voice Velocity Microphones

Favorites of well-known orchestras and sound engineers.


Models $\mathbf{V}-3,2$, and 1 sive high fidelity, bi-directional pick-up and reproduction of music and voice for p.a.'s, broadcasting and recording. reproduction of music and voice for p.a.s, broadcasting and recording.
Equal front and back pick-up. Zero pick-up at sides, top and bottom. Equal front and back pick-up. Zero pick-up at sides, top and bottom.
Proper tilting and placement, lower feedback, random noise, nonProper tilting and placement, lower feedback, random noise, non-
reflection housing. Internal shock absorber, sturdy, I piece frame and mounting otructure. Locking cradle mounting. Cable connector. "On-Off" switch. 20 ft . cable, $5 / \mathrm{F}^{\circ}-27$ thread. These models are ideal for anyone engnged in rental of public address systems. They permit the use of short or long cables without difficulty, or loss of efficiency. Because of their superb reproduction these Electro-Voice microphones are the favorites of well-known handsmen and vocalists. Ribbon is of selected pure aluminum and has long life and fine quality.
Model V-3-All popular impedances in one "Mike." Vari-Z selector on back gives ready choice of $50,250,500$ ohma, or $\mathrm{Hi}-2(35,000$ ohms). Substantially flat response $40-10,000$ c.p.s. Output -58 db . Bronze gunmetal finish. Shpg. wt. 3 lbs.
\$32.19
Modol V-2-Similar to V-3 but without Vasi-Z selector. Choice of ingle standard impedance. A superb instrument. Frequency response angle standardimpedance. A superbinstrument. F
$40-10,000 \mathrm{c} . \mathrm{p} . \mathrm{s}$. Output -62 db . Shpg. wt. 3 lbs.
$40-10,000$ c.p.s. Output -
K13717-High Impedance.
K13718-50 Ohms.
Your Cost Each
524.14

Model V-1 Same high quality but smaller size. Freq. response fat $40-9000 \mathrm{c} . \mathrm{p} . \mathrm{s}$. Output -65 db . Chrome finish. Shpg. wt. $21 / 2$ lbs. K13722-High Impedance
K13719-50 Ohms
Your Cost Each
519.32

## Carbon Microphones

Model 50-C-Efficient double-button mike, for ring spring mounting. High output. Clear reproduction 5-20 m.a. button current. Metal case. Chrome finish Screv terminals. $3^{3 \times x 11 / 8 .}$. Wt. 1 b. $\$ 3.85$ K13721-(50-CO). Single button
K13721-(50-CS). Single button .............. 52.88
 Mal shock absorber. High output. $5-20 \mathrm{~m}$.a. button current. Gunmetal metal case. $5 / 8^{\prime \prime}-27$ thread, for use with handle or stand. Size $23 / 4^{\circ} \times 11 / 6^{\prime \prime} \times 4^{\prime \prime}$ including stud. With 5 ft. cable. Shpg. wt. 1 lb K13724-(75) Your Cost

S5.14 K13725-(75-S) Single-button.

## Model 423 Utility Desk Stand

Modern, sturdy, sound die cast base. Rests firmly. Satin chromium finish. Matching stem riser. Rubber base chromium finish. Matching stem riser. Rutons prevent scratching. $5 /{ }^{2}-27$ thread. This attracbuttons prevent scratching. 8 or table use has a die cast tive microphone stand for deak or tabe comes in highest quality pressure cast metal. base that comes in highest quality pr
 K13726-(423-A3) With $3^{\prime \prime}$ stem riser.

## AMERICAN microphones



Model D220T Wide Range Dynamic A widerange highfidelity mov-ing-coil. Output phone. Hes phone. Has two dynamic generators, each with a specific freTotal bandwidth 25 to above 10,000 cycles per second. When the two dymamic generators are combined a crossover band is produced which gives an average for both generators and eliminates peaks. Thus, the outputs are electrically and acoustically coupled to probandwidth is from 150 to 5000 bandwidth is from 150 to 5000
cyeles per oecond. A three position switch provides three types response, with characteristics as follows: Aigh: Slightly rising characteristic. (From 150 to 10,000 c.p.a.) Full: For high fidelity requirements where smooth, flat response and broad range are necessary. ( 30 to above 10,000 c.p.s.) Low: For pickup systems requiring embellished lows and good range.
Impedance $-38,000$ ohms. Dimensions $51 / 2$ " $x 4$ " $\times 2$ " deep. Finish of brushed chrome. Weight 4 lbs.
$\mathrm{K} 13573-\mathrm{D} 220 \mathrm{~T}$ ( 38,000 ohms) Your
Cost
s 41.75
Low imp. model, balanced lines. $30-50$ ohms. Same as D220T. K13575-D220 (30-50 ohms) Your
\$38.51

## DYNAMIC MICROPHONES



## Model D8T Dynamic Microphone

The D8T dynamic microphone has been carefully designed to have a consistent well-balanced response, and embodies all the latest developments in dynamic microphone construction. It is exceptionally rugged and assures the user of trouble-free service over a long period of time where ordinary precautions are taken against damage. The D8T is particularly useful for all types of public address installations. For orchestra pick-up as well as solo work and straight announcing, the D8T compact microphone, $31 / 4^{\prime \prime}$ long and 2 " in diameter. A swivel mounting permits either nondirectional or semidirectional pick-up. Average approximate output- 57 db . High impedance $\mathbf{3 8 , 0 0 0}$ ohms. Comes complete with $121 / 3$-foot cable and plug at microphone and $5 / 8{ }^{\circ}=27$ thread for suapension or stand mounting. Has platinum chrome finish. Shpg. Wt. $11 / 2 \mathrm{lbs}$.
K13581- 38,000 ohms, complete
$\$ 17.64$


(f: $\left(\frac{10}{2}\right.$

## Model D9AT Unidirectional

 MikeThe D9AT dynamic, a pressure-velocity combination microphone, with pick-up from the front only, broad frequency response and high output, plus the usual dynamic microphone qualities of ruggedness, immunity to weather conditions, and circuit adaptability, should fill the majority of requirements. Its wide range response and efficient unidirectional characteristies place this microphone in a high position in comparison with other unidirec tional microphones. An extended frequency range to above 10,000 cycles per second. The D9AT is recommended for public address and general sound installations because its energy response field (cardioid of revolution) excludes extrancous pick-up and reduces feedback by two-thirds. May be used for close talking due to the modified velocity section which modified velocity section which
also reduces wind noises to a minimum. Average output approximately -54 db . Dimensions: $7^{*}$ high $\times 21 /{ }^{\prime \prime}$ wide $\times 21 /{ }^{\prime \prime}$ deep.
Standard $5 /-27$ thread provided Standard 5 - -27 thread provided
for auspension or stand mounting. for suspension or stand mounting.
Finished in satin chrome. 25 -foot Finished in satin chrome. 25 -foot shielded rubber-jacketed cable supplied with each microphone. ume on this microphone. High-im-pedance-38,000 ohms. Shpg. weight 4 lbs.



## Model D7T-The "CIlpper" Dynamic

 A good quality moving-coil dynamic microphone with a semi-communication type response suitable for airplane use, marine, police broadcasting, ama teur, public address, and indoor and outdoor in stallations. Output approx. -56 db . High impedance $-38,000$ ohms (also 500 or 200 ohms, is requested). The "Clipper" comes equipped with a $12 y$-foot $R / J$ cable and an Amphenol plug. Finished in chrome. Fits $4 / 8^{\circ}-27$ threaded stand Dimensions: Over-all height, $21 / 5^{\prime \prime}$; diameter $1 \frac{1}{2 \prime \prime}$. Weighs only $81 / 2$ ounces. Shpg. weight

K13487-200 ohm
K13483- 500 ohms
Your Cost, Any Type


## Model C6 Crystal Mike

 Carefully de signed to incor porate the follow ing features: Ex ireme Sensitivity: Crystal driv ing lever, twice as efficient se previousy twice voltage output with equa sponse. Results of roader sponse: Results of new construc tion include extension of low and high end
Bass End Improved: Naturalness insured by improvement in low frequency response.
Longer Lines: By increasing the voltage output, the cable length may be increased proportionately. Mechanical Noise Reduced: Mechanical and stand noise is no longer a factor. The C6 method of cryatal mounting reduces noises by 12 db .
Less Amplifier and Induced Noise: The high output of this microphone assures a very desirmicrophone assures a ver
Swivel Head: All angles for semidirectional and nondirectional pick-up are provided by the $5 / 8$ " -27 Standard mounting connector. 7 -foot cable and plug at microphone. Polished chrome finish. 3 "x21/4" diam. Shpg. wt. $11 / 2$ lbs.
K13580
Your Cost,
Complete.
${ }^{5} 10.58$
deep. Provided complet position and seven fet with metal clip for strap fastening into shielded cable. Weight less than two ounces. Shpg. wt. 1 ib K13589-Model HE1


## Model D4T Moving Coil Dynamic

A quality, low-priced, moving-coil microphone. For general use where clear speech and natural music reproduction is required. Has broad range, from 60 to 7500 cycles per second, and high output of -56 db . While designed for maximum ruggedness, it is of convenient aize and reflecte beauty in modern lines. The utility value lies not only in the quality and type of response but also in mechanical features, such as light weight (approximately $101 / 2$ ounces), a full 180 degrecs vertical angular setting, and positive friction lock at the swivel. The D4T high impedance is equipped with a single-contact, shielded plug. The 500 and 200 ohm models are equipped with a twoconductor plug and have a balanced line out. All modele have a high permeability core transformer enclosed in the case. Shpg. wt. 2 bs. $\left.\begin{array}{ll}\text { K13587 } & 200 \text { ohme, } \\ \text { K13586 } & 38,000 \text { ohms }\end{array}\right\}$ Your Cost, Each

Model RC Crystal Mike


A truly versatile crystal mierophone. For home recording or phone. For home recording or output and good quality. Stationoutput and good quality. Station-
ary or portable. The RC crystal ary or portable. The RC crystal
microphone is provided with a microphone is provided with a
non-breakable plastic stand, but is non-breakable plastic stand, but is
constructed for mounting on any constructed for mounting on any
stand equipped with a standard $5 / 8$ " $\times 27$ thread. If desired, it can be removed from the stand. The base is easily removed. A quarter turn releases the bayonet lock at the end of the handle and the two sections are separated. Capable microphone replacement accomplished by releasing the set screw in back of the microphone and pulling gently on the spring and puling gently on the spring cable protector. Flexible cable,
which comes with microphone, which comes with microphone, handle, and stand, is 7 feet long.
K $23477^{-}$Model RC $\$$ $\underset{\text { Kour Cost............ } \$ 6.4 \text { I }}{ }$

# microphones, sfands and accessories 



For permanent installations. Live rubber covering. Ridged for easy separation of conductors. In Black, Ivory or Brown. Specify color desired when ordering.

## K20920-

$21 / 2^{c}$
100 Ft .
$\$ 2.06$
9.26
00 Ft
4-Wire Speaker Cable


Heavy rubber covering, hemp filler, color coded. Wt. 6 lbs . per 50 K16154-Per Foot ...... $\mathbf{S}^{1 / 2 c}$ 100 Ft. for ................. $\$ 5.85$ 2-Wire-Like above, excellent for portables.
$k 20945$ Per Foot. .......... ${ }^{\text {c }}$
100 Ft . for
53.60

## Crystal Mike Cable

Fiexible stranded tinned copper ingle conductor; tinned copper braid shield; cotton wrap and lacquered braid, rubber overall. Outide diameter . 280 " K20842-Per Foot K16333-50-Foot Roil K16334-100-Foot Roll
K16334-100-Foot Roll . . . . 4.50

## 2-Conductor Crystal

 And Velocity Mike Cable

Low impedance, color-coded in a clowely woven tinned copper shieldAbrasion outer co Abrasion proof K16201-50-Foot Roll. K16202-100-Foot Roll

## 3 and 5 Conductor Shielded Cable

## High Quality Microphone Floor Stands

All adjustable amoothly and noiselessly. and wear-ever, suregrip automatic friction clutch locks for firmly locking the stands at any desired height. The hardened fibre bushing in the elutch is practically indestructible. All have tubing of heavy gauge metal, triple chrome plated. All have $3 / 8{ }^{\prime \prime}-27$ thread to fit standard mikes Extend Wrom 35 to 68 net-add 4 lbs. for packing.

(A) Has $10^{\prime \prime}$ die K13647-Net wi. 15 with gray crinkle finish. (B) Has $10^{\prime \prime}$ dia. base, chrome finish K13528-Net wt. 15 Ibs. Your Cost

## Tripod Base Floor Stand

(C) Deluxe stand. Tripod spread $15{ }^{\circ}$
$\$ 4.98$
$\$ 6.70$
$\$ 7.64$

## ATLAS "Boom" Stand

Precision built. All moving part and locking adjustmente are "velvet smooth" in operation. The counterweight and boom extension can be adjusted for all microphone weights and variable extensions Maximum vertical extension $72^{\prime \prime}$, minimum $48^{\prime \prime}$ Length of horizontal boom arm $63^{\circ}$. Base diamLength of horizontal boom arm ${ }^{\text {eter, at floor contact points, } 17^{\prime \prime} \text {. Tube diameters }}$ 1 1/0" and $7 / 3^{\prime \prime}$ brass, triple "superchrome" plated. Base finished in gun-metal shrivel, chromium legs, rubber shock absorbing bumpers. Fittings provided for all microphones: Universal swivel, assorted adaptors and extenaions, snap-on hangers for holding cable to boom. Wt. 35 lbs. K13527
$\$ 32.34$
Atlas Adjustable Banquet Stands
This banquet stand is of the telescope type with the "Velvet Action" full grip clutch. Constructed of $7 / 8$ " heavy brass tubing. The base is of 5 lb . castThe base is of ${ }^{10}$. castEquipped with rubber bumpers to prevent table scratching, absorb
shock. Tube finished shock. Tube finished adjustable from $18^{\circ}$. The stand is ished in attractive $32^{\prime \prime}$. Finshrivel.

## Carbon Mike Stand

Has 5\%" octagonal
ring. 8 springs sup. plied. Overall height
9". Removable ring $^{\circ}$. Black enamel wrinkle finish.
$\mathrm{K} 13540-\mathrm{Wt} .4 \mathrm{lbs}$. Your
Cost.... ST.62

De Luxe Banquet Stand
Same as above, but with $6^{*}$ re movable round ring. Height $13^{\prime \prime}$ overall. Shpg. wt. 5 lbs K13542-
$\$ 2.35$
Microphone Springs
Made of fine tem-
Made of fine
Kered steel. $\mathbf{K 1 3 4 0 2 - S e t ~ o f ~} 8$.
Your Cost.
Faithfully reproduces any musical instrument. High impedance (available in 200 ohms impedance on order only). Range 40 to 11,000 cps at -40 db . level. Equipped with a 15 -ft. cable. Shpg. weight 4 lbs.
K13675-Model SKH ST .
Your Cost.........

## Carbon Granules

Extra fine quality-not adulterated. Refill one twobutton mike.

AMPERITE Velocity Mikes


With Acoustic Compensator Feature hand-hammered ribbons. Alnico magnets, standard "station rype" cable connector assemblies, rype cable connector assembles, rying case. Guaranteed for 3 years. Built-in Acoustic Compensator-Built-in Acoustic Compensator-
push knob up to increase highsdown to increase lows. Range: $40-$ 11,000 c.p.s. Output: -65 db .25 ft. cable. Chrome. Wit. 8 lbs. K13668-RBHK. Hi-Imped. K13669-RBMK. 200 ohms.
Your
$\$ 24.71$
Standard Models
Similar but range: $60-8000$ cp.s. Output: -68 db .12 ft cable K13598-RSHK. Hi-Imped. K13599-RBSK. 200 ohms.
Your
$\$ 18.82$
SR-80 studio Velocity
Tops in quality. Flat within 1 db . from 40 to 15,000 c.p.s. Triple shielded. Built-in "onoff" switch. 25-ft. cable. Chromefinish.High impedance. Shpg. wt. 10 lbs. Model SR. 80
K13463
Your
Cost... 39.20


## ANHPERITE "PG"

Pressure Gradient
Lowest feedback point of any diaphragm type mike. Improved ellipsoid pickup pattern, flat responsc. Range 40 to 11,000 c.p.s. Output level -56 db . Station-type cable connector, built in "on-off" cabitch. With $25-\mathrm{ft}$. cable. Satin chromium finish. Shipping wt. 31 bs . K13610-PGH.
High Imped.
$K 13613$ PGL.
s18.82 200 ohms.
K13611-PGAH. As above, but 70 to 8000 c.p.s. 12-ft. cable. High imped.
Your Cost
s14.70 K13607-Plastic Baffle for 88 e
PG Mikes, Each........

## AMPERITE Replacement

 RibbonsFor use with Amperite Velocity Microphones RBHK, RBMK, RSHK, RBSK. 2 to a package. K13566.
Standard.
$73^{c}$
K13567
s 1.03

AMPERITE "KF" Foot Volume Control


Provides smooth control of volume by foot action. For any high impedance Kontak mike. Size: $9 \times 21 / 4 \mathrm{I} 21 / 4^{\circ}$. Supplied with 15 foot cable. Shipping weight 4 lbs . K13663-
Your Cost
$\$ 7.06$


## Single Contact Mike Connectors

Pressure type compact connec tors for use with single conductor microphone cable-utioize shell for second contact. Contact is made when center soldered connections are pressed together by tightening coupling ring. Plated metal ahells. Insulation is special tissue base laminated bakelite. Cable shield easily grounded through shell by soldering to cable protector. Accommodate cables up to $1 / /^{\prime \prime}$ in diameter.

Type 75-M C1F-Female cord connector. (A).
Type 75-PC1M-M Type 75-PC1M-Male chassis
connector. ${ }^{\text {Same as } 75-\mathrm{MClM}}$, connector. Same as
but for chassis mitg. (C). TQc K13361-Each
Type 75-MC1FA-Right angle female cord connector with spring cord protector. Use with 75 ${ }^{\mathrm{PCC1M}}$. K13277-(E)-Each

Type 75-MC1M—Male cord con${ }^{\text {nector. }}$ ( B ). K13360-Each
Type 75-SP-PC1M-Same as 75 PC1M but with center contact floating on a heavy coil spring. (D). K13385
Each
$26^{\circ}$
Type 75-CL-PC1M Closed circuit chassis connector. Closes circuit automatically when mike is disconnected. (D). 26.
$\mathrm{K13268}$ - Each

## Receptacles and Plugs



Molded black bakelite insulation. 2 -pole receptacles have one elongated hole and can be used with both the standard type of plug and the polarized type having one $1 / 4^{"}$ and one ${ }^{\text {fis }}$ " blade. 3 -nole receptacles are for
use with 3 pole plugs. Underwriters ratings. $15 \mathrm{~A}-125 \mathrm{~V}$. use with 3 pole plugs. Underwriters ratings: $15 \mathrm{~A}-125 \mathrm{~V}$. or $10 \mathrm{~A}-250 \mathrm{~V}$.
Dimensions: (A) hole $-1.172^{*}$, (B) Mtg. ctrs. 116 to $17{ }^{(B)}$ (C)
 No. Poles Type Each FLUSH (C) No. Poles Reype K11503-2 Standard Plug K11624-2 Polarized Plug K11624-2
K11625-3 Polarized Plus
Receptacle K11625-3 $\quad$ Rfceptacle
K11626-3 Polarized Plug WITH PLATE (B) K11500-2 Receptacle K11501-2 Standard Plug

No. Poles Type Each K11504-2 Receptacle K11635-2 Polarized Plugg $\} 0$

## SURFACE TYPE (D)

K11637-2
$\begin{gathered}\text { Receptacle } \\ \text { K11638-2 } \\ \text { K11639-2 } \\ \text { Ptandard Plug }\end{gathered}$
Polarized Plug
K11639-2 Polarized Plus

## AMPHENOL

## Shielded Plugs

Fully shielded cable type 2 pole plugs and receptacles. Take up to Unbreakable metal caps.

> WITH CLAMP (A)

No. Description
K11546-Receptacle
K11545-Standard Plug
K11647-Polarized Plug
Your Cost
Any Above, Each. 32c
SIDE OUTLET (B)
K11548-Rceeptacle K11517-Standard Plug K11650-Polarized Plug Your Cost
Any Above Each. $28^{c}$

END OUTLET (C K11651-Receptacle K11652-Standard Plug K11653-Polarized Plug Your Cort. Erech 28
Any $A b o v e$


> Rubber Plug Handle
> Whl fit over type (C) recept., plugs as listed above; secured by inner break at cap. IIc

Heavy Duty Type Multiple Connectors

heavy prong rated at 15A.-125V. or $10 \mathrm{~A}-250 \mathrm{~V}$. Dirt and moisture proof. Cable clamp adjustable to 136 ${ }^{\circ}$ diam POLARIZED numbered contacts. Fully shielded Elements are interchangeable. Shell may be used as 5 th conduct or K13314-Male (A). K13316-Female (B) 177 K13320-Panel receptacie (C) thread for male plup ring... $\$ 1.77$ thread for male plug ring. . . $\$ 1.77$ Cable Connectors
Standard connectors waps. Rubber-
grommet cable opening at end. grommet cable opening at end.
Female
Male
Contacts Each

Singie Conductor

## Pon Connectors

Metal shells are heavily plated. Bakelite elements. Screw type coupling rings lock male and female connectors. Shells may be utilized for second conductor. For cable up to $1 /{ }^{\circ \prime 2}$ dia.
K13286-Male (B)
K13287-Female (A) $\}$ - 2 E Ea. K13288-Female chassis connec tor. Mounts in a single $5 / 8$ "hole. (C).

## Your Cost Each

K12574-Female chassis connec tor with riveting plate. Single $5 /{ }^{\prime \prime}$ hole mtg. (D).

## Two-Conductor

Like the a bove, but for 2 -conductor cables and twisted pairs. Have two parallel contacts.
$\left.\begin{array}{l}\text { K13289-Female } \\ \text { K13290-Male }\end{array}\right\}>e^{\text {Ea. }}$ K13290-Male K13292-Female chassis connector. Mounts in a single 5/f" hole. Your Cost

## Each.

29 c
K12575-Female chassis connec tor with riveting plate. Single $5 / 8$ " hole matg.
Your Cost Each
$35^{\circ}$

Molded bakelite connectors in cad mium plated brass shells. Only 11/" long, ${ }^{11}$ /f" diameter. Bakelite element held in place by set screw.
When used with shielded cable, shield can be soldered to shell. Accommodates cables up to $1 /$ " $^{\prime \prime}$.
Male Female
K13335
K13337
$\mathbf{K}$

| K13335 | K13337 | S | 21c |
| :--- | :--- | :--- | :--- |
| K13336 | K13339 | 4 | $24 c$ |
| $K 13333$ | $K 13334$ | 5 | $27 c$ |

## Microphone Switch

Attaches between male and female of any of the above connectors. permanent connection. K13357-75-MC1s

Phone Plug Adapter

Makes a standard phone plug out of the $75-\mathrm{MClF}$ cable connector K13388-75-MC1 Your Cost

## Minlature Connectors

K13333 K13334
K13338 K13340 6 27e


## Chassis Sockets

 Similar to sockete listed above but with shield When used with shield ed male connector list ed at top of page a completelyshielded connection is obtained. shielded connection is obtained. Easily mounted. Your Cost K12704-3-contact. K12705-4-contact K12706-5-contact
K12707-6-contact
$\begin{array}{r}21 \mathrm{c} \\ .24 \mathrm{c} \\ 245 \\ \hline\end{array}$
$.24 c$
Miniature Sockets \& Plugs These are inwith the connectors listed
above. The sockets are equipped with push-on mounting rings and can be used with above listed male plugs as well as the plain plug isted here. Similarly the plugs listed below can be used with the female connectors listed above.
Sockets Ea. Plugs Ea. Cont. Sockets Ea. Plugs Ea. Cont.
K12700 10c K12708 9c $\begin{array}{llll}\text { K12701 10c K12708 } & \text { 10c } & \text { 9 } \\ \text { K12709 } & \text { 9c } & 4\end{array}$ $\begin{array}{lll}\text { K12702 } 121 / \text { c } \mathrm{c} 12710121 \text { c c } & 5 \\ \text { K11542 12 / c K12711 } 121 / 2 \mathrm{c} & 6\end{array}$

# plugs, jacks, connectors 

## Popular Phone Plugs

For 1 or 2
phone or
peaker
crrd 3/4" diam Serew connect long $x$ K14974 Black
K14971-Red. Each.... $29^{\circ}$ 10 For

Metal Shell Type Same with mickeled brass shell K14970-Each 54.50. $50^{c}$ "Stubby" Metal Shell As above but with short metal shell. K14959-Each For $\$ 3.75$. 12e
Midget Bakolite Plug

Bakelite shell. $21 / 4^{\text {" }}$ overall $x$ "后" diameter. Solder lug connections K14960-Black K14963-Red
Yach.................. $\mathbf{3}$ C
Midget Metal Shell Same with metal shell. $21 / 6$ over-


41 c

## Midget Jacks

Fibre insulation
\% mtg. hole
K6548-Closed ci
cuit jack.
K6549-Open cir- $\left.(O)^{7}\right)$ - 0
cuit jack. IS
K6550-New Imp Short Jack.
3-circuit for 3 -way plugs. Ea. 20 c

## Shlelded 3 Way Microphone Plug

## 

Barrel is made of nickel plated brass. Fully insulated bushing. K13519-5 For \$4.10. Your Cost As above but with bakelite K13521-5 For $\$ 2.93$. Your Cost

Shlelded 3 Way Jack


Phosphor bronze spring jack. Nickeled brass shell.
K13520 Your Cost..... K13522-Jack, less shel Your Cost................ 1

## Mike Cabie Clip

Nickel plated brass. Holds cable close to stand. K11661
Each.
$9^{c}$
High Voltage
Plugs and Jacks


Heavy duty type, in medium and giant sizes. Capable of handing use with high radio frequency currents, diathermy work, transmitters, etc. Have insulated threaded heads and handles. Hardiware furnished with jacks. Use medium size jacks for panele up to " $k$ " thick. Use giant size jacks for panels up to $4 /{ }^{\prime \prime}$ thick.
Mediumplugs- $2 \times 3 / 5 \times 35 / 8$
K12870-Black and Red K12871-Black
Your Cost, Esch
Medium Jacks- $2 \times 1 / 8$ K12872-Black and Red K12873-Black
Your Cost, Each
Giant Plugs-2×1/2×33/4 K12785-Black and Red K12786-Black
Your Cost, Each
Giant Jacks-21/6K ${ }^{3}{ }^{\circ}$ K12788-Black Kour Cost, Each

JONES "300" \& "400" Series Plugs \& Sockets
Multiple contact plugs and heavy duty (25 ampere) and "300" series standard duty ( 5 ampere) sizes Cable type pluge and socs Cable type plugs and sock ets have cable clamps. Chassia type have bracket -heavy duty type at ende


A TYPE A PLUGS

Standard Duty Heavy Duty Stock Your Con- Stock Your No. Cost tacts No. Cost $\begin{array}{lllll}\mathrm{K} 12401 & 24 \mathrm{e} & 2 & \mathrm{~K} 12400 & 48 \mathrm{c}\end{array}$ $\begin{array}{llll}K 12461 & 28 \mathrm{c} & 4 & K 12401\end{array}$ $\begin{array}{llllll}K 12462 & 32 \mathrm{c} & 6 & K 12402 & 68 \mathrm{c}\end{array}$ $\begin{array}{lllll}\text { K12463 } & 36 \mathrm{c} & 8 & \text { K12403 } & 77 \mathrm{c} \\ \mathrm{K} 12464 & 40 \mathrm{c} & 10 & \text { K12404 } & 88 \mathrm{c}\end{array}$ $\begin{array}{lllll}\text { K12465 } & \text { 45c } & 12 & \text { K12405 } & 98 \mathrm{c}\end{array}$ CHASSIS TYPE PLUG (C) K 12472 11e 2 K12426 29 c | $K 12473$ | 15 e | 4 | $K 12427$ | $37 e$ |
| :--- | :--- | :--- | :--- | :--- | $\begin{array}{lllll}\text { K12474 } & \text { 18c } & 6 & \text { K12428 } & \text { 44c } \\ \text { K12475 } & \text { 22c } & 8 & \text { K12429 } & \text { 51c }\end{array}$ $\begin{array}{lllll}K 12476 & 25 c & 10 & K 12430 & 57 c\end{array}$ K12477 28e 12 K12431 G4c

## JONES No. 140 Terminal Strlps

$7 /{ }^{\text {" }}$ deep by ${ }^{18}$ /r" high. Terminals mounted on 8/" centers. Metal to metal spacing over bakelite 10". Screws are brass, burnished nickel plate Ideal for radio, P.A., and other electrical work.


## Stock No. Terminals

minals
$2 \ldots \ldots$
$3 \ldots \ldots$
$4 \ldots \ldots$
$5 \ldots$

| Each | Stock No. Terminals |  |
| ---: | :--- | ---: |
| $\mathbf{\$ 0 . 1 3}$ | K12653 | $7 \ldots \ldots$ |
| .18 | K12654 | $8 \ldots \ldots$ |
| .23 | K1265s | $9 \ldots \ldots$ |
| .27 | K12656 | $10 \ldots$. |
| .31 |  |  |

## JONES No. 141 Terminal Strips

$11 / 6^{*}$ wide by $3 / 2^{\prime \prime}$ high. Terminals mounted on ${ }^{7 / 6 "}$ centers. Metal to metal apecing over bakelite $1 / \mathrm{s}^{\prime \prime}$. Screws are brass, burnished nickel plate.

## Stock No. Terminals

K12539

## K12540

K12541
K12542
K12543

| Each | Stock No. | Terminals |
| :---: | :---: | :---: |
| S0.17 | K12544 |  |
| . 23 | K12545 | 8. |
| . 29 | K12546 | 9 |
| . 35 | K12547 | 10 |
| . 40 | K12548 | 11 |
|  | K12549 | 12 |

"Spring Sleeve" Plug and Jacks


72

71

73

Rubber Capped Male and Female Plugs Molded rubber. Standard socket arrangement of holes and prongs. Ideal for outdoor use. Prevent broken cables.

Male Male Female
No. Each Prongs No. Each
K11705 $\left.70 \quad{ }^{4} \quad \times 11710\right\} 38 \mathrm{C}$
 \(\left.\begin{array}{l|l|l}\mathrm{K} 11707 <br>

\mathrm{~K} 11708\end{array}\right\} 236\)| K |
| :--- |
| 7 s |
| $\mathrm{~K} 11712 \ldots 45 \mathrm{c}$ |
| $\mathrm{K} 11713 \ldots 47 \mathrm{c}$ |



## Standard Speaker

 Plugs1-piece
molded bakelite. Solid construc tion; speake
easily wired.

No. Type
K11512-4 prong
K11513-5 prong
K11514-6 prong
K11515-7 prong
K11516-8 prong
$10 c$

## Dial Plates

Fine etched metal black
dial plates, calibrated $0-10$ in $300^{\circ}$. 21/ " high by $1^{11 / 4 " ~ w i d e, ~ w i t h ~ f o u r ~}$ mounting holes.
Plain Record
Gain Microphone
Specify marking desired
Specify marking desired. IGe
K $9904-5$ For 72 c . Each

## "Modern" Dial Plate

Silver colored plates
with black letters. All
${ }^{23}{ }^{3} /{ }^{\circ} \times 2{ }^{25}{ }^{\prime \prime}$ ". Marked:
phone, Increase (no Eigures, markings only), Volume and Plain (no titie, just i to 10). Specify marking desired when ordering. K10669-
Any Type, Each
$21^{c}$

## Etched Metal Plates

Raised let-
ters on an
black etched
beckern
background.
All $1 / 3 /{ }^{\prime \prime}$ wide
by $3 / 88^{\prime \prime}$ high
With following
ma kings
A. C. Input

Amp. Grid Curr. Amp. Sereen Curr Antenns Ant. Feeder Curr. Buffer Plate Curr 1st Buffer Grid 1st Buffer Plate filament Voltage Fil. 1st ON; 2nd OFF Gain Control
Input
50 Ohm Input 125 Ohw Input 200 Ohm Input 500 Ohm Input Key
Mey
Modulation Ind. Modulator Grid Modulator Plate

Monitor
Neut. Cond
Oscillator
Ose. Plate Cur
Osc. Plate Curr.
Output Output
Output
Output Gnd. Gind.
50 Ohm Output 125 Ohm Output 200 Ohm Output 500 Ohm Output Plate Plate Voltage Plate 2nd ON: Power Amp. Grid Power Amp. Plate Receive Rectif Modulator Plate Tritet Oscill. Specily marking desired.
K9898- Type, Each
10 For (any selection).


## JENSEN Type "J" Coaxial Hi-Fidelity Speakers

Efficient dual apeaker assemblies with cone type "tweeter"' mounted in the cone assembly of the "woofer". Provide true high-fidelity response, ceivers, for broadcast and recording monitoring etc. The $15^{\prime \prime}$ models incorporate a built-in two channel network providing high and low-pass channels with attenuation of $10-12 \mathrm{db}$ pe octave; also furnished with four-position High Frequency Control Switch on a $36^{\circ}$ cable ("rolloff" control of high range). $12^{"}$ model has simple bridging type network that affords good wide-range performance; no range control switch with this model.

## Model JAP-60. 15" Speaker

Professional type for FM-AM broadcast monitoring, transcription playback, reference standard for laboratories, etc. Range 50 to $12000-$ 15000 c.p.s. Efficiency 3 db bigher than other $15^{\prime \prime}$ models. Input impedance 500 ohms. Max. input $14-15$ watts. Integral two-channel K19007-Shpg wt, 24 lbs. Your Cost

## Model JHP-52. 15" Speaker

For all general applications such as FM and AM receivers, fine phonographs, broadcast and recording monitoring, etc. Range 50 to $12000-$ 15000 c.p.s. Maximum input $12-14$ watts. Input impedance 500 ohms, Integral 2-channel aetwork. With 4 -position H.F. control. Shpg, wt.
23 lbs. K19002

## - Your Cose

## Model JCP-40. 12" Speaker

Ezcellent modernizing unit to replace $12^{\prime \prime}$ speakers in radios and phonoradio combinations. Range 50 to $10000-12000$ c.p.s. Max. input 8.10 watts. Iaput impedance 6 ohms. Has simplified bridging type network (no H.F. control)
K19008-Shpg. wt. 16 ibs. Your Cost.
S20.73


## JENSEN PM \& Field Coil Dynamic Concert Speakers

A series of heavy-duty highly efficient apeakers for use in all types of radios, phonographs and public address equipment. All are designed so that they may be used in Jensen BASS REFLEX enclosures and cabinet. Field coil modele have hum bucking coils. All models less out put transformer. A complete listing of suitable transformers will be found below. Frequency response range of all models meets the accepted standard for high fidelity performance.

## Permanent Magnet Types

${ }_{\mathrm{N}}^{\mathrm{N}} \mathrm{O}$
K19076
$\mathbf{K 1 9 0 8 8}$
$K 19092$
$K 19071$

| Model | Size | Watts | V.C. | Shpg. We. |
| :--- | :---: | :---: | :---: | :---: |
| P8-S | $8^{\prime \prime}$ | 8 | 6 ohms | 41 bs. |
| P10-S | $10^{\prime \prime}$ | 9 | 6 ohms | 5 lbs. |
| P12-S | $12^{\prime \prime}$ | 10 | 6 ohms | 7 lbs. |
| PM12-H | $12^{\prime \prime}$ | 12 | 8 ohms | 9 lbs. |

## Field Coil Types




## JENSEN RA83 Hi-Fi Unit

Comprises a high quality $8^{\circ} \mathrm{PM}$ speaker housed in enclosure as shown. Handles 6 watts continuously. Recommended wherever flat response is required from 50 to 10,000 c.p. A. Ideal for broad cast work auditoriums, for fine radio receive etc. Voice coil impedance 6 ohms. Enclosure has Bass Refiez feature; constructed of plywood Bass Renez feature; constructed of plywood

 c (G8RT). 2500 ohm field coil
9-Watt Model RA123
Like the above, but for use where greater power handling capacity is required. Has $12^{\prime \prime}$ PM speaker and handles 9 watts continuously. In MT-121 enclosure, $27 \times 248 / 4 \times 131 / 2^{\prime \prime}$. Wt. 53 lbs. K19001-Enclosure with $12^{\prime \prime}$ PM Speaker. Your Cos
$\$ 34.87$ K19000-12" PM Speaker only (PM12CT). Your Cost..... $\$ 13.26$ K19006-12" Dynamic (G12RT). 2500 ohm field coil. Your cogt . 9.35

## Transformers For Above

K19177-Matches voice coil to 500 ohm line. Each. . . . . . . . . . . $\$ 1.85$ K19181-Universal Line ( $500 / 1000 / 1500 / 2000$ ohms). Each . . . . $\$ 3.05$ K19183-Universal Tube (any tube, single or p.p.). Each.
$\$ 3.09$

## Type "A" Bass Reflex. Enclosures only


$\$ 26.84$
23.35


## JENSEN 8", $10^{\prime \prime}$ and 12" Standard <br> Dynamics Models "C" <br> Figh quality dynamics ideally suited for radio re

 ceivers, P.A. work, etc. Employ heavy field pots $11 /{ }^{\prime \prime}$ voice coils and hum bucking coils. Voice coil impedance 8 ohms at 400 cycles per second. $8^{*}$ models have power capacity of 6 watts 10 models have power capacity of 8 watts and $12^{\circ}$ models have power capacity of 12 watte. All furnished less output
transformers.
Stock No. Model
K18988 C8-RS (8")
K18992 C12-R (12*)
K18993
C12-R (12*
Field Res
2500 ohms.
500 ahms 6 lbs 1250 ohms 9 lbs.


JENSEN 12-Inch Concert Speaker
Used for public address and high quality radio and phonograph applications. Designed for use in the Jensen Bass Reflex enclosures and cabinets. Supjensen without transformer. Voice coil characteris. plied without transformer Kics: 8 ohms imp. 15 watte
Your Cost.

## $\$ 23.81$

## JENSEN Auditorium Speakers

 These $18^{\prime \prime}$ PM Auditorium Speakers are among the best known and respected high quality laud speakers nvailable. Model PMJ-18 is recommended as a general purpose unit. Model PVJ -18 was designed with greatest emphasis on reproduction of voice, but in accomplishing this, bass response has not been sacrificed. Voice coil characteristics: impedance 8 ohms, 25 watts. K18954-Model PMJ-18 K18955-Model PVJ-18 Either mode!. Your Cost$\$ 143.58$


Series "S" PM Speakers Rugged,com $\underset{\text { pact speak. }}{5 \text { spe }}$ ers. $5^{\prime \prime} 6^{\prime \prime}$ and $8^{\prime \prime}$ speaker: voice coils are 4 ohms impedance at 400 cycles; $10^{\circ}$ and $12^{\circ}$ speakers are 6 ohms. Less output transformer.

| Stock | Model | Size | Your |
| :--- | :--- | :---: | ---: |
| No. | No. |  | Cost |
| K18960 | P4-X | $4^{n}$ | $\$ 2.56$ |
| K18668 | P5-X | $5^{\prime \prime}$ | 2.62 |
| K18969 | P6-W | $6^{\prime \prime}$ | 3.26 |
| K18970 | P\&U | $8^{\prime \prime}$ | 4.70 |
| K18971 | P10-T | $10^{\prime \prime}$ | 6.56 |
| K18972 | P12-T | $12^{\prime \prime}$ | 8.20 |

Universal Out putTranstormers For Serles "S" Speakers No. Type For Each K18973 Line PM \& E 4, 5, 6, 8 \$1.06 K18975 Line PM8 DS, FS K 18976 Tube PM8 Dg, FS
NOTE:10" and 12" speat transformers listed at right.

## Universal Matching Transformers

 Match Jensen speakers to any output tubes, single or push-pull,universal Iine ( $500,1000,1500$ and 2000 ohms). Shpg. wt. 4 lbs universal ine (500, 1000,1500 and 2000 ohms). Shpge wt. 4 lbs. K19022 Univ. Line PM-8C, PM-10C, PM-12C, G12RS, PM12GS K19023 Univ. Tube PM-8C, PM-10C, PM-12C, G12RS, PM12GS K19024 Univ. Line K19025 Univ. Tube A12, B12X, PM12H K18964 Univ. Line C8PR, C10-RS, C12-R, PAH-8, FAB-8 K18965 Univ. Tube CS-RS, C10-RS, C12-R, PAH-8, FAB-8 ${ }_{K} 18966$ Univ. Line PM10-GS, G10-RS

## JENSEN A40-1 Network

A unique 2 -channel network for those who wish to assemble their own speaker system, or add a high frequency speaker to an existing single speaker. Freq. division is at 4000 cycles, with an attenuation outside pass band of $10-12 \mathrm{db}$ per octave. Low freq. channel accommodates any suitable 8 ohm, 12 or $15^{\prime \prime}$ speaker. High channel takes 1 to 4 high freq. speakers ( 16,8 \& 4 ohm taps). 500 ohms input.
Your Cost
$\$ 19.43$

## JENSEN HNP-51 Hi-Fi Coaxial

Two speakers in one assembly! 4 -point switch gives 4 response curves for phono, SW. AM, FM and television. H-F cut-off at $15,000,10,000$ 7500 and 6000 cycles. "Roll-of" type h-f controi 7500 and 6000 cycles. "Roll-off" type h-f control
built into dividing network. Nominal input built into dividing network. Nominal input
imped. to div. network 500 ohms. 25 watte power eapacity. ${ }^{15^{\prime \prime}}$ curvilinear cone with $2^{\prime \prime}$ voice coil. Compression-type, horn-in-coae speaker. Alnico 5 field. Wt. 181 ibs. K19016-Your Cost.
$\$ 73.50$


Series "FF" Dynamics Standard Replacemente. Alliessoutput transformers (seelistingunderSeries " $F$ " PM), crept${ }^{\mathrm{i}} \mathrm{K} 18977$ which includes a
4500 ohm transformer to match 43, etc.
No. Model Size Ohms Each $\begin{array}{llll}\text { K18956 F4XX } & 4^{\prime \prime} 450 & \$ 2.38 \\ \mathbf{K} 18957 & 450 \\ 4^{n} 3000 & 2.38\end{array}$ K18957 F+X K18958 F5-X K18978 F5-X K18977 F5-X K18979 F5-X $\quad 5^{\circ} 3000$ $\begin{array}{ll}\text { K18979 F5-X } & 5^{*} 6 \text { wolt } \\ \text { K } 18980 & \mathrm{F6}-\mathrm{X} \\ 6^{*} & 2750\end{array}$ K18981 FG-X

K18982 F6-X K18983 F8-T K 18984 F -

K18985 F10 S
18986 F10-S
K18928 F12S
K18987 F12-8
$6^{\circ} 1800$ tap1800 tap-
ped at 300
volts $0^{\prime \prime} 6$ volts
$8^{\prime \prime}, 2500$
$8^{\prime \prime}$
$8^{\prime \prime} 1000$
$8^{\prime \prime}$
$8^{\prime \prime} 1000$
$\$ 4.09$ ped at 300
$\$ 6.14$
$\$ 7.61$

# all purpose speakers 

| CINAUDAGRAPH speakers offer complete range of speakers available for replacement, small PA installations, and inter-office communications. Each speaker is of superior quality. All except $2^{\prime \prime}$ speakers have transformer mounting brackets, but are supplied without transformers. All PM speakers use Alnico $V$ magnet. All dustproofed all field coil models have bucking coils. |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PM Type Oice |  |  |  |  |  |  |  |  |  |  |
| No. | Size Imped | 1. Watts | Each | No. |  | Imped | Watts |  |  |  |
| K19128 | $2^{\prime \prime} 3.2$ | 1.0 | \$1.91 | K19141 | $3{ }^{\prime \prime}$ | 3.2 | 1.5 | 450 | 3 | \$2.65 |
| K19129 | $3^{\text {F }} 3.2$ | 1.5 | 2.06 | K19142 | 4* | 3.2 | 2.0 | 450 | 3 | 2.79 |
| K19130 | $3^{\prime \prime} \quad 3.2$ | 2.0 | 2.35 | K19143 | $5{ }^{\prime \prime}$ | 3.2 | 2.5 | 450 |  | 2.94 |
| K19131 | $4^{\prime \prime} \quad 3.2$ | 2.0 | 2.21 | K19144 | $5{ }^{\prime \prime}$ | 3.2 | 2.5 | 1000 | 3 | 2.94 |
| K19133 | 5" 3.2 | 2.5 | 2.35 | K19145 | 5" | 3.2 | 2.5 | 2750 | 3 | 2.94 |
| K19134 | 5" 3.2 | 3.0 | 265 | K19146 | $6^{\prime \prime}$ | 3.2 | 3.0 | $4(8 \mathrm{~V})$ | 3 | 3.23 |
| K19135 | $6{ }^{\prime \prime} 3.2$ | 3.0 | 265 | K19147 | $6{ }^{\prime \prime}$ | 3.2 | 3.0 | 450 | 3 | 3.23 |
| K19136 | $6{ }^{\prime \prime} 3.2$ | 3.5 | 2.94 | K19148 | $6^{\prime \prime}$ | 3.2 | 3.0 | 1000 | 3 | 3.23 |
| K19137 | $6^{\prime \prime} \quad 3.2$ | 5.0 | 4.12 | K19149 | $6^{\prime \prime}$ | 3.2 | 3.0 | 2750 | 3 | 3.23 |
| K19138 | $8^{\prime \prime} \quad 3.2$ | 5.0 | 4.26 | K19150 | $8{ }^{\prime \prime}$ | 3.2 | 4.0 | 1000 | 4 | 3.82 |
| K19139 | $10^{\prime \prime}$ | 8.0 | 7.06 | K 19151 | $8{ }^{\prime \prime}$ | 3.2 | 4.0 | 2500 | 4 | 3.82 |
| K19140 | $12^{\prime \prime}$ | 9.0 | 7.94 | K19152 | $8{ }^{\circ}$ | 8 | 5.0 | 2500 | 6 | 5.58 |
| Note: Magnet weight varies from |  |  |  | K19153 | $10^{\prime \prime}$ | 8 | 8.0 | 2500 | 8 | 6.17 |
|  | . 68 os. to 3.1 | 18 oz . |  | K19154 |  | 8 | 9.0 | 2500 |  |  |

## LAFAYETTE DYNAMIC SPEAKERS

A quality line of speakers for general replacernent purposes. Also good for light public address work. They have a practically flat response, when properly baffled, varying from 100 to 4500 c.p.s. Formed one-piece cones.

3 " and 4" Diameter Madels
or call systems, hearing aids and midget radios. Less transformer. Shpg. wt E Each
$3^{\prime \prime}$ No. $4^{\prime \prime}$ No. Field K19279 K19115 450 ohms $\} \$ 2.50$ K19265 K19116 2750 ohms $\}$ ( $\}$ 2. $\$ 1$ K19273-Universal tube matching transformer for any of the above models

5 " Diameter Models
All less tranaformers. Average wt. 3 lbs. Stock No. Field Stock No. Field K19263-2750 ohms K19264-1800 tapped at 300 ohms. She.

Special Transformers for $5^{*}$ Models Stock No. Impedance For Tubes K19286 2,000 ohms 25B6, 25L6, etc. $\begin{array}{lrl}\text { K19287 } & \text { 4,000 ohras } & \text { 25A6, 43, ete. } \\ \text { K19288 } & 10,000 \text { ohms } & \text { 41, 6C6G, } 6 \text { A4-LA }\end{array}$ Your Cost Each, Any Type
All less 6" Diameter Models All less matching transformers. Averase $65^{\circ}$ Stock No. Field Resistance K19122 4 ohms (for auto sets) $K 19165 \quad 1000$ ohms
K19109 1800 ohms tapped at 300
K19166 $\mathbf{g}^{\prime \prime}$ Diameter Models
All less matching transformers. Shpg. wt. each 6 lbs.
Stock No. Field Resistance Each

 $\begin{array}{lc}\text { K19283 } & 1800 \text { ohms tapped at } 300 \\ \text { K19292 } & 2500 \text { ohms }\end{array} \quad$ S3.60 10" Diameter Models All less matching transformers. Shpg. wt. each 7 lbs .
$\left.\begin{array}{ll}\text { Stock No. } & \text { Field Resistance } \\ \text { K19284 } & 1000 \text { ohms } \\ \text { K19285 } & 2500 \text { ohms }\end{array}\right\} \quad \$ 5.80$

12" Diameter Models
All less matching transformera. Shpg. wt. each 9 lbs.
\(\left.$$
\begin{array}{ll}\begin{array}{l}\text { Stock No. } \\
\text { K19294 } \\
K 19295\end{array}
$$ \& \begin{array}{l}Ficld Resistance <br>
2000 ohms <br>

2500 ohms\end{array}\end{array}\right\}\)| $\$ 7.25$ |
| :--- |

 $\begin{array}{ll}\text { K19294 } & \left.\begin{array}{l}1000 \text { ohms } \\ \text { K19295 } \\ 2500 \text { ohms }\end{array}\right\}\end{array} \$ 7.25$

## LAFA YETTE PM SPEAKERS

Once more Lafayette is able to supply you with the finest grade permanent magnet type speakers. High quality permanent magnet all-purpose speakers. Each matches in sensitivity a comparable field coil type. Have high permeability magnets; one piece seamless cones ; plated metal frames. Voice coil impedance $3-8$ ohms. All supplied less output trans former.

| Stock No. | Diameter | Wattage | Shpg. Wt. Lbs. | Your Cost |
| :---: | :---: | :---: | :---: | :---: |
| K19155 | $2{ }^{\prime \prime}$ | 1 | 11/2 | \$1.79 |
| K19123 | 3" | 11/2 | 11/2 | 1.95 |
| K19268 | 3" | 2 | 2 | 2.20 |
| K19111 | 4" | 2 | $11 / 2$ | 2.09 |
| K19112 | 4" | $21 / 2$ | 13 | 2.30 |
| K19113 | 5 " | $21 / 2$ | 11/2 | 2.20 |
| K19269 | 5" | 3 | 3 | 2.50 |
| K19270 | $6 "$ | 4 | 3 | 2.75 |
| K19271 | $8{ }^{\prime \prime}$ | 5 | 4 | 4.00 |
| K19290 | $10^{\prime \prime}$ | 8 | 6 | 6.70 |
| K19272 | 12" | 9 | 7 | 7.50 |



No radio ser viceman can aford to go out on a job without this kit. ful for repairing parts of speaket cones; voice coils, radio frequencs coils and chokes. Kit connists of one bottle of all purpose cement plicator brush.

## LAFA YETTE Fabrikoid

## Wall

## Baffies

Correctly angled faces provide
wide area coverage.
Can be Clan be floor to 81 $\qquad$ and 12 \# models only) Herdwood and brownleatherette. Av. wt. 81 bs No. Speak. H. W. D. Each K20060 6" 81/4x71/2 54 " $\$ 1.80$ K20063 $8^{\prime \prime} 10$ 多 $\leq 9 \leq 61 /{ }^{\prime \prime} 2.25$ K20064 $10^{\prime \prime} \quad 14 \times 12 \times 81 / 2$ " 3.30 K20066 $12^{\prime \prime} \quad 15 \times 14 \times 10^{\text {" }} 3.75$

## Universal

## Outputs

Popular strap
mountiag units
 which match prac
tically any tube, single or pushpull, to any standard voice coil. Hook-up instructions supplied with each unit. Three sizes depending on speaker size: Small for speakers from $31 / /^{\prime \prime}$ to $6^{\prime \prime}$ : medium or $6^{\prime \prime}$ to $8^{\circ}$ spe

## Stock Dimensions

No. H. L. W. Ctrs. Each K19273 111/0x111/0x11/2" $2^{\prime \prime}$ S0.98


# ALTEC-LANSING high fidelity equipmenf 



Model 605A Duplex System

## Revolutionizes Sound Repro-

 duction- Area of Horizontal Distribution: 60 degrees ( 12 times the area distribution at high frequencies as compared to single unit speakers of comparable size.
Area of Vertical Distribution: 40 degrees (8 times the area of speakers of comparable size. $15^{3} / 0^{\prime \prime}$ dia.)
- Low Frequency Cut-off: 60 cycles.
H1-Frequency Cut-off: Above audibility.
Duplex Unit Impedance: 20
Dividing Network Crossover: 2000 cycles.


## Dividing Network impeda Signal Capacity: 25 watts. <br> Froquency Response: Flat over entire range. <br> Distortion Characteristics: Inaudible.

Response curves of the 605 Duplez System show amazingly fiat response over the entire audible range, not only when measured in front of the speaker on its axis, but up to 30 degrees off the speaker axib! Performance tests were calibrated by leading independent acoustic laboratories. Floor cabinet was designed to please a connoisseur of fine furniture. At same time, cabinet easily satisfies the foremost requirement -high quality sound reproduction. Provides ample area of air space which permits Duplex Speaker to radiate efficienty grille front permits a full 60 degrees of horizontal distribution. Finished in beautiful walnut. Unit includes cabinet, the model 604 Duplex Speaker and model N2000B Dividing Network. Duplez Speaker and the Dividing Network may be purchased individually, and are decribed below. Shipping wt., complete unit 150 lbs .
19319-Model 605A Duplez System Your Cost, Complete
s323.40


## Model 604

## Duplex Speaker

Amaxing Development in High Fidelity Sound Reproduction! The perfect two-way multi-cellular speaker for monitoring, radio, public address, recording, home radio, phonograph, pag-
ing systems, television and $F M$ reproduction. The Duplex speaker delivers up to $500 \%$ greater efficiencies in these operations. Intermodulation effects always promodulation effects always produced by aingle diaphragm type
loudspeakers are not heard from the Duplex. It's a new loudspeaker the Duplex. Its a new loudspeaker
which combines both high and low which combines both high and low
way multi-cellutar unit. Compared to single unit speakers of equal size, the Duplex provides up to $800 \%$ increased area of quality sound distribution in the vertical plane and up to $\mathbf{1 2 0 0 \%}$ increased area of distribution in the horizontal plane.
The voice coil is wound with rectangular aluminum wire and operates in a magnetic field of very high flux density, which is supplied by a recently perfected type of permanent magnet. The aluminum alloy metal diaphragm provides mass stiffness and high velocity of transmission speed. The high frequency horn has six cells in a $2 \times 3$ configuration. Each cell covers a 20 degree solid angle, which means a combined area of distribution in the horizontal plane of 60 degrees and 40 degrees in the vertical plane. The high frequency horn is mounted in the face of the low frequency unit. Power from the high frequency unit is supplied through the pole piece of the low frequency unit. The three-inch voice coil of the low frequency unit is also wound with rectangular wire, and operates in a magnetic field of very high flux density, which is supplied by the newly perfected type of permanent magnet. Both the voice coil construction and the magnetic circuit design aid in delivering a very high efficiency. The low frequency voice coil assembly is mounted in a 15 -inch stiff paper cone resonant at 38 cycles. Requires use of N2000B network listed below.
The Altec Lansing speaker has an overall efficiency in the region of 500 to 1500 cycles such that it produces 92 db (ref. 10 to 16 dynes per sq. in.) at a distance of 5 ft. With an input of 0.1 watt. This increased efficiency minimizes distortion at all performance levels, and gives a much greater dynamic volume range. shipping weight29 lbs.
K19320-Model 604 Duplex Speaker
Your Cost.
${ }^{s} 205.80$

## Model N2000B Dividing Network



This dividing network has been so engineered as to guarantee perfect practical performance of the Duplex Speaker. It has a high crossover point (approximately 2000 cycles), which keeps the size of the multi-cellular horn small because, mounted on face of the low-frequency horn, it would otherwise obstruct the low-frequency cone radiation. Shpg. whove, ONLY ${ }^{5}$. above, ONLY.
K19321—Model N2000B Dividing Network
Your
Cost......................................................


## Model A323 High Impedance Amplifier

## Specifications-

Gain: 104 db in high gain position ( 500,000 ohm input); 74 db gain low gain position.
Frequency Characteristics: 20 $+20,000$ cycles per second $\pm 1 \mathrm{db}$. Power Output: 15 watte, $2 \%$ harmonics above 60 cycles ( $8 \%$ intermodulation $60+7000$ dles).
Noise Level: -37 in high gain position and -45 in low gain position ( .006 watts reference)
Impedance: Input - 500,000 ohms; out put- 10 to 20 ohms .
Power Supply: 110 to 125 volts, 110 watts, 50 to 65 cycles $/ \mathrm{sec}$. The A- 323 Amplifier is a portable high quality amplifier designed to operate high conjunction with Altec Lansing Duplex Speaker or to be used as high quality amplifier for public address and sound re-enforcemen systems. Specifically engineered to operate adequately from low level phono pick-ups, microphones, radio tuners, reproducing high quality sound over full frequency range of Duplex Speaker without overload or distortion. Iwo high impedance inputs provided by means of switch. Input 11 is a hugh gain position and input 12 it a low gain position. The switch can be re-wired so both inputs can be connected to the high gain stage if desired. The first stage (high gain input) is a 6SJ7 pentode connected tube. The second stage (low gain input) is a $6 \mathrm{SJ7}$ pentode connected. The third atage is a $6 \mathrm{SJ7}$ triode connected and is used as phase inverter to drive the final stage, which consists of two 6L6 tubes in push pull
Chassie finished in light gray crackle: Dimensions: $12^{\prime \prime}$ long, $9^{\prime \prime}$ deep and $8^{\prime \prime}$ high. Weight 12 lbs
Kour Model A-323 Amplifier
Your Cost
$\$ 115.64$

## Low Impedance Amplifier A323A

This A-323 Amplifier can be supplied with input transformer having 90 db of magnetic shielding with input impedances of 30,250 and 500 ohms. This model is designed as A-323A and has 94 db eain. Low gain position same as Model A-323. Weight 12 lbs K19323 Model A-323A Amplifier
Your Cost

## s154.84

## Model 603 Multicell Dia-Cone Speaker

A mechanical dividing network and multicellular horn at a price you can afford! Features:

- Area of Horizontal Distribution

Area of Vertical Distribution
Voice Coil Impedance Voice Coil Diameter
.... 10 ohms


Power Rating. 20 watts To meet tremendous demand for high quality metal diaphragm cone speaker for those who desire diaphragm cone speaker for those " who desire a
speaker priced lower than the "pro" model. This speaker priced lower than the "pro" model. This unit has the advantages of a 2 -way multi-cellular
speaker system, and its performance, efficiency. high frequency distribution, frequency response and absence of dis tortion. Designed for those who appreciate quality sound ia home radio, phonograph, music system, and FM reception. Adaptable to portable 16 mm . sound reproduction. The 603 Multicell Dia-Cone Speaker is an Alnico 5 perm. magnet unit in $15^{\circ}$ frame. Uses a $3^{\circ}$ edge wound aluminum voice coil to which is mounted a domed aluminum alloy metal diaphragm and a seamless moulded cone. These and the careful design of the magnetic circuit to close tolerances results in high efficiency that delivers $89 \mathrm{db}(10-16 \mathrm{dynes} / \mathrm{sq} . \mathrm{cm}$. ref.) at 5 feet with input of $1 / 10$ watt. Depth 6 \%/8". Shpg, wt. 17 lbs K19324-Model 603 Multi-Cell Dia-Cone Speaker
\$82.32

## Model 600 Dia-Cone Speaker

 A high-fidelity speaker on a $12^{\prime \prime}$ frame using the exclusive dia-cone principle of reproducing low and high frequencies from separate diaphragms Meets the need of those who do not wish to invest in more expensive speakers, yet whose training, musical enjoyment, sound consciousness and discriminating hearing demand faithful reproduction of sound in radios, music syatems. public address systems or wherever sound is reproduced in homez or in industry. Power Rating: 18 watts. Diame ter: $121 / 4^{" .}$ Depth 51/4. Voice Coil Diam. 3" Voice Coil Impedance: 10 ohms.

K19325
s 47.60


Model TL217A Output
Transformer
Insures high quality putput. 6600 ohm c.t. pri., 10 and 20 ohm sec. Response flat within 1 db from $20-20,000 \mathrm{cps}$ Max. oper, level +35 db ( 19 watts 6 mw ref.). Max. pri. DC 65 ma Primary winding DC unbalance should not exceed $7 \mathrm{ma} .31 / 2^{\prime \prime}$ x35/8" $241 / \mathrm{g}$ ". Shipping weight 6
K19327-TL217A $\$$ I
Your Cost........

# speakers, projectors and accessories 

## Parabolic Baffles by ATLAS

The new all-steel "Armor Plate" parabolic baffles will resist the severest type of field service. They are practically impossible to dent or damage. All boles required for securely fas tening the speaker unit in place are punched accurately in position at the factory. Cadmium plated peaker mounting bolts are sup plied as well as hanging loops for suspension Attractively finished in a baked blue-gray weather resistant enamel. All models incorporate the new exclusive vibration-proof inter porate the new exclusive vibration-proof inter Eliminates rain leakage at the acam where the front bell and rear housings are joined. Less speaker.


©

## Super-Power Driver Units

 Entire magnetic assembly is hermetically sealed in two-section aluminum hous ing, offering a perfect insulation against moisture, dust or corrosion. In additionelectro-chemical finishes are applied to the internal construction and all painted surfaces are chemically treated. The diaphragm is entirely constructed of a thermal-setting phenolic. Voice coil is also a phenolic material. Sturdy shockproof construction. Each unit is pre-tested for efficiency, frequency response, etc. Average power capacity 25 watts.

| Stock No. | Model | Freq. Response | vc <br> Imped. | Wt. | Diam. | Each |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K21308 | PD5 | 80 to 6000 cps . | 16 ohms | 61/1 lbs |  | \$21.76 |
| K21309 | PD8 | 60 to 7500 cps . | 16 ohms | $101 / 2 \mathrm{lbs}$. | $51 / 2$ | 29.40 |

## ATLAS DR Projectors

High efficiency exponential air column type projectors. Ultra compact and easy to install. The frequency response is uniform over the entire useful audio spectrum. The directional characteristics and total absence of rear sound generation minimizes feedback or acoustic "howl." Adverse or cross-wind conditions which normally disperse low intensity sound projection have little effect on the soundbeam emitted by these high velocity output projector No. Model Air Column Low. Freq. Length Diameter Weight Eaeh


## University Super Power

 SpeakersThe Model driver units on the back on the back of a heavy castmountThe 4 air columns eed into common bell. Completely waterproof. Mounted by swivel joints which can be locked in any poition. May be used with a tripod or with a "U" bracket alone. 100 watts; 4,16 , and 60 ohms impedance. Dia. 16". Length $17^{\prime \prime}$. Wt. 42 lbs.
K20098-Your Cost Ea. 5179.34

## UNIVERSITY

## Accessories

Tripod will sup port any directiona rumpet. With tand wind pret ures of 50 MPH . styles available. Connector can be used for connecting any 2 driver units to any trumpet. Adapter attachable o "U" bracket for mounting any trumpet on pipe fittings.
K20083--TS-6 Tripod E.E. $\$ 23.52$
K20084-TS-10 Tripod, Ea.23.52 K20086-PMA Adapter, Ea. 88c
K22573-2YCConnector, Ea 5.88

## Car-Top Horn Carrier



Doubly secured by straps that anchor to the drip rail over the doors by means of rubber covered hooks. For all steel car-tops or for steel tops with fabric center up to $411 / /^{*}$ wide. Easy to install. Size: $6 \times 461 /{ }^{\prime \prime}$. wt. 8 lbs.
Your Cost
Your Cost. Asabove, but 8 wide. $\$ 4.63$
$K 20028$-Each ..... Baffle Mounting Fixture Offereasy convenient mounting for parabolic baffles on sound trucks, walls, and other surfaces. Bracket constructed for heavy surface, infor adjustment K20095-Firture and base.

## Your Cost

 ost. .\$2.89 $\underset{\text { Swivelonly Yourcost }}{\text { K20097-Fixtureand }} \mathbf{S} .76$ Pipe Stanchion Fitting DR projector brackets can be adapted to 4 "pipe fittings. The cast iron adaptor has holes prop "U" bracket. All mounting bolts are supplied. Finished in gray shrivel. Female $3 \beta^{n}$ pipe thread Solidly cast. Will take plenty of Sunishment.
K2009-Pipe Stanchion Fitting
Your Cost.

## UNIVERSITY IB-8 "Booster" Speaker

Compact intercommunicator speaker. Clear sound output overcomes industrial factory background noises. "Booster" effect of speaker gives same results as added "booster" amplifiers. Impedance 8 ohms; power capacity 12 watts. Bell $71 / 2^{\prime \prime}$ dia., depth $7 \mathrm{~h}^{\mathrm{n}}$. With matg. bracket and rubber rim $7 \mathrm{~m}^{\prime \prime}$. With mtg. bracket and rubber rim. Shpg. wt., ${ }^{4}$ 1bs.
K19348-Your Cost
s 17.64 Model MiL: Compact, 5 -watt version of
above. Ball-and-Socket mounting. Dia. 6 in. Length $7^{\prime \prime}$. Shpg. wt. 43/2 lbs. K20093


Your Cost Each
s 14.70
Model CR-4: Heavy duty model, similar to above, that has a power capacity of 20 watts. Voice coil impedance 8 ohms. Bell $11^{\prime \prime}$ dia. depth $8^{\prime \prime}$. Shpg. wt. 8 lbs.
K19359-Model CR-16, same as CR-4 but 16 ohms
K19359-M
Your Cost.
$\$ 24.70$

## UNIVERSITY Driver Units

Buit to the highest standards of electrical and Buit to the highest standards of electrical and methanical tolerances. All employ Almico masnets to insure peak efficiency. Other features
include: rim centering for perfect alignment and include: rim centering for perfect alignment and
greater efficiency; breakdown proof diaphragm greater efficiency; breakdown proof diaphragm
suspension; heat dissipating voice coil; sealed uspension; heat dissipaing voice cond, sealed the unit waterproof. Standard thread fits all Stock Model Cap. V.C. Range standard pojectore. No. No. Watts Imped. C.P.S. Wh. Your $\mathrm{K} 2305 \mathrm{MAH} 12 \quad 8$ ohms $100-6000 \quad 31 / \mathrm{lbs} . \quad \$ 14.70$ $\begin{array}{lllllll}\mathrm{K21301} & \mathrm{SAH} & 25 & 15 \text { ohms } & 70-5000 & 6 \mathrm{lbs} . & 21.76\end{array}$ Heavy duty model; relative acoustic output 93.

## UNIVERSITY $360^{\circ}$ Radial Projectors

New type ceiling baffles that combine pleasing appearance and compact construction with the rich tone quality of struction whth the rich tone quallity of "Infinite Baffe" sealed acoustic cham. ber is responsible for the added bass response afforded. Give uniform cover age in all horizontal directions ( $360^{\circ}$ )
 Easily mounted; gingle point suspension. Projection angle is about $15^{\circ}$ down for most effective sound placement. Other features: All Metal weatherproof construction: "rubber tire" rims; "floating rubber" cone mounting; back pressure "breathers." Less speakers.

| Less speakers. |  |  |  | Model | Cone | Diam. |
| :--- | :---: | :---: | :---: | :---: | :---: | ---: |
| No. | Height | Weight | Each |  |  |  |
| K24016 | RBP8 | $8^{\prime \prime}$ | $17^{\prime \prime}$ | $8^{\prime \prime}$ | 151 bs | $\$ 11.52$ |
| K24017 | RBP12 | $12^{\prime \prime}$ | $26^{\prime \prime}$ | $10^{\prime \prime}$ | 271 bs. | 20.58 |

## UNIVERSITY Reflex Projectors

Special speakers for special applications. Type " $A$ " and " $B$ " are sub mergence and explosion-proof speakers, Type " $C$ " and " $D$ " are rail road and marine units shown with and without flanges for flush panel mounting. "E" is a connector for connecting drivers to any trumpet. No. |Type| Mtg. Type Imped. Freq. CPS Dimensions Wt. Watts Cost

K22567
$K 22567$
$K 22588$ $K 22569$ $K 22569$
$K 22570$ $K 22571$ $K 22572$

High efficiency exponential air column type projectors with heavy-gauge all-metal spun horns. Ultra compact and easy to install. Incorporate design features that insure superior acoustic results. Non-resonant rubber rims with each unit. Easily handle 25 watts of audlo power. All furnished complete with universal " $U$ " type mounting bracket. Finished in battleship grey. All are $100 \%$ water proof-suitable for outdoor use. Less driver units (listed below)

| Stock | Model | Bell | Length | C.P.S. | Shpr. | Your |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | No. | Dia. | In. | Cutoff | Wt. | Cost |
| K20045 | SMKE*** | 151/2" | 12 * | 200 | 7 lbs. | \$12.05 |
| K20049 | PH* | $20^{\circ}$ | $15^{\prime \prime}$ | 150 | 11 lbs . | 16.17 |
| K20047 | LH** | $25^{\prime \prime}$ | 181/2" | 120 | 16 lbs . | 26.17 |
| K20092 | GH*** | $30^{\prime \prime}$ | $25^{\prime \prime}$ | 85 | 23 1bs. | 35.28 |
| * Acoustic | ngth 42 | $54^{\prime \prime}$; | " ${ }^{\prime \prime}$ | 72 " |  |  |

Speakers for Industrial Applications


## HICKOK fest equipmenf



## HICKOK Model 534

## All-Purpose Tube and Set Tester

A portable tube and set tester incorporating a complete high-sensitivity analyzer unit. The tube tester features are the same as the 532 listed below. In addition, the set tester measures volts, ohms, ma., capacitance, inductance, leakage and decibels. Voltage ranges: $0 / 20 / 200 / 500 / 1000 / 5000$ volts AC and DC. Sensitivity of 20,000 ohms per volt DC; 1000 ohms per volt AC. Resistance: . 1 ohm to 100 megs in 3 overlapping ranges. No batteries needed. Capacitance: . 0001 to 100 mfd . in overlapping ranges. Checks leakage of electrolytic or paper condensers. Inductance up to 100 henrjes with or without DC component. Ma. ranges: $0 / 5 / 20 / 200 \mathrm{Ma}$ DC. DB ranges: -10 to $50 \mathrm{db} .418^{\prime \prime}$ meter scale. Tubes: 1-83, $1-5 \mathrm{Y} 3$, 2-6H6. Panel: 2 -tone satin chrome finish. Power supply $110-130$ volts,
50.60 cycles. $17 \mathrm{I} 18 \mathrm{I} 81 / \mathrm{h}^{\circ}$. Wt. 35 lbs . $\mathbf{5 0 . 6 0}$ cycles. ${ }^{17 \text { ge18x }}$

## HICKOK Model 288X

## X'tal Controlled Signal Generator

Specifically designed to meet the varied needs of the radio engineer and service man working with FM, AM and Television receivers. Complete frequency modulation coverage with 3 Variable bandwidths of sweep: 0/30/150/450 KC. Frequency modulation at 2 self-contained modulating frequencies, 60 and 400 cycles. Provisions for external amplitude, frequency modulation to 15,000 cycles. Selfcontained db meter. Amp. modulated RF ranges: $100-300 \mathrm{kc} / 300-850 \mathrm{kc} / 850-2200 \mathrm{kc} /$ $2.2-6.5 \mathrm{mc} / 6.5-20 \mathrm{mc} / 20-50 \mathrm{mc} / 50-110 \mathrm{mc}$ ranges: $0-30 \mathrm{kc}$ sweep, $100 \mathrm{kc}-110 \mathrm{mc}$, in 7 ranges, $0-150-450 \mathrm{kc}$ sweep, $1 \mathrm{mc}-160 \mathrm{me}$ in 7 ranges. $\mathrm{Db}:-10$ to 6,6 to 22,22 to $38.14 \times 161 / 2 \times 8^{\circ}$ $105-125$
K 21583
Vo
Your Cost, Complete With Cables.
s 141.71
 Crystal Controlled Microvolt Signal Generator


An accurate and dependable source of calibrated, modulated or unmodulated RF test voltages from 125 kc to 120 mc . Internal vacuum tube voltmeter permits direct calibration of RF output from $1 / 2$ microvolt to 100,000 microvolts on all ranges. AF from 0 to 2 volts. Provision for external amplitude modulation
from 50 to 10,000 cycles. Self. from 50 to 10,000 cycles. Self. contained db output meter. Variable RF oscillator frequency range: $125-325 \mathrm{kc} / 325-890 \mathrm{kc} /$ $890 \mathrm{kc}-2.4 \mathrm{mc} / 2.4-6.9 \mathrm{mc} / 6.9-20$ $\mathrm{mc} / 20-70 \mathrm{mc} / 70-120 \mathrm{mc} / 140$. 240 mc . RF oscillator frequency range, erystal controlled: 100 kc with harmonics to over 15 mc and 1000 ke with harmonics to over 125 mc . AF oscillator 400 cycles. Meter ranges: -10 to $+6,+6$ to $+22,+22$ to +38 . Modulation can be varied from 0 to 70 percent. 4 tubes: $2-6$ SN7, $1-6 \mathrm{C} 4,1-6 \mathrm{~K} 5$. A large 8 -inch
dial with over 100 inches of calidial with over 100 inches of calibrated scale distributed over its surface. Output impedances vary from 5.6 ohms at 10 micro volts to 100 ohms at 100,000 microvolts. Operates on 105 125 volts, 50 to 70 cycles AC only. Metal case, 14:161/2=8". Shpg. Wt. 31 lbs.
K21582-
Your Cost... ST, 3,01

HICKOK Model 532P \& 532C Dynamic Mutual
 Conductance Tube Testers This tester duplicates the method used by tube manufacturers in their laboratories. Easy-to-read scales have micromho ranges of 0-3000/6000/15000 in addition to mark: ings "Repl, ace" "Good". A ges test provision quickly checks tubes which are ruinous and speedily eliminates gassy tubes. Highly sensitive noise test detects RF disturbances, and locates shorts-hot or cold. Diodes are tested separately at low and locates shorts-hot or cold. Diodes are tested separately at low
voltage to prevent paralysis of the elements. Tests all present-day voltage to prevent paralysis of the elements. Tests all present-day
tubes including octal, loctal, miniatures, ballast, and magic eye tubes. tubes including octal. loctal, miniatures, ballast, and magic eye tubes.
Tested and approved by expert technicians. Choice of engineers. Tested and approved by expert technicians. Choice of engineers.
Uses rectified current to energize plates and grids. Panel is modern Uses rectified current to energize plates and grids, Panel is modern
and legible, finished in satin chrome. Roll chart in the panel makes tube data easily a vailable. Will also check grid-controlled rectifier tubes. Continuity checks can be made by a special new feature of design. Tubes: $1-83,1-5 \mathrm{Y} 3$. Normally operates on $110-130$ volts, $50-60$ cycles. Other voltages or cycles available. Size $17 \times 18 \times 81 / 4^{\prime \prime}$, Manufactured in two models for both counter and portable usage. Shpg. wt. 341 bs . Complete with line cord and tube cap connector. In dicates accurately line voltage on meter from 100 to 130 volts. K21592-Type 532P (Portable)
K21593-Type 532C (Counter Type)
Your Cost, Elther Type
s118.78

## HICKOK Model 435 Volt-Ohm-Milliammeter



The Hickok Model 435 volt-ohm milliammeter has a sensitivity of 20,000 ohms per volt on both the AC and the DC ranges. An output jack is readily available for all of the AC volt ranges. The instrument employs a 4* meter for greater readability and ac curacy. AC ranges are: $0-2.5 / 10 / 50 /$ $250 / 1000 / 5000$ volts. The DCranges are: $0-2.5 / 10 / 50 / 250 / 1000 / 5000$ volts. An unusually versatile instrument. Four ranges are provided for measuring ohms from 0 to 10 megohms. Will measure DC microamperes on a 0 to 50 microamp scale. DC Milliamperes: $0-2.5 / 10 / 50 / 250 / 1000$. Amperes: 0 to 10 amps DC. Three decibe scales are also provided. The ranges are: -20 to $+3,-8$ to +15 +6 to +29 . Test leads are provided with the instrument. This is an extremely useful instrument in its price field. The case measures $5^{\mathrm{s}} \mathrm{tr}^{8 / 6} 3 \mathrm{~m}^{5}$ Shipping Weicht 9 lbs K21590-Your Cost

## HICKOK Model 305 <br> Oscilloscope



Specifieally designed for use with frequency modulated, amplitude modulated and television equipment. Permits a complete visual analysis of the electrical and electronic circuits of the IF and RF bands as well as the AF stages. Effectiveness of a tube or circuit as an amplifier, rectifier or source of special wave shapes may be readily determined. may be readily determined. qualloscope may be used as a termining unknown frequencies. Special features include a wide band, high gain amplifier from 30 cycles to 1 mc ; self-contained wide band frequency modulated oscillator with variable sweep width from 0 to 450 kc ; self-contained narrow band FM oscillator with sweep width of 0 to 30 kc ; self-contained demodulator for tracing signal through RF and IF stages; self-contained mixer circuit; high sensitivity mixer circuit; high sensitivity amplifers, calibrated screen. Deffection sensitivity. 2 volts (RMS)/inch vertical; ${ }^{3}$ volts RMSD/inch horizontal. Input mpedance 1 megohm, 25 mmfd Frequency range: Linear sweep, 10 cycles to $25 \mathrm{kc} .105-125 \mathrm{v}$. 50.70 cycles AC only. $14 \times 111 / 5 \mathrm{x}$ $151 / 5^{\prime \prime}$. Shpe. Wt. 34 lbs
K21591-
Vourcost
S142.59


HICKOK Model 156

## Indicating Traceometer

The indicating traceometer has been designed to provide not only a means of rapidly locating troubles in radio and television receivers but also to facilitate the alignment
and provide a means of checking the overall or individual stage performance of such elecor individual stage performance of such elec-
tronic equipments. 5 precision meters provide 7 simultaneous measurements without affecting normal operation. ranges: RF-IF low freq: 95-240/240-600/600-1700 kc, Oscillator, High Preq: 540-1500 KC/1.5-4.6/4.6-13 MC. AF voltmeter: 20-20,000 cycles. DC Volts: $0-2.5 / 5 / 25 / 50 / 250 / 500$, plus or minus. RF-IF volts in microvolts: $0-5 \mathrm{~K} / 25 \mathrm{~K} / 100 \mathrm{~K}$. Volts $.5 / 2.5 / 10 / 25$. OSC. High Freq- Volts: $.3 / 1.5 / 7.5 / 30 / 150 / 750$. AF Volts: $0-.1 / 1 / 10 / 100 / 500$. Wattage Range: $0-150$ watts. For 105-125 volts, $50-70$ cycles AC only. $14 \times 161 / 2 x 1^{\prime \prime}$. Shps. Wt. 34 lbs.
K21589-Your Cost, Complete With Cables.
SI4I.IT
HICKOK Model 203 Volt-Ohm-Capacity Milliammeter
An excellent universal test instrument for all radio and electronic service work in manufacturing plants and laboratories or wherever required. Will accurately measure wide ranges of inductances capacitances, resistances, currents and $0-3 / 12 / 30 / 120 / 300 / 1200$, AC and DC.
 DC Ma.: $0-3 / 12 / 30 / 120 / 300 / 1200$. Capacity: $0-10,000 \mathrm{mmfd}$ in 2 ranges, $0-1000 \mathrm{mfd}$. in 5 ranges. Inductance: $50 \mathrm{mh}-100$ Henrys. Ohms: 1 ohm to $\mathbf{1 0 , 0 0 0}$ megohms in 7 ranges. AC up to appros. 5 megs may be measured. Input impedance: 12 to 15 megohms. Shielded cables for voltage measurements permanently attached to the instrument, in addition to 2 unshielded cables for ohmmeter and milliammeter measurements


# SIMPSON test equipment 

## SIMPSON Model 330 Mutual Conductance Tube Tester



Dynamic mutual conductance tester provides comparison of tube under teat against standard rated micromho value by means of a direct reading dial. $41 / 2^{\prime \prime}$ meter with a "Percentage of Mutual Conductance" scale. Neon glow tube to indicate shorts. Sockets provided for all types of tubes. Revolutionary Automatic Reset; just press reset button and instantly all switches return to normal automatically. Tubes are tested with voltages applied automatically over entire operating rance. $\quad 151 / 2 \times 91 /=61 / 2$ Shpg. wt. 16 lbs.
$\$ 06.53$
K21621-Your Cost.

## SIMPSON Model 240 "HAMMETER" AC DC V-0-M

The Hammeter was deaigned to check unusually high voltages and all component parts of radio
transmitters and receivers. Completely self-contained, needing no external multipliers, with a sensitivity of
1000 ohms/volt $\&$ maximum voltage range of 3000 volts $A C$ or DC. Has all the useful ranges needed to do an all-around servicing job. All components and subpanel mounted, directly on panel. Movement has construction, iron pole pieces. Resistors matched
 to insure greater accuracy. to insure greater accuracy.
Test leads furnished ( 3000 volts tested) and fitted with rubber guarded alligator elips. Gitted with rubber guarded alligator elips.
Ranges: $0 / 15 / 150 / 750 / 3000$ AC volts; $0 / 15 /$ Ranges: $0 / 15 / 150 / 750 / 3000$ AC volts; 0/15/
$75 / 300 / 750 / 3000 \mathrm{DC}$ volta; $0 / 15 / 75 / 300 / 750$ $75 / 300 / 750 / 3000$ DC volta; $0 / 15 / 75 / 300 / 750$
DC milliamperes; $0 / 3000 / 300,000$ ohms. 1000 DC milliamperes; $0 / 3000 / 300,000$ ohms. 1000
ohms per volt AC and DC. Housed in an ohms per volt AC and DC. Housed in an
attractive molded bakelite case. Panel fgures engraved and filled with white enamel. $3 \times 5 \%$ $\times 215{ }^{2}$ Shpg. wt. 3 Ibs.
K10485-Your Cost. .
$\$ 25.97$

## SIMPSON Model 321 Giant Set Tester

Large 7 -inch meter incorporating fifty ranges in 2
colors; $D C$ scales in black, colors; DC scales in black, lated for 3000 volts. Als voltage ranges have resistance of 1000 ohms/volts. Will measure .1 volt direct reading. Ranges: (Volts, AC and DC) $0 / 3 / 7.5 / 30 / 75$ / $150 / 300 / 750 / 1500 / 3000$. All AC voltage ranges are available for output mea-
 surement. Ma. ranges (DC 300/750. DC Amp: 0/15. Ohms: 0/2000/ $20,000 / 200,000 / 2$ megohms $/ 20$ megohms. Microfarads: $0 / .05 / .5 / 50$. Decibels in seven ranges from -20 to 48 db . Housed in an attractive molded bakelite case. Panel is of anodized aluminum with silver etched characters, arranged for quick choice of ranges. Case for entire instrument is steel with black wrinkle finish. Meter pointer knife-edged to insure correct reading of values. Single barknob control for easy switching from one range to another. Size $115 / 8 \times 81 / 8 \times 4^{\prime \prime}$. Shpg wt. 151 bs .
K21625-Yowr Cost.
.$\$ 58.31$

## SIMPSON Model 415 Signal Generator

Complete signal generator for AM FM, with output through output through eliminating eliminating
necessity for separate con nection for high uncontrolled output. High fidelity modula tion up to $100 \%$
from below 60 cyc. per sec. to over 10 kc per sec. Modulation from 0 to $100 \%$ using either 400 cycle intermal sine wave or external source. A range of 0 to more than 20 volts is available for external use, calibration purposes, or for independent uses. Direct reading dial with continuous coverage from 70 kc to 130 mc in the following ranges: $75 / 200 ; 200 / 600 ; 600 / 1750 \mathrm{kc}$., and $1.5 / 4.5$; $4 / 15 ; 14 / 30 ; 29 / 65 ; 58 / 130 \mathrm{mc}$. Enclosed in a steel case, copperplated for shielding, finished in black durable wrinkled enamel. Rotating turret coil used as a band selector. Low-loss RF coils individually calibrated. Coils and tuning condenser individually shielded. $5 \% / 8 \times 11 / 8 \mathrm{x}$ $151 /{ }^{1 / 2}$ Shpg. wt. 22 lbs. STT2.71
K2 1622 - Your Cost. . . .

## SIMPSON Model 260 Set Tester

A high-sensitivity tester for all servicing jobs. At 20,000 ohn $/$ volt, this isstrument is as sensitive as any other instre. Practically price range. Practically negligible current consumption assures remarkably accurate full scale voltage readings. Current readinga as low as 1 microampere and up to 500 ma . are available. Tests up to 20 megohms, as low as $1 / 2 \mathrm{ohm}$.
Measures automatic fre-
quency control diode balancing circuits, grid currents of oscillator tubes, bias of power detectors, ave diode currents, rectified sf current, high-mu triode plate voltage. Ranges: (Volts, AC and DC) $2.5 / 10 / 50 / 250 / 1000 / 5000$ AC ranges 1000 ohms per volt, DC 20,000 ohms per volt. Output ranges same as for voltage
ranges. DC ma. $10 / 100 / 500$. Microamps 100 . ranges. DC ma. $10 / 100 / 500$. Microamps 100. Ohms $0-2000 / .2$ meg/20 megs. $51 / 5 \mathrm{lbs}$ ranges


## SIMPSON Model 315 Signal Generator

Complete signal
generator designed to most minute detail for highest ac-
curacy. stabilcuracy, stabil-
ity, minimum leakage, good wave form. Big 9 $^{\prime}$ meter type
dial with knife dial with knife edge pointer for Vasier reading.
 Vernier contro
settings. Electron-coupled circuit assures extreme stability throughout the band. Three tubes are used in the circuit-full-wave rect.modulator, and osc. Standard $30 \%$ modulation at 400 cycles is used. Signal is controlled through atep attenuator of the ladder type. RF output from $1 / 2$ microvolt to .1 volt and approximately 400 cycle output from 0 to 5 volts. Bands: 6 RF coils provide ranges of $75 / 200 ; 200 / 600$; $600 / 1700 \mathrm{kc} .1 .5 / 4.5 ; 4 / 12 ; 10 / 30 \mathrm{mc}$. Coils, attenuator and cord shielded to reduce leakage shielded. Line cord shielded to reduce leakage to absolute minimum. Each coil individually calibrated. 16x10x6". Shpg. wt. 20 lbs. K 21626 --
Your Cost.

## SIMPSON Model 445 Plate Conductance Tube and Set Tester



A portable shop, combines plate conductance tube teater and wide-range volt-ohm-milliammeter. Automatic Reset instantly returns all push button and rotary switches to normal position. Current from 1 microampere to 500 millamperes. Resistances are from $1 / 9 \mathrm{ohm}$ to 20 megohms, Voltmeter: 0/2.5/10/50/250/ $1000 / 5000$ at 20,000 ohms per voit DC, 1000 ohms per volt AC. Milliamps $0 / 10 / 100 / 500$. Microamps $0 / 100$. Decibels in five ranges from -10 to +52 db . Output: $2.5 / 10 / 50 / 250 /$ 1000/5000 AC volts. Ohms: $0 / 2000 / 200,000 /$ 20 megohms. $41 / 2^{\prime \prime}$ meter insures accurate
readings. $151 / 2 \times 91 / 2 \times 61 / /^{\prime \prime}$. Shpg. wt. 12 lbs. readings. $151 / 2 \times 91 / 2 \times 61 / /^{\prime \prime}$. Shpg. wt. 12 lbs.
K21623- $\$ 107.80$
Your Cost . . . . . . . . . . . .

## SIMPSON Model 230 AC and DC V-0-M

This is one of the smallest AC-DC service instruments on the market, yet contains asufficientnumberof ranges to enable a technician to do a complete servicing job on average radio equipment Entire case, including front panel, is of molded bakelite for more complete protection against high voltages. Has full size $3^{\prime \prime}$ meter for easier reading. Test leads furnished with instrument Ranges: $0 / 10 / 250 / 1000 \mathrm{AC}$ volts; 0/10/50/250/1000 DC volts; $0 / 10 / 50 / 250 \mathrm{DC}$
$\mathrm{ma} ; 0 / 1000 / 100,000$ ohms.
 Resistors for different ranges matched in pairs to insure accuracy for all ranges. Can easily be carried in overcoat pocket. Only $3^{\circ}$ wide, $5 \frac{1}{2}=^{\prime \prime}$ long, $2 \frac{1}{2 \prime}$ deep and weighs two pounds. Front panel is engraved and figures filled in with white enamel for greater readability. All component parts and the sub-panel are mounted on the bakelite panel. Single baraknob facilitates switching. Shipping weight 31 bs . K21624-Your Cost.
$\$ 24.25$
SIMPSON Model 305 Tube Tester

Versatile tube tester provides filament voltages from 5 up to 120 voits. rests loc midgets, ballasts, midgets, ballasts, gaseous rectifiers, acorntubes, bulbs and all popbulbs and all pops. ular radio tubes. way switching makes it possible to test any tube regardless of its
 base connections or the internal connections of the elements. No adapters or special sockets required. Provides for line adjustment from 100 to 130 volts with smooth vernjer control. Large fan-shaped meter has exceptionally long scale. Incorporates latest improved circuit. Mounted in attractive leatherette case with handle for carrying. Simplified instruction book and tube charts in book form carried conveniently in cover. Dimensions: $8 \times 10^{3} / 451 / /^{\prime \prime}$ Ship-


## fest equipmenf



## CHICAGO

Model 433

## Volt-Ohmmeter

 This super-high sensitivity volt-ohmmeter employs a $3^{\prime \prime}$ square 50 microampere meter movement to maintain sensitivity of 20,000 ohms per volt on all voltageranges. Range voltageranges. Range plished by means of toggle switch and jacks. Set in black wrinkle finish steel case, $5^{7}$ 佫 $\times 3^{\circ}$ in $_{6} \times 3^{\prime \prime}$. Test leads furnished. Four volt rangea, four ohm ranges insure complete coverage for most test applications. Ranges: $0-3 / 30 / 300 / 600$ DC volts; Five useful resistance ranges indicating in ohms full scale: $5000 / 50,000 / 500,000 / 5$,000,000 ; ohms center scale: $70 / 700 / 7000$ / 70.000 . Wt. 5 lbs .K21501
Your Cost, Complete
\$23.40

## CORNELL-DUBILIER BF-50

 Capacitor Analyzer

For measuring all important characteristics of Capacitors. This instrument incorporates a Wien bridge oscillator with a single stage of amplification. A visual eye indicator is used or measurements. A 60 cycle 110 volt power supply is built into the equipment for use in making leakage and insulation resistance tests. Paper, air, mica and electrolytic capacitors ranging from .00001 to 240 mfds . can be measured with'accuracy. The analyzer meas ures power factor and checks for shorts, opens, te. Uses 1-12A7 and 1-6E5 Comes in walnut portable case, $61 / 2 \times 12 \times 934^{\prime \prime}$. Shipping Weight 11 lbs. Less tubes. $\$ 34.08$


## CORNELLDUBILIER

 BN Capacitor Bridge With speed and accuracy this bridge measures all capacitors ranging in size from .00001 to 50 mfds. A Wien bridge circuit provides excitation and a tuning cye is employed to indicate a balanced condition. Direct reading scale indicates measured capacity. Power factor, shorts, and opens can be checked easily. Two vacuum tubes are used, 1-12A7 and 1-6AF6G. Comes in walnut bakelite case, $33 / 3$I $5 \mathbf{x ~}^{\prime \prime}$. Test leads and instructions are furnished. Operates from 110 volt, 60 cycle line. Weight 4 lbs. Less tubes. $K 21728$-Your Cost.

## CORNELL-DUBILIER

## Capacitor Decades

C-D Capacitor Decades provide accurate standards over a wide range of capacity. May be used in set of three decades or used individually xibility. Rated at 600 volts DC, 220 voles AC $\pm 5 \%$. shipping weight 4 lbs. each. Calibration chart for exact capacity values with each decade. CDA-5. 01 K21729-
Your Cost
CDB-5 1.1


CHICAGO Model 431 AC-DC Volt-Ohm-Milliammeter


This multimeter em ploys a sensitive 425 microampere movernent A copper-oxide rectifier is incorporated to provide accurate AC meas urements. All multi pliers are bridge selected within one percent 1nclosed standard 11/2 volt flashlight cell supplies testing current, Test leads are furnished. The instrument is set in a black wrinkle metal
 Polarized jacks and rotary range switch facilitate instantaneous range selection Aluminum panel. Range: $0-30 / 300 / 1500$ Case volts; 0-15/150. AC volts; 0-150 DC ma. Case has a "Dot" snap-on carrying strap
K21503-Your Cost
\$ 15.34

## CHICAGO Model 450

 Volt-Ohm-Milliammeter

Combines compactness and accuracy in original unique design. 1 ma meter movement provides $1000 \mathrm{ohm} /$ volt sensitivity on all voltage ranges. $0.5 / 10 / 50 / 500 /$ 1000 DC volts; 0-1 DC ma ohms full scale: $5000 / 50,000$ / 500,000 : ohms center scale: $30 / 300 / 30,000$ Wt. 3 lbs.
K11456Your Cos
$\$ 9.75$

## CHICAGO Model 451 AC-DC Volt-Ohmmeter



CHICAGO 452

## Volt-Ohmmeter

10,000 ohms per volt is provided by the 100 microampere meter movement. A
rotary switeh and enclosed otary switch and enclosed jacks simplify range selection; Volts DC: $0.10 / 50 /$ cale: $200 / 20,000 / 200,000 /$ $2,000,000$. Ohms center scale $30 / 300 / 3000 / 30,000$. Shpg. wt. 3 lbs.
K21524
Your Cost. $\$$ I 3.65


## SIMPLEX Model 312 Volt-Ohm- <br> Milliammeter

Combination AC-DC hairspring meter. Testing current is obtained from any convenient $A C$ or DC outlet through power cord furnished. 0-25 $50 / 125 / 250$ voits AC and DC. $0-50 \mathrm{ma} \mathrm{AC}$ and DC. 100,000 ohms full scale. 2400 ohms center scale. Wt. $22 / 2$ lbs. K11445Your Cost.
55.88


## CHICAGO

## Model $458^{\circ}$

## Multi-Meter

 This versatile instrument employs a large $53 / 2$ " rectangular meter set at a $45^{\circ}$ angle. A copper-oxide rectifier is used to insure AC range accuracy. All multipliers are bridge seRected within $1 \%$. Range selection is accomplished by means of polarized jacks, ro-tary switch, toggle switch. The treated alumiaum instrument panel is mounted on a welded steel brown wrinkle case. Ranges: 0-5/10/ so/100/500/2000 DC volts; $0-12.5 / 25 / 125 /$ 250/1250 AC volts; $0-1 / 10 / 100$ DC ma; $0-2.5 / 25 / 250$ AC ma; $1000 / 200,000 / 2,000$, black wrinkle finish to +55 db ; Steel case, black wrinkle finish, $101 / 8 \times 63 / 3 \times 51 / 2$
K21513-Your Cost.
$\$ 26.00$

## BOES Signal <br> Tracer Probe

## Connected to any am

 plifier, this signal trac er probe will quickly locate that part in the defective radio set that needs replacing. The probe is encased in high impact bakelite housing that fits your hand. The connector is shielded and long enough to react the radio set. A separate three prong receptacle is included so that it can be wired into your amplifier. This probe, incorporating the best design features of commercial type probes, eliminates the necessity of buying a combination probe and amplifier. Start at the antenna and trace through the mizer, IF antenna and trace through the mizer, IF
stages, second detector, audio stages, and stages, second detector, audio stages, and output. When the signal ceases in your amplifier, you have located the defective circuit. This is primarily an excellent instrument developed to easily locate defective parts. Fast servicing. Shipping Weight 21 bs . K21515-Model 103 Your Cost.
s7.77

## RADIO CITY Model 705

Signal Generator
This newly designed instrument features constancy of calibra-
tion and output, and high freq,-range, 95 kc to 100 mc in range. continuously variable. Calibration accurate to $2 \%$ through broadcast bands, 3 for high freq. bands.


Internal 400 bands.

mod. sine wave available for external use. 2 degrees of modulation- 30 and $80 \%$ approz. Automatic shorting of all coils not in use and individual shielding of each circuit. 5 step attenuator controls output. Overall ateel case, chassis, panel, $8 \times 118 / 4 \times 5^{\prime \prime}$. Shipping Weight 11 lbs.
K21720-Model 705
Your Cost
s48.51

## RADIO CITY Model 802-N

## Combination Tube and Set Tester

A complete tube tester and a complete set tester combined, with only 5 simple switches to operate both. Rangs: DC.AC volts $0 \cdot 10 / 50 / 500 / 1000$ at 1000 ohms/volt.; 0/1 10/100/1000 ma DC; $0 / 10$ amps DC; db-
 minus 8 to $55 ; 4$ range angular meter protect AC volts. 43/2" recspecial fuse. Tests old and inst burnout by ballast tubes, shorts, noise new type tubes, handsome hardwood case, $121 / 12 \times \mathrm{ctc}$. m handsome hardwood case, $12, ~ x ~$
Complete with self-contained batteries. 115 v . 60 cycies AC. Shpg. Wt. $111 / 2 \mathrm{lbs}$. 115 Y - 60 cycies AC. Shpg. wt.
K21641 Model $802-\mathrm{N}$
Your Cost................... $\$ 58.3$ lbs.

# PRECISION test equipment 

PRECISION Series EV-10 Vacuum Tube Multi-Range Tester

Zero-center VTVM, megohmmeter milliammeter, ammeter, output and db meter. Sensitivity of 1000 ohms/ volt, AC and DC. Ranges: zero-center $D C$ volts + and $-3 / 6 / 12 / 60 / 300 /$ $600 / 1200 / 6000 ; D C$ and $A C$ at 1000 ohms/volt $0-3 / 6 / 12 / 60 / 300 / 600 /$ $1200 / 600$, current $0-600$ micro amps, $0-3 / 12 / 60 / 300 / 1200 \mathrm{ma}, 0-12$ amps; db -26 to $+70 ; 8 \mathrm{AC}$ output ranges: $0-2000$ ohma/0-200 M ohma.
$0-2 / 20 / 200 / 2000$ megohms. 816 in $0-2 / 20 / 200 / 2000$ megohms. $81 / 2-i n . ~$ meter. Regulated power supply. In
black ripple finished steel case, $101 / 5 x$ black ripple finished steel case, $101 / 2 \mathrm{x}$
$12 \mathrm{x} \%$. With tubes, battery, test
probes. Wt 20 lbs. Model EV.10P as above, in walnut fin. portable case. K21766-Your Cost Model EV-10PM is EV-10MCP removably inserted into $121 / 419^{\prime \prime}$ for rack mounting. Wt. 26 lbs.
K21709-With dust cover. Your Cost.
s68.41
into steel panel
 Series RF-10 Vacuum bakelite housing, provides direct


PRECISION 856-P Multi-Range Tester


For industrial, laboratory, and servicing application, this instrument has 44 ranges including ranges up to $60000 \mathrm{and} 1000 \mathrm{hms} /$ volt. Ranges: DC and $A C$ volts: $0-3 / 12 / 60 /$ 300/600/1200/6000; 0-60/300 microamps; $0-3 / 30 / 120 / 600$ ma; $0-12$ amps; $0-6000$ / 600,000 ohms; $0-60$ megs.; db from -12 to +70 ; output ranges same as AC. The meter is $4 \%^{\prime \prime}$ " square with a 50 mieroampere movement. Calibration is accurate to $2 \%$ DC and $3 \%$ AC. Heavy duty jacks, ceramic switch conatruction, and high grade wax impregnation insulate high voltage circuits against breakdown. Heavy duty master selector uses silver plated wiping contacts. Hardwood walnut fin. case $9 \times 10 \pm 6$. Complete with batteries, leads, instructions. Shipping weight, 11 lbs. M21437-
Your Cost, Complete
\$48.94

## PRECISION Series 920 Set Tester

Combines a transconductance type tube tester, a battery tester, and a 33 range AC-DC set tester. Tests all latest type tubes with filaments ranging from 1.4 to 120 volta. Tests A, B and C batteries 1.5 to 135 volts under actual load conditions. Check for open elements, hot cathode leakage, noise, shorts, etc. Ranges: AC-DC 1000 ohms/volt: $0 / 12$; 60/300/600/1200/3000 volts; DC current: $0 / 1.2 / 12 / 120 / 600 \mathrm{ma}$; $0-12$ amps; $0-400 / 100,000$ ohms; $0-1 / 10$ megohms ; db from -10 to +64 . Employs large $4 \% \mathrm{~g}^{\prime \prime}$ square meter. metal case $101 / 2 \mathrm{z} 12 \mathrm{z}$ $488^{\prime \prime}$ square mete
$6^{\prime \prime}$. Wt. 21 lbs .
Model $920-\mathrm{MCP}$
K21701-Your Cost



K21701-Your Cost . . . . . . . . . . . . . . . . . . . . . . . . . . . . S8. 58 Model 920-P-In walnut finish portable case, 12x13z6". Complete with battery, test leads and instructions.
$\mathbf{K 2 1 7 0 0}$ - Your Cost Complete K21700-Your Cost Complete Model $920-\mathrm{PM}$ is Model $920-\mathrm{MCP}$ inserted into Must cover for rack mounting, removable. Wt. $27 \mathrm{Ibs} . \$ 84.5$ Model 920-C as above, but in modern chrome trimmed, counter type steel cabinet. Size $16 \pm 131 / 1 \times 7^{\prime \prime}$. Slopes $3^{\prime \prime}$ at front. Complete and ready to operate. Wt. 22 lbs. K21692-Your Cost
s84.50

## PRECISION Series 912 Tube Tester

Tests all tubes with fil. voltages from 1.4 to 120 , including loctals, 7-prong tubes, bantam, single-ended, miniatures, etc. Checks for hot cathode leakage, shorts, opens, noise, etc. $488^{\prime \prime}$ meter, accurate to $2 \%$. Electri920 , above. Hardwood, walnut fin. case, $12 \times 13 \times 6^{\circ}$. Wt. 19 lbs . Model $912-\mathrm{P}$
$\mathrm{K} 21702 \ldots$ \$ 59.98
912MCP-metal case $101 / 2 \times 12 \times 6$ K21703-Your Cost.... $\$ 58.02$ 912-C-steel cabinet $16 \mathrm{z} 131 / 2 \times 7$ K21723-Your Cost.... S61.94 912-PM-in rack mount panel K21721-Your Cost.... $\$ 61.94$


## PRECISION Series E-200 Signal Generator

 Modern laboratory sig. gen. for all AM, FM and television mente. Features servicing by signal substitution. 90 ke to 88 mc in eix bands. $\mathbf{~ F ~ n m o d u - ~}$ lated RF, 400 cyc. modulated RF, ext. mod. RF, and 400 cyc. audio output selected at will. Modulation is va-
riable from 0 to $100 \%$. AVC voltage supplied for aecurate alignment. Doubleattenuator provides smooth control of RF signal. In black fin. metal case, $101 / 2 \pi 12 \times 6^{\circ}$. Complete with tubes, cable, and free copy "Servicing by Sig. Sub." Wt. 20 lbs. K21715 Your Cost Model E-200.PM for rack mount W K21691-
Your Cost
s64.83

## PRECISION Series 832-S Multi-Range Tester



Though small in size, this instrument incorporates most of the feat ures of larger testers: $3^{\prime \prime}$ square 800 microamp meter; 31 ranges; shunts and multipliers of $1 \%$ accuracy; rugged construction. Ranges: DC volts at 1000
ohms/volt $0-6 / 30 / 150 / 300 /$ ohms/volt $0-6 / 30 / 150 / 300 /$
$600 / 1200 ; A C$ volts at 500 $600 / 1200 ; A C$ volts at 500
ohms/volt $0.12 / 60 / 300 /$ 600/1200/2400: DC ma $0-1.2 / 12 / 120 / 600$; ohms o-5000/500,000; megohras $0.5 ; \mathrm{db}$ from -10 to +62 ; output $0-12 / 60 / 300 / 600 / 1200 / 2400$ volts. In hardwood walnut finished case, $7 \times 41 / 3 \times 3{ }^{7 \prime}$, with leather handle. Complete with test leads, internal batteries. Shpg. wt 4 lbs . K21771 Your Cost.
$\$ 23.49$

## PRECISION Series 954

 Combination Set TesterWith 20,000 ohms/volt DC senaitivity, this tester meets most of the measurement problems in modern radio and AC volts $0-3 / 12 / 60 /$ AC volts $0-3 / 12600$. $0.60 / 300$ microamps: $0-3 / 30 / 120 / 600 \mathrm{ma}$; $\begin{array}{ll}0-3 / 30 / 120 / 600 \mathrm{ma} \\ 0-12 \mathrm{amps} ; & 0-6000 \\ & \end{array}$ $0-12$ a mps; $0-6000 /$
600,000 ohms $\quad 0.60$ mess; -12 to +70 db finish, portable case $12 \times 13 \times 6$
 Wth, portable case $12 \times 13 \times 6{ }^{\prime \prime}$. With bateries 954-P $954-\mathrm{P}$. Your Cost.
$954 . \mathrm{MCP}$
597.22 K21690-With batteries. Your Cost
. $954-\mathrm{PM}$ as above but panel K21689-
954 C Cost ........................... ies and teat leads. Wt 24 lbs. \$ 9.18
K 21688 Your Cost........ 9.

## PRECISION 915 Tube Tester

Featuring a $9 "$ " square comes in a heavy gauge steel case finished in black ripple with chromium trim. 23×16×10" Fitted with chromium meter lamp reflector Easy reading 3 colored Easy reading a colored Replace. Weak-Good able tube testing results. able tube teathg resulto Tests all popular tube types with filaments from 1.4 to 120 volts. Checks portable dry batteries, pilot lamps, inter-element shorts, open elements, noise, leakage, ete. Automatic push button system provides maximum flexibility. A full vision, dual window, roller tube chart facilitiates $\begin{aligned} & \text { quick accurate testing. Shps. Wt. } 37 \text { lbs. } \\ & \text { K } 21716-M o d e l ~ \\ & 915\end{aligned} \$ 92.72 . .$. Your Cost.

.292 .72

## PRECISION 844-P Volt-Ohm-DB-Milliammeter

Features ranges of 6000 volts AC and DC, 10 megs. 12 amps. and $70 \mathrm{db} .4 \% " \prime$
meter. $2 \%$ aecuracy on AC. Ranges: DC.AC volts at 1000 ohms/ volt 0/12/
$60 / 300 / 600 /$
 1200/6000; DC current 0/1.2/12/60/300/1200 ma ; $0-12$ 日mps; $0-400 / 100,000$ ohms, $0-1 / 10$ ma; $0-12$ ampa; $0-400 / 70$; output same as AC.
megs; $\mathrm{db}-12$ to +70 . megs; do - Multi -range selector includea ceramic spacers Multi-range selector incluces ceramic contacts. and double wiping silver plated contacts. High voltage circuits are insulated against breakdown. $48 / 8$ rectangular, 400 microamp meter. In walnut finished hardwood portable case, $9 \times 10 \times 6^{\prime \prime}$, with removable cover, battery
and test leads. Shpg. Wt. 9 lbs. $\$ 3$ K21656-Your Cost

## PRECISION 864 Multi-Meter

 This tester has a $9^{\prime \prime}$ rectangularmeter with dual meter with dual
sensitivity of 5000 ohms/vole DC and 1000
ohma/volt DC ohmi/volt DC and AC. 41 ran-
 greatest versatil-
ity. DC. AC volt
ity. DC.AC Volte $0-12 / 60 / 300 / 600 / 1200 / 6000 ; D C$ current $0-300$ microamps, $0-1.2 / 12 / 60 / 300 / 1200 \mathrm{ma}$, $0-12 \mathrm{amps} ;$ ohms $0-2000 / 200,000,0-2 / 20$ megohms; db from -12 to +70 ; output ranges same as AC voltage ranges. $1 \%$ accurate shunta and multipliers are used. Calibration accurate to $2 \% \mathrm{DC}$ and $3 \% \mathrm{AC}$. In standard panel mount, $19 \times 121 / 4 \times 6$ ". Complete with panel mount, $19 x 124 \times 6$ bateries. Wt. 21 lbs . operating instructions, batteries.
K 21719 Model $864 \ldots \ldots \ldots .$.
Your Cost. . . . . . . . . . . .
y

## JACKSON Model 637

## Dynamic Output Set Tester



A complete servicing instrument for bench or portable operation. Combines 27 ranges and 10 functions. Tubes are tested under normal working conditions by the "Dynamic" method. All filament voltages from $2 / 3$ to 115 volts are available. Accommodates ballast tubes. Sensitive neon leakage test. Can also be used to check condensers. AC and DC Volt ranges are: $0 / 10 / 100 / 250 / 500 / 1000 / 2500$; are: $0 / 10 / 100 / 250 / 500 / 1000 / 2500$;
output meter from -10 to +54 output meter from -10 to +54
db ; DC Current $0 / 1 / 10 / 100 / 250$ ma, 0/1Qamps; Resistance 0/3000/ 300,000 ohms $0 / 30$ megohms. All range sel ction is made by sure action push buttons. Accurate $6^{\prime \prime}$ meter for full vision. Oak case $1481 \times 13 \% / 96^{\prime \prime}$. With self-contained ohmmeter battery and probes. Noise test jacks are provided for audible test of possible tube noise. Shpg. wt. 18 lbs.
K21440-Your Cost, Complete
s80.36

## JACKSON Model 652 Audio Oscillator

The basic design of this new instrument eliminates all the characteristic faults of the beat audio method. Absence of RF circuits vastly simplifies the instrument and accounts for its remarkable accuracy and stability of output frequency. Features resistancecapacity tuned circuit design for modern audio measurement needs. No zero adjustment-turned fundamental frequency method provides perma-
 20 to 20,000 cycles in 3 bands. Accuracy of frequency calibration to within $3 \%$ or 1 cycle. Output power 500 milliwatts. Output impedance: $10 / 250 / 500 / 5000$ ohms $/ \mathrm{high}$, controlled by selector switch. Output control is continuously variable from 0 to maximum. Less than $5 \%$ harmonic distortion from 30 to 15,000 cycles. Meets most ezacting requirements as to wave form, uniform freq. characteristic, and output load impedance selection For $105-120$ volt $50 / 60$ cycle AC. Supplied with $1-80,1$-6S J7, 2-6F6. Size $13 \times 91 / 2 \times 9 / 8{ }^{\prime \prime}$. More than three times the power output available from average oscillator. Shpg. wt. 30 lbs .
K21785-Your Cost, Complete
\$114.66

## JACKSON Model 640 Test Oscillator



Has full range direct reading dial from 100 kc to 30 mc . All ranges Tre fundamental frequencies. Push re fundamental frequencies. Push outton selection of all ranges for dial is glass enclosed. Two-circuit attenuator for variable and vernier control. Powerful signal output which may be used as pure RF or modulated RF carrier, modulated at approximately $30 \%$. AF voltage obtainable for external use. Accuracy to $1 / 2$ of $1 \%$ on all ranges. Complete with three tubes. Unit welded steel case, gray morocco baked enamel finish, $81 / 2 \times 81 /\left\{26^{\circ}\right.$. 110 volts 60 cycle AC. Wt. 151 bs . $K 21652$ Your Cost
s48.02

JACKSON Model 650A Condenser Tester

- Push Button Selection
- Range From .00001-1000 Mfd.


Six push-buttons instantly select desired range. Glass enclosed acale has "scale expander" indicating pointer that doubles effective scale length. Testa paper, mica, electrolytic condensers. Range in four steps from .00001 to 1000 mfd . Meas: ures power factor on dial; range calibrated from 0 to $60 \%$. Test voltages from 20 to 500 volts. "Eye" tube for leakage and balance tests; special built-in amplifier
for leakage tests. In grey morocco steel for leakage tests. In grey morocco steel case $81 / 2 \pi 81 / 2 \times 6^{\prime \prime}$, with metal cover. With
tubes. Shpg. wt. 12 lbs. K21651-Your Cost

0.02


## JACKSON Model 615 Volt-Ohm-Milliammeter

An excellent general purpose instrument, compact in size but unusually complete in ranges. 2 ohms ranges $0-1000 / 500,000 ; 5 \mathrm{DC}$ volt ranges: $0-5 / 50 /$ 100/250/1000; four DC ma ranges: $0-1 / 5 / 50 / 350$; five AC volt ranges: $0-10 / 100 / 200 / 500 / 2000$; additional high voltage DC range: $0-2500$. Rotary switch range selection saves time and reduces errors. 3" square type meter has two jewelled bearings. Each instrument supplied complete with self-con. tained batteries. Panel is finished in attractive two-tone grey with white lettering. 7x41/4․․" Shpg. wt. approx. 4 lbs. K21473-Model 615, Your Cost

## JACKSON Model 645 Vacuum Tube Voltmeter

 Both AC and DCVVolt
ranges are
ent electronic, providing maximum sensitivity and overload protection. sistance up to 1 billion ohms and as low and as low as $2 / 10$ ohm. Meter anges: AC Volts $0-1 / 4 / 10 / 40 /$ $100 / 400 / 1000$; DC Volts $0-4 / 10 /$ 40/100/400/1000; Ohms 0-1000/ $10,000 / 100,000 / 1 \mathrm{meg} / 10 \mathrm{meg} /$ $100 \mathrm{meg} / 1000 \mathrm{meg} ; \mathrm{Ma} 0-1 / 4 / 10 /$ $40 / 100 / 400 / 1000 ; \mathrm{db}$ minus 30 to minus $5 /$ minus 10 to plus $15 / 10$ to $35 / 30$ to 55 . Reversal switch gives instant positive or negative DC voltmeter indications. Constant input resistance of 12 megs on all DC volt ranges. Input resistance of 4.4 megohms on all AC ranges. 3 million ohms per volt sensitivity on $0-4$ volt DC range. Over 4 million ohms/volt range. ity on 0 yon $A C$ range sensitiv $6 \times 5 \mathrm{GT} 6 \mathrm{~K} 6 \mathrm{G}$ Tange. 3 tubes. battery, 6 Kd and furnished Shd
K21472 yproz. 10 lbs
K21472-Your
Cost, Complete.

JACKSON Model 642 Volt-Ohm-Milliammeter


A valuable inatrument for all measurements of sensitive circuits such as AVC, grid circuits, etc. ments can be made with cur rent drain as low as 10 microamperes. Instant selection
of any range by means of 11 key push button selector: Volts AC and DC; range: 0/10/100/250/500/1000/5000; -10 to $+14 / 10$ to $34 / 30$ to $54 \mathrm{db} ; \mathrm{DC}$ ma 0/10/100/ $250 ; 0-100$ microamps; $0-10$ amps; $0 / 3000 /$ $300,000 / 30,000,000$ ohms. No external batteries or line power required. All DC volt ranges are 20,000 ohms/volt. Current readings may be made as low as $2 / 1000$ of 1 ma . Case is welded steel finished in grey morocco. Fitted with removable ateel hinged cover. Protects meter and controls. $81 / 2 \times 81 / 9 \times 6^{\prime \prime}$. With battery, test leads. Shpg. Wt. 81 lbs . K21653-Model 642 Sout Mour Cose Model 643-same as Model 642 except 0-1000 microamps, ohms $0-3000 / 300,000 / 3,000,000$. K21759-
Your Cost, Complete...... \$4. IO

## BLILEY Model 1A

Crystal Controlled Oscillator


A new standard for proficiency and accuracy, this instrument provides: direct crystal control, with instant selection of the 5 most commonly used i-f frequencies $175 \mathrm{kc}, 262 \mathrm{kc}$, $370 \mathrm{kc}, 455 \mathrm{kc}$, and 465 kc ; direct crystal control at 200 kc for RF alignment; direct crystal control at 1000 kc for short wave alignment. External socket for addition of special frequencies, a 3 position modulation selector, and a 5 cies, a 3 position modulation selector, and a 5
step attenuator with vernier output control step attenuator with vernier output control
from 0 to 15 volts. All low temp. Coeff. $\pm 1 \%$ crystals used. In metal black ripple finish case, crystals used. In metal black ripple
$8 \times 6 \mathrm{z} 5^{\prime \prime}$. Shpg. Wr. approx. 7 ibs . K21474
Your Cost, Complete

## JACKSON Model 636-CP Dynamic Tube Tester

This tester is modernin every feature of construction, appearance, and oppearance, The
eration. Tynamic method of namic method of test makes a better
more accurate test more a ccurate test
of every tube. By of every tube. By
testing tubes at testing tubes at higher plate volt-
ages (over 200 volts ages (over 200 volts
for some) more ac-
 curate results are obtained. Tests all of the popular receiving type tubes and television amplifiers, including bantams, loctals, single ended, miniatures, and high voltage filament types. Provision is made for many more. The tester is protected against obsolescence in every feature. Roll chart tube index simplifies correct settings. Full range filament selection from $3 / 4$ to 115 volts. Spare circuits and two spare socket positions provided for future use. Large 4 " square meter. Noise jacks provide audible test of possible tube noise. In portable leatherette case, $16 \times 7 \times 13 \frac{3 / 4}{4}$. Shpg. wt. 13 lbs
K21530
Your Cost, Complete
\$61.25
Model 636-CB-same as above except 2 -tone grey finish counter top case.
$\$ 55.37$

## RCP fest equipment

## REINER ELECTRONICS Model 451 <br> Vacuum Tube Voltmeter



Accuracy, stability and long life are assured by excellent circuit design and by rugged, precise mechanical and structural design teristics up to 700 megacycles, accomplished by a unique probe giving input capacity of less than 7 mmfd . Both AC and DC voltage ranges are easily read on a single long linear sale Reaily. $0-2$ 5/10/25/100/250/1000 scalc. Ranges. $0-2.5 / 10 / 25 / 10 / 250 / 1050$ 1000 ma DC; $0-1000 / 10,000 / 100000$ ohms $1 / 10 / 1000$ megohms. Accuracy $2 \%$ DC volt, ohm, and current; $5 \%$ entire AC fre quency range. 0-180 microamperes mete movement is accurate within $1 \%$. Other featurea are: wide frequency range, high in put impedance, wide voltage range, ningle zero-adjust for all AC and DC ranges, voltage regulated power supply, large overvoltage capacity, stable operation. With tubes, fuse extractor post, test leads, service cord, and probe. In black finish portable case, $102 / 69 \times 8^{\circ}$. $110-125$ volt, $50-60$ cycles AC. Shps. wt. 22 lbs. K21498-Model 451. Your Cost Complete

## RADIO CITY PRODUCTS Model 665A AC-DC V.T. Volt-Ohm-Capacity Meter



This instrument combines an insulation tester with a vacuum tube volt-ohm-capacity meter. Twenty-nine measurement ranges handle practically any service or laboratory testing job. Ranges: insulation testing $1-10,000$ megohms at 500 volts; vacuum tube ohm meter, direct reading $0-1,000 / 10,000 / 100,000$ ohms; $1 / 10 / 100 / 1000$ megohms; accurate measurements from .000025 to 2000 mfds with eapacity meter; AC vacuum tube voltmeter $0-3 / 6 / 30 / 150 / 600 / 1500 / 6000$ volts; input capacity .0005 mfd ; input resistance 160 and 16 megohms. Measures signal and output voltages from 10 to $10,000 \mathrm{cpa}$. DC vacuum tube voltmeter $0-6 / 30 / 150 / 600 / 1500 / 6000$ volts; sensitivity 160 megohms on high ranges and 16 megohms on low ranges. The $8^{\circ}$ meter is accurate to $2 \%$ at full scale. Automatic line voltage check provides excellent $A C$ and DC regulation to assure accuracy and stability. In sturdy steel case, $93 \times 121 / 2 \times 6^{\circ}$. Complete with 4 leads and batteries. Shpg. wt. 14 lbs. K21595-Model 665A Your Cost, Complete
\$92.61

## RCP Model 488A

## Sensitive Multitester

Ideal instrument for field and shop testing of elec tronic equipment. Dua DC sensitivity of 20,00 sensitivity of 1000 ohms/ volt. Rangee: $0-3 / 12$ $60 / 300 / 600 / 1200 / 6000$ volts $D C$ and $A C ; 0-60$ 300 microsmps DC; 0-3 20/120/600 ma DC; 0-12 mps $D C ; 0-3 / 6 / 12 \mathrm{amp}$ ohms: $0-30$ megohms. Wide acale $41 / 5^{\prime \prime}$ meter with 50 microamp movement, $2 \%$ accurate. All multipliers are matched and $1 \%$ accurate. Overall accuracy $3 \%$ on DC and $5 \%$ on $A C$ voltages and currents. High voltage test leads voltages and currents. High volcage test leads are furnished. Batteries are readily accessible,
can be replaced merely by releasing spring can be replaced merely by releasing spring
clamp. No soldered terminal connection to clamp. No soldered terminal connection to batteriea. Supplied ready to operate, complete
with self-contained battery. Case, $13 x 121 / 2 x$ with self-contained bat
$51 / 2^{\prime \prime}$. Shpg. wt. 121 bm . K24594-Model 488A. Your Cost.
s70.07

# RADIO CITY Products 424A Volt-Ohm-Milliammeter 



Features self-con. tained battery operated ohmmeter with a high range of 10 ter movement is 400 microamps and provides a sensitivity of 2500 ohms per volt.
$50 / 250 / 1000$ volts $D C ; 0-10 / 50 / 250 / 1000$ volts AC; $0-10 / 50 / 250 / 1000 \mathrm{ma}$ DC; $0-500 / 100,000$ ohms; $1 / 1 \mathrm{c}$ megohms; -10 to +15 . ${ }^{-4}$ to $+29,-18$ to +43 , -30 to shunt and multiplier is individually calibrated uppreter toper oride rectifier is used suppreasor eype copper opide rectiner is usec Tor AC mesarements. Tier construction and reaistor boord mounting of shunts and mult pliera make them accessible. Hardwood case with batteries. Size $71 / 2 \times 53^{2} \times 33^{3} 4$ K21587-Model 424A Your cost
$\$ 28.91$
Model 4244 P - as above but in portable case,
 $\underset{\text { Your Cost, complete }}{ } \mathbf{H 2 1 5 8 6}$
s32.83

## REINER Electronics Model 333 DC Volt-Milliammeter



## A simple instrument

 that meets the voltamp test requircments of most circuits with current or potential values between .002 to 1000 volte, and 20 mi coamps to 10 amps. One unit serves as 20 or more different single instruments. To operate you merely insert multiplier for the desired range and take readings. Ranges: $0.5 / 10 / 25 / 100 / 250 / 500$ voles DC at 1000 ohms per volt; $0-5 / 10 / 25 / 100 /$ $250 / 500 \mathrm{ma}$ DC. Comes complete with 6 shunts, 6 multipliers, 2 meter fuses and instructions. The meter is set at easy ready to read angle. Handy slide drawer contains shunts, multipliers, fuses and shorting connector all mounted on spring snap holders. Housed in steel case, $6 \times 7 / / 2 \times 61 / 2 \%$. Wt. 6 lbs . Meter is hermetically sealed against dust, moisture and is non-corrosive. Greater scale length increases accuracy and readability K22500-Model 333 Your Cost, Complete\$26.95

RCP Model 805 Tube and Set Tester
 Combination battery, set, tube and condenser leakage tester. test under rated voltages for for all popular condensers. Battery test for all popular sizes and types of radio batteries under
rated load. Ranges: $0-2.5 / 10 / 50 / 250 / 1000 /$ rated load. Ranges: $0-2.5 / 10 / 50 / 250 / 1000 /$
5000 volts $D C ; 0-10 / 50 / 250 / 1000 / 5000$ 5000 volts DC: $0-10 / 50 / 250 / 1000 / 5000$
volts $A C$ : $0-10 / 50 / 250 / 1000$ output volta volte $A C ; 0-10 / 50 / 250 / 1000$ output volta;
$0-10 / 100 / 1000 \mathrm{ma} D C: 0-10$ amps $D C$ $0-10 / 100 / 1000 \mathrm{ma}$ DC; $0-10$ amps DC; $0-250 / 2500 / 25,000$ ohms, $0-2.5 / 25$ megohms;
-8 to $+15 /+15$ to $+29 /+29$ to $+49 /+32$ -8 to $+15 /+15$ to $+29 /+29$ to $+49 /+32$ to +55 db . Low range ohmmeter is back-up.
low drain type. Medium range ohmmeter is low drain type. Medium range ohmmeter is
powered by self-contained battery. High range is operated from plug-in line supply. All popular filament voltages are supplied. Test leads are furnished. Sturdy wood case, $141 / 4 \times 13 \times 6^{\prime \prime}$. Complete, ready to operate on $105-35,50-60$ cyclea. A deluxe instrument. Famous Dynoptimum test circuit. Line fuse replaceable at front penel. "Rolindex" mechanical tube chart. K21645-Model 805. Shpg. wt. 14 1bs. Your Cost
587.71

REINER ELECTRONICS Model 530


Squarewave Generator This instrument was designed to meet the demand for square wave generator to be used in production and general testing. The frequency scale is hand calibrated from below 10 to above 100 cycles. A decade usequency multiplier inge. Accuracy of frequency calibration is $5 \%$ over extended periods. The instrument can be made to synchronize with any standard frequency generator providing a syme voltage of at least. 1 volt is available. The output voltage a syme. voltage of at least. 1 volt is avalabie. The output voltage may either be varied dances are $100 / 200 / 500 / 600 / 1000 / 2000$ ohms. Operates on $110-120$ dances are $100 / 200 / 500 / 600 / 1000 / 2000$ ohms. Operates on $110-120$
volts, 60 cycle AC. Size $8 \times 9 \times 15$. Complete with tubes, ready to volts, 60 cycle AC. Size $8 x 9 x 15^{\prime \prime}$. Complete with tubes, ready to
operate. Shpg. wt. 20 lba.
K 21499 -Model 530 . Your Cost......................
K21499-Model 530. Your Cost

RCP 449 Pocket Tester


This veraatile multitester is remarkably accurate and combines low and high ranges. Rangea: O-S/
$50 / 250 / 1000$ volts $50 / 250 / 1000$ volts
$D C, A C$, and output: DC, AC, and output:
$.5 / 10 / 100 / 1000 \mathrm{ma}$ DC; $0-1000 / 10,000$ ohms; 0-1/1 meg; -6 to +52 db in 4 rancalibrated for 500
ohms line.
Correction charts for other im. pedances, batteries supplied. $3^{\circ}$ square 200 microamp meter. 5000 ohm/volt sensitivity. In black metal case, $57 / 8 \times 31 / 1521 / 8^{\prime \prime}$. Shipping wt. 3 lbs. Mod 449 K21453
Your Cost
\$24.01

## REINER Test Leads



Model 910 leads designed for use up to 15000 volts. $54^{\circ}$ long, $7^{\circ}$ prod Negligible volt age drop

Your Cost
s3.53
REINER Pencil Type Test Lead
K12951 $48^{\circ}$ phone tip.
K12952 $48^{\prime \prime}$ spade lug.
K12953 48" alligator clip K12957 $48^{\prime \prime}$ phone tip* K12958 $48^{\text {" }}$ spade lus* K12959 $48^{\prime \prime}$ alligator clip* K22960 54" Phone tip* K12961 $54^{\prime \prime}$ Spade lup* K12962 54 Npallige K12962 Scived handles to prevent 1.26

With $3^{\text {" }}$ square, $2 \%$ accurate meter. Ranges: $0-5 / 50 / 500 / 2500 /$ volts DC: 0-10/100/500/1000 volts $A C ; \quad 0 / 10 / 100 / 500 / 1000$ volte; $0-500 / 100,000$ ohms, 1 meg; -8 to 55 db . Batteries supplied.

Perfect Merchandise-Prompt Shipment-Personal Service

## WESTON fest equipment

## WESTON Model 779 <br> Super-Sensitive Analyzer



Ideal for measurement of tube circuits, as in electronic receivers, low-powered transmitters and electronic control equipment. Will measure potentials and current in television equipment
and wired communication systems. Power level in decibels in audio equipment, public address systems, telephone or speech lines can be measured with equal facility. Can be used for testing cathoderay equipment, and in the maintenance of electronic control and alarm systems in iadustry. Also extremely useful in the production adjustment and testing of sensitive electronic devices and communication equipment. Will accurately measure plate voltage and current on most ham transmitters as required by the FCC. Diode currents and AVC and AFC circuit currents as well as leakage of condensers can be accurately checked. AC accuracy of three percent. Only precision resistors are used throughout the instrument to insure accurate measurements. The fine finished case and panel make this instrument a thing of beauty. It will withstand a good deal of rough treatment also. Ranges: $0-2.5 / 10 / 50 / 250 / 1000$ volts, DC and AC. DC Current: . $1 / 1 / 10$ / $50 / 250 /$ milliamperes, $1 / 10$ amperes. Five DB scales: -14 to $+2-/$ -2 to $+14 /+12$ to $+28 /+26$ to $+42 /+38$ to +54 decibels. Resistance ranges: $0-3000 / 30,000 / 300,000$ ohms/30 megohms. The instrument is amall, light, and compact. The attractive heavy molded bakelite panel and rugged, solid oak case with hinged removable cover and convenient carrying handle add to the many technical improvements. Sensitivity 1000 or 20,000 ehms all-around test instrument. Sensitavity 1000 or 20,000 ohms per volt. $67 / 8 x 91 / 8441 / 8 \mathrm{~s}$
We. 73 lbs . K21503-Model 779, Complete

## WESTON Model 697 Volt-Ohm-Milliammeter



Production tests on mo tors, electrical equipment, and parts, as well as laboratory work and general servicing can be efficiently handled by this multi-range test unit. Its ranges have been very carefully selected to meet many test requirements. A simplified switching and pin-jack arrangement facilitates rapid operation. Test leads are supplied. Precision resistors are used hroughout the instrument to insure accurate neasurements. A self-contained $41 / 2$-vol Extremely rapid operation versatile formance lasting dependability all these ormance, lasting dependability all these Chenges in battery voltage are compensated for by rotating an adjuster or by rotating an adjuster knob on front panel. Sustained accuracy is assured under ll kinds of operating conditions. AC and DC voltage ranges: $0-7.5 / 15 / 150 / 750$ ( 1000 ohms/ volt): current: $0.7 .5 / 75 \mathrm{ma}$. DC; ohms: full scale, $5,000 / 500,000$ ohms ... center scale, $35 / 3500$ ohms. Weight 3 lbs. Size $5 \% / 4 \% / 4$ K21469-Model 697 Your Cost, Complete
\$25.89

## McMURDO SILVER Model 905 "SPARX" Signal Tracer



The Dynamic Signal Tracer provides an audible means of following a signal from the antenna to the speaker. The electron-ray indicator furnishes a visual means of measuring circuit
gain or loss. With this instrument the tech gain or loss. With this instrument the technician can check a receiver at every circuit point, locating hum, noise, open and short circuits. Even the presence of grid and plate supply voltages is indicated visually. Useful frequency range is from 20 cycles to over 200 negacycies. 65 db gain in AF amplifier. Complete with test leads. Practically no detuning effect of circuit under observation. Size and wht. identical to "Vomax." $\$ 39.91$

McMURDO SILVER "Vomax" VTVM \& Dynamic Signal Tracer


The "Vomax" is a true post-war instrument 12 DC voltage ranges, 0 to + or -1200 volts at 51 megohma input resistance and 12 DC voltage ranges, 0 to plus or minus 3000 volts at 126 megohms input resistance. Accuracy + volts at 6.6 megohms input resistance. Accuracy + or megohms input resistance. 6 ranges. 3 DB ranges, -10 to +50 db . Diode probe gives frequency response from 20 cycles to 100 megs. $45 /{ }^{\prime \prime}$ meter $100 \%$ protected against overload burnout. For 105/125 volts, 50/60 cyeles A.C. only. Conveniently

$w_{t} .13 \mathrm{lbs}$
$\$ 59.85$ Complete. . . . . . . . .

## McMURDO SILVERModel 906 FM-AM Signal Generator

No illustration is avallable at the present time.

This signal generator provides fundamental frequency coverage of all usual AM bands, plus built-in frequency modulation and total range including new FM bands up to 170 MC .
The frequency range, 90 kc 170 mc , is covered The requency range, $90 \mathrm{kc}-170 \mathrm{mc}$, is covered triode section of a 6 J 6 miniature uhf tube serves as oscillator and the other as buffer amplifier. Output voltage is indicated by a uhf radar-type crystal diode and panel meter, calibrated directly in microvolts. Built-in attenuator provides continuously variable metered output from 0-1'volt. Signal can be AM or FM modulated at any frequency Offers negligible load on circuit under test. $123877^{3} 8551 / 8^{\circ}$. Wt. 20 lbs. K21452-Model 906
Your Cost.
$\$ 89.00$

## WESTON Model 798 Analyzer and Mutual Conductance Tube Checker

Sirty-cycle tube element poteatials are used in this tube tester, thereconditioaching the zero plate load conductance tests. A separate 5 KC internal oscillator signal is applied to the grid and the resulting plate component of the high frequency signal is measured on a rectifier meter. The analyzer section provides for rapid trouble shooting in electronic and electric equipment. All volt-ohm-milliammeter ranges terminate in a pair of
pin jacks. Ranges are selected by
 one 12-position switch. Switching is automatically shut off when the analyanged that the tube checker provided and a self-contained $71 / 2$-volt batery used. Test ranges, so it is not necessary to connect the instrument to ohmmete when it is used as an analyzer. Tube checler ranges 3000 a power line micromhos. Voltmeter ranges: 15/150/750 AC and DC at 1000 ohms per volt. DC milliamps: $7.5 / 150$. Resistance $100,000 / 1$ megohm The AC voltage range in this instrument has an accuracy of plus or minus three percent. All analyzer ranges are available without depending on an AC power source. The fiexibility of switching in the tube teater provides for the testing of new tubes as they may be announced. Only six settings required. The meter has an accuracy of plus or minus 3 percent for all DC voltage, current and resistance ranges. For use on $105 / 125 \mathrm{v}, 60$ cycles AC only
Shpr, Wt. 23 lbs.

## Complete

${ }^{131212.64}$

## WESTON Model 695 Power Level, Volt-Output Meter

A power level, volt-output
rectifier-type meter, rectifer-type meter, pro-
vides readings in decibels and in AC volts. Ideal for power level measurements power level measurements in all types of radio equip-
ment. It is a medium ment. it
speed instrument with a speed instrument with a
moderately damped movement and has a constant Eleven decibel ranges ohms. Eleven decibel ranges from -4 to +36 db . ranges from 2 to 200 volts
also available also available. A self-con-
tained condenser
 separate pin jack is, accessible through a DC component. Test leads are supplied. Each meter is supplied with a chart which gives interpolation values from $5 / 10000$ ohms. Small, light, and compact; has a single knob for switcining to different ranges. - Heayy molded bakelite panel. Number of moving parts reduced down to a bare minimum with single control knob, tip jack for series condenser and one set of tip jacks for all voltage denser and one set of tip jacks for all voltage
and output ranges. Size $51 / 2 \times 31 / 42313^{\circ}$. Shpg. Wt. 3 lbs., complete.
K21468-Model 695
Your Cost, Complete.
\$30.25

## McMURDO SILVER Model 904 C-R Bridge



The Model 904 Capacitance-Resistance Bridge gives direct readings from 10 ohms to 1000 megohms and from 10 mmfd to 1000 mfd on a five-inch logarithmic scale. Accuracy is better than 3 percent up to 100 megohms $/ \mathrm{mfd}$. slightly less on the highest scale. Measure ments down to $1 / \mathrm{ohm} / \mathrm{mid}$ can be made as to any small value of $C$ or $R$. 0.500 volta DC potential is applied to all capacitore during test Unit is furnished complete with tubes 1-6SN7, 1-6E5 "Eye" tube, 1.5 Y 3 and teat leads. Will operate on 105.125 volts, $50-60$ cycle, AC only. Dimensions: 123/5x73/55 ${ }^{1 / 3 "}$ Shpg. We 13 lbs.
K21454-Your Cost.
$\$ 49.91$

## EMC Model 101B "Volometer"

Here is an attractive, EXCEPTIONALLY LOWPRICED volt-ohm-milliameter. It is a rugged, flezible instrument, combining features which are not available in competitive models selling for twice the price, 5 DC voltage ranges: $0 / 6 / 60 / 300 / 600 /$ 3000 volte 5 AC voltage ranges; $0 / 12 / 120 / 600 / 1200$ volts. 3 DC Current ranges; $0 / 6 / 60 / 600 \mathrm{ma} .4$ resistance ranges; $0 / 200 / 2000 / 200,000$ ohms, $0 / 20$ megohms. 4 DB ranges: -8 to $16 / 36 / 50 / 56$. Open face

 ing iron.
K21511-Open Face Model
Your Cost
K21512-Portable Model
Your Cost
 \$20.53 \$24.45

## FEILER Signal Tracker

Rapid, efficient, economical- compact signal detector eapecially built for those who want to track down set troubles without investing in costly equip ment with complex mechanisms. This is the signal tracer everyone can afford. The TS. 1 permits you to test any set without bothersome adjustments Just touch probe to any section of the set, RF, IF phones. The TS-1 uses one $221 / 2 \mathrm{v}$. battery, $1 \$ 2$ phones. The TS-1 uses one 22 VV . battery, 1 Comes in a Brown crackle fanish. $67 / 8 \times 4 \times 43 \mathrm{~A}^{\prime \prime}$. Shipping weight 3 lbs. K21531
Less batteries, phones K19862
221/2v Battery


K20622-No. 2 Cell

## FEILER Signal

## Tracing Analyzer

For thosc who want a "professional" signal tracer, which at the same time is simple to operate, the TS-2 Professional Model Signal Tracing Analyzer has "plus" features found in no other instrument in its price range. Operation is on batteries only ( $2-45 \mathrm{~V}$ and $1-43 / 2 \mathrm{~V}$ ), makes the TS- 2 completely portable and free from line hum.
Bullt-in VTVM circuit has connection Built-in VTVM circuit has connections for external RF and output meters. 3 low-drain miniature tubes included. $8^{\prime \prime}$ I $111 / 2 \times 6^{\prime \prime}$. Shpg. Wt. 6 lbs. M21462-Less Batteries
Your Cost only.
א20617-45v. battery.
Each.
K20610-4 Y/2v. battery. Each

## Electronic Designs VT-VM

The model 100 has been expressly designed to withstand hard uaage and at the same time supply the demand for sensitive, accurate vacuum tube Voltohmmeter. Ecsides such unique features as a hermetically sealed movement and anti-fungus witchea, all components have been chosen and matched for precision results. The power supply matched for precision resuits. The power supply $0 / 3 / 10 / 30 / 100 / 300 / 1000$ volts. 11 megohms input resistance for all ranges with accuracy $\pm 3 \%$. AC Renges; $0 / 10 / 30 / 100 / 300 / 1000$ volts sensitivity 1000 ohms per volt. Electronic Ohmmeter Ramgea:
$\$ 1.50$ 1000 ohms per volt. Electronic Ohmmeter Rangea;
$0 / 1000 / 10,000 / 100,000$ ohms, $0 / 1 / 10 / 1000$ megohm
 $0 / 1000 / 10,000 / 100,000$ ohms, $0 / 1 / 10 / 1000$ megohms. The Model
100 VT.VM PROVAC is supplied in a black steel case, pg 100 VT-VM PROVAC is supplied in a black steel case, 95 íx $6 \times 4 \%$ " . Bridge Amplifier Circuit Meter individually calibrated for use with K21509 Electronic Voltohmmeter Model 100 Your Cost
K21528-Model ED100 Complete with $\dot{\mathrm{R}}$. F . Probe Your Cost.

## AEROVOX Motor Starting Capacitor Selector

On a refrigerator job you can 't take your own sweet time. When there is perishable food at atake you must get that motor going at once. Nine times out of ten on the capacitor-start type refrigerator, the trouble is due to a wornout capacitor. That's where the AEROVOX Capacitor Selector goes to work. To use merely connect its clips in place of defunct capacitor. Try various toggle awitches starting with the 65 mfd . first. Voltmeter indicates voltage impressed on capacitor, which must not exceed 138. Toggle switches provide progressive choice of capacities from $171 / 2$ to $1521 / 2 \mathrm{mfd}$. Each successive toggle throws in 17.5 mfd . Each when a toggle thrting torque is more. in less than three seconds, merely total the capacity from the "on" switches. That's correct capacity.

Your Cost


## DUMONT Model 164E 3" Osclllograph

Ideal for service engineers and laboratory technicians. Employs 3AP1 (green) Cath-
ode Ray Tube. Amplified sweep uses 2B4 as saw-tooth oscillator. Separately controlled horizontal amplifier has gain of 55 and vertical amplifier has gain of 43; response from 5 to 100,000 s.n.r. sinusoidal cycles. Provision for applying signals direct to deflection plates (not necessary to remove from cabinet). Two power supplies deliver 1100 volts accelerating potential and 415 volts amplifier potential. Removable calibrated scale for accurate determination. For $115-230$
volts a.c., 40 to $60 \mathrm{r}, 40 / 60$ cycles a.c. Size: $113 / \mathrm{x} 71 / \mathrm{x} 13^{n}$. Complete with tubes. Shps.
Wt. 25 lbs. Your Cost. . \$I
K21557-Y

$5^{*}$ Model 208B: Uses type 5LP1 Cathode Ray Tube. Amplifiers flat from 2 to 100,000 sinusoidal cycles. Extended sweep range 2 to 50.000 cycles. Nearly $15^{\prime \prime}$ time base. Freedom from pattern drift. Size:

$52,35.11$

## DUMONT Model 274 Oscillograph

Here is an inexpensive, general purpose eathode ray instrument designed for routine laboratory and production testing, and for radio servicing. Several provisions have been made to adapt this oscillograph to the requirements of colleges, technical and high schools. Emfull gain flat within $+20 \%$ from 20 cycles to 50 kc. Yiehds spot deflection of $1^{\prime \prime}$. Sweep frekuency range variable from 8 to 30,000 cycles. Panel switch permita applying signals direct to deflection plates. Two power units deliver 1200 volts with low supplying plate potentials for remaining tubes. Power consumption is
approximately 50 watts with fuse protection approzimately 50 watts with fuse protection
at one ampere. For 115 volta $\pm 10 \%, 50 / 60$ cycles a.c. Size $14 \times 5 / 6 \times 198 / 8{ }^{\prime \prime}$. 7 tubes.
K21558-Shpg. wt. 351 bs.
Your Cost


## DUMONT Osclllograph Type 224-A

Study of pulsea and square waves eased by faithful reproduction of steep front wave forms and resultant large harmonic content Protective front panel cover and sturdy
mechanical design results in rugged instrumechanical design results in rugged instru-
ment for field and lab use. Numerous combi ment for field and lab use. Numerous combinations of signal input connections at front panel provide for great flexibility. Wide band vertical amplifier response to 3.5 megs . Provision for Intensity Modulation is made on front panel. Built in $4 / 1$ resistance capacitance attenuator. Has 3GP1 3" DuMont CRT Freq. range from $15-30,000$ c.p.s.. less than 0.5 volts needed for synchronization. 3 power units, 400 volt for plate voltage of amplifier and sweep oscillator, 190 volt for low-level plate voltage and 1000 volt negative supply for CRT. For 115 volts, $50 / 60$ cycles, size $141 / 6 \times 8^{1} / 2 \times 151 / 8^{\prime \prime}$. Shpg. wt. 51 lbs. K24561-Your Cost.

$\$ 250.00$

## DUMONT Model 185 Electronic Switch \& Square-Wave Generator

Developed to satisfy demands for an instrument that would make for easy observation of 2 or more signals on the screen of a single cathode ray oscillograph, also for a squarewave generator at from 10 to 500 sq. Wave cycles. Slight distortion at 25,000 sinusoidsl cycles. Used in studies of vacuum tube performance characteristics. Switching rate is variable $10-2000$ times per second. Uniform amplifier response, d.c. to 5000 sinusoidal c.p.s., down $25 \%$ at 25,000 . Input resistance 50,000 ohma. Maximum signal putput 75 volts 100,000 ohms. Output resistance 50,000 ohms. Maximum signal output 75 volts peak to peak. For 155 or 230 volts, $40 / 60$ cycles a.c., 7 tubee size $7510 \times 111 / 2 \times 13^{\prime \prime}$ ", in black wrinkle-finished steel cabinet with varrying handle. Wt. 17 lbs.
 K21783-Your Cost.
$\$ 105.10$

## Electronics Designs <br> R. F. "Ediprobe"

Enables the laboratory encineer
Enables the laboratory engineer
and radio service technician to measure every voltage. Can be used and radio service technician to measure every voltage. Can be used
with Model 100 VTVM or other standard VTVM. Will trace a signal through both the IF and output stages of any receiver. Smallest probe made, provides easy access to all points, $1 / 2^{\prime \prime}$ diam $\times 4 \frac{1}{2 \prime}$ long, freq. range from 60 cycles to 100 megs, standard phone plug, RF voltage range $0 / 3-10-30-50.3 \mathrm{mmf}$ and 1 megohm effective circuit loading, used as output meter and for measuring decibels. K21529-Electronic Designs R. F, Probe Your Cost.
\$9.85

## RCA fest equipment



Complete instrument for matching up a new sound system or to repair existing installations. Will hold continuous check on four different audio circuits simultaneously to locate intermittents. Two amplifier channels and an electronic AC voltmeter check gain and level on circuits from -80 to 49 db . All channels flat from 20 to 10,000 cycles at 1 meg. input. Impedance measurements 004 megohms; voltages sistance ranges from $0-400$ megohms; voltages
from 5 to 1000 at 20 megohms; $D C$ input resistance of 2 megohms. 15 tubes: $1-5 Y_{3}$ rectifier, $1-6 \mathrm{E} 5$ indicator, 16 H 6 meter diode, 1.6 JS intermediate amplifier, $2-6 \mathrm{~K} 6^{\circ} \mathrm{s}$ meter bridge, 1-6SA7 oscillator control, 2-6SJ7's B.F. oscillators, 2 -6S J7 preamplifiers, 1 -6SN 7 detector, $1-6 \mathrm{~V} 6$ power amplifier, 1.6 X 5 rectifier. and $1-2050$ sweep control. $12^{15} / 6 \times 93 / 8 \times 187 / 80^{\circ}$. Wt. 35 lbs.
K21769-Model 170-A,
Your Cost.

RCA Voltohmyst
One of the most popular ervicing instruments. Designed to do more of the unusual things, Model 195 incorporates a basic innovation in AC measurement - linear diode rectifier reading directly on the DC scale-flat response from 20 to 100,000 cycles. A common ground supplied, 1 with isolating probe for DC, the other or AC or ohms. Electronic meter overload control built into instrument. and dynamic testing. Ten megohm constant input for all six ranges: $0.5 / 10 / 50 / 100 / 500 / 1000$ volta d-c on a linear scale. Flat frequency response up to 100 volts with an input impedance of 200,000 ohm and 170 micromicrofarads. AC ranges: $0-5 / \mathrm{Re}$ sistan/500/1000 voits on a also calibrated in terms of volume units. Supplied complete with tubes and test leads. A polarity reversing switch built into the instru ment makes it unnecessasy toment is housed in an attractive and durable portable black metal case with handle for carrying. Improved dial acale housing slopes upward and is cut away at the top for greater visibility and easier, more accurate readings. Minimum amount of dials. Size $93 / 8 \times 57 / 8 \times 5 \%{ }^{\circ}$. Shipping Weight 14 lbs . K21770-Model 195-A,
Your Cost.
$\$ 69.50$

## RCA-RIDER Chanalyst



The servicing of any radio, new or old, can be done faster and easier with an RCA Chanalyst than with any other type of test instrument. The Chanalyat permits you to follow the signal like a bloodhound from the antenna coil in the receiver right through each succeeding stage to the speaker voice coil. Shows you instantly the speaker voice coil. Shows you instantly
where signal gets weaker, distorted, or disapwhere signal gets weaker, distorted, or disap-
pears altogether. Ranges: RF-IF channel; 96 pears altogether. Ranges: RF-IF channel; 96
to 1700 kc ., Oscillator channel; 600 to 15000 to 1700 kc ., Oscillator channel; 600 to 15000
kc ., AF channel; 150 to 50,000 cycles. Electronic voltmeter channel $0-5 / 25 / 125 / 500$ volts DC with an input impedance of $11,000,000$ ohms. Scale reads zero center with both positive and negative deflection. Wattage indicator channel has input range of 30 to 250 watts. Accuracy plus or minus 15 percent assuming 80 percent power factor of load. Power supply $105-125$ volts, $50-60$ cycles. Tube complement: $2-6 \mathrm{~K} 7$ 's, $1-6 \mathrm{H} 6,4-6 \mathrm{E} 5$ 's, $1-76$, $1-6 \mathrm{X}, 1-607,1-6 S K 7$, and $1-6 \mathrm{AC7}$. 9x16x 10:1" Wt. 281 lbs . Yowr Cost.
s 162.50

## RCA Cathode Ray Oscilloscopes

3" Model 155 C : Uses 906P1 tube, 2-6SJ7's for vertical and horizontal amplifiers, $1-6 \mathrm{C} 8$ timing oscillator stage, $2-5 \mathrm{Y} 3$ rectifiers. Bar knob controls located on front panel. Useful range of 10 cycles to 200 kc . Input impedance at Ext. Syac. Terminals is 11 meg. Extremely useful feature is external 6 volt source brought to binding posts from fla. supply. Can be used for calibration work, studying Lissajou figures, or as heater supply for ezternal diode probe. Input 110-120 volts, $50-60$ cycles AC, $14 \frac{1}{3} \mathrm{z}$ 82141/". Shpg. wt. 32 lbs . $\$$ ITS.00 K2147
$5^{*}$ Model 1608: Deluxe model with $5^{\prime \prime}$ screen for large clear images. Vertical amplifier flat within 3 to 35,000 cycles, horizontal amplifier flat from 3 to 35,000 cycles. Complete with tubers, hardware and operat. 40 lbs . K21442-Your Cost, Complete.

## WATERMAN Pocketscope

The model S-10-A Pocketecope is a small, compact, lightweight, complete C-R oscilloscope incorporat and horizontal amplifiers, linear time basc oscillator, synchronization means. Self-contained power supply. The time base oscillator is variable from 10 cycles to kilocycies deflection sensitivity is 1 v, RMS/ inch. The Tubes are 1-6AUS tube. As used pormally, the vertical dimension is amplitude, and the horizontal may be either ampli-$50-60$ cycles AC. The CR tube is magnetically shielded. $63 / 5 \times 4 \times 10^{\circ}$
Wt. 7 libs.
K21466-
Your
Cost

Ideal for radio shops,

$\$ 185.00$

## MEISSNER Analyst

Incorporates 5
separate signal tracer channels. Each channel, on its individual panel, provides a simple fool-proof instrument that will check any receiver from ancenna to speaker. tenha to speaker. All channels can be used at one time for locating intermittents, and will check a defective circuit quickly. A built-
 in electronic voltmeter then enables you to identify the defective part. Completely and thoroughly checks the receivers of yesterday, today, and tomorrow. The new Analyst is completely wired, aligned, and laboratory tested. Furnished complete with a full set of tubes. It is all ready to be put into service the minute it is unpacked and connected to a 110 -volt AC line. No alignments or adjustments are necessary. Covers all frequencies from 100 to 1700 KC . Oscillator channel covers 600 to 15000 KC . Shielded test cables and probes, and an input impedance of 10 megohms, results in a miniimpedance of 10 megohms, results in a mini-
mum of circuit disturbance on all teats. A mumplete instruction book gives detailed instructions for use of this instrument in locating
ation all kinds of trouble. Size $91 / 2 \times 131 / 2 \times 101 / 2^{\prime \prime}$. We 35 lbs. K21706-Model 9-1041,
Complete...............
$\$ 113.85$

# SUPREME fest equipment 

SUPREME Model 589A Tube \& Battery Tester


8 sockets for all, 4, 5, 6, 7, 8 prongers, loctal, Bantam, single-ended, midget. Battery tester checks A and $B$ batteries under normal load. Hot neon tests for inter-element leakage, shorts. Tests for internal opens. Phone jack for noise test. Filament voltages from .75 to 117. Roller chart lists sectional and complete tube testr. 100 to 133 volts, $50-60$ cyeles.
Shpg. Wt. 10 lbs.
$K 21753$ -
Your Cost
s. 47.97

## SUPREME Model 546A

 $3^{\prime \prime}$ OscilloscopeLaboratory type oscilloscope for all
radio, PA radio, PA
and television testing. Produces singleor double image alignment patterns. Linear amplifier response from 15 to 90,000
 cycles per sycles per Linear saw-tooth oscillasecond. Linear saw- 20 to over 30,000 cycles. $1.33^{\circ}$
tor C-R-T, 2-6SJ7 for vert. and horiz. C-R-T, 2 -6Sj7 for vert, and horiz. amplifier circuits, $1-885$ gat triode
for timing oscillator circuit, $2.5 Y 3$ for timing oscillator circuit. $2.5 \times 3$ pass 60 cycle square wave signal.
131 Wt. 23 lbs.

K21598
Model 546A.
s87.95

## SUPREME Model 599A <br> Tube-Battery-Set Tester



Foolproof tube checker and set Foolproof tube checker and set 15/150/600/1500; AC volts: 0/15/ 15/150/600/1500; AC volts: 0/15/ 150/600 (guaranteed rectifier circlit): ${ }^{4}$ output meter ranges : $0 / 15 / 150 / 600$ volts; DC Ma.; 0/6/60/600; Ohms . $1 / 200 / 20,000$ / 2 megs / 20 megs. Tests electrolytic and paper condensers for leakage. DC range accuracy $2 \%$; AC. $3 \%$. Battery tester checkss portable " $A$ ", " $B$ " batteries under load. Airplane luggage case, sliphinge cover. $111 / 8 \times 87 / 6 \times 53 / 夕^{\prime \prime}$. Shpg. Wt. 12 lbs.
K21754-
Your Cost

## SUPREME Model 562 "Audolyzer"

## Signal Tracer

 With Loudspeaker Complete functional signal tracer. The probe may be con nected to any point in the receiver, from antenna post to apeaker, and will audibly in dicate the presence or lack of signal at that point. Instantly discloses faulty part where signal loses gain or dies, or where distortion, intermittents, regeneration, oscilla tents, regeneration, oscilation or noise occurs. Built-in loudspeaker permits listening for defect without adjusting Audolyzer controls for every test. 7 Range electronic voltmeter, 15 meg. impedance on all ranges: $0 / 1 / 3 / 10 / 30 / 100 / 300 / 1000$ volts D.C. plus or minus. Checks all operating and control voltages such as grid bias, AVC, AFC, etc. without interference with set operation. Checks set oscillator and IF frequencies. Range 95 kc to 14.5 mc . Can be used as field strength meter and noise locatos. 5 Ohmmeter ranges: $0 / 200 /$ $2000 / 200,000 / 2 \mathrm{meg} . / 20 \mathrm{meg}$. Can be used with any 'scope. With cables. Oak case $151 / 2 \pi 111 / 2 \times 83 /{ }^{4 \prime}$. Shps. Wt. 32 lbs. $\$ 124.46$

## SUPREME 592 Dual-Sensitivity Tester

25,000 or 1000 ohms per volt sensitivity by pressing a button. At 25,000 ohms/ volt, readings can be taken in AVC, AFC or FM discriminator circuits while set is in normal operation. Ideal for detection of intermittents and noise. Ranges: DC Current $0 / 70 / 700$ microamps, $0 / 7 / 35 /$ $140 / 350 \mathrm{ma}$. 0/1.4/14 amps; DC Volts (1000 or 25,000 ohms/volt) $0 / 3.5 / 7 / 35 /$ $140 / 350 / 700 / 1400 ;$ A.C. Volts $0 / 7 / 35 /$ $140 / 350 / 700 / 1400$; Ohms 500 ohms to 50 in 5 ranges. Portable oak case $91 / 1 / x 6 \% / 4 x$ 5 Shpg. wt. 9 lbs.
K 21722 -
Your Cost.

$\$ 57.77$

## SUPREME 504B Tube, Battery

## and Set Tester

Deluxe Migh Speed Checker for all tubes. Tests all 4, 5, 6, 7, 8 prongers, loktals, Bantams, midgets, single ended, magic eye and hearing aid types; also gaseous rectifiers, ballasts and pilot lights. Shows internal opens. Hot neon tests for shorts and inter-element leaks. All filament voltages from 75 to 117 . Exclusive tapped primary power transformer for stable line voltage adjustment. Patented switching systern automatically reconnects all sockets for any future tube base connection lay-out.
 No worry about spare sockets, adepters
or rewiring for new tubes Roller or rewiring for new tubes. Roller tube chart lists all complete and
sectional tube testa; 1 -year free chart sectional tube testa; 1 -year free chart revision service. Built-in
battery tester checks batteries under normal load conditions. Elec battery tester checks batteries under normal load conditions. Elec-
trolytic condenser leakage test. Noise test provides jack for external connection of phones for audible detection of noise or leakage between elements. Large high torque meter. Meter ranges: $0 / 5 / 25 / 100 / 250 /$ $500 / 1000 / 2500$ D.C. volts; D.C. current $0 / .5 / 2.5 / 10 / 50 / 250 \mathrm{ma}$., $0 / 1 / 10 \mathrm{mmps}$; A.C. volts $0 / 5 / 10 / 50 / 250 / 1000$ (also output meter)
$1 / 200 / 2000 / 20,000$ ohms on internal battery, $0 / 2 / 20$ megs. on internal power pack. Natural solid oak case with slip-hinge cover, $143 / 8 \mathrm{sx} 12 \mathrm{~L} / \mathrm{s} \mathrm{z}$ 47/". Large tool compartment. With instructiona. Shpg. wt. K21678-Your Cost.
$\$ 87.71$

## SUPREME Model 542M

## Pocket Multi-Meter

 Compact test instrument with a highly sensitive meter. DC ma ranges: 0/0.3/$6 / 30 / 150 ; \mathrm{DC}$ volts $0 / 6 / 150 / 300 / 1500$ : AC volts $0 / 6 / 30 / 150 / 600 ; D B-6$ to +10 , +8 to $+24,+22$ to $+38,+34$ to +50 ; 4 output ranges. $3^{\prime \prime}, 200$ microamp meter (5000 ohms/volt). 4 ohmmeter up to 2 megs. Battery operated, $5 \%$



Model 542 B and 543 B same as 542 M and 543 M but in bakelite case less snap-on coves K21608
\$23.I8 $\begin{aligned} & \text { K21470 } \\ & \text { Model } 543 \mathrm{~B}\end{aligned}$
ST8.57

## SUPREME Model 543M Tester

Similar in appearance to the model 542 M listed above. Has $3^{\prime \prime}$ meter with knife-edge pointer. Sensitivity 1,000 ohms per volt. Ranges: DC Volts-0/15/150/600/3000. AC Volts- $0 / 15 / 150 / 600 / 3000$. DC Ma.- $0 / 6 / 60 / 600$. Ohms- $0 / 2000 / 200,000$ witb built-in battery. Accuracy $2 \%$ DC, $3 \%$ AC. Metal case with snap-on cover, size $5 \% 31 / 2621$ Shpg. wt. 3 lbs.

SUPREME Model 561 AF-RF Oscillator


5 types of signal output-Variable audio from 15 to 15,000 cyeles. Unmodulated RF from 65 KC to 20.5 MC. Variable audio modulated output. Frequency modulated output. Frequency modu-
lated RF. Means for varying the percentage of audio modulation from 0 to $80 \%$. $151 / 2 \times 111 / 2 \times 8 \% / 4^{\prime \prime}$. Shpg. We. 33 lbs K21717-

SUPREME Model 563
B. F. Audio Generator Covers the
complete complete
audio spectrum; is from 15 to 15,000 cyquency cali. brated di-

cycles on dial. 3 output imped cycles on dial. 3 output imped-
ances: $250,500,5,000$ ohms. Output has virtually flat frequency amplitude characteristic within + or -1 db from 30 to 10,000 cycles. Distortion from all causes less than $5 \%$ at any frequency. $131 / 1 \times 9 \times 6 / \mathrm{h}^{\prime \prime}$. Wt. 21 lbs K21471Your Cost
$\$ 61.69$
SUPREME Model 565 Vacuum Tube Voltmeter
 Probe includes
a new hi-frequency diode. DC ranges: $0 / 1 / 2.5 / 10 / 50 / 250 / 500$; AC 0/1/2.5/10/50/250; DC input resistance 40 to 80 megs; AC 20 to 40 megs. Input capacity 9 mmid

K21411-
$\$ 82.23$
SUPREME Model 576 Signal Generator


KC; $650-2050 \mathrm{KC} ; 2050-6500 \mathrm{KC}$; 6.5-20.5 MC. fundamentals. Audio: 400 cycles-voltage output continuously variable from maximum to minimum. RF carrier modulated at approx. $50 \%$ at 400 cycles. Can be cut off to provide unmodulated signal. $110-125$ volts, $50-60$ cycles. $93 / 2 \times 8 \frac{3}{4} \pi 7 \frac{1}{8}$ "
We. 15 lbs.
$K 21667-$
Your Cost
\$67.57

## TRIPLETT fest equipment

## TRIPLETT Model 2405 Volt-Ohm-Milliammeter



New engincering design and wide versatility are featured in this instrument. 40 microamp meter movement provides extreme sensitivity of 25,000 teed metter ${ }^{\text {g guaran- }}$ teed meter. Self-con22 volt batteries and aished. Ranges: DC Volts $0-10 / 50 / 250 /$ 500/1000; DC amps 0-10; DC Ma. 0-1/10/50/ 250; DC Microamps 0-50; AC Volts 0-10/50/ $250 / 500 / 1000$, at 1000 ohms/volt; AC Amps $0-.5 / 1 / 5 / 10 ; 0-4000 / 40,000$ ohms; $0-4 / 40$ megohms; DB -10 to $+15,+29,+43,+49$, +55 . Plug-in rectifier simplifies replacement in case of accidental damage by overloading. Banana plug-alligator clip test leads furnished. Baked enamel case, $10 \times 10 \times 5 \frac{3}{4}$ K 21502
Your Cost Complete
\$55.6I
Model 2400 -Same as Model 2405, but DC Volts at 5000 ohms/volt, instead of 25,000 , and $0-250$ micro-amps instead of $0-50$. K21506-Shpg. wt. 14 lbs. Your Cost, Complete
$\$ 48.51$
TRIPLETT Model 2413 Counter or Portable Tester
 Designed for both
counter and portable use, this tester handles receiving tubes, gaseous rectifiers, ballast tubes, and pilot lamps. Guaranteed meter, scale $3.5^{\circ}$. Fit. Volt Range.75/1.2/1.4/1.5/
$2 / 2.5 / 3.3 / 5 / 6.3 / 7.5 /$ 12.6/25/32/50/70/85/ $12.6 / 25 / 32 / 50 / 70 / 85 /$
$95 / 100 / 110$. Sockets for 4,5 , and 6 prong tubes, 7 prong large and small, 8 prong octal and loctal, 5 prong bantam, 7 prong miniature and sub-miniature, and 1 spare. Neon short test detects shorts and leakage. Counter style, enamel finish case, 10x10×5 $1 / 2^{\prime \prime}$. Book type chart simplifies testing. We 14 libs. K 21519 - Your Cost.
548.51

Roll Chart
Attachment for Models 2413 and 2425 testers. Makes testing quick, sure. Fits in carrying

K21520
Complete
Cor .90


TRIPLETT Model 666-H Pocket Volt-OhmMilliammeter


Ranges AC-DC Volts 0-10/ $50 / 250 / 1000 / 5000$ at 1000 ohms per volt- DC Milli-
amps $0-10 / 100 / 500$. Resistamps $0-10 / 100 / 500$. Resist-
ance $0-300$ ohms (shunt-type circuit) 10 ohms center scale. $0-250,000$ ohms (series type) 3700 ohms center scale. Selector switch for all instru. ment readings. Higher resistance measurements are
available by using external batteries. Knob operated adjustments for resistance ranges. The 3 " meter is guaranteed and provides a long two-color scale to facilitate reading. Black molded case and panel, completely insulated. tained batteries and test feads. Shpg. Wt. $21 / 2 \mathrm{lbs}$.

## K10475

## Your Cost Complete

## \$I9.60

## Model 669 Carrying Case

Leather carrying case for $666-\mathrm{H}$ Pocket Meter Snap-on cover, sturdy strap handle. K21579 -
Your Cost.

## TRIPLETT Model 2425 <br> Portable Tube Tester



The very latest transconductance tube receiving tubes, gaseous rectifiers, ballast tubes, and pilot lamps. Simplified settings as sure maximum speed in operation. Switching circuit gives individual control for each tube element. Neon shor test shows slightest in ter-element short or leakage while cathodes are hot. Easy to read panel with direct reading micromho scale $0-2500 / 5000 / 10,000$. Fil. volt range $0-.75 / 1.2 / 1.4 / 1.5 / 2 / 2.5 / 3.3 / 5 / 6.3 / 7.5 /$ $12.6 / 25 / 32 / 50 / 70 / 85 / 95 / 100 / 110$. For 4,5 and 6 prong tubes, 7 prong large and small, 8 prong octal, 9 prong loctal, 5 prong bantam, 7 prong miniature, 7 prong subminiature, and one spare. $10 \times 10 x 5 \% / \mathrm{n}$. Quick reference tube chart supplied. $110 \mathrm{v}, 60$ cycles AC. Shpg wt. 14 lbs .
K21516-Complete
$\$ 63.21$
K21517
Your Cost
\$73.99

## TRIPLETT Model 3212 Counter Tube Tester



Professional counter tester for servicer and
dealer. Handles receiv dealer. Handles receiv-
ing tubes, gaseous rectifiers, ballast tubes and pilot lamps. Full range of filament volt ages $0-75 / 1.2 / 1.4 /$ $1.5 / 2 / 2.5 / 3.3 / 5 / 6.3 /$
$7.5 / 12.6 / 25 / 32 / 50 /$ $70 / 85 / 95 / 100 / 110$. 51/2" scalereads BAD,? GOOD, in red, yellow, and green sections. date all tube bases, 4,5 , and 6 prong, 7 prong large and small, 8 prong octal and loctal, 5 prong bantam, 7 prong miniature and subminiature, and one spare. Neon indicator short test shows inter-element short or leakage under operating conditions. 3 position lever switch ing makes this tester fast and fexible. Operates from 60 cycle, 110 volt line. New metal "square line" case, with two-tone hammered baked-on enamel finish. Dim. 15玉11 $\mathrm{s} / \mathrm{x}^{\prime \prime}$. Illuminated Speed Roll Chart below Switch Panel for quick easy setting. Shpg. wt. 15 lbs.
K21518-
Your Cost Complete
\$62.23
TRIPLETT Model 2450
VT-Volt-Ohm-DBMilliammeter


This electronic volt-ohm-milliammeter is useful for FM and Television work and for any sensitive cir cuit requiring a high impedance measuring device. DC Volt
ranges $0-2.5 / 10 / 50$ 250/500/1000: AC volts 0-2.5/10/50/
$250 / 500 / 1000 ;$ DC $250 / 500 / 1000$ DC
Milliamps $0-0.1 / 1 /$ $10 / 50 / 250 / 1000$
Ohms 0-1000/10,000/100,000; Megohms 0-1/ 10/100/1000; capacity in mfd. $0-.005 \% .05 / .5 /$ $5 / 50$. The scale is $51 / 2^{\prime \prime}$ long, the meter guaranteed. Load impedance is 51 megohms at low frequencies on DC volts. High freq. circuit loading is equal to 8 megohms shunted by 5 mmfd. 115 volt, $50-60$ cycle, positive and negative supplies are regulated to maintain accuracy. Detachable vacuum tube probe furnished for RF voltage measurements. Bridge circuit prevents meter overload and damage on all volt and ohm readings. Capacity measuring circuit accommodates paper and mica capacitors. Metal case with brown hammered enamel finish, $10 \times 10 \times 53 / 4$ " overall. Shpg. wt. 14 lbs.
K21521-
Your Cost Complete.....
$507.5 I$

## TRIPLETT Model 625-N Volt-Ohm-Millammeter



DC voltage ranges with dual sensitivity ( 10,000 and 20,000 ohms/volt) provide for double the number of full scale readings. AC voltage ranges at 10,000 ohms $/$ volt permit checking many audio and high impedance AC circuits. Ideal for checking television circuits. Ramees DC Volts $0-1.25 / 5 / 25 / 125 / 500 /$ $2500,20,000$ ohms/volt: $0-2.5 / 10 / 50 / 250 / 1000 /$ $5000,10,000$ ohms $/$ volt; AC Volts $0-2.5 / 10 / 50$; $250 / 1000 / 5000$ at 10,000 ohms $/$ volt; DC Microamps $0-50 ;$ DC Ma $0-1 / 10 / 100 / 1000 ;$ DC Amps 0-10; $0-400$ ohms; $0-50,000$ ohms; $0-10$ is mohms. Capacity check of in instruction is possible by following data la instruction Long readable $5^{n}$ scale arc. Compact, molded insulated case, $6 \pm 51 / 2 \pm 21 / 2^{\prime \prime}$. Shpg. wt. 4 lbs.

Model 629-Carrying Case for Model 625 N K21505
Complete
s5.15
TRIPLETT Model 1632 Signal Generator


Wide range signal generator providing con-tinuouscoverage from 100 ke to 120 mc , all fundamentals. Ideal FM, TM, vision servicing. Metered output to multiplier and attenuator. Heterodyne detector permits checking oscillator by beating against self contained crystal or external signal. Output available at the end of coaxial cable. Provision for external modulation at AF or RF. Positive vernier dial tuning control. Permeability adjustments and tubular air trimmers used for maximum accuracy and stability. All circuits shieided to eliminate strays; low loss insulation throughout Streamlined metal case $15 \times 9 \times 6 \%$ "; with black enameled finish. Voltage regulated supply. Ranges Band A $100-200 \mathrm{kc}$; B 200-400 kc; C $400-820 \mathrm{kc}$; D $820-1700 \mathrm{kc} ;$, E $1.7-3.15 \mathrm{mc}$; F $3.5-7 \mathrm{mc}$; G $7-14.5 \mathrm{mc}$.: H $14.5-27.5 \mathrm{mc}$; K21789 K21789- Come Complete
$\$$ IA7.80

## TRIPLETT Model 2432 Signal Gemerator



In six overlapping bands, a frequency range from 75 kc to 50 me is covered. Approz. $30 \%$ internal modulation at 400 cyclea. A 400 cycle audio signal is available at panel jacks. Air trimmer capacitors, permeability adjusted coils, and elec-tron-coupled oscillator creased stability. Directly geared, aluminum dial permits accurate settings. Fine and coarse variable attenuation. Coazial cable output lead minimizes losses. Separate coaxial fittings for RF and AF output connections. Uses one each 6SJ7, 6J5, 65GT and VR-150-30. The 115 volt $50-60$ cycle power supply is voltage regulated for increased oscillator stability. Metal case with tan, hammered enamel finish, size 10x10x6 $1 /{ }^{\prime \prime}$. Entire RF and AF assembly enclosed in separate shields. Strong second and third harmonic signale provide for extending coverage to the new FM bands. Internally shielded power transformer. Filtered power line. Shpg. wt. 16 lbs .
K21507-
Your Cost Complete.
\$86.73

# GE fest equipmenf 

## Oscilloscope CRO-3A

Portable and compact. Used for study of wave shapes and transients measurement of modula tion adjustment of radio transmitters, determination of peak voltages, and tracing of electronic tube char acterintics. Operates from
115 V 60 cycle power source
Wide Sweep Circuit: Sweep rates from 20 to 30,000 cycles per second, adjustable by 7 point switch, with vernier for fine adjustment. High Deflection Sensitivity: Vertical plates through amplifier 0.3 rms . volts per inch; horiz. plates through amp. 0.3 V rms. per inch. horiz. plates through amp. 0.3 Vrms . per inch. max.
Input Impedance: Vertical amplifier, 1 meg. ohm in parallel with 45 mmf .; horizontal amplifier, 1 megohm in parallel with 50 mmf . Viewing Screen: Comes with 3AP1 CRT whose sereen is viewed in daylight.
Freq. Response: Vertical amplifier- 20 to 100 KC sinusoidal cycles $\pm 10 \%$; horizontal amplifier- 20 to 70 KC sinusoidal cyc. $\pm 10 \%$. Convemiently Located Controls: All controls are located on the front panel. Case $8^{\prime \prime} \times 121 /$ " $^{\prime \prime} \mathrm{I}^{\prime \prime} 3^{\prime \prime}$. Weight 25 lbs . K21629-Model CRO-3A
s77.91

## Beat Freq.

Audio Osc. AO-2
Designed to aimplify the measurementa of audio amplifiers and radio re-
ceiver fidelity. Thi instrument can be used for the testing of loudapeakers and for frequency measurements or calibration. It provides a stable sine wave, continuously variable frequency from 25 to 15,000 cycies per second. Ita practical application for use in radio makes this instrument a preferred item for every radio engineer. Full vigion frequency dial. Direct calibration provided by vernier type dial. 6E5 electron-ray tube is employed to indicate zero beat while adjusting the panel control knob to obtain the proper relationship between the two high frequency oscillators. The panel control knob controls the output level continuously from zero to full power output. Maximum output obtainable is 120 milliwatts. Diatortion of waveform is less than $3 \%$ above 50 cps . at 60 mw. output and less than $5 \%$ above 100 cps . at 120 mw . output. Transformer output impedance is 500 ohms. Welded steel case in
 Your Cost.
$3^{\prime \prime}$ Round Case Shroud Style
Diameter of flange, $31 /{ }^{\prime \prime}{ }^{\prime \prime}$, body $2 \mathrm{z} / \mathrm{M}^{\prime \prime}$ scale 2!" " long. Molded bakelite case, Illustration shows 0 to 1 milliOther models meter. Other models listed below.

e
3" Round Cas
Model 26

3" DC Milliammeters Stock
No.
$k 10723$ K10723 K10724 K10725 $K 10726$ K10727 K10728 $K 10729$
$K 10735$

K10744 K10745 K10746 K10746 $K 10747$
$K 10748$ $K 10748$ $K 10749$
$K 10750$
$K 10772$
$K 10773$
K10774
K10775

| Your | C Mimammeters |
| :---: | :---: |
| Cost | Range |
| 57.50 | 0.1 |
| 6.61 | 0.5 |
| 6.61 | 0-10 |
| 6.61 | 0-25 |
| 6.61 | 0-50 |
| 6.61 | 0-100 |
| 6.61 | 0.200 |
| 6.61 | 0-300 |
|  | DC Voltmeters |
| \$6.61 | 0.5 |
| 6.61 | 0-10 |
| 6.61 | 0-25 |
| 6.61 | 0-50 |
| 6.61 | 0-100 |
| 8.23 | 0-200 |
| 8.23 | 0.300 |
|  | AC Milliammeters |
| Model 56 |  |
| \$6.17 | $0-25$ |
| 6.17 | $0-50$ |
| 6.17 | 0-100 |
| 6.17 | 0-500 |


\section*{ctangular Case} Stock | Stock | Your |
| :---: | ---: |
| No. | Cost |
| K10736 | 57.50 |
| K10737 | 6.61 |
| K10738 | 6.61 |
| K10739 | 6.61 |
| K10740 | 6.61 |
| K10741 | 6.61 |
| K10742 | 6.61 |
| K1074 | 6.61 |
| K10751 | $\$ 6.61$ |
| K10755 | 6.61 |
| K10756 | 6.61 |
| K10757 | 6.61 |
| K10767 | 6.61 |
| K10768 | 8.23 |
| K10769 | 8.23 |
| R10del |  |
| K10776 |  |
| K10777 | 56.17 |
| K10778 | 6.17 |
| K10779 | 6.17 |

## Unimeter YMW-1

20,000 ohms per volt multi-range portable multi-range portable for rapid, accurate for rapid, volts, ohms, current and decibels. Ex-
 treme simplicity of operation. ALL functions except the 50 microamp and capacitor for output are available without changing to various jacks. AC and DC. Volts: $0-2.5 / 10 / 50 / 250 /$ 1000. Sensitivity: DC volts, 20 K ohms per volt; AC vcits, 1 K ohms per volt. Output Meter: Same as AC volts through .5 mf .600 V capacitor. Decibels: -10 to $+3,-2$ to +15 . +16 to $+29,+30$ to $+43,+42$ to +55 . O level is 6 milliwatts in 500 ohms. Resistance: 3 ranges covering 1 to 20 megohms; $R$ z 1,20 ranges covering 1 to 20 megohms; $\mathrm{R} \mathrm{I}^{1}$, 20
ohm center 2 K ohm max.: $\mathrm{R} \mathbf{I} 100,2 \mathrm{~K}$ ohm ohm center 2 K ohm max.; $\mathrm{R} \times 100,2 \mathrm{~K}$ ohm
center 200 K ohm max.; $R \times 10 \mathrm{~K}, 200 \mathrm{~K}$ ohm center 200 K ohm max.; R x $10 \mathrm{~K}, 200 \mathrm{~K}$ ohm
center 20 meg ohm max. $0-.5 / 5 / 50 / 500 \mathrm{DC}$ center 20 megohm max. $0-.5 / 5 / 50 / 500 \mathrm{DC}$
ma.; $0-50$ microampa available at separate $\begin{array}{lll}\text { ma.; } & 0-50 \text { raicroampa available at separate } \\ \text { jack. } & 1 \text { set } 40^{\circ} \text { test leads and } 2 \text { slip-on alli- }\end{array}$ gator clips for test prods, 1 -No. 2 flashlight cell, $2-7.5 \mathrm{~V}$ C batteries supplied. Portable carrying case of fabricated steel with removable cover. Gray wrinkle finish. $128 / 8$ " $\times 98 / 4^{\prime \prime} \times 51 / 2^{\prime \prime}$. Wt. 12 lbs

 bility in readings.
Range Coverage: DC volts- $0 / 21 / 2 / 10 / 50$ / $250 / 2500$ volts all at 2000 ohms per volt. highest range at separate jack, AC volts$0 / 21 / 2 / 10 / 50 / 250 / 1000 / 2500$ volte all at approximately 1300 ohms per volt, highest range at separate jack. Resistance Ranges: $0-1000$ / $100,000 / 1$ megohms-center scale values are approximately 10,1000 and 10,000 respectively with self-contained battery. Direct Current: $0 / 1 / 10 / 100$ milliamperes, $0 / 1 / 10$ amperes. The two ampere ranges are obtainable on two separate jacks. DB Calibrations: -12 to +55 DB in 5 ranges, 6 milliwatts into 500 ohms is used as 0 reference level. Accessories supplied: High grade test prods. Welded steel case with rounded cornero, removable snap-on cover, includiag pocket for accessories. Size $9^{\prime \prime} \times 10^{\prime \prime} \times 45 / 5^{\circ}$. Weight $91 /{ }^{\prime \prime}$ lbs. K21634-Madel UM-3
$\$ 34.30$

## SIMPSDN PANEL METERS

These pane. meters are sturdy precision instruments. Furnished in either round or rectangular shape and provide the variety of ranges listed below. Expressly made so that individual chassis design requirementa can be satisfied. Compact construction insures against heapy vibration. All models have setscrew for zero adjustment. Sufficiently long terminals protrude from rear of case for ease in making connections.
$3^{\prime \prime}$ Round Case Model 26

## Oscilloscope CRO-5A

## Electronically regulated

potentials to withstand all power line changes. $105-125 \mathrm{~V} 60$ cycle supply. Power
100 watts.
Vertical Ampliffer: In put impedance 1.25 meg. 50 mmf .; sensitivity
02 V rms./inch; input range 5 amplifier gain 750 ; amplitude variation not more than $+0 \%$ or $-10 \%$ from 20 to 350,000 sinusoidal cycles, and not more than $50 \%$ down at 900,000 sinusoidal cycles; square wave reaponse 20-10,000 cycles; attenuator 2 ostep capacity compensated, with vernier Horizontal Amplifier: Input impedance 3.3 meg., 32 mmf .; sensitivity .2 V rms./inch; maximum input 5 V rms.; amplifier gain 70; amplitude variation not more than $+0 \%$ or $-10 \%$ from 20 to 200,000 sinusoidal cycles, and not more than $50 \%$ down at 600,000 sinusoidal cycles.
Sweep Generator: 20-20,000 cycles in 5 steps; synch control internal, external and 60 cycles; not-more than $\pm 15 \%$ non-linearity over $80 \%$ sweep.
Cathode Ray Tube: Deflection factor vertical axis 33V dc./inch, horizontal axis 31 V dc . /inch; $14^{\prime \prime} \times 8 \times 19$. Wt. 40 lbs . K21632-GE CRO-5A SI 64. I 5

## Tube Checker TC-3A

Latest emission-type tube checker. No switch ing required to apply fila. ment voltage to the most common filament pins
for each base type. For other filament arrangements, 8 lever switches are provided for the proper connections. 10 lever switches connect ot her elements to proper voltages for quality test; usually no more than 4 of these switches are used. Makes quality teats, short teats, provides a dc. voltmeter for general use. Works off $110-130 \mathrm{~V} 50-60$ cyc. general use. Works off $110-130 \mathrm{~V}$ so-60 cyc.
ac. 11 position line adjuster tap switch. Fil. volt positions $1 / 1.5 / 2 / 2.5 / 5 / 6.3 / 7 / 12.5 / 25 /$ 30/45/70/117. 9 test sockets for $4,5,6$ prong standard, 7 prong combination, 8 pin octal, 2 spare positions. Test switch: 7 position rotary-position 1, 2, 3 and 4 for short test, position 5 is line voltage, positions 6, 7 are 1 st and 2 nd output respectively. Test voltages: 1st output 100 V ac., 2nd output 250 V ac., short test 100 V de. 400 popular tube types on tube chart in cover. DC voltmeter $0-10 / 100 / 1000 \mathrm{~V}$. $14 \times 14 \times 173 / \mathrm{m}^{\prime \prime}$. Wt. 13 lbs . K21630-Model TC3A Your Cost
\$54.88

## 3" Rectangular

 Case3" wide, $31 / 8$ high Meter in molded bakelite case, mount into round hole; body diam eter of meter, $2 \%$ " Figure shows 0 to 1 ma DC meter. Other models listed below.


DC Voltmeters $\begin{gathered}3^{\prime} \text { Rectangular Case } \\ \text { Model } 27\end{gathered}$
DC Voltmeters
(1000 ohms per volt)

| Stock | Your Cost | Rance | Stock |  | Your Cost |
| :---: | :---: | :---: | :---: | :---: | :---: |
| K10687 | \$ 9.70 | Range | K10693 |  | ¢ 9.70 |
| K10689 | 10.29 | $0-100$ | K10694 |  | 10.29 |
| K10690 | 10.58 | 0-200 | K10695 |  | 10.58 |
| K10692 | 13.23 | 0-500 | K10696 |  | 13.23 |
|  |  | DC Ammeters |  |  |  |
| K10697 | \$6.61 | 0-1 | K10703 |  | \$6.61 |
| K10698 | 6.61 | 0-5 | K10704 |  | 6.61 |
| K10699 | 6.61 | 0-10 | K10705 |  | 6.61 |
| K10700 | 6.61 | 0-25 | K10706 |  | 6.61 |
|  | Model 56 |  | Model | 57 |  |
|  |  | AC Voltmeters |  |  |  |
| K10707 | \$6.17 | 0.5 | K10710 |  | \$6.17 |
| K10708 | 6.17 | 0.10 | K10711 |  | 6.17 |
| K10709 | 6.17 | 0.25 | K10712 |  | 6.17 |
|  |  | AC Ammeters |  |  |  |
| K10713 | 56.17 | 0.1 | K10718 | , | \$6.17 |
| K10714 | 6.17 | 0-5 | K10719 |  | 6.17 |
| K10715 | 6.17 | 0-10 | K10720 |  | 6.17 |
| K10716 | 6.47 | 0-25 | K10721 |  | 6.47 |
| K10717 | 8.08 | 0.50 | K10722 |  | 8.08 |

## 

TRIPLETT and SHURITE panel meters

Incorporate precision enginecring, the finest materials and workman-
ship. Molded cases, all terminals molded in. Sapphire jewels in adjust-
able screws. Accuracy within $2 \%$.

|  | $\left\lvert\, \begin{gathered} 2^{\prime \prime} \text { Round } \\ 221 \mathrm{~T} \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} 2^{n} \text { Square } \\ 22 \pi T \end{gathered}\right.$ |  | $\begin{array}{\|l\|} 3^{\prime \prime} \text { Round } \\ 321 T \end{array}$ | $\left\lvert\, \begin{gathered} 3^{n} \text { Square } \\ 32 \pi T \end{gathered}\right.$ |  | $\left\|\begin{array}{c} 4^{\prime \prime} \text { Square } \\ 428 \end{array}\right\|$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Range $0-1$ | $\begin{aligned} & \text { No. } \\ & \text { K11208 } \end{aligned}$ | No. K11288 | Each $\$ 5.39$ | No. | No. $\text { K } 11320$ | Esch |  | Each $\$ 8.01$ |
| 0-1.5 | K11209 | K11289 | 5.39 | K11201 | K11321 | 66.54 |  |  |
| 03 | K11415 | K11290 | 5.39 | K11411 | K11322 | 6.54 |  |  |
| 0.5 | K11416 | K11298 | 4.58 | K11412 | K11323 | 5.39 | K11337 | 6.86 |
| 0-10 | K11210 | K11299 | 4.58 | K11202 | K11324 | 5.39 | K11338 | 6.86 |
| 0-15 | K11211 | K11300 | 4.58 | K11203 | K11325 | 5.39 | K11339 | 6.86 |
| 0-25 | K11398 | $K 11306$ | 4.58 | K11394 | K11326 | 5.39 | K11340 | 6.86 |
| $0-50$ | K11212 | K 11309 | 4.58 | K11204 | K11327 | 5.39 | K11341 | 6.86 |
| 0-100 | K11213 | K11311 | 4.58 | K11205 | K11328 | 5.39 | K11342 | 6.86 |
| 0-150 | K11417 | K11312 | 4.58 | K11413 | K11329 | 5.39 | K11343 | 6.86 |
| 0-200 | K11214 | K11313 | 4.58 | K11206 | K11330 | 5.39 | K11344 | 6.86 |
| 0-250 | K11418 | K11314 | 4.58 | K11414 | K11331 | 5.39 | K11345 | 6.86 |
| 0-300 | K11287 | K11315 | 4.58 | K11395 | K11332 | 5.39 | K11346 | 6.86 |
| 0 -500 | K11215 | K11316 | 4.58 | K11207 | K11333 | 5.39 | K11347 | 6.86 |
| 0-750 | K11400 | K11317 | 4.58 | K11396 | K11334 | 5.39 | K11343 | 6.86 |
| 0-1000 | K11401 | K11318 | 4.58 | K11397 | K11335 | 5.39 | K11349 | 6.86 |

## D.C. Microammeters Round and Square Case

| $\begin{aligned} & 0-50 \\ & 0-100 \\ & 0-200 \\ & 0-500 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { K11432 } \\ & \text { K11433 } \\ & \hline \end{aligned}$ | $\begin{aligned} & K 11350 \\ & \text { K11351 } \end{aligned}$ | $\begin{array}{r} \$ 8.01 \\ 6.86 \end{array}$ |  |  | $\begin{array}{r} \$ 15.35 \\ 13.72 \\ 11.10 \\ 8.50 \end{array}$ |  | $\begin{array}{r} \$ 20.41 \\ 18.30 \\ 12.57 \\ 9.63 \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A.C. Voltmeters-Round and Square Case |  |  |  |  |  |  |  |  |
|  | $\left\|\begin{array}{c} 2^{\prime \prime} \text { Round } \\ 231 \mathrm{~S} \end{array}\right\|$ | $\begin{gathered} 2^{2} \text { Square } \\ \\ 237 \mathrm{~S} \end{gathered}$ |  | $\left\|\begin{array}{c} 3^{n} \text { Round } \\ 331 \mathrm{~S} \end{array}\right\|$ | $\begin{gathered} 3^{\prime \prime} \text { Square } \\ 337 \mathrm{~s} \end{gathered}$ |  | $\begin{aligned} & 4^{*} \text { Square } \\ & 431 \end{aligned}$ |  |
| $\begin{aligned} & \text { Range } \\ & 0-5 \\ & 0-10 \\ & 0-15 \\ & 0-25 \end{aligned}$ | No. K11280 K11281 K11282 K11283 | $\begin{aligned} & \text { No. } \\ & \text { K11499 } \\ & \text { K11454 } \\ & \text { K11455 } \\ & \text { K11456 } \end{aligned}$ | Each $\$ 4.58$ 4.58 4.58 4.58 | No. K 11273 K11274 K 11275 K11276 | $\begin{aligned} & \text { No. } \\ & \text { K11459 } \\ & \text { K11460 } \\ & \text { K11461 } \\ & \text { K11462 } \\ & \hline \end{aligned}$ | $\begin{gathered} \text { Each } \\ \$ 5.39 \\ 5.39 \\ 5.39 \\ 5.39 \end{gathered}$ | $\begin{aligned} & \text { No. } \\ & \text { K11466 } \\ & \text { K11467 } \\ & \text { K11468 } \\ & \text { K11469 } \end{aligned}$ | $\begin{array}{r} \text { Each } \\ \$ 6.86 \\ 6.86 \\ 6.86 \\ 6.86 \end{array}$ |
| $\begin{aligned} & \hline-50 \\ & 0-150 \\ & 0-300 \\ & 0-15 . \end{aligned}$ | K11284 K 11286 K 11409 | $\begin{aligned} & \text { K11380 } \\ & \text { K11457 } \\ & \text { K11458 } \end{aligned}$ | $\begin{aligned} & 1.58 \\ & 5.39 \\ & 6.69 \end{aligned}$ | $\begin{aligned} & \text { K11277 } \\ & \text { K11279 } \\ & \text { K11406 } \end{aligned}$ | $\begin{aligned} & \text { K11381 } \\ & \text { K11463 } \\ & \text { K11464 } \end{aligned}$ | $\begin{aligned} & 5.39 \\ & 6.54 \\ & 7.53 \end{aligned}$ | $\begin{aligned} & \mathbf{K} 11382 \\ & \mathbf{K} 11470 \\ & \text { K11383 } \end{aligned}$ | $\begin{aligned} & 6.86 \\ & 8.33 \\ & 9.15 \end{aligned}$ |
| 150 |  |  |  | K11408 | K11465 | 8.65 |  |  |

D.C. Voltmeters

| Model 321 T- 1000 Ohma/Volt |  |  |
| :--- | :--- | ---: | ---: |
| No. | Range | Each |
| K11240 | $0-10$ | $\$ 7.52$ |
| K11241 | $0-50$ |  |
| K11242 | $0-100$ | $\$ 7.84$ |
| K11243 | $0-150$ | $\$ .8$ |
| K11244 | $0-500$ | $\$ 9.97$ |


| D.C. Voltmeters 125 Ohms per Volt |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Mode No. | $\begin{aligned} & 1321 \mathrm{Each} \\ & i_{\text {2 }} \end{aligned}$ | Range | Mode | $\begin{aligned} & \text { e1221T } \\ & \mid \end{aligned}$ |
| K11230 |  | 0.5 | K11247 |  |
| K11231 | 55.39 | $0-10$ $0-15$ | K11248 | \$4.58 |
| K11233 |  | 0-25 | K11250 |  |
| K11234 | 5.39 | ${ }^{0-50}$ | K11251 | 4.58 |
| K11236 | . 3 | 0-150 | K11253 |  |
| $K 11237$ K 11404 | $\$ 6.54$ 8.50 | $00-25$ | K11254 | ¢5.93 |

## Meter Dimensions

Model
221-T, 2:11-T
${ }_{2}^{231-\mathrm{T}}, 247-\mathrm{T}$
${ }_{23}^{23-1}$
321-T, 341-T
331-S
327-T, 347-T, $337-\mathrm{S}$ 426, 436, 446 43/94 $4^{4} \quad 3,{ }^{2}$

| Thermo-Ammeters with External Couple |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { Model } \\ 3^{d} \mathrm{R} \end{gathered}$ No. | $\begin{aligned} & 1341 \mathrm{~T} \\ & \text { Ound } \\ & \text { ioner } \end{aligned}$ | Amps. |  | $\begin{aligned} & \text { cl } 241 \mathrm{x} \\ & \text { Round } \\ & 1 \end{aligned}$ |
| K11389 |  | 0.5 | K11428 |  |
| $K 11391$ |  | 1.0 | K11425 |  |
| $\mathbf{K 1 1 3 9 0}$ | s9. 26 | 1.5 | $K 11430$ | \$8.33 |
| 1393 | . 26 | ${ }_{8.0}^{2.5}$ |  | 0.33 |
| Replacement couples on order, |  |  |  |  |

A.C. Milliammeters \begin{tabular}{c|c|c}
$\begin{array}{c}\text { Model } 331 \mathrm{~S} \\
\text { No. I Each }\end{array}$ \& Ma. \& $\begin{array}{c}\text { Model 231S } \\
\text { No. I Each }\end{array}$ <br>
\hline

 

\hline K11419 \& $\mathbf{5 6 . 3 7}$ \& $0-10$ \& K11420 \& $\mathbf{5 5 . 0 7}$ <br>
\hline
\end{tabular}

 | $K 11267$ |
| :--- |
| K 11268 | K 12268

K 11421 $\mathbf{\$ 5 . 3 9}$
 s 4.58 K 11422 0-500 $\mid \times 11424$
A.C. Ammeters

Model 3 Bas No. 1 Each Amps. No. 1 Each





## D.C. Ammeters

With Internal shunt.

| Model $1321 T$ | Model $221 T$ |
| :--- | :--- | :--- |




## Thermo-Ammeters

 with Built-in Couples For r.f. measurements, ant. radiation indication, etc.| Model 341 T $3^{n 1}$ Round |  | Amps. | Model 3477 <br> $3^{\prime \prime}$ Square |  |
| :---: | :---: | :---: | :---: | :---: |
| No. | Each |  | No. | Eseh |
| K11229 |  | 0.5 | K11220 |  |
| K11235 |  | 1.0 | K11221 |  |
| K11238 | 66 34 | 1.5 | K1122 | 56.34 |
| K11239 |  | 2.5 | K11227 | 3 |
| K11246 |  | 5.0 | K11228 |  |



SHURITE Square and Round Meters
Model 550, round with clamp. black. Model 950, square, 27 b" hole. DC: Polarized vaire solenoid type; AC: double vane
repulsion type. Accuracy withi
D.C. Milliammeters

| D.C. Milliammeters |  |  |  |  | D.C. Ammeters |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model 550 |  |  | Model 950 |  | Model 550 |  |  | Model 950 |  |
|  | Each | Rang |  | Each | No | Each | Range |  | E |
| K10978 | \$1.96 | $0 \cdot 3$ | K10980 | \$2.11 | K11091 | \$1.27 |  | K11162 | \$1.42 |
| K11050 | 1.81 | 0-5 | K11150 | 1.96 | K11092 | 1.27 | 0-3 | K11163 |  |
| K11100 | 1.71 | 0-10 | K11151 | 1.86 | K11093 | 1.2 | 0-5 | K11164 |  |
| K11102 | 1.27 | 0-25 | K11153 | . 42 | K11094 | 2 | $0-1$ | 1116 |  |
| K11103 | 1.27 | 0-50 | K11154 | 1.42 | K10 | 1.27 | $0-1$ | K10994 |  |
| K11104 | 1.27 | 0-100 | K11155 | J. 12 | K10989 | 1.57 | 0-25 | K10995 | . 71 |
| K 11105 | 1.27 | 0-150 | K11156 | 1.12 | K10990 | 1.96 | 0-50 | K10996 | 11 |
| K11106 | 1.27 | 0-200 | K11157 | 1.42 | K10991 | 1.27 | 1-0-1 | K10997 |  |
| ${ }_{\mathbf{K} 111107}$ | 1.27 | $0-300$ | K11158 | 1.42 |  | $\begin{aligned} & 1.27 \\ & 1.27 \end{aligned}$ |  |  | 1.42 |
| K11108 | 1.22 | 0-400 | K11159 | 1.37 | $\begin{aligned} & \text { K11096 } \\ & \text { K11097 } \end{aligned}$ | $1.27$ | $\begin{aligned} & 3-0-3 \\ & 6-0-6 \end{aligned}$ |  | 1.42 |
| A.C. Milliammeters |  |  |  |  | K11098 | 1.27 | 10-0-1 | K11169 | . 42 |
| 110982 | \$2.30 | 0-25 | K10983 | \$2.45 | K11 | 1.37 | 20-0-2 | 111 |  |
| K11087 | 2.30 | O-50 | K11000 | 2.45 | K10992 | 1.76 | 30-0-30 | K1099 | 1.91 |
| A11088 | 2.30 | 0-100 | K11001 | 2.45 | K10993 | 1.96 | 50-0-50 | K10999 | 11 |
| K11089 | 2.30 | 0-250 | K11002 | 2.45 | D.C. Voltmeters |  |  |  |  |
| A.C. Ammeters |  |  |  |  | K11051 | \$1.22 | 0-1 | K11009 | \$1.37 |
| K11081 | \$2.30 |  | K11004 | \$2.45 | K11052 | 1.27 | 0-3 | K11010 | 1.42 |
| K11082 | 2.30 | $0-3$ | K11005 | 2.45 | K11053 | 1.27 | ${ }^{0-5}$ | K11011 | 1.42 |
| K11083 | 2.30 | $0-5$ | K11006 | 2.45 | K11055 | 1.27 | 0-8 | K11013 |  |
| K11084 | 2.30 | 0-10 | K11007 | 2.45 |  | 1.32 |  |  | 42 |
| K10984 | 2.45 | 0-30 | K10985 | 2.60 | K11057 | 1.37 | 0-15 | K11015 | 52 |
| A.C. Voltmeters |  |  |  |  | K1 | 1.27 | 0-25 | K11016 | 1.42 |
|  |  |  |  |  | K11060 | 2.35 | 0-25 [ ${ }^{\text {+ }}$ | K11017 | 50 |
| K11072 | 52.30 | 04 | K11028 | \$2.45 | K11062 | 2.74 | 0-50 ${ }^{\text {+ }}$ | K11019 | 89 |
| K11073 | 2.30 | 0-6 | K11029 | 2.45 | K11042 | 1.37 | 0.75 | K11109 | 1.52 |
| K11074 | 2.30 | 0-10 | K11030 | 2.45 | K11063 | 1.47 | 0-100 | K11020 | 1.62 |
| K11075 | 2.30 | 0-15 | K11031 | 2.45 | K11064 | 2.94 | $0-100 \mathrm{H}$ * | K11022 | 3.09 |
| K10986 | 2.94 | $0-50$ | K10987 | 3.09 | K11065 | 167 | 0-150 | K11023 | 1.81 |
| K11076 | 3.43 | 0-150 | K11032 | 3.58 | K11066 | 294 | O-150H | K11024 | 3.09 |
| K11077 | 4.07 | $0-300$ | K11033 | 4.21 | K11067 | 3.18 | 0-300 | $\mathbf{K 1 1 0 2 5}$ | 3. |
| K11079 | 5.05 | 0-750 | K11034 | 5.19 | K11068 | 3.67 | $0-500$ | K11026 | 3.82. |
| K11041 | M | el 5 A | ange | ap- | K11086 | 4.41 | 0.750 | $\mathbf{K} 11172$ | 4.56 |
|  |  |  |  | P | K11095 | 2.20 | 0-8-160 | 11178 | 2.35 |
| MARION Multi-Ranger |  |  |  |  |  |  |  |  |  |
| Designed to permit user to assemble highly accurate instrument for use as voltmeter, milliammeter, high and low resistance ohmmeter, AC voltmeter, and db meter. Ranges: $0 / 10$; $50 / 250 / 1000$ volts, $A C$ and DC; $0 / 1 / 10 / 50$ / 500 ma ; $0 / 500 / 100,000 / 1 \mathrm{meg} / 10 \mathrm{meg}$ ohms; $-10 /+14 /+4 /+28 j+18 /+42 /+30 /+54 \mathrm{db}$. Has alnico magnet, 100 degree three color scale. Dim. $48 / 8 \times 41 / \mathrm{s}^{13}$ /后". Shpg. wt. 1 lb . K11181-Mod. 55 <br> Your Cost |  |  |  |  |  |  |  |  |  |

Triplett "V-U" Meter
 For measur-
ing sound or
noise levela,
including
bigen broadcast monitoring. or communi cation ys.
tems. Ballistic characteriatics comply with specs. formu lated by N.B.C. C.B.S, and Bell. Steady atate reference 1 milliwatt; for 600 ohm line. Two scale markinga: $0-100 \%$; minus 20 to plus 3 Volume Units (V-U). Scale length $3.12 \%$. Black molded case, cream Model 426 . ${ }^{\text {square case, wt. } 3 \text { bs. }}$ $\frac{\text { K11399-Each.... } 23.0}{\text { Bakelite Meter } 80 x}$


Power Level Indicators
 For measur ing noise lev-
els in $P$. theatera, broadcast stations, etc. Range reads
up 6 and down 10 db . Zero db at
1.73 volts 1.73 volts,
500 ohm lines, 6 milliwatta. Standard Number


## Meter Rectifiers



# LITTELFUSE producis 

## LITTELFUSES for Radio

 Sets and Amplifiers

3AG fuses, $11 / 6$ " $x 1 / 4$ ". 250 volt fating. All are Underwriters' Labor atories Approved.

| Stock | Mfr | Rating | *Resis. | Cost | Per |
| :---: | :---: | :---: | :---: | :---: | :---: |
| No. | No. | Amp. | Ohms | Each | Doz. |
| K11909 | 312.062 | 18 | 7.5 | 50.11 | 51.19 |
| K12396 | 312.125 | \% | 7.4 | . 09 | . 97 |
| K12397 | 312.250 | 14 | 5.3 | . 09 | . 97 |
| K12398 | 312.500 | 15 | 2.0 | . 09 | . 97 |
| M12399 | 312,750 | 8 | 0.5 | . 09 | . 97 |
| K12378 | 312,001 | 1 | . 22 | . 05 | . 54 |
| K12379 | 312,015 | 13/6 | . 14 | . 05 | . 54 |
| K12380 | 312,002 | 2 | . 10 | . 05 | . 54 |
| K12381 | 312,003 | 3 | . 07 | . 05 | . 54 |
| K11910 | 312,004 | 4 | . 036 | . 06 | . 65 |
| $K 11911$ | 312,005 | 5 | . 016 | . 06 | . 65 |
| K11912 | 312,006 | 6 | . 012 | . 06 | . 65 |
| K11913 | 312,008 | 8 | . 010 | . 09 | . 97 |

## LITTELFUSE Auto Fuses

3AG, $11 / 4^{\prime \prime} x \frac{1}{4}$ ". 32 volt rating. 3AG fuses are not recommended over 20 amps. because of small contact area. See 4 AG listing


Designed especially for Aircraft Service. High mechanical strength, long vibration life. 4AG, 1


## LITTELFUSES <br> for Test Instruments

Protect delicate instruments. Break circuit immediately on reaching blow point. Length $1^{\prime \prime}$ diam. $1 / \mathrm{m}^{\prime \prime}$.
High Speed action. Type 8 .

| Stock No. | Rating Amps. | Max. <br> Load <br> Ma. | $\left\|\begin{array}{c} \text { Res. on } 5 \\ \text { Mar Load } \\ \text { Ohms } \end{array}\right\|$ | Your Cost Each | $\begin{aligned} & \text { Your } \\ & \text { Coust } \\ & \text { Doz. } \end{aligned}$ | V-M Ohme Per $V$. | ToProtect Milliammeters |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K12339 | 1/200 | 5 | 500 | 21e | \$2.27 | over 100 | Gglv. |
| $\overline{\mathrm{K} 12385}$ | 1/100 | 10 | 110 | 15c | $\$ 1.62$ | 1000 | up to 0-1 |
| K12386 | 1/16 | 25 | 20 | 15 | \$1.62 | 500-1000 | 1-10 |
| K12387 | 1010 | 60 | 5 | 10 e | $\$ 1.08$ | 100-500 | $10-25$ |
| K12389 | 1/8 | 100 | 1.5 | 15 c | \$1.62 | 20-100 | 25-75 |
| K12388 | \% | 100 | 3 |  |  | 20-100 |  |
| K12390 | 4 | 200 | 6.2 |  | \$1 1 | 10-20 | 75-150 |
| K12391 | 3 | 300 | 3.0 |  |  | 5-10 | $150-250$ |
| K12392 | $1 / 2$ | 400 | 2.5 |  |  | $3-5$ | 250-350 |
| K12393 | 3 | 600 | . 4 |  |  |  | 350-500 |
| K12394 | 1 | 1000 | 24 |  |  |  | 500-750 |
| K11939 | 11/2 | 1500 | . 18 | 6 c | $65 c$ |  | 750-1000 |
| K12395 | 2 | 2000 | 14 |  |  |  | 1000-1500 |

## LITTELFUSE <br> Neon NITE-T-LITE



Newt Gives soft, diffused, glareleas glow. Illuminates enough for visibility and safety. Nite-T-Lite operates from any electric light ocket, s.e. or d.e. Burns month after month, the day round, at a fraction of a cent per month for current. No. 201006 is used for safety and convenience in hallways, bathrooms, nurseries, sickrooms, store

## application

Your Cost
24 for.

## LITTELFUSE

 Neon LampMay be used on any voltage above a minimum of 90 volta D.C. or 65 volts A.C. provided sufficient series resistance is used to limit current to 1 ma . on steady loads. Recommended resistance 100,000 ohms for 110 volts, 200,000 ohms for 220 volts, etc. Standard octa gon witchboard lamp base. Size 13 " $x$ " 6 ". About 10 watt rating.
Use in No. 211007 standard lamp Use in No. 211007 standard
jacks or in mounting below jacks or
K 11944

## Your Cost

231

## RJIEmFUS Mtg.

For use with 211007 neon larap above. Can be mounted on panels up to $8 / /^{\prime \prime}$ thick. $1 / 2^{\prime \prime}$ diameter mounting hole. Black Bakelite body. $2^{\prime \prime}$ behind panel, 7/8" exposed. No. 231008 has a built-in 0.2 meg. resistor. K11945-
$59{ }^{\circ}$

## Extractor Fuse Posts

Especially constructed for replacing fuses from front of panel. Molded black bakelite body. These extractor fuse posts can be used on panels up to "/i" thick. No. 341001 ekes of panel, $21 /$ " $^{\prime \prime}$ overall, $1 / 6^{\prime \prime}$ mounting hole. No. 342001 same as 441001 , screw type for 4 AG fuses, $5 /{ }^{\prime \prime}$ hole, length $21 / 4$ " from panel. No. 442001 same as No. 441001 finger cap type for 5 AG fuses, needs $7^{7 / 1}$ hole, length $31 / \mathrm{m}^{\prime \prime}$ from panel. No. 371001, for 8AG fuses, $1 / 2^{\prime \prime}$ mounting hole. No. 372001 , same as 371001 , but with finger cap.

## K12326-341001 <br> K11900-342001 <br> K11902-442001 K12328-371001 <br> K11904-372001

## Fusible

## Binding Post

 mountin
## si

## us

ment. Polished black knob. Over all length, $12 / 4$. Extends $14 / /^{\prime \prime}$ beneath panel. Requires a Takes
diameter mounting hole. Takes diameter of knob is 3/". No 373003 is supplied with two extruded insulation mounting washers. For 8AG instrument type K11905
K11905-

## Shielded <br> 3AG <br> Mount

Nurnber
351005
351005 ,
metal hinged cover 3AG fuse mounting. Size ${ }^{\text {mide by }}$ " high above panel. Rewide by " "high above panel. Requires $13{ }^{\text {" }}$ by ${ }^{6 / 8}$ knockout hole. with $21 /{ }^{\prime \prime}$ between centers. Cad mium plated cover, fiber lined. Meets Underwriters Laboratories requirements in that a tool is required to renew fuse. Choose from following types to suit your requirements.
No 35100 Yur Cost..... 35 double pole. Size $21 / 2 \times 11 / 4 \times 2 / 4$
K12341
Your Cost
$44^{\circ}$

## Mercury Switch

Low voltage-up to
25 V AC or DC. Non-
25 V AC or DC. Non-
inductive. Max.curr.
6a, at 6 v. for snali
6a, at 6 V. for snrall
lights in autos, ther-
mostat control cir-
shows bafte which prevents eplash of mercury. No. 251001 operates in any position
K11946-Your Cost

## "JERKIT" Fuse Puller



Pulls all fuses from $1 / /^{*}$ to ${ }^{18}$ /s in diameter. No. 097006 is made of the strongest horn fiber, $31 / 8$ " long and "/i" thick. Just "Jerkit" from circuit. Wt. 4 oz.
Your
Your
10 for
 $9^{c}$


Tester 203005 One of the finest neon tube testers. A must for radiomen, automobile owners and mechanics. Tests fuses, circuit continuity, spark plugs, ignition cables, distribut or heads, static elec. tricity etc. Weak spark cricises frat tube to plow causes hrs tube to glow. tubes to tow Hes valve tubes to glow. Has valve core remover, hand y pocket clip apark plug gap gauge. Enclosed in sturdy plastic barrel. K12333 10 for $\$ 3.49$
Your Cost Each.

## Fuse Clips

Highest quality phosphor bronze. 101001 will not lose epring under prolonged tension. For 3AG and 8AG fuses.
K11943-
Per 100..............

## Bakelite

## Fuse Mounts

Sub-Panel Type 383001-Molded bakelite. ${ }^{10}$ 6-32 ruds fuses only. K12382 Your Cost...12e Same as above, but for $11 / 6 \pi 1 / 6^{\prime \prime}$ fuses (type 3AG).\$353001 T2 ${ }^{\text {c }}$

## Panel Type

 Molded bake lite. $1^{11 / 4 \pi^{5} /{ }^{\prime \prime}}$ instrument typefusesfusc clips. $\$ 381001$
 Same as above, but for $11 / 4 x 1 / 4=$ fuses (type 3 AG ) 1351001 \& K12324-Each Same as K12383 but for fuses. $\$ 381002$
K11940-Your Cost..... 4 Same as K12324 but for two 3AG fuses. $\$ 351006$
K11941-Your Cost .....24,

## "Meter Back" Fuse Mounting

Mounts directly on meter binding post. Bakelite base " aly zom. type fuses only. (8AO) I.
K11049-Your Cost....

3AG Mounting


Light weight mounting, $11 / 6^{\prime \prime}$ " $/ /^{\prime \prime}$ x化" overall. Bakelite mounting trip with $1, e^{\text {fiber insulator on }}$ bottom for mounting on metal panels. \$351003. Hole for No. 6 screw.
K11942-Your Cost. Flush-Lite $\$ 201001$ To reduce lamp projection above panel transucent white plastic. Neon lamp has 100,000 ohms in $110-120 \mathrm{~V}$ AC hours lamp life at ${ }^{3}$ rated


## Post-Lite $\$ 201005$

For control panels of adio television, and other electrical equip-$65-130 \mathrm{~V}$. AC . $90-130 \mathrm{~V}$ 65-130 V AC, 9130 V DC. Buit-in 100,000 ohm limiting reaistor, watt. Molded, clear f" long. K12334- Your Cost.


# STANCOR replacement transformers 



2 or 4 Hole Half Shell

UNIVERSAL MOUNTING POWER TRANSFORMERS

- Electrostatically Shielded
- Primaries For 115 V. $50 / 60$ Cycles
- 5 Possible Mountling Positions
- Heavy 8-Inch Flexible Leads

| Stock No. | $\begin{aligned} & \text { Type } \\ & \text { No. } \end{aligned}$ | No. of Tubes | Your Cost | Plate |  | Rec. Fil. |  | Fil. No. 1 |  | Fil. No. 2 |  | Mtg. Area | We. <br> Lbs. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Vits. | M.A. | V. | A. | V. | A. | V. | A. |  |  |
| K1706 | P-6001 | 4.5 | \$2.65 | 650 | 40 | 5 | 2 | 2.5 | 4 |  |  | 21/683" | 4 |
| K1712 | P-6002 | 5-6 | 3.38 | 700 | 50 | 5 | 2 | 2.5 | 71/4 |  |  | $21 / 5 \times 3$ " | 4 |
| K1713 | P-6003 | 6-7 | 3.53 | 700 | 70 | 5 | 3 | 2.5 | 9 |  |  | $21110 \times 35 /$ | 4 |
| K1714 | P-6004 | 8-9 | 4.15 | 700 | 90 | 5 | 3 | 2.5 | 12.5 |  |  | 31/8×3\%" | 6 |
| K1719 | P-6009 | 6-7 | 3.88 | 550 | 70 | 5 | 3 | 5.0 | . 5 | 2.5 | 10.5 | $21110 \times 3 \%$ | 5 |
| K1715 | P-6005 | 6-7 | 3.88 | 700 | 70 | 5 | 3 | 2.5 | 9 | 2.5 | 3.5 | $21110 \times 3{ }^{\prime \prime}$ | 6 |
| K1716 | P-6006 | 11-13 | 5.12 | 700 | 120 | 5 | 3 | 2.5 | 12.5 | 2.5 | 3.5 | 31/103\% | 6 |
| K1717 | P-6007 | 10-12 | 5.32 | 800 | 110 | 5 | 3 | 2.5 | 15 | 2.5 | 3.5 | 31/63 ${ }^{\text {\% }}$ | 7 |
| K1735 | P-6297 | $4-5$ | 2.65 | 480 | 40 | 5 | , | 6.3 | 2 | . . . |  | $21_{2}^{1 / 2} 3^{n}$ | 4 |
| K1720 | P-6010 | 4-5 | 2.65 | 650 | 40 | 5 | 3 | 6.3 | 2 |  |  | $21 / 2 \times 3$ " | 4 |
| K1721 | P-6011 | 6.7 | 3.38 | 700 | 70 | 5 | 3 | 6.3 | 2.5 |  |  | $213 \times 3$ " | 4 |
| K1722 | P-6012 | 8-9 | 3.82 | 700 | 90 | 5 | 3 | 6.3 | 3.5 |  |  | $2{ }^{13}$ sife3 $8^{\prime \prime}$ |  |
| K1723 | P-6013 | 11-13 | 4.20 | 700 | 120 | 5 | 3 | 6.3 | 4.7 |  |  | 31/831\%" | 6 |
| K1724 | P-6014 | 13-15 | 5.53 | 750 | 150 | 5 | 3 | 6.3 | 5 |  |  | 31/8x3\%" | 6 |
| K1726 | P-6165 | 14-16 | 6.41 | 800 | 200 | 5 | 4 | 6.3 | 5.5 |  |  | 3 $1 / 4 \times 41 /{ }^{\prime \prime}$ | 7 |
| K1731 | P-6293 | $6-7$ | 3.82 | 600 | 60 | 5 | 3 | 6.3 | 2.5 | 2.5 | 7.5 | $2^{19} 10 \times 388^{\prime \prime}$ | 4 |
| K1733 | P-6295 | 8-9 | 4.47 | 700 | 90 | 5 | 3 | 6.3 ) |  |  |  |  |  |
| K1734* | P-6234 ${ }^{\text {年 }}$ | 11-13 | 5.82 | 660 |  | 5 |  | 2.5 | 3.5 | 2.5 | 9 | 31/8233/4" | 6 |
|  |  |  |  |  | 90 |  | 3 | 2.5 | 12 | 6.3 5.0 5. | 4 | 31/853 \% " | 6 |
|  |  |  |  |  |  |  |  |  |  | 2.5 |  |  |  |
| K1718 | P-6008 | 14-16 | 5.97 | 750 | 180 | 5 | 3 | 6.3 | 3.3 | 2.5 | 6 | 3716x41/8" | 7 |

SPECIAL 6.3 V . TRANSFORMERS FOR SETS USING P.M. SPEAKERS

| K 1785 | P |
| :--- | :--- |
| K 1786 | P |
| K 1787 | P |
| K 1741 | P |
| K 1743 | P |
| K 1744 | P |
| K 1745 | P |


$|$| P-6289 |
| :--- |
| P-6119 |
| P-6120 |
| P-6312 |
| P-6313 |
| P-6314 |
| P-6315 | | $5-6$ |
| :---: |
| $6-7$ |
| $7-9$ |
| $7-8$ |
| $11-13$ |
| $14-16$ |
| $16-18$ | $\mathbf{V} .65$

2.68
3.56
4.06
4.50
6.29
8.58 $\square$



UNIVERSAL OUTPUT TRANSFORMERS

| No. | Type | Primary Ohms | Mtg. | Cirs. | Lbs. | Each |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K1675 | A-3856 | All for Singlo |  |  | 1 | \$1.32 |
| K1637 | A-3823 | or P. P. Plates | 0 | $23,11^{\prime \prime}$ | 1 | 1.32 |
| K1671 | A-3850 | $4000,7000,8000$, | J | $2^{\prime \prime}$ | 1 | 1.32 |
| K1673 | A-3852 | 10M, 14M CT | J | $23 / 4$ | 2 | 1.71 |
| K1678 | A-3890 |  | E | $23 / 8$ | 2 | 2.79 |
| K1670 | A-3849* |  | 0 |  | 1 | 132 |
| K1666 | A $3830 \dagger$ | 5000, 7000, 10,000 $3000,5000,6600$ $7000,8000,10,000 \mathrm{CT}$ |  |  |  |  |
|  |  |  | J | $24 / 16^{\prime \prime}$ | 3 | 2.50 | - For battery radias.



| REPLACEMENT DRI |  |  |  |
| :---: | :---: | :---: | :---: |
| Stock | Type | 1 m | ance |
|  | No. | Pri. |  |
| K1684 | A-4712* | 20M | 2.2 M |
| K1685 | A-4713 | 10M | 2.5M |
| K1688 | A-4723 | 10M | 1.1 |
| 1687 | A-4722 | 10M | 10 M |
| K1682 | A-4401 | 10M | 1.4M |
| K1689 | 473 |  |  |

FILTER CHOKES TYPE A

| Stock | Type | Hen- | Cur. | D.C. | Dimensions | Wt. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | No. | rys | M. | Ohms | HzW 2 D | Lbs. | Cost |
| K1698 | C-1706 | 4.5 | 50 | 300 | 13/6x23/8911/0 | 1 | \$0.82 |
| K1699 | C-1707 | 6 | 50 | 500 | 15422任110" | 1 | . 82 |
| K1700 | C-1708 | 13 | 65 | 460 |  | 2 | 1.06 |
| K1701 | C-1709 | 8 | 85 | 250 | 17) $\times 31 / 8 \times 213 / 6^{\prime \prime}$ | 2 | 1.41 |
| K1702 | C-1710 | 7 | 150 | 200 | $21 / 3 \times 4 \times 21 / 80^{\prime \prime}$ | 3 | 1.79 |
| K1623 $\dagger$ | C-1003 | 16 | 50 | 550 |  | 2 | 1.09 |
| K1624 | C-1002 | 15 | 75 | 400 | 21/5316017\% | 2 | 1.50 |
| K1625 | C-1001 | 10.5 | 110 | 200 | $21 / 24^{18}{ }^{\prime \prime}$ | 3 | 1.88 |
| K1626* $\dagger$ | C-1034 | 8 | 30 | 1150 | $11 / 3 \times 21 / \times 15$ | 2 | 1.35 |
| K1583 | C-2303 | 2.5 | 130 | 100 | $2 \times 319 \times 1$ | 2 | 1.32 |
| K1584 | C-2304 | 2.3 | 150 | 65 | $2 \times 39 \times 13$ | 2 | 1.32 |
| K1585 | C-2305 | 4.8 | 100 | 275 | 23 <2313 21 | 2 | 1.79 |
| K1586 | C-2309 | 3.3 | 150 | 90 | 21/43110817/8 | 2 | 1.56 |
| ${ }^{-}$Center tapped. $\dagger$ Output chokes. A.C.-D.C. CHOKES TYPE A |  |  |  |  |  |  |  |
| K1703 | C-1723 | 5.5 | 50 | 330 | 156x23/9x11/4" | 1 | \$0.82 |
| K1694 | C-1080 | 4.5 | 50 | 200 | $15 / 6 \times 215 / 6 \times 1 / 8$ | 1 | . 85 |
| K1697 | C-1325 | 6.5 | 50 | 250 | 13/8203310x188 | 1 | . 85 |
| K1695 | O-1227 | 7 | 50 | 350 | $136 \times 2{ }^{13} 10 \times 1$ | 1 | . 85 |
| K1696 | C-1279 | 8.5 | 50 | 400 | $10 \times 21310 \times 1 \times 18^{\prime \prime}$ | 1 | 85 |



OUTPUT TRANSFORMERS

| $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | Type No. | Class Oper. | Tubes | Impedance in Ohms |  | $\begin{aligned} & \text { Mx. } \\ & \text { Wts. } \end{aligned}$ | $\begin{gathered} \text { Mtg. } \\ \text { No. } \end{gathered}$ | Your Cost |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Prim. | Secondary |  |  |  |
| X1663 | A-3822 | A | S | 7M, 10M | . 7 to 4 | 5 | Q | \$1.03 |
| K1669 | A-3848 | A | 8 | 16,000 | 1, 2, 4 | 5 | Q | 1.09 |
| K1676 | A-3857 | A | 8 | 25,000 | , | 5 | A | 1.15 |
| K1677 | A-3865 | A | S | 1,500 | 2,4,6 | 5 | A | 1.09 |
| K1640 | A-3876 | A | S | 2,000 | , | 5 | A | . 82 |
| K1645 | A-3877 | A | S | 5,000 | 4 | 5 | A | . 82 |
| K1646 | A-3878 | A | 8 | 7,000 | 4 | 5 | A | . 82 |
| K1648 | A-3879 | A | 8 | 10,000 | 4 | 5 | A | . 85 |
| K1649 | A-3881 | A | S | 15,000 | 4 | 5 | A | . 85 |
| K1647 | A-2201 | A | Sor PP | 8,000 | 0 | 10 | A | 1.59 |
| K1664 | A-3824 | B | S | 8,000 | 1,2,4 | 8 | Q | 1.71 |
| K1665 | A-3825 | A | S | 2,500 | 1,2,4 | 8 | Q | 1.41 |
| K1667 | A-3831 | B | Sor PP | 10 M | 2,4,8 |  | A | 1.23 |
| K1656 | A-3303 | AdB | Sor PP | 14 M | 4, 8, 15, 500 | 20 | C | 3.15 |
| K1657 | A-3304 | AdB | Sor PP | 10M, 7M | 4, 8, 15, 500 | 25 |  | 3.44 |
| K1644 | A-3301 | AdAB | PP | 3,000 | 4, 8, 16, 500 | 30 | C | 3.56 |
| K1672 | A-3851 ${ }^{\circ}$ | AB1 | PP | 4,400 | $4,8,1,250,$ | 30 |  | 4.29 |
| K1590 | A-3855 | A | Sor PP | 7,000 | 10,2000 | 5 | L | 241 |
| K1661 | A 3800 | AdAB | PP | 5,000 | 4,8,15. | 30 | C | 4.03 |
| K1662 | A-3801 | AB1 | PP | 6,600 | 250,500 | 35 | C | 4.70 |


| No. | Type | Core | Mtg. | H. W. D. | Centers | Ench |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K1630 | A-4773 | ${ }^{3} \times 1{ }^{\text {P/ }}$ | E | (x2 $\times 2$ | " | \$2.20 |
| K1631 | A-4774 | $3^{3} \times 1{ }^{1 /}$ | S | $29 \times 27$ a 21 |  | 1.85 |
| K1634 | A-4775 | 7/8x ${ }^{7}$ | S | $27 / 8 \times 21 / 4 \times 23$ | " - 29 | 2.50 |
| Push-Pull Inputs (1 PI. to 2 G.) |  |  |  |  |  |  |
| K1651 | A-53C | 3:1 | 13/72 ${ }^{3}$ | $132^{\prime \prime}$ | ${ }^{2}$ | \$1.09 |
| K1652 | A-63C | 3:1 | 1\%/82 2 | 11/2" | 5 | 1.2 |
| K1690 | A-4740 | 3:1 | $2 \times 2$ |  |  | 1.41 |
| K1654 | A-73C | $3: 1$ | $2 \times 3{ }^{3} / 6$ | 15 | $2{ }^{13}$ | 1.59 |
| K1691 | A-4750 | 3:1 | $21 / 4 \times 27 / 98$ |  | 28 | 1.59 |
| K1686 | A-4719 | 3:1 | $21 / 8 \times 23 / 8$ | $21^{\prime \prime}$ |  | 2.82 |
| K1587 | A-62C | 2:1 | $13102{ }^{13}$ | 13 |  | 1.26 |
| K1588 ${ }^{\text {¢ }}$ | A-4745 | 2:1 | 23 ¢ 25 |  |  | 2.5 |
| K1589* | A-4206 | $3: 1$ | 31/8923/82 |  | 3 |  |
| - Split Secondary. $\dagger$ Has static shield. May be used 1 PI. to 1 G. by not using center tap. |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Push-Pufl Interstage ( 2 PI. to 2 G.) |  |  |  |  |  |  |
| K1683 | A-4711 | 1:1 | 13/42 | 111/ ${ }^{\circ}$ A | 23. |  |
| K1681* | A-4208 | 1.4:1 | 31/8x2 | 25\%" C | … 2.5 |  |
| * Has split secondary. TUBE CHECKER TRANSFORMER |  |  |  |  |  |  |
| For modernizing older types of tube checkers. Primary; $105,115,125$ volts at $50-60$ cycles. Secondary; 1.1, 1.4, 1.5, |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| K1966-P-1834-3. Shpg. wt. 3 1bs. Your Cost . . . . $\mathbf{\$ 6 . 1}$ |  |  |  |  |  |  |

We stock a full Stancor line and will supply any Stancor products not listed in this catalog at lowest net prices.

# UTC transformers 



## Standard VARITRAN Voltage Controls

The VARITRAN is an ideal voltage control unit of the type employing a sliding contact riding over the transformer turns. They pro vide continuously variable output voltages FROM O TO 130 VOLTS without interrup tion of the circuit. Type V-1 (illusirated) it completely shieided and includes cord, plug. and switch. Other units are completely shielded and have screw terminals on an in sulated strip. All units 215 volt input.


| - | \|Watts | Amps. |  |
| :---: | :---: | :---: | :---: |
|  | 230 | 2 | 4 |
|  | 570 | 5 | 5 |
| M | 570 | 5 | 5 |
|  | 570 | 5 | 5 |
|  | 850 | 7.5 | 5 |
|  | 1250 | 11 | 61/8 |
| but includes $0-150$ |  |  | vol |



| Wt. | Price |
| :---: | ---: |
| 10 lbs | $\$ 11.27$ |
| 14 lbs | 17.15 |
| 14 lbs. | 28.22 |
| 13 lbs | 14.70 |
| 19 lbs | 21.5 |
| 37 lbs. | 31.3 |

## "Linear Standard" Audios

A line of shielded highest fidelity audio transformers featuring input coils that have lowest hum pick-up of any awaisable wide range frequency response ( $w$ thin plus or minus 1 db . from 30 to 20,000 c.p.s.) thorough shielding and dependability. Used extensively by broadcast stations. Housed in alloy cases that have threaded 2 -hole ter minals for mounting (top or bottom). Tele phone black enamel finish. Overall dimen


Line Matching Units
For matching multiple line: $50,125,200,250,500$ ohms. Type A case. Dual alloy shielding, hum reduction -74 db . Shpg. wt. 3 lbs

| No. | Type | Match To |
| :---: | :---: | :---: |
| K5401 | LS-10 | Single grid- 60,000 ohms, 2 sections |
| K5739* | LS-10X | Single grid - 60,000 ohms, 2 sections |
| K5402 | LS. 12 | Multiple line to push pull grids |
| K5399 | LS-12X | As above. 80,000 ohms. |
| K5403 | LS-26 | Bridging line to 1 or pp grids |
| K5405 | LS-30 | Multiple line to multiple line |
| K5404 | LS.30X | As above. |
| K5406 | LS-27 | Single plate to multiple line |
| K5427 | LS-50 | Single plate to multiple line |
| K5428 | LS-51 | PP low-level plates to multiple line |
| K5422 | LS-20 | Single plate to single grid |
| Quad | ruple allo | shielding, hum reduction -92 db . |

Each
$\$ 14.70$

LS. 12
(5403
K5405 LS-30
K5404 Ls.30X
K5406 LS-27
K5428 LS 50
K5422 LS-20

## VARITAP All-Purpose Power Transformers


ach unit can be used to replace several different types of transformers. Black enamel finish. Fil. 11 and Fi\$. 2 provides either ONE of the voltages shown. Primaries for $115 \mathrm{v}, 50 / 60$ cycles A.C Universal Mounting Transformers (type A)

| Stock No. | $\begin{aligned} & \text { Type } \\ & \text { No. } \end{aligned}$ | High Volt. Volts Ma. | Vits.A | Volts Amp. | Fil. No. 2 Volts Amp. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K5901 | R-1 | 650 @ 40 | (1)2 | 6.3 @ 2 |  | \$3.59 |
| K5902 | R |  | (a) 3 | $2.5 @ 4$ 6.3 @ 2.5 |  |  |
|  |  |  |  | 2.5 (3) 8 |  |  |
| K5903 | R-3 | 700 (9) 95 | 5 (a) 3 | 6.3 (a) 4.5 | 2.5 @ 9 | . 2 |
| K5904 | R. 4 | 750 @ 120 | 5 (a) 4 | 6.3 @ 5 | 2.5 (4) 15 | \$6.2 |
| K 5905 | R-5 | 770 @ 180 | 5 @ 4 | 6.3 (e) | 6.3 (3) 5 |  |

Vertical Shielded Transformers (type B)

K5911 R-11 700 @ 75 (a) 3 6.3 (a 3 2.5 @ 8 $\$ 5.59$
K5912 $\begin{array}{lllllllll}\text { R-12 } & 750 \text { @ } 100 & 5 & \text { @ } 3 & 6.3 \text { @ } 4 & 6.3 \text { @ } 2 & \$ 6.35\end{array}$

Fiush Mounting Transformers (type C)

| K5906 | R-6 | 600 (a) 50 | (a) 2 | $\left\{\begin{array}{l}6.3 \text { (11) } 2 \\ 2.5\end{array}\right.$ |  | 9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K5907 | R-7 | 700 (a) 75 | (1)3 | 6.3 ¢ 3 | 2.5 (1) 8 | 5450 |
| K5908 | R-8 | 750 (a) 100 | 5 (a) 3 | 2.5@3 | 2.5 @ 10 |  |
| 09 |  | 800 |  | 2.5 6.3 |  |  |
| KS909 |  | 800 |  | 2.5 (a) 4 | 2.510 |  |
| K5910 | R-10 | 850 (a) 200 | 5 (a) 3 | 6.3 @ 5 | 6.3 ¢ 3 | \$8. |

Dimensions and Shipping Weights of All Units

| Type | W.xDxH. Lbs. |  | Type W'xD.xH. Lbs. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | T11 | , |
|  | $\times 2 \times 3{ }^{\text {m }}$ |  | R-12 31 |  |
| R-3 3 |  |  | R-13 | 10 |
| R-4 4 | $41 / 2 \times 3 \times 4 \times 38$ | R-9 $41 / 5 \times 3^{3}{ }^{1} \times 4^{\prime \prime}$ |  |  |
| R-5 4 | 4) $3^{2} \times 3 \frac{1}{4} \times 41 / 2^{\prime \prime} 8$ | R-10 $41 / 2 \times 3{ }^{3}, 4 \times 43 / 410$ |  |  |
| Interstage Audio and Mixing Transformers |  |  |  |  |
| No. | Type | Application |  | Each |
| K5459 | 9 HA-100 | Multiple line to grid, 60 | ,000 ohms | \$11.17 |
| K5728 | 8 HA-100X | Same as above w/intern | al shield | 14.11 |
| K5446 | 6 HA-101 | Multiple line to PP grid |  | 12.94 |
| K5447 | 7 HA-101X | Same as above w/intern | al shield | 15.88 |
| K5451 | 1 HA. 108 | Mixing, to multiple line |  | 11.17 |
| K5449 | 9 HA-108X | Same as above w/intern | al shield | 14.11 |
| K5450 | O HA-104 | Single plate to PP grids | 2A3, ete. | 11.76 |
| K5457 | 7 HA-106 | 1 plate to PP grids 1.5: | ratio | 9.41 |

K5457 HA-106 1 plate to PP grids 1.5:1 ratio

Featherweight 40 to 15000 cps . Wt. 15000 cps . 13/in high. Ideal or hearing aids, etc. Max evel 0 db .200 hm balanced winding may be used for 250

## Ultra-Compact Line Matching Transformer

Compact high fidelity units: frequency range from 30 o 20,000 c.p.s. $1 x x^{2}$, threaded inserts for mounting. Match 50, 125, 200. 250, 500 ohm lines. Net wt. 6 oz shps. wt. each 1 lb .

K5394-A-10. Line to 1 grid . 50,000 ohms
K539 A-10. Line to 1 grid. 50,000 ohms................. 58.82
55726-A11. Line to 1 or 2 grids. 50,000 ohm
513 A1. Mutiple line to push-pul grids. 50,000 ohms.
K5539-A18. Mike to one or two grids. 300150,000 ohms
K5396-A18. Single plate to two grids. $8000 / 80,000 \mathrm{ohm}$
K5440-A19. 1 plate to 2 grids. 8 ma . $8000 / 80,000$ ohms. 10.58
K5436-A. 20.
K5397-A24. 1 Triode plate $8000 / 15,000$ ohms to line

## P.A. VARIMATCH Output

Output impedances: $500,200,50,15,8,5,3,1.5$ ohms.

| Stock | Type | Watts | Ty | Case | Lbs. | Ea |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K5777 | PVM-1 | 12 | - | E | 3 | \$5 |
| K5778 | PVM-2 | 30 | 42, 45, 2A3, 6L6, 6B5 | F | 4 | 8.2 |
| K5779 | PVM-3 | 60 | 46, 50, 6L6, 801, 807 | G | 10 | 11. |
| K5780 | PVM-4 | 25 | 800, 801, 807, 4-6L6 |  | 15 |  |

## TRUTEST transformers and chokes

## SERVICE OVER 90\% OF ALL STANDARD RECEIVERS



## Replacement Power Transformers

Trutest Power Transformers are engineered by experts and constructed of the finest materials. Each unit is designed to provide ample safety factor under normal conditions of use. All are fully guaranteed for a period of ninety (90) days against mechanical and electrical defects. All conform to R.M.A. standards. This is your assurance that Trutest transformers will live up to the claims made for them. To simplify installation, all units are furnished with a schemstic diagram showing terminal connections. All primaries are designed for $105-120$ volts, 60 cycles AC only. Power sources should check with this.
 Receiver Replacement Type-Mtg. Fig. C.


Fully shielded upright mounting type-Mtg. Fig. D

| K1456 | 650 | 40 | 5 | 2 | 6.3 c.t. | 2 |  | $31 / 8 \times 23.8 \times 213 / 6$ | 4 | 3.09 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K1457 | 700 | 50 | 5 | 2 | 6.3 c.t. | 2.6 |  | 31, $\times 2{ }^{3} 10 \times 3$ | 4 | 39 |
| K1458 | 700 | 70 | 5 | 3 | 6.3 c.t. | 3 |  |  | 4 | 3.89 |
| K1459 | 700 | 90 | 5 | 3 | 6.3 c.t. | 3.5 |  | 41/x ${ }^{31 / x} \times 37 / 6$ | 6 | 9 |
| K1460 | 700 | 110 | 5 | 3 | 6.3 c.t. | 4.5 |  |  | 0 | 4.89 |

Output Transformers
To couple output plate to speaker voice coil. Sec. Imp. -3.5 ohms.
No. Class Pri. Imp. |Pri. Ma. Max. Watts Mtg. Ctrs. Dimensions |Mtg. | Each

| K1610 | A | 2,000 | 60 | 5 | 2 | 13/682\%/8x ${ }^{1 / 4}$. | A | 60 c |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K1611 | A | 5,000 | 40 | 5 | 2 | $13 \times 26 \times 1{ }^{\prime \prime}$ | A | 63 c |
| K1627 | A | 7,000 | 30 | 5 | 2 | $13 \times 25 \times 11 \times$ | A | 63 c |
| K1613 | A | 10,000 | 30 | 5 | 2 |  | A | 66 c |
| K1628 | A | 15,000 | 10 | 5 | 2 | 11/8x29 ${ }^{\text {a }} 11 / 4$ | A | 68 c |
| K1629 | A | 25,000 ct.l | 10 | 5 | 2 | 13 \% $29.6 \times 11 / 4$ | A | 90 c |

## Universal Output Transformers

Stock correct coupling between many output tubes and any voice coil
 K1632 1 or PP $4 \mathrm{M} / 7 \mathrm{M} / 10 \mathrm{M} / 14 \mathrm{M}$ c.t. $17-3235$ K 16331 or $\mathrm{PP}^{2} / 4 \mathrm{M} / 7 \mathrm{M} / 10 \mathrm{M} / 14 \mathrm{Mo}$ K1635 Single $\begin{gathered}1500 / 2 \mathrm{M} / 4 \mathrm{M} / 5 \mathrm{M} / \\ 7 \mathrm{M} / 10 \mathrm{M}\end{gathered}$

| K 1641 | 1 or PP | $7 \mathrm{MM} / 7 \mathrm{M} / 10 \mathrm{M} / 14 \mathrm{M}$ c.t. | $.1-40$ | 5 |
| :--- | :--- | :--- | :--- | :--- |
|  | $17-32$ | 40 |  |  |

## Interstage Transformers

| To co No. | $\begin{aligned} & \text { ple a } \\ & \text { Ohms } \\ & \text { Pri. } \end{aligned}$ | ale plate Impedance Sec. | Turns Ratio | Mtg. Centers | Prl. Ma. | Dimensions | Mtg. Type | Your Cost |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K1643 | 10,000 | 90,000 | 3:1 | 2 | 10 |  |  | 83 c |
| K1655 | 10,000 | 90,000 | 3:1 | 23/8 | 10 | 1\% $\times 213 / 5 \times 11 / 2$ | A | 99 |
| K1658 | 10,000 | 90,000 | $3: 1$ | 21310 | 10 | $2 \times 31 / 4 \times 15$ | A | \$1.39 |
| To couple Puah-Pull plates to Push-Pull grids |  |  |  |  |  |  |  |  |

## Driver Transformers

To couple driver plates to amplifier grids. Driver, 6C5, 30, 49. Work into a single $1 \mathrm{J6}, 19$, or push-pull 30,49 . Ratio of primary to half
of the secondary $2.5: 1$. Class B. Primary milliamperes $10.2 \%{ }^{*}$

K1674
Your Cost Each
$\$ 1.09$

| No. | Replacement Type Filter Chokes |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Henries | Ma. | DC Res. | (Insul.) | Size | Mtg. | Each |
| K1549 | 4.5 | 50 | 200 ohms | 1500 |  | A | $75 c$ |
| K1567 | 8.5 | 50 | 400 ohms | 1500 | $15 / 8 \times 213$ 16x $11 / 2^{\prime \prime}$ | A | 99. |
| K1568 | 20 | 15 | 900 obms | 1500 | $14 / 8{ }^{113} 10 \times 11 / 2^{\prime \prime}$ | A | \$1.35 |
| K1569 | 16 | 50 | 550 ohms | 1500 | 2x $31 / 4 \times 158^{\prime \prime}$ | A | 1.69 |
| K1572 | 15 | 75 | 400 ohms | 1500 |  | A | 75 |
| K1573 | 10.5 | 110 | 220 ohms | 1500 | $296 \times 4 \times 21 / 0^{\prime \prime}$ | A | 75 c |



## SOLA Constant Voltage Transformers

These transformers involve a combination of a resonant electrical circuit and a high leakage-reactance magnetic circuit. The electrical circuit is comprised of three windings: a primary winding, an inter mediate or resonant winding, and a compensating winding. In addi tion to the items listed here, special unite can be made to order on tequest. In listing special orders, include range of line variation, output voltage, load, power factor, voltage regulation, load variation, distortion data

| Output VA. | $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | $\begin{aligned} & \text { Mtg. } \\ & \text { Type } \end{aligned}$ | Input Voits | Output Volts | Size Inches | Shipping Weight | $\begin{aligned} & \text { Your } \\ & \text { Coast } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15 | $\overline{\mathrm{K} 2200}$ | A | 95-125 | 6.3 | $53 / 6 \times 31 / 2 \times 21 / 6$ | $4 \frac{1}{2}$ lbs. | \$16.65 |
| 15 | K2201 | A | 95-125 | 115 | $5816 \times 31 / 2 \times 21 / 6$ | 41/2 lbs. | 16.65 |
| 15 | K2202 | B | 95-125 | 6.0 | 511/x2\% $\times 37 / 18$ | 6 lbs . | 13.50 |
| 15 | K2203 | B | 95-125 | 6.3 | $514 \times 25 / 8 \times 33 / 6$ | 6 lbs . | 13.50 |
| 15 | K2204 | - | 95-125 | 115 | $515 / 8 \times 28 / 8 \times 37 /$ | 6 libs. | 13.50 |
| 30 | K2205 | C | 95-125 | 115 | $89 \% 84 \frac{1 / 6}{} \times 4 \frac{1}{6}$ | 12 lbs. | 15.30 |
| 60 | K2206 | C | 95-125 | 115 |  | 13 lbs. | 21.60 |
| 120 | K2207 | C | 95-125 | 115 | 913084\% $\times 41 / 8$ | 17 lbs. | 28.80 |
| 120 | K2208 | C | 95-125 | 115 | 11368 $84316 \times 43 / 8$ | 16 lbs . | 28.80 |
| 250 | K2209 | C | 95-125 | 115 | $113 / 5 \times 615 / 6 \times 59$ | 28 lbs . | 46.80 |
| 250 | K2210 | C | 190-250 | 115 | 113/8 $\times 6^{15} / 6855 \%$ | 28 lbs. | 46.80 |
| 500 | K2211 | C | 95-125 | 115 | 141/2 $\times 6.51565858$ | 40 lbs . | 67.50 |
| 540 | K2212 | C | 190-250 | 115 |  | 40 lbs . | 67.50 |
| 1000 | K2213 | C | 95-125 | 115 | 191/9 $\times 93 / 2 \times 7 \%$ | 110 lbs. | 112.50 |
| 1000 | K2214 | C | 190-250 | 115 | 191/8 $\times 91 / 8 \times 77 / 8$ | 110 lbs. | 112.50 |



Step Down Transformers 220 Volts A.C. to 110 Volts A.C.
Fully shielded. Supplied with $6 \cdot \mathrm{ft}$. heavy lamp cord for 220 volt line, and flush receptacle for 100 volt side.
No. Watts Size Shpg. Wt. Each
 $\begin{array}{lllll}\text { K1968 } & 160 & 3 y \times 4 \times 514 & 9 \mathrm{lbs} & 5.15 \\ \mathrm{~K} 1422 & 250 & 31 / \times 4251 / 2 & 10 \mathrm{lbs} . & 5.95\end{array}$


Universal Step Down Transformers
Like above but input is tapped for $160 / 180 / 200 / 220 / 240$ volts a.c.; deaired tap selected by means of a switch on the housing. Output 115 volts a.c. With 6 -ft. line cord.
100 Watts. $43 / 6 \times 31 / 6 \times 37 / 8^{7}$ high. $\quad 250$ Watts. $44 / 8=37 / 6 \times 4 \frac{1}{6 n}$ high.



## MERIT Power Transformers

 Receiver Replacement TypeAn excellent transformer for use in radio receiver power transformer replacement use. The transformer windings are fully shielded and the leads are RMA color-coded. Primary for 115 volts, 60 cycles AC only. The power source should be checked for proper voltage and frequency ratings before installing the transformer. As shown in the illustration, the transformer is of the shell mounting type. Shpg. Wt. 6 lbs

| Stock No. | $\begin{aligned} & \text { Type } \\ & \text { No. } \end{aligned}$ | Secondary \| Reetifier |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Volts | M.A. | Voits | Amps |
| K2017 | P2965 | 650 | 40 | 5 | 2 |
| K2018 | P2966 | 700 | 70 | 5 | 3 |
| K2020 | P2967 | 700 | 90 | 5 | 3 |
| K2021 | P2968 | 800 | 110 | 5 | 3 |
| K2022 | P2950 | 650 | 40 | 5 | 2 |
| K2023 | P2061 | 700 | 70 | 5 | 3 |
| K2024 | P285 | 700 | 90 | 5 | 3 |
| K2025 | P2063 | 700 | 120 | 5 | 3 |
| K2026 | P240 4 | 750 | 150 | 5 | 3 |


|  | Fil. |  | Size in Inches |
| :---: | :---: | :---: | :---: |
| mps | Volts | Amps |  |
| 2 | 2.5 c.t. |  | 21 |
| 3 | 2.5 c.t. | 9\&3.5 | $2{ }^{13} \mathrm{~m}^{3}$ |
| 3 | 2.5 c.t. | 12.5 | 31, $\times 33 / 3 \times 416$ |
| 3 | 2.5 c.t. | 15\& 3.5 | 3\%:8412x ${ }^{1}$ |
| 2 | 6.3 c.t. | 2 | 21473x27/8 |
| 3 | 6.3 c.t. | 2.5 | 215 $2 \times 3 \times 37 / 6$ |
| 3 | 6.3 c.t. | 3.5 | 214031/63 |
| 3 | 6.3 c.t. | 4.7 | $31 / 8 \times 31 / 43^{12}$ |
| 3 | 6.3 | 5 | $31.8 \times 3$ \% ${ }^{\text {\% }}$ |


| Your |
| ---: |
| Cosi |
| $\$ 2.65$ |
| 3.67 |
| 3.97 |
| 5.14 |
| 2.65 |
| 3.38 |
| 3.67 |
| 4.12 |
| 5.29 |

# THORDARSON transformers 



## Power Transformers

Mtg. type GGV ; Prl. $50 / 60$ cyc. 117V.; Fils. 6.3V.CT. T-22R32 has3rd fit.

| $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | Thord. No. | Sec. 11 DCFII. 2 |  |  |  | $\begin{aligned} & \text { Pri. } \\ & \text { Vi. } \end{aligned}$ | $\begin{aligned} & \text { WxDxH } \\ & \text { (inches) } \end{aligned}$ | $\begin{aligned} & \text { Wt. } \\ & \text { Lbs. } \end{aligned}$ | Your Cost |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Volts | MA | Rect. | Amps. |  |  |  |  |
| 111 | T-22R30 | 275-275 | 50 | 5 | 2.5 | 55 |  | 5 | \$4.26 |
| 12 | T-22R31 | 360-360 | 80 | $5 \mathrm{~V}-2 \mathrm{~A}$ | 2.5 | 76 | $2{ }^{1} / x^{2}$ | 6 | 4.56 |
| K413 | T-22R32 | 350-350 | 110 | $5 \mathrm{~V}-2 \mathrm{~A}$ | 3 | 107 |  | 6 | 5.14 |
| K414 | T-22R33 | 375-375 | 160 | 5 V 2 A | 5 | 145 | , | 8 | 6.17 |
| K415 | T-22R34 | 385-385 | 225 | 5V-3A | 5 | 186 | 323/6x4130445 | 10 | 7.94 |
| K416 | T-22R35 | 400-400 | 340 | 5V-6A | 7 | 290 |  | 10 | 8.8 |

## Replacement Power Transformers

Mtg. type AGF; Pri. 50/60 cyc. 117 V

| Stock No. | Thord. No. | Sec. 11 DC |  | Reet. Fil. | Fil. 2 | Wt. Lbs. | Your Cost |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Voits | MA |  |  |  |  |
| K 417 | T-22R00 | 250-250 | 40 | 5V-2A | 6.3V CT-2A | 5 | \$3.09 |
| K418 | T-22R01 | 275-275 | 50 | $5 \mathrm{~V}-2 \mathrm{~A}$ | 6.3V CT-2.5A | 5 | 3.12 |
| K 419 | T-22R02 | 300-300 | 70 | $5 \mathrm{~V}-2 \mathrm{~A}$ | 6.3V CT-3A | 5 | 3.97 |
| K 420 | T-22R04 | $300-300$ | 90 | $5 \mathrm{~V}-2 \mathrm{~A}$ | 6.3V CT-3.5A | 6 | 4.41 |
| K421 | T-22R05 | 300-300 | 120 | 5V-3A | 6.3V CT-5A | 6 | 4.70 |
| K 422 | T-22R06 | 325-325 | 150 | 5V-3A | 6.3 V CT-5A | 7 | 5.58 |
| K123 | T-22R07 | 350-350 | 200 | $5 \mathrm{~V}-3 \mathrm{~A}$ | 6.3 V CT - 6 A | 8 | 6.35 |
| K425 | T-22R08 | 250-250 | 40 | $5 \mathrm{~V}-2 \mathrm{~A}$ | 2.5 V CT-4A | 8 | 3.09 |
| K435 | T-22R09 | 275-275 | 50 | $5 \mathrm{~V}-2 \mathrm{~A}$ | 2.5 V CT-7.5A | 4 | 3.67 |
| K436 | T-22R10 | 325-325 | 85 | $5 \mathrm{~V}-2 \mathrm{~A}$ | 2.5 V CT-9A ${ }^{\text {a }}$ | 5 | 4.70 |
| K441 | T-22R11 | 325-325 | 120 | 5V-3A | 2.5 V CT-12.5. $\mathrm{A} \dagger$ | 6 | 5.58 |

Tube To Line Transformers
Impedance-20,000 CT., pri. sec. 500 CT. or 125 and 200 ohms. Primary application-single or PP plates. Secondary application-line Stock Thord. Mtg. WxDxH Wt. Your


## Dual Tone Control Reactor

K502-T-20C74, RAV, hum-bucking const., 10/4 dia. $\times 2^{\prime \prime}$. Each $\$ 1.91$ Dual Control R1068-For use with dual control reactor T-20C74. K406-Your Cost Each.
$\$ 1.82$

| Stock No. | Thord No. | $\begin{aligned} & \text { Mtg. } \\ & \text { Typpe } \end{aligned}$ | Henries* Rated DC | Rated MADC | $\begin{array}{c\|} \hline \text { DC } \\ \text { Ohms } \end{array}$ | $\begin{aligned} & \text { WxDxH } \\ & \text { (inches) } \end{aligned}$ | Wt. Lbs. | Your Cost |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K 484 | T-20C50 | BAH | 350 | 5 | 5500 | $31 / 4 \times 2 \times 2$ | 2 | \$1.76 |
| K 185 | T-20C51 | BAH | 35 | 15 | 1850 |  | 2 | 1.06 |
| K 491 | T-20C52 | BAH | 8 | 40 | 450 | 29181) $\times 13 / 8$ | 2 | 1.06 |
| K492 | T-20C53 | BAH | 12 | 80 | 375 | 3110 $2 \times 2$ | 2 | 1.47 |
| K 493 | T-20C54 | GGV | 8 | 150 | 145 | 276x $214 \times 31 / 6$ | 3 | 2.50 |
| K 494 | T-20C55 | GGV | 6 | 200 | 75 | $27.1031 / 4 \times 31 / 2$ | 4 | 2.79 |
| K495 | T-20C56 | GGV |  | 300 | 60 |  |  | 4.56 |
| K496 | T-20C57 | PUV | 10 | 500 | 65 | $415073 \times 6$ | 20 | 17.64 |
| K 198 | T-20C58 | BAH | .75 | . 5 | 30 | $213 / 6 \times 11 / 2 \times 18 / 8$ | 1 | 1.18 |

## AEROVOX condensers

## Inverted Dry Electrolytics

Screw－mount inverted dry electrolytics．Supplied with lock－washer nut， $3 / 4$＂screw bushing．All have two $8^{\prime \prime}$ color－coded leads per sec－ ion for terminals．Avail－ able in single，double and lated large size can．

Type GL－600－Single Section
 K4517 Type GL－450－Sing．e Section 525 V．Peak－ 450 V．D．C．Wkg．

| K4651 | 4 | 178x3 | \＄0．77 |
| :---: | :---: | :---: | :---: |
| K4652 | 8 | $118 \times 4$ | ． 96 |
| K4653 | 12 | 1384 | 1.26 |
| K4654 | 16 | 11／8x ${ }^{4}$ | 1.41 |
| K4577 | 20 | 11624 | 1.56 |
| K4679 | 30 | 1884 | 1.77 |
| K4580 | 40 | 18174 | 2.04 |
| K4572 | 80 | 17／8×4 | 3.61 |

Type 2GL－450－Double Section 525 V．Peak－ 450 V．D．C．Whg

| K4656 | 8－8＊ | 18／5x4 |
| :---: | :---: | :---: |
| K4686 | 8－16＊ | $11 / 84$ |
| K4573 | 10－10＊ | $1318 \times 4$ |
| K4574 | 16－16＊ | $11 / 2 \leq 4$ |
| K4575 | 20－20＊ | $11 / 5 \times 4$ | 525 V．Peak－450 V．D．C．Wkg．


 ＊Each section has 2 leads．
Midget Dry Electrolytics Ultra－compact； 2 leade per section． Type GL5－450－Single Section 525 V．Peak－ 450 V．D．C．Wkg．

| No． | Mfd． | Size－Ins． | Ea |
| :---: | :---: | :---: | :---: |
| K4663 | 4 | 1x23／6 | \＄0．77 |
| K4664 | 8 | 1x211／0 | ． 96 |
| K4665 | 12 | $1 \times 31 / 18$ | 1.26 |
| K4666 | 16 | 1×31／4 | 1.41 |
| K 4518 | 8－8＊ | $13 / 6{ }^{3}$ | 1.44 |

TypeGLS－250－250V．D．C．Wkg．

| K4667 | 4 | $1 \times 23 / 6$ | 50.66 |
| :--- | ---: | :--- | ---: |
| K4668 | 8 | $1 \times 21 / 6$ | .85 |
| K4669 | 12 | $1 \times 211 / 0$ | 1.00 |
| K4670 | 16 | $1 \times 31 / 6$ | 1.22 |

Plug－In Electrolytics
 Type AEP：Quick change dry electrolyt－ ics．Facilitate test－ ing and replacement in equipment where continuity of service merely by plugging into a standard octal socket．Unit can only be inscrted the proper way．Ultra－ use of etched foil for higher capaci－ arm internal construction．Alumi－ be used to replace wet electro－ ytics providing surge voltage

450 V Type AEP－450
450 V．D．C．Wkg． 525 V．Surge


Type AEP－22）4A（ $15 / 4 \times 21 / 2^{\prime \prime}$ ）

| Stock | Cap． | Wkg． | Your |
| :--- | :--- | :--- | :--- |
| No． | Mfd． | Vlts． | Cost |

## ＂DANDEE＂Ultra－Compact Tubular Dry <br>  Electrolytics－Type PRS

Space saving，yet full－rated capacity and voltage．Ideal for midgets，AC－DC ity and working voltage required in minimum space．Varnished papacer insulating jacket over can．Dual units（Type PRS－A）have two leads plus common negative riveted center mounting strap．

| Stock No． | Cap． Mfd． | Wkg． | $\begin{aligned} & \text { Size } \\ & \text { Ins. } \end{aligned}$ | Your Cost | $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | Cap． Mid． | Wkg． Volts | Size Ins． | You Cost |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K700 | 10 | 25 |  |  | K726 | 4 | 350 | $96 \times 236$ | 30.44 |
| K701 | 25 | 25 |  |  | K737 | 8 | 350 | 13／6x ${ }^{11 / 4}$ | ． 51 |
| K5050 | 50 | 25 | 108110 | ． 44 | K738 | 12 | 350 | ${ }^{13} 10 \times 2$ \％${ }^{\text {in }}$ | ． 63 |
| K5051 | 100 | 25 | 13 | ． 81 | K739 | 16 | 350 | 13 㑑 ${ }^{2}$ 3／30 | ． 73 |
| K702 | 10 | 50 | \％ $16 \times 116$ | ． 40 | K5054 | 24 | 350 | 15／6x ${ }^{1 / 16}$ | ． 81 |
| K703 | 25 | 50 | $116 \times 1{ }^{11 / 16}$ | ． 51 | K753 | 4 | 450 | 11／0811／16 | ． 51 |
| K5052 | 50 | 50 | 13601116 | ． 63 | K754 | 8 | 450 | 13／6x1110 | ． 55 |
| K5053 | 100 | 50 | 11／6x ${ }^{\text {\％\％}}$ \％ | ． 88 | $K 733$ $K 755$ | 10 | 450 450 |  | ． 63 |
| K741 | 4 |  |  |  | K756 | 16 | 450 | 156823，100 | ． 81 |
| K742 | 8 | 150 | 90x1106 | ． 40 | K5055 | 20 | 450 | 13／16x ${ }^{3} 10$ | ． 88 |
| K748 | 12 | 150 | 11081110 | ． 44 | $K 734$ $\mathbf{K} 736$ | 30 | 450 |  | 1.07 |
| K749 | 16 | 150 | 110x146 | ． 51 | K736 | 40 | 450 |  | 1.29 |
| K745 | 20 | 150 |  | ． 55 | K704 | 10－10 | 50 | $5 / 6 \times 29$ 2／5 | ． 73 |
| K750 | 24 | 150 | 11／60 $2^{21 / 16}$ | ． 55 | K5056 | 10－10 | 25 | 5 \％ $\mathrm{I}^{2} 316$ | ． 63 |
| K751 | 30 | 150 | 1316x1106060 | ． 59 | K5057 | 8 8－8 | 150 | 11／0x $2^{31 / 6}$ | ． 73 |
| K 752 | 40 | 150 | 13／6x ${ }^{3} 3 / 6$ | ． 63 | K5058 | 8－16 | 150 | $3 \times 2 \times 14$ | ． 77 |
| K 732 | 50 | 150 | 162 | 81 | $K 5059$ <br> $\mathbf{K} 5045$ | 20－20 | 150 | 7／39 3 \％ | ． 96 |
| K718 | 4 | 250 |  | ． 40 | K5060 | 8－8 | 200 |  | 85 |
| K723 | 8 | 250 | 11／80 $111 / 6$ | ． 44 | K5061 | $8-16$ | 200 | 13 ¢ $\times 2$ | 88 |
| K 724 | 12 | 250 | 11／6811906 | ． 59 | K5062 | 16－16 | 200 | 7／3x ${ }^{5}$ | 1.04 |
| K725 | 16 | 250 | 11／4x ${ }^{1 / 1 / 0}$ | ． 66 | K5063 | 8－8 | 450 |  | ． 96 |
| K 735 | 20 | 250 |  | ． 73 | K5064 | 8－16 | 450 | $1 \times 28 / 8$ | 1.19 |

## 4－Lead Dual－Section＂DANDEES＂Type PRS－B

Separate sections，sep．leads，reduced size．Smallest midget electro－
lytics on the market．Same high quality． lytics on the market．Same high quality．

\section*{| No． | Mid． | Volts | Size | Each | No． | Mfd． | Volts | Size | Each |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K5034 | $20-20$ | 150 | $1 \times 21 / 4$ | $\$ 1.22$ | $\times 5036$ | $8-8$ | 450 | 12216 | $\$ 1.22$ |} | K 5035 | $16-16$ | 250 | $1 \times 21 / 2$ | 1.48 | K 5037 | $8-16$ | 450 | $1 \times 31 / 2$ | 1.71 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |



## PRVC Dry Electrolytics

Universal eleat mounting，inverted dry eadi．Multi－element unit have separate color coded insulated positive and negative leads．

| Single Section |  |  |  |  | Dual Sections |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No． | Mfd． | Volts | （DxH） | Each | No． | Mfd． | Volts | （DxH） | Each |
| K705 | 4 | 600 | 11884 | \＄1．94 | K719 | 8－8 | 450 | 13／8x4 | \＄1．67 |
| K706 | 8 | 600 | $115 \times 4$ | 2.72 | K720 | 8－16 | 450 | $118 \times 4$ | 2.08 |
| K707 | 16 | 600 | 11／28416 | 3.63 | K721 | 12．12 | 450 | 13 \％ | 2.08 |
| K708 | 4 | 450 | 121783 | ． 90 | K722 | 16－16 | 450 | $11.2 \times 4$ | 2.42 |
| K709 | 8 | 450 | 11／8x ${ }^{1}$ | 1.12 | K727 | 20－20 | 450 | 11／2x4 | 2.85 |
| K711 | 10 | 450 | 11883 | 1.29 |  |  |  |  |  |
| K712 | 12 | 450 | 11\％83 | 1.46 |  | Trip | le Se | ctions |  |
| K713 | 16 | 450 | 18883 | 1.65 |  |  |  |  |  |
| K 714 | 20 | 450 | 13193 | 1.81 | Stock | Cap． | Volts | Size | Your |
| K715 | 30 | 450 | 13 yr 3 | 2.08 | No． | Mfd． |  | （DxH） | Cost |
| K716 | 40 | 450 | $116 \times 3$ | 2.38 | K730 | 8－8－8 | 450 | $115 \times 4$ | \＄2．42 |
| K717 | 80 | 480 | 1\％的 | 4.20 | K731 | 10－10－10 | 450 | 11／2x 4 | 2.76 |



## AEROVOX Paper Tubulars

Non－inductively wound paper tubular condens era．Wax impregnated．All have pigtail wire

400 V．Working


| 400 V．Working |  |  | 600 V．Working |  |  | 1000 V．Working |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No． | Mfd． | Each | No． | Mrd． | Each | No． | Mfd． | Each |
| K4731 | ． 01 |  | K4746 | ． 001 |  | K4766 | ． 001 |  |
| K4733 | ． 02 | 5 c | K4747 | ． 002 |  | K4767 | ． 002 |  |
| K4734 | ． 03 |  | K4748 | ． 003 |  | K4768 | ． 003 | c |
| K4735 | ． 05 |  | K4749 | ． 005 |  | K4769 | ． 005 |  |
| K4737 | ． 1 | 18 c | K4750 | ． 006 | 15 | K4770 | ． 006 |  |
| K4739 | .25 | 21 c | K4752 | ． 01 |  | K4772 | ． 01 | 29c |
| K4741 | ． 5 | 32 c | K4753 | ． 015 |  | K4774 | ． 02 | 29 c |
| K4742 | 1.0 | 44 c | K4754 | ． 02 | 25c | K4776 | ． 05 | 32c |
|  |  |  | K4755 | ． 03 | 18 c | K4778 | ． 1 | 44 c |
|  |  |  | K4756 | ． 05 | 18 c |  |  | 44 c |
|  |  |  | K4758 | ． 1 | 21 c |  |  |  |
|  |  |  | K4760 | ． 25 | 32 c |  |  |  |
|  |  |  | K4762 | ． 5 | 44 c |  |  |  |

Paper Vibrator Tubulars
Paper type，rated at 1600 volts working
No．Size

| No． | Mfd． | Size | Each | No． | Mfd． | Size |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K4779 | .01 | $1 / 2 x 11 / 2$ | $\$ 0.32$ | K4781 | .03 | V10x2 |

$\left(\begin{array}{c}\text { en } \\ 0 \\ 0\end{array}\right)$

## Oil Filled and Oil Impregnated Tubulars

These condensers are rated at 2000 volts DC working voltage．Have pigtail leads and come complete with mounting strap．
$\begin{array}{ll}\text { No．} & \text { Mfd．} \\ \text { K4833 } & 0075\end{array}$ $\begin{array}{ll}\text { K4833 } & .0075 \\ \text { K4834 } & .015\end{array}$
K4835－015 1218511／6
K4835 ． 015

| Each | No． |
| :---: | :---: |
| $66 e$ | $K 4837$ |
| $66 e$ | $K 4838$ |
| $66 e$ | $K 4839$ |
| 66 c |  |

Mfd．

> Size
13／10 ${ }^{29} 16$
$1 / 18 \times 2 \%$


## ＂Adjustimount＂Midget Dry Electrolytics



Feature＂adjustimount＂swivel mounting bracket with slotted holes．Mounts flat，upright，singly or stacked．Two separate leads for each section．Wax impreg

Type PBS600－High Surge
600 Volts DC Working

| No． | Mid． | D．W | E |
| :---: | :---: | :---: | :---: |
| K4501 | 4 | 17／6x11／6x29／6 | \＄1．56 |
| K4502 | 8 | 176011／2． $31 /$ |  |
| Type PBS450 525 Volts Surge 450 V ．DC Working |  |  |  |
| No． | ｜Mid． | D．W．L． | － |
| K4633 | 2 | 3／4x $3 / 4 \times 27 / 6$ | \＄0．59 |
| K4634 | 4 | 910x 10270 | ． 66 |
| K4635 |  | 11／6x $11 / 8 \times 230$ |  |
| K4636 | 10 | $11 / 10 \times 11 / 6 \times 33$ 佫 | 1.04 |
| K4637 | 12 | 11／6x11／833\％ | 1.19 |
| K4495 | 16 | $176 \times 1188 \times 2 \% / 8$ | 1.9 |

Type PB5450－ 525 Volts Surge


Midget

## Condensers

Easily mounted com－ pact dry electrolytics． Base prongy slip into washer riveted on chas－ sis．Fibre washer for for grounded can metal neg．Type F can．Can


| No | Mfd． | W．V | DxH | Each |
| :---: | :---: | :---: | :---: | :---: |
| K5022 | 10 | 450 | $1{ }^{1} 2$ | \＄0．66 |
| K5023 | 20 | 450 | 1x2 | 1.00 |
| K5021 | 30 | 450 | $1 \times 3$ | 1.22 |
| K5024 | 40 | 450 | $1 \times 3$ | 1.44 |
| K5025 | 10－10 | 450 | $1 \times 2$ | 1.07 |
| K 5026 | 10－10－10 | 450 | $1 \times 3$ | 1.41 |
| K5027 | 20－20 | 450 | $1 \times 3$ | 1．48 |
| K4586 | 80 | 400 | 11／0x2 | 2.19 |
| K5028 | 10－10 | 250 | $1 \times 2$ | ． 96 |
| K5029 | $20-20$ | 250 | 122 | 1.00 |
| K5030 | $20-20$ | 150 | $1 \times 2$ | ． 88 |
| K 5031 | 30－30 | 150 | 1x2 | 1.00 |
| K5032 | 30 | 150 | $1 \times 2$ | ． 77 |
| K5033 | $\left\{\begin{array}{c}10-10 \\ 20\end{array}\right.$ | $\left.\begin{array}{c}450 \\ 25\end{array}\right\}$ | 113 | 1.19 |
| K4590 | 30－20 | 150 |  |  |
|  | 20 | 25 | $1 \times 2$ | 1.04 |
| K4567 | 15.15 20 | $\left.\begin{array}{c}250 \\ 25\end{array}\right\}$ | $1 \times 2$ | 1.00 |
| K5044 | 10／10 <br> 10／10 | 450 | 11／8×2 | 1.70 |

AEROVOX Midget Micas


## Type＂EL＂Prong－Base Dry Electrolytics



In uninsulated．metal cans with self－mount－ ing feature；metal ears bend back under chasais．Lug termi－ nals are coded．Ail perfectly scaled and are impervious to moisture．Insulating plates and meta

Cock Cap，Wkg．Size Your Vis．D．L．Cost $\begin{array}{lllll}\mathrm{K} 2521 & 10 & 450 & 122^{\prime \prime} & \$ 0.67 \\ \mathrm{~K} & 525 & 1 \times 2^{\prime \prime} & .89\end{array}$ $K 2523$ $K 2524$

$K 2525$ $K 2526$ $\begin{array}{llllll}\text { K2527 } & 40-20 & 450 & 1 \times 3^{\prime \prime} & 1.49 \\ \text { K2528 } & 40-40 & 450 & 13 \times 3^{\prime \prime} & 2.38 \\ \text { K2529 } & 20.30 & 250 & 183^{\prime \prime} & \end{array}$ $\begin{array}{lllll}\text { K2531 } & 20-20 & 250 & 1 \times 22^{\prime \prime} & 1.00 \\ 20-20 & 150 & 12^{\prime \prime} & 109\end{array}$ $\begin{array}{lllll}\text { K2532 } &$| $20-20$ | 150 | $1 \times 2{ }^{\prime \prime}$ | .89 |
| :--- | :--- | :--- | :--- |
|  | $50-30$ | 150 | $1 \times 3^{\prime \prime}$ | \& 1.08\end{array} $\begin{array}{lllll}\text { K2533 } & 40-20 & 150 & 1 \times 2^{\prime \prime} & 1.00 \\ \text { K2533 } & 40-00 & 150 & 1 \times 3^{\prime \prime} & 1.19\end{array}$ $\begin{array}{lllll}\text { K2541 } & 10-10 / 20 & 450 / 25 & 1 \times 3^{7 \prime} & 1.19\end{array}$ $\begin{array}{llllll}\text { K2550 } & 10-10 / 20 & 350 / 25 & 1 \times 2^{\prime \prime} & 1.00\end{array}$ $\begin{array}{lllll}\text { K2552 } & 20-20-20 & 150 & 1 \times 2^{\prime \prime} & 1.08 \\ \text { K2530 } & 30-20-100 & 150 / 6 & 1 \times 2^{\prime \prime} & 1.33\end{array}$ $\begin{array}{llllllllll} & K 2556 & 40-20-20 & 150 & 1 \times 21 / 19\end{array}$ K2535 50505030 150／25 1＊ 1 ＂ 1.71 K2597 10－10．10／20 450／25 13 $\times 2^{\text {＂}} 1.52$ K2536 10－10－10－10 450 1\％ 1 x $2^{\text {² }} 1.71$

 K2537 20－20－20－20 450 1 ${ }^{1 / 43^{\prime \prime} 3^{\prime \prime}} 2.45$ K2602 40－20－10／20 200／25 11） $\mathrm{x}^{3 \prime} \quad 1.41$
Mounting Plates For Above K2658－Bakelite．For $1^{1 \prime}$ cans K2659－B3kelite．For $12 / 80$ cans Each $K 2660-\mathrm{Metal}$ ．For $1^{\prime \prime}$ cans K2661－Metal．For 13／8＂cans


Standard Milcas Type IF F 解 stand－ ard postage stamp high quallty ruby mica dielectric． 600 V，working voltage．Size： 810 $1 / 1{ }^{\circ}$
Stock No．Capacity Mfd．Each $\mathbf{K} 2765$
$\mathbf{K 2 7 6 9}$ $K 2769$
$\times 2770$ $K 2770$
K 2771
$\begin{array}{ll}K 2771 & .0001 \\ & .0002 \\ & .0002\end{array}$
$\mathbf{k 2 7 7 2} \quad .00025$
K2773
K 2774
$\times 2775$
$K 2775$
$K 2776$
K 2776
K 2777
$K 2777$
$K 2778$
$K 2778$
$\mathbf{K 2 7 8 5}$

SPRAGUE＂Atoms＂Ultra－Compact
Dry Electrolytics
Ultra－compact capacitors sealed in tubes．Protected againat moisture and＂blowups＂．Guar－ anteed to have low leakage and to withstand high surge voltages．


| $\begin{gathered} \text { No. } \\ \mathrm{K} 2713 \end{gathered}$ | Mfd． | Wkg． Volts | D－L |  | No． | Mrd． | Wkg． Volts | D－L | Each |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | S | 25 | 11／4x $1^{13 / 4}$ | $\$ 0.37$ | 3 Leads－common negative |  |  |  |  |
| K769 | 10 | 25 | $13.16 \times 13 / 10$ | ． 37 | K783 | 10－10 | 50 | 21623／ | 74 |
| K770 | 25 | 25 | $31 / 681^{1316}$ | ． 44 | K 3164 | 8.8 | 150 | 11／$\times 2$ \％ | ． 74 |
| 2714 | 50 | 25 | 11／18x $1^{13 / 16}$ | ． 55 | K284 | 12－20 | 150 | 1782\％ | ． 85 |
| K2680 | 5 | 50 | 11／Ex $\mathrm{I}^{13 / 6}$ | ． 37 | K2788 | 16－18 | 150 | 3482\％ | 85 |
| 882 | 10 | 50 | ${ }^{14} 16 \times 1316$ | ． 40 | K3165 | 20－20 | 150 | $13 \times 21 / 8$ | 96 |
| K771 | 25 | 50 | $11 / 1081^{13 / 6}$ | ． 52 | K2795 | 20－30 | 150 | 7／8x $31 / 8$ | 1.00 |
| K2841 | 50 | 50 | 18／4x12／4 | ． 63 | $\overline{\mathrm{K} 2797}$ | 20.40 | 150 | 15／16．$\times 23$ | 04 |
| K772 | 4 | 150 | 1408 | ． 37 | K2800 | 30－30 | 150 | ${ }^{13} / 6 \times 23 / 8$ | 1.00 |
| K773 | 8 | 150 | $1{ }^{1} \times 11^{13}$ | ． 40 | K 2301 | 40－30 | 150 | $1 \times 23$ | 1.04 |
| K774 | 12 | 150 | $13 \times 1{ }^{13 / 10}$ | ． 44 | $K 2802$ | 40－40 | 150 | $1 \times 23$ | 1.08 |
| K775 | 16 | 150 | $14 / 6 \times 1{ }^{13} 16$ | ． 52 | K2803 | 50－30 | 150 | 1x2\％ | 1.11 |
| K776 | 20 | 150 | 1190113／6 | ． 55 | $\overline{\mathrm{K} 785}$ | 8－16 | 200 | 6 | 85 |
| 2840 | 30 | 150 | 1108 $1^{13 / 3 / 4}$ | ． 60 | K784 | 12－12 | 200 | 1316x2\％ | ． 85 |
| K777 | 40 | 150 | $7 \times 1818$ | ． 63 | K787 | 16－18 | 200 | 13／6x $\times 2$ \％ | ． 96 |
| K2715 | 50 | 150 | $15 / 10 \times 13$ | ． 74 | K2844 | 8－16 | 250 | 1316x $21 / 8$ | 96 |
| K778 |  | 450 | 11／68113 | ． 52 | K2846 | 16．16 | 250 | 13／6x2\％ | 1.11 |
| K779 | 8 | 450 | $13 \% \times 148$ | ． 55 | K786 | 8－8 | 450 | 1x2\％ | ． 96 |
| K780 | 12 | 450 | 160011／ | ． 67 | K2847 | 8.16 | 450 | 182\％ | 1.22 |
| K781 | 18 | 450 | ${ }^{134} \times 825$ | ． 81 | 4 L | ads－s | parate | and |  |
| K782 | 20 | 450 | $1410 \times 2$ \％ | ． 89 | K 2683 | 20－20 | 150 | 1×23／9 | 1.22 |
| K2718 | 30 | 450 | 110923／16 | 1.08 | K2843 | 40－20 | 150 | 11／6x ${ }^{3} / 6$ | 1.26 |
| K2719 | 8 | 500 | ${ }^{15} 6 \times 1{ }^{181}$ | ． 77 | K2845 | 8.16 | 250 | 1 x 2 | 1.26 |
| K2786 | 16 | 500 | 116825 | 1.19 | K2684 | 16－16 | 250 |  | 1.49 |
| K2787 | 20 | 500 | $1310 \times 36$ | 1.41 | K2685 | 8.8 | 450 | 1 | 1.22 |

＂PTM＂Tiny MIkes 450 V．Wkg．， 525 V．Peak


SPRAGUE AP Dry
Electrolytics， 600 v ．Can


These sturdy can type units are popular for all applications where working voltage is high and surges capacity full working voltage and low power factor are guaranteed．
No．Mfd．Wkg．V．D－L Each

|  |
| :---: |
|  |  |
|  |  |

SPRAGUE RW Wet Elec－
trolytic Replacements


Dry electrolytics of very high voltage formation designed to re－ place wet electrolytlcs．They will ripples that might cause ordinary 450 drys to break down．
Stock Cap．Wkg．Size Your $\times 2515$ Mrd．Vlts．D－L Cost
 $\begin{array}{lllll}K 2674 & 16 & 600 & 1315 \times 41 / 86 & 3.13\end{array}$

## SPRAGUE UHC High Capacity－Low

Voltage Tubulars
These miniature high capacity low voltage tubular dry electrolytics are specifically deaigned for use as cath ode bypass capacitors and as smooth ing filters for low voltage，high cur rent power supplies．They provide exceptionally low leakage current．

 | Each |
| :---: |
| $\$ 0.67$ |
| 1.11 |
| 1.56 |
| 2.01 |
| .74 |
| .96 |
| 1.33 |
| 2.23 |

## SW Paper Capacitors

For high voltage，high frequency uses，mica capacitor substitute as by－pass，blocking，or antenna coupling capacitors．Unita are oil－ impregnated in metal cases to withstand severe climatic conditions．They are non－ inductive and have the further advantage of very low power factor

| Stock No． | Cap． Mfd． | Wkg． Volts | $\begin{gathered} \text { Size } \\ D-L \end{gathered}$ | Tour Cost |
| :---: | :---: | :---: | :---: | :---: |
| K2722 | ． 002 | 1500 | 5／8513／4 | \＄0．40 |
| $K 2723$ | ． 005 | 1500 |  | 40 |
| K2724 | ． 000 | 150 | 8x13／8 |  |


| Stock |  | Wkg． | Size | Your |
| :---: | :---: | :---: | :---: | :---: |
| No． | Md． | Volts | D－L | Cost |
| K2725 | ． 02 | 1500 | 11／16x13／6 | \＄0．67 |
| K2726 | ． 05 | 1000 | 11／6x 17 | ． 75 |
| K2727 | ． 1 | 1000 | $3{ }^{3} \times 13$ | ． 81 |

## SPRAGUE PLS 450 Volt Dry Electrolytics

Exceptional quality in minimum size，PLS capacitors can be used with complete de． pendability where larger，old style can types were previoualy necessary．Alumi num cans have threaded bushing and lock． nut at one end for mounting．Etched foil process permits high capacity with very amall leakage currents and low power factor．
 ated from capacitor sections

| Stock | Cap． | Wkg． | Size Your | Stock | Csp． | Wkg． | Size Your |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No． | Mfd． | Volts | D－L Cost | No． | Mfd． | Voits | D－L Cost |
| K2700 | ， | 450 | $1 \times 2{ }^{18}$ 价50．77 | K2707 | 40 | 450 | 1308315／n\＄2．05 |
| K2701 | 8 | 450 | 1424\％的 96 | K2703 | 4－8 | 450 | $116 \times 215161.30$ |
| K2702 | 12 | 450 | 1x $2^{13}$ 价 1.26 | K2709 | 8－8 | 450 | 11／2x213／81．45 |
| K2703 | 16 | 450 | 1 $\times 215 / 81.41$ | K2710 | 8－16 | 450 | $13.5 \times 176$ |
| K2704 | 20 | 450 | 1\％${ }^{1} 213 / 161.56$ | K2711 | 16－16 | 450 | $11 / 2 \times 370$ 1.93 |
| K2705 | 25 | 450 | $11 / 8 \times 3$ \％ 161.67 | K2712 | 8－8．8 | 450 | 1 1 5 $\times 215 / 16$ |
| K2706 | 30 | 450 | 11） $6 \times 37 / 151.78$ |  |  |  |  |

## SPRAGUE Television Replacements

Hermetically sealed，all impregnated metal
tubulars，with outer cardboard insulating
tube．They are specially designed for high frequency and television use and have a strong，fiexible $21 / 6^{\prime \prime}$ pig tail lead at each end． In spite of compact size and form，working
 and test voltages are sufficiently great to mect the needs of most television applica

| Stock No | Mfd． | kg．Vol | est Vol | Diam | Len | ac |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K2600 | ． 05 | 2500 | 5000 | 11／6＂ | 3\％＂ | \＄0．73 |
| K2609 | ． 03 | 2500 | 5000 | $11.66^{\circ}$ | $23 /$ | ． 7 |
| K2644 | ． 002 | 2500 | 5000 | 1160 | $16^{\circ}$ | ． 62 |

## TRUTEST condensers

 Trutest Inverted Can Dry Electrolytics
DC dry electrolytic condensers in insulated cylia drical screw-base aluminum cans with $6^{\prime \prime}$ flexible insulated leads. Can insulated from condenser section. Maximum protection type for upright mounting: palnut aupplied for this can: $31 / 8$ "xisose". In three types. single section, dual section, dual with common neg.

| 450 V . Wkg. | - | 525 V. Peak |
| :---: | :---: | :---: |
| No. | Mfd. | Each |
| K3323 | 4 | \$0.56 |
| K3324 | 8 | . 68 |
| K3329 | 12 | . 90 |
| K3300 | 16 | . 99 |
| K3301 | 20 | 1.09 |
| K3309 | 30 | 1.26 |
| K3310 | 40 | 1.49 |
| 525 V . Wkg. | - | 600 V. Peak |
| No. | Mfd. | Each |
| K3311 | 8 | \$0.94 |
| K3312 | 16 | 1.44 |
| $\overline{600} \mathrm{~V}$. Wkg.-Highest quality series wound construction. |  |  |
| No. | Mfd. | Each |
| K3313 | 4 | \$1.19 |
| K3314 | 8 | 1.66 |
| K3315 | 12 | 1.95 |
| K3347 | 16 | 2.23 |

## Dual Section Units

## 450 V. Wkg

 Same size as single units fexible insulated leade| No. | M ${ }^{\text {d }}$. | Each |
| :---: | :---: | :---: |
| K3398 | 8-8 | 51.03 |
| K3359 | 8-16 | 1.22 |
| K3367 | 16-16 | 1.42 |
| K3368 | 20-20 | 1.49 |
| 450 V . Wkg. | 525 V. Peak |  |
| Same size as single units. mon negative construction. flexible insulated leads. |  |  |
| No. | Mfd. | Each |
| K3369 | 8-8 | \$1.03 |
| K3370 | 8-16 | 1.22 |
| K3371 | 16-16 | 1.42 |
| K3372 | 20-20 | 1.49 |

## FULLY GUARANTEED FOR 1 YEAR!

For best results, use TRUTEST filter and by-pass condensers. They are manufactured to conform with the highest standards Electroly mect all R.M.A. quality standards. All TRUTEST Ory $4 \%$ to $8 \%$ leakage less than 1 Ma. per microfarad; all capacity (suitahle for troplc use)

## "Mites" Ultra Compact Dry Electrolytic Condensers


> $\begin{array}{ll}\text { Stock Cap. Wkg. Size } \\ \text { No. } & \text { Mfd. Vlts. }\end{array}$

Ultra compact units that can be used in a large percentage of radio repair re-
quirements. Especially well suited for use in a.d.-d.c. midgets, and wherever space is limited. Self-supporting wire leads are permanently attached to the end plates. All have cardboard outer sleeves. Conservatively rated.


Self-Mounting Dry Electrolytics
In uninsulated metal cans. Have mounting car: to be beat back under chassis. Connec tions to coded lug ter minals. Perfectly sealed.

 iny mica concensers in moldings. Provided with pigtail wirethrough Sizee
$m f d$. are 1000 v. test, 500 v. d.e. wkg - i above .004 mfd , are 600 v . d.c. test, 300 v. d.c. wkg.
 No. Mid. Cost| No. Mid. Cost
 K3439 .000025 8e K3443 .00075 9c
 $\begin{array}{llllll}\text { K3405 } & .0001 & 8 \mathrm{c} & \text { K3400 } & .0015 & 11 \mathrm{c} \\ \text { K3440 } & .00015 & 8 \mathrm{e} & \text { K3418* } & .002 & 14 \mathrm{c}\end{array}$ $\begin{array}{llllll}\text { K34407 } & .0002 & 8 \text { ce } & \text { K3404* } & .003 & 18 \text { c } \\ \text { K3408 } & .00025 & 8 c & \text { K } 3446^{\circ} & .004 & 21 c\end{array}$

 | $\mathbf{K} 3441$ | .0004 | $9 c$ | $\mathbf{K} 3401^{*}$ | .006 | 28 c |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{K} 3111$ | .0005 | $9 c$ |  |  |  |

## Servicemen's Specials

## P-B Tubular Electrolytic Condensers WIth <br> Self-Supporting Leads <br> Then 00

For better performance at less cost, you can't beat "P-B'" tubular electrolytics. Each capacitor backed by engineering skill and manufacturing experience of many years Built to rigid standards, and assure satisfactory perform-
ance, with long life. Specifically designed for replacement and for manufacturing of new radio sets and equipment. Compact cardboard containers. Wax-sealed, impregnated and completely mois-
ture-proofed. Equipped with tinned copper pigtail leads.

> No.
$\times 3800$
$\times 3801$
> K 3802
K 3802
> K 3802
K 3803
> K4223
> $\times 4224$
> K3805
> K3806
> K3807
> K3808
> $\mathbf{K} 3809$
$\mathbf{K 3 8 1 7}$
> Mfd
10
25
50
16
20
30
40
50
100
8
$8-8$
10
16
> Mfd.
10
25
50
16
20
30
40
50
100
8
$8-8$
10
16
> Wkg. V.
25
25
25
150
150
150
150
150
150
450
450
450
450
> Each
$19 c$
$24 c$
$29 c$
$26 c$
$29 c$
$31 c$
$34 c$
$39 c$
$59 c$
$30 c$
$56 c$
$35 c$
$51 c$


P-B Dual Electrolytics With Mounting Brackets Dual-section eldensers designed ectrolytic cona cement receivers in CA-DC.Com pact size, completely insulated, wax-sealed moisture proofed, fully mpregnated cardboard containinsulated colorpped with flexible, insulated color-coded wire leads. Special mounting bracket is provided on each condenser. Working voltage, each capacitor, 150 V . DC.

Three-Lead Dual Unit Stock Common Negative

| Stock | Compacity | Your |
| :---: | :---: | ---: |
| No. | Mfd. | Cost |
| K 225 | $20-20$ | $39 c$ |
| K4226 | $30-20$ | $42 c$ |
| K4230 | $30-30$ | $47 c$ |
| K4227 | $40-30$ | $53 c$ |
| K4231 | $40-40$ | $58 c$ |
| K4228 | $50-30$ | $58 c$ |
| K4232 | $50-50$ | $68 c$ |
| Three-Lead Dual Unit |  |  |
| Common Positive |  |  |
| Stock | Capacity | Your |
| No. | Mfd. | Cost |
| K4233 | $20-12$ | $42 c$ |
| Four-Lead Dual Unit |  |  |
| Stock | Capacity | Your |
| No. | Mfd. | Cost |
| K4235 | $20-20$ | $43 c$ |

## Pyramid Dry Electrolytic Condensers

|  |  | "TYNEE-DRY" Electrolytics |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Ideally suited for limited working space. In sealed metal tubes with cardboard sleeves, $3^{\prime \prime}$ pigtails. |  |  |  |  |  |
|  | Mf | kg. V. Size (in.) | Each |  | Mrd. | Wkg. V. Sire (im.) | Each |
| K8 | 5 | 1146118 | 31 c | K8 |  |  |  |
|  | 10 |  | 35 c | K8 |  | 450 14/4x2 | \$1.11 |
|  | 5 | 110 | 44 c 54 54 | Dual | Section, | Common Ner. |  |
|  | 100 | 1 |  | K846 | 10.10 | 13 ax1/3 |  |
|  | 8 | 11 | 35 c | K847 | 16-18 | 150 13/4x |  |
| K8 | 16 | 150 15010 | 44 e | K88 | 200 |  |  |
| K834 | 20 | 150 113 | 47 e | ${ }^{\mathrm{K} 85}$ | 30-30 | 150 |  |
| K | 30 | 15 | 50 c | K85 |  | 150 |  |
| K836 |  | 20, | 546 | K85 | 50-30 | ${ }_{150}^{150}$ |  |
| K837 |  | 150 | 70 c | K85 | $80-4$ | 150 |  |
| K838 |  | 150 1\% | 5 |  |  | ${ }_{450}{ }^{1504}$ |  |
| K839 |  | 昒 |  |  |  |  |  |
|  |  |  |  | K857 | 20-20 | ${ }_{450}^{450} 110$ | - 81.42 c |
| K8 |  | 450 | 54 c |  |  |  |  |
| $\begin{gathered} \mathbf{K} 842 \\ \mathbf{K} 843 \end{gathered}$ | $\begin{array}{r} 16 \\ 20 \\ \hline \end{array}$ |  | 75c | K858 | $\begin{gathered} \text { Dual S S } \\ 20-20 \end{gathered}$ | $\begin{aligned} & \text { Etion, Four Leads } \\ & 150 \quad 1 \times 2^{\frac{3}{6}} \end{aligned}$ | \$1.04 |
| Inverted Can Type Screw base alum. can. Pal <br>  |  |  |  |  |  | - |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  | $\mathrm{F}_{3}$ |  |  |  |
|  |  | 50 |  |  |  |  |  |  |  |
|  | K860 | $\begin{aligned} & 450 \\ & 450 \end{aligned}$ |  |  |  |  |  |
|  | K861 | $16 \quad 450$ |  | 225V pk. $\mathbf{6}^{\circ} \mathrm{lds}$. Assem. mitg, strap. |  |  |  |
|  | 862 | 20450 | 1.33 |  |  |  |  |  |  |
|  |  | $30 \quad 450$ | 1.52 |  |  |  |  |
|  |  | 40 |  |  |  | (nches) |  |
|  | Sect |  |  | K7 | 30-30 | $1 \times 2$ | c |
|  |  |  |  |  | 40-20 |  |  |
|  | 16-1 | 6 450 | 1.71 | K798 |  |  |  |
| 67 | 20-2 | - 450 | 1.80 | K799 | $80-40$ | $1215 \times 23$ |  |

# MALLORY condensers 

## Inverted Can Type Dry Electrolytics



Supplied in aluminurn threaded neek type containers with special hardware to replace original units Tyardieas of diameter
Type RS-Single Sections Stock Type Cap. Wkg. Your
No, No. Mfd. Vlts. Cost $\begin{array}{llccc}\text { K4031 } & \text { RS207 } & 30 & 250 & \$ 1.33 \\ \mathbf{K 3 9 2 0} & \text { RS213 } & 8 & 450 & \end{array}$ $\begin{array}{lllll}\text { K3920 } & \text { RS213 } & 8 & 450 & .96 \\ \text { K3921 } & \text { RS215 } & 12 & 450 & 1.26\end{array}$ $\begin{array}{lllll}\text { K4032 } & \text { RS216 } & 16 & 450 & \mathbf{1 . 4 1} \\ \mathbf{K 3 9 3 6} & \text { RS219 } & 20 & 450 & \mathbf{1 . 5 6}\end{array}$ $\begin{array}{lllll}\text { K3937 } & \text { RS223 } & 30 & 450 & 1.78 \\ \text { K3938 } & \text { RS224 } & 40 & 450 & 2.05\end{array}$

## Type RM-

## Separate Sectlons

 K 3934 RM262 8 -8 $\quad 450 \quad \$ 2.45$ K3935 RM265 8-8.8 Stock Type Cnp. Wkg. Sire YourNo. No. Mid. Vls. Ins. Cont $\begin{array}{lllll}\text { K4058 H5693 } & 8 & 600 & 11 / 6 \times 4 & \$ 2.34\end{array}$


These capacitors are supplied in waxed cardboard tubes with an mounting

Single Sections

Stock Type Cap. Wkg. Your $\begin{array}{llccc}\text { No. } & \text { No. } & \text { Mid. } & \text { Vits. } & \text { Cosi } \\ \text { K4119 } & \text { ST555 } & 8 & 400 & \$ 0.55 \\ \text { K1121 } & \text { ST597 } & 16 & 450 & .81\end{array}$ K3939 ST598 $\begin{array}{llll}\text { K3940 ST599 } & 30 & 450 & 1.33\end{array}$ Duals, Common Negative Stock Type Cap. Wkg. Your \begin{tabular}{llrr}
No. \& No. \& Mid. \& Vits. <br>
\hline

 

K4127 \& 2 N 509 \& $20-20$ \& 150 <br>
$\mathbf{K} 3941$ \& 2 N 513 \& $30-30$ \& 150 <br>
$\mathbf{K} 3912$ \& 1.04 <br>
\hline

 

K 3942 \& $2 N 511$ \& $40-40$ \& 150 <br>
K 4128 \& $2 N 516$ \& $8-8$ \& 250 <br>
2N \& 1.19 <br>
\hline
\end{tabular} K4130 2N518 Duals, Separate Sections $\begin{array}{ccccc}\text { Stock Type } & \text { Cap. } & \text { Wkg. Your } \\ \text { No. No. } & \text { Mid. } & \text { Vlts. Cost }\end{array}$ $\begin{array}{lllll}\text { K } 3943 & 2 \mathrm{~S} 556 & 30-30 & 150 & \$ 1.30\end{array}$ $\begin{array}{lllll}\text { K } 39.44 & 28569 & 16-16 & 450 & 1.78\end{array}$

## Triple Units Com. Neg.

 Stock Type Cap. Wkg. CourNo. No. Mid. Vits. Cost K 3946 3N527 $20-20-20 \quad 150-25 \quad \$ 1.30$ |  |  |  |
| :--- | :--- | :--- | :--- | Stock Units Sep. Sections No. No. Mid. Vle. Cost $\begin{array}{lllll}\mathrm{K} 3692 & 3 \mathrm{~S} 579 & 8-8-20 & 450-25 & \$ 1.49\end{array}$ $\begin{array}{lllll}\text { K3949 } & 3 \mathrm{~S} 582 & 8-8-8 & 250 & 1.33 \\ \text { K3695 } & 3 \$ 584 & 8-8-8 & 450 & 1.67\end{array}$ Quad Units Sep. Sections K3950 4S715 16-16, 10-10 150-25 \$1.71




nally insulated.
No. No. Vits. Mifd. Cost
K3891 BS26
K3892 BS29
$\begin{array}{ll}\mathrm{K} 3892 & \text { BS29 } \\ \mathrm{KS} 389 & \text { BS }\end{array}$
$\begin{array}{ll}\text { K3893 } & \text { BS36 } \\ \text { K3894 } & \text { BS39 }\end{array}$
M3895 DS45
$\begin{array}{ll}\text { K3916 } & \text { BS48 } \\ \text { K3919 } & \text { BS62 }\end{array}$
K3922 BS65
K3924 BS81
$\times 3926$ BS91

## 

"TC" Ultra-Compact Tubular Dry Electrolytics
These compact hermetically sealed tubulars are furnished in aluminum tubes with external insulating cov ers and $3^{\prime \prime}$ bare wire leads. Smalle than cardboard tubulars of equiva a premium.

| Stock No. | Type No. | Cap. Mid. | Wkg. Vlts. | Your Cost | Stock No. | Type No. | Cap. Mid. | Wkg. Vles. | Your Cost |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K805 | TC310 | 1000 | 3 | \$1.30 | K882 | TC47 | 30 | 150 | \$0,60 |
| K807 | TC60s | 500 | 6 | 1.11 | K988 | TC48 | 40 | 150 | . 63 |
| K808 | TC610 | 1000 | 6 | 1.56 | K816 | TC49 | 50 | 150 | . 82 |
| K809 | TC1505 | 500 | 15 | 1.56 | K817 | TC52 | 10 | 250 | . 52 |
| K848 | TC22 | 10 | 25 | . 37 | K868 | TC55 | 20 | 250 | . 74 |
| K875 | TC26 | 25 | 25 | . 44 | K888 | TC71 | 8 | 450 | . 55 |
| K876 | TC29 | 50 | 25 | . 55 | K889 | TC72 | 10 | 450 | . 63 |
| K811 | TC2501 | 100 | 25 | . 82 | K993 | TC74 | 15 | 450 | . 82 |
| K987 | TC32 | 10 | 50 | . 40 | K869 | TC75 | 20 | 450 | . 89 |
| K812 | TC36 | 25 | 50 | . 52 | K870 | TC77 | 30 | 450 | 1.08 |
| K813 | TC39 | 50 | 50 | . 63 | K871 | TC78 | 40 | 450 | 1.30 |
| K814 | TC42 | 10 | 160 | . 44 | K872 | TC82 | 10 | 500 | 1.66 |
| K815 | TC45 | 20 | 150 | . 55 | K873 | TC92 | 10 | 600 | 1.82 |

## TCD and TCS Aluminum Tubulars



TCD-Duals, Common Negative Fig. A Type TCD and TCS tubulars are aluminum encased. The first are the common negative type with
three terminals. The TCS tubulars three terminals. The TCS tubulars
are the separate section type with are the separate section type with
four terminals and can replace the four terminals and can replace the common negative, common posi tive, or separate section capacitors Mallory type TH mounting clips.

|  | Negative Fig. A |  |  |  | , 8 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Type | Mid. | Vlis. | Each | No. | Type | Mfd. | Vits. | Each |
| K87.1 | TCD26 | 25-25 | 25 | \$0.78 | K907 | TCs44 | 15-15 | 150 | \$1.16 |
| K890 | TCD45 | 20-20 | 180 | . 96 | K908 | TCS45 | 20-20 | 150 | 1.23 |
| K891 | TCD47 | 30-30 | 150 | 1.04 | K909 | TC847 | $30-30$ | 150 | 1.33 |
| K892 | TCD48 | 40-40 | 150 | 1.19 | K910 | TCS48 | 40-40 | 150 | 1.49 |
| K893 | TCD52 | 10-10 | 250 | . 89 | K911 | TCS52 | 10-10 | 250 | 1.27 |
| K899 | TCD55 | 20-20 | 250 | 1.26 | K912 | TCS55 | 20-20 | 250 | 1.64 |
| K900 | TCD62 | 10-10 | 350 | 1.04 | K915 | TCS61 | 8-8 | 350 | 1.27 |
| K901 | TCD65 | 20-20 | 350 | 1.41 | K918 | TCS64 | 15-15 | 350 | 1.64 |
| K902 | TCD71 | 8-8 | 450 | . 96 | K919 | TCS71 | 8-8 | 450 | 1.33 |
| K903 | TCD72 | 10-10 | 450 | 1.08 | K921 | TCS74 | 1515 | 450 | 1.82 |
| K904 | TCD74 | 15-15 | 450 | 1.41 | K923 | TCS75 | 20-20 | 450 | 1.97 |
| K906 | TCD75 | 20-20 | 450 | 156 |  |  |  |  |  |



Types FP and WP Fabricated Plate Metal Cased Dry Electrolytics
These compact capacitors are available in single, dual, triple and quad arrangements. All types use the mounting ears as the negative terminal. Separate positive ter type is supplied with one BP type mounting wafer

| Stock | Cap. | Wkg. | Your | Stock | Cap. | Wkg. | Your |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Mfd. | Vlts. | Cost | No. | Mid. | Vlis. | Cost |
| K3644 | 3000 | 10 | \$3.31 | K3701 | 10-80 | 450-100 | \$2.45 |
| K3645 | 1000 | 15 | 2.15 | K3702 | 80-10 | 450 | 2.45 |
| K3646 | 2000 | 15 | 3.34 | K3703 | 40-40-40 | 25 | 1.08 |
| K3647 | 100 | 25 | . 96 | K3704 | 15-15-1000 | 150-150-25 | 1.52 |
| K3648 | 500 | 25 | 2.01 | K 3705 | 40-20-200 | 150-150-25 | 1.64 |
| K3649 | 1000 | 25 | 3.13 | K3666 | 40-20-20 | 150-150-25 | 1.08 |
| K3650 | 500 | 50 | 3.31 | K3706 | 50-30-100 | 150-150-25 | 1.52 |
| K3683 | 50 | 150 | . 85 | K 3707 | 30-20-20 | 200-200-25 | 1.11 |
| K3684 | 100 | 150 | 1.27 | K3708 | 15-10-20 | 350-350-25 | 1.04 |
| K3685 | 30 | 350 | . 96 | K3709 | 30-10-20 | 350-250-250 | 1.41 |
| K3686 | 50 | 350 | 1.30 | K3710 | 30-20-20 | 350-350-25 | 1.41 |
| K3689 | 125 | 350 | 2.34 | K3668 | 10-10-20 | 450-450-25 | 1.19 |
| K3658 | 10 | 450 | . 67 | K3711 | 20-15-15 | 450-350-300 | 1.52 |
| K3659 | 15 | 450 | . 89 | K3712 | 20-20-20 | 450-450-25 | 1.56 |
| K3660 | 20 | 450 | 1.00 | K3713 | 40-40-20 | 450-450-25 | 2.45 |
| K3691 | 30 | 4.50 | 1.23 | K3669 | 20-20-20 | 150 | 1.08 |
| K3693 | 40 | 450 | 1.45 | K3714 | 40-40-40 | 150 | 1.41 |
| K3681 | 80 | 450 | 2.20 | K 3715 | 10-10-10 | 350 | 1.23 |
| K3694 | 1000-1000 | 15 | 3.92 | K3670 | 10-10-10 | 450 | 1.41 |
| K3662 | 30.30 | 150 | 1.00 | K3671 | 40-40-30-20 | 150-150-150.25 | 1.49 |
| K3699 | 50-50 | 150 | 1.19 | K3673 | 15-15-10-20 | 450-450-450-25 | 1.71 |
| K3700 | 15-15 | 350 | 1.00 | K3672 | 20-15-20-20 | 450-450-25-25 | 1.64 |
| K 3663 | 20-20 | 350 | 1.22 | K3716 | 40-30-10-20 | 450-450-450-25 | 2.53 |
| K3664 | 10-10 | 450 | 1.08 | K3717 | 10-10-10-10 | 450 | 1.71 |
| K3665 | 20-20 | 450 | 1.19 | K3718 | 20-20-20-20 | 450 | 2.45 |
| K 3680 | 40-40 | 450 | 2.38 |  |  |  |  |
| Type PS Molded Plastic Sockets |  |  |  |  |  |  |  |
| The PS type socket is made of molded plastic, used for plug-in mounting of FP or WP type capacitors. (Blank ear on the eapacitor should be removed to permit polarization with respect to socket.) <br> K3719-PS4 for $1^{\prime \prime}$ Diam. Cond. |  |  |  |  |  |  |  |

"TP" Paper Tubulars


Wax impregaated, in waxed card. board tubes. Seal, type wax afford maximum weather protection.


| Oil Impregnated Tubulars |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| OW cardboard tubulars are oil impregnated and wax sealed. OT metal cased tubulars are hermetically sealed and provided with insulating sleeves. |  |  |  |  |
| Stock No. | $\begin{aligned} & \text { Type } \\ & \text { No. } \end{aligned}$ | Cap. <br> Mfd. | Wkg. Vlts. | Your Cost |
| K4011 | OW340 | . 0005 | 1600) |  |
| K4012 | OW341 | . 001 | 1600 |  |
| K4013 | 0W331 | . 002 | 1600 |  |
| K4014 | OW342 | . 003 | 1800 |  |
| K4015 | OW343 | . 004 | 1600 |  |
| K4060 | OW332 | . 005 | 1600 |  |
| K4016 | OW344 | . 006 | 1600 |  |
| K4017 | OW345 | . 007 | 1600 |  |
| K4019 | OW346 | . 0075 | 1600 |  |
| K4018 | OW333 | . 008 | 1600 |  |
| K4062 | OW334 | . 01 | 1600 |  |
| K4063 | OW335 | . 015 | 1600 |  |
| K4064 | OW336 | . 02 | 1600 |  |
| K4065 | OW337 | . 03 | $1600)$ |  |
| K4066 | OW338 | . 04 | 1600 | $37 e$ |
| K4067 | OW339 | . 05 | 1600 | 40c |
| K4020 | OT101 | . 01 | 600 | 48 c |
| K4025 | OT103 | . 02 | 800 | 52 c |
| K4035 | OT108 | . 05 | 600 | 60 c |
| K4036 | OT110 | . 1 | 600 | 67 c |
| K4037 | OT113 | . 25 | 600 | \$1.00 |
| K4038 | OT116 | . 5 | 600 | 1.33 |
| K4039 | OT301 | . 01 | 1000 | 52. |
| K4040 | OT303 | . 02 | 1000 | 55. |
| K4041 | OT306 | . 05 | 1000 | 67 c |
| K4042 | OT310 | . 1 | 1000 | 89 c |
| K4043 | OT370 | . 002 | 1600 | 40c |
| K4044 | OT377 | . 003 | 1600 | 40c |
| K 4045 | OT371 | . 005 | 1600 | 40c |
| K4046 | OT372 | . 008 | 1600 | 44 c |
| K4047 | OT373 | . 01 | 1600 | 52 c |
| K4048 | OT375 | . 015 | 1800 | 55 e |
| K4049 | OT376 | . 02 | 1800 | 55 c |
| K4050 | OT378 | . 03 | 1600 | 63 c |
| K4051 | OT379 | . 04 | 1600 | 63 c |
| K4052 | OT380 | . 05 | 1600 | 67 c |
| K1021 | OT458 | . 0025 | 2000 | 55 c |
| K4022 | OT459 | . 005 | 2000 | 60 c |
| K4023 | OT460 | . 0075 | 2000 | 63 c |
| K4024 | OT461 | . 01 | 2000 | 67 c |
| K4055 | OT462 | . 0125 | 2000 | 67 c |
| K4026 | OT463 | . 015 | 2000 | 67 c |
| K4027 | OT464 | . 02 | 2000 | 74 c |
| K 5028 | OT465 | . 03 | 2000 | 77 c |
| K4029 | OT466 | . 04 | 2000 | 77 c |
| K4030 | OT467 | . 05 | 2000 | 81e |

## CORNELL-DUBILIER condensers



No. Type Mrd. V. Size Each K2567 BRH601 $100 \quad 6 \quad 3 / 6 \times 11 /$ /r $\$ 0.66$ $\begin{array}{lllll}\text { K2557 BRH6025 } & 250 & 686 \times 1 / 16 & .84\end{array}$ K2568 BRH605 $500 \quad 6 \quad 31 \times 21 / 2 \quad 1.11$ $\begin{array}{lllll}\text { K2569 BRH610 } & 1090 & 6 & 6 \times 2 & 1.56\end{array}$
 K2575 BRH121 10012 182

 \begin{tabular}{llll}
K 2577 \& BRH125 \& 500 \& 12 <br>
\hline

 $\mathbf{y} \mathbf{x} 25 / 51.34$ K2578 BRH151 $100155 / 5 \times 1 / 1 / 10.77$ $\begin{array}{llllll}\text { K2559 } & \text { BRH1525 } & 250 & 15 & 3 / 4 \times 2 & 1.11 \\ \text { K2580 } & \text { BRH155 } & 500 & 15 & 5 / \times 21 / 2 & 1.56\end{array}$ $\begin{array}{lllll}\text { K2580 } & \text { BRH1155 } & 500 & 15 & 5 \times 21 / 2 \\ \text { K2579 } & 1.56 \\ \text { BRH251 } & 100 & 25 & 62 & .81 \\ \text { K2581 } & \text { BRH2525 } & 250 & 25 & 122\end{array}$ 

K2581 \& BRH2525 \& 250 \& 25 <br>
K2553 \& BRH255 \& 500 \& 25 \& $1 \times 21$ <br>
\hline
\end{tabular} K2554 BRH501 $100 \quad 50 \quad 3 / 422$



Compact mica condensers in molded bakelite housings. Type 1W (fig. A) is $2 / 4 x^{3 / 4}$; type $5 W$ (fig. B) volts test, 500 VDC up to .003 nfd. 300 VDC above.

| No. | Mfd. | Fig. | Each |
| :---: | :---: | :---: | :---: |
| K1309 | . 000005 | B | 15 c |
| K1355 | . 00001 | B | 15 c |
| K1356 | . 00002 | B | 15 c |
| K1357 | . 000025 | B | 15 c |
| K1311 | . 00003 | B | 15 c |
| K1312 | . 00004 | B | 12c |
| K1358 | . 00005 | B | 12 c |
| K1365 | . 00007 | B | 12 c |
| K1359 | . 0001 | B | 12 c |
| K1360 | . 00015 | 8 | 12 c |
| K1361 | . 0002 | B | 12c |
| K1362 | . 00025 | 8 | 15 c |
| K1368 | . 0003 | B | 15 c |
| K1369 | . 0004 | B | 15 c |
| K1363 | . 0005 | B | 15 c |
| K1370 | . 0006 | B | 15 c |
| K1364 | . 001 | A | 18 c |
| K1375 | . 0015 | A | 18 c |
| K1366 | . 002 | A | 24 c |
| K1378 | . 0025 | A | 26c |
| K1367 | . 003 | A | 29 c |
| K1372 | . 004 | A | 32c |
| M1373 | . 005 | A | 35 c |
| K1374 | . 006 | A | 44 c |
| K1377 | . 01 | A | 53 c |

## "KR" Dry Electrolytics

 Extremely compact etched foil dry electrolytics with color coded
leads. May be mounted in any position-either above or below sub-panel. Seamless drawn aluminum can equipped with mounting nut. Furnished with long insulated color coded leads.

[^1]
## "BLUE BEAVER"

## Type BR Dry Electrolytics

Extremely small and very handy to use. Feature: Electro-Chemical etching that eliminates corrosion; HI-Formation Process that affords higher voltage breakdown; Hi-Pressure Centrifuge that provides better impregnation and gives a lower power factor: Hi-Purity Aluminum Foil that makes for better direct current leakage recovery; Special C-D Super-Purity Cellulose Separator that gives extra long life; Double aging that provides more stable characteristics

| Na. | 25 Vo | Mids. | C. | Each | 250 Volts D. C. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K1090 | BR102 | 10 | $88 \times 11 / 4$ | 50.37 | K1105 | BR425 | 4 | 8/8x11/4 | \$0.40 |
| K1091 | BR202A | 20 | 8,8x $11 / 4$ | . 40 | K1106 | BR825 | 8 | $8.8 \times 1316$ | . 44 |
| K1092 | BR252A | 25 | 5/8x11/6 | . 44 | K1107 | BR 1225 | 12 | 8/8x2 | 59 |
| K1093 | BR502 | 50 | 5/8817/4 | . 55 | K1108 | BR1625 | 16 | 3191110 | 66 |
|  | 50 Volts D. C. |  |  |  | K109 | BR2025 | 20 | 趐111/6 | . 73 |
| K1094 | BR550 | S | 51911/6 | 37 | K1110 | BR4025 |  |  | . 85 |
| K1095 | BR105 | 10 | $86{ }^{-1 / 16}$ | . 40 |  | $\begin{array}{r} 450 \\ \text { BR } 145 \end{array}$ |  |  |  |
| K1096 | BR205 | 20 | $88 \times 17 / 6$ | . 44 | K1085 | BR245 | $\frac{1}{2}$ | 6 | . 44 |
| K1097 | BR255 | 25 | 58170 | . 51 | K1111 | BR445 | 4 | $8 \times 1$ | . 51 |
| K1098 | BR505 | 50 | 3/38111/6 | . 62 | K1112 | BR815 | 8 | $31 \times 2$ | . 55 |
|  | 150 Volts |  | D. C. |  | K1087 | BR1045 | 10 | 7/3x ${ }^{2}$ | . 62 |
| K1099 |  |  | 8/81/14 | . 37 | K1113 | BR1245 | 12 | 8/8x2 | 66 |
| K1100 | BR815 | 8 | 518110 | . 40 | K1114 | BR1645 | 16 | 1/8x21/2 | . 81 |
| K1101 | BR1215 | 12 | 3/8x 17 | . 44 | K1115 | BR2045 | 20 | 1x21/2 | . 89 |
| K 1102 | BRI615 | 16 | 84x ${ }^{171 / 4}$ | . 51 | K1055 | BR3045 | 30 | $1 \times 3$ | 1.07 |
| K1103 | BR2015 | 20 | 3/3×111/6 | . 55 | K1089 | BR4045 | 40 | 183 | 1.29 |
| K1054 | BR3015 | 30 | $31 \times 2$ | . 59 |  | 500 V | Its | D. C. |  |
| K1104 | BR4015 | 40 | $3 \times 2$ | . 62 | K1116 | BR850 | 8 | 7/8x11/60 | 77 |
| K1033 | BR5015 | 50 | \% ${ }^{6} \times 2$ | . 73 | K1117 | BR1650 | 16 | 1×21/2 | 1.13 |

## BRL Dual Beavers (Com. Neg.)

Equipped with sturdy center mounting strap; only one screw to mou

| Stk. No. | Type | Cap. Mfd. | Volts | Size | Each |
| :---: | :---: | :---: | :---: | :---: | :---: |
| K1119 | BRL2101 | 10-10 | 25 | 8/8x13/6 | \$0.62 |
| K1121 | BRL115 | - 10-10 | 50 | 5, $\times 2 \times 2 / 6$ | . 73 |
| K1124 | BRL2215 | 20-20 | 150 | 7/6x 313 | . 96 |
| K1079 | BRL4215 | 40-20 | 150 | 15, $\times 2$ 21/2 | 1.03 |
| K1125 | BRL8125 | 8-16 | 250 | 7/8×2\% | . 96 |
| K1126 | BRL1125 | 16-16 | 250 | $1 \times 2 \%$ | 1.11 |
| K1127 | BRL8845 | 8-8 | 450 | 1x23/4 | . 96 |
| K1128 | BRL8145 | 8-16 | 450 | 11106314 | 1.22 |


| Triple Common Negative Units |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| K1080 | BRL2215C | $20-20 / 20$ | $150 / 25$ | $1 \times 21 / 3$ | 1.29 |
| K1081 | BRL4215C | $40-20 / 20$ | $150 / 25$ | $1 \times 23 / 4$ | 1.41 |
| K1082 | BRL5315C | $50-30 / 20$ | $150 / 25$ | $11 / 823$ | 1.66 |

## "DA" Metal Cased Paper By-Pass Condensers

## "EZ" Unlversal Mtg. Dry Electrolytics



Highest grade aluminum ed Kraft tis sue; impregnated in wax compound, oil-cooled, potted in special wax. Lug termina
feet for simple assembly.


## High Voitage Dry to

 Replace Wet Electrolytics High Formation-High Voltage dry electrolytics place wets. Available in placee universal types. The 10 mfd . dry unit will The 10 mid. dry unit win replace 4 wet 12 mfd .; 20 mfd . replaces weta from 12 to 24 mfd : 40 mfd . replaces wets from 24 to 40 mfd .No. Type Mid. Size Esch
 $\begin{array}{lllll}\text { K1059 } & \text { WR30 } & 30 & 1 / 531 / 6 & 1.41 \\ \text { K1056 } & \text { WR40 } & 40 & 11 / 5 \times 31 / 4 & \text { L. } 48\end{array}$

FA Low-Voltage High-Capacity Units

Designed especially for low-volt age high-capacity requirements.

| No. | Mfd | Vits. |  | Each |
| :---: | :---: | :---: | :---: | :---: |
| K2560 | 1000 | 12 | 13/6x32/4 | 52.22 |
| K2561 | 1500 | 12 | 13:8x ${ }^{13}$ | 2.68 |
| K2562 | 2000 | 12 | 1368 $11 / 8$ | 2.89 |
| K2544 | 4000 | 12 | $13 \times 41 / 8$ | 4.91 |
| K2563 | 1000 | 18 | 136 $\times 313$ | 2.68 |
| K2564 | 2000 | 18 | 1868417 | 3.56 |
| X2545 | 1000 | 25 |  | 3.12 |
| K2565 | 2000 | 25 | $12 \times 43 / 8$ | 5.35 |
| K2566 | 1000 | 35 | 13,484\% | 3.5 |
| K2546 | 500 | 50 | 11884\% | 2.91 |
| K2551 | 1000 | 50 | 131841/8 | 5.35 |
| K2555 | 2000 | 50 | 21/2x41/8 | 1.15 |

"UP" Dry Electrolytics

Smallest can type dry electrolytics. Hermetically sealed in aluminum cans, terminal lugs on bakelite inulating cover. Can negative. Projecting tongues for vertical mounting on chassis or mounting
plate. Tongues have wire holes: plate. Tongues have wire holes;
low leakage and power factor, delow leakage and po
pendable operation.

| No. | Cap. | Vits. | Ins. | Each |
| :---: | :---: | :---: | :---: | :---: |
| K1138 | 50 | 150 | $1 \times 2$ | \$0.84 |
| K1139 | 50 | 350 | $1 \times 3$ | 1.29 |
| K1140 | 125 | 350 | 1863 | 2.33 |
| K1150 | 10 | 450 | $1 \times 2$ | . 66 |
| K1141 | 15 | 450 | $1 \times 2$ | 88 |
| K1151 | 20 | 450 | $1 \times 2$ | 1.00 |
| K1152 | 40 | 450 | 1x2 | 1.45 |
| K1142 | 80 | 400 | 1\%\% ${ }^{1}$ | 2.19 |
|  | Dual Section Units |  |  |  |
| K1153 | 20-20 | 150 | $1 \times 2$ | . 88 |
| K1154 | 30-30 | 150 | $1 \times 2$ | 1.00 |
| K1149 | 50-50 | 150 | $1 \times 3$ | 1.19 |
| K1155 | 20-20 | 250 | $1 \times 2$ | 1.00 |
| K1156 | 10-10 | 450 | $1 \times 2$ | 1.07 |
| K1143 | 20-20 | 450 | $1 \times 3$ | 1.48 |
| K1144 | 40.40 | 450 | 11/6x | 2.37 |


| Triple Section Units |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: |
| K1209 | $50-50 / 20$ | $150 / 25$ | $1 \times 3$ |  |  |  |
| K1145 | $20-20 / 100$ | $150 / 6$ | 1.29 |  |  |  |
| K1146 | $40-20 / 100$ | $150 / 12$ | $1 \times 3$ |  |  |  |
| K1157 | $20-20-20$ | 150 | 1.00 |  |  |  |
| K1147 | $40-40-40$ | 150 | 1.11 |  |  |  |
| K1211 | $20 / 15-10$ | 1.07 |  |  |  |  |
|  | $300-300$ |  |  |  | $1 \times 3$ | 1.43 |
| K1213 | $10-10-10$ | 450 | $1 \times 3$ |  |  |  |
| K1197 | $15-15-15$ | 450 | $1 \times 3$ |  |  |  |

Quadruple Section Units K1199 50-50-50/20 150/25 11/8z3 1.71 $\begin{array}{lllll}\mathrm{K} 1214 & 10-10-10 / 20 & 450 / 25 & 13 & 1.51\end{array}$ $\begin{array}{lllll}\text { K } 1210 & 40-30-10 / 20 & 450 / 25 & 13883 & 2.52\end{array}$ $\begin{array}{llll}\text { K1148 } & 10-10-10-10 & 450 & 1 \% \times 2 \\ 1.71\end{array}$ K1086 20-20-20-20
"DT" Paper Tubulars
Halo-waximpregnated, multi-lam inated Kraft tissue.
$\square$ $\left.\begin{array}{ll}\mathrm{K} 1221 & .01\end{array}\right) \left\lvert\, \begin{array}{lll}\text { No. } & \text { Mid. Each } \\ \text { K1228 } & 06 & 18 \mathrm{c}\end{array}\right.$

 \begin{tabular}{ll|lrl}
K 1225 \& .07 <br>
K 1226 \& .04 <br>
K 1227 \& .05

$\quad$

K1232 \& .5 <br>
K1233 \& 1.0 <br>
\hline 42
\end{tabular} K1227

600 Volts D. C. Wkg

| K1234 | .0001 |  | K12.47 | . 02 |
| :---: | :---: | :---: | :---: | :---: |
| K1235 | . 000025 |  | K1249 | . 03 |
| K1237 | . 001 |  | K1250 | . 04 |
| X1238 | . 002 |  | K1251 | . 05 |
| K1239 | . 003 | 15c | K1252 | . 06 |
| K1240 | . 004 |  | K1253 | . 1 |
| K1241 | . 005 |  | K1255 | . 25 |
| K1242 | . 006 |  | K1257 | . 5 | K1242 .006

MD Dykanol "D" 1600 V. D. C. \begin{tabular}{ll|ll}
K1236 \& $.001 \mid \mathrm{K} 1292 \quad .008$ 32c

 

K 1246 \& .002 <br>
K 1248 \& .0025 \& K 1266 \& .01 \& $32 e$ <br>
K 1294 \& .015 \& $32 e$
\end{tabular} $\left.\begin{array}{ll}\text { K1254 } & .003 \\ \text { K1256 } & .004\end{array}\right\}$ 32e $\begin{array}{lll}\mathrm{K} 1268 & .02 & \text { 32e } \\ \mathrm{K} 1269 & .03 & \text { 32c }\end{array}$ $\begin{array}{ll}\mathrm{K} 1256 & .004 \\ \mathrm{~K} 1262 & .005\end{array} \quad 32 \mathrm{c} \begin{array}{llll}\mathrm{K} 1269 & .03 & 32 \mathrm{c} \\ \mathrm{K} 1270 & .04 & 37 \mathrm{c}\end{array}$

## servicemen＇s specials

GE GD－60 Drilled Cabinet A．GE popular＂Edison Deal＂ model．They go fast．Accurately drilled and sloped．A perfect re－ placement fit．A good call item Shpg．wt． 4 lbs．
K19440
Your Cost Each．

PHILCO PT－25 Drilled Cabinet B．Drilled to fit．Inside dimen． sions $51 / 8^{5} 8^{7}$ 化 $=315 / 6^{\prime \prime}$ ．Ever popular model．Stock several of this fast moving cabinet．Quantity limited． Order today．Shpg．wt． 3 lbs ． K19441
Your Cost Each
$\$ 2.15$
GE L－500 Drilfed Cabinet C．Famous GE slide rule model A perfect fit．Inside dimensions are $65 / 8 \times 101 /{ }^{2} 4^{7 / 8} 8^{\prime \prime}$ ．Order this popu－ lar model today．They go terrifi－ cally fant．Shpg．wt． 4 libs． K19439－
K19439－
Your Cost Each．．．$\$ 2.75$

EMERSON AX－211 Drilled Cabinet
D．Accurately drilled cabinet fo this popular Emerson model．In side dim． $5 \frac{1}{7} / 88^{7} 16 \times 4^{\prime \prime}$ ．Order sev eral today．Shpg．wt． 4 lbs．
K19434－
Your Cost Each．．．．\＄2．05
RCA 9TX Drilled Cabinet E．Useful model to keep in stock Inside dim． 57 体 $881 / 2 \times 4^{\prime \prime}$ ．Order sev eral of these best sellers today Our quantity in stock is limited． Shpg．wt． 3 lbs． K19442 Your Cost Each
\＄2．05
EMERSON 301 Drilled Cabinet F．Exact duplicate in wood of this ever－popular model．Inside dimensions are 61 亿6x93／4x5＂．A fast seller．Keep several in stock and cash in on the heavy demand Shpg．wt． 4 lbs． K19437
Your Cost Each．．．S3．75

## Walnut Veneer Replacement Cabinets

A complete line of replacement cabinets that permits servicemen to handle the most popular receivers．Sturdily constructed with solid wood and plywood bases，reenforced cormers，tongue and groove joints．Handsomely finished in fine grained Walnut veneers．



A


NH：＂Coldpatch＂ Speaker Repair Kit
Goodbye to messy glues and cemental Apply in the cold－ patch to the rip in the speaker ish rattling and rasping forever， ish rattling and rasping forever，
because NHI＂Coldpatch＂is because whed with a specially－de－ gummed with a specially－de－ veloped tacky substance that never dries hard The NHI ＂Coldpatch＂speaker repair kit contains 36 Coldpatches in three convenient sizes，plus a $5^{\prime \prime} x 7^{\prime \prime}$ Coldpatch strip，which can be
cut to fit special jobs．Complete cut to fit special jobs．Complete
included． instructions inciuded． $\qquad$


## FEDERAL Rectifiers

Federal＇s new miniature Selenjum rectifiers were designed to replace 11726 11723 ，OY4，and most other rectifier type tubes in AC－DC battery－type portable radio sets，in in－ tercoms，etc．Characteristics：peak inverse voltage -380 volts； 100 milliamperes maxi－ mum．Remarkably small dimensions－only 11／6＂long， $11 / /^{\prime \prime}$ wide，and $11 /{ }^{*}{ }^{*}$ high．Re－ places both tube and socket．These miniature rectifiers are extremely rugged and long lasting．A necessary item for servicing portables K6099－Your Cost Each．．．．．．S1． 19 Lots of 6，each

STANCOR MuIti－Use Slide Ruie


A＂must＂for servicers，students，and hams． Includes tables of natural trigonometric functions，four place logarithm tablea，trig－ onometric formulae，general equations，and a concise instruction chart for easy use． K14747－Your Cost Each．


Blank 4－Tube Chassis Cabinet
 K19430－wt． 3 lbs．$\$ 2.05$
Your Cost Each．．．． Blank 5－6 Tube Chassis Cabinet
 K19431－wt． 3 lbs．$\$ 2.75$
Your Cost Each．．．． Blank 7－10 Tube

## G．Inside dim． $12 \frac{1}{2} \times 71 / 1 \times 61 /{ }^{\prime \prime}$

 K19432－wt． $4 \mathrm{ibs} \$ 23.21$ K19432－wt． 4 lbsYour Cost Each． $\qquad$
Blank 5－6 Tube Chassis Cabinet
H．Inside dimensions of this cen－ ter grille cabinet $10^{1}$／10 $\mathbf{x}^{5}$ 盾 $\times 51$＂ K 19433 －wt． 4 lbs.
Your Cost Each．．．．$\$ 2.75$

EMERSON U4B－199 Cabinet 1．Accurately drilled．Sturdy． Shpg．wt． 4 lbs． K19435－
Your Cost Eac s2．75 EMERSON EP Drilled Cabinet J．This cabinet is in great demand today．Stock now．Shpg．wt． 4 lbs． K19436－
Your Cost Each．
$\$ 2.75$
FADA L56 Drilled Cabinet K．Also fits popular LAFAY－ ETTE．Stock several K19438－wt． 4 lbs．$\$ 2.75$
Your Cost Each．．．$\$ 2.7$ EMERSONETTE Cabinet L．Great midget favorite．Very ${ }^{\text {sturdy }}$ K19429 K19429－

Each．
2.05

## Handy Kits for Servicers！



Mica Condenser Kit Assortment of 50 mica condensers．Coded values on each．All usable sizes． Sealed in molded bakelite housing．Individually tested；will give depend－ able service．High＂Q＂ No capacity drift with time．Provided with long pigtail leads for easy connection．Wt． 11 b ． KPS540－Assortment of $50 . \quad \$ 1.0$ Your Cost


1／3 Watt Resistor Kit Fifty $3 / 5$ watt resiators． High quality units made by a well－known manu－ facturer．Take advantage of our tremendous buying value at low cont．Each eaistor color－coded．Pigtail leads．W reaistor color－cord． KPS509－A
Your Cost．
 Volume Controis Kit A highly desirable item， since individual volume controls are somewhat higher in cost．This kit of 10 assorted volume con－ trols contains all usable values．Short shafts，no switches attached．Shafts measure from $\mathrm{b} / \mathrm{s}^{\prime \prime}$ to $1 / /^{\prime \prime}$ in length．Diameters range from

Your Cost

## Copper Lug Kit

 A one pound assortment of tinned copper lugs．Used in radio conatruction and parts replacement．Ample current carrying capacity for all radio purposes． K14767－Assortment of 450 easy sold Your Cost．


100 RMA Coded Carbon Resistors This acrvicers＇spe－ cial contains 100 RMA coded car－ bon resistors－all
brand new and standard usable sizes．Contains fifty $1 / 3$－watt resistors and fifty 1 －watt resistors．Resist－ ance values will not vary at normal voltage． Provided with long flezible pigtail leads．Ideal for installation in congested spaces．Our sup－ ply of this special is limited．
K3848－Assortment of 100.
Your Cost
s 1.49


Wax impregnated， non－inductively wound．Precision manufactured and individually tested．Satis－ fes RMA requirements．Kit consists of 25 selected and popular tubular by－pass con－ densers．Condensers selected are of standard capacities and working voleages．Capacity values range from .002 microfarada to .5
microfarads．Long fexible pigtail leads on microfarads．L
each condenser．
$\mathbf{K} 3360$ Assortment of 25
Your Cost
97 c


## Ceramicon Kit

Ceramicon con－ densers provide the ultimate in tabil－ ity．The temper． ature coefficient is determined by in－ gredients of the ceramic di－electric
and is controllable to within very fine limiting values．All condensers are color－coded and have long flexible pigtail leads．
KPS511－Assortment of 25.
Your Cost．
$\qquad$
$\qquad$

## FIXED TYPES



Machine wound on non-hygroscopic cores. Heavy luga on all except types AB and DG, which have strong wire leada.

| Ohms | Ohms | Ohms | Ohms | Ohms |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 250\% $\dagger$ ¢ | 2000* 19 | $6000{ }^{\circ}$ | $25000{ }^{\circ} \mathrm{H}$ |
| $5{ }^{\circ}$ | 300 | 2250 | $7000{ }^{*}$ | $30000 \%$ |
| $10^{\circ}$ | 400 | $2500 \%$ ¢ | 7500\% $/ \uparrow$ | 35000 |
| 25*) $\dagger$ | 500* ${ }^{\text {H }}$ | $3000 \cdot / \dagger$ | $10000^{\circ}$ i $\dagger$ | 40000\% $1 \dagger$ |
| 50\% $\dagger$ | $750{ }^{\circ} \mathrm{F} \dagger$ | 3500 | $12000^{*}$ | $50060{ }^{\text {/ }}$ |
| 74 | $1000^{\circ} \mathrm{H}$ | $4000^{\circ} / \dagger$ | 12500* | $60000{ }^{\circ} \mathrm{s} \dagger$ |
| $100 \%$ ¢ | 1250 j | 4500 | 15000\% ${ }^{\text {it }}$ | $75000{ }^{\circ} / \dagger$ |
| 1501 | $1500^{\circ} \mathrm{f} \dagger$ | \$000 ${ }^{\text {/ } \dagger}$ | 20000* ${ }^{\text {什 }}$ | 100000* $\dagger$ |
| $200^{\circ}$ |  |  |  |  |

## TYPE AB-10 WATT

$13 / 4^{\circ} \times{ }^{3} / 4^{\prime \prime}$. All Hated ranges up to 50,000 ohme. 30,000 ohms and over are 5 watte. Specify resistance when ordering. $\times 5210$
Up to 10,000 ohms.
34 c

## TYPE DG-20 WATT

| $2^{\prime \prime}$ ェ"/4". All listed ranges. 60,000 ohme and over are 10 watts. Specify resistance when ordering. |  |  |  |
| :---: | :---: | :---: | :---: |
| No. | From | To | Each |
| K5211 | 1 | 15,000 | \$0.54 |
| K5212 | 20,000 | 50,000 |  |

## TYPE EP-50 WATT

$41 / 2^{\circ} \times 1 / 4^{\prime \prime}$. All listed ranges marked with (*). Specify reaistance when ordering.

| Na | From | To |
| :--- | :---: | ---: |
| K | To |  |
| K 548 | 5,000 |  |
| K5249 | 6,000 | 25,000 |
| K5254 | 30,000 | 100,000 |

Each

TYPE HA- 100 WATT
$63 /)^{\prime \prime}=11$ ". All listed ranges marked with $^{\text {. }}$ (1). Specify resiatance when ordering. $\times 5260$ Each $\begin{array}{lll}\text { K5260 } & 100 \text { to } 5,000 & \$ 1.26 \\ K 5261 & 7,500 \text { to } 25,000 & 1.49\end{array}$
$\begin{array}{lll}\text { K5234 } & 50,000 & \mathbf{1 . 6 9}\end{array}$
$K 5235$
$\times 5236$
75,000
100,000
TYPE HO- 200 WATT
$103 /{ }^{\prime \prime} \leq 13 /{ }^{\prime \prime}$. All listed ranges marked with ( $\dagger$ ). Specify resistance when ordering.
$\begin{array}{cccc}\text { K5237 } & \text { From } & 100 & \text { To } \\ & 10,000 & \text { Each } \\ & 15000 & 100,000 & 2.52\end{array}$


## BLEEDER RESISTORS



Type M-1034 bleeder resistors. 25,000 ohms overall resistance, tapped and 15,000 ohms. 18 watt rating attached fiat to metal chassio, 9 watt free air rating. Used as bleeder in any power supply up to 500 voits. Insulation 1000 volte to ground. Bracket supplied. M1034.
K5104-Your Cost.
$73^{\circ}$


## TYPE NAB PARASITIC SUPPRESSOR

Non-inductive wire wound reaistors. Designed for use, one in each grid of audio driver or power amplifier tubes when parslleled, to prevent parasitic oscillation. 10 watte, 50 ohms.
K5158-Type NAB. Your Cost

## ADJUSTABLE TYPES <br> 

For all industrial and radio uscs. Dissipate heat rapidly, withstand heavy overloads, have great mechanical strength. All but 10 watt units are supplied with new improved Type X contact bands with silver contact button. Mounting brackete with all units except Type ABA.

| Ohms | Ohms | Ohms | Ohms | Ohms |
| :---: | :---: | :---: | :---: | :---: |
| 5 | $200^{\circ}$ | $1500^{\circ} \dagger$ | $6000^{\circ}$ | $40000^{\circ} 1$ |
| 10 | 250 | $2000^{\circ} \dagger$ | $7300^{\circ}$ | $50000{ }^{\circ} \uparrow$ |
| 25 | $500 *$ | $2500{ }^{\circ}+$ | $10000^{\circ} \dagger$ | $75000{ }^{\circ} 4$ |
| 50 | $750^{\circ}$ | $3000{ }^{\circ} \dagger$ | 15000* $\dagger$ | $100000^{\circ} \dagger$ |
| $100^{\circ} \dagger$ | $1000^{\circ} \dagger$ | 4000 | 20000* $\dagger$ |  |
| 150 | 1250 | $5000^{\circ} \dagger$ | $25000^{*}+$ |  |

## TYPE ABA- 10 WATT

$13 / \mathbf{n}^{\prime \prime}$ I $5 / 0^{\prime \prime}$. All listed rangee up to 10,000 ohme. Specify resistance when ordering.

## K5262

Your Cost Each.
K5213- Irtra alider for above. Each ic
TYPE DHA- 25 WATT
$215^{\prime \prime} \times 16^{\prime \prime}$. All listed ranges up to 25,000 ohms. Specify resintance when ordering.

| No. | From | To | h |
| :---: | :---: | :---: | :---: |
| K5274 | 5 | 5,000 | \$0.73 |
| K5275 | 6,000 | 15,000 | . 84 |
| K5276 | 20,000 | 25,000 | 92 |
| K5215 | tra olid | above | . 16 |

TYPE EPA- 50 WATT
$41 / 5^{\prime \prime}$ I $8 / /^{\prime \prime}$. All listed ranges up to 100,000 ohms. Specify resistance when ordering.

| No. | From | To | Each |
| :--- | ---: | ---: | ---: |
| K5286 | 5 | 5,000 | $\$ 1.15$ |
| K5287 | 6,000 | 25,000 | 1.26 |
| K5288 | 40,000 | 50,000 | 1.45 |
| K52899 | 75,000 | 100,000 | 1.69 |
| K5217-Extra slider for above. | Each. | .16 |  |

## TYPE ESA - 80 WATT

$614^{\prime \prime} \times 3 / 3^{\circ}$. All listed ranges except 150 , 1,250 and 75,000 . Specify resistance when ordering.

| No. | From | To | Each |
| :--- | :---: | ---: | ---: |
| K5196 | 5,0 | 5,000 | $\$ 1.49$ |
| K5197 | 6,000 | 25,000 | 1.69 |
| K5198 | 40,000 | 50,000 | 1.91 |
| K5199 | 60,000 | 100,000 | 2.11 |
| K5217-Extra | alider for above. | Each. | .16 |

TYPE HAA- 100 WATT
$63 / 6^{\prime \prime}$ I $11 / 8^{*}$. All listed ranges marked by (*). Specify reaistance when ordering.

| No. | From | To | Each |
| :--- | ---: | ---: | ---: |
| K5266 | 100 | 5,000 | $\mathbf{5 1 . 6 9}$ |
| K5267 | 6,000 | 25,000 | 1.91 |
| K5268 | 40,000 | 50,000 | 2.11 |
| K5269 | 75,000 | 100,000 | 2.29 | K5218-Extra slider for above. Each. 20

TYPE HOA-200 WATT
$1036^{\prime \prime}$ $11 \%{ }^{\prime \prime}$. All listed ranges marked ( $\dagger$ ). Specify resistance when ordering.
$\begin{array}{llcr}\text { No } & \text { From } & \text { To } & \text { Each } \\ \text { K5270 } & 100 & 10,000 & \$ 2.52 \\ \text { K5271 } & 15,000 & 100,000 & 2.95\end{array}$
K5218-Extra slider for above. Each. . 20


## Center Tap Insulated Wire Wounds

Completely enclosed in molded bakelite. Withatand high temperatures. Molded unit $2^{\prime \prime}$ long. Bracket mounting eenters, $23 / /^{\prime \prime}$. Six standard ranges, $10,20,50,75,100$ and 200 ohms. Specify reaistance when ordering.
K5103-Any range above.
Your Cost

## ALL-METAL RHEOSTATS



All-metal units with diecast aluminum case. Heat is uniformly distributed throughout the element regardless of percentage of element actually used. Exclusive IRC Spiral Connector gives positive contact bet ween rotor arm and (25 watt) are $1^{111}$ center connector. PR- 25 PR-50 ( 50 watt) are $2 \% /^{\prime \prime}$ diam., $1 \frac{1}{1 / 3}$ behind panel.

## PR-25-25 WATT

| No. | Ohm | Ampa. | Each |
| :---: | :---: | :---: | :---: |
| K9150 | 6 | 2.04 |  |
| K9151 | 10 | 1.58 |  |
| K9152 | 25 | 1.00 |  |
| K9153 | 50 | . 709 |  |
| K9154 | 75 | . 575 |  |
| K9155 | 100 | . 500 |  |
| K9156 | 250 | . 315 |  |
| K9157 | 350 | . 267 |  |
| K9158 | 500 | . 222 |  |
| K9159 | 750 | . 173 |  |
| K9160 | 1000 | . 155 |  |
| K9161 | 1500 | . 129 |  |
| K9162 | 2500 | . 100 |  |
| K9163 | 5000 | . 070 |  |

PR-50 50 WATT

| No. | Ohm | Amps. | Each |
| :---: | :---: | :---: | :---: |
| K7746 | 6 | 2.88 |  |
| K7747 | 16 | 1.77 |  |
| K7748 | 50 | 1.00 |  |
| K7749 | 125 | . 630 |  |
| K7750 | 225 | . 470 |  |
| K7751 | 300 | . 407 |  |
| K7752 | 500 | . 315 |  |
| $K 7753$ | 1000 | . 223 |  |
| $K 7754$ | 2500 | . 140 |  |
| K7755 | 5000 | .100 |  |
| K7756 | 10000 | . 070 \} |  |



## TYPE "W" WIRE WOUND CONTROLS


watte. Tight, uniform windi accuracy. Spiral Spring Connector between rotor arm and center terminal eliminates noise. Diameter $11 / /^{\prime \prime} ;{ }^{\prime \prime}$ behind panel $215 /{ }^{\prime \prime}$ flatted shaft, $1 / 0^{\prime \prime}$ diam. Supplied with cover, less switch.

Stock IRC No. No. Ohms K7803 W-2 K7805 W-3 K7806 W-5
K7810 W-6
K7811 W-8
K7812 W- 10
K7813 W-15
K7814 W-20
K7815 W-25
$K 7816$ W-30
K7817 W-40
K7818 W-50 50 K7831 W-5000 5000

| $K 7832$ | $W-7500$ |
| ---: | :--- |
| $\times 7833$ | $\mathbf{W}$ |

K7820 W-75 75

| Stock | IRC |  |
| :--- | :--- | ---: |
| No. | No. | Ohms |
| K7821 | W-100 | 100 |
| K7822 | W-200 | 200 |
| K7823 | W-300 | 300 |
| K7824 | W-400 | 400 |
| K7825 | W. 500 | 500 |
| K7826 | W-750 | 750 |
| K7827 | W-1000 | 1000 |
| K7828 | W-2000 | 2000 |
| K7829 | W-3000 | 3000 |
| K7830 | W-4000 | 4000 |
| K7831 | W-5000 | 5000 |
| K7832 | W-7500 | 7500 |
| K7833 | W-10000 | 10000 |
| $\ldots . .$. | $\ldots . . .$. | $\ldots$. |

Your Cost Each
$.73^{c}$


## TYPE "W" SWITCHES

For Use With Type "W" Controls
K7834-S.P.S.T. Each . . . . . . . . . . . . . . 35c
K7835 S.P.S.T. Each. . . . . . . . . . . . . . . . 444e 4 .

[^2]
## IRC resistors

## PRECISION

 WIRE WOUND RESISTORS

Type ww-1
Type ww-2
The utmost in accuracy and dependability. These unite are used by the leading instru ment manufacturers for dependable precision meter multipliers and shunts. Winding forms are of non-hygroscopic ceramic having high insulation qualities, high mechanical strength and low coefficient of expansion. Special sectional construction permits the winding of adjacent sections in opposite directions making possible a non-inductive winding and insuring constant resiatance at all frequencien up to 50,000 cycles. $1 \%$ accuracy is standard


| Stock | Res | Your | Stock | Res. | Your |
| :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Ohms | Cost | No. | Ohms | Car |
| K5146 | 0.1 |  | K5155 | 125001 |  |
| K5151 | 0.5 |  | K5148 | 15000 |  |
| K5150 | 1 |  | K5171 | 20000 |  |
| K5159 | 10 |  | K5149 | 22500 |  |
| K5160 | 25 |  | K5172 | 25000 |  |
| K5161 | 50 |  | K5173 | 30000 |  |
| K5162 | 100 | 88 | K5156 | 40000 |  |
| K5164 | 200 | 006 | K5176 | 50000 |  |
| K5200 | 250 |  | K5177 | 60000 | 1.45 |
| K5152 | 300 |  | K5178 | 75000 | . |
| K5165 | 500 |  | K5179 | 100000. | . . $\$ 1.61$ |
| K5166 | 1000 |  | K5157 | 125000. | 1.83 |
| K 5143 | 1500 |  | K5181 | 150000 |  |
| K5144 | 2000 |  | K5182 | 175000 | \$2.03 |
| K5167 | 2500 |  | K5183 | 200000 |  |
| K5153 | 4000 | 06 | K5184 | 225000 | \$ |
| K5168 | 5000 | y06 | K5185 | 250000 |  |
| K5147 | 7500 10000 |  | K5186 | 300000 | \$2.41 |
| K5169 | 10000 |  | K 5187 K 5188 | $400000)$ 50000 | ....... 279 |

Stock Reen. No. Obms Cost No Res.

| No | Obms | Cost | No. | Res. | Co |
| :---: | :---: | :---: | :---: | :---: | :---: |
| K5113 | 0.1 |  | K5132 | 12500 |  |
| K5114 | 0.5 |  | K5133 | 15000 |  |
| K5137 | 1 |  | K5134 | 20000 |  |
| K5163 | 10 |  | K5195 | 22500 |  |
| K5170 | 25 |  | K5135 | 25000 |  |
| K5174 | 50 | 6 n | K5136 | 30000 |  |
| K5175 | 100 | 06 | K5138 | 40000 |  |
| K5125 | 200 |  | $K 5139$ | 50000 |  |
| K5180 | 250 |  | K5140 | 60000 |  |
| K5126 | 300 |  | K5141 | 75000 |  |
| K5124 | 500 |  | K5142 | 100000. | \$1.42 |
| K5127 | 1000 |  | K5201 | 125000 | 1.61 |
| K 5189 | 1500 | 60 | K5099 | 150000) |  |
| K5191 | 2000 | 036 | K5203 | 175000 | 30 |
| K5128 | 2500 |  | K5100 | 200000 |  |
| K5192 | 4000 |  | K5205 | 225000 |  |
| K5129 | 5000 | C | K5101 | 250000 \} |  |
| K5130 | 7500 | 106 | ${ }_{K} \mathrm{~K} 5102$ | 300000. | $\text { . . } 2.19$ |
| K5131 | 10000 |  | $K 5122$ K 5123 | 400000. 500000 |  |


|  | Type |  |  |  |  |  | WW-2 |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Megs. |  |  |  |  |  |  |
| K5220 | 0.6 | $\$ 3.25$ | K5202 | Megs. |  |  |  |
| K5193 | 0.75 | 3.44 | K5115 | 2.0 | 7.64 |  |  |
| K5221 | 0.9 | 3.64 | K5208 | 2.5 | 9.55 |  |  |
| K5194 | 1.0 | 4.02 |  |  |  |  |  |
|  |  | Type | WW-5 |  |  |  |  |
| K5109 | 0.6 | $\$ 3.25$ | K5111 | 0.9 | $\$ 3.64$ |  |  |
| K5110 | 0.75 | 344 | K5112 | 1.0 | 4.02 |  |  |
|  |  |  |  |  |  |  |  |

Color Code Card A handy resistor color code chart that measures $3 \times 5$ inches. It includes both the old and the new atyle codes, together with tolerance designations. Ohm's Law formulas, and a ruler. Printed on a Pyrolis card. Free with purchase of 5 IRC resistors.
K5209-
Your Cost
Io

## INSULATED RESISTORS





## TYPE BT METALLIZED

Newly-designed, compact size, general purpose resistors with metallized element com pletely insulated with Bakelite. Non-inductive Have pigtail leads. Standard tolerance $\pm 10 \%$ Specify resistance when ordering.

BTS $1 / 2$ Watt
${ }^{13} \mathrm{~g}^{\prime 2} \mathrm{x} 318.470$ Ohms to 22 Megs .
Lota of 100 -fe Each
K5206-Each
BTA-1 Watt
${ }^{11}$ 体 ${ }^{\circ} \times 1 /{ }^{\circ} .330$ Ohms to 22 Megs.
Lots of 100-5c Each
K5207-Each
BT-2-2 Watt
$12 /$ " $^{21 / 4 " . ~} 470$ Ohms to 22 Megs .
Lote of 100-8c Each
K5263-Each
STANDARD RMA RANGES-SPECIFY RESISTANCE

| Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Meg. | Meg. | Meg. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 0.47 | 2.7 | 15 | 82 | 470 | 2,700 | 15,000 | 82,000 | 0.47 | 1.8 | 6.8 |
| 0.51 | 3.3 | 18 | 100 | 510 | 3,300 | 18,000 | 100,000 | 0.56 | 2.2 | 8.2 |
| 0.56 | 3.9 | 22 | 120 | 560 | 3,900 | 22,000 | 120,000 | 0.68 | 2.7 | 10 |
| 0.68 | 4.7 | 27 | 150 | 680 | 4,700 | 27,000 | 150,000 | 0.82 | 3.3 | 12 |
| 0.82 | 5.1 | 33 | 180 | 820 | 5,100 | 33,000 | 180,000 | 1.0 | 3.9 | 15 |
| 1.0 | 5.6 | 39 | 320 | 1,000 | 5,600 | 39,000 | 220,000 | 1.2 | 4.7 | 18 |
| 1.2 | 6.8 | 47 | 220 | 1,200 | 6,800 | 47,000 | 270,000 | 1.5 | 5.1 | 22 |
| 1.5 | 8.2 | 51 | 270 | 1,500 | 8,200 | 51,000 | 330,000 | $\ldots \ldots$ | 5.6 | $\ldots$ |
| 1.8 | 10 | 56 | 330 | 1,800 | 10,000 | 56,000 | 390,000 | $\ldots$. | $\ldots$ | $\ldots$ |
| 2.2 | 12 | 68 | 390 | 2,200 | 12,000 | 68,000 | 510,000 |  | $\ldots$ |  |

## RESIST-O-CABINET

Sturdy cabinet, designed to hold resistors aystematically and safely, without bending of leads. Each drawer has seven ample-sized compartmente which readily accommodate resistor sizes from $1 / 5$ to 10 watts. Attractively finished in blue, yellow and silver. Ohm's law formulas lithographed on top of cabinet for handy reference. Cabinet measures $11^{\prime \prime} \times 51 / /^{\prime \prime} \times 53 / 2^{\prime \prime}$. Arranged for stacking so that several cabinets may be used. FREE with the purchase of any of the well-balanced IRC resistor assortments listed,

## ASSORTMENT NO. 1-54 RESISTORS

Type BTS-One each $1,000,4,700,10,000,27,000,47,000$ ohms; $0.1,0.27,0.47$ megs. Type BTA-One each $39,000,68,000$ ohms; $0.15,0.22$ megs. Two each $1,000,1,500,2,200$, $2,700,4,700,15,000,27,000$ ohms; $1.0,2.2$ megs. Three each $10,000,47,000$ ohms; $0.1,0.27$. Type AB, 10 Watt-One each $1,000,1,500,2,500,5,000$ ohms. Two each $10,000,15,000$, 25,000 ohms.
Type ABA, 10 Watt Adjustable-One each $1,000,2,500,5,000,10,000$ ohms. List price of Type ABA, 10 . (Ct Adjustablet Free.)
resistors, $\$ 15.03$. (Cabine K5381-Wt 7 lbs. Your Cost Complete.
\$8.84

## ASSORTMENT NO. 2-100 RESISTORS

Type BW-1/2-Two each 47, 100, 270 ohms.
Type BTS-Two esch $3,300,6,800,33,000,68,000,82,000$ ohms; $0.22,0.33$ megs. Three each $470,1,500,15,000,22,000,39,000$ ohms; $0.15,1.0,2.2$ megs. Five each $2,200,2.700,27,000$ ohms; 0.27 megs. Siz each $1,000,4,700,10,000,47,000$ ohms; $0.1,0.47$ megs. List price of resistors, $\$ 13.12$. (Cabinet Free.)
K52t0-Wt. 7 lbs. Your Cost Complete
s7.71

## ASSORTMENT NO. 3-83 RESISTORS

An excellent assortment of eighty-three resistors ranging in value from 47 ohms to .47 megs. An unusually wide range of values to cover all resistor requirements. The popular 1 RC resistor cabinet included absolutely FREE. These resistors are in the two types that have proven most populas with radio servicers, the BW type and the BTA type (carbon and wirewound resistors).
Type BW-1 (wirewound)-Two each, 47, 100, 270 ohms.
Type BTA (Carbon)-Two each $470,1,500,2,700,3,300,6,800,33,000,39,000,68,000,82,000$ ohms. $0.15, .22, .33,1.0,2.2$ megs. Three each $1,000,2,200,4,700,10,000,47,000$ ohms; 0.1 . $0.27,0.47$ megs.
List price of the Resistors, $\$ 14.11$ (Cabinet Free)
K5282-Wt 7 lbs. Your Cost Complete.........
$\$ 3.31$


## IRC volume controls

## THE "CEMTURY" LINE-100 ALL PURPOSE VOLUME COHTROLS

## 8 Clutch Type "DC" Controls

For auto radio use and
other a pplications. Friction clutch dinvearm. Special fixed shaft ted or tongued type shaft is required. Instructions for cutting shaft for either application. Switches cannot be used with these controls. Dirnensions: $11 /$ " $^{"}$ diameter $\mathrm{x}^{17} / \mathrm{m}^{\prime \prime}$

| ock No. | IRC No. | Ohms |  |
| :---: | :---: | :---: | :---: |
| K7757 | DC13-130 | 250000 |  |
| K7758 | DC18-130X | 250000 | 6000 |
| K7759 | DC13-133 | 500000 | N |
| K7760 | DC13-133X | 500000 | 125 |
| K7761 | DC13-137 | 1 Meg. | No |
| K7762 | DC13-137X | 1 Meg. | 250 |
| K7763 | DC13-139 | 2 Meg . |  |
| K7764 | DC13-139X | 2 Meg. | 0 |
| Your | Each, |  |  |

Handy Volume Control Cabinet
All-metal cabinet.
$141 / 3 \times 7 \times 41 / 2^{\prime \prime}$, fin-
ished in ailver, blue, ished in silver, blue,
and yellow, containing 18 universal controls, 6 awitches, 5 apecial shafta. Types included are recommended for replacement in over 10,850 models in
Compartments for
Compartments for 20 controls. 3 drawers for witches, shafta, and hardware. Contains two D13-133; one each D11-116, D11-123, D11128, D11-133, D13-123, D13-128, D13-130. D13-130X, D13-133X, D13-137, D13-137X, D13-139, D13-139X, D14-116, D16-119, and DC13-133X; 5 No. 41 and No. 42 switches: one "B" shaft and two each "C" and "D" shafts. Cabinet included FREEI Wt. 7 lbs. K7739-Vour Cost, Complete
$\$ 18.17$

## IRC Guide

New IRC Volume Control Replacement Manual, $81 /$ " $^{2} 11^{\prime \prime}, 136$ pages. Listing manufacturera' part numbers, Rider's schematic reference and special shaft data. Models and chasais cross-indexed. FREE with purchase of 5 or more IRC volume controls. 10 e

IRC Taper Types


A-Used as potentiometer or rheootat in any circuit where uniform resistance change is required.
C-Logarithmic curve. Used as audio circuit control or antenna ohunt control.
D-End tapers to provide control of grid blas and antenna circuit. Used where gri most important for volume control.
F-Tapered at both ends to provide control of grid bias and antenna circuit. Used where control of grid bias is essential in controlling volume. Generaily used where the controf varies grid bias of 1 to 2 tubes. Not for use with heavy currents.
H-Tapped logarithmic curve for audio level control for automatic bias compensation
In addition to the items listed on these pages, we carry a complete line of all IRC volume controls, resistors, parasitic suppressors chokes, switches, shafts, etc. If there are any items not listed on these pages, desired by you, write to us stating your requirements and listing the manufacturer's part number where known, manufacturere list price where known, and brief description of the part deeired.

## 16 Popular "DS" Types

Same as "D" but double flatted shafts. For $1 /{ }^{\prime \prime}$ " and $3 / a^{4}$ pushon and set screw knobs. Dia. 13/8"; ${ }^{17} /{ }^{\prime \prime}$ " deep. for switches, sce listing, this page.

| Stock No. | IRC No. | Ohms | Taper |
| :---: | :---: | :---: | :---: |
| K9108 | LSS11-116 | 10000 |  |
| K9109 | DS14-116* | 10000 | D |
| K9114 | DS 14-120* | 25000 | D |
| K9117 | DS11-123 | 50000 | A |
| K9121 | DS11-128 | 100000 | A |
| K9122 | DS13-128 | 100000 | C |
| K9148 | DS11-130 | 250000 | A |
| K9125 | CS13-130 | 250000 | c |
| K9127 | DS13-133 | 500000 |  |
| K9129 | ES13-137 | 1 Meg . | C |
| K9131 | DS13-139 | 2 Meg . | C |
| * Units include 270 ohm biss resistor. |  |  |  |
| Any Abov | T:pe, |  |  |

Tapped "DS" Units


## 11 Type " J " Special Controls

 For sets with specific requirements. K9170-DJ-4-2 Mex. (tap at 500000 ohrns)/ $\$ 2.20$ 1 Meg. dual. For RCARC-352 etc. Each.. 2.20 K9165-DJ-5-2 Meg./1 Meg. dual. For $\$ 2.20$ K9169 - T-15-32000 ohms. For Stewart- $\$ 1.09$ Warner R-100A etc. Each K9190-J.107-10,000/50,000 ohm dual. S1 82 For GE T-41, RCA R-14 etc. Each. K9195-J-127-3300/3800 ohm dual. For \$1,82 RCA R-32, RE-45 etc. Each........... 3000 \$1 09 K9216-J-210-13000 ohms (tap at 3000 \$1. 09ohms). For GE $3-80$, RCA R-8 elc. Each. . ohms). For GE J-80, RCA R-8 elc. Each. .
K9217-J-296- $225000 / 5000$ ohm dual. For $\$ 1.82$ Philco 70, 70A ete. Each.
K9460-J-777-3.30000 ohms. For a variety \$1.09 of auto radios. Tach
K9149-J-823-1.00000/250000 ohms (tap- $\$ 1.82$ ped at 125000). OE A-82, A-86, A-87. Each. 1.82 K8962-J-843- 350000 ohms (tapped at $\$ 1.09$
 For GE F-70, F-5, F-80 etc. Esch.

## Tap-In Shafts



K7799-Type B. Auto radios . . . . . . . . . . . 26 c
K7737-Type C. Push-on, knurled
K7738-Type D. Push-on, plain.
K7771-Type E. Push-on, split-knurled . 18c K7772-Type F. Plain round
K7773-Type G. Special split, Philco

## 56 Type "D" Controls

For miscellaneous service needs.
Each "D" control accommodates any of the seven Tap-in thafts
 shown in column

2, which increases the utility of these controls. Shaft flate may be located in any position. Double flatted " $A$ " shafts included with each control take push.on knobs. Dia. $11 / 8 x^{17} / 2^{\prime \prime}$. No. Type Ohms No. Type Ohms K7706 D11-103 500A K7728 D14-123 50000D K7707 D11-108 1000A K7729 D 13-125 75000C K7703 D11-110 2000A K7730 D14-125 75000D K7724 D11-112 3000A K7716 D11-128 100000A K7709 D11-113 4000A K7785 D13-128 100000C K 7779 D11-114 5000A K7717 D11-129 200000A K7710 D13-114 5000C K7718 D14-129* 200000D K7765 D14-114* 5000 D K7731 D11-130 250000A K7725 D $11-115$ 7500A K7786 D 13-130 250000C | K 7725 | D $11-115$ | 7500 A | K 7786 | D $13-130$ |
| :--- | :--- | :--- | :--- | :--- |
| K |  |  |  |  | $\begin{array}{lllllll}\text { K77811 } & \text { D13-116 } & 10000 \mathrm{C} & \text { K7787 } & \text { D13-132 } & 350000 \mathrm{C}\end{array}$ $\begin{array}{llllllll}\text { K7711 } & \text { D13-116 } & 10000 \mathrm{C} & \text { K } 7787 & \text { D } 13-132 & 350000 \mathrm{C} \\ \mathrm{K} 7781 & \mathrm{D} 14-111^{\circ} & 10000 \mathrm{D} & \mathrm{K} 7732 & \mathrm{D} 11-133 & 500000 \mathrm{~A}\end{array}$ $\begin{array}{lllllll}\text { K7781 } & \text { D14-118 } & 10000 D & \text { K7732 } & \text { D } 11-133 & 500000 A \\ \text { K7782 } & \text { D16-116* } & 10000 \text { F } & \text { K7788 } & \text { D } 13-133 & 500000 \mathrm{C}\end{array}$ $\begin{array}{lllllll}\text { K } 7782 & \text { D16-116 } & \text { 10000F } & \text { K7788 } & \text { D } 13-133 & 500000 \mathrm{C} \\ \text { K7726 } & \text { D }_{14-118^{\circ}} & 15000 \mathrm{D} & \text { K7720 } & \mathrm{D}_{14} 133 & 500000 \mathrm{D}\end{array}$ $\begin{array}{llllll}K 7783 & \text { D16-118 } 15000 \text { F } & \text { K7774 D11-137 } 1.0 \mathrm{Meg} \text { A }\end{array}$ K7712 D16-119* 20000F K 7789 D13-137 1.0 Meg.C $\begin{array}{llllllll}\text { K7713 } & \text { D11-120 } & 25000 \mathrm{~A} & \text { K7790 } & \text { D13-139 } & 2.0 & \text { Meg.C } \\ \text { K7727 } & \text { D14-120. } & 25000 \mathrm{D} & \text { K7733 } & \text { D13-140 } & 3.0 \text { Meg.C }\end{array}$ K7714 D16-120 25000F K7721 D11-141 5.0 Meg A K7715 D11-123 50000A K7723 D11-143 10 Meg.A K7784 D13-123 50000C

- Units include 270 ohrm bias resistor.

Tour Cost Each, Any Above Type
$73^{\circ}$

## Tapped "D" Controls

| Stock No | IRC No. | Ohms | Tap | T |
| :---: | :---: | :---: | :---: | :---: |
| K7736 | D13-130X | 250000 | 125000 |  |
| K7791 | D18-130X | 250000 | 60000 |  |
| K 7792 | D18-132X | 350000 | 75000 | H |
| K7793 | D13-133X | 500000 | 125000 | H |
| K7843 | D18-133X | 500000 | 50000 | Speo. |
| K7794 | D13-137X | 1.0 Meg | 250000 |  |
| K7769 | D17-137X | 1.0 Meg | 35000 | Speo |
| K7735 | D18-137X | 1.0 Meg | 100000 | Spe |
| K7844 | D19-137X | 1.0 Meg | 500000 |  |
| K9136 | DVC-539X | 1.0 Meg. | 500000 |  |
| K7795 | D13-139X | 2.0 Meg . | 500000 |  |
| K7770 | D17-139X | 2.0 Meg | 150000 |  |
| K7734 | D18-139X | 2.0 Me | 1.0 M |  |
|  | D18-139XX | 2.0 Meg | $250-500 \mathrm{M}$ |  |
|  |  |  |  |  |

K7768 D19-139X $\quad 2.0 \mathrm{Meg} . \quad 50000$
"Spec." indicates sudio control with tone tap.
"Spec." indieates fader control.
Any Type Above, Your Cost Each
$\$ 1.09$


## Switches for IRC Controls

Standard SPST, SPDT, and DPST a witchet for use with the IRC "Century Line" Volume Controls. Easily and quickly installed. Merely remove control cover, slide switch into position, and bend tabs.
$\begin{array}{lccc}\text { For Use With "D" and "DS" Controls } \\ \text { Stock No. } & \text { Type } & \text { IRCNo. Each } \\ \text { K7796 } & \text { SPST } & 41 & 35 \\ \text { K7797 } & \text { DPST } & 42 & 44 \mathrm{c} \\ \text { K7798 } & \text { SPDT } & 43 & 44 \mathrm{c}\end{array}$ K7798 SPDT
For Use WIth "S" and Dual Controls
K9133 $\begin{array}{llll}\text { K9133 } & \text { SPST } & 21 & 35 \mathrm{c} \\ \text { K9135 } & \text { DPST } & 22 & 44 \mathrm{c} \\ \text { K } 9134 & \text { SPDT } & 23 & 44 \mathrm{c}\end{array}$

## | MALLORY volume controls


"UM" \& "TM" Junior Controls
Ulira-compact controls featuring noiseless composition elements; att achatle switches; plug-in type shafts. UM and TM typee have slotted shafts to take any one of the 28 different types of special shafts listed below. (One SS-1 shaft packed with each control.) The TM types are similar to the UM but are provided with a tap as shown. TM type designed for use in tone compensating circuits. All are ${ }^{4}$ "thick, 11 的" dianz.
"UM" TYPE JUNIOR CONTROLS

| ock | je | Ohms \& | Sto | Type | Ohms \& | Stock | pe |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | No. |  |  | No. |  |
| K6926 | UM114 | $5 \mathrm{M}(4 \mathrm{~A})$ | K6935 | UM133 | $50 \mathrm{M}(1)$ | K6944 | UM17 |  |
| K6927 |  | 10M (1) | K6936 |  | 50M (2) | ${ }_{\text {K6945 }}$ | UM149 |  |
| K 6928 K 6929 | UM119 | 10M (2) | K6937 | UM136 | 50M (4) | K6946 $\times 6947$ | UM151 | 350M $(1)$ |
| K6930 | UM121 | $15 \mathrm{M}(1)$ | K69 | UM138 | 75M (2) | K69 | UM156 | 500M |
| x6931 | UM122 | $15 \mathrm{M}(2)$ | K6940 | UM140 | 100 M (1) | K6949 | UM158 | 750 M (1) |
| K6932 | UM 124 | 20M(1) | K69:11 | UM141 | 100M(2) | K6950 | UM161 | (1) |
| K6933 | UM128 | 25M (2) | K6942 | UM142 | $100 \mathrm{M}(4)$ | K6951 | UM193 |  |
| K6934 | UM129 | 25M ${ }^{\text {4 }}$ ) | K 6943 | UM | 150 M (1) | K6 | UM165 | $3 \mathrm{Meg}(1)$ |
| Type UM Controls (with SS- 1 plug-in shaft) <br> Your Cost, Any Slze. |  |  |  |  |  |  |  |  | Your Cost, Any Slie.

$73^{-}$

| "TM"* Type Tapped Controls |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Type | Ohms | Tapped | No. | Type | Ohms | Tapped |
| K6953 | TM220 | 250M | 50M | K6959 | TM240 | 1 Meg , | 200M |
| K6954 | TM221 | 250 M | 110 M | K7006* | TM241 | 1 Meg. | 200 M |
| K7013* | TM222 | 250 M | 110 M | K7007* | TM242 | 1 Meg . | 450 M |
| K7014* | TM223 | 350 M | 70M | K6960 | TM243 | 1 Meg . | 450 M |
| K7015* | TM224 | 500 M | 100 M | K7008 | TM244 | 11/2 Meg. | 200M |
| K6955 | TM225 | 350 M | 70M | K6961 | TM245 | 2 Meg . | 5M |
| K7016 | TM226 | 500 M | 15M | K6962 | TM246 | 2 Meg . | 15M |
| K7017 | TM227 | 500 M | 100 M | K6963 | TM247 | 2 Meg . | 60 M |
| K6956 | TM228 | 500 M | 5 M | K6964 | TM248 | 2 Meg . | 250 M |
| K6957 | TM230 | 500 M | 150 M | K 6965 | TM249 | 2 Meg . | 600 M |
| K6958 | TM231 | 500 M | 225 M | K7009 | TM250 | 2 Meg . | 125 M |
| K7018* | TM232 | 500 M | 225 M | K6966 | TM251 | 2 Meg . | 900 M |
| K7019 | TM233 | 500 M | 60 M | K7010* | TM252 | 2 Meg . | 900 M |
| K7020 | TM234 | 1 Meg. | 65 M | K7011 | TM254 | 2 Meg . | 400 M |
| K7021 | TM236 | 1 Meg . | 125M | K6967 | TM257 | 3 Meg. | $900 \mathrm{M}^{\prime}$ |
| K7022 | TM238 | 1 Meg . | 300 M | K7012 | TM289 | 2 Meg . | 900 M |
| K6864* | TM239 | 1 Mes. | 300 M | *-Clute | Type Con | rols. |  |

Type TM Controls (with SS-1 plug-in shaft)
$\$ 1.09$

## MALLORY Attachable Switches


$35^{\circ}$
Fit all Junior controls listed above.
$K 6969$ - Double Pole, Single Throw
K6972-Four Pole, Single Throw (Shorting Type) ${ }^{6}$ ) Each. $44{ }^{\circ}$
COMPACT RHEOSTATS AND POTENTIOMETERS
2 WATtS
wire wound.
Ideal for use Where space is arm grounded to shaft.Diam. $1^{1 / 6^{\circ}}$ 1/" shaft, is $11 /{ }^{\prime \prime}$ long and slotted.

| RHEOSTATS |  |  |  | RHEOSTA |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Ohms | No. | Ohms | No. | Ohms | No | Ohms |
| K6197 |  | K6201 |  | K6480 | , | K6486 | 20 |
| K6198 | 10 | K6202 | 40 | K6481 | 2 | K6487 | 25 |
| K6199 | 15 | K6203 | 50 | K6482 | 3 | K6173 | 40 |
| K6200 | 20 | K 6204 | 100 | K6483 | 6 | K6174 | 50 |
| Your Cost Each, |  |  |  | K6484 | 10 | K6175 | 60 |
| Any $T$ |  |  |  | K6485 | 15 | K6176 | 75 |
| POTENTIOMETERS |  |  |  | Your Cost Each, Any Above Type |  |  |  |
| K6205 | 6 | K6210 | 40 | POTENTIOMETERS |  |  |  |
| K6206 | 10 | K6211 | 50 |  |  |  |  |
| K6207 | 15 | K6212 | 100 | K6503 | 20 | K6496 | 200 |
| K6208 | 20 | K6213 | 200 | K6492 | 50 | K6497 | 400 |
| K6209 | 30 | K6214 | 400 | K6495 | 100 | K6477 | 500 |
|  |  |  |  | Your C | St Each |  | 3 c |
| Any of the Above. |  |  |  | K6498 | 1000 | K6499 | 2000 |
|  |  |  |  | K6500 | 3000 | K6502 | 5000 |
|  |  |  |  | Your C | St Each |  | 82 c |
| K6217- | 5000 oh | Ea. | $32^{\circ}$ | K6502 | 10000 | K6177 | 15000 |
| K6218- | 6000 ohm |  | 97 c | K6178 | 20000 | K6179 | 25000 |
| K6219 | 0000 oh |  |  | K 6180 | 50000 |  | 97 c |
| K6220- | 000 |  |  | Your | S000 | $\times 6181$ | $70000$ |

Similar to Typye E-9-Watt Potentiometers


MALLORY Radio Service Encyclopedia-5th Edition
Newest, biggest, most valuable issue. Contains data on over 27,000 sets. Over 450 pages. Further data on this valuable book will be K19786 Yage 52 . Shpg. wt. 3 lbs.
$\$ 1.25$


Type "MR" Junior Controls
Ultra-compact controls are similar to the types UM and TM junior controls listed at left except that they feature standard shafts, $3^{\prime \prime}$ long, milled the entire length and furnished wit knob adapters (for spring type knobs). All are rated conservatively at $1 / 2$ watt.

| No. | Type | Ohms | No. | Type | Ohmı | No. | Type | Ohmes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K6900 | MR14 | 5M (4A) | K6909 | MR33 | 50M (1) | K6918 | MR44 | 250 M (1) |
| K6901 | MR18 | 10M (1) | K6910 | MR34 | 50M (2) | K 6919 | MR45 | $250 \mathrm{M}(2)$ |
| K6902 | MR19 | 10M(2) | K6911 | MR35 | $50 \mathrm{M}(1)$ | K 6920 | MR48 | $500 \mathrm{M}(1)$ |
| K6903 | MR20 | 10M4 | K 6912 | MR36 | 75M (1) | K6921 | M1460 | 500M (4) |
| K6904 | MR21 | 15M (1) | K6913 | MR37 | 75M (2) | K6922 | MR51 | 750 M (1) |
| K6905 | MR22 | $15 \mathrm{M}(2)$ | K6914 | MR39 | 100N(1) | K6923 | MR53 | 1 Meg (1) |
| K6906 | MR24 | 20M (1) | K 6915 | MR40 | 100M (2) | K 6924 | MR55 | 2 Meg (1) |
| K6907 | MR28 | 25 M (2) | K6916 | MR41 | $100 \mathrm{M}(4)$ | K6925 | MR57 | 3 Meg (1) |
|  | MR29 | $25 \mathrm{M}(4)$ | K6917 | MR42 | $150 \mathrm{M}(1)$ |  |  | $73^{\circ}$ |

"MK" Junior Controls With Fixed Knurled Shafts Similar to type "MR" controlg above, but have $3^{\prime \prime}$ universal knurled shaft for replacing original units of this type.


## Speclal Junior Controls "SM"

These are special Junior replacement units. Check your Mallory Encyclopedia for your requirements, then order from this listing.

| No. | Type | Res. Ohms | Tapped At | Each |
| :---: | :---: | :---: | :---: | :---: |
| K6775 | SM300* | 350,000 | 75,000 | \$1.47 |
| K6776 | SM301** | 2 Meg . | 500,000 | 1.47 |
| K6777 | SM302* | 500,000 | None | 1.47 |
| K6778 | SM303 | 6 Meg . | None | 1.09 |
| K6784 | SM304* | 1 Meg . | 200,000 | 1.47 |
| K6785 | SM305* | 1 Meg . | 875,000 | 1.47 |
| K6787 | SM307 | 2 Meg . | 250,000 | 2.09 |
| K6565 | SM309 | 2 Meg . | 600,000 | 1.47 |
| K6566 | SM310 | 2 Meg . | 125,000 | 1.09 |
| K6828 | SM311 | 1 Meg . | 300,000 | 1.47 |
| K6829 | SM312 | 250,000 | No Tap | 1.47 |
| $K 6830$ | SM316 | 350,000 | 35,000 | 2.09 |
| K6861 | SM317 | 2.25 Meg . | $\left.\begin{array}{l}500,000 \\ 1 \mathrm{Meg} .\end{array}\right\}$ | 1.47 |

* Has S.P.S.T. Switch attached to control.


## Special Junior Dual Controls

Have fixed concentric shaft and switch

| No. | Type | Res. Fron | Res. Rear | Tap At | Each |
| :---: | :---: | :---: | :---: | :---: | :---: |
| K6779 | SMD500 | 2 Meg . | 2 Meg . | None |  |
| K6780 | SMD501 | 2 Meg . | 1 Meg . | Front 500 M |  |
| K6781 | SMDS02 | 250 M | 1 Meg . | Rear 250 M |  |
| K6782 | SMD503 SMD504 | 2 Meg. 250 M | ${ }_{1}^{1} \mathrm{Meg}$. | Front 500 M |  |
| K6800 | SMD505 | 250 M | 1 Meg . | Rear 300 M |  |
| K6801 | SMD506 | 500 M | 1 Meg . | Rear 200 M | , |
| K6802 | SMD507 | 500 M | 350M | Rear 70 M |  |
| K6803 | SMD508 | 30 M | ${ }_{1} 1 \mathrm{Meg}$. | Rear 450 M |  |
| K6804 | SMD509 | 2 Meg . | 500 M | Front 900M |  |
| K6807 K 6863 | SMD510 SMD511 | 1 Meg . | 500 M 350 M | Front Rear 300 M 70 M |  |
|  |  | Meg. | 350 M | Rear 70M |  |

## MALLORY Plug-In Shafts



K6973-SS1. Replaces any $1 / 6^{\prime \prime} \mid \mathbf{K 6 9 8 9 - S S 1 7 . ~ R e p l a c e a ~ a n y ~ a l o t - ~}$ round shaft or $10^{\circ}$ or hattened
K6974-SS2. For RCA, UMS and any $3 / h^{n}$ shaft up to $4^{*}$. Each . 18c K6975-SS3. Replaces any ${ }^{1 / 26}$ K6970 12240, 12365, etc.). Each... 18 c K6977-SS5. Philco '36, '37, '38 Household sets. Each K6978-SS6. RCA, Hudson H6.18c K6982-SS10. Motorda 60, 80, ' 36 Golden Voice. Each K6983-SS11. Replaces any ${ }^{8 / 6}$ lotted shaft 2 to 4 long.... 26 c K6984-SS12. Philco, UMS and Arvin sets. Each K6986-SS14. Replaces any $1 /{ }^{\prime}$ slotted shaft to $2^{\prime \prime}$ long....... . 26 c K6987-SS15. Replaces any "/4" slotted shaft 4 to $6^{\prime \prime}$ long......26c
K698s-SS16. Exact for Sentinel. Cut to length for RCA etc... 18 c

28 Types fit all UM and TM junior controls. Adapt controls and home radio recelvers

K6989-SS17. Replacea any alot-K6992-SS18. For Belmont Stewart Warner, etc. Each . 18e K6993-SS19. All 1937 and 1938 Motorola sets. Each........38e K6994-SS20. Motorola madel K6995-SS21. Motorola model 17. Each .................... 26 c K6996-SS22. For Motorola and
many others. Each....... 18c K6997-SS23. For Bosch 139, 149, 169. Each ..............18c 985425. Each ...............18c $K 6999$ SS25. Replaces standard Enurled shafts from 3/6" to 4" long. Each
K6809-SS26. Zenith sets.... 18c K6810-SS27. Philco sets. . . . 18c K6820-SS28. Motorola sets.38c K6821-SS29. Motorola sets.18c K6822-SS30. Motorola sets. 18c K6826-SS31. Philco sets.... 18c

## UNIVERSAL VOLUME CONTROLS



The Mallory Volume Controls listed on these pages can be used to service over $90 \%$ of all the radio receivers now in use. With comparatively few units, the serviceman is enabled to meet practically all service requirements. Mallory Controls feature: minimum blas adjustment on all bias controls; $3^{\circ}$ shafts that can be shortened by notching and breaking off; complete shielding; all furnithed with knob adapter, and mounting hardware. Approved awitch (listed below) can be added to any control

## UNIVERSAL REPLACEMENT CONTROLS

All with two mounting nuts, washer, ground terminal and knob adapter. Wire wound units have adjustable bias feature (ezclusive Mallory)
carbon element units with adjustable bias resistor where required.

| No. | Part | Type | Ohms Taper | No. | Part | Type | Taper |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K6660 |  |  | 24 | K6675 |  |  | 150002 |
| K6661 | R | WW | 64 | K6713 | H7* | WW | 15000 |
| K6662 | S | WW | 10 | K6714 | H12 ${ }^{\text {* }}$ | Car | 15000 |
| K6663 | T | WW | 20 | K6741 | \$20MP | WW | 20000 |
| K6664 | 0 | WW | 30 | K6715 | ${ }^{*}$ | Car. | 20000 |
| K6665 | V | WW | 60 | K6742 | Y25MP | Car. | 25000 |
| K6666 | W | WW | 100 | K6676 | $\mathrm{J}^{\text {c }}$ | Car | 25000 |
| K6667 | X | WW | 200 | K6743 | Y50M | Car | 50000 |
| K6732 | A 400 P | WW | 400 | K6677 | $\mathrm{K}^{\text {* }}$ | Car | 50000 |
| K6668 | A | WW | 5001 | K6716 | K12 | Car | 80000 |
| K6733 | A550P | WW | 550 | K6717 | Z ${ }^{\circ}$ | Car | 75000 |
| K6734 | A1MP | WW | 1000 | K6718 | Z12 | Car. | 76000 |
| K6669 | B | WW | 1000 | K6744 | Y100MP | Car. | 100000 |
| K6719 | UC500 | WW | 10002 | K6678 |  | Car. | 100000 |
| K6735 | A2MP* | WW | 2000 | K6729 | UC510* | Car. | 100000 |
| K6670 | ${ }^{\circ}$ | WW | 20002 | K6721 | UC502 | Car. | 150000 |
| K6704 | C12 ${ }^{\circ}$ | WW | 20001 | K6745 | Y200MP | Car. | 200000 |
| K6736 | $\mathrm{A}^{\text {3 }}$ M ${ }^{\text {- }}$ | WW | 3000 | K6746 | Y250MP | Car. | 250000 |
| K6671 | D ${ }^{\text {c }}$ | WW | 3000 | K6679 | M | Car. | 250000 |
| K6705 | D7* | WW | 3000 | K6730 | UC511 | Cur. | 250090 |
| K6706 | D12* | WW | 3000 | K6728 | UC509* | Car. | 250000 |
| K6737 | $\mathrm{A}^{\text {M P }}{ }^{\text {- }}$ | WW | 5000 | K6747 | Y500MP | Car. | 500000 |
| K6738 | Y5MP | Car. | 5000 | K6680 | N | Car. | 500000 |
| K6672 | $\mathrm{E}^{*}$ | WW | 30002 | K6731 | UC512 ${ }^{+}$ | Car. | 600000 |
| K6707 | E7* | WW | 5000 | K6793 | UC513 | Car. | 500000 |
| K6708 | E12* | Cars. | 5000 | K 6722 | -C503 | Car. | 750000 |
| K6673 | $\mathrm{F}^{\circ}$ | WW | 7500 | K 6748 | Y 1000 MP | Car. | 1 Meg . |
| K6709 | F7* | WW | 75007 | K6681 | 0 | Car. | 1 Meg . |
| K6710 | F12 | Car. | 7500 | K6794 | UC514 $\dagger$ | Car. | 1 Meg. |
| K6739 | A10MP* | WW | 10000 | K6682 |  | Car. | 2 Meg. |
| K6740 | Y10MP | Car. | 100004 | K6723 | UCS04 | Car. | 3 Meg . |
| K6674 | $\mathrm{G}^{\circ}$ | WW | 100\%0 | K 6724 | UC505 | Car. | 4 Meg . |
| K6711 | 67* | WW | 10000 | K 6725 | UC506 | Car. | 5 Mex . |
| K6712 | G12* | Car. | 100001 | K6726 | UC307 | Car. | 5 Meg. |
| K6720 | UC501 | Car. | 10000 | K6727 | UC508 | Car. | 9 Mes. |
| Car.-Carbon clement. WW-Wire wound. *-Has adjustable bias feature. Wire wound unita have adjustable plate; carbon element controls have external adjustable resistor. †-Has slotted shaft for auto seta. Supplied Less Switch. <br> Your Cost Each, Any of the above Controls |  |  |  |  |  |  |  |



## Extension Shafts

Type A-Length $4^{*}$
K6561- ${ }^{3 / 6}$ " diam., ify" flat.
K6562-1/" "diam., "后", flat.
Any Size. Eam., M .....24e ${ }^{c}$
Type B-2 long, $\mathrm{M}^{\prime \prime}$ diameter with ${ }^{3 /}$ slot. Enclosed in tight K6559 tube.


## Standard Speclal Single "SRP" Controls

For receivers using other than universal type controla. Each has special features. Encyclopedis shows control No, required. Shpg. wt. 5 oze, Switch, accessoriea not included.

| Stock | Type | Resis. | Stook | Type | Resis, | Stock | Type | Resis, |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | No. | Ohms | No. | No. | Ohms | No. | , | Ohms |
| K6621 | SRP134 | 4500 | K6701 | SRP245 | 32 M | K6552 | SRP280 | 250 M |
| K6627 | SRP142 | 2900 | K6798 | 8RP251 | 350 M | K6632 | SRP288 | 100 M |
| K6635 | SRP152 | 60 | K6584 | 8RP261 | 100 M | K6788 | SRP289 | 50M |
| K6636 | SRP153 | 13 M | K6768 | SRP262 | 1500 | K6553 | SRP290 | 1 Meg |
| K6699 | SRP154 | 50 M | K6585 | 8RP263 | 32 M | K6651 | SRP900 | 20 M |
| K664I | SRP179 | 125M | K6797 | SRP269 | 10M | K6652 | SRP901 | 10M |
| K6693 | SRP185 | 1500 | K6789 | SRP282 | 350 M | K6653 | SRP960 | 800 |
| K6792 | SRP188 | 32 M | K6551 | SRP283 | 2500 | K6654 | SRP961 | 10M |
| K6648 | SRP213 | 250 M |  |  |  |  |  |  | Any bove 250 M

Your cose 5 pe,
1.09 Katis -spre39 w.w. Vol. strip 450 omma rour cost

## Standard Special Dual "DRP" Controls

Two separate controls operated by a single shaft. Will service ove $90 \%$ of sete utilizing thi type of control. Refer to the Mallory Encyclopedia for selection. Shpg. wt. app. 8 oz.

| Stock No. | Type No. | Resistanee |  | Stock No. | Type No. | Reoistance |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Front | Rear |  |  | Front | Rear |
| K6683 | DRP114 | 250 | 5M | K6758 | DRP239 | 25 M | 25 M |
| K6698 | DRP115 | 3800 | 3800 | K6759 | DRP240 | 250 M | 10 M |
| K6694 | DRP116 | 25700 | 10M | K6773 | DRP250 | 50 M | 1M |
| K6751 | DRP117 | 500 | 2500 | K6604 | DRP301 | 5M | 2500 |
| K6752 | DRP119 | 3M | 10 M | K6607 | DRP304 | 1 Meg . | 3 Meg |
| K6753 | DRP122 | 645 | 10M | K6601 | DRP311* | 150 M | 250 M - |
| K6614 | DRP169 | 7500 | 10M | K6611 | DRP314 | 500M | 2500 |
| K6619 | DRP221 | 10M | 100M | K6612 | DRP315 | 2 Meg . | 2500 |
| K6756 | DRP222 | 75M | 32M | K6603 | DRP317 | 500 M | 1 M |
| K6757 | DRP232 | 3 Meg . | 3 Meg . | K6618 | DRP318 | 250 M | 3 Meg. |
| Tapped at 160 M ohms. <br> Any Type Above, <br> Your Cost Each. <br> $\$ 1.82$ |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Standard Universal Tapped Controls |  |  |  |  |  |  |  |
| Standard $112^{\circ}$ diameter controls with tap for various applications. |  |  |  |  |  |  |  |
| Furnished with two nuts, washer, fround terminal and knob adapter. |  |  |  |  |  |  |  |
| Stock | Mirs. | Ree. | Tapped | Stook | Mfrs. | Res. | Tapped |
| No. | No. | Ohms | At Ohma | No. | No. | Ohms | At Ohms |
| K6543 | TRP801 | 40000 | 8000 | K6583 | TRP612 | 2 Meg . | 15000 |
| K6544 | TRP602 | 80000 | 4000 | K6586 | TRP613 | 2 Meg . | 400000 |
| K6545 | TRP603 | 250000 | 110000 | K6587 | TRP614 | 350000 | 70000 |
| K6546 | TRP604 | 350000 | 20000 | K 6588 | TRP615 | 3 Meg. | 900000 |
| K6547 | TRP605 | 350000 | 70000 | K6589 | TRP616 | 500000 | 60000 |
| K6577 | TRP606 | 500000 | 100000 | K6590 | TRP617 | 60000 | 12000 |
| K6578 | TRP607 | 500000 | 225000 | K6591 | TRP618 | 2 Meg . | 25000 |
| K6579 | TRP608 | 1 Meg . | 200000 | K6593 | TRP620 | 2 Meg . | 900000 |
| K6580 | TRP609 | 1 Meg . | 500000 | K6596 | TRP623 | 250000 | 50000 |
| K6581 | TRP610 | 1 Meg . | 30000 |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Your Cost Each, <br> Any of the Above |  |  |  |  |  |  |  |

Standard Universal Dual Controls
Consist of two volume controls strapped together and driven by a Single shaft. Unitw listed service practically all receivers.

| Stock | Mfrs. | Res. in Ohms |  |  |  | Taper |  |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | :---: |
| No. | No. | Type | Front | Rear | Front | Rear |  |
| K6684 | CE | WW | 2000 | 5000 | I | I |  |
| K6658 | GE | WW | 10000 | 5000 | VII | IV |  |
| M6685 | GG | WW | 10000 | 10000 | VII | IV |  |
| M6686 | GK | Car. | 10000 | 50000 | I | IV |  |
| K6659 | IL | Car. | 100000 | 100000 | I | I |  |
| M6687 | LM | Car. | 100000 | 250000 | I | I |  |
| K6749 | MM | Car. | 250000 | 250000 | I | I |  |
| M6750 | MN | Car. | 250000 | 500000 | I | I |  |
| K6689 | NN | Car. | 500000 | 500000 | I | I |  |

K6689 NN Car. $\quad$ WN Wound element. Cer.-Carbon elernent.
Your Cost Ench.
Any Size
$\$ 1.82$

## Explanation Of Mallory Volume Control Tapers

No. (1) For audio or antenna shunt circuits.
No. (2) For aeries circuiss such as cathode voltage controls.
No. (3) Fior antenna hunt and "C" bies circuits.
No. (4) Linear taper; for voltage divider circults
No. (4a) Modified linear tmper, similar to No. 4
No. (7) Wire wound element. For antenna and "C" bias.
FS Universal Flexible Coupling Shafts


## | CLAROSTAT volume confrols

## CLAROSTAT Serles M Volume Control



Compact yet without sacrificing operating efficiency and long service. 1/8" dia. by 1/ ${ }^{\prime \prime}$ deep. Utilizes atabilized element insuring the control's constancy in all weather and in all climates. The Ad-A-Switch feature makes it possible to adapt any "A" switch to any "M" control.

| No. | Type | Ohms | Each | No. | Type | Ohms | Each |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K7100 | M-5-S | 500 |  | K7120 | M-45-W | 50,000 |  |
| K 7101 | M-8-S | 1,000 |  | K7121 | M-46-Z | 50,000 |  |
| K7102 | M-11-S | 2,000 |  | K7122 | M-47-S | 75,000 |  |
| K7103 | M-15-S | 3,000 |  | K7123 | M-48-V | 75,000 |  |
| K7104 | M-10-S | 5,000 |  | K7150 | M-49-S | 100,000 |  |
| K7105 | M-20-U | 5,000 |  | K7151 | M-51-Z | 100,000 |  |
| K7106 | M-23-S | 7.500 |  | K7152 | M-52-S | 200,000 |  |
| K7107 | M-27-S | 10,000 |  | K7153 | M-55-8 | 250,000 |  |
| K7108 | M-29-0 | 10,000 |  | K7154 | M-64-2 | 250,000 |  |
| K7109 | M-30-V | 10,000 |  | K7155 | M-58-9 | 500,000 |  |
| K7110 | M-31-W | 10,000 |  | K7156 | M-50-Y | 500.000 |  |
| K7111 | M-81-Z | 10,000 |  | K7157 | M-60-Z | 500,000 |  |
| K7112 | M-32-S | 15,000 |  | K7158 | M-61-S | 1,000,000 |  |
| K7113 | M-33-D | 15,000 |  | K7159 | M-63-2 | 1,000,000 |  |
| K7114 | M.34-V | 15,000 |  | K7160 | M-66-Z | 2,000,000 |  |
| K7115 | M-35-W | 15,000 |  | K 7161 | M-67-Z | 3,000,000 |  |
| K7115 | M-37-U | 20,000 |  | K7152 | M-68-2 | 4,000,000 |  |
| K7117 | M-40-s | 25,000 |  | K7163 | M-69-Z | 5,000,000 |  |
| K7113 | M-11-W | 25,000 |  | K7164 | M-72-V | 25,000 |  |
| K7119 | M-44-S | 50,000) |  | K 7165 | M-99-Z | 10,000,000 |  |

Taper Code: V-C-bias rheostat; U-Ant. and C-bias control for 1 tube without bleeder; W-Screen grid voltage, phono pickup, regeneration control; Y-Audio shunt and AVC when steep taper is
desired; $Z$ Audio shunt, AVC, tone, gain control; $S$-Standard desired; Z A
potentiometer.


CLAROSTAT Series 58 W W Controls
Sturdy and reliable in construction yet capable of use for delicate control work. Noiseless in operation these units are standard equipment in laboratories, in radio stations, and in electronic equipment where stability and reliability are essential. All the controls listed here are linear. Constructed of precision wound alloy wire on a bakelite strip. Rotor sweeps over inside face of winding. Molded bakelite casing, $1^{211}{ }^{\prime \prime}$ dia., ${ }^{26} /$ /re $^{\prime \prime}$ depth, $1 / 8^{\circ}$ bushing. Shaft $11 / 2^{\circ}$ long.

| No. | Type | Resistance in Ohms Each | No. | Type | Resistance in Ohms | Each |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7048 | 58-1 | $1)$ | 7094 | 58-500 | 500 |  |
| 7049 | 58.2 | 2 | 7093 | 58.750 | 750 |  |
| 7051 | 58-4 | 4 | 7092 | 58-1000 | 1,000 |  |
| 7052 | 58-6 | 6 | 7090 | 58-2000 | 2,000 |  |
| 7053 | 58-10 | 10 | 7087 | 58-3000 | 3,000 | 73 |
| 7054 | 58-15 | 15 | 7084 | 58-5000 | 5,000 |  |
| 7055 | 58-20 | 20 | 7080 | 58-7500 | 7,500 |  |
| 7056 | 58-25 | $25 \sim$ | 7078 | 58-10K | 10,000 |  |
| 7057 | 58-30 | 3073 | 7073 | $58-15 \mathrm{~K}$ | 15,000 |  |
| 7058 | 58-40 | 40 | 7070 | $58-20 \mathrm{~K}$ | 20,000 |  |
| 7099 | 58-50 | 50 | 7068 | $58-25 \mathrm{~K}$ | 25,000 |  |
| 7060 | 58-60 | 60 | 7067 | 58-30K | 30,000 | 94 C |
| 7061 | 58-75 | 75 | 7066 | 58-40K | 40,000 |  |
| 7.098 | 58-100 | 100 | 7065 | 58.50 K | 50,000 |  |
| 7097 | 58-200 | 200 | 7064 | 10-75K* | 75,000 | 11.47 |
| 7096 | 58-300 | 300 | 7063 | 10-100 K* | 100,000 | 1.47 |
| 7095 | 58-400 | 400 | * 1 | n depth. |  |  |

## CLAROSTAT

## 10-Watt Output Attenuators

Type CiB: Compact constant impedance attenuators that will dissipate 10 watts in any position. Linear attenuation in 3 db steps to 30 db , final step to infinity. Units are $2^{\text {F }}$ dia., 23 " long. Mount in single bole. Bushing $1 / 8$ "; shaft $1^{1}$ long. Supplied with dial plate and knob. Shpg. wt. 1 ib.

| No. | Ohms | No. | Ohms | No. | Ohms Any Aype, Each |  |
| :--- | :---: | :--- | :---: | :--- | :---: | :---: |
| K7837 | 8 | K7839 | 50 | K7841 | 250 | $\$ 6.35$ |
| $\mathbf{K 7 8 3 8}$ | 15 | $\mathbf{K 7 8 4 0}$ | 200 | $\mathbf{K 7 8 4 2}$ | 500 |  |

## CLAROSTAT Constant

Impedance Controls
Provide highest quality sound reproduction. Use these " $T$ " and "L" pads to eliminate distortion which arises from mismatched impedances. Safe maximum power dissipation of 2.5 watts. Continuous range from 0.5 to 30 db . atteauation in $90 \%$ of rotation. Last $10 \%$ gives infinite attenuation.



## Serles T Tapped Controls

The standard units listed here permit replacement of tapped units with the assurance that the overall resistance value as well as the taps satisfactorily substitute for the original. A dual contact arm rides the resistance element ring. Low loss conduc. tion throughout reduces operational noise to a negligible minimum.

| No. | Type | Ohms | Tap No. 1 | Tap <br> No. 2 | Tap No. 3 | Esch |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K7172 | T-25 | 50,000 |  | 25,000 |  |  |
| K7173 | T-38 | 200,000 |  |  | 100,000 |  |
| K 7174 | T-39 | 250,000 |  | 25,000. |  |  |
| K7175 | T-42 | 250,000 |  | 125,000 |  |  |
| K7176 | T-43 | 250,000 |  |  | 50,000 |  |
| K7177 | T-44 | 250,000 | 60,000 |  | 125,000 |  |
| K7178 | T-45 | 250,000 | 30,000 | 60,000 |  |  |
| K7179 | T-60 | 350,000 |  | 25,000 |  |  |
| K7180 | T-69 | 350,000 | 76,000 |  |  |  |
| K7131 | T-70 | 350,000. |  | 75,000 |  |  |
| K7132 | T-78 | 500,000 |  | \$00,000 |  |  |
| K7133 | T-80 | 500,000 |  |  | 100,000 |  |
| K7134 | T-81 | 500,000 | 25,000 |  |  |  |
| K7135 | T-82 | 500,000 |  |  | 200,000 |  |
| K7136 | T-88 | 500,000 |  | 50,000 | 20,000 |  |
| K7137 | T-90 | 500,000 |  | 250,000 |  |  |
| $K 7188$ | T-92 | 500,000 | 100,000 |  | 300,000 |  |
| K7139 | T-98 | 1,000,000 | 250,000 |  |  |  |
| K7190 | T-101 | 1,000,000 |  | 50,000 |  |  |
| K7191 | T-102 | 1,000,000 | 100,000 |  | 500,000 | 11.09 |
| K7192 | T-103 | 1,000,000 |  | 100,000 |  |  |
| K7193 | T-109 | 1,000,000 |  | 225,000 |  |  |
| K7194 | T-110 | 1,000,000 |  | 170,000 |  |  |
| K7195 | T-111 | 1,000,000 |  |  | 200,000 |  |
| K7196 | T-112 | 1,000,000 |  | 500,000 |  |  |
| $K 7197$ $K 7198$ | T-95 | 1,500,000 | 250,000 © 25\% Rotation |  | 500,000 |  |
| K7198 | T-125 | 1,500,000 |  | 350,000 |  |  |
| $K 7198$ $K 7200$ | T-114 | 2,000,000 |  | 100,000 |  |  |
| K 7201 | T-115 | 2,030,000 |  | 500,000 |  |  |
| K7201 | T-116 | 2,000,000 |  | 1,000,000 |  |  |
| K7202 | T-118 | 2,000,000 | 20,000 |  |  |  |
| K7203 | T-119 | 2,000,000 |  | 200,000 | , |  |
| K7204 | T-120 | 2,000,000 |  | 400,000 |  |  |
| K7205 | T-121 | 2,000,000 | 250,000 |  | 500,000 |  |
| K7206 | T-124 | 2,000,000 | 5,000 (c) $25 \%$ Rotatlon |  |  |  |
| K7207 | T-126 | 2,000,000 | 200,000 |  | 400,000 |  |
| K7208 | T-129 | 2,000,000 | 15,000 |  |  |  |
| K7209 | T-123 | 2,500,000 | 250,000 |  | 500,000 |  |
| K7210 | T-128 | 4,000,000 |  | 500,000 |  |  |

## CLAROSTAT Ad-A-Switch for Volume Controls

 No K7166 Type $K 7167$ SW-A S.P.S.T. 35 c K7167 SW-Al S.P.S.T., 35c K7168 SW-A2 D.P.S.T. 35c
## With dummy lug.

## CLAROSTAT Duals

Series DC controls are dual units. Two controls of same resistance values and tapers, connected in tandem for joint operation. No. Type Ohms Each $\begin{array}{llr}\text { K7211 } & \text { DC } 5 \text { S } & 50,000-5 \\ \text { K } 7212 & \text { DC } 6-2 & 100,000-2 \\ \text { K } & \text { DC }\end{array}$
 $\begin{array}{llr}\text { K7214 } & \text { DC } 10-Z & 500,000-Z \\ \text { K } 7215 & \text { DC } 11-Z & 1,000000-2\end{array}$ K7216 DC $30-\mathrm{S}$
$1,000,000-2$
$250,000-\mathrm{S}$

## CENTRALAB Faders

Straight Fader For use with high im pedance input
devices, xtal pickups, mikes, etc. Provide smooth quiet fading from one source to another. Each tapped at center.
Srock
No. Resistance
K 9004
Kach Sidec.t.
500 M ST Cour $\begin{array}{lcc}\text { K } 9004 & 500 \mathrm{M} \\ \text { K } 9005 & 1 \mathrm{Meg} . & \text { SI.TB }\end{array}$ K9005 Gain Control Like above but without center tap. $\begin{array}{ll}\text { Stock } & \text { No. Resistance Each } \\ \text { K } 9000 & 250 \mathrm{M} \\ \text { K } 9001 & 500 \mathrm{M} \\ \text { K } 9002 & 1 \mathrm{Meg} .\end{array}$



Dual control maintaining constant impedance to both sides. For sound amplifiers, recorders, etc.
Stock No. Imp. $\begin{array}{lll}\text { K9006 } & 50 \mathrm{ohms} & \$ 2.06 \\ K 9007 & 200 \text { ohms } & 1\end{array}$ $\begin{array}{ll}\text { K9007 } & 200 \text { ohms } \\ \text { K9008 } \\ 500 \text { ohms }\end{array}$

No. $\begin{gathered}\text { Type } \\ \text { K7169 } \\ \text { SW-A4 }\end{gathered}$ four wire 35 c K7169 SW-A4 four wire 35c K7170 SW-A. S.P.S.T.* 44c K7172 SW-A6 S.P.S.T.† 44e

## CLAROSTAT

 Rotary SwitchesCompact, positive contact, bakelite. Rated 1 amp. 250 volts, 3 amps. 125 volts. Dia. $11^{1 / 4}$ ",
 No. ${ }^{\text {Kind }}$ Type $\begin{array}{llll}\text { K12845 } & 8590 & \text { S.P.S.T. } & \$ 0.35 \\ \text { K12855 } & 8591 & \text { S.P.bussinglug } & \mathbf{3 5}\end{array}$ $\begin{array}{llll}\text { K12855 } & 8591 & \text { S.P. bussinglug } \\ \text { K12846 } & 8592 & \text { D.P.S.T. }\end{array}$ $\begin{array}{lll}\text { K12856 } & 8592 & \text { D.P.P.T. } \\ \text { K12847 } & 8593 & \text { S.P.D.T. }\end{array}$ $\begin{array}{llll}\text { K12857 } & 8594 & \text { S.P. rev. action } & .45 \\ \mathbf{K 1 2 8 4 8} & 8595 & \text { 4 }\end{array}$ K12848 $8595 \quad 4$ wireS.T.
Mallory "T" \& "L" Pads


For controlling level of low imp. audio circuits, mikes or phono, etc. With knob, dial and plate.


# CENTRALAB volume controls 

Model $R$

CENTRALAB Radiohms
Centralab Radiohms feature hard－surfaced materiala，pat－ ented design and skilled workmanship．They are man－ ufactured for long service under extreme conditions． Their outstanding feature is


Whodel M
a wall－type resistor strip which is mounted on the inner circumference of the control shell．It gives one－third greater effective resistor length than ordinary controls，and lowers noise levels；it assures better ad herence to logarithm curve forms and greater energy dissipation．Cases Model R Radiohm：The feature of this Radiohm（formerly the Standard Radiohm）is the non－rubbing contact band which reduces wear and assurea quiet operation by relieving the resistor of all erosive action．Rubbing is tranaferred to a permanently lubricated button and a flexible metal contactor where it does no harm to the operation of the part．Case is $1^{3}$／㐌＂diam．by＂盾＂depth．Aluminum shaft extends 3 ＂ from end of Model M Radiohm－Series III：Small in size（formerly the Midget Radiohm）－especially desirable for space saving．Equivalent to Model $R$ and may be used as a substitute in all instances．Has direct contact but retains the wall－type resistor for maximum efficiency．Case is ta darm，by in deep from mtg．surface．Milled aluminum shaft for
otand or set screw knob． 1－Voltage Divider（linear）knob．
1－Voltage Divider（linear）


Your Cost Each
Any Type Listed Above


CENTRALAB Switch Covers
The Centralab switch cover is sup－ plied in five types for Model $R$ Radiohm and in four types for
Model $M$ Radiohm．Add $/{ }^{\prime \prime}$ for Model M Radiohm．Add $1 / /^{\prime \prime}$ for wyle Model R Radiohm and ＂／no $^{\circ}$
for switch cover on Model M Radiohm．

| Stock No． | For Model R CRL No． | Circuit | Stock No． | For Model M CRL No． | Your Cost Each |
| :---: | :---: | :---: | :---: | :---: | :---: |
| K8665 | K10 | S．P．S．＇ | K 8195 | K155 |  |
| K8666 | K11 | S．P．D．T | K8196 | K156 |  |
| K8660 | K12 | D．P．S．T | $K 8197$ | K157 |  |
| K8669 | K15 | 4 Point | K8198 | K158 |  |
| K8670 | K16 | ＊S．P．D．T． |  |  |  |
| K8661 | K17 | tS．P．S．T． | K8199 | K169 |  |
| Operates at clockwise position． |  |  |  |  |  |
| CRL Shaft Couplers |  |  | CRL Extension Shafts |  |  |
| K8885－（CRL（K161） |  |  | CRL Extermanterit |  |  |
| K＂and＂化＂shaft． <br> K8886－（CRL PR184） |  |  |  |  |  |
| －Bakelite auto control coupling．K＂diam，hole；opp．en |  |  | Where long sturdy remote con nections are required． |  |  |
|  |  |  | Stock |  |  |
| cone shaped and alotted for remote |  |  | No． | N | on |
| K8888－（CRL JK168）－Same a K184 but square hole for Motorol |  |  | K8889 | 181 |  |
|  |  |  | K8892 |  |  |
| Your Cost Each．．．．．．．．．．． | K184 but square hole for Motorol |  | Your Co | Each， |  |

## CENTRALAB Model R Wire Wound Radiohms

These Radiohms feature a wire wound resistance strip in a molded bakelite case with dimensions

identical to the regular Model $R$ Radiohm．Only plain controls are listed．Model R Radiohm switch covers may be attached．Insulated aluminum shaft extends 3 ＂from $4 / 8$＂bushing，milled full length for push－on or set screw knobs．Rated at 3 watts．All controls have linear relation of resistance to sota－ | contr |
| :--- |
| tion． |

|  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | CRL No． | $\begin{aligned} & \text { Resist- } \\ & \text { ance } \\ & \text { (Ohms) } \end{aligned}$ | Stock No． | $\begin{aligned} & \text { CRL } \\ & \text { No. } \end{aligned}$ | $\begin{gathered} \text { Resist- } \\ \text { ance } \\ \text { (Ohms) } \end{gathered}$ |  |
| K8893 | V100 | 2 | K8682 | V121 | 100 |  |
| K8894 | V102 | 4 | K8683 | V123 | 200 |  |
| K8959 | V104 | 6 | K8927 | V125 | 300 |  |
| K8895 | V106 | 8 | K8684 | V126 | 400 |  |
| K8961 | V108 | 10 | K8685 | V127 | 500 |  |
| K8900 | V109 | 15 | K8928 | V128 | 750 |  |
| K8902 | V110 | 20 | K8686 | V129 | 1.000 | 3 |
| K8920 | V111 | 25 | K8687 | V131 | 2，000 |  |
| K8921 | V112 | 30 | K8765 | V133 | 3，000 |  |
| K8922 | V114 | 40 | K8929 | V134 | 4，000 |  |
| K8681 | V116 | 50 | K8804 | V135 | 5，000 |  |
| K8925 | V117 | 60 | K8930 | V136 | 7，500 |  |
| K8926 | V118 | 75 | K8766 | V137 | 10，000 |  |

## CENTRALAB Power Rheostats

A 25 －watt or 50 －watt rheostat designed to work at high temperatures without damage． Ideal for many commercial applications，such as amall motor speed controls，charging rate adjusters or soldering iron temperature rezu－ ators．Give maximum dissipation for size be． ause of complete air circulation．All metal rame and core，insulated with treated ashes－ tos．Practically indestructible．Made in tho sizes，all two inches in diameter．Bushing is
 eter by $1 / 3^{" 1}$ long．Shaft and bushing are at contact arm potential．Depth behind pancl of
25 －watt rheostat－ $8 / 4^{n} ; 50$－watt－ $11 / 4$ ．All sizes furnished with bake－ ite knob and panel insulating washers．


CENTRALAB Model M Split Knurl Radiohms

Construction of split Knurl Radi－ ohms specifics an extruded brass ohms 25 pecifres an extruded brass ing that allows immediate cutting． ing that allow
Plain Types

| Stock No． | $\begin{aligned} & \text { CRL } \\ & \text { No. } \end{aligned}$ | Resi Ohms | Taper |
| :---: | :---: | :---: | :---: |
| K8946 | N | 10，000 |  |
| K8947 | NK137 | 25，000 |  |
| K8948 | NK138 | 50，000 |  |
| K8285 | NK139 | 250.000 |  |
| K8286 | NK140 | 500.000 |  |
| K8287 | NK141 | 1 Meg． |  |
| K8288 | NK142 | 2 Meg |  |
| K8949 | NK172 | 3 Megs |  |
| Your Cost，Plain Types Each <br> Tapped Types |  |  |  |
| Stock No． | $\begin{aligned} & \text { CRL } \\ & \text { No. } \end{aligned}$ | Resist． Max． | （Ohms） Tap At |
|  |  |  |  |
| $\begin{aligned} & \mathbf{K} 8952 \\ & \mathbf{K 8 8 2 8 9} \\ & \mathbf{K 8 2 9 1} \\ & \mathbf{K} 8953 \end{aligned}$ | NK173 NK143 NK174 | $\begin{aligned} & 250,000 \\ & 500,000 \\ & 1 \mathrm{Meg} . \\ & 1 \mathrm{Meg} . \end{aligned}$ | $\begin{array}{r} 75,000 \\ 150,000 \\ 300,000 \\ 600,000 \end{array}$ |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Tapped Types， |  |  |  |

## CENTRALAB Model R Twin Radiohms These Cen． tralab Radi－ resistance ele－ ments insulated fromeach other and from the shaft and bush－ <br> 

 are Model $\mathbf{R}$ Radiohm bases，17／6＂ in diameter by $1^{11 / 4 " ~ d e p t h ~ f o r ~ t w i n ~}$ sections． $3^{\prime \prime}$ aluminum shaft with CRL NoCRL No．C100：Has special taper to improve many receivers now
using single controls is in the＂C＂ using single
CRL No．C101：May be used where the onginal single control is in the screen grid circuit． CRL Nos．C102－3－4：Use as dual grid volume control in audio am－ plifiers with push－pull input stage．

| Stock No． |  | Resistance（Ohms） |  |
| :---: | :---: | :---: | :---: |
|  | CRL | Front | Back |
|  | No． | Base | Base |
| K8912 | C100 | 10，000 | 25，000 |
| K8813 | C101 | 10，000 | 50，000 |
| K8758 | C102 | 100，000 | 100，000 |
| K8768 | C103 | 250，000 | 250，000 |
| K8787 | C104 | 500，000 | 500，000 |



K13889-Your Cost Each

## PHILMORE Tunable Crys

 tal Sets(A) Supertone: Glass-enclosed su-per-sensitive crystal with adjustable cato whisker. Aerial, ground and carphone posts. 1 lb . $\$$ ground and K13888-Your cost
(B) Little Wonder; Same as above but open detector. Bakelite housing Slide contact tuning. Gets stations loudly and clearly.

## Duplex Home Telephones

Connecticut Duplez Telephones are a complete two-way station phone system for home, office or play. They are ideal for connecting home to workshop, room to room, house to barn, or dining room to kitchen, etc. Mounts on any wall or on any vertical surface. Mounting area $5^{\circ}$ square. Furnished complete with 100 feet of wire. May be extended to 2000 feet. An ideal yet inexpensive two-way telephone sys em for practically any purpose or use. Require tem for practically any purpose or use. Require 2 No. 6 dry cells for each phone K19858-Cells for above, Each.

## Single Headphone and Band

 These phones are constructed with the new type of alloy magnets for more power and greater permanency. This will help to bring up and maintain a greater vol ume as compared to any other crystal oct using ordinary phones. The phone can be adjusted to any position. The headphone band has just the right amount of ten K13887-Headphone with Band Your Cost
$\$ 1.13$


K23884-Your Cost Eac

## Desk Type Bullet MIke

A microphone housed in a realistic bulletshaped design. Two-tone black and nickel finioh metal. Very sturdily constructed to withstand a good deal of punishment. Comes equipped with eighteen feet of wire. It exceptionally well amplified sound will sur prise you for it is far superior to any other in the same class. It is of the permanentmagnet type thus minimizing damage by breakage or overload. The entire unit meas ures $4 \times 3 \times 3$ inches and weighs nine ounces boxed. Comes complete with cord for connecting microphone
$\$ 2.25$

## ICA "TRIPLEX" Set



The "Triplex" code practice set is the ideal instrument with which to learn teleg. raphy, radio code signals and blinker or navy signaling. Composed of a high frequency buzzer, blinker, light and tele graph sounder. Easy and economical to operate. Only two fiashlight batteries are needed. Code instruction is mounted on the signal box and is easily read. A switch on the panel board enables the user to change from one type of aignal to another. Clips provided for connecting an additional set for dual use, if desired. K14008
Your Cost, Each
\$3.76

## ICA Dual "TRIPLEX" Set

Exactly the same as the unit shown above but with the two Triplez units packed in an attractive carton with 50 feet of special wire and full operating instructions. These units can be connected together to provide a dual system of sending and receiving on the part of both units. All are shipped lea batteries.
K14000- Your Cost Each K20622-Flashlight cells for above
 copper wire, 50 ft . No. 18 rubber covered copore srrester. round clamp, lead-in types of broulcast and all-wave receivers. typer of broulcast and
53.65
$61 / 2 \mathrm{c}$


## Table Model Crystal Set

A crystal set that looka like a real power set in design and character. No tubes, bat teries, or current-just aerial and ground -it actually pulle sound out of the air Extremely simple to connect. Complete instructions for operating supplied. Has instructions for operating supplied. Has a positive contact tuning dial and spring action easy find locator which permits timple tuning. Built into a realistic mahogany finish case. Sturdy yet extremely light. Clear reception is possible with specially constructed earphones. All that is required for effective reception is a good aerial and ground. Shpg. Wt. $11 / 2$ lbs K13822-Model 250 . Your Cost K13823 - Same as above but less phone
$\$ 4.5$

## Miniature Plastlc Crystal Set



An efficient crystal set housed in a beau tiful mahogany color plastic case. Just like the big sets. Earphone is set into the the case. When in use, the phone is removed from the case and held to the ear for top reception. Look like a miniature of present-day modern design sets. Perof present-day modern design sets. Per-

Instructions supplied with each unit.
K13885-Your Cost Each
$\$ 2.49$

Fixed Crystal Detector in Bakelite Case Supersensitive point found by meter sand fixed permanently. In Bakelite case with screw connec K13913-Your Cost
$.48^{\circ}$


Mounted Galena Crystal hillihli Galena(leadsulphide) ha
been used for years because of its extreme sensitivity. These units have been carefully selected and tested. 10 For 81c
K13900-Your Cost.......

## ELECTRIX-Fun With Electrlcity

A new educational toyl No tool or soldering irons needed. Uses a 6 -volt lantern battery or four No. 6 dry cells. Absolutely safe! Contains a 16 . contect board $8 \times 8 \times 1 / j^{\prime \prime}$ steel, black crackle finiah, 1 telegraph ikey. 1 buzzer, 2 lamp sockets, red and green lamps, 2 battery clips, 4 knife switches, 8 straight connecting links, 4 Offet connecting links, 1 gong five feet of hookup wire and a book of instructions. This kit is furnished complete except for the battery. Shpg. Wt. 3 lbs. \$ $\mathbf{K 2 5 0 0 2 - Y \text { our Cost }} 5$
K20630-Six-volt battery for the above. Your Cost

## Popular Phone Plugs

 For 1 or 2 phone or peaker
Bakelite shell. $23 / /^{*} \times 8 / 6^{7}$ diam K14974 - Black K14971-Red. Each 29 10 For.

Metal Shell Type
Same with nickeled brass shell

"Stubby" Metal Shell As above but with short metal shell $21 /{ }^{\prime \prime}$ overall. 10 For $\$ 3.75$ C

Midget Bakelite Plug Bakelite shell. $21 / /^{\prime \prime}$ overall I "/ " ${ }^{\prime \prime}$ diameter. Solder lug connections. K14960-Black K14963-Red Your Cost 10 For $\$ 3.1535^{c}$ Each

Midget Metal Shell Same with metal shell. $21 / 1$ " overall $\mathrm{I}^{1 / \text { / }^{\prime \prime} \text { diam. K } 14958 . ~}$ 10 For

Stand with Crystal
 Ball and socke swivel arm for contacting any point on crysta quickly anc easily. Attrac tively mount ed. Furnished with cryatal that is tested for extra sensitivit terminals. 10 For $\$ 1.89$ K13917-complete Same as above in kit form K13906-Less base and cryatal.

## Glass-Enclosed Crystal

 Detector

## Economy Aerial Kit

detontors An ezcellent
 cconomy gerial kit. Contaims: 90 feet of $7 / 27$ stranded aerial wire, 25 feet of rubber covered lead-in, lead-in strip, ground clamp. 2 nail-it knobs and 2 porce lain insulators. It would be diff. cult to find a more complete kit at any comparable price. Contcins all the parte needed to construct an efficient aerial. Can be used with all types of broadcast and short wave receivers. With some reasonable care in construction and location of the anterna wire, this aerial should provide excellent reception. Packed in individual boxes. Shpg. wt. 2 lbs.
K16478
Your Cost Each


## Cat Whiskers

Finest wire made especially for the purpose. Scientifical iy corrected tencion for the best in accurate tuning. K13921-Bag of 2 Y13921-Be

## headphones and accessories

## COMPACT HEADPHONE KIT

When installed, the user can enjoy headphone reception only, speaker reception only or both together. Complete outfit consists of: $18^{\prime \prime}$ connecting cable, adapter with three-way switch and terminal jacke on an insulated panel, speand complete installation instruc tions. Shpe. wt. 3 lbs. K13944-p
Your Cost,
Complete KIt


## "EMPIRE" DX TYPE HEADPHONES

Made eapecially for DX fans. Have featherweight shells and a one-piece adjustable stecl headband with adjustable clips. Each unit has a powerful bi-polar magnet and a BAKELITE CAP. Highly sensitive. Shpe. wt. 2 lbe.

"EMPIRE" Single Unit Headsets Similar to above, but one phone. Clock-steel and permanently attached; with $41 / 2 \mathrm{ft}$. cord K13896-1000-ohm aingle set. Your Cost. K13897-1500-ohm single set.
$95^{c}$
$98^{c}$


## BRANDES "Admiral" Headphones

Compact, efficient phones featuring power ful magnets, molded caps, steel headbands with new type adjustable clips, concealed terminals. With 5 -ft. cord. K13928-2000 ohms Per Set.
K13929-3000 ohms
Your Cost, Per Set
K13930-5000 ohms
Your Cost, Per Set

## BRANDES ASuperior" <br> BRANDES "Superior" Headphones

## The old standby in the radio field. Similar to above, but with exposed

 screw terminals. 2000 ohms.Headphone Caps and Diaphragms K13936-Bakelite Cap (fits all models). Each ................... . 18 e K13935-Aluminum Cap (fits all models). Each K13937-Diaphragm only (fits all models). Each 5 c

## TRIMM Featherweight Phones

Lightweight - only 4 oz . Beautifully made. Bakelite shell and cap. Forged cobalt steel magnets. Adjustable steel headband

Ahms impedance.
K13918-4,000 ohms resistance. $\$ 5.68$
TRIMM Dependahlo Meadset
Well made low priced set. Bakelite shells and caps. Chrome steel magnets.
K13914-2000 ohms.
s2.65


Professional Headseti Similar but 4,000 ohms K13915-Each
Commercial Headset: DeLuxe super-sensitive phones. Exceptionally rugged. 3 year guarantee. A favorite of commercial operators. K13908-17,000 ohms imp., with army-navy type plug. K13939-Same but 600 ohms impedance.
Your Cost, Either Type
K13912-Same as K13908 but less plug
K13938 Same as K13939 but less plug

## BRUSH Model A-1

For use where high fidelity and extended frequency re-
sponse are of sponse are of
paramount lmportance. ( 60 to 10,000 cps.) corrected for
rising response
 below 200 cps.
Especially suited to monitoring, audiometry, dimilar exacting applications. Impedance over 80,000 ohms at any freq. Sensitivity approx. $11 / 2 \mathrm{bars} / \mathrm{v}$ at $1000 \mathrm{c} / \mathrm{s}$. with 5 ft cord band Shpg wt. With K13920- \$T0.S8 Your Cost.
${ }^{5} 10.58$
BRUSH Mod. A Lorgnette Hearing aid in churches, concert halls, and theatres. Telescope extersion from $12^{\prime \prime}$ to 17".Light weight. comfortable, finished in satin black. 5 ft . cord. Wt. 1 lb . K13923-Your Cost, Complete

$\qquad$
BRUSH Nodel B Single Excellent hearing aid because of extreme light weight. Very low power consump-
 ity reproduction. Hermetically sealed against moisture. Complete with 5 ft . cord. Shps. wt. 1 lb. Cost 53.91 BRUSH Model A Single Adapted to andividual or group hearing applications. Comfortable to wear, light weig ht
Spring
etecl Spring ateel ft cord. Wt. 1 lb.
K 139


## Military

 Phones Sensitive and durable to meet apmy and Navy Extra heavy duty bakelite 24,500 brass shell pedance. polar magnets. 6 ft , cord. Moisture proof. Shpg. wt. 2 lbs.
K13926
Your Cost
$\$ 10.46$ K13927-Same a
above, but low impedance type.
\$IO.46 Your Cost
-K14969-Army-Nayy type plug.
Hard rubber insulation. Black acetate shell. Fits stand- $\$$ I. 32
ard phone jacks. Each. Phone and Speaker Cords


Cotton Brald Insulation No. Type Feet Each $\left.\begin{array}{lll}\text { K13955 } & \text { Double* } & \text { 41/2 } \\ \text { K13956 } \\ \text { Doublet 4 }\end{array}\right\} \quad 20^{\text {c }}$

Ruhher Phone Cord New double headphone cord for hospitals, institutions, etc. 6Sc *Spade tips one end; straight tips other. Pin tips both ends.


Extension Cord Connector Has 2 openings, at either end, for inserting two pin tips.
K13051
Each.
$10^{c}$


Designed for
general purpose applicaing laborato ing laboratoryd amateur and amateur home use. High impedance, insures wide freq. range, high sensitivity. Complete with 5 ft . cord and adjustable lock type headband. Wt. 2 Jbs. Kour Cost.


## MALLORY switches

MALLORY Midget Jacks


Extremely compact. Mount in A. ${ }^{\text {a }}$ hole. Type fack is not illustrated.
No. Part Type Each 6183 A-1 Open Circuit 18c 66184 A-2 Circuit Closing 29c K6185 A-3A Cir. Reversing 47c

MALLORY Junior Jacks


Compact. extend only 1 "fo" behind the panel. plated No. 701-Open Circuit 6450-Your Cost
K6451-N0702 Cir... 3 K6449-No. 702A Circuit closing. K6435-No. ${ }^{702 \mathrm{~A}}$. Two circuit. nicrophone.
Your Cost, Any Type. A, ${ }^{\circ}$ K6452-No. 703. Single circuit flament control. K6459-No. 703A, Circuit reversing.
K6466-No. 703B.
Mike, one circuit cloging -circuit Your Cost, Any Type S Kour Cost, Any Type K6478-No. 704A 2 -ciretage. ment control.
Your Cost, Any Type. S. K6479 No. 705. 2-circuit fla-M6448-No. 706. Interstage fila. nent control


## MALLORY Junior Jack Switches

No. 1. Open Circuit
66401-No. 2. Circ... 385 K6402-No. 2A. Two Circuit.

plate. Mounts in 1/" hole, Panels up to $1 / 4^{\prime \prime}$ thick. $14^{n}$ deep. Two Position Swltches
No. Part Eype Each No. Part Type Each $\begin{array}{lllr}\text { K6470 } & 720 & \text { S.P.S.T. } & 50.65 \\ \text { K6471 } & 730 & \text { S.P.D.T. } & .79\end{array}$ $\times 6472 \quad 740$ D.P.S.T. $\quad .88$ $\begin{array}{llll}\text { K6473 } & 745 & \text { S.Spring } & 1.03 \\ \text { K6474 } & 760 & \text { D.P.D.T. } & 1.15\end{array}$ K6475 733 D.P.D.T. 1.15 6469744 4-P.S.T. 1.50

Three Position Switches (Center Position Off)

| K6440 | 732 | S.P.D.T. | .79 |
| :--- | :--- | :--- | ---: |
| K6441 | 762 | D.P.D.T. | $\mathbf{1 . 1 2}$ |
| K6442 | 763 | 3-P.D.T. | $\mathbf{1 . 4 7}$ |
| K6443 | 764 | 4-P.D.T. | 1.82 |

MALLORY Lever Action
 Switches
Particularly suited to inter. coms, centraliad radio, and PA equipment They are avallable in six dif-
ferent circuit combinations. all with poaitive indexing, with either horting or non-shorting contacts

| No, Circuits Contacta Type Each |
| :--- |
| $\mathbf{K 6 3 3 7} 6142 \mathrm{~S}$ |
| 68 c | $\begin{array}{lllll}\text { K6337 } & 4 & 2 & 6142 \mathrm{~S} & 68 \mathrm{c} \\ \mathrm{K} 6338 & 4 & 2 & 6242 \mathrm{NS} & 68 \mathrm{c}\end{array}$ $\begin{array}{lllll}\text { K6338 } & 4 & 2 & 6242 N S & 68 c \\ \text { K6339 } & 4 & 3 & 6143 S & 68 c \\ K 6341 & 4 & 3 & 6243 N S & 68 c\end{array}$



MALLORY Gang Switches
Contact members are heavily silver plated, and given a smooth hard finish. Contact shoe, of the self-cleaning type is of silver alloy. All switches are provided with one permanent stop and one adjuatable stop. Bushings $3 /{ }^{\prime \prime}$ and extend $8 /{ }^{2 /}$. Bakelite knob supplied. SINGLE GANG SWITCHES

## Shorting Non-Shorting



Kock No. Stock No. Circuits Points Your Cost K6263 1 Circuit 1 to 6 point $\$ 0.76$ 6248 K6250

to 6 point $\begin{array}{ll}\text { K6263 } & 1 \text { Circuit } \\ \text { K6264 } & 1 \text { Circuit } \\ \text { K6265 } & 2 \text { Circuit } \\ \text { K6266 } & 3 \text { Circuit }\end{array}$ to 5 points eac $\$ 0.76$ .91
.97 .97
.06 1.06 $\times 6271 \quad 4$ Circuit 1 to 5 points each K6272 8 Circuit 1 to 3 points each THREE GANG SWITCMES

MALLORY Etched Plates
 Hard aluminum with numbers etched in white. Fit ${ }^{3 / 6^{\circ} \text { bush- }}$ ings. Plates with ings. Plates with
on-off position or use with witches. Others for use with step No. Marking type controls K6224 1 to 2 $\begin{array}{llll}\mathrm{K} 6225 & 1 \text { to } 3 & \mathrm{~K} 6243 & 1 \text { to } 12\end{array}$ $\begin{array}{lllll}\text { K6226 } & 1 \text { to } 4 & \text { K6235 } & \text { Of }-1 \text { to } 3 \\ \mathbf{K} 6227 & 1 \text { to } 5 & \text { K6236 } & \text { Of } 1 \text { to }\end{array}$ $\begin{array}{lllll}\mathbf{K} 6227 & 1 \text { to } 5 & \text { K6236 } & \text { Of二 } 1 \text { to } 4 \\ \text { K6228 } & 1 & \text { to } 6 & \text { K } 6237 & \text { Off二 } 1 \text { to }\end{array}$

 Any Type, Your Cost IT3c K6223-"0.100"

MALLORY Plugs and Jacks

## 

No. 75.2 -way, bakelite shell K6295-Each ............ $\$ 0.38$ No. 75 N . as above, nickel shell. K6293-Each ............... 59 No. 75A. as above, with clamp. No. 100. 2-why, fiber shell No. ${ }^{100}{ }^{2}$-way

- K6348-Each. $\qquad$ .76 No. 100 N as above but nickel No. 100 A , as above, with clamp. K6349-Each . . . . . . . . . . . 1.35 No. 76. 3 -way mike plug, bakelite K6296-Each. No. 76A as above but nickel sbell K6347-Each.


For multiple circuit transfer devices such as inter-com systems, test instruments, etc

| No | Buttons | Type | Each |
| :---: | :---: | :---: | :---: |
| K6575 | 4 | 2164* | \$3.09 |
| K6455 | 6 | 2166* | 3.85 |
| K6555 | 8 | 2168* | 4.65 |
| K6444 | 4 | $2184 \dagger$ | 3.09 |
| K6554 | 6 | 2186 | 3.85 |
| K6556 | 8 | $2188 \dagger$ | 4.65 |
| K6615 | 4 | 2194 | 3.09 |
| K6616 | 6 | 2196; | 3.85 |
| K6617 | 8 | 2198 ! | 4.65 | Circuit trans, TCircuit tranafer Signal Corps Type Jacks 3, (iv) Like Sig. Corps type JK. 34 A. Takes Mallory 75: W. E. 47A, ${ }^{47 B}$; Sig. Corps

No. PL-47, PL-48, PL-55, PL 148, PL-155. K6300-Each. 32c 148, PL-155. Three circuit. Like Sig. Corps No. JK-33A. Takes
W. E. 109; Sig. Corps No. PL-46. W. E. 109: Sig.
PL-68, PL-168. K6301-Each.
Circuit Opening Switches


No. 1400L- 12 positions; opens oneline at a time while maintaining circuit through others. $1 \frac{1 / 621 / 2}{}$ wide. \%" bushing. 2 " notched shaft.
$K 6370$
Your Cost.
$\$ 3.48$

Cornell-Dubllier "Quietones"

Each has plug end and receptacle, for connecting between noisy device and line.

For These Use For These Adding Machines IF-18 Cash Registers Addressing Machines IF-18 Dishwashers Billing Machines IF-18 Floor Polishers Dental Machines IF-19 Food Mixers Dictating Machines IF-19 Fans Drilling Machines IF-19 Juice Extractors Washing Machines IF-19 Massagers Air Conditioners IF-18 Radios Auto Call Syztems IF-18 Refrigerators Barber Clippers IF-21 Vacuum Cleaner IF-21. All-Wave capacitive-inductive filter. For 110 V., 1.6 amps. max. In Walnut bakelite case. Shpg. wt. 2 lbs. K12495-Your Cost Each
....... $\$ 2.23$
IF-19. Like above, but 5 amps. max K12494-Shpg. wt. 2 lbs. Your Cost Each
$\ldots . . . \$ 3.56$
IF-18. All-Wave capacitive-inductive filter. For 110 wolts, 5 amps. max. In Walnut bakelite case. Shpg. wt. 5 lbs. $\$ 4.46$
K12493-Your Cost Each...............................

## Special Type "Quietones"

IF-22A. For use with Schick, Knapp Monarch, etc. shavers. Black bakelite case. WL. 1 Ib. SI. 59
K12496 Your Cost Each...........

1F-27. Capacitive-inductive filter for severe interference from oil burners, motors, etc. For 110 V., 5


IF-28. Same as above, but for equipment drawing up to 10 amps. max. Shpg. wt. 7 lbs. \$7. $\mathbf{K 1 2 4 9 9 - Y o u r ~ C o s t ~ E a c h . . . . . . . . . . ~} 31$


## AEROVOX Interference Filters

IN-23
For fractional h.p. motors. Bracket for mtg. directly to frame. Two Flezible leads. $1 \times 2$. K4852- 6IC

## |N-27

Small capacitive type for use between set and outlet. $1 / 8 / 8 \times 18 / 4$. Keeps noise out of line and wiring. Shpg. wt. 1 lb . K4801
Your Cost Each.

## IN-29

Affords greater filter action than IN-27

## IN-31

Plugs between attachment cord and electric outlet of either set or appliance. Provides additional inductance for better filtering. $13 / 8 \times 2 \frac{1}{4}$
K4805-Each


## IN- Line Fil- ter

This quality line filter is designed for use in the more serious cases of radio interference from ponces. It is provided with inductance as well as capacitance for thorough filtering action. The filter plugs into the electrical outlet. The radio set or the interfering device plugs into the receptacle of the filter. Recommended for use between the interfering device and the power line. The dimensions are $25 / 2 \mathrm{x}$ 3\%. A mounting ring is provided. Rated at 6 amps, for Khpg. weight 1 lb . Your Cos
$\$ 3.90$

## TACO All-Wave Filter

## De Luxe

 Model 100 An effective capacitive-in ductive filter designed for redios and appliances drawing no more than 200 watts at 120 volts AC or DC. Eliminates noises (man-made) on broadcast, hort-wave and ultra-high fre-short-wave and wrown metal case quency bands. Brown metal case plug Wt. 5 ibs. \$5.29

## SPRAGUE IF-21 Filter

Metal cased
ual condenser fiter. For use cross brushes of small motors
 $6^{\text {" }}$ leads.
K12441-Each.


## IF-24 Fiuorescent

## Lamp Filter

Capacitive type deal for fluorescent lights. In metal case. For 110 v.

 $66^{\circ}$

## NHI Standard Radio LIne Filter <br> The NHI

Standard Radio
Line Filter is
designed to
steady a choppy or rippling line and to filter out power line

noises, fluorescent light noises, elevator noises, RF noises, etc. which are superimp ssed on the llne whichare superimpsaed on the ine by passing them into the ground. Two iron core chokes filter line ripple. Two RF chokes filter noise. Six by-pass condensers in 415 Wircuit. Wimensions: $8 \mathrm{lbs} 43 / 4 \mathrm{x}$
K12614-Your Cost. 4. 7

## MALLORY Interference Filters



X-1. For relatively slight inter ference. Use at radio or appliance cord plug. $12 / 8 \mathrm{z} 1 \% / /^{\prime \prime}$, rated at 110 Ki2619-. K12619-Each x-5. Triple capacity .44 city filter with pan return lead to appliance. This unit is ideal for use with vacuum cleaners, food mizers, etc. $11 /{ }^{1} \times 21 / 3^{\prime \prime}$, rated at $110-220$ volts, 5 amps, with binding post. K12620
Each.
$\$ 1.11$

## W-7 Motor Type

Dual capacity
unit for use on motor brushes orcrings.
Bracket for
 mitg. on frame. For moderate in-K115512-Each. 67c W-11 Like bo $67 c$ terference. $13 / 3 \mathrm{xa} \mathrm{\prime}$. ST T

## Heavy Duty Filters

LC-5. Induc-tance-eapacity filter for severe interference. Vated 110-220 cord and plug cord and plug

Case has motg funges Shps $w^{t} 81$ bs.
K12514-Your Cos
LC-10. Same an above 4.4 $110-220 \mathrm{~V}_{\text {.1 }} 10 \mathrm{amps}$.
K 12515 Sach..... 7.24


## DeLuxe "Plug-In"

z-6. A dual in ductance-capacity filter with pro-
vision for return vision for return lead to ground.
for suppressing severe interference. Rated $110-220$ volts, 3 amps . Use at radio or noise solurce. $12 / 8 \times 3 / s^{\prime \prime}$ K12516
Each
51.56

Z-4. Dual inductance-capacity filter for appliances where return lead from filter is inconvenient. For electric razors, vibrators, household appliances. Use at
radio or appliance cord plug. $13 / 8$ radio or appliance cord plug. $13 / 8$ ${ }^{23 \prime}{ }^{1120-220}$ V. $^{3}$ a. ST. 222 Z-8. With provision for return wire connection to appliance frame rather than ground. Equivalent to box type within 3 amp . rating. Each.
51.56

## Heavy Duty Type LB Industrial Filters

For use with equipment that is permanently connected to the power line 10 a mps draws more. Contain capacitors and chokes in standard type metal cut-out bores.
 made by cutting the power line as close as practical to the offending device, and inserting the proper LB filter in series with the line at this point. Connections are made by splicing inside the cut-out box. For 110 or 220 volts AC or DC.
No. Amps. Size Wt. Each $\mathrm{K} 12517 \quad 10 \quad 6 \mathrm{x}$ 6x4" 12 lbs . $\$ 10.72$ $\begin{array}{lllll}\text { K12518 } & 20 & 10 \times 10 \times 0^{\prime \prime} & 18 \text { lbs. } & 25.01 \\ \text { K12519 } & 40 & 12 \times 10 \times \sigma^{\prime \prime} & 25 & \end{array}$ $\begin{array}{lllll}\mathrm{K} 12519 & 40 & 12 \times 10 \times 0^{\prime \prime} & 25 \mathrm{lbs} . & 31.26\end{array}$

## ICA "FILTERVOLTS"



Intermediate Model (A) Eliminates extremely noisy radio reception due to power line disturbances caused by lights, electrical appliances, etc. Can be installed at set or at source of interference. Metal case has receptacle, cord and plug and ground binding post. Ca . pacitive-inductive type. Size: $45 / 8$
 Kach.
$\$ 2.65$

## All-Wave Model (B)

Contains heavy duty R.F. chokes, large filter capacitors and has "PI" Gilter circuit arrangement. Eliminates noises caused by electric heating pads, irons, toasters, vaeu-
um cleaners, etc. Rated 250 watts am cleaners, etc. Rated 250 watts, at 32,110 and 220 vols a.c. or d.c. For use with any all-wave or broadcast receivers. Metal case $5 \times 4 \mathrm{x}$ $42 / 8^{\prime \prime}$. Has cord and plug and receptacle. Wt. 5 1bs. $\$ 4.4 I$
K 2508 Your Cost.

Industrial "Quietone" Model IF-7A Capacitive-inductive type
heavy duty filheavy for eliminating poise caused by mo-
caused oil burners, di chines, elevators, etc. In steel cutout box $6 \times 6 \times 4^{\text {" }}$, with knock-outs for BX cable or conduit. For single phase $110-220$ volts a.c. or d.c. at 5 amps. Wt. 9 Ibs. $\$ ?\}$
K12500-Vour Cost.

## |replacement coils and chokes

## MEISSNER "Universal"

 Iron Core Antenna, R.F. and Osc. Coils Will replace broadcast band coils in practically any receiver Will accurately track with other coils in the receiver when propinductance of burned out coil easily matched with crew driver adjustment of the iron core. Will improve gain and selectivity. Oscillator coil can be adjusted from 175 to 520 kc . and used with ither cut plate or padding condenser circuits. Black crackle cans $18 / "^{\prime \prime}$ square, by $21 / 夕^{\prime \prime}$ high. Stock No. Type K10120 Antenna K10121 R.F.

## Each <br> s 1.64

 Unshielded CollsAs above but without shield cans. K10007 Antenna K10008 R.F. K10009 Oscillator
s1.02

## PERCO Universal Adjustable Colls



The answer to the problema encountered by the scrvicer and experimenter with the denser capacities and curves used in broadcast and shortwave receivers. Each coil, regardless of type, is adjustable throughout the range required to work with any gang condenser and in the case of oscilator coils, with any gang and IF frequency between 175 KC and 465 KC . Litz wound on thinwalled tubing with adjustable iron cores.

Shielded $\qquad$ Unshielded

 K10013 Osc. $\begin{array}{ll}1.62 & \text { K } 10023 \\ \text { Osc. } 1.03\end{array}$

.... Osclilators Permeability tuned for greatest stability. Adjustable iron core coil for CW beat note reception. Oscillato tank capacitor inside shield. $11 / 8 \times 21 / 2^{\prime \prime}$ Shield can
Your
Cost................. $\$$ I.29

## PERCO IF X'Formers



High quality, high gain double-tuned nished in $1 \% \times 18 / 8 \times 3$ square shield cans Spadebolt mounting. For most sets.

Input K10026 175 K C $K 10036455 \mathrm{KC}$

Output No. Each No. Each K10037 1.12

## PERCO Iron Core IF



## Transformers

 These iron core IF's permit higher gain tivity. Ideal for perking up old receivers, unita. $13 / 8 \mathrm{z}$ i $3 / 8 \times 31 / 2^{\prime \prime}$ shield cans with spade bolt mounting High gainunits, not recommended for multiple stage amplifiers.No. Type Freq Each K10039 Input $455 / 6 \mathrm{KC}$ \$1.57 K10044| Output $455 / 6 \mathrm{KC} \quad 2.57$

## MEISSNER Wireless

## Phono-Osc. Coll

Has knob for frequency adjustment. Instructions and diagram furnished. $13 / 413,3312^{\prime \prime}$
K10010-Oscillator Coil
for Phonos. Each.
MEISSNER "Cart-Wheel"
I.F. Replacement

Same size and style of I.F. transformer as used in most of the
midget sets. Trimmer base and supporting dowel made of molded plastic. Accurately wound coils. May be used as input or as output transformer. Designed for 456 kc . Sounting. Size: $18 / 8 \times 11 / \mathrm{m}^{2} 11 /=$ mounting. igh overall.

Size: $18 / 8 \mathrm{x} 11 / \mathrm{xx} 11 /{ }^{\circ}$
K10385-Your Cost Each ? E


## MEISSNER "Plastic" I.F. Coils <br> Stablf-Compact-Wide Range

A new transormer in which the trimmer base and the coil form (dowel) are moulded in one plece. The use of a special plastic material permits holding dimenaions to with an pir-gap between the bottom plate and plastic with an aif "gap between the bottom plate and plastic base. Wide range. Compact in size, Double tuned. Metal shield can. Unaffected by temperature or humidity.


Range KC Input Interstage Output $\begin{array}{lllll}175 & 140-200^{*} & \text { K10373 } & \text { K10374* } & \text { K10375 } \\ 262 & 200-310 & \text { K10376 } & \text { K10377 } & \text { K10378 } \\ 370 & 305-480 & \text { K10379 } & \text { K10380 } & \text { K10381 } \\ 456 & 400-550 & \text { K10382 } & \text { K10383 } & \text { K10384 }\end{array}$ - Note: Range in KC of K10374 is 148-250.

BIC
Note: Range in KC of K10374 is
YOUR COST EACH, Any Type
New Ferrocart (Iron Core) "Plastic" I.F.'s

| No. | Type | Set At | Range | Your Cost |
| :--- | :--- | :--- | :--- | :--- |
| K10325 | Input | 456 | $380-600$ | 51.22 |
| K10326 | Output | 456 | $380-600$ | $\mathbf{1 2 2}$ |



MEISSNER Ferrocart I.F. Transformers
For Servicemen who want to "pep up" old radio sets and give them more gain and selectivity than they had when new also for experimenters who want high-gain I.F. systems with exceptionally good selectivity-Meissner Ferro with low-loss trimmers. Accurately made of the best materials and oscilloscope-tested or gain and selectivity. Mounted in $11 / 6^{\circ}$ square by $31 / 2^{*}$ high black cracklefinished cans. Leads are RMA-color-coded.
YOUR co

$$
\begin{aligned}
& \text { Input } \\
& \text { K9690 } \\
& \text { K } 9689
\end{aligned}
$$

${ }^{s} 1$
K9688
K9688
$\mathbf{K} 9687$
T. 64

|  | Compact 13/8x $\times 2 / 1 / 2$ with ste bolt mou need for ents. | ERCO <br> dget IF <br> sforme <br> ; Only <br> andard unting. <br> amall com | ers <br> 11/8x <br> ipped <br> spade <br> Fills <br> mpon- |
| :---: | :---: | :---: | :---: |
| K10049 | Freq. 175KC | Type Input | $\begin{aligned} & \text { Each } \\ & \text { \$0.91 } \end{aligned}$ |
| K10050 | 175 KC | Output | . 91 |
| K10051 | 455/6KC | Input | . 91 |
| K10052 | $455 / 6 \mathrm{KC}$ | Output | . 91 |

## PERCO Midget Iron

 Core IFX'formers
Identical in size to the midget air core IF's but higher in gain and with improved selectivity. RMA color coded leads. lead stabilizers, and heat treated ceramic base capacitors. They are ideal for portable and small $11 / \times 21 / /^{=}$shield can with spade bolt mounting. Matched input and output transformers.

No. ${ }^{\text {No }}$ Type K10053 $455 / 6 \mathrm{KC}$ Input $\$ 1.29$

| $\mathbf{K 1 0 0 5 4}$ | $455 / 6 \mathrm{KC}$ | Output | 1.29 |
| :--- | :--- | :--- | :--- |

the correct value for three-point tracking. Fully impregnated, dipped in waz to prevent moisture absorption.

No. IF Freq. Padder Each K10067 455 KC * 400 mmfd . 56c K10068 455 KC ** 400 mmfd . S6c *Plate Feedback type-two wind. ings

PERCO Midget Antenna
 and RF Coils Provides an intermediate size for use where space is a factor $13 / \mathrm{k} \times 17 /{ }^{17}$ ound shield can for wiring. Spade for wiring. Spade Unshielded coils with chassis brackets for mounting.

Shielded

Unshielded \begin{tabular}{c|c|c|}
No. \& Type \& Each <br>
K 10059 \& No. Type \& Each

 K10059 Ant $\$ 0.50$ K10064 Ant $\$ 0.41$ 

\hline $\mathbf{K 1 0}$ <br>
\hline
\end{tabular}

 llator Coils
Universal
wound on ce wound on ceBakelite terminal boards, 1 brackets Windings act to


Cathode Tap for 6SA7, etc.
type bronze and apring brass, plated plates.
Standard 10/. Square
Stock Max. Min. No. Your $\begin{array}{llll}\text { Stock Max. Min. No. Your } \\ \text { No. Cap. } & \text { Cap. Plates Coz }\end{array}$ $\begin{array}{llllll}\text { No. } & \text { Cap. } & \text { Cap. } & \text { Plates } & \text { Coss } \\ \mathrm{K} 10076 & 85 \mathrm{mmf} & 60 \mathrm{mmf} & 2 & \$ 0.29\end{array}$ $\begin{array}{lllll}\mathrm{K} 10076 & 85 \mathrm{mmf} & 60 \mathrm{mmf} & 2 & \$ 0.29 \\ \text { K } 10078 & 185 \mathrm{mmf} & 120 \mathrm{mmf} & 3 & .32\end{array}$ K 10078185 mmf 120 mmf K10084 200 mmf 170 mmf

$$
\begin{aligned}
& 6350 \mathrm{~mm} \mathrm{~m}_{2}^{275 \mathrm{mmf}} \\
& \text { Widget } 13 \text { Square }
\end{aligned}
$$

$K 1008765 \mathrm{mmf} 40 \mathrm{mmf} \quad 2 \quad \$ 0.29$ K 10092180 mmf 110 mmf K10093 275 mmf 175 mmf
K 10097325 mmf 275 mmf

## PERCO Cartw

 Transformers Replacement or original use in Unit furnished as Unit furnished as output iF suitable for feeding into a diode detector. Trimmer base. 82e PERCO "Pee Wee" Antenna \& RF Colls
MEISSNER FM X'former
 A permeability-tuned FM transtormer
tuned to 10.7 megacycles, designed es. pecially for ultrahigh frequencies. In shield can, 17 iox $7 / 1 \mathrm{z}$ mounting lugs.
K10105
Your Cost Each...\$2.221
Discriminator X'former Same specifications, frequency as above.
K10111-Discriminator X'former. Your Cost Each.
MEISSNER Osc. Coils


For 190 to 550 meter broadcast band. Used with . 000365 mfd condenser: impregnated. Shielded type is $131^{" ~ h i g h, ~} 11 / 3$
diam. Can be used diam. Can be used antenna coils. Less padders.
No. Freq. Padder No. UnShielded Ke Mmid. shielded $\mathbf{K 1 0 0 3 1} 456 \quad 350$ K10030 Shielded
Your Cost Each
Unshielded

Unshielded Each......2e
K10104-Same as K10030 \&
PERCO RF Chokes


Designed for lower frequenbane or stud nounting Each coil uni versal wound on ceramic
dowels provided with natura bakelite terminal board.
No. Ind. Ma. Ohms Each K10069 $2.5 \mathrm{mh} 150 \quad 30.4 \quad \$ 0.35$ $\begin{array}{lllll}K 10070 & 5.5 \mathrm{mh} & 150 & 48.3 & .35\end{array}$ $\times 1007210 \mathrm{mh} 85105.5$ $\times 1007430 \mathrm{mh}$ $\times 1007560 \mathrm{mh}$

PERCO

## Trimmers

Dual ceramic type trimmer of highest tand rds. Mic compression $\mathrm{N} 1007560 \mathrm{mh} 55374.0 \quad .53$

$\qquad$
32
32
35
$\qquad$



All purpose r.f. chokes, available unmounted or housed in crackle finiahed metal cans $11 / 2{ }^{\circ}$ in diam. All universal-wound, aceurately rated and factory tested. Thor. oughly impregnated-wil Unshielded

Shlelded Stock CostMilli- Stock Cost

 \begin{tabular}{ll|l|ll}
K10099 \& $29 c$ \& 5.5 \& K10241 \& $54 c$ <br>
K10100 \& $38 c$ \& 8 \& K10242 \& $57 c$

 K10101 40c $16 \quad$ K10243 66c 

K10134 \& $44 c \mid$ \& 30 \& |K10244 \& $71 c$ <br>
\hline K1013S \& $51 c$ \& 60 \& |K10245 \& 78c
\end{tabular}

## MILLER Television IF's

Television
interme
diate fre-
quency.
formers
deaigned

correct frequency response for the video and sound channels. The sound channel is of medium gain and double tuned. The video channel section is of single tuned wide range type-approximately 3 MC band width. Twin unit con struction amplifies layout and wirlag and permits symmetrical construction. Sound channel fre quency is 8.5 MC and the video
frequency (nominal) is 13 MC . The transformers are assembled in twin aluminum abields measuring $1 \% 8^{\circ}$ wide by $24^{\prime \prime}$ long by $2^{\circ}$ high. (This dimension includes one video and one sound transformer.)

Input Transformer
This transformer is used in the plate circuit of mizer tube and chrough separator circuit to grids of the video and 1 st sound chan. nel tuber
K10162-8.5 \&
1s Each...... $\$ 3.23$
Asects the plate of the lit video
Connects the plate of the lst video tube to grid ofsecond and the plate
of the 1st sound tube to grid of second tube
K10163-8.5 8
13MC, Each.
s2.94
Connecterthermer tube to grid of 3 rd video tube and plate of 2nd sound tube to grid of 2nd sound detector tube.
K10164-8.5 \&
13 MC , Esch...... \$2. Video Output Transformer Single tuned transformer used be. and the video detector and syncpulse rectifier. Size $1 \%{ }^{*}$ square by 2 high.
K10165-13MC
$\$ 1.47$
TRUTEST R.F. Chokes
Four pie wound sections form. 2.5 mh ., 150 ma . 50 sistance distributed capacity 1 mmf . K10106-Each K10107-Samebut heav lly impregnated. Each. K10109- $2.1 \mathrm{mb}, 250 \mathrm{ma}$ heavy duty choke. Esch.
We can supply any Miller and Tru test coils or chokes not listed on this page. Write us, listing your requirements, and the manufactur er's part or stock number if known

MILLER Tuning Wand

An essential service tool for every aervicer. Makes it easy to check for resonance. Consists of insulated flexible rod $1 /{ }^{\prime \prime}$ " in dia. Brass core at one end, iron at the other. 1/886"
K15035-Tuning Wand, $73{ }^{\mathrm{e}}$ Each

## TRUTEST Antenna Coil

 Primary WindingsDesigned to replace defective or burnedmaries. Will fit over the old coil. Al high impedance.
K10116-For 11/4"O.D. coils. . 25 c K10117-For $1^{\prime \prime}$ O.D. coils. . . . 21 c K10118 - For $7 /$ /" O.D. coils $^{\circ}$ K10119-For $3 / 2 "$ O.D. coils
K10114-For $1 / 2$ " O.D. coils

MILLER 3-Band Coils

are accessible for adjustment through holes in the side of the shield. All winding tection uader all climatic conditions. Frequency range: Band A-540-1700 RC; Band B-17005500 KC ; Band C- $5.5-18 \mathrm{MC}$. Dimenalons: $2^{\prime \prime}$ square by $41 / /^{\prime \prime}$ Kigh. K10158-Ant. Stage
\$2.94 K10159-RF Stage K10160-Osc. Stage (45SKC) 2.94 Tapped Oscillator Coil (for 6SA and similar tubea). K10161-Osc. Stag (455KC). Oscillator seri
$.0016, .005 \mathrm{mfd}$

## Shieided Litz Wound <br> R.F. and Antenna Coils <br> COVERS 175 TO 550 METERS

Will service over $90 \%$ of the receivers on the market. Have high-impedance primaries for screen-grid tubes, and Litz-wound secondaries. Completely shielded in round metal cans $17 / 8$ diameter, $21 / 4$ high. Wound for .000365 mfd . condensers. With diagrams. Two 6-32 spade bolts for mounting. M10077-Antenna Coil.
K10085-R.F. Coil. Your Cost, Elther Type


## 5-TUBE KIT

4-TUBE KIT
K10073-Comprises one antenna and two r.f. coils with instruc-
tions and diagrams. $\$ 1.74$

K10071-Comprises one antenne and one r.f. coil with instruc tionsand diagrams. \$1.

## HIGH GAIN I.F. UNITS

Highly efficient design for use where apace is limited Employa dual tuning trimmer on Ceramic base, ad justable from top of shield can. All leads are RMA color-coded for ease of installation. Size of the metal shicid can is $1 \frac{1}{2} \times 1 \frac{1 / 5}{6} 3^{\circ}$; threaded lug mounting Diagram furnished. Primary and secondary windings are single pi-wound.
$\begin{array}{lllcc}\text { Freq. Input Euch } \\ 456 \mathrm{kc} \text {. K10022 K10034 } & \text { K10027 }\end{array}$
A truly excellent, high gain intermediate frequency
 transformer in both matched input and output units.

## PLUG-IN COIL FORMS

Blank Bakelite forms only, for winding coila to your own spec's. K10060-4 prongs K10061-5 proigs K10062-6 prongs
Your Cost Each, Any Above Type...........................

## Plug-In Coil Kits

Space wound on molded Bakelite forms $114^{\prime \prime}$ in diameter and $21 / 4^{\prime \prime}$ high. Have rims for casy handling. Tune with 00014 mfd . condenser

4-Prongs-2 Winding K10040-Kit of 4 coils covering $9 \frac{1}{2}-217$ meter
s 1.71
MILLER Replacement Coils Permeability Tuned
To meet the needs of the servicer and experimenter.
 The inductance may be adjusted for use with any variable condenser having a maxi. mum capacity between 250 and 450 mfd . The oscillat or coil may be adjusted to track with all inter. mediate frequency amplifier be mediate 100 and 550 KC . $7 / 8 \times 2 \%$. Unshielded
No. Use Freq. Range Each K 10150 Ant. Stage $500-1800 \mathrm{KC}) \$ 109$ K1015 RF Stage $500-1800 \mathrm{KC}$ Shielded
No. Use Freq. Range
K10154 Ant. Stage $5001-1800 \mathrm{KC} \mid \$ 1.47$ K10156 RF Stage $500-1800 \mathrm{KC}$ $K 10157$ Oso Stage Adjustable

4-Prongs-2 Winding N10041-Broadcast coils. Two coils, 190.550 meters. SI
Your Cost......

MILLER Air Core IF Transformers Variable selectivity IF transformers designed to meet the demand for a unit having both selectiv-
ity and broad frequency ity and broad frequency reaponse. Available in several types in all stand-
ard frequencies and asard frequencies and aso sembled in okite finished alumi. num shields. A simple single pole double throw switch is all that is required for a single atage of amplification. The two positions of the switch provide for sharp and broad tuning. Dimensions: $17 /{ }^{\prime \prime}$ " square by $33^{\prime \prime}$ high.
No. Freq. KC Range Use Each
$\begin{array}{llll}\mathrm{K} 10145 & 175 & 165.185 & \text { B }\end{array}$ $\begin{array}{llll}\text { K10146 } & 455 & 450-475 & \text { A } \\ \mathbf{K} 10147 & 455 & 450-475 & \text { B }\end{array}$
 $\begin{array}{lll}\mathrm{K} 10148 & 1500 & 1400-1600 \\ \mathrm{~A} \\ \mathrm{~K} 10149 & 1500 & 1400-1600\end{array}$ K10149 $1500 \quad 1400-1600 \mathrm{~B}$
A-Input. B-Interstage.

## MILLER

 Line FiltersDuo-lateral wound
chokes combine a small physical size with low distributed capacity. Particu. larly recommended and ber adapted for amateurs and techen cians who construct their own filters.
No. Amps Ohms Ind Size Each K10140 $2.75 \quad .600 \mathrm{mh} 17 / 8 \mathrm{xl} \mathrm{l}^{8 / 4} 50.73$ K10141 $5.28 \quad .570 \mathrm{mh} 21 / 2 \mathrm{x} 4 \quad 2.03$ $\begin{array}{lllll}\mathrm{K} 10142 \quad 10.15 & .370 \mathrm{mh} & 21 / 24^{\prime \prime} \quad 2.56\end{array}$ $\begin{array}{llll}\mathrm{K} 1014320.085 & 200 \mathrm{mb} & 21 / 2 \times 4{ }^{2} \quad 2.94\end{array}$

## GIANT Coil Forms

Low-loss amber, ribbed for air-spaced winding. Have knurled flange for casy handling, and groove for wave-band index. $21 / 4$ "indiameter, $31 / 2^{\prime \prime}$ high, $31 / 4^{\prime \prime}$ winding space; eight ribs.


RIBBED FORMS

## K14385 4 Prongs 59c Each

 $\begin{array}{lll}\text { K14386 } & 5 \text { Prongs } & \text { Prongs Each } \\ \text { 62e Each }\end{array}$ K14387 6 Prongs 65e Esch Medium Coil Forms As above, but undrilled and $15 / 8^{\prime \prime}$ diameter, $35 /{ }^{2}$ high. Bakelite. K9630-4 Prong $35 c$ K9631-5 Prong $35 c$ K9632-6-Prong
## MILLER Scratch Filter

Designed to reduce phono scratch from
any type of highimpedance pickup. The resonant frequency of the filter is adjustable to any point between 2000 and 3000 cycles. Attenuation is approximately 22 d . The filter is at. tached to the chassis by means of two $6 / 32$ spade bolts. $2^{\prime \prime}$ sq. by high. Aluminum shield.
K10139-Scratch Filter.
Your Cost
Each

## TRUTEST LItz-Wound

AC-DC Coils
175-550 Meters Matched high-gain coils furnished unshielded for use in t.r.f. receivers.
High impedance primaries with
bank Litz-wound seconderics. 21 long, 7 " diameter. Tunce with .000365 mfd., condenaer. With mounting brackets and diagrams. M10012-Anteana coil. K10095-R.F. Coil. Your Cost Each. $\times 10096$ Set of 2 Your Cost

## MILLER Hash Filters

A filter consisting of two high-inductance duo-lateral wound RF chokes assembled in an aluminum shield.
Maximum safe continuous current capacity is 200 ma . $1 \%$ " $\mathrm{x}^{2 \prime}$ K10138-750 V choke $73^{\circ}$

## DeLuxe Midget

Ant. and R. F. Colls
High quality compact coils for Broadcast band coverage with a 365 mamfd. condenser. Same overall gain as large coils 4 bank litz large coile impedance primaries Black crackle can $13 \times 12 / 8 \times 2^{n}$. $\left.\begin{array}{l}\text { K10046-Ant. Coil } \\ \text { K10047-R.F. Coil }\end{array}\right\}$ Each (o) e

## Modern Slide-Rule Dials



Aew style slide rule dials. and $3 / 8^{\prime \prime}$ shafts. Universal scale, with broadcast kc. scale, with broadcast kc.
and Shortwave mc. Comand Short wave mc. Com-
plete with light sockets, antique finish escutcheon
and unbreakable crystal. and unbreakable crystal.


Type A. Requires panel opening
17/0 $5 \frac{1 / 8}{\prime \prime}$. Ratio $7=1$ over $180^{\circ}$. Escutcheon size 29/8x61/0". K9811-For Cond. Closing Right. K9812-For Cond. Closing Light. Your Cost,

$$
\text { Type } \mathbb{B} \text {. Requires opening } 18 / 6 x
$$ 3\%". Mtg. holes in front plate. Escutcheon size $2^{2}$ 体 ${ }^{47 / 3 "}$ K9816-For Cond. Closing Right. K9817-For Cond. Closing Left. Your Cost,

Either Type. e....... $\$ 1.44$

## Special Slide-Rule Dials

Two new-style slide rule dials. Accommodate both
 versal scale with broadcast kc. and shortwave cast, in addition to o to 100 markings on the bottom scaie. Complete with light socketa, antique finish escutcheon and unbreakable crystal.
Type A. Requires panelopening Type B. Requires opening $17 / 8 x$ $38171 /{ }^{\prime \prime}$. Ratio 12-1, over $180^{\circ}$. 7 $1^{\prime \prime}$. Mtg. holes in front plate. K9815-For Cond. Closing Right. $\begin{array}{lll}\text { K9829-For Cond. Closing Left. } & \text { K9845-For Cond. Closing Right. } \\ \text { Your Cost, }\end{array}$ Your Cost,
Either Type $\ldots . . . \$ 4.23$ K984._For Cond. Closing Left.
Your Cost,
Either Type...... $\$ 3.53$


## J F D Servicer's Bench Racks

An assortment of five different types of cable and cord used for every radio purpose and in the handy spool system. All are of braided nylon aon-stretch cord with cotton or glass fibre cores. Each spool is packed in a weather-resistant, moisture-proof container. All spools come in 100 - foot lengths. Simple to handle, long last-K9793-Servicer's Rack
$\$ 11.75$ Your Cost Each


Special Offer. Servicer's Bench Rack. An assortment of five different types of cable and cord used for every radio purpose and in the handy spool system. Every radio purpose and in the handy spool system. Each one wound on a convenienty handy spool.
Rack size 8 x 10 x 2 . 5 metal spools 25 ft . each: $1.901 \mathrm{D}, 1-903,1.904$, 1-906, 1-908, (total list price \$6.13). You pay only for the cable. The rack is FREE! K9794-Special Offer Your Cost
$\$ 3.60$

## J F D Woven Fabric Dial Belt Kit

Assortment of 25 fabric belts which will replace those used on a great number of dials of popular radios. The assortment is housed in a handy enameled steel case and is furnished with a measuring chart. FREE- 80 page book on replacement belts and ballasts included! K9832-Shpg. wt. 2 Ibs. Your Cost, Per Kit.
$\$ 3.94$
K9831-Kit of 50 Belts.
7.88
14.70

K9830-Kit of 100 Belse............................................................... 14.70
We can supply dial belts for all radios. Specify make and model. We can supply dial belts for all radios. Specify make and model.
K 9909 Individual dial belts. Your Cost Each.................. 15 c


Beautiful Pyralin scale calibrated from 550 to $1800 \mathrm{kc} ., 6.0$ to 15 mc . Panel opening $5 \% \times 2$. Ratio 9 to 1.4 Hub takes $1 / 3$ or $\% / 5$ shafts.
$1 / 4$ cutcheon ( $31 / 8 \times 63 / 8^{\circ}$ ) and crystal. 2 pilot light sockets. Shpg. wt. 3 lbs. K9807-For Cond. Closing Right. K9808-For Cond. Closing Left. Either Type, Each. $\$ 3.12$ G C Dlal Cord Dressing Stick
A new easy way to treat dial cords on slipping mechanisms or loose dial cords. Just rub the stick on the cord and the job is done. Prevents \&s stops
cords fram slipping. Simple, easy to use, long-lasting and extremely effective in the average C8se.
Your Cost, Each . . . . . . I? ${ }^{\circ}$
Two-Speed Planetary Drive Unit

Auxiliary speed reducer
 denser condenser shaf knob shaft. Ratios 5 to 1 and 1 to 1. round shaft. K9887-Each Knobs For Above: Set of Large for high speed shaft, smali for slow speed. Black.
K 9888 -Per Pair......... $59^{c}$ Dial Spring Assortment

all. Shpg. wt. 1 lb .
K9875_100 Springs, $\$ 2.25$
Per KIt....................

## J F D Big Four Servicer's Basic Kit



Four basic kits in 1 package. Excellent for those who are for the established radioman who wants to save time and energy. These four popular JFD kits have everything needed for $25 \%$ of all servicing needed Kit contalns: 1-B25A work. Kit Ahtartment of 25 diat Kit. Assortment of 25 Includes FREE 64-page JFD Includes FREE 64-page JFD Servicer's Manual, listing belta for more than 1500 set models. Also contalns: 5C25 Dial Cable and Cord Rack. 5 Metal spools of fast-moving dial cablea and cords. The 770 Ballast Kit. Five JFD Improved Air-Cooled AC-DC Adjustable Ballasts. Suitable for more than $95 \%$ of all the ballast tube replacements. And the kit Includes: BP-100-MC Plug Assortment. 100 radio battery plugs in 25 different popular types. Sturdy metal container. FREE Battery Plug Folder with data and schemat-

K9795-Big Four Kit.

Giant 11" Dlal


Panel opening: $98 / 8 \times 27 / 8^{71}$. Scale: 550 to $1700 \mathrm{kc}, 5.5$ to 18 mc . and 1.6 to 5.0 mc . Hub takes $1 / 3$ " or \$/" shafts. Wi/n knob shaft. Ratio 9 to 1 . With bronze escutcheon and crystal. 2 pilot light sockets. Shpg, wt. 4 lbs.
K9809-For Cond. Closing Right. K 9810 - For Cond. Closing Left
Either Type, Each
\$4.50

## G C Radio Dial Oil

A special oil for lubricating dial mechanisms. Treated with graphite to assure protective lubrication. An excellent oil for the newer type of complicated dials. Put up in a 4-oz. jar with a brush mounted into the cover. Simple, easy, effecinto the cove
tive to use
K15317-4-oz. jar
Your Cost . . . . .
$15^{c}$
Can be attached to any variable condenser not equipped with a reduction drive. Ratio 6 to 1. Has $1 / 3$ " drive shaft with a set screw. Equipped with an anti-backlash spring. With this unit. any direct vernier or low-ratio K 9621 - For K9621-For $1 /{ }^{\prime \prime}$ shafta.
Your Cost Each.


Precision Vernier Dials Have etched calibrations graduated from zero to 100. Large flanged $k$ zis has bushing for $1 / /^{\circ} \mathrm{knob}$ shafts, Shog wt. 1 lb . An excellent dial for all precision purposes or as calibration dials.
Stock Diam, Degrees Your $\begin{array}{cccc}\text { No. } & \text { Ins. } & \text { Rotation Cost } \\ \text { K14236 } & 4^{\prime \prime} & 325 & \$ 1.62\end{array}$ K14237 K14238 K14239

| $4^{\prime \prime}$ | 325 |
| :--- | :--- |
| $2 \% 4^{\prime \prime}$ | 325 |
| $4^{\prime \prime}$ | 180 |
| $2 \% 4^{\prime \prime}$ | 180 | 51.62

1.23 $\begin{array}{lll}2 \% & 180 & 1.23\end{array}$

## G C Dial Drive Cements

明Specially prepared for fas tening rubber dial drives to metal shafts, rubber mountings to chassis, or for cement ing any rubber materfal to metal.

| No. | Quantity | Each |
| :---: | :---: | :---: |
| K15314 | 1/2 oz. | 12 c |
| K15315 | 1 oz. | 25 c |
| K15316 | 2 oz. | 29 c |

## knobs, variable condensers \& accessories



Flexible $1 / 4$ " Shaft Coupler For use in coupling two $1 /{ }^{\prime \prime}$ shafts or for ertending a shat set angle. Insulat K9751-Bakelite Your Cost Each.........


## Panel Bearing Assembly

For use with rigid or llexible coupling when matg. volume controls, condensers, etc., back from panel. For up to "io "panels. K $9563-3^{\prime \prime}$ long. $1^{\prime \prime}$ Shaft. Each K9562-6" long. $1 /$ / Shaft. Each $^{2}$ K9564-Bearing only. Ench

## Radio Knob Felts

For use behind radio knobs to prevent rubbing and scratchins 45 felts. This han. contans $y$ ould be included dy item should be included in every serviceman ${ }^{\text {s }}$
K14797-Your Cos.t.


29 e
35 c
12 c

## G-C Knob Spring Kit <br>  <br> Knob springs for all types of

 knobs. 20 assorted, in envelope.Kour Cost
$24^{\circ}$

Used for dial drives, condensers phono turntable motors, ett. Large Spring Assortment K9905- envelope, 10
springs. Your Cost......24c Small Spring Assortment K9913-envelope, 10
springs. Your Cost ......2.
G-C Tack Bumpers Used on the bottoms of radios and appliances to protect against scratchKig. ${ }^{\text {Kis }} 33$ - 18 in envelope $\qquad$
$\mathrm{X}^{\mathrm{A}} \quad{\text { X'mitter Knobs For } 1 / 4^{\prime \prime} \text { Shafts }}^{2}$


G-C Tension Springs
 All black bakelite (ezcept * which are black lacquered wood).

No. Type Size Each 10 For No. Type Size Each 10 F | No. Type Size Each 10 For | No. Type Size | Each 10 Fot |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K13022 A | $112^{\prime \prime} \mathrm{d}$ | 4lc | $\$ 3.69$ | K13014 | D | $110^{\circ} \mathrm{d}$. | 21 c | $\$ 1.89$ |

 K13017 K13011 K13010 K13053 K13055

## TRUTEST 2 Gang Compact

Compact 2 gang condenser normally used in midgets. W
K9739-.
Your Cost.

## Pointer and Lever Knobs



Polished bakelite. All have filled pointers except "D" (has ridged top). For $1 / 4$ " shafte. No Each 10 For K13027 2/k. B6" (A) Black 11c 99c $K 13028$ 11". 8", (A) Black 8e 72c K13029 21\% " (B) Black 11c 99e K13052
K13053
K13024
K9650
$K 9651$
$K$
K 9651

## Bakelite Knobs

Brown bakelite set serew knobs for 1/4" diameter shafts
 K9783-4 " ${ }^{\prime \prime}$ diam. $x{ }^{3 / 4}$ "high K9784- ${ }^{15} /{ }^{\prime \prime}$ diam. $x z^{2}{ }^{*}$ high
Your Cost, Each.
$6 c$
10 for (assorted if specified). 45 c
53
100 for (assorted if specified) $\$ 3.95$

## JOHNSON Handle

 IndlcatorHighly attractive, low in cost Solid molded bakelite. Will enhance any equipment. Fits $1 / 4^{\prime \prime}$ dlam. shaft and has $4^{\prime \prime}$ acale. K13015- $\qquad$ $50^{\circ}$

## G-C Non-Slip Llquid

## Dlal Drive Compound

 For radio drive cables and belta. A penetrating and fast drying liquid dressing. This compound has the opecial property of shrinking fibres, which prolongs the life of cables and belts, and prevents slipping. K9914-3, azo bottle. Your Cost. .

G-C Snap Button Hole Plugs K14712-10 assorted plugs
G-C Snap-in


Trimounts used in place of screws to fasten dials, built-in aerials, Rpeakers, other parts. Tri-
R14714. $\mathbf{3 0}$ assorted
mounts. Your Cost.......

## G-C Hexagon <br> \section*{Key Wrenches}

 Essential key wrenches for every repair man. Made of apecial steel, properly hardened. For knobs, dials, motors, pulleys, etc. No. 4 to 14" set screws and No. 2 to 8 cap . Ki4719-envelope, 5
## G-C Dial Cable Clips

Use on dial drive cord assemblies for
K 9902 -envelope, 50 elips
Your Cost..............

## all purpose switches



CUTLER-HAMMER Appliance Switches
The listing below represents popular types of appliance switches by the Underwriters Laboratories. Switches only may be purchased selected to meet the requirements of repair shops, service men, in any asaortment in order to obtain quantity prices. Extraordinary industriala and laboratorica. Cutler-Hammer awitches are approved savings are possible through quantity purchase.

| Stock No. | $\begin{aligned} & \mathrm{C}-\mathrm{H} \\ & \mathrm{No} . \end{aligned}$ | Type | Fig. | Poles | $\begin{gathered} \text { Bushing } \\ \text { D-L } \end{gathered}$ | $\underset{V-A}{\text { Rating }}$ | Your Cost Each | $\begin{aligned} & \text { Quant. } \\ & 2-9 \\ & \text { Each } \end{aligned}$ | $\begin{aligned} & \text { Quant. } \\ & 10-20 \\ & \text { Each } \end{aligned}$ | Quant. <br> 21-40 <br> Each | $\begin{aligned} & \text { Quant. } \\ & 41-99 \\ & \text { Each } \end{aligned}$ | Quant. Per 100 <br> 100-999 | Quant Per 100 $1000-4999$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K12841 | 8303 K 1 | Slide | 1 | S.P.S.T. | * | 125-6 | \$0.80 | \$0.56 | 50.48 | 50.44 | 50.40 | \$35.70 | \$28.80 |
| K12836 | 8280 K 16 | Taggle | 2 | S.P.S.T. | 119\%"159\% | 250-3 | . 40 | . 28 | . 24 | . 22 | . 20 | 19.25 | 15.80 |
| K12834 | 8282R14 | Toggle | 2 | S.P.D.T. | 15\%"-15\%" | 250-1 | . 50 | . 35 | . 30 | . 28 | . 25 | 22.70 | 19.25 |
| K12833 | 8363 K 7 | Toggle | 2 | D.P.D.T. | $1500 \times 15{ }^{\circ}$ | 250-3 | . 95 | . 67 | . 57 | . 52 | . 48 | 35.15 | 31.70 |
| K12817 | 8360K 7 | Toggle |  | D.P.S.T. | 13/85-85/8" | 250-3 | . 90 | . 63 | . 54 | . 50 | . 45 | 32.90 | 29.45 |
| K12813 | 7321 K 3 | Toggle | 3 | S.P.S.T. | $15 / 80^{4 \prime}-159^{\circ}$ | 250-6 | 1.00 | . 70 | . 60 | . 55 | . 50 | 39.85 | 32.70 |
| K12814 | 7320 K 3 | Toggle | 3 | D.P.S.T. | 18, " $0^{\prime \prime} 16 \%^{\prime \prime}$ | 250-6 | 1.05 | . 74 | . 63 | . 58 | . 53 | 41.20 | 35.05 |
| K12815 | 7361 R 5 | Toggie | 3 | S.P.S.T. | 136"-16\%" | 250-10 | 1.60 | 1.12 | . 96 | . 88 | . 80 | 55.60 | 52.35 |
| K12816 | 7360 K 8 | Taggle | 3 | D.P.S.T. |  | 250-10 | 1.75 | 1.23 | 1.05 | . 96 | . 88 | 58.90 | 55.60 |
| $K 12837$ | 8097K3 | Toggle | 4 | S.P.S.T. | 15/6" ${ }^{\text {" }}$-11/2" | 125-75 | . 50 | . 35 | . 30 | . 28 | . 25 | 21.75 | 15.80 |
| K12831 | 7131 K 1 | Toggle | 5 | S.P.S.T. | 13\%"-16" | 125-3 | 1.75 | 1.23 | 1.05 | . 96 | . 88 | 71.40 | 47.60 |
| K12832 | 7140 K 6 | Toggle | 5 | S.P.D.T. | 1/9"-18" | 125-3 | . 4.45 | . 32 | . 27 | . 25 | .23 | 20.55 | 17.00 |
| K12818 | 827-228F3 |  | 6 | Plate | or toggle sw | ches | . $061 / 2$ | . $041 / 2$ | . 04 | . $031 / 2$ | . 03 | 2.60 | 120 |

 ase Knife
Switehes Especially suitable for aerial and Eround. and blades. Stock No. Type Your Cost
K16820
S.P.S.T. 14 .



Tone Swltches Rotary Actlon All are shorting type:haved/ "dia bushing with $1 / 4$ shaft, $21 /$ "lon $^{2}$ Stock No Sitax No. Deacripton Eact $\begin{array}{llll}\text { K12768* } & \text { S.P. } & 2 \text { pos. } & 29 \mathrm{c} \\ \text { M12769* } & \text { S.P. } & 3 \text { pos. } & 29 \mathrm{c}\end{array}$ K12770* D.P. 2 pos. 35 c $\begin{array}{llll}\text { M12820 } & \text { D.P. } & 3 \text { pos. } & 44 \mathrm{c} \\ \mathrm{K} 12771+ & \text { S.P. } & 2 \text { pos. } & 38 \mathrm{c}\end{array}$ M12772 D D. P. 2 pos. 44 c ${ }_{6} \mathrm{K12773}+{ }^{4} \mathrm{P}$. ${ }^{2}$ pos. Action. $\ddagger$-Spring Return

## Slide Lever Switches



## Truteat $\begin{gathered}\text { Toggle } \\ \text { Switch }\end{gathered}$

Medium duty switch rated at 6 amps, 125 volts and 3 amps 250 volts. SPST with beavy lug terminala. Ball type switch lever is used. The barrel is $15 / 32^{\prime \prime}$ in diameter and length. Complete with hard-
Nare 12849 rin Y 12849 In quantity.
$26^{c}$
10 for $\$ 2.45$


Rotary Panel Switches Rated 3 amps., 125 volts. Approved type, with locknuts. Shaft extends $1^{\circ}$. Bushing ${ }^{3}$ " in diameter.

> No, Type Each 10 for $\begin{array}{llll}\mathrm{K} 12693 \text { SPD.T } & 26 \mathrm{c} & \$ 2.07\end{array}$ $\begin{array}{llll}\text { K12780 S.P.S.T. } & 26 \mathrm{c} & 2.34 \\ \text { S12 } & 2.61\end{array}$ $\begin{array}{llll}\text { K12781 S.P.S.T. } & \text { 29c } & 2.62 \\ \text { K. } & 3.78\end{array}$ K12782 D.P.S.T. 48c 4.32 $K 12783$ D.P.D.T. 45c 4.05 $\begin{array}{lll}\text { K12784 D.P.D.T. } \\ \text { D.P. } 49 \mathrm{c} & 4.05 \\ 4.41\end{array}$ *Bushing extends 1 ". Others, \%*

FEDERAL Antl-Capacity Switches


Springs are silver plated phospher bronze for good conductivity. Roller type cam providea easy, smooth lever action. Capacity bet ween elements is minimum. An
 K12850 14244 PDT

## Centralab Momentary Push Switches



For many light duty applications such as meter insertion, teat equipment, etc. Rated 1 amp. at 110 V . a.c. Silvered contacts. Insulated 3/7" bushing, $1 /$ /n $^{\prime \prime}$ long. Button extends $15^{\prime \prime}$ from end of bushing. Available with contacte normally closed or open
K12867-Momentary closed K12862-Momentary
Elther Type, Each.... 290

"Phone-Radlo Plate" EPhone-Radio Plate"
Etched metal and black.



Bakelite Knife Switches
Heavilyplatedmetal parts, bakelite base. Single pole types $1 / \frac{1}{2}$ long; double pole $21 /{ }^{\prime \prime}$. Stock No.

## K16830

 K16831 K16833 K16834 K16834K 16835

K 16836
K 16837
S.P.D.T

- 50 c
D.PST: 59 c

DPDT 68c
3-P.S.T. 79c
$\begin{array}{ll}\text { 3-P.S.T. } & 1.09 \\ \text { 3-P.D. } & 1.18\end{array}$
4-P.S.T. 1.18

## CENTRALAB

 Switch SectionsBakelite and steatite standard sections of various switching combinations.


| K8759 | A | 1 | 6 | Sh. | 24 c |
| :---: | :---: | :---: | :---: | :---: | :---: |
| K8760 | 8 | 1 | 11 | Sh. | 32 c |
| K8763 | C | 2 | 5 | Sh. | 38 c |
| K8764 | D | 3 | 3 | Sb. | 445 |
| K8769 | E | 4 | 2 | Sh. | 50c |
| K8770 | $\mathrm{F}^{\circ}$ | 1 | 5 | Sh. | 35 c |
| K8771 | G $\dagger$ | 1 | 10 | Sh. | 44 c |
| K8772 | H | 1 | 6 | N.S. | 24 c |
| K8773 | J | 1 | 11 | N.S. | 32 c |
| K8776 | K | 2 | 5 | N.S. | 38 c |
| K8777 | L | 3 | 3 | N.S. | 44 e |
| K8778 | M | 4 | 2 | N. 8. | 50c |
| K8780 | N | Use | oget | er in | 29 c |
| K8782 | P | Resi | ance | Decade | 29 c |
| K8783 | 9 | Con | nser | Decade | 358 |
| K8784 | R! | , | 5 | 8h. | 59 c |
| K8788 | St | 3 | 3 | Sh. | 59 c |
| K8791 | EE | 4 | 3 | 8 Sb . | 73 c |

- Unused coniacts shorted out oa one side of common.
+ All unused contacts shorted out. Steatite insulation.

Index with Hardware

No. $\mid$ Description $\mid$ Type | K 8792 | To assemble | K-121 |  |
| :--- | :--- | :--- | :--- |
|  | 32c |  |  |

K8793 | To assemble | Ko |
| :--- | :--- | :--- | :--- |
|  | Kor |

\(\left.\begin{array}{l|l|l|l|}K8794 \& \begin{array}{l}To assemble <br>

5 or 6 gang\end{array}\end{array}\right\}\) K-123 $|$| 56c |
| :--- | :--- |

## H \& H Two Circuit Push Switches



In normal position, with plunger out, one circuit is "on". and the other "off". When plunger is depressed, circuite are reversed. Slow make, quick break momentar y contacts. Rated 75 watte at 125 v
Bushing $18 \mathrm{~m}^{\prime \prime}$ dia., \% " long.

METAL PLUNGER (A)
$35^{\mathrm{C}} \quad 10$ For 53.15
BAKELITE TIP (A) K12777-Red. Ea. 37 elo For
K12778-Black.
S3.33

BAKELITE BUTTON (B) K12775-Red. Ea.
K12776-Black. $\mathrm{e}^{10 \text { For }} \mathrm{S3.78}$

# tube sockełs 

## AMPHENOL Above Chassis Sockets



Chassis type bakelite socket, in aluminum sheve sub-pan above sub-panel. Has 4 knockouts for leada, plus flange for
mounting. Ideal for mounting on work benches, breadboard radios, etc. No. Prongs No. Prongs
K13100 4103 IS $\begin{array}{lllc}\text { K13100 } & 4 & \text { K13103 } & 7 \mathrm{~S} \\ \mathrm{~K} 13101 & 5 & \text { K13104 } & 7 \mathrm{~L}\end{array}$ K13102 6 Mny TXpe Above, $\quad$ Your Cost Each..... K13105-7 L.8S. K13106-8 Oct. Elther Type Above.
Your Cost Each....... Te K13110-
ACS81 Loctal Socket. ....

##  <br> Magnal Steatite Socket

An eleven contact socket made of teatite as shown. Has I'ho" pin circle to accept magnal 11-prong bases as found on many popular cathode ray and television tubes. Has an octal locating keyway. Complete with ring. Mounts in a 15 -inch bole.

## K13108

$71^{\circ}$

##  <br> Miniature <br> Polystyrene <br> Socket <br> An ultra-low-loss socket for

 prong miniature tubes. Complete with mounting ring, which grips socket firmly through chassis K13109-
## "Eye"Tuning Indicator

## 

For Installation in any set having AVC. 6-prong type requires 6E5 or 6G5 tube for 6.3 V . sets; 2 E 5 for 2.5 V . sets. 8 -prong type requires a 6AD6G or 6AF6G K11480-6-prong K12645 8-prong Less tube, Each.
 M1481-cxtra bezel....... 21c K11489-8-prong socket for C-R

## Wafer Sockets

 Sturdily con-
structed oflaminated bakelite. Heavily-plated, floatiag onepiece contacts. Have $11 / 6^{*}$ centers.

## Stk. No. Pronge Each 10 For

| Stk. No. Pronce | Each | 10 For |  |
| :--- | :---: | :---: | :---: |
| K13114 | 4 | $6 c$ | $54 c$ |
| K13115 | 5 | $6 y / 4 \mathrm{c}$ | 59 c |
| K13121 | 6 | 6 c | 72 c |


| K13122 | 7 amall | $8 c$ | $72 c$ |
| :--- | :--- | :--- | :--- |
| K13125 | 7 large | $8 c$ | $72 c$ | K13127 octal 61/4c S9e

## New Wafer Loktal

$136^{*}$ Mtg. Centers. Each 10 For

"MIniature" Wafer
( $1 / \mathrm{h}^{\prime \prime}$ die.) 7-pin type. Mtg. cen
Ker'sog7-Each.
10 For

AMPHENOL Standard Tube Sockets
Type "A" is designed for gen eral replacement work and has a steel adapter plate to fit molunting centers from 11/2" worl requires only a single work and requires only a single $11 / 6$ hole, being held in place with a retainer ring, unusually easy to mount Both types
tite, Steatite being especially desirable for transmitters,
 high power amplifiers, etc. 9 and 11 prong sockets are for Amphenol connectors. 7 C sockets fit small and large base tubes.

| No. | Bakelite | "A" | Bakelite | "8" | Steatle | " |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Prongs | Stock No. | Ea. | Stock No. | Ea. | Stock No. | Ea. |
| 4 | K13057 | 8 c | K13207 | 714c | K13194 | 28 c |
| 5 | K13058 | 8 c | K13208 | $71 / 2$ | K13195 | 28c |
| 6 | K13059 | 8 c | K13209 | 712c | K13196 | 28 c |
| 75 | K13061 | 8 c | K13210 | 71/2c | K13197 | 28 c |
| 72 | K13060 | 8 c | K13211 | $71 . \mathrm{c}$ | K13198 | 36 c |
| 7 C | K13056 | $101 / 2 \mathrm{c}$ | K13237 | 10 c |  |  |
| 8 | K13050 | 10 mc | K13212 | 10c | K13199 | 28c |
| 9 | K13041 | 13c | K13213 | 12c |  |  |
| 11 | K13042 | 18 c | K13214 | 17 c | . . . . . |  |



Amphenol Miniature Tube Sockets
For the New RCA, Hytron,
Raytheon and Cetron Baby Tubes
For the new miniature tubes of all makes for use in hearing aids, pocket radios, remote controls, measuring devices, etc. All mounting holes $5 / /^{"}$ except Raytheon (1/"). Correct retainer ring supplied with socket
Designed for 1S4, 1S5, 1T4 and For CK501, CK502, CK50 1RS
K13173-Black Bakelite. . 121/8c K13172-As above, but of molded polystyrene for UHF work. Each
Designed for HY113, HY115, HY125.
K12702-B1. Bakelite. T $\boldsymbol{T}_{1 / 2}$ c
CK504.
K11598-B1. Bakelite. T $21 / 2$ E
Each .....................
For Photo Cells
Designed to fit RCA Pee-Wee and Cetron CE-5BB, CE-20 photo cells.
Each.


JOHNSON Miniature Sockets
Sockets for 9000 , miniature series. Shield caps
available in two sizes. Equipped with inner available in two sizes. Equipped with inner spring to hold tube firmaly.
N1316-Ceramic
K13117-With shield base
413119-14" shield
K13118-Shield base only
K13120-14* shield

ckets
Low loss.
Top and
sides glazed.
Re-enforced
springs.
2 i/n long,
$1 / 1$ wide.
Centers
No. Prongs Each 10 For

| No. | Prongs | 2ach |
| :--- | :--- | :--- |
| K13064 | 4 | 29 c |
| K13065 | 5 | 29 c |
| K13066 | 6 | 32 c |
| K13067 | 7 s | 35 c |
| K13068 | 8 octal | 38 c |

ach 10 For

## NATIONAL "CIR" Sockets



These low loss isolantite sockets cambe
locked in a metal
flange

| No. | Prongs | No. | Prongs |
| :--- | :---: | :---: | :---: |
| K14534 | 4 | K145337 | 7 small |
| K14535 | 5 | M14538 | 7 large |
| K14536 | 6 | K14533 | 8 octal |
| AnyType. |  | 2 |  |

K13068 8 octal 38c 3.42 Each

## Low Loss Sockets

Base Mounting
Unaffected by
Unaffected by
weather conditions.
Efficient sockets
that cut losses to an
absolute minimum. Excellent for transmitters and high frequency

## gear

| No. | Prongs | Each |
| :--- | :---: | ---: |
| M12636 | 4 | 53 c |
| K12637 | 5 | 53 c |
| K12638 | 6 | $59 e$ |
| K12643 | $7 \mathrm{~L}^{2} \mathrm{~S}$ | 59 c |
| K12644 | 8-octal | 59 c |
| Comblnation Sockets |  |  |

Combinat
all-molded
bakelite sock. ets. Sub or top panel mounting. Positive

adapter plate for $14{ }^{\prime \prime}$ to $17{ }^{\prime \prime}$ atapter plate for 1 to plate for 1 so" hole. Bakelite. K13040-With Plate K13045-With Ring only K130
Each

## Hearing-Ald Plugs Sockets easily mounted by $3 \%^{\prime \prime}$ holes in a row. Mtg.

| K13227-2 pr. plu |  |
| :---: | :---: |
|  |  |
| K13234-4 pr. plu |  |
| K13235-3 contect so |  |
| K13236-4 contact socket. |  |
| Loktal Sockets Replacement |  |
|  |  |
|  |  |
|  |  |
| adapter plate for $11 / /^{\prime \prime}$ to $17 /{ }^{\text {" }}$ |  |
| mtg. centers or sing type without |  |
| plate for $13 / z^{\prime \prime}$ hole. Bakelite. |  |
| M13040-With Plate |  |
| Each................ 3 |  |
| K13045-With Ring only. |  |
|  |  |

K13095-4, 5, 6$\} \quad 10$ For
K13096-5, 6, 7 , Either Type

## AMPHENOL "MIP"

Molded from high-dielectric black bakelite, with molded-in piate for $11 / /^{\prime \prime}$
mounting cen-
ters.
Stock No. Prongs Your Cose Es K1316 K13165
K13166 K13166
K13167
K13168 7, small $\quad 7$
$\begin{array}{ll}\text { K13168 } & \text { 7, large } \\ \text { K13169 } & \text { 8, octal } \\ \text { K13223 } & 9 \ldots . . . . . . . . . . . . . . . . . . ~\end{array}$ K13224 11

## Midget "MIP" Octal

 Smaller, more compact than above. Has 16 有" mitg. centers. Octal, 8 Mrongs only. K 1322 - Your Cost Each K13243-"MIP" Loktal Type. YouPoly-
Styren Ultra

## Lo-Loss

## Socket

Molded poly styrene base.

## Fine for


U.H.F. work. Long lugs. 8 pr Caution: Solder fastl Do not hea beyond $200^{\circ} \mathrm{F}$. $11 / 8^{\circ}$ hole- $113^{\circ}$ centers.
K13170-Octal
Your Cost Each
K13160-Loktal
32 c
JOHNSON Sockets
Low ab-
sorption
porce.
base.
Heavy
phos
phor
bronze
broaze

tacts, cadmilum plated. Heavy nickeled brass shells. 61 C K14160 UX Base. K14161-50 watt Base. Each.88c K14157-Giant 5-prong socket.
Your Cost................ $\$ 1.47$

MILLEN Sockets
Steatite body to provide increased insulation. Barriers separate all contacts, permitting
use of high voltages
use of
Stl. No. Mrrs. No. Prongs Each
$\mathbf{K 8 0 4 5}$
$\mathbf{3 3 0 0 4}$
$\left.\begin{array}{llc}\text { K8045 } & 33004 & 4 \\ \text { K8046 } & 33005 & 5 \\ \text { K8047 } & 33006 & 6 \\ \text { K8049 } & 33008 & \text { Octal }\end{array}\right\}$ 25c

## No. 12 EBY Sockets

Molded Bakelite. For sub or top of gripping positive contacts.
No.
$\times 13072$
K13073
K13076
K13077

$\times 13079$


Each
$32 \%$
K13081-55A13 miniature.... 12 c
loctal socket.....................12t K13089-Magnal-socket (11 con*
tact) $\mathrm{w} / \mathrm{mtg}$. ring............62c

## Mlllen Acorn Sockets

Contact type holds tube secure, beryl. lium copper
ailver plated ailver plated
eontacts.Cer-
amic base.
Die. $1{ }^{19} 16$
Kour Cost.


## binding posts, plugs and jacks



Plain Tip Jack
For test equipment. Powerful spring. $1 / 4$ mounting hole. $K 12918$ Your Cost Each

## Combination Jack



New type, takes both phono tips and benana plugs. Fully insulated, with insulated washer. In red or black.
Speclify color desired. K12925 12 For

## All Insulated

 Tip Jack

Countersunk 1/" d, head $3 / /^{\prime \prime}$ overall. Fits $8 / 8^{\prime \prime}$ hole Bronze spring. Each K12934-Red K12935-Black ${ }^{c}$ 10 For
Insulated Tip Jacks . 1 Have new type springs which provide sure grip contact. Mounts in $1 / 0^{\prime \prime}$ hole. In red or black Specify color. K12879 Each 12 For

Insulated Tip Jacks

## JOHNSON 420

 dakelite. Phone tips nest all the way in gle $1 /{ }^{\prime \prime}$ hole. Each K6505-Red K6506-Blk Per Pair, 1 red, 1 black. K6467-Yowr Cost
## Molded Bakelite

 Insulated Tip JacksLarge diameter molded Bakelite heads take all phone tips. Phosphor bronze springs. With insulating Washer.
K12877-Red Each $\left.\begin{array}{l}\text { K12877-Red } \\ \text { K12878 Blk }\end{array}\right\}$ (3) $\begin{aligned} & 10 \text { For } \\ & \$ 1.15\end{aligned}$


EBY Binding Posts
Non-Removable Tops
Specially designed for use
 on metal chasoin stod use hole for wire or phone tip. K13082-Junior Post Has 6.32 stud, $1 / /^{\prime \prime}$ long. Your Cost Each
K13083-Ensign Poot Has 6.32 stud. $8 /{ }^{10}$ long. Your Cost Each
$23^{c}$ K13084-Commender Po Your Cost Each.......2, ${ }^{c}$

## EBY Twin Post Units

Two posts molded into a Bakelite base. 13062-Your Cost As above, but with th


NOL Phone Tip Jacks
Bakelite body. Takes standard plain or solderless phone tips. Mounts securely by means of map ring Red or Black-specify color deaired.
Cowe Ki276s
High Voltage Jack
13000 V. Tip Jack. As above but $1 / 2$ " diam. For $x^{\prime}$ mitters, etc. Red or Black Specity color. K12766-Your Cost Each. 7


Midget Jacks Fibre inaulation " ${ }^{\prime \prime}$ mitg. hole. K6548-Closed cir cuit jack.
$K 6549$ cuit jack.
Your Cost Each
$15^{\circ}$
K6550-Now 1 mp. Short Jack 3 -circuit for 3 -way plugs. Ea. 20 C

Phone Tip and Lug Adapters For Prods

Handy little adapters for use with any benana plug, or test prod fitted with a banana plug end. Enable you to fit them to either tip jacks or binding posts. Red or Black-Specify color K12913
Phone tip end. Each $9^{10}{ }_{81 \mathrm{~F}}^{10}$ K12914 - Ee 10 For Spade lug end. Each. $9^{\text {c }} 10$ 8ic
Alligator Phone Tip Jacks

Alligator clip fitted with standard phone tip jack. Fits test prods equipped with phone tip ends. Red or Black apecify color. K12880-10 For $\$ 2.34 \ldots 26 c$
Your Cost Each
$20^{\circ}$

## Test Lead Kit



In a convenient leatherette pocket case. Insulated fittings are provid ed for every type of testing. Equipped with one pair of test leads having $60^{\prime \prime}$ of red and black kinkleas wirc: one end phone tips, the other insulated removable banana plugs. Also includes: one pair insulated alligator clips; One pair insulated spade plugs; one pair insulated needle points (all 1-red, 1-black) K12861.
$\$ 2$


## Insulated Banana Jacks and Plugs

## 

Plug has set serew for solderless wire connection. Jack, fits ${ }^{1 / 4}$ hole and panels up to $3 /$ " $^{\prime \prime}$ thick. Red or Black insulation on both. Specify color desired. Kach Each.............. $9^{\text {c }}$| 10 Fic |
| :---: |
| 10 |

## Plain Banana

 Jacks and Plugs
## $492=$



Plug is $11 / 6^{\circ}$ long. Jack is $3 / /^{\prime \prime}$ long and fits $1 /{ }^{\prime \prime}$ " hole in panels up ${ }^{\text {to }} 3 /{ }^{3 / 81}$ thick.

| $K 12919$ Plug | 10 For |
| :---: | :---: |
| K12923-Jack | 62 c |
| Your Cost Ea., |  |
| Either Type |  |
| 100 For |  |

Either Type.
100 For......

|  | Phono Tip Plug |
| :---: | :---: |
|  | Single prong shielde |
|  | plug used extensively |
|  | mike or phono piel |
|  | and similar connection |
|  | K11773 |
|  |  |

## JFD Phono Tip Jack



|  | S |
| :---: | :---: |
|  |  |
| $\begin{aligned} & \text { Fine } \\ & \mathbf{K 1 4} \end{aligned}$ | $\ldots 3^{\text {c }}$ |
| Per 100 |  |

## Plain Solderless

 Phone Tip Plugs derless connection. $15 / 8$ n long. K12943- $7 c^{12}$ For Each....... 75c
 $\frac{\text { Each.......... } 75 \mathrm{C}}{\text { Split Type Banana Plug }}$ Insulated. Fits standard banana jacks. Set for solderless connection Poitive springaction Plug $1 /$ long:over all $1^{1 /}$ /" . Red or black; specify. K12902-
Each
$12 c$
10 For.............................. $\$ 1.08$
Right Angle Tip Plugs ES $\begin{gathered}\text { Strea mlined } \\ \text { plugs } \\ \text { with }\end{gathered}$ plugs with set
bucrew for solder. liess connections.
K12937-(A) Speciry red or black. Your Cost Each......23c K12988-(B) Red

Ea, $\boldsymbol{4}^{\circ}$
Solderless insulated
Phone Tip Plugs
Solderless type;
 fit all standard tip jacks. Used on test leads. In red ar black; specify color. K12973-17/0" long prod. K12974-1 12 " long

IO Per Dozen, Either Type
. $\$ 1.08$
Phono Needle Plug Constructed so that the in sulated leeve will take a banana plug, and the prod itself will make positive contact with the banana plug. Tip holds phono needle (needlea easily replaceable). Overall length $11 /{ }^{\prime \prime}$ Red or black; specify color.
K12917-Far \$1.08
Cable Clamps
Heavy gauge ateel. No. matg, hole. Plated K14351-3/ cable. 4 For 4 c K14952-1/2" cable. 3 For 5 c

## Low Loss Plugs



Tin plated brass body. Heavy silver plate tube prong. Wax impregnat prong. Wax impregnat. Cable sleeve $1 / 4^{\prime \prime}$ inside diam.
K13128-
Your Cost Ea. 3 Ic


Low Loss Sockets Used with Low Loss Pluga. Brass base nickel plated with chrome flash. Bakelite
insulation.
K13146
Your Cost Each
37 c
Heavy Stock Low Loss
Plugs and Sockets
 plugsar to plugs and
rger and heqvier above, but a Plug cable iecve 3 inside diameter. Overall length of plug 19 亿o
Each.... 48 c Each.......51c

Tapered Lugs
Fits over all screws up to No. 10; shank fits banana plugs. $11 / 6^{\prime \prime}$ long, $3 / /^{\prime \prime}$ wide. Cut for casy soldering. K12954-
Per Dozen...... 36



## Escutcheon Pins

Antique finish- ${ }^{\prime} /$ /r $^{\prime \prime}$ long. For fastening escutcheons or nameplates. K14811-Per $100 \ldots \ldots . \Delta^{c}$

Escutcheon Screws Round head, antique finish, $1 / 8$ " K14934-No. 2 size Per Gross

Knob Set Screws
Case hardened. For knobs, couplings etc
 14786.32 $1 / 4$ " $\times 8-32$ Any Slze Above,
50 For 85 c. 10 For..... I?
Bumper Feet
These felt feet have a standard 6-P.K. screw inserted in the netal part that
holds the felt ${ }^{2}$
place. Width $3 /{ }^{1 / 2}$ overall. $3^{c}$ 10 For
$1 / 4^{\prime \prime}$ Metal Spacers
For raising com-
ponemes above
from panel. All
pass. Nos. 4,6 and 8 screws. No. Inches For 10 For 100

| K9868 | $1 / 1$ | 21 c | $\$ 1.89$ |
| :--- | :--- | :--- | ---: |
| K9869 | $1 / 3$ | 25 c | 2.30 |
| K9870 | $1 / 2$ | 29 c | 2.70 |
| K9871 | 1 | 33 c | 3.10 |

Locking Washers K14758-For No. 6 K1475 100 For Either Type
Envelopes of 25.

## Insulating Washers

 Of tibre. Used for metal chas mountiag.| Stock |  |
| :---: | :---: |
| No. | O.D. ID. |
| K15020 | 1" 88" 10c |
| K15021 |  |
| K15022 |  |
| K15023 | 19" 10"6c |
| K15025 | \%" ${ }^{\prime \prime}$ " 6c |
| K15026 | 1/".136*5c |
|  |  |
| K15030 |  |
| K15031 |  |
| K15032 |  |
| K15036 | \%" "4" |
| K15037 | " ${ }^{\text {\% }} 136$ |

> Antique Finished Machine Screws

No. Size Lgh. Dz. Lots K14680 6-32 $/{ }^{1 / 6}$ 6c 44c K14682 6-32 $1^{10} \quad 6 c \quad 45 c$ K14682 6-32 $11 / /^{\prime \prime} 7 c$

Copper
Lug Kit

## A

A l-ib. assort ment of tinne copper lugs. For un $8(0)$ all radio and electrical work. Kit contains approximately 450 unit K14767
Your Cost Per Kit
65


Round Head Wood Screws
Stock No. Size Lgth. Doz. Gr.


| $K 14783$ |
| :--- |

## Nuts 8

## Washers

 Per 100.
K14805-8-32x $1 /{ }^{\prime \prime}$ hez. suts. $5^{\circ}$ Envelope of 20; Net Per 100
K14806-6.32x' hez. nuts. $\mathcal{C}$ Envelop
Per 100
K14807-8-32x ${ }^{3}$ "hez. vuts. $\mathbf{S C}^{\mathrm{c}}$ Envelope of 15 ; Net
Per 100
K14803-10-32 $x^{2} / /^{\prime \prime}$ hex. T ${ }^{c}$ c
nuts. Envelope of 20 ; Net. nuts. En
Per 100
K14808-6-32 $x^{11}$ 石
knurlednuts.Envelopeol 6 ; ${ }^{\mathrm{C}}$ Per 100 . . . . . . . . . . . . . . . . $\$ 1.35$
K14809-No. 6 washers.
Envelope of 25 ; Net....... Per 100.
K14810-No. 8 washer Envelope of 25 ; Net
Per 100.

## Heavy Duty

For battery terminals, etc., $1^{\prime \prime}$ long. No. 10 slot. 100 for 69 c K14912

# set builders accessories 

Insulating Tubing


In natural
8 mooth thick wa Cut to your length, any size

| Stock | Outside | Per | P |
| :---: | :---: | :---: | :---: |
| No. | Diam. | Foot | Inch |
| K13150 | 1" | 56 c | 5 C |
| K13151 | 13/2 | 68 c | 6 c |
| K13252 | 2 " | 80 c | 7 c |
| K13153 | $21 /{ }^{\circ}$ | 98 c | 9 c |
| K13154 | $3{ }^{\circ}$ | \$1.29 | 12c |
| Natural | Tan | r, 1 | Wall |
| K13129 | 1/4* | 39 c | $31 / 2 \mathrm{c}$ |
| K13130 | " | 39c | 315 c |
| K13232 |  | 45c | 4 c |
| K13132 | \% | 49 c | 41/2c |

Threaded Rods

Ideal threaded rod for making your own long screws. Easily cut to any length. In 12 " lengths. K14913-6-32 size. Per Lgth. 18 c K14914-8-32 size. Per Lgth. .18c K14918-10-32 size. Per Lgth. 23 e Steel Screws and Washers $10 / 32$ oval head screws. The cup Wesber, also
$10 / 32$ is designed to match the screw head in appearance.


## | FAHNESTOCK Clips <br> 

## Mounting Lugs

 Of heavy plated steel. Hole in flat end for 6-32screw; threaded ead $6-32$. K1495s
Per ${ }^{10}$.
Your Cost Per 100
Friction Tape Highest quality. Koil fresh by tinfoil wrapper, and
packed in individ. ual boxes. Handy colls.
K14829-2 Oz, Each....... 10c K14842-4 Oz. Each.
K14843-8 Oz. Each. Rubber Tape
An excellent general all-purpose highly insulating tape. Packed in silver foil. $3 \%{ }^{\prime \prime}$ " spool. 10 For $\begin{array}{llll}K 15040 & 4 \mathrm{oz} & 20 \mathrm{c} & \$ 1.80 \\ K 15041 & 8 \mathrm{oz} & 35 \mathrm{c} & 3.15\end{array}$
$\frac{\mathrm{K} 15041 \quad 8 \mathrm{oz} \text {. } 35 \mathrm{c}}{\text { MILLEN Grid Cap }}$


Isolantite covcred grid cap. for transmitting
tubes. Type 866 etc.
K8055-Type 36001
$\frac{\text { Your Cost Each }}{\text { An }}$


Angle Brackets With Tapped Holes Heavy gauge steel. one 5-32 plain hole. Stock No. Size 10 For Each K14909 K14911


## MUELLER Clips and Rubber Insulators



Spring actuated clips for lab., teat and battery uses. Type 27 and 27C are laboratory types with mesh teeth on three sides, others have teeth in front only. Soft rubber insulator cover entire elip as shown Listing below shows insulators opposite proper size clip. All packed 10 to a box; clips are marked ( $t$ and -5 each). insulators 5 red and 5 black.
CLIPS INSULATORS

| No. | Type | Size | Eachilu For\| |  | No. | Type | Ea | 0 For |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K16029* | 45 | 11/2" | 4 c | 50.32 | K1C031 | 47 | 8 c | \$0.55 |
| K16030 $\dagger$ | 45 C | 11/2" | ce | . 54 | $\times 16031$ | 47 | 8 c | . 55 |
| K16032* | 488 | $2{ }^{\text {n }}$ | 4 c | . 34 | K16033 | 49 | 9 c | . 59 |
| K16034 | 24A | 3" | 8 c | .68 | K16035 | 26 | 19c | 1.27 |
| K16026* | 27 | $21 / 2$ " | 8 c | . 68 | K16028 | 29 | 12c | 1.82 |
| K16027 $\dagger$ | ${ }^{27} \mathrm{C}$ | $2 \%^{\prime \prime}$ | 13c | 2.17 | K16028 | 29 | 12 c | . 82 |
| K16018 $\dagger$ | 21 A | 4 | 13 c | 1.17 | K16019 | 23 | 33 c | 2.25 |

* Cadmium plated steel. $\ddagger$ Lead coated steel. + Solid copper.

No. 85 T Mueller Crocodile Tip Clip For connecting Bridges, Voltmeters, etc, or anything having binding posts with non-

## removable heads. Fine for test prods.

K16023-Your Cost Each
No. 85. As above, less phone tip.
K16020-Your Cost Each
Rubber insulator for either of the above, No. 87
$13 c$
$76 c$
10 For

Kubber insulator for either of
K16021-Your Cost Each.
10 For
10 For
10 For

## MUELLER Wee-Pee-Wee Clip Non-Ferrous R.F. Clip. Will not heat in

 coils. Length 1116 . Comphequency circuits. Ideal for tapping jacket (specify color desired. No. 88-93). 10 For K16022-Your Cost Each..................... T E ${ }^{10}$ For
## NATIONAL Grld Clips



Type A. Easily removed. Tinned grip end for soldering. Long.
No. Type Tubes Dia. Each K14434 Stand. Glass $1 /{ }^{\prime \prime} \quad 3 \mathrm{c}$ K14565 Metal (octa) K14441 X'mitting* $1 / \mathrm{m}^{*}$ 6c - 866, T20, 809,812 , etc. Type B. For 866, ceramic. 4 C As above, but ceramic for $1 / /^{\prime \prime}$ dia As above, but ceramic for
Rubber Insulated Clip Soft rubber outer covering. Each with epprox. $12^{\prime \prime}$ lead.

Type Each K11620-For 866, etc. 18 c K11621-Glass tubes. 12c K11622-Metal tubes. 12 c Wetal \& Glass Tube Cap Fits either type. With
$11^{\prime \prime}$ lead and pin-tip. In 11 lead and pin-tip. In
red or black. Specify red or blaciz. Sp
color with order.
color wit
Klit28-


## Universal Grid Cap

 Makes perfect contact to any tube grid stud brass contact spreads to Spring $3 / 8{ }^{\prime \prime}$. Spring date the stud. Fits all metal and glass tubes. With $15^{\prime \prime}$ wired insulated lead.K11730-Each
K11731-Unwired. Each... I1c
Screen Grid Clips Miniature Clips for Metal Tubes. With wire ferrule.
M14385-
Per Doz. 14c
ost Each.2ec
K14927 For Glass Tubes
Each...2e 12 For 100 For
Snap Battery Terminals
(1) 1 ) $\begin{aligned} & \text { Same as used for Ever. } \\ & \text { ready types } 430,435,\end{aligned}$ 455,467 ; Burgess type XX-45 midget batteries.
K 11732 -Set of 2 ( 1 male, 1
female). 10 seta for $25 \mathrm{c} . \mathrm{En}^{2} .3^{c}$
JacketType
Tube
Shields
Will form-fitall
glas tubes,
Bodies consist
of two halves
snugly held to
the tube by a

## (4) Bantam Tube Shields Designed especially for the new 1.5 volt and bantam "GT" tubes or other "T-9" bulbs. Available with and without grid-cap, as de.

 K13259-Plain shield, without cap. One-piece, grounds automatically 10 For
## our Cost Each

K13260-Same as above but short cap and ground elip. For tubes without top grid cap. Type Y. 10 For ......35c Your Cost Each.
K13261-Type B. With orid-led cap and ground clip. 10 For 45 c Your Cost Each.
"Form-Flt" Shields

$\underbrace{2}$ (2)
Smooth, seamless drawn walls as sure a snug, positive fit on the cube. Vertical grooves provide
flexible fit, and the shield suto
matically grounds to the tube base. For GT tubes: $1.218^{\prime \prime}$ base.
K13256-Open top.
K13257-Closed top
For GT/G tubes: $1.165^{\prime \prime}$ base.
K13246-Open top.
K13247-Closed top.
For Loktal Tubes:
K13247-Closed top.
Each, Any Type Above 10 For.

## SMITH Sing Sint <br> Metal Tube Grip Cap Shields For use with screen grid K13217-Ea. .... ${ }^{\text {m }}$ 10 For <br> Card of eight dial pointera. Two slide long. Two slide rule pointers $17 /{ }^{2}$ long. Four airplane dial pointers. Your Cost...SI. P



Molded from pure polystyrene. 6" and $12^{\text {n }}$ lengt hs for machining special coil forms and low loss parts. K8074-K" dia. $x 6^{\prime \prime}$ L...... . 11 c K8075-10" dia. $x 6^{\circ}$ L....... 13 c
K8076-1/2"dia. $\pm 6^{\prime \prime}$ L......23c

$\times 8069-1 / 2^{\prime \prime}$ dia. $\times 12^{\circ}$ L........45c

RODALE wiring devices


The ideal extension set for reaching those far-away corners. The nine-foot cord has a cubed trio tap and serewless plug, tap and
pluy of bakelite. Cost Ea. 33 c
K13293-Your


Flatiron Element
Fit $90 \%$ of th
Kard appliances.
K13270-Flatiron
element.
Each
10 for
54.77

Flush Receptacle
Fit the
otandard
outlet
bozes.
bppor
Approved
by the Underwriters. Shpg. wt. ${ }_{K 13267-Y o u r ~ C o s t ~ E a, ~ I ~ 2 f ~}^{c}$ 10 for
.51 .10
Midget Push Button Brown bakelite push but
ton. K13297
Each T?
10 for . $\$ 1.0$

## 10

3-Way Surface Outlet


Sturdy brown bakelite finish. K13296Cord Connector Body Rubber or bakelite
Takes standard male Mlug. 13/4" diam Rubber
10 for $\$ 2.2$
K 13298


Bakelite. $14 c$


| Eakelite. ...... |
| :--- |
| Porcelain |

## Receptacles These porcelain receptacles come

 in three base styles. 10 for.$\mathbf{K 1 3 3 3 0}$

72c
K13330

$\$ 136$ Miniature base
1137 Candelabra base
10 for
K13327-143
Intermediate base.. $1 / 2^{\mathrm{C}}$


Resistance

## Wire

A high grade
resistance wire In 4 standard sizes in amall quantitics for daily
 use on highly sensitive instruments. Of high grade alloy. 10 ft . colls

Diam.
$\begin{array}{lll}\text { K13252 } & \text { E78-1 } & \text { K1/is } \\ \text { K13253 } & \text { E78-2 } & 13254 \\ \mathrm{E} 78-3 & 1 / 20\end{array}$
$\begin{array}{ll}\text { K13254 } & \text { E78-3 } \\ \text { K13255 } & \text { E78-4 }\end{array}$
4.80

## Attachment Plug sase

bakelite in usual strong Rodale con. struc
K13280-
Your Cost


## Each

$51 / 2^{c}$
Feed-Thru Switch

Bakelite. Com-
pact and very
sturdy. 6 amps.-
110 volts.
K13275
Each......23

$5 /$ " $^{\text {" Desk }}$
Push

## Button

General pur-
K13321-
Your
Cost 336
10 for . 53.00

## Flat Cord Connector

 Flat Bakelite type, Under ${ }_{\substack{\text { K13276-2 } \\ \text { Each }}}$Carbon Brush and Spring Kit

types of small motors. K13323 Your Cost
$\$ 3.95$
3-Way Surface Outlet
Made of brown bakelite. Screw: into the base boards. Eapy to use and install 10 for . . . . . . $\$ 1.30$

K13271-
Your Cost Each


Single Outlet Made of brown bakelite. Screws into the bascooard. install. K13312- 10 for 70 c K13312- 10 for $70 c$
Your Cost Each.......... RubberHandle

Plug Cap
Handle plug cap made of durable rubber. Cannot crack or break. For all appliances. Your Cost Ea.
$\qquad$


Square Push Button Value-full buy is this aquare push button. push button.
10 for.. $\$ 1.08$ K13303 Kour Cost Each


Bakelite Cleat Receptacle This Edison type base receptacle will accommodate any household light bulb. K13322-
Your
Cost
Each

Electrical Appliance Cord


The thick belt of flexible rubber that covers the conduct or is made of smooth oil-resisting, abrasion proof, high quality rubler. Stock Per Per
 K20945 18-2-wire 4c 43.60 $\times 20946$ 16-2-wire $4.5 e^{4.05}$ $\begin{array}{llr}\mathrm{M} 20948 & 18 \text { - } 3 \text {-wire } 5 \mathrm{c} & \mathbf{4 . 5 0}\end{array}$


The two conductors are sheathed in a coating of tough live rubber. A ridge between these conductors allows them to be easily separated without fear of ruining the insulation. In Black. Ivory and Brown. Specify color desired. Shpg. wt. Specify color des
per $100 \mathrm{ft}, 3 \mathrm{lbs}$.
K 20920 Is Gauge Your Cost $\begin{array}{ll}\text { R20920 } & 18 \text { Gauge your Cost } \\ \text { Per Ft. } 100 \mathrm{Ft} . & 500 \mathrm{Ft} \text {. }\end{array}$
$2 \frac{1}{2}$ C $\mathbf{S}_{2} .06 \$ 9.26$

With Switch Plug
With Switch Pluz


Cord for all types of appliances including irons, toasters, coffee makers, etc. Rayon cotton covered and asbestos insulated
10,000 cycles heater 10,000 cycles heater cord with molded switch plug. Shpg. wt.
K13325-Each
$99^{\circ}$

## Cotton Twisted Pair <br> 

18 Gauge, $1 / 4$ R.C. wire with cotton coverling offered at prices below market. 2 colors - white or yellow and green mixture. Specify. K20902-Your Cost $100 \mathrm{Ft} . \quad 250 \mathrm{Ft}$.
\$2:18 $\quad \mathbf{\$ 4 : 9 0} \quad$ \$18.62

## 660 W . Nichrome Element

It's been a long time since we've been able to offer pure Nichrome heating
660 elents. These dissipate 660 watt at $110-115$ volts. Ideal for heaters, hot plates, toasters. K13317
Your Cost Each.
10 for


Reaches places inaccessible with hammer and ordinary ataplea. Can attach staples to any surface. Lightweight, rustproof. Staples wires up to $\%$. Fully automatic. Magazine holds 24 staples. K15091-With (250) steples. Wt. 2 lbs.
$\$ 4.17$

## BELL WIRE

An exce
No. 18
No. 18.
Your
Cost
K16051-25
Your
Telephone Wire

For general use and inter-com. munication phones. 2-Conductor No. 19 Gauge.
K20895-100 Ft. 500 Ft .1000 Ft . Your Cost $\$ 2.64 \quad \$ 12.39 \quad \$ 23.90$ K20896-3-Conductor 119

## hook-up and magnet wire



## 0 - <br> Shielded Auto-Radio Lead-In Wire

No. 20 atranded conductor ( $10 \times 30$ tinned) with special low capacity rubber wheath and overall shield. Max. cap. between conductor and phield 33 mmfd. Overall dia. 230 "
K20883-100-ft. For $\$ 8663$..... S4. 26 Per Foot As above, but with rubber sheath overall. . $290^{\prime \prime}$ O.D K20884-100-ft. For $\$ 8664$
$\$ 5.65$ Per Foot
$51 / 2$

## Transmission Line Cable



Shielded Twisted Palr 18 stranded, rubber and paper wrap, tinned copper shield over twisted pair-weatherproof overall White braid. Ideal where in terference is great. \$8209. 500 Foot Spool SI®.

Commercial Twisted Pair 22 (7x30 tinned) paper wrap. .022 rubber. Weatherproof over all Black braid. For com. broad cast receivers. $18205 . \$ 7,33$
K16171-500-ft spool.
Impedance Matching Cahle No. 18 stranded, rubber covered cotton, twisted pair, weatherproof overall White cotton braid. For all-wave jobs. 72 ohm impedance matching half-wave dipole aerials. 18204. K16174
500 Ft Spooi Per Foot

## All-Rubber Lead-In Wire

Easy stripping-easy soldering. All made of 7 atrands tinned copper wire with thick rubber sheath: 031" on 20;.040" on others. Shpg. wt. 3 lbs. per 100 ft

| Stock <br> No. | Beiden <br> No. | Wire <br> Gsuge | Lsth. <br> Feet | Tour <br> Cost |
| :--- | :---: | :---: | :---: | :---: |
| K16227A | $8200 \uparrow$ | 18 | 100 | $\$ 0.54$ |
| K16227B | 8200 | 18 | 500 | 2.30 |
| K16226A | $8201 \ddagger$ | 16 | 50 | .38 |
| K16226B | 8201 | 18 | 100 | .66 |
| K16226C | 8201 | 16 | 500 | 290 |
| Diam. $-120^{\circ}$ |  |  |  |  |

## Rayon Push-Back

No, 20 tinned copper, heavy wrap, cellulnae acetate, "basket-weave" abrasion-proof lacquered rayon
braid. Colors: green, blue, red, yellow, black. Specify color. K16066-25-ft. spool* 18941 . 26c K16068-25-f. spool $\dagger / 8943$. 28 c K16080-100-ft. spool ${ }^{*}$ K16081-100-ft. spoolt
K16067-1000-ft. spool K16069-1000-ft. spoolt Similar to above. No black only. K1615s-25-ft. spoolt i8938. 41c K16082-100-ft. spoolt $89398 . \$ 1.44$ K16082-100-ft. spool

Television Hook-Up Wire No. 18 strand ed covered with ipecial candorysing rubber compound (O.D. .200") with Pyroglaze Beal and white Fiberglass braid. Puncture voltage 15,000 . Adequate protection | against corona and heat. For all |
| :--- |
| $H . V$ circuits. 8868 . |
| 10 | K16267-Per Ft.

25 Ft . for.

## Shielded Hook-Up Wire

No. 20 hook-up wire with woven tinned copper shielding over a $1 / 4$ rubber wall with rayon braid under shield. O.D. .105". 88885 K16294
Per Fe.
Per 100-8t.
$21 / 2 c$
... $\$ 1.88$

## 

## 72 Ohm Coaxial Cable

Will meet the requirement for all frequencies in the audio to and including the television or $f . m$ range. For use as antenna receiv ing or transmitting cables; also for photoclectric or other circuits where characteristics fit the application. DB loss per 100 -ft.: 1.03 at 10 Mc .; 2.24 at 40 Mc .; 3.78 at 100 Mc . Capacity between conductors per ft.; 26.3 mmf at $10000 \mathrm{kc} ; 25.9 \mathrm{mmf}$. at 40000 kc stranded (19x28) tinned, low loss rubber compound tinned copper shield tough vulcanized rubber sheath $460^{\circ}$ O.D. 88216 K20936-Per Ft.
Per 50 Ft
Shielded Primary Wires
हrax,
No. 12 gauge ( $19 \times 25$ tinned) with colored cellophane serve, . $031^{\prime \prime}$ rub ber wall, glazed cotton braid lac quered and an overall tinned cop per shield. Wt. 6 lbe per 100 ft 98654
K16223-100 Ft. for $\$ 4.52$
Your Cost per Foot....
e Your Cost per Foot ....
No. 14 gauge. 027 ruber wal ( $19 \times 27$ ) $/ 8655.100 \mathrm{Ft}$. for $\$ 3.75$ K16218-Your Cost
per Foot............... $1 / 2$ e Ner 16 最 ( $19 \times 29$ ) 18656.100 Ft . for $\$ 3.00$ K1621 - Your Cost per Foot.

## R-F Hook-Up Wire

100 Foot Spools. Insulation resistance is 49,000 megohms. Tinned copper with two apecially treated cellulose acetate braids. Colors: green, blue, black, red and yellow. K16247 color 99 K16247- 20 Solid. 8841. K16248 $/ 20$ Stranded. $\$ 8839 \$ 1.07$ K16204-18 Solid. 8861 .... 1.07 K16205-\$18 Stranded. 188441.17

## Hi-Volt <br> Push-Back

Latest type ingupuncture voltage rating ( 6900 volts)
yet insulation slips very easily. No. 20 tinned copper, cotton wrap, . $010^{\text {" }}$ rubber wall "basket-weave" lacquered rayon braid over all Colors: green, blue, red, yellow, Colors: green, blue, red, yellow black. pecify color when or K16258 25-ft. Solid. 18837 K16261-25-ft. Stranded. $\$ 8838$ K16259-100-ft. Solid
K16262-100-ft. Stranded

## Test Prod Lead Wire

Flexible No. 18 wire ( $65 z 36$ ) tinned copper. Cotton wrap. $3 / \mathrm{m}^{6}$ rubber wall. Two 7 ft . lengths red and black ( $14-\mathrm{ft}$. total) parallel wound on spool. 18899.
K16336-Two 2-ft. lengtha. $33^{c}$ Your Cost per Spool
K16337-Red or Black (Specify). Your Cost per 100 Feet... $\$ 1: 52$

BELDEN Shielded Rubber Mike Cable
${ }^{2} 0$ Gauge tinned stranded conduc tors cabled cotton wrapped hielded cotton wrap over shield overall rubber sheath. No. Cond. O.D. Ft. 100 Ft , $\begin{array}{llllll}\text { K20876 } & 2 & 18422 & 280^{\prime \prime} & 7 \mathrm{c} & \$ 5.52 \\ \mathrm{~K} 20845 & 3 & 18423 & 280^{\prime \prime} & 8 \mathrm{c} & 6.75\end{array}$ $\begin{array}{llllll}\text { K20845 } & 3 & 18423 & 280^{\prime \prime} & 8 \mathrm{c} & 6.75 \\ \text { K20877 } & 4 & 88424 & 325^{\circ} & 9 \mathrm{c} & 7.88 \\ & \text { Unshielded Cahle } & \end{array}$ Unshielded Cahle Like above, but 118 gauge, no shield.

No. Cond. O.D. FL 100 FL $\begin{array}{lllll}\text { K } 20910 & 2 & 88432 & 245^{\circ} & \text { 31.2. } \\ \text { K }\end{array}$ | K20880 | 3 | 88453 | $.265^{\prime \prime}$ | $41 / \mathrm{cc}$ | 3.92 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| K20881 | 4 | 88454 | $260^{\prime \prime}$ | $61 / \mathrm{yc}$ | 5.61 |

## BELDEN Flexible

 Crystal Mike CableType 8431, for phono pickups, has overall cotton braid
Stock Type Out. Cap. Per 100 Ft No. No. Dia, Mmfd. Fi. For $\begin{array}{llllll}K 20844 & 8401 & 245^{\prime \prime} & 25 & 71 / 2 c 56.33 \\ \text { K20958 } & 8411 & 155^{\prime \prime} & 35 & 5 c & 4.02\end{array}$ $\begin{array}{llllll}\mathrm{K} 20058 & 811 & .160^{\prime \prime} & 55 & 21 / 2 \mathrm{e} & 2.06 \\ \mathrm{~K} 20848 & 8131 & .160^{\prime} & \end{array}$
Extra Flexible Hi Voltage

## Test Lead Wire

The outstanding feature of this wire is it great flexibility. 18 stranded, cotton wrap, a rubb wall. Belden 8898
Per 100
Per 100
feet.
2
300 Ohm Twin Lead and
Stand-Off Insulator
Type 300L transmission line and stand-off are ideal for FM and television lead-ins and Ham applications. Are tough, weather
The insulator helps keep the conductors at
 parallel and at a fized distance from nearby surface K20826-Twin lead,
Per foot
Per 100 feet
K17076-Insulator $\cdots 3^{c}$

## Tinned Copper Shielding



The finest copper shielding avail able. Fine mesh closely woven assures perfect shielding. Shpg. assures periect shielding Ki6214-Inside diom
Your Cost
Your Cost
Per 50 feet
Per Soreet ...................89c Your Cost Per Fook. ${ }^{\text {K }}$ " 3 Per 50 feet
K16216-Inside diam. 3 名".
Your Cost
Per Foot.
Per 50 feet
Non-Kinking Aerial Wire For use on AC-DC receivers. No 23 (20x36). A wrap and a braid of brown cotton. On card. Belden No. 8014.
K16132-1000-ft, spool
.55 .85
Shlelded Pair $t \leq 0$
For inside use. Twisted pair of No. 19 solid, double enameled, cot ton wrap. color coded braid waxed, overall bare copper shield. Two conductors. $145^{\circ} \mathrm{O}$.D. $\$ 8799$. Shpg. wt. 3 lbs. per 100 ft . K20911-Per Foot

## BELDEN Aerial Wire

Made of the fin est copper obtainable. All rolls to be full length and standard gauge as specigauge as speci-
fied. For any type aerial.
722 Bare Copper Stranded 8000
ft. $\mathrm{K} 1627-50 \mathrm{ft}$.
$\times 16288-75 \mathrm{ft}$. K16288-75 ft. K16282- 100 ft.
$\mathrm{K} 16283-1000 \mathrm{ft}$
$\qquad$ K16283-1000 ft...................... 55.24 18002
K16284-50 ft.
$16285-75 \mathrm{ft}$.
53.52

K16287-1000 ft. . . . . . . 18005 8005 K16229-75 ft. K16228-1000 f. $.76 c$
57.14 $7 \times 20$ Enameled Siranded 18006
K16232-100 ft.
${ }^{5} 1.42$ K16233-1000 ft. . . . . 812 Solld Enameled $+8008$
K16230- 100 ft.
$\mathrm{K} 16221-500 \mathrm{ft}$

## BELDEN

## Replacement Cords

Extra flex.
ible brown all-rubber cord. Rubber plug at
end. Other
 end strip. ped and tinned. Excellent for replacement use. All are Under writer's approved. E16307-71/2-ft. Each.... 34 e 10 for . . . . . . . . . . . . . . . . . . . . . . $\$ 3.10$

## Belden Head Phone Cords

 5' cordsof extra ilexible moisturepubbe
covered
corda Over alí

mercerized brown cotton braid. $Y^{\prime \prime}$ arm sections additional 15 " and coupled in series. $\$ 8872$ K13953-Head phone set pin tipa all ends K13954-Spadetips 1887
Youds. pin tip

## AMPHENOL Single Conductor Crystal Microphone Cable

A new line of "mike" cables in 3 sizes and two kinds of plastic jackets. Unusually low capaci tance for their amall diam. Wil remain flexible down to $40^{\circ}$. All have black vinyl jacket which is recommended for heavy use out doors and in auditoriums. De. signed for sound equip., photoelectric devices, home recorders and regular studio installations.


Contains 100 most popular solder terminals. For all servicing and and set bullding requirements. In transparent container.
K14790-Your Cost.

# aerials and accessories 

## Aerial Tension Spring

## 

The ideal device for taking up the lack in aerials. Extremely sturdy Does an effective job. Consists of 2 hooks with porcelain rings inter connected with a powerful spring Wt. 1 lb.
1

ICA Vertical Home Antenna
Made of Admiralty brass TRuaranteed rust-proof The latest type home antenns ouggested by leading set manufacturers for best results. Eliminates unsightly and dangerous wires. Clear noise free reception with no power line interference. Very sturdy construction. Made with a beau iful nickel-plated finish. Guar anteed rustproof for the life of the antenna. Universal bracket allows permanent and convenient installation on soil pipe, window pipe, chimney, roof, gables, cornices wall copings, etc. Lead-in and round wire, brackets, lightning rrenter, screws, insulators, etc. upplled.
K21824-Antenna 4516 Your 4.09 Antenna Loops for MIdgets and Portables
 Ideal for bat tery and midget sets or porta. bles. Replaces aztenna coil tory pickupand excellent eelectivity. Inductance slightly higher than necessary, permitting removal of turns for ad justment. 4.4" $8^{\circ}$. K17147-Your Cost

No. 18 Lead-In Wire Solid/inne
 copper.

ubber easy strip insula tion. For lead ead or aerl als. Shpg. wt 2 lbs. per 100 ft when ordering. Kincle Coil 18 c Lingle Coil 18 c | 34 c | 65 c |
| :--- | :--- |
| 3 |  | K16217-1000.ft. spool $\$ 5.25$

Your Cost......... $5 \$ 3$ $300-0 \mathrm{hm}$ Twin Lead


# Doublet Lead-In Strip 

 Consists of two strips covered by heavy cotton weather-proof bar holds strips parallel. K1695

Single 12" i......... K17101-10 For 54 e Your Cost Each

PREMAX Extended FM and Television Antenna A "V" type dipole antenna that consiste of a well-sea soned straight-grained hard wood support mast and crossarm on which upport mast and crossarm on which are carried the dipole elemen with extended arme. Gives excellent re sponse for all television and FM band covering 44 to 88 MC and 174 to 216 MC. Proper impedance match to 300 ohm tranamission line. Weight 4 lbs. $41 / \mathrm{ft}$. high, 8 ft . wide. K17156.-Premax Antenna Complete with Hardware Your Cost
58.82

## AMPHENOL Dipole Antenna



Amphenol dipole antenna designed for best reception on FM and television. The antenna is furnished in kit form and contains all parts necessary to assemble a complete unit less the guy wires. The reflector type is eapecially recommended for television since unwanted signals are eliminated on the reflector aide. The antenna is also fur nished complete with 75 feet of low loss 300 -ohm transmission line Can be easily and simply erected in a very short time. A similar uni not shown) can be purchased less the reflector if desired. Shpg. wt for complete unit 7 lbs. Shpg. wt. 5 lbs. less reflector K17192-Dipole and Reflector Ki
Your Cost Complete with Necessary Hardware
K17195-As above, less Reflector
Your Cost Complete with Necessary Hardware
\$8.23
\$5.29

## Lafayette

## Low Cost Aerial Kits

No finer low cost aerial kits have ever been offered. Complete in every detai and containing only the finest components and containing only the finest components they Will provide the ultimate in recepwire, 50 ft . No. 18 rubber covered lead-in, 25 ft . ground wire, approved arrester, ground clamp, lead-in strip, two porcélain insulators, two nail-it knobs. Can be used with all types of broadcast and K16476-Your Cost

ECONOMY AERIAL KIT
Contente: $90 \mathrm{ft} .7 / 27$ stranded aerial wire, 25 ft . rubber covered lead-in, lead-in strip, ground clamp, 2 -nail-it knobs and 2 -porcelain insulatore. Shpg, wt. 2 lbs. K16478-Your Cost


## afayette

## All Wave Aerial Kit

A scientifically designed antenna kit that will operate with all broadeast and short-wave receivers-offered at an unusually low price. Fully licensed under Amy, Aceves and King patonts. This kit comes completely factory assembled, ready for installation. Comprises the following equipment: two 30 foot coils of No. 7/24 bare copper aerial wire; 50 -feet of No. 22 braided transmission line cable; two $3^{\prime \prime}$ glass intulators; one duplex lead-in atrip; one "C" type ground clamp; 10 -feet of No. 20 ground wire; one antenna transformer in porcelain casel one receiver coupler; one $6^{\prime \prime}$ insulator ; two nail-knobs; complete instructions. Shpg. wt. 51 lbs K16486-Complete Deluxe Kit
Your Cost
$\$ 3.89$


## "Tenna-Scope" Loop Aerial

Makes a loop-antenna receiver out of any radiol Eliminates the use of an outaide aerial and ground. No circuit changes necessary. Tuning range: 1715500 kc . Adjustment trimmer adapte it to any receiver. Better selectivity. Hicher signal to noise ratio. Fits on the back of practically all midgets. Size $81 / 2 \times 6$ 1íx $11 / 6$ K16452-

## VERTROD Antenna

 The Vertrod antenna elimipates aerial wire from your mates aerial wire from yourroof, prevente loss or theft of roof, prevents loss or thert of aerisl. No wires to atretch, clip or replace. All that ia

$\underline{1}$needed is a screw driver and four inches of apace. The pat ented rotary base permits mounting at any angle. Smooth rotation in an arc of 180 de grees. Antenne is in 3 sec tions, $108^{\prime \prime}$ overall. Adjust able to three lengths, 9,6 , or 3 feet by removing rod sections. Use alone or in conjunction with loop aerial in your radio Completely weather repellent Less lead-in Shipping weight 3 lbs . K20443-
${ }^{5} 3.23$

## 3-Purpose Tuner



Can be used as aerial ellminator, wave trap or antenna tuner. As eliminator it does away with outside wires; as wave trap it separates interfering atationa and improves selectivity; as an tenna tuner it strengthens signals. ${ }^{\text {Wt. }} 2$ lbs. K12678-Each
$59^{\circ}$


## Deluxe I.C.A

 Window AntennasAn ideal antenna for homes, a partments, hotels, office buildings, and places where it is inconvenient to install outdoor aerials or to improve reception on indoar instal
ations. The antenna is very simple to install. An adjustable bracket at the base permits the antenna to be focused in any poaition for best reception. Furnished completely assembled with mounting flange, insulator and lead-in strip. Each antenna individually boxed. The antenna is in three section and opens up to a total length of $96^{\prime \prime}$. Shpg. wt. $21 / 2 \mathrm{lbs}$
Your Cost Complete
$\$ 3.53$
4 Section Extra Long Antenna An extra long window antenna deal for DX reception and in rural sections where extra length is need ed for best results. The four sections open up to an extended length of 12 feet. Shpg. wt. 4 lba K17120-12 foot antenna. Your Cost
Complete
s3.97
Plated Ground Rods


Used wherever a pipe ground is not available. Heavy steel yoke for head, z/a" heavy plated steel. Special lock fitting will accommodate cia lock fitting will accommodate secures the wire.
$\underset{\mathrm{K} 17187}{ }$
Feet
Each
39 c
41 c
Per 10
K17188
6

## Kings Television \& FM Dipoie Antenna

 A revolutionary type of dipole for television and FM reception. Considerably greater efficiency. Tunable arms. The adjustable feature consists of an UHF element calibrated from 1.0 to 21.5 in half-ateps. Capable of receiving an extremely broad band of frequencies including black-and-white, color and experimental television, FM $11 / 4$-meter amateur, glide paths, airport controls, fixed and mobile stations. Comes complete with hardware guy wires, etc. Two types of lead-in are available; standK17154-62 MC-840 MC Dipole.
Ulitra
$\$ 13.23$
Ultra low-loss matched co-axial transmission line K1715S-100-ft. line
Your Cost.........

## Glass Insulators



Special tem pered glass, un affected by heat or cold. Migh

## tensile strength. Ridged

K16849-21/2" long.
Your Cost Ench Lots of 100 Lots of 100
Your Cost ${ }^{\prime \prime}$ long
10 For 25c
K16851-3s/ ${ }^{\circ}$ ong
Your Cost Each.
Lots of 100
$21 / 2^{e}$
52.15
$\underset{3 c}{5.15}$
00 For 52.25
${ }_{5} 5$
5 e

# aerials and accessories 

## TACO Mast Brackets

## Designed for

 mounting a $180^{\circ}$ diameter mast on under the eaves, or on a parapet where clearance of not over $7^{\circ}$ is required. Brackets are made of heavy steel, enameled for durability.K16483
Brackete, Per Palr

s 1.47
"Grip" Ground Clamp
Makes a vise like grip on pipe. Sharp-pointed screw makes perfect co tact. K 17105
Your Cost
Each.
10 For.
100 For.

## 6 <br> $\$ 5.04$

## Indoor Antenna Wire

Multi-strand flexible copper wire covered by a brown mercerized
cotton braid. For incotton braid. For indoor or a.c.-d.c. antenna use. 25 -ft. hank. K16155-Your Cosk.
$\square$

## Copper Aerial Wire

 Made of the finest copper ob tainable. All rolls are guaranteed to be full length and atandard gauge as specified. ForBare Standard-75 F8. Colls

| $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | Size | Per Coil | $\begin{gathered} 10 \\ \text { Coils } \end{gathered}$ | $\begin{gathered} 25 \\ \text { Coils } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| K16041 | 7/26 | \$0.30 | 52.75 | \$6.50 |


|  |  | Is | . |  |
| :---: | :---: | :---: | :---: | :---: |
| K16042 | 7/24 | . 45 | 4.05 | 9.60 | | K 16043 | $7 / 22$ | .65 | 5.85 | 13.95 |
| :--- | :--- | :--- | :--- | :--- | :--- | Bare Stranded-100-Ft. Coils |  | $K 16113$ | $7 / 26$ | .40 | 3.60 |
| :--- | :--- | :--- | :--- | :--- | | K16114 | $7 / 24$ | .60 | 5.40 | 12.85 |
| :--- | :--- | :--- | :--- | :--- |
| K16115 | $7 / 22$ | .85 | 7.65 | 18.20 |

## Enameled Stranded-

|  | 75 | Ft. Coils |
| :--- | :--- | :--- |


| K 16045 | $7 / 22$ | .55 | 195 | 11.75 |
| :--- | :--- | :--- | :--- | :--- |
| $\mathbf{K} 16045$ |  |  |  |  |

Enameled Stranded100 Ft. Coils | K16116 | $7 / 24$ | .75 | 6.75 | 16.05 |
| :--- | :--- | :--- | :--- | :--- |

 Solid Enameled-100 Ft. Coils \begin{tabular}{l|l|l|l|}
K 16118 \& No. 14 \& .95 \& 8.55 <br>
\hline

 

K 16119 \& No. 12 \& 1.45 \& 13.00 \& 30.95 <br>
\hline

 

K 16129 \& No. 10 \& ' 2.21 \& 19.90 \& 47.25 <br>
\hline
\end{tabular}

## TACO Double Doublet

Made up of
one type 436 H-antenna and 1 type 437 reflector. All ateel struc
 for durability. The reflector makes the anteana unidirectional, desirable in noisy location, in areas with low signal strength. The antenna thas 4 aluminum dipole rods; 2 rod supporte with terminals and neophrene grommets; spacer post with mounting clamps for mast; 60 ft . coil of 300 -ohm high-frequency tranamiasion line; 2 jumpers with terminal screws; 5 ft . sectional wood mast; 3 apecial standoffa; 4 wallboard insulators; mounting hardware; complete inatructions. Shpg. Wt. 15 lbs . Reflector has 4 dipole rods with connectors: 1 crossarm (areel heavily enameled); 1 spacer post; mounting hardware. 1.5 db loss per 100 ft . of line. K1648.
Exch...
512.64

TACO H. F. Splicing Tape
Developed eapecially for taping hlgh-frequency tranamission lines. Ordinary friction or rubber tape is unsultable at the higher frequencies, and if used it may even act as a short-circuiting medium on the line. The TACO high-frequency splicing tape comes in handy $12^{\circ}$ length, ready for use
K16489- Cost, Eact

5

## BRACH "Vis-o-Glow" NEON Arrester

Uses a NEON
TUBE intead TUBE inatead of an air-gap or resistance. Fully Underwriters Approved. Shpg. wt. 1 lb $K 16700$ Your Cost

DUPLEX TYPE; Same as above. but for use with gets having doublet antennas.
K16701 - Yout Cost. \$1.I5

## TACO FM Antenna System

Cover standard broadcast, shortwave AM rom
and FM bands. Transmission line is a special low-loss line. 1 type 221 antenna transformer; antenna wire connected in the form of a double " $V$ "; 60 ft . of high-frequency transmission wire; 1 screw eyt; 2 nall-it knobs; 4 mission wire; lacre
K16490-Antenna Kit, S.bpg. Wt. 5 lbs.


## TACO FM-AM Set Transformer

Deaigned for installation where it is denirable
to use the FM antenna for both FM and AM reception. With this tranaformer no change in connections is required since both the AM and FM bands are permanently connected through the unit and the switching is auto-
matic. This unit eliminates the need for matic. This unit eliminates the need for
constantly awitching the transmission line constantly awitching the transmission line
from the AM to the FM terminals and back again. Shipping weight $11 / 2 \mathrm{lbs}$. K16491-FM-AM Set T-ansformer, Your Cost Each.. SI.SI

## TACO Doublet Antenna System

 Balanced doublet type sintenna covering the standard broadcast and shortwave bands. Consists of 1 type 224 transformer; 1 type 222 set transformer; 230 ft . coils of aerial wire; 60 ft . twisted pair transmission wire; ${ }^{1}$ tacrew eye; 2 nail-it knobs; 2 aerial insulators: Shipping weight 4 lbs.K16492-Doublet Anteana System
Your Cost Each.


## TACO Economy Antenna System

Covers otandard broadcast and shortwave
bands only. Ideal for locatlons with low noise bands only. Ideal for locatlons with low noise level. Consists of 1 type 521 antenna transformer; 1 type 522 set transformer; 230 ft . coils of entenne wire; 60 ft . coil transmission wire; 1 screw eye; 2 nail-it knobs; 2 antenna insulators. Shipping weight 4 lbs. The set transformer is equipped with terminal leads for both high and low inmpedance input.
K16482-TACO Economy Antenna System.
Your Cost Ench.

$\$ 5.29$


## TACO Lightning Arrester

A special carbon-pile tspe lightning arrester,
double pole for transmisarion lines. Preferably
 line, close to the goound. Underwritert Approved type. Can be mounted anywhere by means of two screws. Three screws with bolts for attaching the transmission line to the ligbtning arrester
K16493-TACO Lightning Arrester.
Your Cost Each

TACO FM Folded Dipole
An efficient $\longrightarrow \square$ antensa directional both front and rear. Flat char. atteristics. 1 folded di-
pole with terminal block; 160 ft . coil of high-frequency 300 -ohm tranamission line; 15 ft . wood mast; 2 mounting exraps and screwa for mast; 3 special screw eyes for high-frequency transmission line; 4 wallboard insulators; complete instructions. Ideal for areas of low signa. strength. for areas of low signa.
Shipping weight $61 / 2 \mathrm{lbs}$.
K16494-
Frided Dipole
Each.
55.29
$\qquad$

JFD Vertical 12 Foot Antenna
Eaaily and quackly attached on Gable Roof, Flat Roof, Wall, VentPipe, Window, or anywhere. This is the type now used by all principal broadcasting stations. Nln-directional, improves short-wave and broadcast reception on new or old sete. $4-\mathrm{sec}$ tions, 12 ft . long when extended. Made of Admiralty metal, heavily plated. Supplied complete with a single adplete with a single adoff insulator, 40 ft . leadin wire and mtg. screws. Shpg. wt. 4 lbs.
$\mathbf{K 2 1 8 2 2 - E a c h . ~}$ S5.27) K21822-Each.

Porcelain Arrester
Housed

proved.
brasa screw terminals. $1 \times 19 / 9 x$ K16753 Your Cost Ea. T2c 10 For $\$ 1.14 \quad 100$ For $\$ 10.80$

## Arrester for Doublets

An approved arrester for the doublet type of antenna. Air-gap
type, insulated
from 10 For $\$ 1.70$


A 10 -strand wire covered with live rubber, a waxed cotton braid and a woven, tinned shield. K16240-Per Ft. 50 Ft .100 Ft . $\begin{array}{llll}\text { Your Cost } & 21 / 2 c & \$ 1.06 & \$ 1.91\end{array}$

## Transmlssion Cable



Consists of twisted rubber-covered conductor covered by a black weatherproof cotton outer braid. Shpg. wt. ( 100 ft ), 4 lbs,
Kif152-100-ft. coil. $\$ 1.65$ Your Cost. K17184-500-ft. coil. S 3.02

## Lead-In Strip

Window atrip for connecting an aerial from outside into house. Copper core with water-proofed lacquer webbing. $1^{12}$ long. Hian crew terminals. black.

## Pipe Strips

Broad copper clamp adjustable to fit
aize pipe up to size pipe up to
$2^{\circ}$ in diameter, Has clip for at-
Has clip for at-
taching ground
lead.
K17102-Your Cost Each $5^{c}$ 10 For $45 \mathrm{c} \quad 100$ For $\$ 4.25$

## Insulated Staples

For holding inside leadIn and ground wires in $\frac{p l a c e . ~ N ~}{5 / 8}=$ long.
K15950
100 For.

## Aerial Insulators



Dependable porcelain insulators. "A is screw-in type for holding
lead-ins or grounds off-walls; "B" is standard nail-knob: "C" la strain

| Sis |
| :--- | :--- |
| $\left\lvert\, \begin{array}{l}3^{\circ} \\ 7^{\circ} \\ 2^{\circ} \\ 2 y^{\circ}\end{array}\right.$ |

 $\frac{\left|\begin{array}{l}10 \\ \text { For }\end{array}\right|}{\left|\begin{array}{l}24 c \\ 36 e \\ 22 e \\ 37 c\end{array}\right|}$ | K16972 | A | $3^{\prime \prime}$ | $3 e$ | $24 e$ | $\$ 2.16$ |
| :--- | :--- | :--- | :--- | :--- | ---: |
| K16986 | A | $7^{\prime \prime}$ | $4 e$ | $36 e$ | 3.24 |
| K16977 | B | $2^{*}$ | $3 e$ | $22 e$ | 1.92 |


 insulator.

| Stock | Type |
| :---: | :---: |
| No. | No. | K16802 C

- 


er Blank

## fools



Tempered steel with large head and knurled grip. Square head will not roll. Length 4 后", diameter $325^{*}$ Shpg. wt. 1 lb . . . IT

Multi-Use Rule and Gauge


Four inch quick-reading 32nd and 64th inch scale, drill point gauge square, bevel protractor, center finder, circle divider, rap drill table. Tempered steel highly polished With leather case. K14998-Your Cost

## Drill and Wire Gauge

Highly accurate--of hardened and tempered steel. Clear, easy reading numerals. Drill, tap size and decimal equivalents of each. Pocket size K14997-
Each.

## Steel $6^{\prime \prime}$ Rule with B \& S Wire Gauge



Front graduated in quick reading 32nds and 64ths; also has American or B\&S wire gauge for sizes from No. 8 to No. 20. Back has Bst wire gauge decimal equivalents. In leather case. K15007-Each.
Tempered Steel $6^{\prime \prime}$ Rule Stiff tempered steel $6^{\prime \prime}$ ruie. Similar to rule above, but without wire gauge. 32nds and 64ths on front back has decimal equivalents. $3 / 4$, inch wide.
K14982-Each

## Handy Steel Rule

## Depth Gauge

A handy, accurate pocket rule for quick measurement. Made of steel, with convenient pocket clip for depth measurements. 6 inches long. graduated in quick reading 64ths K14996
$15^{\circ}$


GENERAL PURPOSE CIRCLE CUTTERS


Provides an easy, accurate method for cutting clean circular holes in brass, aluminum, steel, wood, Bakelite, etc. Of fine heat-treated steel. Ueed with ordinary hand brace or slow speed drill press. All Americanmode.

| Stock No. | $\begin{aligned} & \text { Type } \\ & \text { No. } \end{aligned}$ | Cut Hole | Shank Style | Type Work | Your Cost |
| :---: | :---: | :---: | :---: | :---: | :---: |
| K14720 |  | 5 to 21 | Round | Light | \$0.78 |
| K14718 | 2 | 7/8 to 4" | Round | Medium | 1.15 |
| $K 14711$ | 4 | 7/8 to 4" | Round | Medium | 1.30 |
| K14713 | 5 | 1 to 51/2" | Round | Heavy | 1.88 |
| K14715 | + | 1 to $51 /{ }^{\prime \prime}$ | Square | Heavy | 1.88 |
| K14717 | $1 \dagger$ | 76 to ${ }^{\prime \prime}$ | Round | Medium | 1.88 |
| K15069 | 5 | 11/4 to 8" | Square | Ex. Heavy | 3.53 |
| * Not illustrated. $\dagger$ Has extra beading center. Replacement Drills and Blades |  |  |  |  |  |
| K15068 | ill for de for ur Cos | with K1 50 ase with all | Your Cost |  | $\begin{array}{r} .35 \\ \mathbf{K} 14720 \\ \ldots . \quad 27 \end{array}$ |
| K15070 | de for | se with Kis | Your |  |  |

## HANDEE Grinder Tool of 1000 Uses

Will drill, grind, polish, cut, carve, saw and engrave on all materials. Fits the hand, yet iscorporates a powerful high-speed motor which is practically troubleproof. Ball bearing construc-built-in switch. Operates on $110-120$ volts 25.60 cycles AC or DC. Each unit supplied with $1 / 5$ " spring collet chuck. K15354-De Luxe HANDEE, complete with 7 accessories as follows: 1/" Collet; 5 Wheels; 1 Rubber Polishing Wheel; 1 Wheel Dressing Stone. Speed 25,000 r.p.m. HANDEE No. 3008. \$T
Your Cost
No. 3010-DeLuxe HANDEE outfit, complete with 27 fine acceasories and contained in a steel carrying case. Accessories include: rubber polishing wheel with mandrel; saw with mandrel; slitting saw; two steel cutters; three drills; push-pin mandrel; ateel wire cavity brush; bristle brush; wire scratch brush; rubber disc with mandrel; felt polishing point with mandrel; rubber polishing point with mandrel; felt polishing wheel; drum sander and three bands; dise cleaning brush mounted wheels (six); wheel dressing stone; vial of Handee speed ail dozen assorted sandpaper discs. You can accomplish overy conceivable job with this complete outfit. Shpg. wt. 8 lbs. K15263 - Your Cost
K15264 - No. 3011. Same as the above, but with 26 ass Wheels for industrial application only.
23.33 Your Cost
\$23.38

## Set of 9 Assorted Steel Drills



Sizes $1 / \operatorname{sb}^{\prime \prime}$ to ${ }^{3} /$ in $^{\prime \prime}$. Good fast cutting steel. Correctly ground; will hold edge. Popular sizes for radio work. In hardwood box.
K14708-Your Cost............. Vernier Sliding Caliper 6" Rule With Depth Gauge


Precision made of fine tool steel. Highly accurate. rule graduated in 16 ths and Vernier caliper hauge. Vernier caliper has lock
nut. Has sharp pointed nut. Has sharp pointed
dividing, scribing, etc. No shop should be without this highly impor ant measuring tool. Shpg. wt. 1 lb K15027-Your Cost Each
$98^{\circ}$


Gripper holds serew and slides up out of the way when not in use. Instant release after screw is driven. Fine for tight places. Tempered ateel blades. Amber plastic insulated handles.
$\begin{array}{ccr}\text { No. } & \text { Blades } & \text { Each } \\ \text { K14710 } & 2 x^{5} 5^{\prime \prime} & 23 \mathrm{c} \\ \text { K14721 } & 4 x^{1 / 4} & 43 \mathrm{c}\end{array}$


## Rivet-Eyelet Punch Set

 Hardened steel tools. Cast iron holder. Hex ides to grip in vise. With rivets and eyelets.Y15045- $\$ 2.35$ Setting Tool Only: As used with above set. Case hardened steel. K15065Each.
$53 c$
Rivet-Eyelet Assortment K15066-100 assorted rivets and Your Cost.

80,
Pocket Scribers
For toolmakers, sheetmetal workers, patternmakers, aircraft mechanice, and all mechanics. Reversible steel points, locking chuck, perfect balance, nickel plated. diam. 181 2/8" diam.
Your Cost,
 K15152-183 1/4 diam. Your Cost, Each $\qquad$


Heavy, rigid, roundedgesteelframe Excellent quality $61 / 2^{\prime \prime}$ blade for wood or metal. Adjustable tension. Heavily plated frame and ferrule. Hardwood handle. Complete with one blade. Shpg. wt. 1 lb. K17278-Each
K17279-Extra Blades. $64^{\circ}{ }^{\circ}$ type. Each. . te Per Doz ${ }^{2}$ in

Adjustable Hack Saw Frame


New patented design adjustable from $8^{\prime \prime}$ to $12^{\prime \prime}$. Cold forged steel frame. Depth of frame 23/4". Complete with $8^{\prime \prime}$ blade. Shpg. wt. 2 lbs. k27286-
Each
$75^{\circ}$
Flexlble Hack Saw Blades

## -

Extra hard. Extra flexible. Longer ife. Scientifically heat treated for hardness and flexibility. For all trandard frames. Shpg. wt. approx. 1b. per doz. All are $1 / 2^{\prime \prime}$ wide and 025" thick.
Stock
No.

No. Length Teeth* Each Doz. \begin{tabular}{lll}
No, \& Length Teeth* Each Doz. <br>
K17273 \& $10^{\prime \prime}$ \& 18 <br>
K 17274 \& $10^{\prime \prime}$ \& 24 <br>
\hline

 $\begin{array}{lllll}K 17275 & 10^{\prime \prime} & 24 & 7 \mathrm{e} & 76 \mathrm{c} \\ \mathrm{K} 17275 & 18 & 8 \mathrm{e} & 86 \mathrm{c}\end{array}$ 

K17276 \& $12^{\prime \prime}$ \& 18 \& 84 \& $8 c^{\prime \prime}$ <br>
\hline
\end{tabular}

* Number of teeth per inch.

Forsberg Hack Saw


An excellent frame for the electrician and radio mechanic. Tenite handle. Reinforced back gives additional strength. Adjustable for $8^{\prime \prime}$ to $10^{\prime \prime}$ blades. Blade can be faced in 4 direc. tions. Nickel-plated stock. Depth of frame: $31 / 3 \%$. Comes with one blade, Shpg. wt. 2 lbs.
K15137-
Your Cos
st, Each.
$97^{\circ}$

LENK Alcohol and Gasoline Torches


Type A-Compact, leak-proof torch for serviceman and home mechanic. Size: $6 \times 2 \times 11 / /^{\prime \prime}$. Wt. 11 b.

## K14868-Alcohol.

ST. 01
Type B-Double burner torchprovides either broad or needle point flame. Cleansing pin in han dle. $7 \times 48 / 6 \times 21 / 2^{\prime \prime}$. Wt. 3 1bs.
K14867-Alcohol.
Your Cost.
2 flame control, shut of valve and many other features. $715^{\prime \prime} \mathrm{H} . \mathrm{x}^{\prime \prime}$ base D. Polished braso. Cap. $1 /$
 K14856 -Same but for
Your
Cost
s1.96

## LENK Torch Fuel

No sediment in fuel pre vents carbon deposit on wick. Eliminates corro sion. Maximum efficiency.
K14860-16 oz. can. 39c 14890 -Quart can. 69c

Ship by Express Only

## WALSCO Staple Driver

## fis finn-0

For neater, faster jobs on all wire and cable installations. Reaches places inaccessible with hammer and ordinary staples. Attaches staplea to any surface. Lightstapight, suatproof construction. Staples wires up to $1 / 4^{\prime \prime}$ diam. Single stroke with palm of hand drives staple home. Fully auto aratic Magazine holds 24 staples men Maged Trigaer control when loaded. Trigger control feed. Can be regulated for driving oundmen and for general stapling.
K15091-Staple-Driver, with one box of (250) staples. Wt. 2 lbs. Your
Cost
$\$ 3.33$
WALSCO Carrying Case
For carrying the Walsco
Stapler in the Stapler in the
pocket or on pocket or on uine leather.
Shps. wt. 11 lb .
 51.22

WALSCO Rubber Cap
Covers plunger head and
makes it easier on the hand
to drive staples into hard surfaces.
K15090-Each
I ${ }^{\circ}$

## WALSCO Steel Staples



Made of carhon tool steel. In Wrips eapecially made for the Walsco Staple Driver. Inside coated with special clear Insulating lacquer. Brown color. 258 K15093-Box 250
K15099-Box 1000 . $\$ 1.08$ K15100-Box 5000:

## Power Sprayer

Operates from spark plug of any automo bile. Will spray any ing liquid. Complete with spray-

er, pint jar, spark-plug air check valve, compression tank set of adapters, 12 -foot hose. Slupg. wt. 6 lbs .
K14704- Your Cost
$\$ 4.02$

## Touch-Up Sprayer

Designed to op-
ate perfectly
ate perfectly with very low spare tire or any other air container. Air-tight brass valve, adjustable brass spray tip, rub- 4 oz. jars, Very
 handy for touching up marred pancla, cabinets and chassis. Shpg. wt. 3 lbs. $\$ 1.10$
"RHINO" Screwdrivers with Amberlite Handles

## 

Finest screwdrivers, for electrician's use. Chrome-Vanadium bade over half-way into Shockproof Amberlite handle. K15345-3x ${ }^{3}$ 体 blade. Ea....38c K15346-6x ${ }^{3} /$ " $^{\prime \prime}$ blade. Ea.... 50 c K15347-8x ${ }^{1 / 10}$ blade. Ea.....57c Phillips Offset Screwdriver A very handy alloy
ateel offset serew-
driver. One end for phillip No 1 size other end for Phillips No. 2 size. K15255 -
Each
$36^{c}$
Neon-Llght
Screw
Drivers 8
Quality screw drivers with neon lamp built into amber Pyroxilin handle. For R.F. and spark plugs. K15348-41/: long Each 29c K15349—7" long. Each ....61c

Flexible Screwdriver


Strong, unbreaka ble, flexible shaft and insulated movable screw lo cater finds slots of screws. $8 / 44^{\circ}$. K 15062
Your Cost
s1.32
VACO "Amberyl"
Radio Screwdrivers

Transparent amber colored plastic handles. Oil tempered tool steel blades. Rust-proof, unbreakable, shock-proof. Blade diameter small enough for radio set


## "RAPID" Electroplaters

 Small portable electroplating outfits for home or workshop. Easy to use. For replating jewelry, utensils, radio parts, etc. Each kit contains: 1 oz. of plating compound; 1 oz . of metal polish; 1 anode brush; battery wires with clips attached; full instructions. Require two K15359-Nickel Plating Outfit Any Type K15371-Silver plat-K15360-Copper Plating Outfit 5 I. 1 lig Outfit $\$$ T. 7 K15370-Cadmium Plating Outfit Additional 1-oz. bottles of compound (plate $125-175 \mathrm{sq}$. in.): New Industrial Silver Plating Outfit
For industrial use only. Comprises 8-oz. Electrolyte, Sterling Silver Applicator, 4 -oz. metal cleaner. Shpg. wt. 3 lbs. K15376-Your Cost
57.51

## Genuine KLEIN Pliers

Finest alloy tool steel. Individually tempered to assure long-life cutting edges.
K15223-(A) Ohlique Cutting Pliers with Wire Stripping Notch. Lap joint; narrow head. ${ }^{6 /}$ long. Shpg. wt. 3 lbs. $\$ 2.61$ K15221-(B) Long Nose Side Cuteing Pliers. Pointed alender nose-sharp cutters. $6^{\circ}$ long. K15224-(C)Long Curved NosePliers. Very useful in close quarters. $6^{\circ}$ long.
Your Cost Either Above, Each


## HEX-NUT Socket Wrenches

## Straight and Offset Types

Firm grip, ribbed wooden handles. Heavily plated shanks. Have deep holes in ends of shanks which will take long screws up to No. 10 size. Straight types, $6^{\circ}$ and $6^{\text {" }}$ and $9^{\prime \prime}$ long. Offset types are 7"


| Straight (B) | Size $9^{\prime \prime}$ | c) |
| :---: | :---: | :---: |
| K15203 | ${ }^{\text {3/ }}$ " K15209 |  |
| K15051 | 1/4 K15107 |  |
| K15052 | 3/6" K15109 |  |
| K15053 | \%" K15108 |  |
| K15054 | K25110 | each |
| K15204 | K15210 |  |

K15215-Set of $6 \$ 1.40$ K15205-Set of $6 \$ 1.25$ K 15211 -Set of $6 \$ 1.40$

ACRO Chassls Cradle


Holds radio, amplifier, power supply, etc. chassis in any position for testing, repairing or counter demonstration. Special clamps (supplied) grip chassis firmly and leave hands free. Steel. 28 Y/a" L., $155^{\prime \prime} \mathrm{w}^{\circ} .12^{\circ} \mathrm{H}$. Shpg. wt. 5 lbs. M15071-Ẅith clamps $\$ 4.75$ Your Cost
K15072-Extra Clamps (Pair) $\$ 2.45$

## Hex Wrench Set <br> 

This handy all steel hex socket This handy all stand the sardet usage. It has five interchangeable

 set is Cadmium plated. Knurled handle. Sockets are easy to remove yet they will not loosen while working. Spare wrenches fit into hollow handle. Compact, easy to carry, and casy to use. Add this bex wrench set to your tool kit today and be prepared for any emergency.
K14749-Shng, wt 1 Ib. 725
$\frac{\text { Your Cost, Each }}{\text { Drill Stand }}$
Drill Stand Holds complete set
from No. 1-No. 60. K17277


Wind honey comb, spider-web, or solenoid coils of various widths and diametera equal to factory made coils. All accessoriea for winding various types. Has recorder and indicator that counts turns. Shpg. wt 61 bs.
Your Cost Each.... \$4.05


## Geared Chuck For Drills

7 to 1 geared chuck to use drills up to $3 / 2^{\prime \prime}$ in your small electric drill. Shpg. Wit. ${ }^{4698}$
Ki4698-.... $\$ 7.98$
Each......

## fools

XCELITE Nut Drivers

Shockproof-UnbreakableGenuine transparent amber XCE LITE handles-will protect against 5000 volts. Sockets truly formed. Deep enough to handle two ished. Deep enough to handle tw K15330-For $1 / 0^{\prime \prime}$ hex nut. K15328-For " ${ }^{\prime \prime}$ " hex nut K15331-For $1 / 0^{\prime \prime}$ hex nut K15327-For " $\mathbf{g}^{\prime \prime}$ hex put. K15332-For " $/$ m $^{\prime \prime}$ hex nut. K15333-For ${ }^{11} \mathrm{~m}^{\prime \prime}$ hex nut.
Any Above Type
Your Cost, Each.
K15335-For ${ }^{7}$ " bex nut. Either Above.
Vour Cost, Either.
57c
Nut Driver otand and 7 popular size wrenches for following hex nuts:
Your Stand and 7 wrenches. Your Cost

Hollow Shaft Nut Drivers


A unique time-saving tool, especially designed for radio and general electrical work. Invaluable for inatalling and removing volume tontro and other panel equipaned or logened readily tightened or loosened without damage to the panel.
Mepth of hole $21 / 5$ hex nut.
K15300-For $11 /{ }^{\prime \prime}$ hex nut
Elither Above,
Vour Cost, Each $\qquad$
K15301-For $\%$ : hex nut K15302-For 10 " hex nut K15342-For 1 = hex nut K15329-For © hez nut K15303-For $\%$ " hex nut Your Cost K15307-7 Driver rack only $23^{c}$

## XCELITE Screwdrivers

Round blade Skillfully forged of chrome yanadium electric furnace steel. Ruat-proof finish. Tip properly ground and gauged to fit screw slot accurately. Flange on blade at handle resists shock of pounding. Embedded end of blade is wing-shaped, to prevent turning of the blade in the handle. Handle is genuine XCELITE plastic, full size and correctly shaped for grip and balance. Shock-proof and fire-resistant. Size of each screwdriver clearly marked on handle. Stock Size of Vour Ntock
No.
K15165
K15165
$\times 15186$
$K 15189$
$K 15196$
$K 15196$
$\mathbf{K} 15202$
K 15217
K 15218
K15222


## KRAEUTER Blue Temper Finish Pliers



The line of tools listed below are from the Kraucter "Standard" series, and are not to be confused with the lower priced "K" series (except the electriian's cutting pliers). All are drop forged All are drop forged teel and have the farmous "blue temper" amous "blue temper" finish. Stand up under
de Nose Plers
Dlagonal Cutting Pliers
A-Cutting jaws meet perfectly Cuts insulation as well as wire.
No.
K15042
K14944
K14943

## Long Nose Pliers

B-For the hard to get at places. Side cutting blade will stay sharp. | No. | Length | Each | No. | Length | Each |
| :--- | :---: | :---: | :---: | :---: | :---: |
| K14946 | $5^{\circ}$ | $\$ 1.55$ | K14935 | $61 \%^{\prime \prime}$ | $\$ 1.21$ |
| K14945 | $6^{\circ}$ | 1.63 | K14936 | $8^{\prime \prime}$ | 1.46 |



KRAEUTER
Thin Nose Combination Pliers The tapered jaws and long thin nose of these pliers en-
able the mechanic to reach and grip object difficult to get at. Milled teeth and wire cutter give t
K14937-5" long
7

$92{ }^{\circ}$


## BRUNO Hole Cutters

This versatile set of hole cutters can be used in hand bits, power drills, or drill presses to cut holes in metals, wood, plastice and plastic or bakelite products. etc. Model 100 cuts holes from $8 / /^{\prime \prime}$ to $11 / 2^{\prime \prime}$, $1 / 0^{*}$ deep. Model 101 cuts holes from models have round shanks. Models the above models have round shanks. Models
$100-\mathrm{B}$ and $101-\mathrm{B}$ are same as above but have $100-\mathrm{B}$ and $101-\mathrm{B}$ are same as above but have
square shanks to fit tapered chucks. The blades square shanks to fit tapered chucks. The blades
are easily adjusted to cut the proper size hole, and once set, can be locked in position. Blades can be removed for re-sharpening when necessary. A standard drill bit is part of the hole cutter. The drill bit extends down below the knife's cutting surface. Thus an cany start is assured, and a cleaner, truer hole can be cut with less strain on the metal, the cutter blade, or the chuck. Easy, simple, and safe to use. Shipping weight of
each 2 lbs. Shank Each No. Bruno Shank Each
 Power Cutter Kit-Cutters 1100 and $\$ 101$ in plastic case $\$ 5.35$ K14962-Your Cost, Complete.

## BURGESS Vibro-Tool



MARKS, ENGRAVE5, FILES, CHI5EL5, HAMMERS leven on the hardest metals, glass and thin THIN WOOD AND CARDBOARD. UsIN, vibration principle, the Burgess Vibro-Tool puts temporary or permanent markings on tools, jigs, dies, production parta; instantly engraves names, departments or trade-marks on tools or parts. Cuts cloth patterns, stencis, gaskets, washers from rubber, fibre, cardboard, leather, etc. Special improved ball grip makes all-day use possible without hand cramp. Does not overheat. Vibro-Tool can be used by anyone. No special experience necessary. Uees vibration principle, 60 cycle, 110 V. A.C. 120 vertical strokes per second. Supplied with 20 engraving needies and line cord. Approximate weight- 11 lb .
K24724-Your Cost, Complete

## VINCO Automatic Center Punch

Just apply pressure to the handle and the internal triphammer punches a uniform hole in any unhardened metal, thus leaving one hand ountersinking or for punchno countersinking or for punchng a ing Pemovable tips Plastic han ing. Removable tips Phipping weight 1 lb . K14972 -
Your Cost.
$\$ 1.09$

Shockproof Screw Drivers

A group of unbreakable and shockproof screwdrivers in a complete range of sizes and styles for all radio shop and radio or electrical service work. All of these are equipped with transparent amber handles, multi-grooved for s firmer grip.


## Radlo Chassis Guards



Practical set of chassis guarde that permit chassis to be turned to any position for servicing without damage to set or tub
Wt. 4 lbs
K15029-Per Pair
Your Cost.
$\$ 1.32$


## G-C Cable Eyelet Tool

## Inexpensive riveting tool

 for riveting parts to chas. ais and for turning eyelets on dial cable assemblies. Kit consists of a base which can be inserted in vise and clincher punch for turn ing the sivets.Cost....
$5 \%$

## G-C Inspection Lite

Light where you want it! 110 V AC or DC. Get into hard-to-see corners. Handy for dipping bulbs into color. K15304-

88
Combination Tacker and Staplling Machine


A quick, handy tacker that is exceptionally convenient for tacking on grille cloth, attaching light wire or sphaghetti, labels, etc. In addition to its use as a tacker it can also be used as a regular office or home stapling machine for clipping papers, receipts, checks, etc. Precision built, of steel with fine black finish. Complete with 100 staples.
K15280-Your Cost.
K15281-Box of 1000 Staplem 35 c

## solder and service accessories

EsIco Solder Pots

## GLASER Rosin Core Solder

This finest quality 40 . 60 rosin core solder is made of the best virgin tin, lead and perfect stantly, forming. strong permarent bond strong permanent bond. It $q u i c k ~ p o s i t i v e ~$ action makes it a action makes it a big time saver. $3 /{ }^{\prime \prime}$ in
diameter. Also packed to one pound and five diameter. Alsa packed in one pound and five pound spools. It is economical, especially when bought in larger quantities and is one of the beat for all electrical and soldering work in general. Stock up on this item. Order now.
Stock K14557
K14558
K14559

## Solder Paste, Flux and Tinning Bar



NOKORODE Pasto: Non-corroaive paste that fluxes all metals except aluminum without corroding or discoloring. Insures perfect soldered joint. Economical to use. IOc KESTER Paste Flux-Non-corrosive. For a clean soldered connection. In handy twoounce can.
K15278-Your Cost Each
KESTER TInning Block-Cleans soldering irons speedily. Easy to use. I
K14875-1/4 lb . bar. Your Cost...

## TRI-CORE Solder



## KESTER Solder

Will not apatter. Preferred by servicemen and other large users. Flux in core. The eluminum solder is the flux-silled type and is furnished with cleaning manished with cleaning ma 3/10 " diameter. and other Federal requirements for purity. It is a self-fluxing solder with three cores located just beneath the outer surface of the wire. Each core is packed with pure, high grade non-corrosive rosin hux. in the core. None can leak out. K14779-Tin. Your Cost.... 18 c K14784-1 Ib. Your Cost....68c K14785 5 lb . Dia. Each... $\$ 3.25$

## SolderIng Iron Tips

 Replacementplunger type tipa plunger type tipa of quality copper.
Stock No. Size


 has molded plastic body, cord, attachment plug, receptacle to connect iron volte AC. We. 3 lbs.
K15168- $\qquad$
Air Drying Finishes


Professional appearing finishes in efther crystal, wrinkle or chrome. Simply apply and let it dry for durable, lasting finish. Air-dry or bake on metal or wood.

Wrinkle Lacquer (Crystal) 2 oz . Stock Your

8 oz . No. Cost Color No Your $K 15259$ 24e Black K15309 73c $K 15319$ 24c Gray K15387 73c K15320 24c Brown K15388 73c K15380 24c Red K15389 73c Wrinkle (Varnish) Finish $K 15381$ 27c Black K15390 73c $\mathbf{K 1 5 3 8 2} 27 \mathrm{c}$ Black R 15390 73c K15383 27c Red K15391 73c Telephone (Smooth) Finish Telephone (Smooth) Finish K15384 21c Black K15393 $\$ 1.18$ K15385 21c Gray K15394 1.18 $\mathbf{K 1 5 3 8 6}$ 18c Chrome K15395


1b. Spool K14858 $\quad \mathbf{\$ 0 . 1 7} \quad$ K1 $\quad$ K14878 $\quad \$ 0.17$
KESTER K14859 3.55 K14879 3.55 proximately $1 / 6$ ounces.
K14882-Vour Cost

## GENERAL CEMENT Radio Chemical Kit

A complete kit of 8 chemical neceosities in neat leatherette pocket case. Makes it easy for serviceman always to have his chemical needs with him. Includes: Service Cement, Rubber Drive Cement, Car-non-X, Lube-Rez, Scratch Polish, Liquid Non-Sip, Dial Oil, and Contact Cleaner. Handy applicator attached to cap of each Handy applicator attached to cap of each
container. Take this bit with you on very outaide call. K15352-No. 999 Your Cost

## $\$ 1.32$

## G. C. No. 28

 Cement ThinnerThis thinner is made of the same solvents as service cement and makes the best nubstance for thin. ning all cement.

## No.

K 15341
$\times 15342$
K15342
K15343
GC Wood Cabinet Glue Best quality wood glue for repairing cabinets. Strong and fast drying. Will not injure cabinet finish.
No. Quant. Each

| No. | Quant. | Each |
| :---: | :---: | ---: |
| K15350 | 4 oz | 50.25 |
| K15400 | 8 oz | .44 |
| K15401 | 16 oz. | .73 |

WALSCO Contact Clean-

## ing Fluid

Prepared to clean tuning condenser aprings, vol. ume controls, switches. of contact with brush 2-oz. bottle.
${ }^{2}$ K153. bottle.
Your Cos
"WALSCOLUB B" Lubricant
New chemical that eliminatea noise on band switenes, controls, and other air exposed contacts. Superior to graphite. In a dispenser tube. Keep a tube handy tube. K
K15378
$29^{\circ}$


Alum. Solder $K 14845$ \$1.96

## NOKORODE Core Solder

Made of virgin tin and lead. Superior paste used for flux. No. 10 gauge. Apo


GC Plastic Cement Best grade pyroxilyn cement for cementing all types of plastics. $\begin{array}{ccc}\text { No. } & \text { Quantity } & \text { Each } \\ \text { N15273 } & 2 \text { oz. } & \$ 0.32 \\ & & \end{array}$ | K15273 | 2 oz | $\$ 0.32$ |
| :--- | :--- | :--- |
| K15274 | 8 oz. | .73 | Color Coding Enamel

For color

blue, red, yellow and a bottle of thinner. Two brushes are included K15258-Your Cost.... 29'
 peaker cones, cementing grille eloths etc. K15257- 2Ic Each.........

## chloride

## Non -inflam

 mable, safe and efficient. Used efficient. Usedfor cleaning forcleaning
contact pointa,


## ERSIN

 Multicore SolderNewest solder research achicveformula. Maximum fux action at correct solder melt point. Reduces surface tension of mol ten solder, and metal wets rapidly. Fast melting, non-corrosive, nonsticky, non-toxic. 3 -core construction insures constant flux. Excellent cleansing action, Tin: Lead \% 40-60. .08" dia.
Stock No. Quantity Each K14801 $\quad$ 1-lb. spool $\$ 0.90$

## Cabinet Repair KIts



Handy kit. ideal for radio shops, stores, trucks, etc. Small brushes in caps of all bottles make quick patching of damaged cabinets casy. Kit contains bottle each of: Ivory spirit enamel, light and dark, dark brown lacquer enamel, walnut spirit stain, polish renewer. French varnish; 3 sheets garnet finishing paper, steel wool, polishing cloth and instructions. Shpg. wt. 3 ths K15527
Your Cost
\$I.IS
For use on plastic,
bakelite or wood cabinets. 9 shades of shellac sticks. light and dark oil stain bottle of metal shading lacquer. Magic Scratch Remover, alcohol lamp spatula, touch-up brushes, steel wool, etc. Shpg, wt. 3 lbs. K15521 $\qquad$ \$2. 16
Cabinet Touch-UpKit: Same as above, less Scratch Remover, shel lac aticks 1 amp and spatula (stains only). Ideal size and equip. ment for servicemen to keep in tool kit. Wt. 2 lbs.
K15522-Your Cost
$35^{c}$

## Handy Scratch Remover

A simple dab
with the
blemish disappears. Touch-up wax on the other end. Provided with handy fiber carrying case. 2,
10 for.
.51 .89

## soldering irons



## HOTIP Soldering <br> Gun

Heate in 5 seconds. Just press the button and start working. Has a special GRAPHCO start working. Has a special GRAPHCO heating element in copper tip. H-6 for use
from a 6 -volt source only. H-110 can be used from a 6 -volt source only. H-110 can be used
from a $110-120$ volt AC line or a 6 -volt battery. from a $110-120$ volt AC line or a 6 -volt battery
K14973-H-6. Wt. 2 lbs
 K14975-H-110 WL 4 Ibs K14954 Extra Copper Tip K14977-Graphco Element

## WELLER Soldering Gun



A must in the kit of every man who makes soldered electrical connections. Heate in five seconds; see where you work; gets into tight corners. Operating on the same principle as the resistance welder. 100 watta, 115 volts 60 cycles AC.
K14907-Your Cost
ST2.69 K14841-Tip Fastening Stud


K1484\&-Copper Tip
UNGAR Soldering Pencil


Light soldering pencil draws only 20 watts. Heat in 90 seconds. Choice of five interchangeable tips. Overall length, $7^{n}$. Wt. 8 oz . K14981- 7776 Solder Pencil, less tip. Your Cost
K14983- 536 Standard Tip
K14983-536 Standard
K14984- 537 Pencil Tip
K14986-538 Chisel Tip, iv... Hot

## ESICO Thermostatic Controi Stand

Use of this unit makes it impossible to overheat iron. Iron can be maintained at any desired temperature while in

stand. When removed from control, full current is applied to iron. For irons with up to $\mathbf{1}^{\prime \prime}$ diam. tlps. Shpg. Wt. 3 lbs.

## K14885-Stand Only

$\$ 3.32$

Preferred by technicians everywhere. All are constructed of the finest materials and will give long, dependable service. High grade elements are wound on finest mica insula. tion. Underwriter's approved. Furnished with $6-\mathrm{ft}$. cord set. For a.c. or d.c. All models are supplied WITH STAND. WL. 3 lbs. Instantly replaceable forged copper tip Instanty replaceable forged copper tip. protected by spring in the handle.

With Plug-In Tips

| Stock No. | Watts | Tip Dia. | Your Cost |
| :---: | :---: | :---: | :---: |
| K14848 | 65 | 省" | \$1.73 |
| K14854 | 100 | 3/8" | 2.32 |
| K15174 | 150 | 1/2" | 2.91 |

## Constant Duty Models

Plug-tip irons especially designed for use in Plug-aip irons especialty duty at factories, labs, etc. For constant duty at factories labs
110 volte a.c. or d.c. Wt. 4 lbs .

| Stock No. | Watts | Tip Dia. | Your |
| :---: | :---: | :---: | :---: |
| K15190 | 110 | $8{ }^{8 /}$ | \$3.23 |
| K15191 | 130 | 1/3" | 4.55 |

## So High Quality Soldering Irons

## DRAKE Heat Control

The Drake Heat Control is the only control that allows constant temperature at all times. No thermostats to stick. A flip of the owitch and iron is ready for use in a few moments. "Hot" "."Warm" position switch $\$ 300 \mathrm{H}$,
100 -watt irons only.
K14884 Your Cost
$\$ 2.94$

## DRAKE "Special" Irons



Anexcellent iron for occa-
Heating element is of nichrome wire. Heat up in surprisingly short time. Handle of cher wood. Consumes 60 watts. Wt. 3 lbs. K14846-With 1 Tip.
Your Cost
88
All Drake irons complete with 6 -ft. cord and K14883 iron stand.
 K14908 Model 425. 200 Watt g/t Your Cost \$S.29 K14921-Model 800. 200 Watt, sf" tip Cour
K14950-Model $60 . .100$ watt 1.3 Your
54.80

## Compact Pencil-Type Irons



Compact insulated handle. cork finger guard. 6-ft. cord, plug and
K15155-25 watts. $1 / 4$ tip.
\$T Your Cost Each. K15154-40
Your Cost
Each.

## KWIKHEAT Thermostatic Irons



Powerful, yet light in weight, the 225 and 450 watt Kwikheat irons feature built-in thermostatic heat control which prevents overheating and results in longer lasting tips, infrequent retinning and more uniform soldering. Heats up ready for use in only 90 seconds. Stands included. Supplied with $\$ 1$ tip. K14871-450 watt We. 4 lbs. K14870-225 watt We. 2 lbs . K14840-Extra tipa, 0 to 5 , specify, ea. K14872-Kit of 5 tips (0-2-3-4-5)
.94
4.13
DRAKE Solder Pots


Solder pots for large volume use. Both units come complete with a detachable cord and plug. Replacement elementacan be purchased plug. Replacement elementa can be purchased
for these. Model 200 is $212^{\prime \prime}$ in diameter and $2^{\prime \prime}$ deep. Model 100 is $112^{\prime \prime}$ in diameter and ${ }^{1 "}$ deep. Wt. 6 lbs. K14953-Model 200, 200 W . Your Cost K14836-Model 100, 150 W. Your Cost.
53.75

## DRAKE Compact Iron

Smallest indus-
trial iron, for
tight corners
and delicate instrument wiring. Measures $9^{\prime \prime}$ and weighs oaly 9 oz .60 watts with 4 tip. With 6-ft. cord and Magic Cup stand. Underwriter's Approved. Wt. 1 lb. \$2.9 I

## TIIITed DeLuxe Irons <br> Approved By Underwriter's



The best soldering iron values on the market today! All Trutest DeLuxe irons feature: re todayl All Trutest DeLuxe irons feature: replaceable elements wound on metal cores, with best grade meran copper tips, tinned; one-piece hard drawn copper tips, tinned; one-piece
cases finished in gun metal; replaceable smooth cases finished in gun metal; replaceable smooth black wood handles; Underwriter's approved cord with cord spring. For a.c. or d.c. All furnished complete with metal stands. Shpg, wt. 31 bs
K15180-75 Watte, $110 / 120 \mathrm{~V}$. ST. 50 K15197-75 Watte, $220 / 250 \mathrm{~V}$. Your Cost Each.
K15182-90 Watts, $110 / 120 \mathrm{~V}$ Your Cost Each
$\$ 1.65$
K15198-90 Watts, $220 / 250 \mathrm{~V}$
Your Cost Each.
Your Cost Each..................22.45 K15184-170 Watts, $110 / 120 \mathrm{~V}$. Your Cost Each. K15199-170 Watts, 220/250 V. \$3.95 Kour Cost Each... $110 / 120 \mathrm{~V} . \$ 5$

K15188- 300 Watts, $220 / 250$ V. $\$ 5.35$
Your Cost Each.............. 5.35

\section*{JACKSON Heavy Duty Irons <br> Extra heavy <br> duty irons de- <br> signed espe- <br> cially for industrial or thop <br> use. Heating element and <br> all parts renewable. 6 -ft. <br> cord, removable handle. Wt. 2 lbs. With Screw-In Tips <br> | Soldering Irons |  |  |  | Extra Tips |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Stock No. | Watts | Tip Dia. | Your Cost | Stock No. | Your Cost |
| K14874 | 85 | $7{ }^{7}$ | 52.58 | K14886 | 45 c |
| K14853 | 100 | 5/8" | 3.23 | K14887 | 55 c |
| With Plug-In Tips |  |  |  |  |  |
| K15176 | 85 | $5{ }^{\prime \prime}$ | \$2.63 | K15166 | 35 c |
| $\times 15177$ | 100 | \% | 3.31 | K14903 | 42 c |
| K15178 | 150 | 12" | 5.52 | K15168 | 55c |
| "AMERICAN BEAUTY* Irons* |  |  |  |  |  |

100-Watt, Model 3138
America's most famous iron. Length $12 \% / 8$ " With $3 / \mathrm{A}^{\prime \prime}$ tip and 6 -ft. cord. Stand supplied. Shpg. wt. 2 lbs.
K15171-Your Cost
$\$ 5.29$
K15170-Extra tip for above. Each. . . 37c 50-Watt, Model \$76
A smaller "American Beauty." 7/4" tip. With stand. Shpg, wt 2 lbs. $\$ 3.31$ K15172-Your Cost. . Exave. Each 200-Watt, Model 3158
K14988-5/6" tip. Your Cost
K14989-Extra tip for above.
 "Magic Cup"
Iron Stand Insert tip into Magic Cupand
K14880-Shpg. wt. 1 lb .
Your Cost
$44^{c}$
Plain Stand Öniy. Less magic cup.
K15219-Your Cost.
.35c

## NATIONAL COMPANY RADIO RECEIVERS

NATIONAL NG-46
NATIONAL NC-2-40D


The NC-2-40D is a twelvertub suparheitrodyn. receiver covering $a$ continuous frequency of 490 to $30,000 \mathrm{KC}$. Ons stage of RF ompllica. tlon, a seporate first detector and stobilized HF oscillator, iwa IF stages, an infinite Impedance second detector, o self-balancing pedance second darector, o self-balancing phase inverfer and audio amplifier and an 8-wall PP output stage. Auxiliory circuits in clude o erystal filler with exceptionally wide selectivity range tor use on both CW and phone, a series valve naise limiter, AVC, beot oscillator, ton cantrol, and signal strength meter. Buitr-in pawer supply. Narmal operation is from $110-120$ volt, $50-60$ evele $A C$ only. A special plug is provided for operaling from a baffery, vibrator or dynamo supply. Holded polystyrene coil forms are used in both RF and if circuits and paddina and tuning can densers are of the oir dielectric iype. There are six calibrated call ranges tuned by o control with a 60 to I ratio. Finished in gray irol wh o chroms. $19 x / 2 \times 101 / 2$. Less speoker.
crock and chror crockle an
K21160-NC-2.40D.
Your Cost Each.
s225.00
NC2-TS-Table model PM speoker in matching cabinei. Shpg. wi. 19 lbs.
K21161-Speaker. Your Cost Each .... \$16.44

The NC. 46 is a ten-tube superhet covering a continuous frequency of 550 to $30,000 \mathrm{KC}$ and cambining capable performance with low price. Feoluras include a sorias valve noise limiler with automatic threshold control, CW oscillator, separate RF and AF goin controls, and omplified ond dalayed AVC. Power sup. plies are self-contained and operate on 105 . 130 volts AC or DC. An audio output of 3 watts is provided by push-pull $25 \mathrm{~L} 6^{6} \mathrm{~s}$. Provision is mode for either headphones or speaker A straight line frequency condenser is used in coniunction with a separale band spread condonser. Full vision dial is calibrated for eoch range covered and a separate linear scale is provided for band spreod calibration. Tuning condensers have inertio type drive. Finished in gray crockle. Dimensions ore $17^{\prime \prime}$ wide, $11^{\prime \prime}$ high by $91 / 4^{\prime \prime}$ deep. This recelver, new in dehigh by $91 / 4$ deep. This recelver, now in design ond performance, is a fiting adotition to

K21081-NC-46. Less speoker. Your Cost.

NC-4675 PM speaker in matching cabinat. K21082-5hpg. wt.-10 lbs. Yaur Cost Each

## NATIONAL 1-10A

## NATIONAL HRO SERIES AND ACCESSORIES

## HRO SERIES

World's finest communications receiver, complete with de luxe relay rack, power supply, speoker and spare coli cabinet, in a single unit for lable or desk use. Chrome strips beunit for lable or dosk use. Chrome silids beith twaen units and speaker grile coincidendard model includes alt coils for cantinuous rango of 1.7 to 30 mc . Same colls by simple switch. of 1.7 to 30 mc . Same coils by boy be used for band-spread Ing method, may be used for band-spread on amateur bands, providing nearly 12 -feet of dial space for eoch band. Low.driff oscil.
lator and axtremely favorable signal to lator and extremely favorable signal to
nolse ratio provide constant signal level. A new pype puning condenser of extremely rigid construction is used in this series. The famaus PW type dial and drive is vied in order to provid a maximum af tuning ease. The PW dial revelves ten times in covering the tuning range, and the numbers visible through the smoll windows give continuous consecultive numbering from 0 to 500.2 stoges of tuned r.f.' provide exceptional sensifivity and Image rejection ratio. Lamb type xtal filter circuit. AVC and manual control. V.T. valtmeter calibrated in "S" units. Phone or valtmeter calibrated in Finished in block loudspeaker operat
K21262-HROC5, complete as shown, with 4 sots coils (14.30, 7.14.4, 3.5-7.3, 1.7-4.0 mc). Your Cost.
$\$ 353.65$ $K 21251$ - HRO.5RAI, rack mounting os
above, less all other units, with $3 / 6^{\circ}$ black
 K21265-HRO-5TAI, table madel, otherwise as above, less all other units. Shpg. w1. 62
lbs. $\$ 274.35$
Pour Cost.

NOTE: All af the National HRO Madels listed above ore the now type employing the 6.3 volt series tubes. All are finished in block wrinkle. All ore complete with built-in nolse limiter.

## HAMMARLUND



## HAMMARLUND Super.Pro Series 400 Communication Receivers

One of the best known communicotions receivers with o wide tuning ronge that tokes in oll of the regular broadcost band as well as all short wove broadcast and communlcotions channels up to 30 megacycles. Covers o continuous range in 5 steps from .54 to 30 mego . cycles. Includes such feotures os: iwo tuned RF stoges with proctically completo imoge rajaction; improved HF converter stoge with separate oscillotor; 3 IF stoges with voriobie solectivity; automotic goin contral; varlable crystal filter ond a separate AVC omplifier for mointoining unifarm level of foding stotions; 2nd defector with a modern noise-limiting circuit using o seporate tube; three sloges of audio frequency omplification provide ovep efght wotts of high fidelity oudio for reproducing high-quolity broodcast programs op for use with a modern record ployer for home enfertainment: separofe heovy-duly hum free power supply, beat oscillator, S-meter, and mony other refinements, The funing condur free ore "dual-trimmed" for perfect tracking with a midget aip dielactric vorioble conductors The 5 -meter is calibrated In units of 6 db and has compensated sensitivity forle copacliar. strong signols. The speciolly designed master band mong signois. The speciolly designed master band switch has silver-plated contocts. No moving port corries current. Varioble selectivity If transformers instontly tronsforms the Supar-pro from a high fidelity broodcast recoiver to a super-shorp commercial receiver. Size: $25^{\prime \prime} \times 15^{\prime \prime} \times 14^{\prime \prime}$. Shpg. Wt. 132 lbs .
K21040-SPC400SX With PM Speoker In Cobinet, 7.5 meters to 240 meters, Your Cost Eoch. Complefe with Speaker.
K21042-SPR400SX os obove but for Rock Mounting, Your Cost Eoch
K27044-SPC400X 10 meters to 560 meters, Your Cost Eoch.
. 5333.75
. $\$ 347.25$
K21046-SPR400X As Above, But For Rock Mounting, Your Cost Each.
$\$ 357.75$

## HAMMARLUND HQ-129-X Amateur Communications Receivers

The hom's recoiver whit the professional touch. Covering 31 to .54 MC ., 9.7 to 555 meters shortwove ilstoners 100 will find this a most excellent DX recolvar., Buill to meet the needs of the most discriminoting professionol or omoteur rodio operator. Very eosy to operote stoble in porformanee, ond sensitive onough to pick up extremely weok signols. Six bonds fully colibroted for quick ond simple locotion of stotions. Hoss obuiltinin fully odiustoble 5 -metar for reading comparative strength of signal, in addition to 310 degrees of bandspread. Four colibroted scoles and one orbitrory scole. Stoble beot oscillator provides pleasing heterodyne for code recepllion. Noise limitar reduces outo Ignition intarference and other similar nolses. Earphone iock cuts off speoker when phones are in use. Audio goin control provides omple room volume. Controls are smooth ond oceurafe; no slipping or iomming. Six-bond high-efficiency switch with insulated shath ond ceramic oscillotor sectlon. An ontenno compensotor to molntoin high sensifivity ond moximum image rejection. SendReceive switeh permits operotion of transmitter with o minimum of noise from the receivar. Receive switen permits operotion of ransmitter with o minimum of noise rom the receivor.
Crystol filter phosing tokes out onnoying hoterodyme whistles. Six position control for voriable bond width-crystol filtor works equolly well on both phone and C .W. Size $23^{\prime \prime} \times 18^{\prime \prime}$ $15^{\prime \prime} .5 \mathrm{Shpg}$. Wi. 73 lbs.
K21048-Hommarlund HO-129-X, Your Cost Eoch, Less Speoker
$\$ 161.40$
K21049-Speoker for the HQ-129-X, Your Cost Eoch

## RADIO MANUFACTURING ENGINEERS

## (aCly

## RME-45 Receiver

The RME-45 is the outgrowth of a long series of instruments built for proctical all-covaroge radio receplion on phone os well os CW, with a range of 500 to $33,000 \mathrm{KC}$. Full vision scal indirectly illuminated from the front. A dull black bock. ground with fine white scole divl sions and distinct numerals on on ight-inch circular steel plote. The troveling pointer, mounted idge. wise, is palnfed red for distinctive contrast. Five amoteur bands ore occurately collbrated and well spread. Unusually stable oscillator section. Both reloy control and on open breok-in connection provided of the rear. Thus in conjunction with the Stond-by-Transmit switch. the operator moy perform the necassory operations os per the dia. grom. A D8 mefer, illuminoted indirectiy, is colibroted in steps of 6 decibels per " $R$ " reoding beoin. ning of zero on up to 48 db s for on $R 9$ reoding. Five positions for epystal selectivity. Oetol tubes: I 787 tal 8 electivity. Oetol tubes: 1787
RF, 757 detector ond osclllator. 787 IF, 787 IF 786 det and $8 F O$ 7A6 nolse limiter 7 C 7 AF 7 CF beom power output, 80 rect. $19^{\circ \prime}$ wide, $\mathrm{k} 2 / 2$ high. Shpg. Wi. 65 lbs Your Cost
$=$

## YHF-152 Converter

## For 2, 6, and 10 meters

 Becouse of the new minioture VHF fubes, and engineering design ond construction, sensitivity on oll three bonds is of the order of 2 micro volts. Image rejection rotio is a proximatoly 54 db which for oll proctical purposes makes images non-existent. Provision is made for the use of four seporate onfenno connections. Each band has its own speciolly designed ontenno input circuit. It is olso provided with o change-over switch to focilitate switching the receiver ither to o regulor low-frequency onfenno or to the converfer output. Antenno input impedance is opproximotely 300 ohms on all ranges. A shialded outpul cable is provided for con nection to the recsiver. The cable reduces the possibility of stroy pickup of the if frequency if can be used with any all-ware or amo tour type communicallons pectiva The output impedone of the con verter is also 300 ahms. All con perts are of heavy construction melo ploted or fintshed consiruction ond plored or finished to provide resistonce to corrosion. Dimonsions: $11^{\circ}$ 50.60 eycles. Complypply: 115 volis, $50-60$ cycles. Complete with fubes. Shpg. Wp. 20 lbs K21195-YHF-152. Your Cost
## Ham Headquarters For Communications Receivers

## DB-20 Preselector

For odded selectivity and goin when operoting o communicotions recelver, the $08-20$ preselectar is the perfect solution. Frequency coverage is from 9 lo 540 meters ( 550 to $33,000 \mathrm{KC}$ ). The Input circult is of the typical motched doublet ivpe plus o single wire to ground orrongement permitting high gain motching 10 ony ontenno. The output circuit is of the low impedonce type, 150 to 350 ohms, equipped with on output plug and line for direct connection to the input cir cult of your receiver. The signolto image rotio obtoined by using the D8-20 with o good communication recsiver employing one stage of RF omplification is greater thon 1500 to 1 of 28 MC At 14 mego. cycles the slgnal-to-imoge potio is opprox. 50,000 to I. Self-contained power supply two 6K7 tubes and on 80 rectifier. Ronge is covered in six bonds. Individuol goin tonifol in oddition to the repulor sixbond switch and finger tip contral mech onism. Finished in attroctive gech crockle. Rigidiy bultit and groy crockle. Rigidiy bult and tested cellent signal strength booster exd cellent signal strength booster and image response rejector. 9 . ${ }^{\text {a }}$ $91 / 2^{* \prime} 10 \mathrm{~K}^{\prime \prime} . S h p g . w t .20 \mathrm{lbs}$. K21197-DR-20.
Your Cos! Your Cost

## RME. 84 Receiver

All-band recalver for phone and CW. An importont foofure is the continuous coveroge ronging from 540 KC to 44 MC . Collibration is mode on o 7 -inch diometer scole woch roised numerals on a block bochground and indirectly llighted to provide maximum visibility without glape. Sensilivity is of the order of 2 microvolis over the entire pange of the instrument. Front panel con. trols ofe orronged for eose of op. eration: heodphone jock, CW/ tronsmit/phone switch beat frequency oscilolior pitch control noise limiter switch, oudto goin control; tone control and ON.OFF switch, bond selector switch radio frequency goin control ond outo. motic volume control switch outo net is $18^{\prime \prime} \times 93 / 3^{\prime \prime}$ and $93 / 4^{\prime \prime}$ deep with o top hinged and $93 / 4$ deep, PM speoker is built directly into moin cobinet ond is shock-mounted on rubber. Tube lineup comprlises: on fubber. Tube lineup comprises:
787 RF Amp. 757 Ist Def. and R F. Osc.. 7 it Ist If. 787 2nd if 7K7 2nd det. and lst Aud. Amp. 6 G 6 G Oulput, 5 Y 3 Rectifier. Moy 6G6G Output, $5 Y 3$ Rectifier. Moy
be operoted from either IIS-volf, be operoted from either 115 -volt,
60 cycle $A C$ supply, bolteries or 60 cycle $A C$ supply bolteries or
power pock. $18^{\prime \prime} \times 9 y^{\prime \prime} \times 9 y^{\prime \prime}$. power pock. $18: 1$
Shpg. Wi. 31 lbs.

s 98.70

## transmitfing gear

## MILLEN Transmitter Sub Units



These are basic units for Incorporation In the assembly of complete amateur and commerclal transmitters. Ideal universal equipment for seneral laborlatory and experimental use.

## High Voltage Power Supply

## R-F Power Amplifier

A 500 watt amplifier for use as the basia of a high power amateur transmitter or to increase the output of an existing tranamitter. As shipped, the unit is wired for use with 812 tubes, but full instructions are furnished for readjusting for operation with such popular tubes as Taylor TZ40, Eimac 35T, T55, HK154, RK35, etc. The amplifier is of unusually sturdy construction and is mounted on a standard $83 / 4$ " 19 " rack panel. Individual grid and plate milliammeters are on the front panel, as well as the grid and plate circuit tuning contruls. One set of 500 -watt coll with awinging link antenna coupling are furnished, specify band. The wigue plate tuning condenser has constant low impedunce and multi unique piah purcent rotor contactor and is rated at 6000 volts peek Disc-type neutralizing capacitors have stop to prevent ohorting and Disc-type neutralizing capacit
a rotor lock. Shog. Wt. 25 lbs.
K21051-MILLEN No. 90881 , less tubes.
Your Cost, Onl
Gour cost, Oniy $\mathbf{~ G r i d ~ a n d ~ P l a t o ~} 21055-10 \mathrm{~m}$
K21057-40 m. Coll Sets $K 21056-20 \mathrm{~m}$. $\mathrm{K} 21057-40 \mathrm{~m}$
$\mathrm{~K} 21058-80 \mathrm{~m}$.


## MILLEN Varlable

 Frequency Oscillator COMPLETE CONTROL OF TRANSMITTER FROM THE OSCILLATOR PANEL Operating Features: Stable aeng. tuned electron-coupled oscillator: voltage-regulated power supply: high or low impedance output with power to drive any tube up to an 807 , output on 40 or 86 m . : secu* rately calibrated full-vision bandspread dial for $10,15,20$ and 80 m . emateur bands.Clreult Features: Cereful circult design makes this oscillator unusually stable and drift-free-high capacitance oscillator grid circuit; untuned oscillator plate circult; large temperature, compensated oscillator grid coil; temperature-compensated capacitors; regulated plate and screen voltages. Keying is clean and free from all annoying chirp, quick drift, jump and similar difficulties.
Convenience Features: Good electrical bandspread for each amateur band, not one band only! Panel dial has 13 to 1 drive ratio. Output may be coupled to a low impedance link; or, by means of the supplied plug-in adaptor, the output may be plugged into atranemieter erystal ocket or connected directly to a grid. Band change, including bandspread change, is accomplished by turning a switch on the panel (no plug-in coils).
Power Source: $105-125$ volts $50-60$ cycles 60 watts
Tubes: 6 SK 7 oscillator, 6L6 amplifier, 5 V3GT rectifier, VR1 50 volt. age regulator, and VR75 voltage regulator. Shipping wt. 29 lbs. K21053-Millen No. 90712 , ineluding tubes and impedance adaptor Vour Cost,
s74.50 Only

## THE PANORAMIC <br> Panadaptor

Panoramic reception enables the operator to see at once a continuous overall picture of band activity or exemine the charscter of any sisinal, his own or mother's. With the PANADAPTOR connected to your receiver you can see up to 200 kc of the band at once on the 2 -inch oscilloscopel Just look at some of these band at once on the 2 -iach oscilloscopel Just look at some of theae
unique advantages and sce why the Panadaptor is indispensable for unique advantages and sce
alert progressive amateural

1. Acta as an additional tunable receiver. Enables simultancous reception of many radio signals, continuously selectable from a recest bend of frequencies down to single frequency
2. Enables interpretation of transmitter signal characteristics (your own and others) of such factors as key clicks, hum and noises. You can detect frequency shift on CW, distortion, carrier shift and splatter, spurious aupersonic and RF parasitics on phone, frequency deviation (AM or FM) and modulation characteristics of FM signals. Aleo indicates percentage of modulation-upward, down ward or overmodulation.
3. Instantly identifies $Q R M$ signals. Selects $Q R M$-free spots within a band for sending and listening. Provides instantameous S -meter for CW and 'phone signsis heard through receiver.
4. Spots replies to CQ's. Facilitates network operations.
5. Assista in making adjustments of your trapsmitter and antenna, Consistently, fter once using the Panadaptor with thelr rigs, amateurs claim that without Panoramic they'd be at a loss in practical phases of operation ranging from looking over the band or spotting replies to their CQ's to checking the other fellow's modu lation. Handsomely finished to harmonize with the rest of your rig $6^{8}$ 角"11" $293 * \%$. Shpg. Wt. 20 lbs. Deseriptive booklet sent free on request.
K21054-Complete with tubes
Your Cost

"THE RADIO MAN'S RADIO"
Model S-38
540 KC 1043 MC in four bands Adequole overlap of bond ends Seporate elecrical bandspread Adiustable 日FO pitch
CAM/CW switch operotes AVC Stondby-Recaive Switch Automatic Noise Limiter Excellent oudio respons. Enternol PM speaker in POp
105-125 volt AC/DC operation Sir modern lubes
Handsomely designed cabinet Pin jocks for headphones Easily portable

The Model 5.38 meats the demand for o truly competent communications receiver in the low price fiseld. Styled in the post-wor Hollicraftaps pottern ond incorporating many of the leotures found in their more expensive sets the 5.38 offers performance and appearance for above anything
herefofore avallable in lits class. Four funing bonds, CW heretotore avalable in its class. Four tuning bonds, CW pitch control adjustable fram the frant panel, autamatic
noise Imiter, self-contoined PM speaker ond "Airodized" steel grille, all mark the 5.38 as the new leoder amolig in. expensive communications receivers. It is an especially fine receiver for younger people just beginning to find the unending fascination offered by radio as a hobby. In addition to boing a goad standby recelver for any amateur, the 5.38 perfarmance on both short waves and standord broodcost peffarmance on both shopt waves and standard broodcost library, callege dormitary, camp or cottage or in any room, oround the house wherever a good extra receiver is desired. Main tuning dial is occurately calibrated far precise funing. Adequote overlap provided af both ends of the bohds.

The Model $5-38$ is price-designed as a new leader. The beat frequency oscillator pirch is adjustable from the front ponel. The AM/CW switch olso furns on the Automolic 1.6 walts. Controls arranged for maximum ease of operotion. A ground terminal is also provided. Equipped with ip jocks far earphones. The entire receiver is housed in 9 sturdy
steel cabinet finished in a rich satln block. 105.125 volf AC/DC. Resistor line cord for otion avallable. Hos external antenno ferminals for a doublet or a single wire antenno. The chassis is codmium plated. The lettering on the panel is in light groy and the switch knobs ope fed. The pawer consumption is 117 volis. Overall dimensions are: $12 \%$ inches long by $8 \% / 1$ inches deep by $73 / 8$ inches wide. The receiver alone weighs II pounds. Pocked far shipment, it weighs $131 / 2 \mathrm{lbs}$. An attractive as well as an extremely uselut ado station or ham shack and would loak equally wall on a busy execulive's desk. K21100-Model 5 -38 Comm. Receiver. $\qquad$ s47.50


Model S.40A
 AVC swith adusied rf colls Model SM-40 "S" maler connection Inertio Flywheel Tuning Nine Tubes including rectifier 540 KC to 43 MC in 4 Bands

The New Model 5.40A combines both function and beouty in ane great communication receiver, handsomely dusigned, expertly engineered. One stage of tuned rodio frequency amplification, the S-40A uses a type 6SA7 tube as a conof the permeability adjusted "micro-set" type identical with thos used in the most expensive Halliepaffers receivers. The high frequency oscillator is temperature-compensated for malimum stobllity. Maximum ventilation is assures by o The entipe top of the cobinel opens on a full-tength plano hinge for complefe accessibility. Ponel and chassis may be of the contrals or any of the internal connections. All cony trols ore clearly identified and the normal positions for standard broodcost reception are marked in red, making it - osy for the entire family to operate this receiver simply and effectively. Hallicrathers again points the way to exciting new in enjoyoble, troulle-free rodio listening.

The Model S-40A has mony leatures never before available in this price class. The slondard model is designed for use can be used on $110,130,150,220$, or 250 volts, 25 to 60 cycles AC. The standord model draws .76 amperes at 117 volts. When used with external batterles the heoter current is 5 special af 6 volts, the plate cuprent 70 mo , of 270 volis. external power supply and stand-by connections to the $181 / 2$ inches ping welght approximately 33 pounds. 9 Pubes: 6567 RF amplifier; 65A7 converter; 6SK7 lit if amp.; 65K7 2nd If Amp.: 65 Q7 2nd Hel. \& Ist Audio Amp-i of 43 MC in four bands: $540 / 1700 \mathrm{KC} / 1.7 .5 .35 \mathrm{MC} / 5.35-15.7 \mathrm{MC} /$ 157.43 MC .

K21093-Hollicrafters Madel S.40. Your Cost
580.50 K21090-Universal Model S4OU. Your Cost

Model SP-44
The Model SP-44 Ponoramic Adapter offers all the advantoges of panoramic reception. In o steal cobinet finished to match the new Holli. cratters line. The cathode ray lube is provided with a light shade for greater visibility. Ten
fubes: $65 G 7$ Amplifier: $65 A 7$ Converter: $55 G 7$ if Amplifier: 6507 Delector, Video Amplifier: 6AC7 Reactor: VR105 Voltage Regulator: 6SN7 Sawlooth Generator and Amplifier; 902A Catherotes on 105.125 volts, $50-60$ crele alfernating current. Power consumplion approximately 55 walls. Size: $11 \times 6{ }^{3}{ }^{3}{ }^{3} \pi 10 \% \%^{\prime \prime}$. Shpg. wi. $151 / 2 \mathrm{lbs}$ Your Cost Each


## Model S.37 Receiver

The Madel 5.37 has been designed ta fill the need for very high frequency equipment with the performance charocteristics of Hollicrafters top communicalions recelvers, and with a frequener range extending above 200 MC . Has o continuous frequency ronge fram 130 MC to 210 MC . The moin tuning dial is accurately callbrated in megacycles. The bandspread is mechanical. FM/AM switch. Autamaile noise limiter and pravision for break-in aperation. Separate RF and AF gain cantrols, voriable tone controts. Socket far external power con nections. Oscillotor compensated for drift in nections. Oscilotor compensared for "irift in frequency. AVC swifch. Dual purposens and
tuning meter with odjustment from front panel. tuning meter with adjustment from front panel. ing. Antenno compensaior mounted on panel, Twa RF stages with acorn tubes. 500 or 5000 ohm output. Voltage regulatar lube for maxi. mum stability. Hermatically sualed transformers ond reaclors. All paper condenseps are oil impregnoted and harmetically sealed. Mais lure-proofed wiring. Switch on chassis permits operation on 105.125 or $210-250$ volis 50.60 cyeles AC. Inertlo flywhe tuning. A new pre-looded geor drive with seporate bandspread dial pro. geor drive with seporate bandspreat dial pro. vides ease of funing, and the entire range of the recelver is covered without bond switching. Two RF stages ore used and ossure on amoz ingly high raflo of image relection. Hermeticolly seoled iransformers and capacitors moke

this receiver sultoble for use in ony climate. Controls: RF Goin avC On/Off, Antenne Trimmer, Send-Receive, Tone, ANL On/Off, Tuning, Meter Adjustment, AM/FM, AF Goín, Power On/OH. External connec. tions: Input terminals for single wire and doublot antenno. 500 and 5000 ohm ferminals fer loudspeoker. Line cord and plug. All companents mounted on a heavy steel chassis provided with special end plafes for cose of mointenance. High frequency RF section is buili on removoble chossis. $191 / 4$ inches wide by $91 / 2$ inches high by $143 / 4$ inches deep. Wt. 100 lbs. Cabinet is os speel finlshed in black wrinkle enomel K21079-Model S.37 Recelver.
YOUR COST.
s591.75

## Model S-36A Receiver

The Hallicraffers $A M / F M / C W$ recelver Model S.36A is designed for moximum performance on the vary high frequencles. Using ocorn lubes in the RF omplifier, first detector and high fre. quency oselllotor circults, it provides continuous frequency coverage from 27.8 to 143 megoEycles. Either o if or third IF omplifier, dilade detector and FM or o third if omplifier, for AM may be switched Info the nolse limitep for AM mpy be switched info the
circult fram the front ponel. The frequency range is from 27.8 to 143 megacycles in three bands. Band $1-27.8$ to 46 MC . Bond 2-46 1082 MC, B and 3-82 la 143 MC. Adequale overlap Is provided of the ends of oll bonds. The main puning dial is accurotely colibraled on all bands. Mechonical bandspread. Beot Fre= quency Oscillator, pitch variable from the front panel. BFO switch FM/AM switch. Send-Recolve switch. Automotic Noise Limiter. Push. Celve switch. Automotic Noise Limiter, PushPull high fidelity output stage. Provisian for breok-in operotion. Seporote RF ond AF goin conirols. rour-position tone conirol with bass boost. Socket for externol DC power connections. Oscillofor compensoted for frequency drift. AVC switch. Shorp-brood selectivity switch. Duol-purpose "S" and tuning meler. RF ossembly eosily removed for servicing. Antenno compensator mounted on panel. RF stago with ocorn tube. 500 or 5000 ohm oulput plus speciol bolanced 600.0 hm output plus special bolanced $600 \cdot \mathrm{chm}$ line with jack. Volt.

## Model HT-9 Transmitter

The Hollicrafters Model HT. 9 is on ideal me. dium power tronsmitler. The fraquency ronge is 3500 KC to 18 MC and the omoteur 28 MC bond. The power output is 100 wotls on CW, 75 watts on phone. Antenna coll will motch ony resisilive lood from 10 to 600 ohms. Maximum ventilation provided by lauvres on sides, culouts af rear. Hinged top permits occess to Interior for changing coils and crystals. All aperoting contrals on front ponel. Self-con. toined power supply far $105-125$ valts, $50 / 60$ cycle AC operation. Inpul for any medium level, high-impedonce microphone. Mefering of cothode current of exciter or modulotor, power omplinier grld ond power omplifier plote. 100 -percent modulation with law disior. plon. Corpler hum mare than 40 db below 100 tlon. Corrier hum mare thon percent modulalion. Frequency respanse flot percent modulalion. Frequency respanse aper
within 3 db from 100 ta 5000 eycles. Five aper within 3 db from 100 ta 5000 cycles. Five aper. ailng frequencies may be pre set in the ascil.
lotor and buffer daublér sloges ond selected lotor and buffer daubleif sloges and selected at will by meons of the band switch. Line fuses mounted on rear of chassis. Convanient toble mounting. Rugged construction and oversize campanents ossure dependable aperation. I4 tubes: 6 L 6 Crystal Osclllatar (used obove 6 MC only); 6 L6 crystal oscillatar ar daubler 814 Final RF Amplifier: 6SJ7 Ist Speech Amplifier; 6.55 2nd Speech Ámplifier: 4.6 L 6 Push-Pull Porallel Modulotor Stoge; $2.5 \mathbf{z 3}$ Rectifiers; 80 Rectifier; 2.866 Rectlfiers. In normal operotion the transmitier draws approximately 3.5 amps.

age regulotor fube for maximum stobility. Maisture-proofed wiring. Switch on chassis permirs operotion on 105 - 125 or $210-250$ volts AC . Line
fuse on front pogel. Inertio flywhel funing. Improved geor drive in dust. fuse on front poael. Inortio flywheel funing. Improved geor drive in dust. proof housing. Fifteen tubes. External connections; Input terminols for ingle wire and doublet antennos. $500-0 \mathrm{hm}$, bolonced 600.0 hm , and 5000 -ohm termirals for speoker. Line cord and plug. Octol socket on ear of chassis permits operation from externol power source such os botteries, ond nokes provision for remote sfondby switch. Socket normal shorted by on octol plug. $191 / 4 \times 91 / 2^{x} 151 / 4^{\prime 1}$. Shpg. Wi. 100 lbs K21u ' Model S.36A Receiver.
s307.50 YOUR =OST

( 400 w.) Size: $291 / 0 \times 121 / 2^{201} 2^{\prime \prime}$. Wt. 125 lbs K21346-Madel HT-9 Transmilter. YOUR COST

Coils For Above K10278-80 Melers. K10285-40 Meters. Any Above, EACH SET
K10286-20 Meters. K10288-10 Meters. Elther Above. EACH SET

Crystals For Above
K10293-40 M. K10295-80 M.
Either Above, EACH.
K10294-20 M. (for 10 m . oper.) EACH

Model 700 UHF

## Transmitter

Model 700 Pronsmitter ploneers the shift to MOPA erystol control in the 140.144 and $235-240 \mathrm{MC}$ bands. The $10 \times 5 \times 51 / 4^{\prime \prime}$ cobinet houses o complete two bond transmitter and voice modulator Uses one bADS as o Trifal crysta oscillotor tripling in its plate cir. cuir to drive a 6C4 doublar. A second 6C4 acts as a doublor for 2 meters or as a tripler for $11 /$ melers. This drives on 832 push pull beam power omplifier to 20 wotts input. Crystof frequencies may lie belween 12 and 12333 MC for belween 12 and 12.333 13.005 and 13.333 for $11 /$ merers. 8uilt-in and is. 333 for $11 / 4$ meters. 8uilt-in modulator employs iwo $K 21162$ - Mess cobinet. Wt. 9 lbs K21162-Less Tubes, Each $\$ 36.95$ $K 21105$ - Modal 700 Kit . Unas sembled, less cobinet...... $\$ 24.95$ 21163 -Tubes for obove, 6 rubes Your Cost
$\$ 14.2 \$$
Model 800 UHF Receiver The Modal 800 is a now non. radialing super-regenerative re. ceiver for the $144 / 148$ and $235 / 240$ MC amoteur bands. Uses a AK5 RF omp., o 6 ©4 superregenerotive delector, o bAU6 Ist audio and a bákb power omp. Has o buill-in PM speaker, Inductive funing, 7 leet plus of ffective dial length. Low Internal noise, exceliont usable selectivity, proctically zero rodiotion. Power supply anything from batterles to vibro-pock or simple AC power supoly unit. Takes, 1.05 amps at 6.3. volts and 40 mo of 135 vde Cabinet. $10 \times 5 \times 51 / 4^{11}$, Wi. 71 lbs . K21164-Less fubes, power supp Kand coil ess lubes, pawer supply
and K21165 - Unassembled Kit. Less
Cobinet, Your Cost......... $\$ 24.95$ K21166-4 fubes for obove. $\$ 24.95$ K21166-4 Pubes for above. $\$ 6.01$
K21167-Two 2 -meter colls $\$ 1.40$ $\begin{array}{ll}\text { K21167-Two } & 2 \text {-meler coils. } \$ 1.40 \\ \text { K21168-Two } & 1 / 4 \text {-meter cls. } \$ 1.40\end{array}$

## Model 801.BHF Receiver

 The Model 801-B high-frequency receiver is practically the same as the Model BOI, except that It is designed primarily for dry baltery operotion. 4 miniature tubes are used: 1 1T4, 2 is5's, 1354. Gives an axcallent occouni of itsell in the 50.54 MC bond where frequency stable tronsmit. ters are now mandatory.Plog-In Colls (Ant, \& Dot. Poirs)

|  |  |  |  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| 23 |  |  |  |
|  | , |  |  |
|  |  | (all weigh 302. |  |
| Your Cosp Per Palr............. $\$ 1.00$ K21233 - Complete Less Tubes. Coils and Batteries, Wi. 7 lbs. Your Cost <br> \$28.95 K21234-Kit, Less Tubes, Colls and 8 otteries $\$ 18.95$ |  |  |  |
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## Model 903 Absorption

## Frequency Mefer

Model 903 Frequency meter covers the unusually wide frequeney range from 1600 KC up to 400.500 MC. Consists of on etched alu. minum panel carrying 600 -series ow-loss Steotife insulated tuning capocitor, Inductor socket and resonance-indicating lamp and ocket. Wi. 12 oz.
K21274-Model 903.
Your Cost
$\$ 3.30$
Plug-in inductor with built.in lamp coupling coil. Your Cont Each K21275-Tym 100-1800/3200KC 65c K21276 Type 101-3000/7510 KC. 68 K21277-Typ 102-7000/17500KC 65e K21273-Type 10.3-17/50 MCS...65c K21280 Tyne 104-50/150 M1CS..65e K21281-Type 105-100/300 11 CS . 65 se K21282-Type 106-400/500 MCS* 65c - No lomp couplling coll.


## Model 701 75.Watt

## Transmitter

1.6A05 miniature beam tetrod functions as Tritet erystal osell lator working stroight through doubling or quadrupling in it plate elrcuit to drive on 807 beam power amplifier. CW power output in oll bands, $3.5 / 30 \mathrm{MC}$., is 50 wolts. Wi. 9 lbs.
K21200 - Complate less tubes, key, crystal, microphone, power supply, coils. Your Cost $\$ 36.95$ K21201-Kit less cabinet $\$ 24.95$ Plug-In Coils for Model 701 Frey Tritet Tritet P.A. $\begin{array}{llll}\text { 3.5-4 } & \text { K2thode Plate Plate } \\ \text { K21203 } & \\ \text { K2120 }\end{array}$ $\begin{array}{lllll}7.7 .3 & K 21205^{\circ} & \text { K21206 } & \text { K2120 }\end{array}$ $\begin{array}{llll}14-14.4 & \text { K212000. } \\ 21-215 & \text { K21211 K2121212 }\end{array}$ $\begin{array}{llll}\text { 21-21.5 } & \text { K21205* } & \text { K21213 } & \text { K21214 } \\ 27-30 & \text { K21209.* } & \text { K21216 } & \text { K21219 }\end{array}$ 30-34 K2120900 K21220 K2122 AnyC Xtal. 19 MC Xtal. Any Coil Your Cost Eoch.......50e
Model 801 HF Receiver The Model 801 is a necessity for every amoteur, beginner, or old. imer, not only as a fine recoiver but also as a piece of test equip. ment. A bBA6 tuned RF sloge precedes a bAU6 regenarative detector which drives a 6C4 AF amplifier feeding o 6AK6 power ampllfier pentode. Regeneration control is very smooth. Wp. 7 lbs. Plug-In Coils (Ant, \& Det. Pairs) Type (MC) Type (MC) K 21225 .45-. 85 K 21226 .845-1.56 K 21227 3.45-6.55 K21223 $\quad 6.4-12$. $\begin{array}{lllll}K 21230 & 11.95-21.9 & K 21231 & 20.737 .3\end{array}$ K21232 35. -60. (all weigh 3 os.ea.) Your Cost Per Pair................ $\$ 1.00$ K21222 - Model 801 Less Tubes Coils, and Pwr. Supply .... $\$ 29.95$ K21223-Kit of 4 tubes ....... $\$ 4.04$ K21224 - Unassembled Kit Less Cobinet, Tubes, Pawer Supply
and Coils

## Model 802 HF

Single-Signal Superhet
A 6 -band superhel for hams. Covers 3.5-4/7.7.3/ 14-14.4/21-21.5 50.54 and 27.30 megacyele bands. Uses 6BEd first dotector/electron coupled oscillator, 6BA6 regen. erative single-signal varlable selectivity 455 Kc IF amp. 6 J 6 in finite imped. 2nd detecior and beot oscillator, 6.56 (dual UHF triode) noise lim. \& Ist AF amp. GAKG power pentode 2nd AF amp. SAKb power pentode 2nd AF amp
Plug.In Colls (Ant. © Det. Poirs)

|  |  |  |  |
| :---: | :---: | :---: | :---: |
| K21267 | 3.54 | K21268 |  |
| K21269 | 14.-14.4 | K21270 | 21.21 |
| 21271 | 27.30. | K21272 | 50. |
| Your | st per |  |  | K21263-Less Tubes, Coils \& Pwr Supply. Wi. 7 lbs............ $\$ 38.95$ K21264-Kit, less cabinet \$26.95 K21266-Kit of 5 tubes......... $\$ 6.21$

## Model 907

## Keylng Monitor

small enough to take practically no room on the amoteur operat. ing desk audible. Basically a imple untuned receiver using a 12AT6 AF amplifiep pentode, a 12AT6 dlode detector, 5085 AF 12Alb olo detector, o 5085 AF
power ampllfier, a $35 W 4$ rectlifier. kower amplifier, a 35 signal rectifier. bullt-in loud speoker or head. phone lock. $105 / 125$ volt, 25/60 cycle AC operoted. Cobinet, panel insulated from the mains eircuif to ovold shock. Complate ess tubes, $10 \times 5 \times 51_{4}{ }^{\prime \prime} .7$ lbs. K21283-Your Cost Eoch....\$29.95 K21284-Same as above but in Kil form, less cabinel and fubes. Your Cost Each ......... $\$ 19.95$ K21285-Kif of Tubes Consisting of 2-12AT6, 1.5085, and 1.35W4. Your Cost

# fransmitfing equipment 

## SPECIFICATIDNS

Bands: 10, 11, 15, 20. 40, 80 Meters Output: 100 w CW, ICW, FM or AM. Method of Modulation: AM-high level $A B 2$; $F M$-reactance tube. Modulation Capabilities: AM $100 \%$ : FM-100\% (narrow or wide band, variable from 0 to $\pm 75 \mathrm{KC}$ ). Input Audio Source: High imped ance microphone. Level 60 DB down. Audio Response: AM-200. $6000 \mathrm{CPS} \pm 2 \mathrm{DB} ; \mathrm{FM}-100-7500 \mathrm{CPS}$士1DB.
Nolse. Below 100\% Modulation: $\mathrm{AM}-45 \mathrm{DB}: F \mathrm{M}-60 \mathrm{DB}( \pm 75 \mathrm{KC})$. Audio Distortion: AM-5\% at $85 \%$ mudio Distortion: AM- $5 \%$ at TUBECDMBLEMENT: 1.6 AC 7 re act mod., $1-6 \mathrm{~J} 5$ var. freq. oscillator. 1.6AC7 "A" amp. or crystal oscillator. $1-6 \mathrm{~L} 680 \mathrm{M}$ buffer or 40 M doubler or 30 M tripler, 3.6 L 6 20, 15 and 10 M doublert, 1-3D23 final amp., 2.807 "AB2" modulutore. 1.6 J 5 ' modulator driver, 1-6SJ7 speech ump. 2-866A hivoltage rectifiers, $1-5 R 4 \mathrm{~S} \mathbf{Y}$ low volt age rect.. $1-80$ speech rect., $1-6 \times 5$ GT bias rect., 1-VR150 voltage regulator, 1-6SN7 GI audio ascillator
CONTROLS: Oscillutor. final amplifier, oscillator selector and modulation selector dials: band selector, filument power, plate power and emission selector switches: mierophone gain and tor switchesi mi
METERS: PA plate, PA grid and Modulator plate current meters.



## SUPREME Amateur Transmitter Model AF-100

A 6-band, 100 watt ouxput desk type transmitter which embodies ALL features desired by most amateurs. Covers amateur bands most frequently used: $10,11,15,20,40$ and 80 meters for CW, ICW, AM and FM Phone transmission. Continuously tunable tho oughout entire range of each band. The first transmitter offered to amateurs which has the new feature of Frequency Modulation in the 27.185 to 27.445 and 29 to 29.7 megacycle bands. A highly stable variable oscillator followed by slug-tuned buffer and doubler stages which are ganged to the oscillator dial simplifies the problem of working through severe QRM and further enhances the pleasure of easily establishing and retaining QSOs. Band changing easily accomplished in exciter by plugging in a coil for the particular band selected. Operates on $110-117 \mathrm{~V} 50160$ cycle AC. This unit is simple to operate and is highly efficient on all bands for all zypes of emission. $29^{3} y^{\prime \prime} 111^{\prime \prime} \times 183 / /^{\prime \prime}$. Shpg. Wt. 2001 bs K21115-SUPREME Model AF-100.
$\$ 450.10$

## MECK 60-Watt <br> Transmitter

- Efficient on any amateur band 10 to 80 M -Phone or CW. - Combined plate and screen modulation.
- Band selection plug-in coils. 10 and 11 M bands supplied. - Antenna changeover relay. - Two 60 cycle power suoplies - Battery or vibropac operation. Simple operation-Vermatile.
TRANSMITTER CHARACTERISTICS: A 6L6G tube is used in a regenerative oscillator circuit which operates with the output at the crystal frequency on all bands except 10 meters. For operation on 10 meters the plate of the oscillator is tuned to the second harmonie of the crystal with ample driving power because of the regenerative oscillator circuit. Oscillator drives two 6L6G push-pull doublers in the final RF amplifier.
MODULATION: The microphone preumplifier consist of a single 6SN7 GT/G connected as a cascaded amplifier. This is followed by nother 6SNTGT/G which functions as a phase inverter. Two 6L6G's in push pull, operating as class AB amplifiers, are used as modulators. Any crystal or high impedance dynamic mike may be used grid or plate circuits for tuning; crystal socket on front panel fos rapid frequency changing send-receive switch with extra contacts on rear frequency chunging, send-recion.
TUBES F URNISHED: $1-6 \mathrm{~L} 6 \mathrm{G}$ oscillator (oscillator-doubler on 10 M ), 2-6L6G final amplifier doubler. 1-6SN7GT/G cascaded 2 -stage final 2-6L6G final amplifer doubler. phase inverter driver. 2.6 L 6 G push speech amplifier, 1-6SN7GT/G phase inverter driver. ${ }^{2-6 L 6 G}$ push
pull modulutor, $1-5 U 4 G$ final $R$ amplifier rectifier. $1-5 U 4 G$ modulapull modulator, $1-5 \mathrm{GG}$ hnal RF amplifier rectifier. 10 and 11 M coils supplied.
 Your Cost K21117-20 meter coil et K21118-40 meter coil set K21119-80 meter coil set

Your Cost
$\$ 5.80$ per set


## SONAR VFX-680

## Exciter

- Variable frequency erystal controlled or ECO oscillator -Works either break-in or CW operation on same frequency. operation on same frequency. operation
This exciter, which works as a variable frequency crystal oscillator or as a atraight electron coupled oscillator, drives any CW or phone transmitter on all amateur bands. To switch from VFO to erystal operation simply plug in the erystal. Voltage regulated oscillator operates on 160 meters; range is from 1565 kc to 2000 kc . With the 160 meter er ystal there is a 15 kc tumable variation on 160 meters, 30 kc on 80 , 60 kc on $40,120 \mathrm{kc}$ on $20,240 \mathrm{kc}$ on 10 and 480 kc on 6 (doubling). There is one monitor for CW and one for NFM phone. Provision for shift keying is self-contained. 4 to 6 watts on $6,10,11,15,20,40$ and 80 meter.
Tubes: 6AG7 VFX, VFO or erystal oscillator; 6SL7 audio amplifier: 6SL 7 FM modulator and FM monitor: 6AG 7 1st freq. multipliers: 6 L 6 2nd freq. mult.: VR150 voltage reg. for oscillator; 5 Y 3 power supply: $6 A F 6$ indicator for FM modulation or freq. mult. tuning. Handsomely finished in smooth grey. Panel or rack mounted. Panel is $5120^{219}$. Shpg. Wt. 30 lbs.
K 2120 SONARVFX. 680 , les
K21120 SONAR VFX-680, less crystal. Your Cost $\$$
87.45


## MEISSNER

## Signal Shifter

Exceptionally stable for 10 ,
$11,15,20,40,80 \mathrm{M}$ bands. -Provides 6 M operation and bandspread in 20 and 75 M
bands.

- Provision for use as excellent
crystal-controlled exciter. crystal-controlled exciter.
- Over 6 watts output-all bands.


## SALIENT FEATURES

- Single dial track tuning of exciter and buffer multiplier
- Fingertip control. Instant band or frequency selection. A flip of the dial selects AM phone, FM phone. CW or ICW.
- Screwdriver adjustment varies ICW modulating tone from 400 to 1000 cps. On FM deviation or swing can be adjusted from 0 to $\pm 75 \mathrm{KC}$.
- All essential circuits metered. Pilot Aights indicate operating conditiona. - Antenns change-over relay with extra contacts permits break-in operation to speed traffic.
- Standard mike connector and key jack for easy connections.
- An inter-lock protects operator against shock by cutting off power against shock by cutting
- Completely AC-operated from wall outlet. Nobatteries used for blasing.
- Uniquely constructed oscillator section. Oscillator unaffected by external load condltions.
- Perfect mechanical design. All components readily accessible.
- Professional looking cabinet
- Professional iooking cish.
- Transparent plastic call-letter nameplate free. We etch call letters.
- Economical: Uses only 325 watts.
- Complete: A key, a mike and two crystais get you on the air.
-Self-contained power supoly.
BANOSWITCHING: Accomplished by 6 -position shielded turret. Five coil atrips provide complete coverage of $10,11,15,20,40$ and 80 meter bands with $2 \%$ overlap at ends of each band. Blank position in coil turret allowi for 20 and 75 M bandspread or 6 M band coverage CRYSTAL CONTROL: Plug-jn of suitable crystal permits use of shifter as crystal-controlled exciter-a desirable feature for "net" operations. Crystal operation checked by tuning eye.
TUNING: Only 2 controls select any operating frequency; the band selector switch quickly moves coil strip into position, and is tuned by the precision vernier control which rotates the ganged condensers. Illuminated dials provide $0-500$ calibration in each band. Approx. dial settings in instruction manual. Free blank charts for calib.
KEYING: Two jacks for CW or phone. Shifter may be keyed in oscillator or*amplifier circuits. Tuning eye checks keying. Cathode current of 807 read by plugging a 0-100 MA meter into key jack.
POWER: Input-110V 60 cyc. AC. Output in excess of 6 watts TUBES: $6 \mathrm{~V} 6 \mathrm{GT} / \mathrm{G}$ oscillator-doubler, 807 amplifier-doubler, 2-5Y3 high voltage, OD3/VR150 osc.-voltage reg.. 6U5/6ज5 tuning eye. COUPLING: Output Impedance 300 ohms. Coupling possible into grid circuit of single-ended or push pull stuge of transmitter: into crystal stage with crystal removed; into plate tank of crystal oscillator with tube removed. Five versatile coupling methods completely describe in instruction manual provided with shifter. 30 lbs. K21108-MEISSNER Model 9-1090

SI20.01

## NATIONAL radio products

## Low and Medium Power Transmitting Condensers





## TMC Medium

 Power Units Type TMC is designed for use in the power stages of transmitters where peak voltages do not exceed 3000 V . The frame is ex. tremely rigid and panel or base mounting. Plates are aluminum with buffed edges. Flanged legs for base mounting. Isolantite insulation. $1 /{ }^{\prime \prime}$ shaft, $11 / /^{\prime \prime}$ long. . $077^{\circ}$ air gap. Model TMC-100Dhas split stator.

F|Pl
$\left|\begin{array}{c}\text { Length } \\ \hdashline 3^{\prime \prime} \\ 31^{\prime \prime} \\ 4 \%^{\prime \prime} \\ 6 K^{\prime \prime} \\ 63^{\prime \prime}\end{array}\right|$

| Each |
| :---: |
| $\$ 2.81$ |
| 3.20 |
| 3.67 |
| 4.63 |
| 5.27 |

## Chokes and Coils

## High Frequency Coils

Here are high frequency coils ama teurs need for work with the microwaves. These new high-Q unita have adjustable inductance and give fine performance as high frequeney oscillators, RF stages or frequency multipliers. A vaileble in 2 ranges or blank form if desired. TypoAR-2: Frequency range- 68 to 220 mepocycles. SI. 7 Type AR-5: Frequency range- 37 to 130 megacycles. $\$ 14407$ Your Cost $\mathbf{1} .46$ Type XR-50ur Co $K 14408$ Your cost

R. F. Chokes Wound in a con tinuous universal tinding on isolanme forms. Two
 R.300 (A) have and R-300S (B) are screw mounted in any position on the chassis. Each end of the $S$ series chokes is terminated at a cotter pin easily accessible for making soldered connec tions.
R-100, R-1005 Characteristics: Inductance
DC Resintance
Distributed Capacity K14429-R-100 Your Cost K1442-R-100S Your Cost For parallel or series feed in trans mitters with plate supply up to 3000 V . modulated or 4000 . un modulated. Reactance is high throughout 10 and 20 meter band as wends. Induc, 225 and 160 meter bonds. Induc. 225 microhenries dist. Cap. 0.6 mmf, DC res. 6 ohms, 12500 curr. 800 me ., breakdown a 12,500 volts. Your Cost
${ }^{5}$
2.09

## Vernier Dials



Type "B" Vernier Dial Has a compact variable ratio 6 to 1 minimum, 20 to bakelite case 4 . diemiack Fita $/{ }^{*}$ " haft. Illumineter. Fits K" shaft. Iluminetor K14367-200-0
K1436 0 100 acale, $360^{\circ}$ K1ur 0-100-0 scale, $180^{\circ}$ Your Cost,
K14352-Dial llluminator

## R-300, $\bar{R}-3005$ Characteristics:

Inductance
DC Resistance
Distributed Cepacity
Current Rating
K14422-R-300
Your Cost
K14423 R-300S
Your Cost
5 millihenries
50 ohms

## . : .

Your Cost


1 millihenry
10 ohms
1 mmf
.300 ma
35 c
36

## Plugs and Sockets



## UHF Midget Condensers




K 16412
Your $\cos$ at 0


\section*{Ultra Midget

## Condensers

}Designed for ultra high frequency use. Small pad. ding condensers with very low temp. coeff. particularly useful for mitters, exciters. Shaft extensions at each end of rotor permit easy ganging. Isolantite base 1 "x2"/."Axial length 2 /6". overall. Plates: $180^{\circ}$ rotation, straight line ca pacity.

| $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | $\begin{aligned} & \text { NC } \\ & \text { No. } \end{aligned}$ | MmF | No. of Plates | Air | $\begin{aligned} & \begin{array}{l} \text { Your } \\ \text { Coast } \end{array} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Max-Min |  |  |  |
| $K 14336$ | UM-15 |  |  |  |  |
| K11337 | UM-35 | $35 \quad 2.5$ | 12 | .017* | 1.06 |
| ${ }^{\mathrm{K}} 1414338$ | UM-75 | $\begin{array}{lll}30 & 3 \\ 75 \\ 75 & 3.5\end{array}$ | ${ }_{22}^{16}$ | ${ }^{.017 *}$ | 1.12 1.21 |
| K14319 | UM-100 | 100 10.5 | 28 | ${ }^{0.170}$ | 1.21 |
| K14340 | UMA-25 | 100 25 | 28 | ${ }_{\text {a }}^{.017{ }^{*}}$ | 1.34 1.28 |

## Neutralizing Condensers



NC- 800 Neutralizing Condenser A disc-type neutralizing Condenser suitable for RCA-800, 35 T, HK-54, cometer thimble for a micrometer thimble for superfine adjustment. a clamp to insure adjustment ata binty. Steatite insulation. Aluminum discs, ${ }^{\text {3-hole }}$ mounting bracket. Approximate capacity range: 1.5 mmf at $0.6^{\circ}$ air gap to 10 mmf at $0.07^{\prime \prime}$ air gap. Wt. ${ }_{k}^{1}{ }^{\text {lb }}$ Your cost
$\$ 1.92$ NC-75 Neutralizing

## Condenser

High voltage disc-type for 75T, 808, 811, 812. Steatite insulation. Aluminum discs. Micrometer screw adjust-
ment. 3 -hole mounting ment. 3 -hole mounting
bracket. Approz. cap. range: 2 mmff at 0.6

## Coupltes and Buthins

## Couplings and Bushings

## \$ $\mid$ RRigid Rhaft Couplings Rigid couplings, glazed isolan.

 K14501-TX-1, leakage path 1" $66^{c}$Y14502-TX-2, leakage path 2 Yi $^{\circ}$ $75^{\circ}$

## Shaft Couplings

TX-8-I solantite insulatio TX-8-Irolantite insulation. $1^{10}$ $K 8461$ Your Cost. TX-9 Steatite insulation. $18 / 6$ Kiam, Fits ${ }^{1 / 2}$ " ${ }^{\text {shaft }}$

## Flexible Shaft Couplings

 TX-11-Connects, hafts at angles up ${ }^{20} 90^{\circ}$. Fita $11^{\prime \prime}$ shaft. $\mathrm{X} .11,41 /{ }^{\prime \prime}$Your cose $\qquad$
TX-12, TX-13-Uses fiexible shafting like isolantite inulators at each end
K10530 TX-12, Length $44 \%^{\prime \prime}$
Your Cost
-13. Length $71 / 5$
$84^{c}$

Insulator Bushings
XS-6 Low-loss isolantite bush ins for $3 / 1 /$ " holes $^{2}$
$\mathrm{XP}^{2}-6$ Same as XS-6, but $\mathrm{Z}^{\text {c }}$
tron.
N14417-10 for
$51^{c}$

## HAMMARLUND precision products

## "TC" <br> Transmitting Condensers

Superior electrical mechanical design. Heavy aluminum end plates for maximum strength tied together with four "is" duralu minum pillars. Rotor and stator plates carefully buffed and pollshed. Rounded edges minimize flashover. Rotor plates carefully staked to non-magnetic shaft. All magnetic material kept out of direct field of condenser Special hand fitted full-foating bearings elim inate binding, twisting. Heavy silver plated beryllium wipers of sufticient area to eliminate contact losses. Contact direct to rotor shaft Stainless stel through rear plate for soldering. Stainless steel shaft. "diameter. Isolantic bushinge for $8-32$ screws and special-mounting feet packed with each condenser

|  |  | $\begin{gathered} \text { MMF } \\ \text { Max-Min } \end{gathered}$ | $\begin{aligned} & \text { Air } \\ & \text { Gap } \end{aligned}$ | $\begin{aligned} & \text { No. of } \\ & \text { Plates } \end{aligned}$ | $\begin{aligned} & \ln . \\ & \text { l.g. } \end{aligned}$ | it |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K8710 | T | 1032 |  | 25 | 6\% | 37.80 |
| K8711 | TC-50H | 5315 | .1710 | 11 | $3^{3} \times$ | 4.17 |
| K9043 | TC-110H | 11528.5 | .171" | 23 | 5 | 6.27 |
| K 8712 | TC-240] | 25031 | 100" | 33 | 53/6. | 7.11 |
|  | TC-220K | 22224.5 | .084" | 25 | 33. | 5.5 |
| K9034 | TC-401 | 46532.5 | . 07 | 43 |  | 6.36 |

## "TCD" <br> Split-Stator Xmitting <br> Condensers

Dual units with same quality and features as TC" single transmitting condensera. Although TCD: have wide plate spacing and high capacities, their aire is stil within baign of and are therefore excellent
modern, compact upparatus.

 K8714 TCD-110H $115 \quad 29$.171" 23 104, 311.16 | K 8715 | TCD $-240 J$ | 250 | 32 | $100^{*}$ | 23 | $10^{3}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| K | 1316 | 13.26 |  |  |  |  |




Transmitting Condensers
"HFA" Midget Condensers For transmitting and receiving. All parts cadmium plated brass, soldered in compact. rugred unit. The HFA
 is single unit having isolantite end plate. $100 \%$ soldered construction eliminates danger of losses due to high resistance contacts. Shafts are 1 " diam. Plates semicircular. "is" shaft, ${ }^{11} \mathrm{c}^{*} \times 1^{11} \mathrm{c}^{\prime \prime}$ isolantite end panel.
 K $7233 \overline{H F A}-100 \mathrm{~A} 102 \quad 4.5$.020 K7234, HFA-140A 145 K 7235 HFA-108 K8727 HFA-100B100

## "HFAD" Split-Stator Midget

 A dual unit with same compact, rugged fea tures as HFA midgets. Similar dual conatruc tion as HFBD's below but with smaller plate and uninsulated control shaft. Ideal for port able transmitters and receivera $12 / 7$ sqfront and rear isolantite panela. Capacity: 25 inmf max. 6.3 mmf min . Air gap $030^{\circ}$ 7 plates/section. $1^{29} z^{\prime \prime}$ Ig. with " shaft ext Single hole mtg.
$\times 8728$-Code HFAD-25B
s2.70

| "HFBD" Split <br> Stators <br> Insulated control shafts for hi-voltage connections. $1 / 4 "$ shaft ext.. $1^{13} \mathrm{ks}$ sq isolantite end plates. Supplied with base mounting brackets. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
|  |  |  |  | Air |  |  |  |
|  |  |  |  |  |  |  |  |
|  | N |  |  |  |  |  |  |












## "MCX" Double-Spaced Condensers

 Same features as MC type. .0715" air gap. 1750 V 60 cyc. RMS breakdown. K8468* MC-20: $\mathrm{K} 523^{\circ}$K
$\mathrm{MC} 55^{\circ}$

| K8502* | MC-100sX | 100 | 18.5 | 35 | $33^{23}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| Spl | MCD" it-Stator ndensers |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| These | duals have | ow | 1111 |  |  |
| loss and structio | careful | on- |  |  |  |
| base an | d shield pla | te betw | en st | ors. | 1000 |
| V. 60 c | c. RMS bre | cakdown | . 0245 |  |  |
| stoek | Conle | MMF | Platex |  | Your Cast |
|  |  |  |  |  |  |
| K8542† | MC'D-1005 | 1003 |  |  | \$3.48 |
| K8519* | MC'D-140M | $140 \quad 78$ | 19 |  | 3.75 |
|  | MCDX" | Doub | -Spa | ced |  |
|  |  | Sta |  |  |  |
| 750 V | 60 cye. R | MS bkdn. |  |  |  |
| K8528 | (M1) 1 -3isi | :31 li.s. | 11 |  | 153.33 |
| Ilatex: | mistline, - | mu-circula |  |  |  |

Flexible Couplings A sturdy coupling which compensates for slight shaft misalignment but still does not al. low backlash or play to result hubs are peened to apring-tem
 pered phosphor bronze flexible arms. All metal parts except set screws are nickel plated. Ceramic insulation on FC.46-S. Stock No. Mrf-Code Type $\mathrm{K8495}$
K 8493

| Neutralizing Condensers voltage neutralizing coners. Thick aluminum Smooth micrpmeter adnent. Lock nut permits anent setting. A stop pre- <br> shorting. Isolantite insulation. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SToek No. | $\begin{aligned} & \text { Code } \\ & \text { No. } \end{aligned}$ | $\begin{aligned} & \text { MNF } \\ & \text { Max-Min } \end{aligned}$ | Air | Peak Volts | Plate | Your Cost |
| K8731 <br> K8732 | $\mathrm{N}-10$ X 20 | $\begin{array}{ll}10 & 2.3 \\ 1+\quad 3.8\end{array}$ | 11.2 | 3000 7500 | $!$ | \$3.21 |

## Hi-Impedance Chokes

Very large inductance, very low distributed capacity. very effective in broadcant, $S W$ receivers. Curr. eapacity 60 ma . Bakelite case $1^{13}{ }^{19}$ "high $\times 1^{8} \mathrm{~m}^{\prime \prime}$ dia

| stiek <br> No. | $\begin{aligned} & \text { Conde } \\ & \text { No. } \end{aligned}$ | Ind. mh | $\begin{aligned} & \text { DC } \\ & \text { Res. } \end{aligned}$ | $\begin{gathered} \text { Dist. } \\ \text { C-mmf } \end{gathered}$ | Your Cost |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $K 8525$ $K 8526$ | RFC-85 | 85 250 | 215 ohms 420 ohma | 3 | ${ }_{52.25}^{2.64}$ |
| K8526 | 18FC-250 | 250 | 420 ohris |  |  |

## Condensers

 plates Smooth micrometer ad. permanent aettin a pormit vents shorting. Isolantite insulation$\qquad$


K8526

## "MTC" Transmitting Condensers

Small size, light weight for use in airplane and other mobile or portable units. Wide range

of capacities and plate spacings. Rotor plates wedged into deep slots. Stainless ateel shaft carefully fitted to a long front bearing mount ed on beryllium cushion disc. Rear bearing of steel bell and cup type. Isolantite insulation and silver-plated beryllium contact wiper assure lowest loss.

| Stock | Code | MMF | Air | Xo. of | In. | Your |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | No. | Max-Min | Gap | Plates | l. | Cost | | K87191 MTC-20B | 22 | 7 | $.070^{*}$ | 5 | $17 /$ | $\$ 2.85$ |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| K8720 MTC-100B | 100 | 15 | $.070^{\prime \prime}$ | 21 | $27 / 4$ | 3.69 | $\begin{array}{llllllll}\text { K8720 MTC-1008 } & 100 & 15 & .070 & 21 & 2 \% & 3.69 \\ \text { K8721 MTC-150B } & 150 & 19.5 & .070^{*} & 31 & 3^{\%} \% & 4.26 \\ \text { K8722 MTC-250C } & 255 & 13.5 & .031 & 25 & 2^{3} & 3.69 \\ \text { K }\end{array}$ K8723 MTC 350 C 360

## "MTCD" <br> Split-Stator Xmitting Condensers

Dual units with same construction features
as MTC singles aperating advantages as for TCD ty pe same opers. Unusually compact and light. condensers. Unasually for portable transmitters, Overspaced plate securely held in place.

| Stock No. | Code No. | $\frac{\overline{\text { MMF }}}{\text { Max-Min }}$ |  | $\underset{\text { Gap }}{\text { Air }}$ | Plates /Sec. | In. La. | Your Cant |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| K8724 | MTCD-20B | 22 | 6.5 | .070" | 5 | 2? ${ }^{\text {2 }}$ | \$3.30 |
| K8725 | MTCD-35B | 33 | 7.5 | . $070^{*}$ | 7 | 27 \% | 4.17 |
| K8726 MTCD-100B |  | 100 | 14.5 | .070 | 21 | 5 | 609 |
| Note: Letters following code numbers indicate peak voltages es follows: <br> A- 800 V C- 1500 V G- 6750 V J- 4250 V L. 2000 V B- 1200 V E- 3000 V H- 6000 V K -3750 V M- 1000 V |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

# MILLEN radio products 

Frequency Shifter


A good variable electron-coupled oscillator at a low price. Buil to meet the following exacting requirements:
Low Onif -Less than $0.06 \%$ from a - VIBRATION IMMUNE Sht 10 minutes.
oscillator section: sturdy construction

NO MAND CAPACITY
CHIRANLESS KEYING
GOOD power supply
sions from 3500 to 3650 dilo dial divi sions from 3500 to 3650 kilocycles. Has - COMPLETE Verniter tuning
ply, three tubes, outpur coupline supply, three tubes, output coupling units. Easy-to-change taps on amplifier and link coils provide for output on 80 or 40 meters Shipping weight 12 lbs ,
K8001-Millen 90700 incl. tubes Your
Cost

s 42.50
Tunable Coll Form Permeability tuned, shielded plug-in coil form. Stendard octal base of low loss mica-filled bakelite. Polystyrene
$1 / 2^{\circ}$ dia, coil form.


A flexible unit ideal for either low power ama teur bend transmitter use or as an exciter for high power PA stages. A tri-tet circuit, which is used to obtain harmonic output, is reduced to the simple tetrode circuit for oscillator out put at the crystal fundamental by short circuiting the cathode tank circuit. Sufficient oscillator output at the fourth harmonic o the crystal frequency is obtainable to drive
the 807 , which may be operated as the 807, which may be operated as either a straight amplifier or frequency doubler, mak
ing it possible to obtain an output of 25 to 50 ing it possible to obrain an output of 25 to 50
watts or more in four bands from a single cryatal of properly-chosen frequency. The entire unit is designed to oper ate from a single $250-\mathrm{ma}$. supply delivering up to 750 volts, the maximum voltage at which the 807 is designed to operate. A fixed bias of 45 volts is required for the 807 and the two heaters together consume 1.8 amperes at 6.3 volts. A single milliameter with a scale of 200 ma . may be switched to read the plate current of either stage. Shpg. we. 151 bs ?
K8014-Millen $\$ 90800$, less tubes
Cost
$\$ 37.50$


The basie type $2^{\text {" }}$ oscilloscope is complete with power supply, focusing and centering controls and 60 cycle sweep, for use in normal form for transmitter monitoring or as basic unit for addition of specially designed external sweeps, amplifiers. etc. Shpg. wt. 20 lbs. K8043-Millen 90902 , less tube Your
Cost
s 42.50

## Panel-Dial

Attractive
combination panel. slide. rule dial. Holes readily drilled to add 2 small controls, as controls, as
shown. Escutcheon removes without dis. turbing dial mechanism, for scale calibra.
tio 8:1. Escutcheon size $81 / /^{\prime \prime} \times 61 / 6$ K8048 Cost
 $1 / 2$

Heavy slum. shield. Iron tuning slug suitable for use up to 35 mc . Adjusting screw protrudes thru center hole of socket. Special extension terminals aid connections to base pins.
K 8002 - You
s 1.85

## Crystal Sockets



Ceramic Plate Caps Steatite insulation. Spring con nectors retain continuous high heat encountered in operation. Soldering lug and contact one-piece. Lug lug and nealed and solder dipped to facili tate easy combination "mechanical plus soldered" connection of cable
No.
Millen
Size Each

$21^{\circ}$

## Right Angle Drive

 may be mounted on stator: RF choke on pressed Rounded polished heavy gauge aluminum plates. Heavy Dressed aluminum mounting frame is employed in place of casting condensers are essentially rotor shaft. The series 14000 transmitting except the rotor plate diameter is 316 general design as the 13000 except the rotor plate diameter is $315^{\circ \prime}$ instead of $2^{\circ}$. For single of center feed and connect sections in parallel to obtain advantage of center feed and elimination of shorted frame loops.| Stock No. | Millen No. | $\underset{M}{M}$ | /Side Min. | Plates <br> /Side | Depth Bhd. Panel | $\begin{aligned} & \text { Air } \\ & \text { Gap } \end{aligned}$ | Peak Volts | $\begin{aligned} & \text { Your } \\ & \text { Cose } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $K 8028$ | 13035 | 34. | 5.3 | 9 |  | . $077^{\prime \prime}$ | 3000 | \$4.56 |
| K8029 | 13050 | 45.2 | 6.2 | 12 |  | . $077 \times$ | 3000 | 5.20 |
| $\times 8030$ | 13070 | 66 | 7.4 | 17 | $51 /{ }^{\prime \prime}$ | .077* | 3000 | 5.88 |
| $\times 8032$ | 14.00 | 85 | 12.8 | 15 | $113{ }^{\circ}$ | .171" | 6000 | 12.00 |
| $\times 8033$ | 14050 | 48 | 9.3 |  | 6 | .171" | 6000 | 7.20 |
| K8015 | 14060 | 59 | 13 | 15 | 111/2" | . $265^{\prime \prime}$ | 9000 | 12.00 |



## Transmitting Condensers

New and different dual variable condenserspermitting more efficient use of newer tubes more compact and symmetrical clrcuit ar rangements and consequent better neutral ization. Center fed rotors for better high fre quency current distribution. Isolentite insuIntion. "Designed for Application" hols in convenient placep:inductane termi


Nickel silver instrument dials. Type 100007: 1 \%" diam. 10 div. isions over 180 or $280^{\circ}$, specify which. For CW or CCW rotation Type 10009: $21 /{ }^{1}$ " diam, 0.100 Type 10008: 3 ". diam. O-100
No. Millen No. Fig. Each

K8003 $\begin{array}{cccr}\text { K8003 } & \text { Millen NO. Fig. } & 10007 & \text { Esch } \\ \times 8005 & 10009 & \text { B } & 50.60 \\ \times 8004 & 10008 & \text { C } & 1.85\end{array}$ | K8005 | 10009 | B | $\mathbf{8 5}$ |
| :--- | :--- | :--- | :--- |
| $\times 8004$ | 10008 | $\mathbf{C}$ | $\mathbf{1 . 0 0}$ |



An extremely compact right angle drive unit. The case size is only $1 h_{2}{ }^{\prime \prime} \times 1 y_{1}$ "x ${ }^{3}, 4$ ". Uses bevel gears. Mounts on adjustable "standoff rods," single hole panel bushing or tapped holes in frame. Ideal for operating switches, potentiometers, etc., that must be located, for short leads, in remote parts of chassis. Millen No. 10012.
K8016
Your Cost
53.75


Used where tighter than normal grip with multiple finger $360^{\circ}$ low resistance con tact is required. Contact self lock ing when cap is pressed into posi tion. Insul. snap button at top No Millen Size Each ${ }_{K 8013}$ 36011
36012 60 c
50 c

## Aluminum Shields

The aluminum shieid cans are available in Variety of sizes and shapes, as illustrated and listed. Millen Nos. 80001 and 2 (Fig. A \& B) form a combination of die-cast aluminum base, extruded cover. Of particular interest to the amateur transmitter constructor is the Millen 80009 mounting shelf, shield, tube socket (Fig. G) for use with 807 s . This is same
unit used in Millen 90800 transmitter above. Stock Millen Fig. $\begin{gathered}\text { Description } \\ \text { No. } \\ \text { No. }\end{gathered}$
(Sizes in Inches)

| K8017 | 80001 |
| :--- | :--- |
| K8018 |  |
| K80002 |  |
| K8029 | 80003 |
| K802 | 80004 |
| K821 | 80005 |
| K8024 | 80006 |
| K8044 | 80007 |
| K8042 | 80008 |
|  |  |

Cover $2 \times 2 y \times 31 / 4$ Base only Square only
 Square $2 x 43 / 1$ Square $2 \times 4$ 友
Round 21 Round $21_{n \times 2} \times 2$ Round $21^{2} \times 2 x / 2 x$
Assembly for 807

Your
Cost
$\$ 0.25$
0.25



Dial Lock
Compact, does not al ter dial setting in operation. Rotation of "A"depresses "B" 8. "C" without im parting rotation to dial. Single hole mounted.
Kour Cost
$45^{\circ}$
Safety Terminal, Combinetion high voltage terminal and thru. bushing. Tapered contact pin fita firmly into conical socket pro viding large area, low resistance connection. Pin is swivel mounted in cap to prevent twisting of lead Wire. Millen Color Each

No. | K8054 | (A) 37001 | Bluck |
| :--- | :--- | :--- |
| K8054 | (B) 37001 | Red |



## B\&W Type B Inductors

Rugged. efficient coils for use in buffer and inal amplifier stages where input power does not exced erceed 1500 volta. steatite base and plug-in jack mounting give maxmum emiciency and lealbility. Supplied in three types. End ink, center link and variable link. The vari able link is unusually cood for atages where variable loading is desirable and may be adjusted for matching impedsnces of 72 ohms. With thit arrangement, coupling can be adjusted from the panel for best resulta The variable link is part of the jack assem bly and adjustment for optimum coupling cen be quiekly made when tuning up on a new be quickly made when inductors furnished less jack bar assembly. Dimenions of inductors vary from $3 / 2 \pi 3,42$ to $3,2 \times 41 / 6 \times 211 / 4$ Type EL-End LInk Models-Without Tap


Jack Bar and Swinging Link Assemblies BAW No. 3721 -For
BaW No. 3722 -For Variable Link Model K10343-Your Cost

B\&W Banana Plugs and Jacks
Sturdily constructed of nickel plated brass. Nickel silyer aprings used for positive coatact Plug thaft extend the entire length of the epringe for added support. Two sizes available: all B\&W inductors except the HD series use smaller size.
No. B\&W No.
Description


K10344 3908 Sinall banane plug with mounting screw
$K 1034539093909$ Jack for 3908 plug with mounting
K10346 3910 Larte banana plug with mounting screw
K10347 3911 Jeck for 3910 plug with mounting screw
B\&WCeramic Plug and Jack Bars Steatite. Fine antenna feeder spreaders. K10348 3914 Plug 31/2x $1 / 2 \times 2 / 4$ B series K10349 3915 Jack 142x \% $\times$ \%/4 coils K10350 3916 Plug $51 / 81 / 2 \times 2 / 6$ T seri K10351 3017 Jack 7 x / $1 / 6$ coils

 Your

SperL-Center Link, CT \begin{tabular}{|l|l|l|l|l|}
\hline Stock \& Bd, <br>
No. \& No. \& Band \& $\begin{array}{l}\text { C to res. } \\
\text { LF end }\end{array}$ \& $\begin{array}{l}\text { Your } \\
\text { Coat }\end{array}$ <br>
\hline

 $\overline{\mathrm{K} 10354} \overline{3308} \overline{10 \mathrm{M}} \overline{19 \mathrm{mml}} \overline{\$ 2.89}$ 

\hline$K 10154$ \& 3308 \& 10 M \& 19 mmf \& 82.69 <br>
K 10355 \& 3309 \& 15 Mi \& 21 mmf \& 2.96 <br>
\hline

 

K10156 \& 3310 \& 20 M \& 21 mmf \& 2.96 <br>
$\mathbf{K} 10357$ \& 3311 \& 40 M \& 34 mmf \& 3.30 <br>
\hline

 

K10433 \& 3317 \& 20 M \& 22 mmg \& 2.28 <br>
K 10432 \& 3318 \& 40 M \& 29 mm \& 2.61
\end{tabular}

 Astual condenser capacity will be smaller by the sum of the tube enerally bet. 5 \& 20 mmf
teatite Jack Bar and Swinging Link Assemblies
B\&W No. 3321 - For center link type inductors.
K10322-Your Cost
B8W No

## $K 10395$

55.50

Note: Type TCL coile have link, center tap and five plugs.


Highly efficient miniature coils. Ertremely low losses. A vailable in sizes from $1 \mathrm{~h}^{\prime \prime}$ to $1^{\prime \prime}$ diameter. Especially useful in high-frequency circuits. Supplied in standard $2^{\prime \prime}$ lengths which may be readily cut to size. Each diameter is available in four different pitches. The $Q$ cheracteristic of Miniductors is amazingly high due to the aimost total absence of insulating material. Thus Miniductors prove useful as tank circuit coils, R-F chokes, high-frequency I-F transformers, loading coils and a host of other special ized applications.

| $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | $\begin{aligned} & \text { BdW } \\ & \text { No. } \end{aligned}$ | Diam. (ia.) | Turns per in. | Each |
| :---: | :---: | :---: | :---: | :---: |
| K10360 | 3001 |  | 4 | $3 I$ |
| K10361 | 3002 |  | 8 |  |
| K10362 | 3003 | 3/2 | 16 |  |
| K10363 | 3004 |  | 32 |  |
| K10364 | $\left.\left.\begin{array}{l} 3005 \\ 3008 \\ 3007 \\ 3008 \end{array} \right\rvert\,\right\} \$$ |  | 481632 |  |
| K10365 |  |  |  |  |
| K10366 |  |  |  |  |
| K10367 |  |  |  |  |
| K10368 | $\left.\left.\begin{array}{l} 3009 \\ 3010 \\ 3011 \\ 3012 \end{array} \right\rvert\,\right\} 3 / 6$ |  | 1 |  |
| K 10369 |  |  | 18 |  |
| K10370 |  |  | 18 |  |
| K10371 |  |  | 32 |  |
| K10372 | $\left.\left.\begin{array}{l} 3013 \\ 3014 \\ 3015 \\ 3016 \end{array} \right\rvert\,\right\}$ |  | 4 |  |
| K10391 |  |  | 16 |  |
| $K 10392$ |  |  | 16 |  |
| K10393 |  |  |  |  |

## B\&W Junior Inductors



Fitted with a standard five-promg steatite base. Unusually rugged, and efficient in operation. Used in oscillator, buffer or final amplifier stage with input powers up to 75 watts and plate voltages up to 850. In three models with end link. center link or variable center link. Any of these coils may be used in eapacity-coupled circuits by omitting connection to the links. $\qquad$
$\qquad$ Ctores. Yous Type JEL-End Linked Models

 \begin{tabular}{l|l|l|l|l}
K 10390 \& 3101 \& 10 M \& 22 mmf \& 1.38 <br>
K 10401 \& 3102 \& 15 M \& 22 mmf \& 1.38

 

K10401 \& 3102 \& 15 M \& 22 mmf \& 1.38 <br>
K 10402 \& 3103 \& 20 M \& 34 mmi \& 1.33

 

K 10402 \& 3104 \& 40 M \& 47 mmi \& 1.38 <br>
K 10403 \& 3105 \& 80 M \& 60 mmf \& 138

 

K 10404 \& 3105 \& 80 M \& 60 mmI \& 1.38 <br>
\hline Type JCL Center Linked

 

Models <br>
K10405 \& 3107 \& B \& M \& 15 mmf <br>
K 10406 \& 3108 \& 10 M \& 16 mmf \& 1.38 <br>
K 1048

 

K 10406 \& 3108 \& 10 M \& 16 mmf \& 1.38 <br>
K 10407 \& 3109 \& 15 M \& 16 mmf \& 1.38 <br>
K 1040 \& 3110 \& 20 M \& 16 m \& 1.38

 

K 10407 \& 3109 \& 15 M \& 16 mmf \& 1.39 <br>
K 10409 \& 3110 \& 20 M \& 16 mmf \& 1.38 <br>
K 10409 \& 3111 \& 40 M \& 33 mmf \& 1.38

 

K10409 \& 3111 \& 40 M \& 33 mmf \& 1.38 <br>
K10410 \& 3112 \& 80 M \& 33 mmf \& 1.38 <br>
\hline
\end{tabular}

 \begin{tabular}{l|l|l|l|l}
K 10412 \& 3115 \& 10 M \& 22 mmf \& 1.38 <br>
K 10413 \& 3116 \& 15 M \& 27 mmf \& 1.38

 

K 10413 \& 3116 \& 15 M \& 27 mmf \& 1.38 <br>
K 10430 \& 3117 \& 20 M \& 21 mmf \& 1.38

 

K 10430 \& 3118 \& 40 M \& 31 mmf \& 1.38 <br>
K 10435 \& 318 \& 3119 \& 80 M \& 46 mmf <br>
K 10436 \& 1.33
\end{tabular} - Actualconderser capacity will be smaller by the sum of the tube output and wiring espacities, senerally between 5

and 20 mmf .

## B\&W "Band Hoppers"

 Using the same coil design as B\&,W Juniors, model 2A "Band Hopper" provides - panel controlled unit of unusual comactness. It may be used for interstage coupling between two beam power tubes or between beam power tubes and triodes. By means of a special tapping arrangement, this unit covers the $80,40,20,15$ and 10 meter bands. A tuning capacitor of 50 minf, capacity is recommended for use with the type 2A "Band Hopper. K10312-B\&W No. 3121. Band Hopper Type 2A $\$ 4$. Your Cost
## BUD transmitting components



Thin type of condenser is particuarly suited in circuits utilizing cubes with the grid lead terminat Threaded brass rod holding the condenser in place bringe the con nection to the bottom plute thru
the chassis, shorting and simplify ing whiring.
Stock Plate Mmid. Mig.titpe Your





Ceramic rod single layer with strap leads. For use on 2 K or 5 meters. | Slock | In- | duct | Max. | $\begin{array}{l}\text { D.C. } \\ \text { Rexis. }\end{array}$ | $\begin{array}{l}\text { Your } \\ \text { No. }\end{array}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ance |  |  |  |  |  | K10103 5.7 uh. $750 \mathrm{ma}, 1.4$ 14/2 21 K10112 15 ub. $1.7 \mathrm{a} \cdot \quad 0.2 \quad 2 \AA^{N} \quad .85$

X'mitting Chokes


## X'mitting Chokes

 For use in high-power transmitter plate cir-cuits. On ,
rod, connection lugs and meg. foot. Coating prevents. moot. Coating prevents Used on $10,20,40,80$, Used on $10,20,40,80$,
and 160 imeter bands. Distributed capacity at minimum.

| Stock | In |  | D.C |  |
| :---: | :---: | :---: | :---: | :---: |
|  | duct- | Current | Resis. |  |
|  | a nee | Cap. | Ohms |  |


$\times 10115$ 4.3 mh 600 mp .

BUD Master X'mitting Condensers, Single Section


Condenser is in rigid, sturdy frame of two end-plates which are made from 1 " sluminum and tied together with $45^{15}{ }^{\prime \prime}$ diameter tie-rods. The end-plates have angles on top and bottom to facilitate mounting and to enable the assceiated inductance to be attached directly to the condenser. The roters and stators made from $0.051^{\prime \prime}$ sluminum. Rotor shaft is 1/4" diam

| Stock No. | $\underset{\operatorname{Max}}{\mathrm{M}}$ | fd. Min | No. of Plates | $\begin{gathered} \text { Alr } \\ \mathrm{G}_{\mathrm{ap}} \end{gathered}$ | Length Overall | Shipping Wt. | $\begin{aligned} & \text { Your } \\ & \text { Cost } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K9504 | 55 | 8 | 7 | .100" | 437 \% ${ }^{\text {a }}$ | 5 lbs . | \$5.73 |
| K9505 | 70 | 9 | 9 | $.100 "$ | $51 \%$ | 5 lbs . | 6.17 |
| K9506 | 100 | 13 | 13 | . 100 " | 53* | 5 lbs. | 6.47 |
| K9507 | 150 | 17 | 17 | . 100 " | $6{ }^{11}=$ | 6 lbs . | 6.79 |
| K9508 | 35 | 11 | 7 | 200 " | $5{ }^{5} 1{ }^{10}$ | 5 ibs . | 6.17 |
| K9509 | 50 | 13 | 11 | 200 " | 67 你 | 6 lbs . | 6.53 |
| K9510 | 75 | 16 | 15 | .200" | $7^{7} 10^{\prime \prime}$ | 6 lbs . | 7.06 |
| K9520 | 100 | 20 | 21 | .200" | $88^{13^{16}}$ | 6 lbs . | 7.50 |
| $K 9521$ | 145 | 35 | 29 | . 200 " | $10^{15}{ }^{110} 1$ | 7 lbs . | 8.97 |
| K9522 | 35 | 14 | 9 | . 300 " | $63^{3 / 5}$ | 6 lbs . | 6.67 |
| K9523 | 55 | 18 | 15 | .300" | $8^{7}{ }^{\text {min }}$ | 7 lbs . | 7.79 |
| K9524 | 75 | 21 | 21 | 300" | $10^{15}{ }^{10}{ }^{\prime \prime}$ | 7 ibs. | 8.94 |
| K9525 | 100 | 28 | 29 | . 300 " | $13 \frac{1}{}$ | 8 lbs | 9.70 |
| K9526 | 50 | 22 | 15 | . 375 " | 97 | 7 lba | 8.17 |
| K9527 | 75 | 28 | 25 | . $375{ }^{\circ}$ | 141. | 8 lbs . | 10.29 |

BUD Master X'mitting Condensers, Dual Section


Offers the last word in variable air capacitors for high and ultra-high freq. applications. Tie-rods insulated by glazed Steatite pillara eliminating all closed metallic loops in frame. Specia: feature is placing positive double wiping silver plated retor contact between the two sections at center of roter. These eliminate majcrity of difficultics due to parasitics, circulating currente, neutralization.and permitsperfectcircuit balance.


| K9528 | 25 | 9 | 5 | 200 |  | 7 lbs | \$12.05 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K9529 | 35 | 12 | 7 | 200 " | 91 | 7 lbs . | 13.23 |
| K9530 | 50 | 13 | 11 | .200* | $111{ }^{\prime \prime}$ | 7 lbs . | 13.73 |
| K9531 | 75 | 16 | 15 | 200 " | 1316 | 8 lbs | 15.58 |
| K9532 | 100 | 20 | 21 | . 200 * | $11^{1}{ }^{\prime \prime}$ | 9 lbs. | 17.05 |
| K9533 | 50 | 15 | 13 | 300 " | $14^{7}{ }^{\text {¹/ }}$ | 8 lbs . | 14.41 |

BUD Tiny MIte Tuning Condensers, Single Section


For applications where space weight are limiting factors. for tuning of UHF circuits. Rigid construction, close fitting bearink, positive rotor contact, and insuation are features. Unit may be mounted way without additional hardware. (1) single hole panel, (2) insulated panel. and (3) insulated base mount

| Stock No. | Max. | $\mathrm{d}_{\mathrm{Min}}$ | No. of Plates | $\mathrm{Gir}$ | Shipping Weight | $\begin{aligned} & \text { Your } \\ & \text { Cost } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K9537 | 8 | 2.5 | 3 | .017" | 2 lbs. | \$0.79 |
| K9539 | 15 | 3 | 5 | . $017{ }^{\prime \prime}$ | 2 lbs . | . 91 |
| K9540 | 25 | 4 | 9 | . $017{ }^{\prime \prime}$ | 2 lbs . | . 97 |
| K9541 | 35 | 5 | 13 | . 0170 | 2 lbs | 1.03 |
| K9542 | 50 | 6 | 19 | . $017{ }^{\prime \prime}$ | 2 lbs . | 1.09 |
| K9544 | 75 | 7 | 29 | . $017{ }^{\prime \prime}$ | 2 lbs. | 1.29 |
| K9543 | 100 | 9 | 37 | . $017{ }^{\circ}$ | 2 lbs . | 1.35 |
| K9545 | 10 | 4 | 7 | .037" | 2 lbs . | 2.00 |
| K9546 | 15 | 5 | 11 | .037" | 2 lbs . | 2.09 |
| K9547 | 25 | 5.5 | 17 | .037" | 2 lbs. | 1.29 |
| K9548 | 35 |  | 21 | .037" | 2 lbs . | 1.41 |
| K9550* | 50 | 8 | 35 | .037* | 3 lbs . | 1.82 |
| K9552 | 6 | 3.5 | 5 | .073" | 2 lbs | 1.06 |
| K9552 | 15 | 5.5 | 15 | . 073 " | 2 lbs . | 1.29 |
| K9553* | 25 | 9 | 27 | . 073 " | 3 lbs . | 1.76 |



BUD Tiny Mite Dual Condensers
End pieces are held together firmly with two tie-rods. Round plate soldered on rotor rod to shield stator sections. Large surface front sleeve bearing, ball and cup rear bearing proboth rotation

| Stock No. | Mmfd. |  | Plates per Section | $\begin{aligned} & \text { Air } \\ & \text { Gip }^{2} \end{aligned}$ | Length Overall | Shipping Weight | $\begin{aligned} & \text { Your } \\ & \text { Cost } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K9511 | 8 | 2.5 | 3 | .017" |  |  |  |
| K9512 | 15 | 3 | 5 | .017" | $21.16^{\circ}$ | 2 lbs. | 1.85 2.03 |
| K9513 | 25 | 4 | 9 | . $017^{\prime \prime}$ | 2118 | 3 lbs . | 2.23 |
| K 9514 | 50 | 6 | 19 | . $017{ }^{*}$ | $3{ }^{1}$ | 3 lbs . | 2.32 |
| K9525 | 100 | 9 | 37 | .017" | 41 | 4 lbs . | 2.64 |
| K9516 | 10 | 4 | 7 | .037** | $2^{15}{ }^{10}$ | 3 lbs . | 1.94 |
| $\begin{aligned} & K 9517 \\ & K 9518 \end{aligned}$ | 15 | 5 | 11 | .037" | $2^{13}$ ¢" | 3 lbs . | 2.15 |
| $K 9518$ $\mathbf{K} 9519$ | 25 35 | 5.5 | 17 | .037** | $3{ }^{\text {\% }}$ | 4 lbs | 2.29 |
| K9519 | 35 | 6 | 21 | . $037{ }^{\circ}$ |  | 41 lbs . | 2.4 |

## BUD Jr. X'mitting

 CondensersExcellently suited for low and medium power tranamitters. panel space of $3 \times 2 \mathrm{~T} / \mathrm{a}^{\prime \prime}$. Rigid and perfectly spaced. Alsimag stator insulation. Brass rotor and stator plates, cadmium plated. Panel miates, cadmiurm plated. Panel mitg.
Stock Max Air Rear Your
No. Mmfd. Gap L'th. Cost









## Compact Neutralizing

## Condensers

Where space is prime factor. Low loss Steatite used Mounted either by one hole or frsten provided. Brass ing to solder lugs plated. Locknut permits locking of movable plate

| Stock No. | Mmid. | Overall Length | Shpg. Wt. | $0$ |
| :---: | :---: | :---: | :---: | :---: |
| K9534 | . 35 to 4 | $2{ }^{18}$ | 2 l l s. | \$0.56 |
| $K 9335$ | 1208 | $2{ }^{\text {\% }}$ " | 2 lbs . | 1.18 |
| K9536 | 2 10 12 | $3^{3}{ }^{\circ \prime \prime}$ | 31 bs . | 1.56 |

Double-SpacedX'mitting
 Midgets Hard drawn brass plates and rods elec tro-soldered und plated. Alsimag um insulation. Double spring rotor contacts. Wide plate spacing. Double bearings on single and 2 gang units

| O. | M | Gap | Plates | Each |
| :---: | :---: | :---: | :---: | :---: |
| K10827 | ${ }^{3} 15$ | . $060{ }^{\prime \prime}$ | 5 | \$1.44 |
| K 10828 | 7.35 | . $060{ }^{\prime \prime}$ | 11 | 1.68 |
| K10829 | 8-50 | . 080 " | 13 | 1.79 |
| K10330 | 10-75 | . 080 " | 23 | 2.21 |
| K10831 | 13-100 | . 080 " | , | 2.2 |

## 2-Gang Double-Spaced X'mitting Midgets

Heavy ceramic base permita mounting these double spaced \begin{tabular}{l}
condensers directly to the chassis. <br>
$\mathrm{K10832} \mid 6-20^{\circ}$ <br>
$\mathrm{K} 10830^{\circ}$ <br>
\hline

 

\hline$K 10832$ \& $6-20^{\circ}$ \& $.060^{\circ}$ \& $6^{\circ}$ \& $\$ 2.50$ <br>
K10833 \& $7.35^{\circ}$ \& $.060^{\circ}$ \& $11^{\circ}$ \& 2.67 <br>
\hline
\end{tabular}

## Single-Spaced Midget

Receiving Condensers
Semi-circular plate type. Havesingle bearing (except $2 \cdot g a n g$ which is built on ceramic base and has two bearlngs) and spacing suitable for receivers and low power transmitters and trancelvers.

 | Stock | Cap. | Air | Nio. | Your |
| :---: | :---: | :---: | :---: | :---: |
| No. | Mmids. | Gap | Plates | Cort |

| K10835 | + 15 | .024" |  | 71 |
| :---: | :---: | :---: | :---: | :---: |
| K10836 | 5-35 | . $024^{\prime \prime}$ | 5 | 79 |
| K10837 | 6-50 | .024* | 7 | 85 |
| K10838 | 7-100 | .024* | 14 | 1.03 |
| K10839 | 7-140 | .024" | 19 | 1.12 |
| K1C834 | 7-100* | .024" | 14* | 2.6 |

K10834 $7-100^{*} .024^{*}$
$* 2$. Gang ratings $^{2}$ per section.
Heat Radlating Grid and
 Plate Caps
Use at terminals of tects glass.
K14377 For HK-24
K14378-For $35-\mathrm{T}, \mathrm{HK}-54$ 35C $\mathbf{t a}$. K14381-For 100 - $\mathrm{T}, 807$ )


# CARDWELL transmitfing condensers 

## TRIM-AIR Midget Condensers Single \& Dual <br> 

X'mitting and receiving condensers, Shaft $1 / 3^{\prime \prime}$ diam., nickeled brass, end plates ${ }^{3} / 2^{\prime \prime}$ isolantite, plates $.020^{\prime \prime}$ alum. Spacers, etc., nickeled brass. No. Mfg. No. Ty
 K85

## Disc Type Neutralizer

For neutralizing low capacity eransmitting triodes. Glazed steatite insulation. Knurled thumb nut. Fine screw thread sđjustment no wabble. Heavy atin finish.

| stock | Dimensions Your |
| :--- | :--- | :--- | $\begin{array}{lllll}\text { K8600 } & 1-7 \mathrm{mmf} & .100-700 & 1^{11} \mathrm{~m} \mathrm{a}^{235} \mathrm{Gx5} 51 / 6 & \$ 2.64\end{array}$


"T" Type Heavy Duty Condensers
To accommodate increased capacity and airgap requirements for higher power operation. Shaft of $3^{\circ}$ diam. End plates 1, "thick, brass and nickel plated. Bearings of nickeled brass, oversize steel ball
 thrust rear bearing.

Double Heavy Duty Transmitting Condensers


 | K8639 | PL 9034 | TL-160-UD | 160 | 10 | 25 | .294 | $614 \times 227 / 3 \times 5 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |




## Trim Air Midgets

A Balancing condenser the PL6046 is similar to Crim-Airs ubove except this type has two stators. requirements of portable mobile equioment. the heavy duty condensers incorporate a four-tie-rod frame for greater strength und rigidity.


Trim-Air Balancing No. Mfg. No. Type Max. Min. Plates Gap WxLxH Eech
 Trim-Air Heavy Duty


MIDWA Y X'mitting Condensers
Ideal for low and medium power $x$ mitter for portable mobile and aircraft equipment because of its light weight, sturdiness and compactness. Aluminum plates rods. Shart is, C.R. steel cadmium plated. Brass bearings, My
calex insulation, 3 pt . front panel mtg.


MIDWAY single Condensers

|  | Mfg. No. | Type | Max. | Min. | Plates | Gap | W Lx ${ }^{\text {a }}$ | Eech |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K8568 | PL-700 | MR-260 | 260 | 13 | 25 | . 030 |  | \$3.8 |
| K8569 | PL-7006 | MR-365 BS | 365 | 16 | 35 | . 030 | $3^{3}{ }^{3} \times 1$ | 4.20 |
| K8550 | PL. 7015 | MT-20 GS | 25 | 8 | 5 | . 070 | $35.6 x^{319} 9 x^{2 b} 4$ | 2.88 |
| K8552 | PL 2017 | MT-50 GS | 50 | 10 | 11 | . 070 | $35 / 83^{311} \times 2^{3}$ is | 3.45 |
| K8553 | PL-i018 | MT-i0GS | 70 | 10 | 15 | . 070 | ${ }^{36} 9 \times 417 x^{17} \times{ }^{25}$ | 3.93 |
| 554 | PL-7019 | MT-100-GS | 100 | 14 | 21 | . 070 |  | 4.32 |
| $K 8555$ | PL-7020 | MT-150-GS | $-150$ | 18 | 31 | . 070 |  | 5.31 5.31 |
| K8614 | PL-7021 | MG-35-NS | 35 | 14 | 15 | . 171 | $35.515 \times 25$ | 5.31 |
| mioway Dual Condensers |  |  |  |  |  |  |  |  |
| K8548 | PL-i010 | MR.100-BD | 112 | 9 | 11 | . 030 |  | 4.50 |
| K8621 | PL-7028 | MT-50-GD | 50 | 9 | 11 | . 070 |  | 5.61 |
| K8628 | PL-7029 | MT-70-GD | 70 | 11 | 15 | . 070 | $3^{3}{ }^{5} \times{ }^{515}$ | 6.18 |
| K8629 | PL-7030 | MT-100-GD | 100 190 | 13 | 21 29 | .070 .050 |  | 7.05 7.05 |
| K8649 | PL/ 7031 | MO-180-BD | 190 | 13 | 29 | . 050 | $3{ }^{1} \times 7 / 102^{25}$ | 7.05 |

"X" Type Standard Transmitting Condensers


G'nded rotor, variable air condenser. All components of nickeled brasa $1 / 4^{\text {" }}$ cadmium plated steel shaft, $040^{\circ}$ alum. plates. 3 pt . front. mitg


Type "N" U.H.F. Condensers
Straigbt line capacity. Ceramic infulation. plates with rounded edges NP.35-ND with polished edges. Single hole or 3 pt. panel mounting. Shaft is $1 / 2$ "thick cadmium plated steel. Eliminates closed circuit loops completely. *Single, $\dagger$ Dual.


| No. | MIg. No. | Type | Max. | Min. | tes | Gap | W $\times \mathrm{L} \times \mathrm{H}$ | Each |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K8557 | *PL-7100 | SP-50-DS | 30 | $\theta$ | 13 | . 084 | 21/2x ${ }^{1 / 8} \times{ }^{231} 6$ | 33.0 |
| K8553 | -PL-7101 | NP.75.DS | 75 | 11 | 19 | . 084 | $21.85^{5} \times 2{ }^{23} 6$ | 3.6 |
| K8576 | - PL-7102 | NP-100.DS | 100 | 13 | 25 | . 084 | $2.15 \times 67 / 8 \times 2^{216}$ | 4.1 |
| K8579 | +PL-7105 | NT-50-6D | 50 | 7 | 11 | . 070 | $21 / 6 \times 56 \times 296$ | 5.3 |
| K8651 | +PL-7106 | NP-35-ND | 35 | 5 | 9 | . 084 | $2158516 \times 216$ | 5.3 |
| K8594 | 4PL-7107 | NP-35-DD | 35 | 5 | 9 | . 084 |  | 4.7 |
| K8545 | +PL-7108 | NP-50-DD | 50 | 9 | 13 | . 081 | $21.3 \times 6^{1} 12 \times 2{ }^{21 / 6}$ | 5.3 |
|  | PL-7108 | NP-75-DD | 75 | 11 | 19 | . 084 | $21 / 2 \times 7^{11} 6 \times 21 / 6$ | 6.3 |

## "NA" Neutralizing Condensers

This type offers $180^{\circ}$ neutralizing condenser of restricted range, for dial or screw driver adjustment. Aluminum end platecarries mycalex justmenting plate supporting stator seticon Plates 040 gium. $3 \mathrm{pt} . \mathrm{mtg}$. on panel or foot Plates. preferably on a ceramic pillar if both mta., preferabiy 3 pt ingied above ground potencial Shaft lock for permanent settins


Cardwell V.H.F. Oscillator Kit \& Midget Condensers For U.H.F.


Butterfly
Type Kit has 3 sets of coils covering $144-148 \mathrm{MC}, 220.225 \mathrm{MC}, 420-450 \mathrm{MC}$ bands. 6 F 4 not included For local oscillator, for superhet as plated modulated oscillator for low power X mitter or transceiver
driver unit for amplifier tube in higher powered X mitter, ete. $\$ 10.80$ FF4 Tube $\$ 5.55$ K8609 Your Cost.
"Butter Hy" $90^{\circ}$ midget condensers are electrically symmetrical, low inductance, no moving contects, remavable plates, isolantite insulation $1^{7 / 10} \times 1^{13 / 6} 1$ holemte.

U. H. F. Kit

# miscellaneous amateur equipment 

## POLYSTYRENE Round Rod, Clear Finish

POLYSTYRENE Sheets
 Strong, clear

flexible mate flexible mate rene) for yiry frequency, RF or high-volitage deteriorate with age and will not discolor. Absorbs ittle moisture: water content only, $8 \%$. Cen be No. Dimensions Each | K8071 | $6881^{1}$ | 50.59 |
| :--- | :--- | :--- |
| K8072 | $688 x$ | 1.18 |
| K8073 | $6 \times 8 x$ |  |

## POLYSTYRENE Strips

 A aynthetic resin having transparency greater than most glass and having good electrical Insulation characteristics. Can be shaped (when hested), drilled, cut, etc. Very atrong. In strips 21 iong, lis" thick. For coil supporta, mer bases, or binding post or tip jack mounting strips.| No. | Width | Each |
| :---: | :---: | :---: |
| K8063 | $1{ }^{\prime \prime}$ | 12 c |
| K 8064 | $1{ }^{\text {- }}$ | 18 c |
| K2065 | \% | 24 c |
| K8066 | 1 | 30 c |

## POLYSTYRENE Tubing

This plantic tubing is made from cellulose acetate Butyrate. The outstanding properties of this type of plastic is its toughness, high im pact wrensth, low water absorp thability and ease of machining It is very stable under trying heat and freezing conditions. mal temperature this type nor mall withetand considerable tubing oure. Burating pressures pres aure. Burating pressures are re$150^{\circ} \mathrm{F}$. Tensile strength $60 \%$ at per square inch. An Anenth 4.500 lbs. per square inch. An excelleat uteel copper block tin, atainlesa beer coopper, etc., in water and ahaped with the application of heat. Sold is $12^{\prime \prime}$ lengths. No. Outside Inside Wall Cort

to your present radio provide unexcelled mobile or fized reception. Ideal for hams converting surplus receivers to or fized reception ments. Permitu bandspread tuning ( 8 to 1 vernier!) from 27 to 30 any broadcast aceiver. Tubes aso to megacycie spread) on 6AK5 R.F., 6AK5 Mixer, 6C4 Osc in the GON-SET are the Output frequency is 1.500 to ${ }^{6 \mathrm{C} 4} \mathrm{Osc}$., OB2 Voltage Regulator cluded. Input jacks are furnished for necessary cablea are in illuminated dial, single dial contral for mobile or fized antennas. finish. Only $51 / 23$ kis $5 y^{\prime \prime}$ deentrol, on-of switch. Gray crackle the steering column of your ear. Shpm-small enough to attach to K 21169 - With tubes 10 meter Sonve. wt. 4 lbs. K21171-With tubes. 10 meter converter.
Your Cost, Either one meter converter.

## MILLEN Quartz

$\$ 39.95$
$3 \times 8$ "n 2 I $1 / 10^{\prime \prime}$ thick
K8024-Millen No. 55001


BROWNING Amateur Frequency Meter Model MJ-9
Designed for checking the frequencie of amateur transmitters operating in any amateur band from 3.5 to 148 megacycles on either FM or AM. Fur nishes RF of known frequency to re place crystal oscillator in transmitters. diecirical Feat wres: Large clear-cut dial face reads directly in frequency on place of a cryatal to furnish RF seven amateur bands. May be used in an accuracy of $05 \%$ at all fr cquencies. exciter or transmitter. Has kilocycle crystal whose freq- can be checked with WWV. the 3.5-4.0, 7.0-7.3, 14.0-14.4, 20.5-21.5,28.0-29.7, and $50.0-54.0 \mathrm{Me}$. bands a stable electron-coupled oscillator is used. The $144-148 \mathrm{Mc}$.
band is covered by band is covered by the hermonic of the 20.5-21.5 bund. Low power consumption. 40 V -Amperes. $110 / 120$ volt $25 / 60$ cycle AC-DC. Tubes Used: 6SK7GT, 6SL7GT, and 2526 GT .
Mechanical Features: Steel cabinet with
Black leatherette panel finish with black wrint aluminum panel. for ease of reading. Engraved panel labels. All controls on front. K21476 check points are marked on dial. 7x10x6 $1 / \mathbf{m}^{\prime \prime}$. Shpg. wt. 111 be Your Cost.
589.50

## GON-SET 6 Meter and 10-11 Meter Converters



GON-SET
10-11 Meter complete with built-in pre-selection, dewith either broadeast. auto, or communications receivers. AttachFor panele condenarke "Q" Sheet and cuts rapidly. Quartz "o insulation, etc. Drilla ired styrene having remarkable low R.F. loss and h resistance to voltage breakdown. Size:


No
$\times 80$

| No. | Diameter | Each |
| :---: | :---: | :---: |
| K8067 | 3/1. | \$0.08 per |
| K8069 |  | .17 per |
| K1206 | , | . 31 per fl |
| K8107 |  | -6t per ft. |
| K8108 | 7 | ${ }^{4} 1$ |
| K8109 | 1 | 1.27 |

Very good electrical properties which are not affected after long immersion in water. Excellent are resistance and is non-treckine. Has very low power factor unar fected by frequency temperatur or moisture. High resistance to corrosive chemicals such as acids. alkalies, antes and lower alcohol. Tough and stable subnormal temperatures. Cementing is pos. sible. Sold in 12 Cementing
singths.

## Crystal Diode Type 1N34



The SYL VANIA Type
IN34 Cryital IN34 Cryatal
Diode was es. Diode was es.
pecially devel. oped to give formance at high frequencien and with low values of loed resistance. Rated for a maximum of 22.5 ms . average anode current, it is useful in such applications as second detectors and DC restorers in television recelvers, and frequency discriminators in FM sets in frequency ranges up to 100 mega. cycles. Soldered in place without the use of tube sockets. Will at and a great deal of shock, abuse and vibration. Its superior electrical performance is derived frota low value of forward resistance. Has low shunt capacitance.

## K13458

Your Cost Each
${ }^{5} 1.80$

## Plug-In Coils

Amphenol "912-A" poly. styrene coil forms. Prone spacing fits standard tube sockets. Diam. of coil
 $\begin{array}{cc}\mathrm{N} & \mathrm{M} \\ \mathrm{N} \\ \mathrm{KBO78} \\ \mathrm{~K} 8079 & 24 \\ \mathrm{~K} 8080 & 24\end{array}$
ilength of body with liquid "912".

Type
5-Prong
6-Prong
transceiver, from eithe
E-L Model 619 is eapecially useful for emer gency operation in the case of fallure of the 115 Volt AC power line. It is well adapted. because of its sturdy, compact construction tion by radio mateurs, taxicab and operafleets, police, public service compand truck reets, police, public service companies and others. This unit is also suitable for operation of mobile Public Address syatems. Installation and operation of this unit is very easy. A common plug-type connection is provided for both power inputs, and a socket connection for the output. An AC-DC selector awitch is mounted on the front penel for

## E-L Model 2606 Power Converter



High in power low in cosel That's this power conver ter which was especially designed for portable-mobile Careful deaien has. made possible extre quality in extra quality in smaller space. The E.L
vibrator in the 2606 vibrator In the 2606 has normal life of
500 hours. The 500 hours. The
compactnes and the sturdiness of this unit makes it ideal for the operation of mobile transmitter-recelvers frompletely filtered and delivers 30 watts of completely filtered power. If permanent in. car or in is denired-as in a motor truck or car or in a stationary amsteur rig-the unit may be mounted in trunk compartment by linertine are wall or radio chassis merely by traertine a atud into a tapped hole in the base plate. Includes complete sudio filtering and RF noise suppression for the high frequency band. Operated automatically by the owitch contralling the radio equipment and has been deaigned to operate over an input range of 5.5. to 7.5 volts. Installation easy, connections made to a four terminal connector strip on front of converter. Input- 6 V . DC. Output-300 V. DC at 100 me . 30 watts continuous output power. Complete hum nitering. $60 \%$ efficiency. Regulation is $38 \%$ between no load and full load. Ki723s.-Your Coit Euch

## E-L All Purpose Converter

 The all purpose converte for two-way radio opera tion from 115 V . AC or
6 V . DC. Designed to sup ply plate and filamen ply plate and filament power to any type, of radio

E-L Multiple Output Converters
power input selection. The unit is oper ated by throwing the toggle switch to the "on" position.
General Dafa: Input 6 V. DC or 115 V. AC. Output is 300 V . DC at 100 ma ., no-hum filter incorporated. Output power is 60 watts (max.). Unit has been carefully designed to eliminate RF noise to cover a frequency band of 20 mc . to 150 mc . Efficiency $-63 \%$ band rated load. Requlation- $26.2 \%$ at rated lond. Fuses- 15 ampere, 3-AG fuse is located on the frone panel. Size: Lensth 94 ". width $5 \%$. and height $6^{\circ}$. Shipping weight is 16 pounds. Your Cos:

Model General Date
Input V
Output $\dot{\mathbf{V}}$

Output P
Filtering:
Effieney: Regulation: Size:
Weight:
Reetification: ${ }^{8}$ $\mathbf{K 1 7 2 3 3}$ - Solf rectific $\mathrm{K} 17233 \rightarrow$ Model 60 incation K17234-Model 601 300 V. at 100 ms 30 Watts Full RF ONLY 6 V. DC 225 V. at 50 m 275 V . at 65 me 275 V. at 80 ms. Lo Hi-Voltare DC Full RF ONLY rated DC No Hi-Voltage DC rated 60 m at rated load $0.4 \%$ at rated load 38.6 \%at rated loed

MODEL 604A
Multiple output converters provide 6 , age DC from 6 .Volt batteries and give volt standing service in providing ala give out aupply for radio Ximitting plate and grid their power capacities. Desioned ers, within radio chassis and thus. Designed to mount on instellation in any two way radio applicution
 is incorporated.
 ur cose


All purpose stand－offs made of white glazed porcelain．All furnished with nickel－plated hardware as listed below．

| Stock No． | Type No． | Fig． | Body Ht． | Hard． ware | Your Cost |
| :---: | :---: | :---: | :---: | :---: | :---: |
| K16746 | 22 | A | $1{ }^{\prime \prime}$ | 832 | 7 c |
| K16748 | 22 J | B | 1 ＊ | Jack | 11 c |
| K16745 | 20 | A | 1\％＂ | 10／32 | 10 c |
| K16744 | 20.5 | 8 | 1\％＊ | Jack | 12 c |
| K17024 | 65 | D | 1\％＂ | 10／32 | 15 c |
| K17025 | 66 | C | $2 \frac{1}{4}$ | 14－20 | 29 c |
| K17026 | 67 | C | 43 | 1＋-20 | 47 c |

## JOHNSON Spring Clip <br> For inductor coils of all Winds．Will take wire from 120 to 112 gauge．Lock screw M16749－Each ．．．．．．．．．．．．．．．．．．．．．．．${ }^{\text {ed }}$

BIRNBACH Stand－Off Insulators


Made of white．brilliantly glazed porcelain for max－ imum insulation．Ideal for mounting condensers，coils． tube sockets and other high－frequency apparstus． Complete with nickeled brass hardware．

| No． | He．B． | Dia． | Thread | Each |
| :---: | :---: | :---: | :---: | :---: |
| K17001 |  |  | 6－32 | 12 c |
| K17003 |  | \％＂ | 10－32 | 16 c |
| K17004 | 2\％＂ | 11／2 | 1／4－20 | 25 c |
| K16998 | 1 ＂ |  | Jack＊ | 17 c |
| K16999 | 13／2 |  | Jack＊ | 20 c |
| －Standa | nane j | on |  |  |

## BIRNBACH Transmitter

Lead－In Insulators

| Each 23：＂high． of vittified glazed porce－ |  |  |  |
| :---: | :---: | :---: | :---: |
| 俍 |  |  |  |
|  |  |  |  |
| K17037 | $10^{\prime \prime}$ | Metal | 5 c |
| K17038 | 15＊ | Metal | 51.07 |
|  | $10^{\circ}$ | Porcelai | 1.23 |
| $K 17040$ | $15^{\prime \prime}$ | Porcelain | 1.56 |

BEE－HIVE Stand－OH Insulator
An extra－large standoff insu． lator manufactured of hesvy glazed porcelain．It has a ribbed body for increased surf K16735
Your Cost Each
$15^{\circ}$


## Birbach Steatite Pllars

 （Less Hardware）In many conatructions，these un mounted threaded steatite pillara will facilitate assembly because of the one－hole mounting and parallel mounting eurfaces．They are made of glazed glass－like steatite with
 threaded holes for screwe on both face leakage．They have great tenale strength with extremely low losses．

| ock | Height | Diam． | Hole | Your |
| :---: | :---: | :---: | :---: | :---: |
| No． | Inches | Inche | Thread | Cost |
| K17015 | 1 ＂ | 1／2＂ | 6／32 | 214 |
| K17016 | 11／2＂ |  | 6／32 | 25 c |
| K17017 | $213^{\prime \prime}$ | $1{ }^{\prime \prime}$ | 6／32 | 28 c |
| K17018 | $21 /{ }^{\prime \prime}$ | $3{ }^{3}$ | 1／1／20 | 45 c |
| K17019 | $4{ }^{*}$ | ${ }_{4}$ | 1／2／20 | 74 c |



## JOHNSON Lead－In Bushings

For antennalead
in bushinge，panel bushinge，and other applica
 lated mounting is required．Fea－ ture long leakage paths．Type A made of white glazed porcelain， type B made of Alsimag 196： provided with all necessary hard－ ware．Suitable for high frequency work．Cushion washers furnished．


Strain Insulator A $11 / 1^{\prime \prime}$ strain insulator loaded in compression K17175－10 for 30c
Your Cost Each

## Transmission Line Spacer Bar

A low lons bar fabricated from Amphenol 912－B（a cryatal clear．hard，tough acrylic thermoplastic，light in weight．strong and durable）possessing excellent electrical char－ acteristics at high frequencies－low power
factor－low loss factor．Possesses excellent water and weather resistance．Will not dis－ color from sunlight or outdoor exposure．A feature of this line spacer is that it is easily attached to the line without threading wires through holes．There is no metal contact bet ween line wire and spacer to cause noise or changes in line characteristic．The use of tie wires or set serews in direct contact with line wires is a direct contributing cause of un－ suspected high noise level．
K17006－Type LX2（2 in．）Each 18c K17007－Type LX4（4 in．）Each 27c K17007－Type LX4（ 6 in．）Each Each 36c

## JOHNSON Porcelain Stand－Off Insulators

Supplied in porcelain inaulation Asterisked numbers indicate


| Stock |  |  | Your |
| :---: | :---: | :---: | :---: |
| No． | Dimensions | Hardware | Cost |
| K17024 | 55811／8x13， | 10／32 | 15 c |
| K17030 | $8 / 8118 \times 18$ | 10／32 | 18 c |
| K17025 | ${ }^{13} 16 \times 1 \% \times 2$ 年 | 1／1／20 | 28 c |
| K17031 | ${ }^{13} 15818,4 \times 23$ ， | － $1 / 20$ | 32 c |
| K27026 | $1^{1 / 5} \times 21 / 4 \times 41 / 8$ | 1／1／20 | 42 c |
| K27032 | $11 / 621 / 8 \times 41 / 2$ | －1／20 | 50 c |
| K17033 |  | 10.32 | 22 e |
| K17034 |  | ＊10／32 | 24 |

## JOHNSON UItra－Steatite Cone Insulators

All cone insulatore are furnished complete with machine screws and brass washera for the top and bot． tom and also equipped with cushion washers．

| No． | Dimenaions | Hardware | Cont |
| :---: | :---: | :---: | :---: |
| K17035 |  | 6／32 | 12 c |
| K17036 | 勾× 3／5x1 | 8／32 | 18 c |
| K17041 | H2x11／2x11／2 | 8／32 | 32 c |
| K17042 |  | $10 / 32$ | 44 c |
| K17043 | 6x11）183 | 10／32 | c |

## BIRNBACH High Voltage

The Birnbach high－voltage feed through insulator has a high dielectric and mechanical atrength sleeve tapped．Height 1 s／＂；base dirmeter $2^{\prime \prime}$ ：mounting hole 1 Hardware $1 / 6 / 20$ ． $K 16712$
Your Cost Each
$45^{\circ}$


## Antenna

 Insulators These antenna insu lators haveexception sorption．Theleakage path is long and the and is consistent with and is consistent wirred the strength required．A smooth white glaze overall prevents the accumulation of dirt and extremely low losses at higher frequencies No．Length
Each Ko．Length
K17010－12＂lons
K17011－41／2＂long center Invulator．．． 25 c

JOHNSON Thru－Panel Insulators Made of white glazed porce－ lain，nonhygrascopic．Fea strength and increased break． down voltece Flat mount－ ing surfaces with cushion washers eliminates breakage． All have longest possible leakage path．Jack ty pes have
 tion above as well as below the panel．Nickel plated brass hardware furnished．Ideal for pee terminals on high frequency，high volt age and low frequency devices．Jack tops take standard banana pluge．
Stock Type Top Bot．Panel Hard．Your No．No．Ht．He．Hole ware Cost



 Suspension Assembly
New type insulator and all necessary hard－ ware for connecting＂$Q$＂matching aection to Kintenna and transmission line．SI．Your Cost Each．．．．． 5

## BIRNBACH Airplane Type Strain Insulators

White glazed low－absorption porcelain．Particularly useful where good insulation is ensential No． $K 27012$ $K 17013$

Length
2 inches
1 inches


## JOHNSON

Wet Process glazed porcelain．
No．
Break Strength
K17044
K17045
K17050 Break Strength $K 17045 \quad 800$ pounds K17050 800 pounds

Long leakage path．low capacity．
Length

| Length | Your Cos |
| :--- | ---: |
| 4 inches | 12 c |
| 7 inches | 47 c |
| 12 inche | 53 c |

As the largest distributor of RCA rubes, we carry a large manufacturer. All are characterized by rugzed construetion and uniformity of ratings. Closely controlled produc. tion insures their long, faithful operation

O-Oscillator: R-RF Power Amplifier: C-Class B Mod ulator; B-Beam Power Ampllifier; A-AR Power Amplifier; S-Screen Grid Power Amplifier: T-Triode:


## Experimental Television Tubes

A specially selected series of experimehtal television tubes. Included are Iconoscopes, Kinescopes, and a Projection tube. Type
2AP1A
5TP4
$70 P 4$
7 GPA
$9 A P 4$
10 BP
$12 A P 4$
1851
$6 A C 7 / 1852$
$6 A B 7 / 1853$
$6 A G 7$

| $2^{\prime \prime}$ Kinescope Elect. Stat. (Green) |
| :---: |
| 5 " Projection Kinescope (White). |
| ${ }^{\prime \prime}$ Kine. Elect.-Mag. Defi. Elect. St |
| $7^{\prime \prime}$. Kinescope Elect. Stat. (White) |
| 9 " Kinescope Elect.-Mag. (White P |
| $10^{\prime \prime}$ Kinescope Elect. Mag. |
| $\mathbf{1 2}^{\text {- }}$ Kinescope Elect. - Mag. (White |
| Amplifier Pentode |
| Amplifier Pentode (Single End) |
| Amplifier Pentode (Single End) |
|  |
|  |
|  |R.C.A

Type86864
$2 \mathrm{C4O}$
2 C 43

## Mlscellaneous Types

## 957

958 A
959
991
1603
1609
1612
1621
1622
Power Amplifier Pentode
Electron Ray Tube
9002 U.H.F. Midget Pentode (Sharp Cut-off)
9003 U.H.F. Midget Pentode (Super Control)
9005
OA2 U.H.F. Midget Diode. 1 Mis volt
OA $3 /$ YRr 75 Voltage Regulator, is volts.
DC3/VR-105 Voltage Rezulator, 90 volts
O03/VR-150 Valtage Regulator, 150 volis


## Phototubes.

| Type | Description | Vle. | Not | Type | Descript |  | 1 | Ne |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 868 | Gas Type | 90 | \$2.15 | 924 | End Ty |  | 90 | \$2.25 |
| 917 | Vacuum Type | - 500 | 3.00 | 925 V | uum Typ |  | 250 | 1.85 |
| 918 | Gas, Hi-Sens. | 90 | 2.60 | 926 V | c. Cart. Rb | Type | 500 | 2.50 |
| 919 920 | Vacuum Type | ( 500 | 3.00 3.25 | 927 G | Type (M | Inet.) | 90 | 2.50 |
| 921 |  | 90 | 3.75 | 928 | Non.D |  | 90 | 2.75 |
| 922 922 | Gas Cartridge Vacuum, Cart | E 500 | 1.75 1.80 | ${ }_{929} 92 \mathrm{H}$ | Vac. Caesi |  | 250 | 1.75 |
| 33 | Vacuum, Cart | - $\begin{array}{r}900 \\ 90\end{array}$ | 1.80 | 930 G | s, Hi-Sens. |  | 250 | 1.50 |
| HEINTZ-KAUFMAN Gammatrons |  |  |  |  |  |  |  |  |
|  | $\begin{aligned} & \text { Type } \\ & \text { No. } \end{aligned}$ | $\mathbf{W}_{\text {ste }}$ Diss. | Plate Volt | Fil. Volts | Power Output V. | Max. Freq. | Net Price |  |
|  | 24 | 25 | 2000 | 6.3 | 0 |  |  | 4.75 |
|  | 24 | 25 | 2000 | 6.3 | 90 | 300 |  | 6.00 |
|  | - 54 | 50 | 3000 | 5.0 | 250 | 200M |  | 8.00 |
|  | - 254 | 100 | 4000 | 5.0 | 400 | 175 M |  | 13.50 |
|  | $2578{ }^{\circ}$ | 75 | 4000 | 5.0 | 300 | 150 M |  | 24.50 |
|  | 354 C | 150 | 4000 | 5.0 | 600 |  |  | 24.50 |
|  | $354 E$ | 150 | 4000 | 5.0 | 600 | 50 MC |  | 24.50 |

## UNITED ELECTRICS COMPANY

Iransmitting-Industriat
Electro-Medical Tubes
Fomous for ifs "/solated
Getter Prap"

| $\begin{aligned} & \text { Type } \\ & \text { No. } \end{aligned}$ | Corresponding Type Number | Function | Net Price |
| :---: | :---: | :---: | :---: |
| UX-CV11 |  | Triode | \$10.00 |
| HV-12 | 814-T | Triode | 18.50 |
| KU-23 | HF \& T300 | Triode | 30.00 |
| HV-27 | 822 | Triode | 18.50 |
| V-70-D | T. 55 | Triode | 6.90 |
| 311-CM | HD211-C | Triode | 18.00 |
| 311-CT | $211-C$ | Triode | 16.00 |
| 468 | WL. 468 | Triode | 24.75 |
| 812-H | 812 | Triode | 6.90 |
| 9494 | 849 H | Triode | 135.00 |
| 5562 | TB-35 \& 3D21 | Beam Tetrode | 10.00 |
| 866A |  | MV Half-wave Rect. | 1.75 |
| 2-225 | 866A | MV Holf-wave Rect. | 1.95 |
| 872-A |  | MV Half wave Rect. | 7.50 |
| $\begin{aligned} & 975 A \\ & 967 \end{aligned}$ | 575A | MV Half-wave Rect. | 27.50 |
| 973 | FG-17 | MV Thyratron | 6.50 |
| 975-T | FG. 27 | -MV Thyratron | 17.25 |
|  |  | Thyra | 27.50 |

We can supply all types of twbes for industrial requiraments.

RAYTHEON Industrial and Speclal-Purpose Tubes The following exhnustive list of special purpose tubei for encineering and apeclal industrial applications has been compiled to cover the wideat possible number of different applications. If there are any other tubes which you require, communicate with us for prices and spesifeations. In addition to the tubes listed below, we carry a complete line of Raytheon tubes.

| Tube |
| :---: |
| Type |
| 2C33/R×233 |
| 2C34/RK34 |
| RK3824 |
| RK3829 |
| RK4B31 |
| RK4022 |
| RK403 |
| 5023/RK65 |
| 6AK5 |
| RK6022 |
| 6N4 |
| RK20A |
| RK25 |
| RK28A |
| RK38 |
| RK48A |
| RK62 |
| RK12 |
| R×235 |
| CK569AX |
| CM606BX |
| CK608CX |
| CK619CX |
| RKTOSA |
| E14/RK47 |
| RK8664/8 |
| RK872A/872 |
| 1005/CK100 |
| 1006/CK10 |
| CK1007 |
| CK1012 |
| 1641/RK60 |
| 2050 |
| 5517/CK101 |
|  |
| Cx502AX |
| 503AX |
| CK505AX |
| CK506AX |
| DAX |
| CK515BX |


| tub |  |  | Your |
| :---: | :---: | :---: | :---: |
| Function or | Plate | Fil. | Cost |
| Construction | Volts | Volt | h |
| Full Wave Rectifier | 1000 |  | \$2.70 |
| Control Thyratron | 1050 | 2.5 | 5.00 |
| HF Oxcillator, Amp. | 300 | 6.3 | 3.50 |
| Half-wave High Vac. | 20,000 | 2.5/5.0 | 7.25 |
| Half-wave High Vac. | 16,000 | 2.5 | 13.30 |
| Clipper Diode Hi-Vac. | 16,000 | 5.0 | 13.55 |
| Bearn Tetrode | 750 | 25.2/12.6 | 3.75 |
| Beam Tetrode | 750 | 6.3 | 5.75 |
| RF Amplifier | 3000 | 5.0 | 34.50 |
| UHF Amplifier | 180 | 6.3 | 1.93 |
| RF-AF Ampllfier | 3500 | 5.0 | 53.00 |
| UHF Osc.-Amp. | 180 | 6.3 | 1.00 |
| Suppressor-Mod. | 1250 | 7.5 | 15.00 |
| Suppressor-Mod. | 500 | 6.3 | 3.95 |
| Suppressor-Mod. | 2000 | 10.0 | 21.00 |
| RF-AF Amplifier | 3000 | 5.0 | 13.50 |
| RF Osc. Ampllier | 3000 | 10.0 | 27.50 |
| Radio Control | 45 | 1.4 | 3.50 |
| Half-wave High Vac. | 20,000 | 2.5 | 7.20 |
| Half-wave High Vac. | 25,000 | 2.5 | 14.85 |
| Amplifier-Pentode | 67.5 | 1.25 | 2.60 |
| UHF Rectifier | 420 | 6.3 | 5.40 |
| Oscillator-Amp. | 120 | 6.3 | 7.00 |
| Oscillator-Amp. | 250 | 6.3 | 7.00 |
| Half-wave High Vac. | 35,000 | 2.5/5.0 | 14.05 |
| RF Oscillator Amp. | 1250 | 10 | 14.70 |
| Half-wave Mercury Vapor | 10.000 | 2.5 | 1.75 |
| Half-wave Mercury Vapor | 10.000 | 5.0 | 7.50 |
| Full-wave Ga: Rectifer | 450 | 6.3 | 3.80 |
| Full-wave Gas Rectifer | 1600 | 1.75 | 3.25 |
| Full-wave Cas Rectifier | 980 | 1.0 | 1.90 |
| Full-wave Gas Rectifier | 1200 | 1.75 | 3.25 |
| Full-wave High-Vacuum | 4500 | 5.0 | 2.75 |
| Control Thyratron | 650 | 6.3 | 1.75 |
| Half-wave Gas Rectifier | 2800 |  | 2.25 |
| Hearing Aid Tubes |  |  |  |
| Output Pentode | 45 | 1.25 | 3.20 |
| Output Pentode | 45 | 1.25 | 3.20 |
| Voltage Amplifier | 30 | . 625 | 3.20 |
| Output Peatode | 45 | 1.25 | 3.20 |
| Voltage Ampllifer | 45 | . 625 | 5.35 |
| Voltage Amplifier | 45 | . 625 | 3.20 |

## EIMAC Power Tubes

The Elmac power tubes are juatly famous for thelr extraordinary reliablity and efficiency. They are conservatively rated for long life and dependable performance. All of the component parte that a into the making of an Eimac power tube are carefully selected to exarting atandards. Elemente such as the filamente, the eathodes, the grids. the plates are all manufactured of the hishest quality material to provide trouble-free performance and long life to assure you of sevice that critical moment- "just when you need them mont." In addition to the few more popular types shown below, we carry a eomplete line of Eimac tubes. We can tupply any type not shown. Write for prices and specifications, giving as much data on type of tube desired, ultimate use to which the tube is to be put, maximum and mininum voltage ratinga if possible, and any other data that you feel will be of use in recommending a tube suitable for your purpose.


## AMGLO Electronic Photoflash Lamp

The Amglo 48R42 is interchangeable with many other the Amglo 48 Ryies of electronic photofash lamps. It is an excellent styles of electronic photoflash lamps. It is an excellent
basic lamp for the individual amateur or professional basic $\operatorname{lamp}$ for the individual amateur or professional
technician interested in designing and building photoflash or electronic timing units. It is a two-electrode type which does not require an uuxillary circuit to trigger a grid into initiating. Because of the open apiral construction and the substantial reserve of the precious Conizing gas, it is possible to control the flash by a sim ple series relay. This is normally open and has a low resistance coil which will permit the low voltage from Flash Gun batteries to effect instant closing and consequent lash control. The high current during adis charge can cause welding of inferior contact points and it is definitely better to use contacts which are particu larly qualified. Those that can pass enormous currents without stieking and are composed of a special silver-oxide and cadmium alloy re andecially adaptable. The following basic technical mium alloy are especialiy adaptable. the 48 Z should be suffient to permit design dedata rel
cisions.
SPECIFICATIONS:
Energy Rating (Input)- $50-150$ watt seconds ( 200 w.m maximum) Minimum Ionising Vgltage- 1700 volts
Maximum Permassible Voltage- 3000 volt
Recommended Voltage- $2000-2500$ (top efficiency range)
Recommerded Condenser Cap.-30-75 mid.
Recommerded Condenser Cap.- $30-75 \mathrm{mf}$
For maximum life, it is important that no lamp be flashed at near its maximum eaer gy more often than once every half-minute.

GENERAL ELECTRIC UHF Tubes


GENERAL ELECTRIC Pllotrons
High-vacuum tubes in which one or more electrodes are used to control the uni-directional current flow.

| Type | Max. | Max. | Max. | Your |
| :---: | :---: | :---: | :---: | :---: |
| No. | Volts | Ampa. | Wate | Cost |
| PJ-21 | 350 |  | 7.5 | 58.00 |
| PJ-7 | 350 | 0.04 | 10.0 | 7.00 |
| PJ-8 | 350 | 0.04 | 10.0 | 7.00 |
| FP-54 | 6 | 0.006 |  | 55.00 |
| FP-62 | 112.5 | 0.01 |  | 35.00 |
| FP-285 | 1350 | 0.20 | 100 | 16.50 |
| FP-265 | 1500 | 0.20 | 160 | 24.75 |
| GL-807 | 600 | 0.10 | 25 | 2.30 |
| GL-820 | 2000 | 0.25 | 125 | 12.50 |
| GL-833A | 3000 | 0.50 | 300 | 45,00 |
| GL.851 | 2500 | 1.0 | 750 | 210.00 |
| GL-880 | 10.500 | 3.6 | 20.000 | 440.00 |
| CL-889A | 8500 | 2.0 | 5000 | 190.00 |
| GL-892 | 15.000 | 2.0 | 10,000 | 200.00 |
| GL-8020 | 40.000 | 0.75 |  | 18.00 |
| GL-8002 | 3500 | 1.0 | 1200 | 120.00 |
| GL-891 | 12.000 | 2.0 | 6000 | 200.00 |
| GL-207 | 15,000 | 2.0 | 10,000 | 220.00 |
| GL-893A | 20,000 | 4.0 | 20.000 | 570.00 |
| GL-862A | 20,000 | 10.0 | 100.000 | 950.00 |
| GL-898A | 20,000 | 10.0 | 100,000 | 950.00 |

GENERAL ELECTRIC Ignitrons
Gas-discharge tubes with a pool-type cathode in which an ignition electrode is used to control the aterting of the unidirectional current flow in each oper ative cycle.

| Welding Types |  |  |  |
| :---: | :---: | :---: | :---: |
| Type | KVA | Average Anode | Your |
| No. | Demand | Current in Amps. | Cost |
| GL-415 | 300 | 12.1 | 538.00 |
| FC-271 | 600 | 30.2 | 65.00 |
| F G-235A | 1200 | 75.6 | 95.00 |
|  | Power | Rectifier Types |  |
| Type | DC | Peak | Your |
| No. | Volte | Ampe. | Cost |
| CL-427 | 125/300 | ${ }_{30}$ | \$ 65.00 |
| FG-238日 | 600 | 1800/1200 | 290.00 |
| FG-259B | 300/600 | 900/600 | 150.00 |

## FENERAL ELECTRIC Vacuum Capacitors

| Type | Capacity | Breakdown | Your |
| :---: | :---: | :---: | :---: |
| No. | Mmfd. | Voltage | Cost |
| CL-1L32 | 6 | 7.500 | \$10.00 |
| GL-1L21 | 12 | 7,500 | 10.00 |
| GL-1L36 | 25 | 7,500 | 10.00 |
| GL-1L38 | 50 | 7.500 | 10.00 |
| GL-1L33 | 100 | 7.500 | 12.00 |
| GL-1L31 | 6 | 16,000 | 11.00 |
| GL-2L25 | 12 | 16,000 | 11.00 |
| GL-1L22 | 25 | 16,000 | 11.00 |
| GL-1L23 | S0 | 16,000 | 11.00 |
| GL-1L24 | 100 | 16,000 | 13.25 |


\section*{| GL-1L24 100 | 16,000 |
| :---: | :---: |
| NEW TYPE GENERAL ELECTRIC TUBES |  |}

Type No.
GL-5D24 Triode, Air.Cooled
$\begin{array}{ll}\text { GL-592 } & \text { Tetrode, Forced } \\ \text { GL-2H21 } & \text { FMPhasitron } .\end{array}$
Your Cost
Type
$\$ 36.00$

We Can Supply Your Every Radio Requirement

## transmitting keys and accessories

Signal Practlce Key Model R-50 Cast base
black rip. black rip. ple finish. Coin silver contacts. Parts are heavily plated. Easily adjustable.
Shpo. w. 1b.
K 14009 Your Cost SI.I2 SIGNAL Key With Switch
 swite to
close the con. tacts. Polished lacquered brass
 $K 14005$ Less Switch
$\$ 2.15$

## "Original" VIbroplex



For all types of communications work where speed and perfect Morse are essential. Single lever. Two pairs of contact points: one for dots other for dashes. Easy to adjust. Has unlimited sending posnibilities. Polished parts with
blackbase Suplied complete with blackbase. Supplied complete with cord and wedge. Shpg. $K 14057$
Your Cost
$\$ 15.95$

SIGNAL Model R-68 Code Practice Set


Key and high frequency buzzer on a polished hardwood base. Hook battery to terminals ( $11 /$ / and cell required, not supplied code plate on base.
K14001
s3.06
Type R-60 BUZZER ONLY Fully adjustable. Has standard resistance of 2 ohms. Black crys tal laeguer finish. S S.06
K14006 Your Cost
"Champion" Vibroplex


An inexpensive transmitter hav. ing exceptional sending qualities: elarity, speed and euse of opers-
tion. Single lever with two pars of contact points (one for dots. one for dashes). Easy to adjust. Black crystal finish metal base All parts above base in briaht finish. With cord and wedge Shpg. wt. 4 lbs.
$K 14058$
Your Cost
59.95

## SPEED-X Keys

Model 515 Hi-Speed Key


Sturdy, hea vy duty high speed key Hastwo sets of $1 /{ }^{\prime \prime}$ silver contacts. Metal parts heavily plated; base has black wrinkle finish. is $3 \times 61$
 K14054 Your for abo

Model 321 Senior Key

contacts. Navy type knob. Die cast heavily plated base and key arm. Adjustable steel bearings concealed brass connector strip Shpg. wt 2 lbs. Cost $\$ 2.94$
K14039 Your Cost Model 300 Practice Key
 Has two
adjust ments Bese of bakelite. $/$ " $^{\text {" coin silver contacts. }}$ K14042 Your cost S 1.03 Mod, 305. As above, with metal K14053-Your Cost $\$ 1.12$

Model 310 Manual Key Heavy die - Ro Sa, $\begin{aligned} & \text { Heavy die- } \\ & \text { cast metal }\end{aligned}$ - Ro Sa, $\begin{aligned} & \text { Heavy die- } \\ & \text { cast metal }\end{aligned}$ kle enamel. Smooth adjustable bearings.
Shpg. Wi. 1 ib pure siver contacts.
K14051 Your cost Like above. but with S2.20
Model 301 Key
 General pur pose key with molded black bakelite base lated. Adjustable bearinge. 3ilver contacts.

## K14040-

s 1.76
Ks above, with switch
K14044 Your Cost
\$2.06
Code Practice Set


Model 450
Comprises constant fre quency ad justable buz zer and a
standard hand key with 1 " silver contacts. mounted on a brown bakelite base 6x4*. Metal parts plated. Code card included. Uses $2-1 / 6$ vol cells (not included).
$K 14027$ Single Set
Your Cost
$\$ 2.65$

## Constant Tone Buzzer

 Resistance 2 ohms. Op erates on 3 voles. K14021 Each SI.06 K20622 Each

## ICA Deluxe SIgna-Tone



A perfected audio oscillator having three different output frequencies and continuously variable volume control. Audio notes are similar to those of high quality commercial CW stations. A number of phones and keys may be connected for intercommunication or for classntercommunication or for class room or radio elub instruction in ode. Excellent for use as a key. ing monitor. An invaluable aid in improvink any ham's "fist". Will follow the "bug" at all speeds. Indispensable for the weli-equipped station. Steady note of the Signatone is ideal for adjusting both the modulator and modulated stages of your transmitter for maximum modulation percentage of not over 100 percent. By feesting the output of the Signatone into each stage of your mojulator and listening to the output, defects and bugs" can easily be located. $71 / 2 \times 416 "$. Shps. Weight $31 / 2$ pounds.
Your Cost Each
s 11.76
ICA Signa-Tone
Basically similar to the deluxe model speaker. Complete with tube AC
s8.82

# crystals, holders, crystal instruments 

## STANDARD PIEZO Crystals

These units have been especially designed for operation in the six and two meter bands. It is a plated type of erystal which is mounted between spring contacts suspended on wire supports. These crystala are hermetically sealed into a small metal case with pins at $486 \mathrm{c} . \mathrm{c}$. Two of these crystale may be plugged into a single octal socket. These crystals
 are just about the newest thing to be released specifically for the use of the amateur as the result of extensive wartime experiments and laboratory man hours. These new cryatals are the ideal and tong sought after eryatal for mobile and point to point operation. Wherever and whenever a minimum number of stagee is desired in the transmiter these are the crystals to use. Ideal for UHF crystal control transmitters or uny other UHF equipment
Stock No. Meters Megacycles Your Cost Ench
48.0 mc to 49.3 me

Your Cost Esch 56.95
6.95

## STANDARD Non-plated Piezos

This small precision unit is the famous United States Army FT- 243 type crystal used in hand-talkie, walkietelkie. and other portable ground forcen communication equipment. This unit is designed to withstand extreme emperature moisture snd shock conditions. The holder of molded phenolic. These crystals will also eliminate more stages in the tronsmitter as all frequencies are most stase in the from the crystal oscillator output frequencies obtained from the crystal oscillator. $\begin{array}{lll}\text { Stock No. For operation in Crystal frequency in ke } \\ \text { K1318. } & 6 \text { Meters } \\ 25,000 \mathrm{kc} \text { to } 27,000 \mathrm{kc}\end{array}$ $\begin{array}{lll}13418 & 6 \text { Meters } & 25,000 \mathrm{kc} \text { to } 27,000 \mathrm{ke} \\ 13421 & 2 \text { Meters } & 24,000 \mathrm{kc} \text { to } 24,666 \mathrm{kc}\end{array}$ $\begin{array}{lll}\text { K13422 } & 10 \text { Meters } & 28,000 \mathrm{kc} \text { to } 29,700 \mathrm{kc} \\ \mathrm{K} 13423 & 11 \text { Meters } & \mathbf{2 7 , 1 8 5} \mathrm{kc} \text { to } 27,455 \mathrm{kc}\end{array}$

## MONITOR Precision

## Secondary Standard

A precision secondary standard for meas uring frequencies from 10 kc to 100 kc . The Monitor FS. 101 frequency standard employs: 100 ke shock-proof gold-silver lated crystal, coupled through a switch. ng arrangement to either a 100 kc , a 50 ke or 10 ke multivibrator. followed by - mizer stage which includes a Pierce oscillator circuit for the external reference spotting crystal. This unit is unique in that
 it emits very strong signals is high as 100 megacyeles and readiable signals to at least 140 megacycles. The Monitor is the frequency standard for use where utmost accuracy is a must. Precision atandard frequencies from 10,000 cycles to 100 million cycles are available when desired with new circuit which modulates a high freq. spotting crystal with the 100 ke signal. Very simple to oper ate with minimum of with the djustment. There are no resonant circuits to adjust. The frequency change. Compact. Shipping weight 5 lbs.

## BLILEY Crystal Controlled Oscillator

 Here is the only test inetrument available to radio service technicians that provides direct crystal control for IF aliknment. Features of the BLILEY CCO: Direct Crys. al Control-accuracy and stability main. ained by low temperature coefficient crys. als. All frequencies stay within $\pm 0.1 \%$. nstant selection of 5 most used intermedi. ate frequencies, $175 \mathrm{kc}, 262 \mathrm{kc} .370 \mathrm{ke}, 455 \mathrm{kc}$, 465 kc . At 200 ke for alignment of RF stages, check points every 200 kc . Three Ponition Modulation Selector-Internal Modulation pure RF output, External Modulation. Output Centrol-five step attenustor provides vernier control from 0.15 V . Power consumption onecestary, zince the crystals are on frequency a scon warm-up period energized An external crystal socket provides for the possible fature use of the oscilletor in alligning FM receivers. K21474 Bliley Cryotal Controlled Oscillator
569.30

## MOSLEY Crystal Holder Adapters

The ideal crystal holder adapter is now available for the "ham." Made of material having a very high dielectric atrength and a very low loss. The Mosely crystal holder adupters, 75-5 and 5-75, take up very will fitace the $5-75$ dapter which iny will fointo che 4 "prong spacing, will fit into any 6 prong socker, prong socket. or any crystal holder with apacing. th spacing, will fit into an octal socket or any crystal holder, with $1 / 2^{\prime \prime}$ spacing

Stock No. So.



NOTE: We can supply quartz specialties of all types. Large "X" cut blanks up to two inches in diameter or two inches square or cut to your own specifications for supersonic work. Quartz lenses are also available on special order, etc. Also special quartz mounted crystals evaranteed to $.005 \%$ of marked frequency. Write giving complete
apecifications and we will gladly quote current prices.

## BLILEY

## Type FM6-S

100kc.
Primarily for use as a frequeney standard. Plated precision crystal is rigidly clamped between reso.
nant pins provid. ing exceptional
 electrical and mechanical stability. Frequency $25^{\circ} \mathrm{C}$ when unit is used 100 kc . at $25^{\circ} \mathrm{C}$ when unit is used in recom rate tank coil, with proper char acteristics for correct perform ance. supplied with each unit. Frequency stability $\pm .005 \%$ at any temperature between $0^{\circ} \mathrm{C}$ and
K13394-
Your Cost Each
SIO
Type CF-6 455kc.
Single signal
unit Erystal
tionally low

holder capac
ity permite sharp signal diserimination in filter network of general communications receivers. Fre-
quency 455 kc free from spurious quency 455 kc free from
responses within $\pm 7 \mathrm{kc}$ K13409
Your Cost Each $\qquad$
Type CF-3
455 kc .
Signal single fil
ter crystal unit.
Frequency
45 bec. $\pm 5 \mathrm{kc}$ freefrom spurious responses within
 $\pm 7 \mathrm{kc}$. of fundsmental. Designed for intermediate frequency filter in generas communications re-
ceivers.
K13410


## Mce Type

 MC9-3105kc.For use in privete aircraft transmitters operating at 3105 kc . The crys. t.al is guspanteed to
be within $\pm .02 \%$ be within $\pm .02 \%$
of 3105 ke . at any
 temperature between $0^{\circ} \mathrm{C}$ and $50^{\circ}$ and is factory tested for performance over this temper aturerange Plug-in type holder is gasket sealed agalnst moisture and hu midity.
K13391-
Your Cost Each... S S.50

## Type

MC 100
100-
1000kc.
Suggested
for signal
generators
used in
 of radio recelvers. Dual frequeney crystal provides either 100 kc . or 1000 kc . frequency source. When used in recommended oscillator $\mathrm{n} \pm .05 \% \mathrm{kc}$. frequency is with requency can be adjusted to sero ${ }^{2}$ Type VX-2

## 3105kc.

For applications where space is at
a premium. Reca premium. Rec. ommended for private aircraft
communications at 3105 kc . Guaranteed to main tain frequency within $\pm .02 \%$ at any temperature between $0^{\circ} \mathrm{C}$ and $50^{\circ} \mathrm{C}$. Solder lug connections per mit mounting under chassis and asembly is gasket sealed against Klisture humidity. $\$ 5.00$

## Primary electrodes in this unit conslat of a micro

 thin metal film which is placed on quartz by evaporation. Film exhibits high adhesion. Second ary electrodes under spring pressure clamp crya tal in position, minimum thermal dissipation. Acid etching to freg. prevents aging, calibration sceurate to $\pm .002 \%$ at $25^{\circ} \mathrm{C}$ in fuctory oscillator Solid. stainless steel pins, activity level tented between $-10^{\circ} \mathrm{C}$ and $+60^{\circ} \mathrm{C}$. Temp. stability better than $\pm .02 \%$. Neoprene gasket seal. K13111-Type AX-2, 80.Meter band. Your Cost Each K23412-Type AX-2, 40-Meter band. K13416 Type AX-2, 20 -Meter bend. Your Cost Each

P-R Crystals for Amateur Service Type Z-2 for 80 and 40 meter bands: Fundamen tal oscillators with low temperature coefficient cut, Available at all frequencies within the 80 and 40 meter bands and for bunds doubling and quadType Z-3 for 20 meter bands A third harmonic oscillstor with high setivity comperable to funda mental osciliators at lower frequenciea. Precision desizned for high-power output, stability. and high activity suitable for keying in the oscillator atage with most circuits.
Type Z-5 for 10 meter bendi Ideal for portable operation. Harmonic oscillator, comparable in stability, activity and output with fundarnental
 frequencica. Avic able for anf frequencies within the 10 -meter band Fentures: Feanres, tigrade Gasket is sealed against contamination, moisture and heat. Calibration is accurate to within $.01 \%$. X-Ray orientation insures Calibration is accurate to within $.01 \% 1 / x^{7 / 6 \%}$. Pin apacing is $1 / /^{\prime \prime}$ for stability and acti
octal tube socket

$$
\begin{aligned}
& \text { octal tube socket. } \\
& \text { K13371-Type 2.2, } 80 \text { and } 40 \text { Meter Band. }
\end{aligned}
$$

Your Cost Each. 30 Meter Band.
K 13372 Type Z.
K13374 Type Z.5, io Meter Band.
M13374 Type 2

## ADVANCE Transmitter Relay



This new ADVANCE relay is ideal for transmitting purposes where high radio The entire assembly coil shell and contact terminal are mounted on a ${ }^{\text {is }}{ }^{\circ}$ Ce are mounted on a is" Cefour atationary contact terminals are .032" hard copper. The meving contact arms, $020^{*}$ apring phosphor bronze, are securely attached to the Ceramic Steatite cross arm. The contact combination is double pole-double throw, usine a pure silver points rated at 10 amperes on 110 -vale AC nen-inductive loade. Constructed to provide the same quiet, dependible opera tion on alternating current free from all hum and chattering that is normally expected oniy on DC relays. Assembly methods and skillfus adjustments eliminate any necessity for chang. ing the tension on either the armature spring or moving contact leaves, both of which areset to provide perfect balance and complete wip. ing of the estationery contacts, Coils wound for 110 volts AC. However they are obtainable for other voltages, either AC or DC on apecial order. Metallic parts are cadmium or nickel plated, preventing K14100-Your Cost Each
55.94

## ADVANCE Overload Relays



This relay is capable of es sentially the same functions as the one described immediately below, except that the unit is reset to the nor. mal operating position by means of a manually operated lever. It is an excellent safety device. When current passing through the coil reaches a pre-determined value within the preseribed range, the armature of the relay
ie pulled in which opens the contacts. The contacts are thus locked open mechanically until reset by the bakelite-tipped levec. Sup plied in either one of two groups: Type A which allowe the relay to close on any current setting between 250 and 500 mills, and type $B$ for any setting between 500 and 1000 mills. K14101 Type A-Your Cost Each... \$6.09 N14102-Type B-Your Cost Each

Same apecifications as a bove but with electrical k14103-Type mechanical
ope A-Your Cost Ench
$\$ 7.92$
$\$ 7.92$

## ADVANCE Underload Relay



This relay is designed for use in tube circuits and as a protective device for class B modulatcr transformer, it operates in this manner: Should an underload occur, due to loss excitwtion in the class $C$ tubes, amount of current in coil circuit would be insufficient to hold armature in closed position, thus opening contacts and breaking the modulator circuit from rectifier. Available in two types: 800A with an adjustable petentiometer which allows relay to
close at any desired pcint between 150 and 300 ma . type 800 B , to close between 300 and 500 ma . In both types $\mathbf{a} 20 \%$ underloed will cause armature to drop out and break the cir cuit. Mounted on a ${ }^{3}{ }^{\circ}$ " bakelite base.
K14130-Type A Your Cost Each K14132-Type B Your Cost Each
56.09
56.09

ADVANCE Heavy-Duty Relays


Exceptionally sturdy
power transfer relays. The 20 ampere relay has one set of $\%{ }^{\circ}$ diameter pure silver ccntacts and is rated at 20 amperes on 110 -volt AC 30 -ampere relay is similar in design, two sets of "* diameter pure ailver contacts banded together at the front by the armature contacts. Both relays are mounted posts. Ideal for bakelite base, with binding pVDEs. lde
K14133-20.ampere Relay. Your Cost S3.96 K14134-30.ampere Relay. Your Cost. 54.62


A new and improved midget relay. The armature hinge of Beryllium copper assures positive action in any position, reduces friction to an abolute minimum, and positively removes all oossibility of misalignment. All parts cad. mium and nickel plated. Pure silver points, Frighly efficient coils non-inductive AC loads. tighly efficient coils also available for opers.
tion from 2 to 32 volts $D C, 1.5$ to 115 volts AC.

 $\overline{\text { K14135 }} \overline{1501-S} \overline{\text { SPST. NO }}$ K14136 | K14136 | .. |
| :--- | :--- |
| K14137 |  | K14144


 ${ }_{c}^{\text {Kitasitis }}$ ${ }^{\text {Kitasisiz}}$ K14153 1302 K14158
K14166 $K 14166$
K14172 K14172 1303 K14173 K14180 K14182 1504 K14183 K14186 No-normally

|  | SPST. NO | 115,60cye. | $\$ 1.80$ |
| :---: | :---: | :---: | :---: |
| 1601-S | SPST-NO | 12 | 1.80 |
| 1601-S | SPST-NO | 6 | 1.80 |
|  | SPET-NC. | 115,60cye. | 1.90 |
| 1602-S | SPAT-NC | 12 | 1.80 |
| 1602-S | SPST-NC | 8 | 1.30 |
|  | SPDT | 115,60cyc. | 1.95 |
| 1603-5 | SPDT | 12 | 1.95 |
| 1603-5 | SPDT | 0 | 1.95 |
|  | SPST-NO-DM | $115,60 \mathrm{cyc}$. | 1.95 |
| 1601 | SPST-NO-DM | 12 | 1.95 |
| 1801 | SPST-NO-DM | * | 1.95 |
|  | 3PST-NC-DB | 115,60cye. | 1.95 |
| 1602 | SPST-NC-DB | 12 | 1.95 |
| 1802 | 8PST-NC-DB | 6 | 1.95 |
|  | SPDT-DM-DB | 115,60cyo. | 2.10 |
| 1803 | SPDT-DM-DB | 12 | 2.10 |
| 1003 | SPDT-DM-DB | 6 | 2.10 |
|  | DPDT | 115,60cyo. | 2.10 |
| 1604 | DPDT | 12 | 2.10 |
| 1604 | DPDT | 8 | 2.10 |
| open. | NC-normally | closed. | B- |

## ADVANCE MIdget-Type Cermmic Insulated Relays



Sturdy, compact, ceramic-insulated relays, especially designed for aircraft, marine, mobile and portable radio communication equipment. They are ideal for installations in the smaller, compact communications sets. To afely handie RF power, high dielectric "Ceramic Steatite" insulation is used throughout. With K 4188 pure alver contacts.
K24188 Type 1000 DPDT, 115 V.AC. S4.95 K14191 Type 2000 DPDT, 6 V. DC... $\$ 4.95$

## ADVANCE Ultra-Sensitive



## D. C. Relay

The Advance type 1200 offers the last word in ing sensitivity, durabil. ity, compactness, and fine appearance. A transpar. ent molded plastic cover prevents accidental oper. prevents sceidentaloper
ethort circuits or dust and dirt on contacts, yet allows inatant visual inspection. The molded black bakelite base provides mechanical sturdiness, high dielectric strength and insulation. A counter. balanced armature makes operation possible in any position. Embodies high overall sensitiv. ity -5 milliwatts for positive operation- 2 参 milliwatts with careful adjustment and light contact load. is mall make and break differen. tial- $25 \%$ to $15 \%$ less current to make than to break. A vernier serew is used for coil spring tension adjustment. Solder lugs and screws, recessed on bottom of base, are easily accessible through panel or through knockouts on side of base. (Palladium, platinum, or other specified materials at extra cost.) Contacts: sinsle pole. double throw-serew driver adjustment. Contact rating: 1 ampere ot 110 volts AC noninductive load. Weight 6 , 4 ounces.

Stock
Ne. Resistince
$\begin{array}{ll} \\ \times 14192 & 2200 \text { ohms }\end{array}$
Shpg.
K14193 3500 ohms 71 ounces
5500 hms $71 / 6$ ounces
K14194

# beam anfennas and equipment 

WORKSHOP ASSOCIATES Antennas and Antenna Equipment
10 Meter 3-Element Beam Antenna

Efficient performence makes instant appeal to the amateur who wants the best equipment. Elements of adjustable aluminum alloy sleeves. One 4 ft . section of mast supplied. Element spacing adjustable so combinution of variable length-depth makes sharp tuning simple. All parts of assembly designed for strength and durability to withstand windsice. Structure rigidity provides smocth rotamision ine in recommended for uew win unit Your Cost
s39.50
6 Meter Beam Antenna A hightional. 3-elements. Similar to abcie. K17110 Model 52AB Your Cost

## ${ }^{5} 9.00$

## WORKSHOP Mast Antenna Kits

 Model AM-2 sections of $4^{\circ}$ mast with brackets and hardware. Stationary mast.K17112-Model.AM. Your Cost... $\$ 8.25$ Model-AM1-Extra 4' sections for PAM K17114-Your Cost per $4^{\prime}$ section.... S1.30 Model AM2 Accessorykit. Converts AM to manually rotated msst. 17115-Model.AM2. Your Cost .. $\$ 5.00$

The WORKSHOP Rotator


This rotator built to rotate more than one antenna- 10,20 combination and UHF antennas. Eliminates costly, troublesome fotating joints and caupling devices. Allows the use of low loss soaxial line unbroken from transmitter to antenna cutting impedance devices. rotating joints, etc. Automatically stops at North, breaking or twisting of coax lines impossible.
Specifications: $360^{\circ}$ rotation at 1 RPM 3. way switch provides rotation in either direction. RugRed ball thrust bearing. Mini mum of back lash and wear for maximum accuracy. Quiet operation. Powerful geared motor- 110 V . AC. Indicator housed in aluminum casting, c-inkled black enamel. Rota tor sealed in aluminum, $9 \times 9 \times 6^{\circ}$. Shpg. wt 30 lbs.
Your Cost
s 157.50

## New WORKSHOP 2 meter Beam Antenna

This antenna is a highly efticient 6 -element array with two driven elements. The two bays employed use the well. director principle which director principle which in the deaired direction. Hall wave spacing between the bays, which are fed in phase, elimi. nates nearly all side partern. Matched to give maximum efficiency when coupled with 50 ohm conxial line. Ele ments made of $1 / 5^{\circ}$ aluminum tubing sealed with spherical tips on ends and rigidly sup. ported in two heavy duty molded plastic heads. Comes with one 4 ft . mast section. Buite in rugged style to withatand high winds and ice. Standard pipe fittings have been used where possible so whole structure can be adapted to a rotating mast. All hordware supplied.
As A Recelving Antenna: Eliminates QEM. Strong R9 locul signals tuned out. Selectivity eased by rotating beam.
As A Transmitting Antenna: Sharp directivity enables you to be heard over a greater distance. It is the least expensive way to increase your effective power output in a given direction.
K17108-Model 146AB (2 meter)
Your
s21.50

AMPHENOL Signal Squirter Rotary Beam Antenna A rotary beam antenna with the
following exclusive features: rotafollowing exclusive features: rota-
tion in either direction: swo band operation: hi.efficiency feed: positive electric brake; and non-resonant feed line. Sturdy. durable and accurately designed und built. Kits complete including rotator with mounted assembly, indicator, ware. Elements are of two-piece adjustable reeded steel tubing. All holes are drilled. The kit complete except for tower. motor control wires ( 5 needed) and open $110 \mathrm{~V}, 50 / 60$ cycles AC .
Write for PRICE and literature.


## WILCOX Rotating Bearing

This Rotating Bearing is not a makeshift item but is manufactured by Wilcox for amnteur gear, buile to exacting standarda. The bearing is easily adapted to rope drive by " large diameter pulley mounted on the is readily adapted to a gear drive such as those now being offered on the market. Retio of Wilcox bearing is just $1: 1$. The bearing is light weight but sturdy enough to support 200 tbs in the highest wind. This rugsedness is due in the main to the aluminum castings used in its manufacture. It is weather resistant in its entirety and requires no lubrication. It is mounted to your tower and/or any beam by four $1 /{ }^{\text {" bolto. Ease of turning is. for manual operation. }}$ amazing, and if motor driven requires but , M.P. into suitable sear reduction for the heaviest of antenna arrays.

S C LABORATORIES Rotary

## Beam Kit

This new three element parasitic beam pre tenta a distinct high-gain directive antenna designed for 2, 6 and 10 meter amateur bands. It is adjustable in every respect and sound in mechanical design. Electrically and mechanically engineered to give the best in efficiency. Constructed of the finest grade aluminum, the supporting foume consists of aluminum castings and tubing. The antenna elements are telescopic. Adjustment can be made without removal of any parts. All types of supportink members, support castings, mast. spacers, insulators. insuleting block, clamps, nécessary hardware, less transmisaion line. The entire kit weighs 18 ibo. and can be assembled by one man trom given inatructions. May be used with coas or open wire lines.


 NOTE: When additional tranamiting antennae, beam antennae. rotators, entenne equipment and parts become available for diseribution we will be happy to quote you current prices on request and to supply you with descriptive literature.

## New ROTO-BEAM Antenna Rotator

Point to point communication is what you want and that's what you get through the use of the
ROTOBEAM ROTOBEAM rotator and Synchro Anten•A.Cator. Message eraffic voice or code is di-
rected or beamed over narrow rected or beamed over a narrow
arc which tends for secrecy, min. arc which tends for secrecy, min.
imizes QRM, and in addition increases signal strength 6.9 DB (power gain of 5.8 ) in the desired direction, without increasing the power of the transmirting source. Equally effective on either trana mission or reception.
Engineering Detalls: Direct which permit impedance match: ing to a transmission line through the use of a transformer net. work, or quarter wave line.
Collector rings with $300^{\circ}$ tact, self-cleaning copper floattact, self-cleaning copper hoatreception and will safely carry up to 20 amperes RF. Low PF hi-freq. Alsimag 196 insulation.
 use of a 3 wire reversible, variable speed, high torque. 110 V .60 eycle ball bearing motor $11 / 2$ RPM. Sealed air dielectric cosaial tube between antenna terminals and rings. Rain shield. Oilite bearings never tween antenna terminals and rings. Rain shield. Olite bearings never
require oil, weather sealed housing. Critical parts are made of stainless require oil, weather sealed housing. Critical parts are made of stainless steel, brass, copper. All connections made through the bottorn. Comes wired. $16{ }^{\prime \prime}$ "high, $14{ }^{\circ}$ wide, and $18{ }^{\prime \prime}$ long. Shipping Wt. is 17 lbs . Synchro Anten-A-Cator: Dial is $74 \xi^{\prime \prime}$ and accuracy of compass guaranteed within $11 / 2$. Two switch control "on-of" und power motor control for counter clockwise, standby, and clockwise rotation. 15 sloping panel $9 \times 10^{\prime \prime}$. Gray crackle finished metal cabinet sized of cabinet dep. For protectona mperefuse is mounted on back K17130-Roto-Beam Rotator and Anten-A.Cator. Your Cost
s 225.00

## ABBOTT Beam Antenna

This Abbott Type BM-2-2 Meter beamantenna is for use in $144-148 \mathrm{Mc}$. operation. This unit is particularly recommended for use with any 2 -
meter rig no matter whether it be. meter rig no matter whether it be.
crystal controlled or self-excited oscilcrystal controlled or self-excited oscilator. At willimprove operating range Beam certainly is abbott BM-2 Beam antenna is constructed of hard sluminum slloy tubing and is very
 strong. The center boom is one inch square by 75 inches long. the elements are one-half inch round heavy gauge hard aluminum alloy. This mount and antenna are very ruggedly constructed but weigh only three pounds. can be atilizes a 1 match stub of very rugged constuction. if desired can be set at a half inch from the end of each stub tube. If desired the clamps on "T match can be varies slightly K17131 ABBOTT BM-2 Beam Antenna
Your Cost

## UTC transmitting transformers

## The Special Series Audio Transformers Designed by the United Transformer Company

UTC Special Series transformers are specifically designed for amateur and popular-priced PA service. Finished in a rich, commercial type cray erinkle enamel. A recessed terminal strip is provided,


#### Abstract

permitting above chassis or breadboard wiring in addition to standard


chassis type wiring. Universal windings provided on driver, matching and output transformers. Large components housed in ventilated cases. The more expensive Varimatch transformers are listed here also for your convenience.

## Case Dimensions

 Type Height Width Depth| G-1 | $17 / 8^{\prime \prime}$ | $2{ }^{\prime \prime}$ | $13 / 4^{\prime \prime}$ |
| :--- | :--- | :--- | :--- |
| G-2 | $25 / 16^{\prime \prime}$ | $23 / 8^{\prime \prime}$ | $115 / 16^{\prime \prime}$ |
| G-3 | $21 / 2^{\prime \prime}$ | $23 / /^{\prime \prime}$ | $21 / 8^{\prime \prime}$ |
| G-4 | $215 / 16^{\prime \prime}$ | $31 / 8^{\prime \prime}$ | $25 / 16^{\prime \prime}$ |
| G-5 | $35 / 8^{\prime \prime}$ | $31 / 8^{\prime \prime}$ | $49116^{\prime \prime}$ |
| G-6 | $45 / 8^{\prime \prime}$ | $33 / 4^{\prime \prime}$ | $51 / 2^{\prime \prime}$ |



61 TO G4


| Case Dimensions |  |  |  |
| :---: | :---: | :---: | :---: |
| Ty | He | W | Depth |
| G-7 | 53/8" | 49/16" | 59 |
| G-8 | 53/8" | $51 / 2^{\prime \prime}$ |  |
| G-9 | 61/8" | $55 / 16^{\prime \prime}$ | $613 / 16^{\prime \prime}$ |
| G-10 | $61 / 8^{\prime \prime}$ | $63 / 16^{\prime \prime}$ | $611 / 16^{\prime \prime}$ |
| G-11 | $71 / 8^{\prime \prime}$ | 69/16" | $73 / 8^{\prime \prime}$ |
| G-12 | 73/8" | $9{ }^{\prime \prime}$ | $51 / 2^{\prime \prime}$ |
| G-13 | 11" | 11" | 9" |

Fliter, Swinging and Audio Chokes

| No. | Type | Service | Hy. | Me. | Ohms | Case | Each |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K5823 | *S-23 | Audio | 500 | 5 | 6000 | G-2 | \$3.33 |
| K5827 | *S-27 | Filter | 30 | 75 | 350 | G. 4 | 3.72 |
| K5828 | *S-28 | Filter | 20 | 100 | 350 | G-4 | 3.72 |
| K5829 | *S-29 | Filter | 10. | 175 | 95 | G. 4 | 3.72 |
| KS830 | -S-30 | Swing. | 5/25 | 175 | 95 | G-4 | 3.72 |
| K5831 | tS-31 | Filter | 20 | 225 | 120 | G. 5 | 4.90 |
| K5832 | +S-32 | Swing. | 5/25 | 225 | 120 | G. 5 | 4.90 |
| K5833 | ${ }_{+}^{+5} \mathbf{S}$ | Filter | 20 | 300 | 90 | G.7 | 6.86 |
| K5834 | +5-34 | Swing. | 5/25 | 300 | 90 | G.7 | 6.86 |
| K5837 | :S-37 | Filter | 20 | 550 | 60 | G.9 | 13.72 |
| *Shpg. we- 4 lbe. |  | + Shpg. wt. 61 lbs. |  |  | ! Shpg, wt. 91 lbe . |  |  |

## Plate Transformers

Primaries for 115 v., 50/60 cycles a.c. For duplez rectifiers, the high and low voltage output of any of the units linted below can be used timultaneously. The rated d.c. current can be divided as required between both voltage outputs.

| No. | Type | High Voltage | Ma. | Case | Lbs. | Each |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \mathrm{K} 5844 \\ & \mathbf{K} 5845 \end{aligned}$ | $\begin{aligned} & \text { S-44 } \\ & \text { S. } 45 \end{aligned}$ | $\begin{aligned} & 575-525-0-525-575 \\ & 900-750-0-750-900 \end{aligned}$ | $\begin{aligned} & 300 \\ & 200 \end{aligned}$ | $\begin{aligned} & \text { G.9 } \\ & \text { G. } 8 \end{aligned}$ | $\begin{aligned} & 22 \\ & 14 \end{aligned}$ | $\begin{array}{r} \$ 15.19 \\ 11.76 \end{array}$ |
| K5846 | S. 46 | 1000-750-0.750-1000 | 300 | G.9 | 19 | 14.70 |
| K5847 | S.47 | $\begin{aligned} & 1500-1250-1000 \cdot 0 \cdot 1000 \\ & 1250-1500 \end{aligned}$ | 300 | G-10 | 30 | 18.62 |
| K5848 | S-48 | $\begin{aligned} & 1500-1250-1000 \cdot 0-1000 \\ & 1250-1500 \end{aligned}$ | 500 | G.11 | 32 | 27.44 |
| K5850 | S-50 | 3000-2500-0.2500-3000 | 300 | G-11 | 50 | 36.26 |

## Plate and Filament Transformers

All primaries for 115 volts, $50 / 60$ cycles a.c.
High volt. $490-400-0-400-490$ at 175 ma .; 5 y. at 3 a. (rect.); 2.5 y . c.t. at 6 a.: 6.3 v. c.t. at 4 a. G-6. Wt. 9 ibs.

K 8839 S. 39 . Your Cost
s10.29
High volt. $525-425 \cdot 0 \cdot 425-525$ at 250 ma .; 5 v . at 3 a . (rect.); 6.3 v .
 High volt. 600-0-600 at 200 ma ; 5 v . at 3 a (rect); 7.5 V . tapped
 High volt. 600-525-0-525-600 at 300 ma.; 5 v. at 3 a. (rect.); 7.5 v . tapped at 6.3 v. at 3 a.; 6.3 y. c.t. at 3 a. G-8. Wt. 14 lbs. \$ 2 2.25

## Single Secondary Filament Transformers

Primaries tapped 105, 115 volts, $50 / 60$ cycles a.c.


## Multiple Secondary Filament Windings

Primaries tapped 105,115 volts, 50/60 cycles AC. All secondarles center topped. Shpe. wt., each, 8 lbs .

| Stock No. | $\begin{aligned} & \text { Type } \\ & \text { No. } \end{aligned}$ | Fil. No. 1 Vole Amps |  | Fil. No. 2 Voles Amps |  | $\begin{aligned} & \text { Fil } \\ & \text { Vol } \end{aligned}$ |  | Case | $\begin{aligned} & \text { Your } \\ & \text { Cost } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K5865 | S-65 | 2.5 | 5 | 5 | 4 | 6.3 | 3 | G-5 | \$5.39 |
| K5868 | S-68 | 5 | 3 | 6.3 | 4 | 7.5 | 5 | G. 5 | 5.88 |
| K5870 | S. 70 | 6.3 | 5 | 6.3 | 5 |  |  | G. 5 | 5.88 |

# transmitting fransformers 

|  either pide or cit. DC voltage out of 2 -sec, filter (choke input) approz$20 \%$ less than AC rating. DC MA. Ating is for intermittent operation cont. rating approx. $25 \%$ less. Shields bet. pri. \& sec. ( ( ${ }^{* *}$ ) denotes sec |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | P775 |  | 2400,1500 | 6501253503501203003003203002000200.150$1000-40$ |  |  | 9 9, $\times$ \% |  |  |
|  |  | 3000 <br> 1855,2450 <br> 1560 <br> 150 |  |  |  |  |  |  |  |
|  | P81: |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| K524 | ${ }_{\text {T21 Pr9 }}$ | ${ }_{\text {ckis }}^{\substack{\text { S35, }}}$ |  |  |  |  |  |  |  |
|  | ${ }_{\text {T21P93 }}$ | (1200*900 |  |  |  |  |  |  |  |
| Prament TRANSFORMERS |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Stoc | Thord. No. | Secondary |  | $\xrightarrow{\text { Ins.is }}$ | Mype | ${ }_{\text {S }}^{\text {Size, }}$ In, |  |  |  |
|  | F01 |  |  | 16 |  |  |  |  |  |
|  | ${ }_{\text {T }}$ |  |  | 1500 |  |  |  |  |  |  |
|  | ${ }_{\text {T } 21 F 0}$ |  |  |  |  |  | $\times 214 \times 21 / 2$ |  |  |  |
|  | T21F10 |  |  |  |  |  |  |  |  |  |
|  | T2F |  |  | 160 |  |  |  |  |  |  |
|  |  |  |  | 160 160 |  |  |  |  |  |  |
|  | ${ }_{T} 2151$ |  |  | 160 |  |  |  |  |  |  |
| ¢ | T21F |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  | Tho |  |  |  |  | Mi | ${ }_{\text {Type }}^{\text {Tre }}$ |  |  | Wit. |  |
|  |  |  |  |  |  | CAV |  | $\begin{aligned} & \hline 3 \\ & \hline \\ & \hline \end{aligned}$ | ${ }_{\substack{58.23 \\ 7.82}}^{\text {7.06 }}$ |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| LINE DRIVER TRANSFORAERS <br> Tapped to match line imped. to Mod. or "B" Amp. grid |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Type | Pri/kSec | DC MA | Audio |  | Lbs. | Each |
| K1679 | A4765 | $\begin{aligned} & 1: 3 / 1,1: 25 / 100,1: 1,1: 11 / 4, \\ & 1: 140 / 100,1: 12 / 1: 2,1: 215 . \end{aligned}$ | $\begin{aligned} & \text { Pri.180 } \\ & \text { Sec } 100 \end{aligned}$ | 15 W | $3^{3} \times 28.4 \times 38$ | 3 | \$5.35 |
| K1680 | A4766 | Some as above | $\begin{aligned} & \text { Pri-280 } \\ & \text { Sec-200 } \end{aligned}$ | 30 W | 346x3x ${ }^{39}$ | 4 | 6.29 |

Multi-tapped for choosiner TRANSFORMERS

| No. | Type | Pri, :/2:ec |
| :--- | :--- | :--- |
| $K 1616$ | A4761 | $11 / 21,13: 1,13 /: 1,1 / 5: 1$, |

DC Mal Audio CD.



K1707 Atied $111: 1,2: 1,2^{1}: 1$,

## SWINGING CHOKES

Stock
No.
Min. Swg. Approx. Range VRMS Mi
Sire, In.
Hys. Ohms Hys. DC MA Type HxWXD Lhs.- Con

| K1728 | C1718 | 10 | 130 | 1312-312 | -150 | 2000 | C |  | 2.5 | 91 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K1827 | C 1400 | 10 | 100 | 12-2 | 17512.175 | 3000 | C | $3{ }^{110 \times 2 \%} \times 2 \times 2 \%$ | 2.7 | 270 |
| K1729 | C1401 | 10 | 80 | 12-2 | 20-200 | 3000 | C | $3 \% \times 3 \times 316$ | 3.5 | 3.35 |
| K1730 | C1645 | 10 | 90 | 12-2 | 20-200 | 5000 | C | 4x $31.4 \times 3 \%$ | 4.7 | 3.73 |
| K1766 | C1702 | 10 | 60 | 12-2 | 25-250 | 3000 | B |  | 3.9 | 3.56 |
| K1829 | C1402 | 10 | 60 | 12-2 | 25-250 | 3000 | C | $36 \times 3 \times 315$ | 4.6 | 3.94 |
| K1732 | C2307 | 10 | 80 | 20-4 | 30-300 | 3000 | C | $4{ }^{15} \times 2 \times 37$ | 9 | 5.82 |
| K1740 | C1403 | 16 | 80 | 20-4 | 30-300 | 5000 | D | $43114 x+6$ | 9 | 6.17 |
| K1742 | C1404 | 14 | 60 | $17-3$ | 40-400 | 5000 | D | $4^{2} \times \times 4 \times 5$ | 12.3 | 8.11 |
| K1750 | C1405 | 12 | 75 | 16-4 | 50-500 | 7500 | FS | $75 \times 6453$ | 17 | . 5 |




| ODULATION |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Stock No. | Thord. No. | Imp. ('CT) | (-CT | imary pplic. |  |  | Size, In. H×W×D | $\begin{aligned} & \text { Wi. } \\ & \text { Lbs. } \end{aligned}$ | $\begin{aligned} & \text { Your } \\ & \text { Cost } \end{aligned}$ |
| K557 | T21 M50 | $\begin{aligned} & 10 \mathrm{M} \\ & 10 \mathrm{M} \end{aligned}$ | 45004500,3750 | 19 etc, |  | $\begin{aligned} & \mathrm{BAH} \\ & \mathrm{FGV} \end{aligned}$ | $1 \times 2 \times 1$$2 \times 2 \times 2$ | $\stackrel{2}{3}$ | \$ 1.6 |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  | PP 6 L 6 |  |  | GGV | $3 \times 2 \times$ |  |  |
| Ks6. | T21M5 | $6.6 \mathrm{M}^{\circ}$ 10 M | $\begin{aligned} & 4000 \\ & 8600,3750 \end{aligned}$ | T220, 809 etc. PP 811 etc. |  | GGV | $\begin{aligned} & 3 \times 3 \times 4 \\ & 5 \times 4 \times 5 \end{aligned}$ | 8 | 5.2 |
| KS64 | T2 | 15:1 | 6250 |  |  | 3.2 |  |  |
| UNIVERSAL MODULATION TRANSFORMERS <br> Ideal for amateurs and experimenters. The rapped coils used in this series are designed for wide range applications. |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Thord. | Cap. Watts | Pri. MA Side | Sec. Ser. | $\begin{aligned} & \text { MA } \\ & \text { Par. } \end{aligned}$ | Mug | $\begin{aligned} & \text { Sive, } \ln , \\ & H \times W \times D \end{aligned}$ | Wt. Lbe. | Your Cost |
|  |  |  |  |  |  |  |  |  |  |
| 565 | T21: | 15 | 5 | 50125 | $\begin{aligned} & 100 \\ & 250 \end{aligned}$ | KTV |  | 3 | \& 7.06 |
| KS66 | T21M61 |  | 125 |  |  | PUV |  |  | 8.23 |
| K567 | T21:162 | 125 | 210 | 250320 | 320 | PUV | $5^{3} e^{\times 1}{ }^{19} 8 \times 68$ | 15 | 16.17 |
| K563 | T21:164 | 300 | $\begin{aligned} & 210 \\ & 250 \\ & 320 \end{aligned}$ |  | 500640 | PUVPLV | $\begin{aligned} & 6 \times 114 \times 73 / 4 \\ & 673 \times 53 \times 11 \\ & 6 \end{aligned}$ | $\begin{aligned} & 32 \\ & 35 \\ & \hline \end{aligned}$ | 27.9347.04 |
| K569 | T21,165 | 300 500 |  |  |  |  |  |  |  |

## STANCOR

## PLATE SUPPLY TRANSFORMERS

Sec. voltages either side of C.T. Pri. 115V. (')-115-230V, Mtg. FS

| No. | Type | $\checkmark$ DC | Sec-V AC | DC MA ${ }^{\text {b }}$ | $\mathrm{H}^{\prime \prime} \mathrm{xW}^{\prime} \times \mathrm{D}^{\prime \prime}$ | Lbe. | Esch |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K1752 | Ps045 | 1000, 750 | 1225, 850 | 250 |  | 27.2 |  |
| K1753 | P8025 | 1000, 750 | 1230, 940 | 400 | $74 \times 611 \times 88^{3}$ | 35.5 | 22. |
| K1755 | P8026 | 1250, 1000 | 1473. 1175 | 300 | $73 \times 79 \times 814$ | 36 | 24. |
| K1760 | P8027 | 1250, 1000 | 1510, 1210 | 500 | 71; $7^{7 \% \times 9}$ | 40 | 30. |
| $K 1761$ | P8028 | 1500, 1250 | 1740. 1460 | 300 | $731 \times 716 \times 816$ | 38 | 26.8 |
| $K 1762$ | P8029 | 1500, 1250 | 1775, 1500 | 500 | 111487\%883/ | 52 | 37. |
| K1763 | P8030 | 1750, 1500 | 2100, 1800 | 300 | 53, $\times 71 / 480$ | 40 | 29.3 |
| K 1764 | P8031 | 1750, 1500 | 2075, 1775 | 500 | 111487108834 | 52 | 39.3 |
| K 1765 | P8032 | 2000. 1750 | 2400. 2100 | 300 | $73 \times 719 \times 91 / 6$ | 45 | 30.7 |
| K1770 | P8033 | 2000, 1750 | 2375, 2065 | 300 | 1134871/x93 | 57 |  |

FILAMENT TRANSFORMERS (ALL SEC. CENTER TAPPED)

$\begin{array}{ll}\mathrm{K} 1771 & \text { P3024 } \\ \mathrm{K} 1800 & \mathrm{P} 5000\end{array}$
$\begin{array}{ll}\text { K1801 } & \text { P4086 }\end{array}$
K1802 P6302

| K 1804 | P6137 | 5.25 | 2 |
| :--- | :--- | :--- | :--- | :--- |
| K 1779 | 13 |  |  |


| K 1779 | P5014 |
| :--- | :--- | :--- |


| K 1775 | P3064 |
| :--- | :--- |
| K 1805 |  |

K1805 P6308

| K1780 | P5015 | 7.5 |
| :--- | :--- | :--- |
| K1828 | P |  |


| K 1828 | P 4091 |
| :--- | :--- |
| K 1782 | P 6138 |
| K 188 | P 492 |

K1834 P4092
K 1840 P6139
MODULATION TRANSFORMERS
Multi-tapped, matches Driver output to Modulation unit. Matehes impedisnces of Class ' $\mathrm{B}^{\prime}$ " amp. (2000 to 20,000 ohms) to Class "C"'load impedances of 2000 to 20,000 obms. * Denotes max. values

| No. | Type | DC MA* | Audio | Mtg. | H"xW"xD" | Lbs. | Each |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K1842 | A3891 | 100 | 15 W | D | $3^{3} 18 \times 28 / 1{ }^{1} \times 1 / 6$ | 2.5 | \$4.97 |
| K1621 | A3892 | 150 | 30 W | D | $4 \times 314 \times 3{ }^{31}$ |  | 6.09 |
| K1622 | A3893 | 180 | 60 W | D | $4 \times 3$ + $\times 415$ | 7.3 | 7.14 |
| K1852 | A3894 | 225 | 125 W | D | $43, \times 4 \times 4 \%$ | 12 | 9.44 |
| K2638 | A3898 | 260 | 300 W | FS |  | 40 | 34.02 |
| K1852 | A3899 | 500 | 600 W | FS | 111:5778x9 | 75 | 70.18 |

FILTER CHOKES

| No. | Type | Hys | MA | hms | VRMS | Mtg. | H"xW"xD" | Lbs. | Each |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K1832 | Cl | 5 | 200 | 90 | 5000 |  |  |  | 53.73 |
| K1831 | C1411 | 4.5 | 200 | 80 | 3000 | C | 3 \% 8 $3 \times 3$ |  | 3.35 |
| K1855 | C1721 | 8.5 | 200 | 120 | 3000 | N | 37 7 7 \% $1 / 1 \times 3$ | 4.5 | 3.44 |
| K1860 | C1412 | 4 | 250 | 60 | 3000 | C | $3 \mathrm{~S} \times 3 \times 31 / 2$ | 4.8 | 3.94 |
| M1865 | C2308 | 8 | 300 | 80 | 3000 | C | 4 ) $\times 4 \times 3$ | 9 | 5.82 |
| K2833 | C1413 | 8 | 300 | 80 | 5000 | D | $41 / 54 \times 4$ | 9 | 6.17 |
| K1866 | C1414 | 7.5 | 40 | 60 | 5000 | D | $43 / 5$ | 131/2 | 8.11 |
|  |  |  |  | 75 | 750 |  | , |  | . 5 |

## fransmitting condensers

Compact high voliage

## AEROVOX＂10＂Series



Hyvol＂inverted alumi－ metically sealed．Washer． Stock Cap．Wkg．Your No．Mfd．Vits．Cost $\begin{array}{llll}\text { K4519 } & 2.0 & 600 & \mathbf{2 2 . 2 5} \\ \mathrm{~K} 4521 & 4.0 & 600 & 3.08\end{array}$ $\begin{array}{llrr}\text { K4522 } & 1.0 & 1000 & 2.05 \\ \aleph 4522 & 2.0 & 1000 & 2.05\end{array}$ $\begin{array}{llll}\text { K4523 } & 2.0 & 1000 & 2.67 \\ \text { K4524 } & 0.5 & 1500 & 2.46\end{array}$ $\begin{array}{llll}\mathrm{K} 4525 & 1.0 & 1500 & \mathbf{2 . 6 7}\end{array}$

## ＂05＂Serie5

＂Hyvol＂filled and im－ pregnated units in round aluminum canspro－ vided with terminals mounted on high volt． age standzoff insulators． Hermetically sealed．All mount either upright or inverted；mounting ring is furnished．All con－ servatively rated．

| Stock No． | Cap． Mid． | Wkg． Vies． | Size in inches | Your Cost |
| :---: | :---: | :---: | :---: | :---: |
| K4819 | 1.0 | 600 | $2 \times 23$ | \＄2．22 |
| K4820 | 2.0 | 800 | $2 \times 2{ }^{3}$ | 2.89 |
| K4821 | 4.0 | 600 | $2 \times 31$ | 4.01 |
| K4793 | 1.0 | 1000 | $2 \times 54$ | 2.45 |
| K4794 | 2.0 | 1000 | $2 \times 514$ | 3.34 |
| K4795 | 4.0 | 1000 | 23／351／4 | 4.23 |
| K4796 | 1.0 | 1500 | $2 \times 51 /$ | 3.12 |
| K4797 | 2.0 | 1500 | $2 \times 31$ | 4.23 |
| K4822 | 4.0 | 1500 | 21／2x54／ | 5.35 |
| K 4798 | 1.0 | 2000 | $2 \times 4{ }^{3}$ | 4.01 |
| K4799 | 2.0 | 2000 | 251 | 4.46 |
| K 4827 | 1.0 | 2500 | $2 \times 51 /$ | 5.35 |
| K4828 | 2.0 | 2500 | 21／2051／ | 8.21 |
| K4823 | 1.0 | 3000 | $21 / 2 \times 31$ | 8.04 |
| K4561 | 2.0 | 3000 | $3 \times 51$ | 9.80 |

＂D YR＂By－Pass Units


Dykanol＂G Oil rilled
Drawn meta eans 600 volts d．e．warking． Low power
factor．

| No． | Type | Mfd． | Eech |
| :---: | :---: | :---: | :---: |
| K3011 | DYR．6010 | .1 | 51.56 |
| K3012 | DYR．6025 | .25 | 1.63 |
| K3013 | DYR－6050 | .5 | 1.73 |
| K3014 | DYR．6100 | 1.0 | 2.00 |
| K3015 | DYR－6200 | 2.0 | 2.68 |
| K3007 | DYR．6011 | $.1 . .1$ | 1.96 |
| K3008 | DYR－6055 | .5 .5 | $\mathbf{2 . 2 9}$ |


| ＂TLA＂DYKANOL＊G＊ |  |
| :---: | :---: |
| Filter Capacitors |  |
|  | In Sealed aluminum con． |
|  |  |
|  | 600 v ．and 1 mfd .1000 v |
|  | are 2 \％／8＂high）．Mount in |
|  | any position．Dykanol dielectric． |
|  |  |
| 4195 | Cap．Mfd．Wkg．V．Each |
| 4196 | $4 \quad 600 \quad 3.33$ |
| K4197 | 110002.22 |
| K4198 | $21000 \quad 2.97$ |
| K4199 | 15002.97 |

Your


AEROVAX Silver MIcas
Encased in red molded bakelite hous－ inge and provided with pigtail leads． For most critical applications where precise capacity value must be at－

Features：only plus .0022 per de． gree F．temperature coefficient； hich＂Q＂：no capaclity drift with time 1000 volts test， 500 work－ Ing．Tolerance $\pm 5 \%$ ．


| Type No． | Fix． Mfd． | Eash ${ }^{11}$ |
| :---: | :---: | :---: |
| K5071 | ． 000005 | 35 c |
| K5072 | ． 00001 | 29 c |
| K5073 | ． 000025 | $29 c$ |
| K5074 | ． 00004 | 29 c |
| K5075 | ． 00005 | 29 c |
| $\times 5076$ | ． 00007 | 29 c |
| K5077 | ． 000075 | 29c |
| K5078 | ． 0001 | 29 c |
| K5079 | ． 00015 | 35 c |
| K5080 | ． 0002 | $35 c$ |
| K5081 | ． 00025 | 35 c |
| K5082 | ． 0003 | 53c |
| $\times 5083$ | ． 00035 | 53 c |
| $\times 5084$ | ． 0004 | 53 c |
| K5085 | ． 0005 | 53 c |

GENERAL ELECTRIC Industrial Capacitors


Pyranof filled high voltage capacitors in hermetically sealed metal containers with premountedrigid bate brac

## PLASTICON Condensers



Here is something new in high voltage condensers Mineral oil impregnated and filled，Hermetically sealed；can be operated in any position．Plasticon condenser use plastic film dielectric in place of the ordinary impregnated paper．They are smaller， wider temperature ranges，greater safety factor longer life．All DC rectangulars have $8-32$ screw and hex nuts with removable hot－tinned solder luys．

| Stock No． | Mfd． | DCWV | Dimensions | Your Cose |
| :---: | :---: | :---: | :---: | :---: |
| K2901 | 4 | 600 | $4 \times 2 \times 1 y^{\prime \prime}$ | \＄3．11 |
| K2902 | 1 | 1000 | 2\％x1处x＂ | 2.36 |
| K2903 | 2 | 1000 | $31 / 2 \times 2 \times 1$＂ | 3.04 |
| K2905 | 4 | 1000 | 4 9\％2 $5 / 8 \times 1^{3 \prime}$ | 3.85 |
| K2906 | 8 | 1000 | 41831／413＊ | 5.43 |
| $\times 2907$ | 1 | 2000 | $21 / 82 \times 11 /$ | 3.36 |
| M2908 | 2 | 2000 | $316521 / 21^{13}$ | 4.01 |
| K2909 | 4 | 2000 | 31423，$\times 14{ }^{\circ}$ | 5.43 |
| K2910 | 1 | 3000 | $4 \times 21 / 2 \times 1{ }^{3} 16$ | 7.11 |
| K2911 | 2 | 3000 | 4 E3 $1 / 211 /{ }^{\prime \prime}$ | 9.06 |
| K2912 | 4 | 3000 |  | 12.51 |
| K2913 | 1 | 5000 | 4 23年1年＂ | 19.40 |

SANGAMO X＇mitting Micas
For low and high power tranamitters，power sup－ pliee，power amplifiers，etc．Employ the finest ruby mice dielectric．Completely cased in molded bake－ lite housings with tapped $6 / 32$ screw terminals on （varies sigghtly with capecitance）．Type A 600 Volt Whg． 1200 Volt Whe 2500 Volt Whg． 1000 Volts Test 2500 Volts Test 5000 Volts Test
Mf
Mfd．
.00005
.0001
00015
.00015
.00025
.00025
.0005

## .0005 .001 .002

.001
.002
.005
.005
.006
.01
No．E
K3051
$\times 3053$

K 3054
$\times 3056$
$\times 3060$
$\times 3061$
$\times 3064$


## SANGAMO Economy Micas <br> Type BE－21／419

| Cap． | $60$ | He． | $1200 \mathrm{~V}$ | ， | $25$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mfd． | 1000 V． | Each | 2500 V | Each | 5000 V | Each |
| ． 00005 | K3600 | \＄0．33 | K3609 | \＄0．45 | K3617 | 50.45 |
| ． 0001 |  |  | K3610 | ． 45 | K3618 | .45 |
| ． 00025 | $\times 3601$ | .33 | K3611 | ． 45 | K3619 | .47 |
| ． 0005 | K 3602 | .33 | $\times 3612$ | ． 47 | K3620 | ． 56 |
| ． 001 | $\times 3603$ | ． 36 | $\times 3613$ | ． 53 | K3621 | ． 65 |
| ． 002 | M3604 | ． 39 | $\times 3614$ | ． 62 | K3622 | ． 97 |
| ． 005 | M3606 | ． 50 | K3625 | 1.00 |  |  |
| ． 006 | M3607 | ． 56 |  |  |  |  |
| ． 01 | M3608 | ． 65 | K3624 | 1.47 |  |  |
| ． 02 | K3623 | 1.29 |  |  |  |  |

＂TJU＂DYKANOL＂G＂ Oil－Filled Capacitors


New universa！
mounting bracket mounting bracket makes these con－ deasers a better buy than ever and impregnated Porcelain high tension terminal． Shpg．wt． 1 lb
53.12
3.78
4.91
7.13
3.33
4.46
5.58
8.04
8.92
4.01
5.58
7.44
11.15
4.91
5.79
8.04
10.78
13.39
28.65
＊Mounting soldered feet to bottom of can．

## ＂TO＂DYKANOL＂G＂？ Oil－Filled Condensers



Designed to Etend up
under conditions of se－ under conditions of se－
vere translent voltage vere transient voltage
and line surges and con tinuous duty operation． In cylindrical alumi－ num containers，with 2 insulated terminals and univeraal m＇tg bracket．
May be mounted in any position

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Designed for use in electronic cir cuits where frequency stability must be maintained．Molded in low－loss red bakelite and provided with tinned brass wire leads．All ing 1000 volts d．c test except on capacities higher than .0025 which are rated ti 300 V．d．c． wkg．， 600 volts d．c．test．

Type $\begin{aligned} & \text { Mon No．Nach No．}\end{aligned}$ Mif．Each K1351 ． 000005 35e K1386 ．00015 35e $\begin{array}{llllll}\mathrm{K} 1352 & .00001 & 29 \mathrm{c} & \mathrm{K} 1387 & .0002 & 35 c \\ \mathrm{~K} 1353 & .000025 & 29 \mathrm{c} & \mathrm{K} 1388 & .00025 & 35\end{array}$ K1371 $.00004 \quad 29 \mathrm{c}$ K1389 $0.0003 \quad 53 \mathrm{c}$ $\begin{array}{llllll}\mathrm{K} 1383 & .00005 & 29 \mathrm{c} & \mathrm{K} 1390 & .0004 & 53\end{array}$ K1385 ．0001 29a

K1392 ype A8e4 Square $\begin{array}{llllll}\mathrm{K} 1393 & .0015 & \$ 1.06 & \mathrm{~K} 1397 & .004 & \mathbf{0}, 58\end{array}$ $\begin{array}{llllll}\mathrm{K} 1394 & .001 & 1.06 & \mathrm{~K} 1398 & .005 & 1.76\end{array}$ $\begin{array}{lll}K 1395 & .0025 & 1.41\end{array}$

We can supply any C－D Indus－ trial or transmitting eapacitors not shown here．Prices on re－
quest．

CENTRALAB Ceramic Tubulars


General 5 peclifcatlons
NPO indicates zero temper ature capacitor and is used where no change with temperature is desired. N750 indlates negative temperature compensating capacitor. N750 $=.00075 \mathrm{mmf} /$ mmf $/{ }^{\circ} \mathrm{C}$. Standard tolerances for both types is $\pm 23 . \%$ for 25 mmf and higher: $\pm .5 \mathrm{mmf}$ for 20 mmf or less.
Centralab Tubular Capacitora consist of a thin wall ceramic tube, specing two tubular silver plates, one inside and one outside the ceramic. The capacitance has uniform retrace characteristics under sll life and aging test because the silver is electroplated on the ceramic und no mechanical movement or warping that might change the distance between the plates is possible..


Midget silver-mica condensers-for use where compect size, minimum external inductence, and high internal series resistance is essential, Unmatched for VHF and UHF work. "Q" factor at 1 MC is not less than 1000 above 100 mmf ; not less than 700 between 50 and 100 mmf ; and not less than 500 for below 50 mmf . Max. Working voltage is 350 V A.C. or 500 V D.C. Type $370 \cdot \mathrm{CB}$ has ring type metal shell with 3 soldering cark. High potentia terminal at either end for feed-thru connec. tion. Type 370.FF bolted to chassis with 3/48 screw.

| $\frac{\text { Type }}{\text { No. }}$ | CA |  | Type 370-FF |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Each | Cep (mmf) | No. | Ench |
| K7398 | \$0.73 | $15 \pm 1.5$ | K7408 | 50.73 |
| $\times 7399$ | . 73 | $50 \pm 5$ | K7409 | . 73 |
| K7400 | .73 | $100 \pm 10$ | K7410 | . 73 |
| K7401 | . 73 | $150 \pm 15$ | K7411 | . 73 |
| K7402 | . 73 | $200 \pm 20$ | K7412 | . 73 |
| K7403 | . 73 | $300 \pm 30$ | K7413 | . 73 |
| K7404 | . 73 | $400 \pm 40$ | K7414 | . 73 |
| K7405 | . 73 | $500 \pm 50$ | K7115 | . 73 |
| K7406 | 1.47 | $750 \pm 150$ | K7416 | 1.47 |
| K7407 | 1.76 | $1000 \pm 200$ | K7417 | 1.76 |

ERIE NPO and GP Ceramicons


## Non-Insulated

These condensers consist of silver electroden fired on ceramic dielectric.
Physical Sizes: Insulated types-Style K $.250^{\prime \prime} \mathrm{x} .562^{\prime \prime}$
$\begin{array}{lll}\text { Style L } & .250^{\prime \prime} \equiv & .812^{\prime \prime} \\ \text { Style M } & .340^{\prime \prime} \times 1.328^{\prime \prime}\end{array}$
Non-Intulated type-Style D $.360^{\prime \prime}=1.110^{\circ}$

## NPO Ceramicons

Has zero temperature coefficient. Recommended for frequency applications, "Q" for NPO Ceramicons above 30 mmf is 1000 or higher. Below 30 mm , " $Q$ " decreases slightly as capacity decreases. Working voltage, 500 volto D.C.

| Number | Style | Capacity (mmf) | Each | Number | Style | Capacity (maf) | Each |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K7350 | $\mathbf{K}$ | $3 \pm 1$ | \$0.29 | K7356 | M | $50 \pm 5$ | \$0.29 |
| K7351 | K | $5 \pm 1$ | . 29 | $K 7357$ | M | $75 \pm 7.5$ | . 29 |
| K7352 | K | $10 \pm 1$ | . 29 | K7358 | M | $100 \pm 10$ | . 29 |
| K7353 | K | $20 \pm 2$ | . 29 | K7359 | M | $120 \pm 12$ | . 29 |
| K7354 | $L$ | $25 \pm 2.5$ | . 29 | K7360 | D | $150 \pm 15$ | . 35 |
| K7355 | $L$ | $33 \pm 3.3$ | . 29 | K7361 | D | $175 \pm 17$ | . 35 |

## GP1 and GP2 Ceramicons

These types should be used for seneral purpose applications auch as by-pass and blocking condensers, where temperature coefficient is not important. Type GP1 Ceramicons have temperature coefficient between 130 parta $/$ million $/{ }^{\circ} \mathrm{C}$ and -1600 parts $/$ million $/{ }^{\circ} \mathrm{C}$. " O " limit over 30 mm is 1009 or greater. The capacity of Type GP2 Ceramicons will not decrease more over 30 mmf is 1000 or greater. The capacity of Type GP2 Ceramicons will not decrease more than $20 \%$ nor inerease more than $10 \%$ from their value at room termperature as the tempera. ture is varied from $-\mathbf{V D O}^{\circ} \mathrm{C}$ to $85^{\circ} \mathrm{C}$. Power factor will not exceed $3 \%$. Rated voltage of OP1

| Number | Style | Capacity (mmf) | Each | Number | Style | Capacity (mmf) | Each |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K7362 | GP1K | $10 \pm 2$ | \$0.15 | K7373 | GP2K | $500 \pm 100$ | 50.15 |
| K7363 | GP1K | $25 \pm 5$ | . 15 | $\times 7374$ | GP2L | $680 \pm 136$ | .18 |
| K7364 | GP1K | $50 \pm 10$ | . 15 | K7375 | GP2L | $750 \pm 150$ | . 18 |
| $K 7365$ | GPIK | $75 \pm 15$ | . 15 | K7376 | GP2L | $1000 \pm 200$ | . 18 |
| $K 7366$ | GPIK | $100 \pm 20$ | . 15 | K7377 | GP2L | $1500 \pm 300$ | . 18 |
| K7367 | GP1L | $120 \pm 24$ | . 15 | $K 7378$ | OP2M | $2000 \pm 400$ | . 24 |
| K7368 | GP1L | $150 \pm 30$ | . 15 | K7379 | GP2M | $3000 \pm 600$ | . 28 |
| K7369 | GP2K | $200 \pm 40$ | . 15 | K7380 | GP2M | $4000 \pm 800$ | . 12 |
| K7370 | GP2K | $250 \pm 50$ | . 15 | K7381 | GP2M | $5000 \pm 1000$ | . 36 |
| $K 7371$ | GP2K | $300 \pm 60$ | .15 | K7382 | GP2D | $6000 \pm 1200$ | . 44 |
| K7372 | GP2K | $390 \pm 78$ | . 15 | K7383 | GP2D | $6800 \pm 1360$ | . 44 |


\section*{| K7372GP2K$\quad 390 \pm 78$ | . 15 |
| :--- | ---: | ---: |}

Perform dual function of supporting other circult elements and serve as a condenser for by-Dassing R-F currents to ground, Minimum inductance at high frequencies makes them ideal for VHF, and UHF applications. Type 720A is "盾" high above chassis; mounted with 3.48 nut. Type 721 hes $116^{\prime \prime} 20^{\circ}$ gauge tinned copper wire lead terminal ot top. Condenser body approx. $3 / /^{*}$ above chassis; mounted with 3.48 nut.
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## kits for amateurs and experimenters

## afayette 6, 10 and 11 Meter Converter



This new LAFAYETTE kit was designed to operate directly from a 105 to 125 volt 60 eycle AC scurce. The converter makes use of the new selenium rectifier and three of the new miniature tubes. One 6BA6 is employed at a tuned RF stage, one 6BE6 as a mixer and one 6 C 4 as the high frequency oscillator. Single dial tuning is featured; however, this only controls the high-frequency oscillator. the RF stage being separate control. This feature eliminates tracking error and the ability to band spread tuning and cope with atrong local signals by detuning the RF stage. A separate bias control makes it possible to vary the gain of the mixer which provides a means of obtaining optimum signal to noise ratio regardless of what type receiver it may be connected ahead of. The other controls are an "ON-OFF" awitch and a stand-by switch which controle both the converter and the associated receiver. Plug-in coils are employed for the various bands, one set to cover the 50 to 54 megacycle range and another to cover from 27.180 to 29.7
megacycles. The suggested output frequency is 5.7 mc., however the output transformer is adjustable from 4.7 to 6.5 mc . The kit K21000-Kit of Tubes for Converter comes supplied complete with a punched chassis, panel and cabinet Your Cost perkit Gray crinkle cubinet $8 \times 12 \times 8^{\prime \prime}$. Shpg. wt. 15 lbs., kit or assembled.
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## Cafayette <br> All Wave 2 Tube AC-DC Receiver Klts

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## Battery Operation

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## racks and panels

Sloping Front Steel Chassis
Heavy duty steel chassis finished in black ripple enamel．Have sloping front for effect of instruments，etc．Give the or amplifier unit when used without top covera．All sizes are $31 / 2^{"}$ high and have 4 ＂slope front．Three popular sizes

| No． | Top of Base | Bottom of Base | Wt．．．Lbs． | Your Cost |
| :---: | :---: | :---: | :---: | :---: |
| K22099 | $7 \times 17^{\circ}$ | $10 \times 17^{\circ}$ | 4 | $\$ 1.94$ |
| K22100 | $10 \times 14^{\prime \prime}$ | $13 \times 14^{\prime \prime}$ | 4 | 2.15 |
| K22101 | $10 \times 17^{\circ}$ | $13 \times 17^{\circ}$ | 5 | 2.4 |

MASONITE Radio and Relay Rack Panels
 Tempered Masonite，non－mag－ netic．sturdy yet easily worked with ordinary woodworking tools．All panels is thick，fin－
rack panels have amateur Standard notching

| Stock N | Rack | Eech | Sto | Radio Panel |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2277 | 19 | 0.03 | K22280 | 10 |  |
| 2284 | 84／419＂ | 103 | K22281 | 7 $12^{\circ}$ | 65 c |
| 22285 | 104／7819＊ | 1.18 | K22282 | 7814＊＊ | 73 |
| K22286 | 121／819＊ | 1.18 | K22283 | 7x18＊ | ce |

## GREENLEE Punches



Driven by screw ac tion，this handy tool quickly cuts clean ac curate holes for sock ts．pluge，etc．，in ra dio chassis．Only nec eseary to drill ${ }^{3}$＂or re hole to fit ${ }^{3} g^{\circ}$ cap screw； cap screw．Each size tool consist of the punch，die for the metal and cap screw．Shpt．wt． 2 lbs M15132－ 2 ＂Complete Elther Above． Each Punches．Each K15136 $1^{\text {c Complete }}$ M15138－11＂Complete M15139－1s作 Complete K15140－1 $16^{\circ}$ ．Complete K15141－11／4＊Complete Any Above， Each

K15143－1 Complete K15118－1 Complete clusive．Each for 1 to $1 / 夕^{\prime \prime}$ In． K15146－2 4 Complete 5558 K15147 Screw for $21 / 4$－Punch 45 e

## Standard Type Steel Chassis Bases



Stamped from one plece of No． 20 gauge cold rolled steel．Have four Bottom edges flanged in on four aides for additional reinforcement and are drilled for bottom plates Stock Size W．W．Your
No．L．H．Lbs．Cost
 $\times 22208$ 5ス10×3＂ $\times 22212$ 7x 7x2 ${ }^{\prime \prime}$ $\times 22213$ 7x9x2＂ K22214 7x11手 K22215 713玉2＊以22216 715 天3 K22217 7217x3＂ M22226 10×12×3 M22209 10×14×3＂ K22227 10x17ェ3＊ M22210 10×23×3＂


Sloping Panel Steel Cabinets Streamlined cabinets withrounded corners． Withrounded corners． For use as speaker cabinets，oscillator cases，monitors，tele－
receivers，etc．Both have marine gray ripple finish． K22097－（left） $4^{3} 16.541 / 241_{4}^{\circ}$ ．Shpg．wt． 2 lbs．Your Cost．． 51.26 $\times 22098$－（right） $71 / 3 \pi 4 / 1 / x 44$ ．Shpg．wt． 5 lbs．Your Cost． 2.26


Black Ripple Finish Steel Cabinets Cover removable，held in place by self－tapping screws．
Stock No．Dimensions Shpg．Wt．Your Cest

| K22178 | $4 \times 4 \times 2^{\prime \prime}$ | 1 lb | $\$ 0.65$ |
| :---: | :---: | :---: | ---: |
| K 22179 | $4 \times 5 \times 3^{\prime \prime}$ | 2 lbs | .73 |
| K22180 | $6 \times 6 \pi 6^{\prime \prime}$ | 3 lbs． | .97 |
| K22181 | $12 \times 7 \times 6^{\prime \prime}$ | 5 lbs． | 1.82 |
| K22182 | $15 \times 9 \times 7^{\prime \prime}$ | 10 lbs． | 2.56 |



## General Utility Steel Cabinets

Can be used for a multitude of radio and other purposes．All ase substantially made of sheet steel，with spot welded re－inforeed corners． The tops and bottoms are removable：held in furnished．Finished in attractive black ripple． No．Size Shpe．Wt．Each ＊Spor Welded Corners $K 22174$ K22175 5 5 ， $6251 / 2^{\circ}$ K22173 8 $\quad 9 \times 6^{\circ}$ $K 22176$
$\times 22177$ Tops，Bottoms

## Deluxe Speaker Cabinets



The exterior appearance of these speaker cabi－ nets offers every modern refinement．To match other streamlined equipment，the front corners are rounded and neatly trimmed with chrome and red striped moulding．Chrome finished handles are provided for portubility．A new modern grille，combined with slate gray ripple finish．completes this very attractive unit

| Stock | Hole <br> No． | Speaker <br> Size | Cabinet | Shpg． | Your |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Size | Size | Wt． | Cost |  |  |


| K22244 |  | 6 ＊ | 10x1086＂ | 8 lbs ． | 4.12 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| K22246 | 61／2＂ | $8{ }^{\prime \prime}$ | 12x12x7 | 9 lbs ． | 5.17 |
| $K 22247$ |  | $10^{\prime \prime}$ | 14814x8＂ | 15 1bs． | 6.47 |
| K22248 | 11＊ | 12＂ | 16x16x8＊ | 20 lbs ． | 8.53 |

Blank Metal Chassis Bases


Here＇s your chance to buy all purpose radio chassis，un－ drilled，at unusually low prices．All have
re－inforced spot re－inforced spot extra strength．

DeLuxe Amplifier Chassis


Chassis is of one－piece cold with reinforced corners．Fin． ished in rippled black：cover in slate，kray with polished striped molding and chromium handles．All covers red striped
chromium handles．All covers $6^{\prime \prime}$ deep．Chas－
sis drilled for bottom covers（not supplied）．

| Stock No． | Size | Shpe．We． |
| :---: | :---: | :---: |
| K22183 | 5x10x3＂ | 9 lbs ． |


$\begin{array}{lccr}\text { Stock No．} & \text { Sire } & \text { Shpg．Wt．} & \text { Each } \\ \text { K22183 } & 5 \times 10 \times 3^{\prime \prime} & 9 \text { lbs．} & \$ 3.15 \\ \text { K22184 } & 6 \times 14 \times 3^{\prime \prime} & 10 \mathrm{lbs} & 3.68 \\ \text { K22185 } & 7 \times 17 \times 3^{\prime \prime} & 11 \mathrm{lbs} & 4.20 \\ \text { K22186 } & 10 \times 12 \times 3^{\prime \prime} & 11 \mathrm{lbs} & 4.20 \\ \text { K22187 } & 10 \times 17 \pi 3^{\prime \prime} & 13 \mathrm{lbs} . & 5.00\end{array}$
$\begin{array}{lccr}\text { Stock No．} & \text { Size } & \text { Shpg．Wt．} & \text { Each } \\ \text { K22183 } & 5 \times 10 \times 3^{\prime \prime} & 9 \mathrm{lbs} & \$ 3.15 \\ \text { K22184 } & 6 \times 14 \times 3^{\prime \prime} & 10 \mathrm{lbs} & 3.68 \\ \text { K22185 } & 7 \times 17 \times 3^{\prime \prime} & 11 \mathrm{lbs} & 4.20 \\ \text { K22186 } & 10 \times 12 \times 3^{\prime \prime} & 11 \mathrm{lbs} & 4.20 \\ \text { K22187 } & 10 \times 17 \times 3^{\prime \prime} & 13 \mathrm{lbs} & 5.00\end{array}$
13 lb

Sloping Chassls Units


Deluxe steel amplifier units with sloping with sloping fronts on chas is bases．Bases equipped with hrome trim med handles op covers have beautifu chrome plated ＂air gate＂ven tilators with red striped chrome trim．Venti lating louvres on vides and back．Raised screen openings on top，with red striped chrome mold ing．Rounded corners．Marine gray ripple
finish．All have＂slope；bases 3 th＂high．
No Overall Bottom $\times 2213$
K22134


Chassis Shearing Punch


Shpg．wt． 33 lbs
Each
54.70

K22103－32＂high．Panel space 28x19＂．Wt 36 lbs．
$\$ 5.36$

## Black Ripple Finish <br> Steel Bottom Plates

Bottom plates huve holes to match the steel chassis listed above

| Stock | Size | Wt． | Your |
| :---: | :---: | :---: | :---: |
|  | D． IL ． |  | Cost |
| K22228 | 51／2x $91 / 8{ }^{\prime \prime}$ | 1 | \＄0．32 |
| K22233 | $5 \times 10^{\circ}$ | 1 | ． 35 |
| $\times 22211$ | 7x7＊ | 1 | ． 35 |
| K22242 | 7x9＊ | 1 | ． 38 |
| K22249 | 7811＊ | 1 | ． 44 |
| K22256 | 7213＊ | 2 ＊ | ． 50 |
| $\times 22258$ | 7×15＊ | 2 | ． 56 |
| $\times 22260$ | 7x17＂ | 2 | ． 59 |
| $\times 22265$ | 10x12＂ | 2 | ． 59 |
| K22264 | 10x14＊ | 2 | ． 62 |
| $\times 22266$ | 10x17＊ | 2 | ． 76 |
| K22267 | 10x23＂ | 3 | 1.03 |
| Zinc Plated Bottom Plates |  |  |  |
| $\times 22205$ | $51 / 2 \times 91 / 4{ }^{\prime \prime}$ | 1 | \＄0．32 |
| $\times 22206$ | $5 \times 10^{\circ}$ | 1 | ． 35 |
| K22207 | 7×7＂ | 1 | －35 |
| $\times 22243$ | $7 \times 9$＂ | 1 | ． 38 |
| $\times 22268$ | 7811＊ | 1 | ． 44 |
| K22269 | 7813＊ | 2 | ． 50 |
| K22273 | 7x15＊ | 2 | ． 56 |
| K22274 | 7817＂ | 2 | ． 59 |
| K22275 | 10x12＂ | 2 | ． 59 |
| $\times 22276$ | 10x14＊ | 2 | ． 62 |
| K22278 | 10x17＊ | 2 | ． 76 |
| K22279 | 10×23＊ | 3 | 1.03 |

$\begin{array}{lr}\text { We．} & \text { Each } \\ 3 \text { lbs．} & 50.62 \\ 3 \text { lbs．} & .88 \\ 3 \text { lbs．} & .68 \\ 3 \text { lbs．} & .82 \\ 3 \text { lbs．} & .88 \\ 4 \text { lbs．} & .94 \\ 5 \text { lbs．} & 1.23 \\ 5 \text { lbs．} & 1.18 \\ 5 \text { lbs．} & 1.29 \\ 6 \text { lbs．} & 1.35 \\ 6 \text { lbs．} & 1.35 \\ 7 \text { lbs．} & 1.76 \\ 7 & \text { lbs．} \\ & 2.32\end{array}$

No．
$K 22299$
$\times 22301$
K22325
K22326
K22327
K22339
$\times 22303$
K22328
K22304
$\times 22329$
$K 22330$
126
All Prices Subject To Change Without Notice

| Hinged Steel Cabinets |  |  |  |
| :---: | :---: | :---: | :---: |
| Employ full piano-hinged doors, and removable front panels. Modern grille type ventilation provided at the sides and back. Front top corner is rounded. Finished in black ripple enamel. ${ }^{\text {a }}$ |  |  |  |
| No. | H.L.D. | For Chassis | Exch |
| K22072 | 71. $\times 1016 \times 66^{7}$ | $53 / 3 \times 9.1 / 4$ |  |
| $K 22073$ | $71.6 \times 8 \times 8{ }^{\text {c }}$ | $7 \times 12$ | 35 |
| K22074 | $74 \times 10 \times 8{ }^{\circ}$ |  | 2.68 |
| $K 22075$ | 71/4x $14 \times 8^{7}$ | 7x13x ${ }^{\text {a }}$ | 3.03 |
| K22076 | 9x $15 \times 10^{3}$ " ${ }^{\prime \prime}$ | 10x14x3" | 4.85 |
| K22077 | $12 \times 18 \times 12^{2}$ | 10x17830 | 5.59 |



[^3]
## Heavy Duty Type

16" Steel Chassls With Bottom Cover Plates


One piece 1 /it steel. All corners re-enforced. Ends drilled to fit standard mitg. bracket. All black wrinkle linish.

| No. | W. L. D. | Lbs. | Ea |
| :---: | :---: | :---: | :---: |
| K22255 | 8×17x2" | 9 | \$2.12 |
| K22229 | 8×17x3" | 10 | 2.35 |
| $\times 22231$ | 11817x2" | 11 | 2.38 |
| 22256 | 11817x3" | 12 | 2.59 |
| K22230 | 13817x2" | 13 | 2.79 |
| K22232 | $13 \times 17 \times{ }^{\prime \prime}$ | 14 | 3.06 |
| $\times 22237$ | 13x17x4" | 15 | 3.38 |

## Cabinets

Made from sheet steel with louvred slots for wall hanging. Fin. shed in black ripple enamel.

 $\begin{array}{llll}\text { No. Sise Cabiaet Wh. Each } \\ \text { K22140 } & 6^{\circ} & 10 \times 10 \times 6^{\circ \prime} & 8 \mathrm{lbs} . \\ \$ 2.82\end{array}$ K22141 $8^{\prime \prime} \quad 12 \times 12 \times 7^{\prime \prime} \quad 91 \mathrm{bs}$. 3.53 | K22142 | $10^{\prime \prime}$ | $14 \times 1488^{\prime \prime}$ | 15 lbs | 4.56 |
| :--- | :--- | :--- | :--- | :--- |
| K22143 | $12^{\prime \prime}$ | $16 x 16 \times 8^{\circ \prime}$ | 20 | lbs |



## Steel Cabinets For Rack Paneis



Heavy duty cabinets built of b/ steel and finished in black ripple Standard and DeLuxe medals. Standard models have square re-enforced corners; spot welded joints. DeLuxe models have neatly rounded corners and are decorated with attractive chromium trim. Both types are universally drilled to take all stand. ard 19 " rack panels. All have louvrea and lateh covers. All take chassis $13^{\prime \prime}$ deep. De Lume avallable with slate gray finish on special order.

| STANDARD STEEL CABINET |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Stock | Stint | Panel | Do | Shpe. | - |
| N | Dimensions | Space | Location | , | Cos |
| 219 | 83 | 8\%/619" | Top Only | 20 lbs . | \$6.17 |
| K22070 | 12) $\times 19 \times 14$ | 12) $\times 19^{*}$ | Top Only | 27 lbs. | 7.64 |
| K22193 | 17 \% $\times 19$ | 1712519* | Top \& Rear | 34 lbs. | 11.47 |
| K22192 | 2614*19 | 2614x19" | Rear Only | 47 lbs . | 12.64 |
| K22190 | 35 z19x | 35x19" | Rear Only | 55 lbs | 15.58 |
| DE LUXE STEEL CABINETS |  |  |  |  |  |
| K22188 | 101/5x21x15" | 83'x19* | Top Only | 22 lbs. | 9.42 |
| K22071 | $14 \times 21 \times 15{ }^{\prime \prime}$ | 121/1 $\times 19^{\prime \prime}$ | Top Only | 29 lbs. | 11.47 |
| K22191 | 191/621×15" | 1737219* | Top \& Rear | 34 lbs | 15.88 |
| K22198 | $28 \times 21 \times 15 *$ | 2631819" | Rear Only | 69 lbs. | 17.93 |
| K22199 | 361/4 $21 \times 15$ " | 3519** | Rear Only | 73 lbs . | 20.29 |

Heavy Steel Rack Panels, Black or Gray
Heavy duty $3 /{ }^{\prime \prime}$ steel panels for all standard $19^{\prime \prime}$ racks. Available with either blsck ripple finish or with commercial slate gray ripple. These panels don't collect dust and they don't show finger marks. Available in 12 standard sizes to meet practically
Block Gray Ht. Wht. Tour Black


 \begin{tabular}{lllll|lllll}
\& N22169 \& K 22118 \& $13 / 4$ \& 2 \& $\$ 0.59$ \& K 22163 \& N 22124 \& 121 \& 12

 

K 22171 \& $K 22119$ \& $31 / 2$ \& 5 \& .68 \& $K 22164$ <br>
$K 22120$ \& $5!$ \& 7 \& .82 \& $K 22165$

 K22160 K22121 22161 K 22122 $. .91 \times 22166$ 

K 22162 \& K 22123 \& 1016 \& 9 \& 1.06 \& K 2216 <br>
\hline
\end{tabular}

## Sloping Front Cabinets

Slate gray ripple finish. Front panel removable. Rear with openinge for ventilation, leads tc. Less chassis
Stock H. W. D. Chassis Wht.
K20. Inches Inches Lbs.
K22092 8x 8x $8 \quad 7 \times 7 \times 2 \quad 6$
K22093 $8 \times 10 \times 8$ ix $9 \times 2$
K22094 $8 \times 14 \times 8$ 7x $13 \times 28$




## Enclosed Steel Racks

| DeLuxe stream Unive drilled standar els. St steel m trimmi top and in slate (Black availabl ify on Panel 19". Mo $22 \%$ " Hinged Ship knocked with all ware. locks on door. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Stock No. | $\begin{aligned} & \text { Ht. } \\ & \text { In. } \end{aligned}$ | Panel Space | $\begin{aligned} & \text { Wi. } \\ & \text { Lbs. } \end{aligned}$ | $\begin{aligned} & \text { Your } \\ & \text { Cost } \end{aligned}$ |
| $\begin{aligned} & \overline{K 22145} \\ & \mathrm{~K} 22146 \\ & \mathrm{~K} 22148 \\ & \mathrm{~K} 22158^{\circ} \\ & \mathrm{K} 22159^{\circ} \end{aligned}$ | $\begin{aligned} & 42^{\prime \prime} \\ & 661 \xi^{\prime \prime} \\ & 81^{\prime \prime} \\ & 6811^{\prime \prime} \\ & 824^{\circ} \end{aligned}$ | $\begin{aligned} & 36^{3}{ }^{4 \prime \prime} \\ & 611^{\prime \prime} \\ & 77^{\prime \prime} \\ & 611_{4}^{\prime \prime} \\ & 77^{\circ} \end{aligned}$ | $\begin{aligned} & 100 \\ & 100 \\ & 175 \\ & 190 \\ & 220 \end{aligned}$ | $\begin{array}{r} \$ 27.93 \\ 39.69 \\ 4704 \\ \$ 5.86 \\ 67.62 \end{array}$ |



## Roiler Trucks for Racks

Designed for use on the
deluxe streamlined racks. and have rounded corner: at the front with chrome finished red-striped trim. Custore are of the ball. bearing wivel type with steel or rub


## Amplifier Chassis

Amplifier chassis and covers, with new decorative
grille-type ven grille-type ven
tilators. Chassi tilators. Chassis
stamped from one piece coldrolled steel, fin. ished in black ripple. $6^{*}$ deep and slate gray" Stock No. $\begin{array}{ll}\text { K22132 } & 5 \times 10=3 \prime \prime \\ \times 22133 & 6=14 z^{\prime \prime}\end{array}$
 K22135 7x17ェ3 K22136 10x12=3 K22137 10117=3


MISENER Rotary Hack Saw (Hole Cutter) Equipped with six blades to cut circular holes from $8 / 4$ to tions. Cuts clean, finished holes up to $1 /{ }^{\prime \prime}$ deep in steel. holes up to metals, cast iron, slate, wood, plaster, plastics, masonite, etc. Blades non-shat-
terable. All parts are easily replaceable. Ideal for chassis layout work, set or panel modifications, instrument or meter openings, etc.
K14735-Shpg. Wt. 2 lbs.
s6.95

## last minute specials



## ELECTRO-GLOW Switch Plate

This new switchplate tells whether the switch is on or off. Will fit any standard toggle switch. For $110-220$ volts AC or DC. Has a useful fife of over 10,000 hours. Operates at less than 1 c per month. A cold light, always safe to touch. Standard model. Will fit any toggle switch. Has many uses: Bedroom, nursery, bathroom, cellar. garage, work benches, indicstor on factory equipment, dark rooms, used si a signal device. Availble in chrome, brown and ivory finiohes.
K13240-Electro.Glow Switch Plate, Ivory, K13241-Electro-Glow Switch Plate, Brown, Each K13242-Electro-Glow Swltch Plate, Chrome, Your Cost Each $7^{\circ} \mathrm{c}$


## HANDI-GLOW

As a pilot light, Handi-Glow is a constant reminder to disconnect your appliance when not in use. Soldering irons, heating pads, colder pots, heating irons, ovens, immersion heaters, waffe irons, grills-all are illustrations of the countless uses of Handi-Glow in Industrial plants, homes, stores, laboratories, etc. Handi-Glow is economical to operate on AC or DC and on 100 to 220 volts. Only a few pennies a year and over 10,000 hours of feithful service. As a test light, just alip the Handi-Glow on the prongs of any standard plug: plug into wall outlet or aocket and the neon glow will indleate voltage. A simple and safe way for teating a line circuit. Designed to be easlly transferred from one appliance plup to another. No screws, no adjustmenta necessary K1324-Handi-Glow
$49^{\text {c }}$
10 for
$\$ 4.01$

## WILLARD 2-Volt Storage Battery



A compact, rechargeable spill-proof atorage battery. Takes up just about as much apace as an ordinary No. 6 dry cell Can be ganged for other voltages in multiples of 2 volts. Ideal for many applications in addition to its use as a atorage battery for the GE portable. Shipped dry. Ship-
King weight 4 libe 2 -volt Storage Battery
53.95


## SPRAGUE Photo-Flash Capacitors

 A vastly superior photoflash condenser. Buitt especially for continuous repetitive action. Guaranteed to give a minimum of 10,000 peak flashes. Maximum number of permissible flashes is 1800 per hour. Hermetically sealed, very light in weight, and manufactures with a ynthetic Impregnant known us Vitamin "Q." They ynthetic impregnant known as Vitamin "Q." They where duty cycles other than photoflanh conditions prevail.| Stock No. | Cep. <br> Mrd. | DC Peak Photoflash Volts | Watt/See Total | Dimensions |  |  | Sprague Type No. | Your Cost Each |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | T | w | H |  |  |
| K2805 | 10 | 2500 | 31 | 1\% | 3\% | 4\% | PQ-2510 | \$10.00 |
| K2806 | 15 | 2500 | 47 | 21/2 | 31 | 49 | PQ-2515 | 13.08 |
| K2807 | 25 | 2500 | 78 | 4\% 16 | 31 | 4\%/5 | PQ-2525 | 19.55 |
| K2808 | 35 | 2500 | 109 | 4.4 | 31 | 6. | PQ-2535 | 23.81 |
| K2809 | 15 | 3000 | 67 | 38) | 32 | $4 \mathrm{~s} / 8$ | PQ-315 | 14.41 |
| K2810 | 25 | 4000 | 200 | 40 is | 3\% | $81 /$ | PQ-425 | 30.28 |



## Double Triplex

 Beam AntennaA bi-directional broad-band low vertical angle antenna. Two broad lobes at right angles to the line of suspension Gain schieved line of suspension. Gain schieved angle. Each lobe 80 degrees wide. Reliable in rain Repeated wide. Reliable in rain. Repeated teats show variation in loading to be less than $15 \%$ under a downpour. Simple twin-lead feeder supplied with kit. ( 100 feet). Rust-proof copper, dural, cadmium plated and galvanized parta used throughout. Mechanically atrong. High im. pedance design afords the same electrical performance uting galvanized Wire as would be obtained from copper wire, thereby permittlng an antenns of superior physical strength. Simple to construct. Complete tep-by-step instructions furnished with each antenna kit. Shpg. wt 1217139
K17139- 10 -meter Kit with 100 ft . of wire. Your Cost
K17142-20-meter Kit with 100 ft . of wire

## BUD Tuning Dials

For transmitters, receivers, and instruments. Fluted knobs for easy finger grips. Spun finish chromium plated brass. Runs perfectly concentric with the shaft and is well insuluted. Lines and numerals are diestamped for accuracy and filled with black enamel Dials cover 180 degree are
Stock
NO.
K974
K9778
K9780
K9781
K9785
K9786
K9787
K9792



CALCULAIDE Frequency Computer The Calculaide Frequency Computer correlates, in one setting, the natural frequency and wave ength of a circuit comprising a coll and a condenser, with the physical dimensions of the coil and the capacity of the condenser. It greatly simplifies calculations of problems in frequency, inductance and.capacity, permitting inductance calculations for widely different physical dimenions of coils. Its range covers frequencies from 2 to 600 meter wave lengths with appropriate inductance and capacity values. Convenient-light yet flexible, it can be used with only one hand. Easily stipped into a pocket. Accurate readable withinl percent of the respective quantity, permanent precision assured by non-warping, non-shrinking material. Simple cales appear on one side of the computer Contrasting colors make for eney reading Fast-answers obteined in one setting Ourable ch is ough, non-ininammable K1974 Calculade Frequeny Comput
Your Cost Each
52.85

AMPHENOL Minlature Socket Die Punches For punching apecial holee for Amphenol connectors, plugs, and receptacles. Used by laboratories, amateura, and radio parts jobbers. Made of tool steel, properly hardened. Capable of punching from several hundred to a thousand holes. K15128-LD5 6/8" Flatted Hole Punch, K15229-LD6 $19^{\prime \prime}$ Flatted Hole Punch, Each
$\$ 3.53$

## Custom Made Lapel Pins

 All metal. colored background, chromium plated charactere. Any combination, up to 10 , of letters or numbers can be made. Specify black, red, blue.Approx. 2-week delivery
Approx. 2-week delivery.
K19610-Custom Made Lapel Pins, Your Cost Each
$\$ 1.2 .5$


## GORDON Handwheels

Large, easy to manipulate precision controls with Large, easy to manipulate precision controls with raised markings. Ideal for re
building your own equipment. Acales are chromium plated brass with etched All scales are chromum plated brass with etched bisek background. Handwheeng.

| $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | $\begin{aligned} & \text { Type } \\ & \text { No. } \end{aligned}$ | Handwheel Diameter | Scale Length | Scale Degree: | $\begin{aligned} & \text { Your } \\ & \text { Cost } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| K12998 | 300 | $31 /{ }^{\prime \prime}$ | 51/ | 180 | \$1.26 |
| $K 13001$ | 301 | 213" | 3\%* | 180 | 1.11 |
| K13002 | 320 | 13* | 3\%. | 180 | 1.08 |
| K13003 | 321 | $1{ }^{\circ}$ | 2\%" | 180 | . 78 |
| K13006 | 322 | $1{ }^{\text {1 }}$ " | $210 "$ | 270 | . 84 |
| Handwheels only, less scales. |  |  |  |  |  |
| Stock No. | $\begin{aligned} & \text { Type } \\ & \text { No. } \end{aligned}$ | Size | Metal Pointer |  | Your Cost Each |
| K13019 | 308 | 31/80 | yes |  | \$0.96 |
| K13020 | 309 | 31\% | no |  | . 90 |
| K13021 | 310 | 21/ | yes |  | 84 |
| K13025 | 311 | 210 | no |  | . 78 |
| K13026 | 312 | 13\% | yes |  | . 66 |
| K13030 | 313 | $1 \%^{\circ}$ | no |  | . 60 |
| K13038 | 314 | $11 \%$ | yes |  | . 5 |
| K13039 | 315 | 114" | no |  | . 48 |

$1 / 1^{*}$ brass bushings in all of the above numbers.

## JOHNSON Ceramic Wafer Sockets

Insulated with steatite (Govt. Grade G, wax impregnated). Contacts are cadmium-plated reinforced with cadmium plated steei springs, recessed in the form to prevent movement. All metal parts are countersunk and mounting holes bossed to permit mounting on metal panel without shorting. A socket especially adaptable to the HK 257 and RCA 813 tubes. 247 is similar with an aluminum tube shield.
Stock No. Johnson No. Base Your Cost

| K14155 | 237 | 7 prong | 65 c |
| :---: | :---: | :---: | :---: |
|  | 247 | 7 prong | 73 c |


| K14156 | 247 | 7 prong | 73 c |
| :--- | :--- | :--- | :--- |



PRAGUE 120-Watt 10,000
ohm Koolohm Resistor
Insulated wire, ceramic coated. Glazed ceramic coating, end seals. Impervious o thermal thock and corrosion. Each

LEACH Relay


This relay has all ceramic insulation. The coil is made for 115 -volt, 60 -cycles. Ideal for use as an antenna change-over. D.P.D.T., with a separate set of S.P.D.T. contacts for break-in, etc. K14195-Leach Relay 1177 CPB . Your Cost Each.
s1.95

## BUD Vernier Diai

A new and improved precision-built vernier dial of A nevtive appearance, designed for industrial, lab attractive appearance, designedications. Fteedom from back-lash ie obtained by the use of springfrom back-lash ie obtained by the use of springloaded laminated steel gears. identification and each arc is divided into five sections over 180 dekrees. Panel mounting area is $5 / 4 \mathrm{ES}$, Your Cost Each

## last minute specials

## 3-Tube Phono Amplifler

This is what you've been waiting forl An assembled unit ready for installution. or 12AT6, and one 50L6. or 50B5. The audio stages are capacitively coupled. Mounted on a heavy chromed chassis, $31 /{ }^{\prime \prime}$ deep by $1 \frac{5 / "^{\prime \prime}}{}$ high by $65 / /^{\prime \prime}$ long. vocket to plug in speaker. Complete with socket to plus in speaker. Complete with 5 -foot cord and tubes. Two models available, with or without tone control. Shipping weight 3 lbs.
K106-3-tube phono amp., less tone control Your Cost.
K108-3-tube phono amp., with tone control Your Cost

## TELECTRON Magnetic

 Deflection Yokes
## Best possible

deflection medium for latest TelenisionPicture type coil windings give uniform mag netic deflec Folded end Folded ead onstruction of horiz. coils increase def. energy at a given coil current. Yokes housed in plastic tubing. Impregnated coils, acketed by a solenoid-type soft ron wire magnetic shield. Five split term. connection lugs. Horiz. winding c.t. connected to a lug for neutralization, if required. $11 / 2^{*}$ inside diam., $25 / 8^{n}$ outside diam., 5 mh horiz. coil inductances, 23 mh vertical coil inductance. Recommended matching transformer step-down turns ratio: horizontal -approz. 2.6:1, vertical-approz. 10:1.
K5515-TELECTRON DY-1S, for deflection angles up to $55^{\circ}$ for tubes 10BP4, 10EP4, 12EP4, R-6025, etc. Overall length including terminals is $25 /$ Cost for deflection tubes 5 TP4, $9 \mathrm{AP4}, 12 \mathrm{AP} 4$, ete. Length incl. term. 3 Your

### 1.5 MH Deflection Yoke

 Construction identical to yokes described above. This yoke is intended for receivers such as RCA TRK-120, etc., requiring 1.5 mh deflection yokes.K5517
ELECTRON DY-4L Your
s 15.75

## TELECTRON Blocking

 Oscillator Transformers Standard open construction with strap mitg. and color coded leads. Designed electrically and mechanically, as direct replacements for most blocking ose. transformers found in commercial television revrs. $18 / \mathrm{g}^{\prime \prime}$ high. $2^{\prime \prime} \mathrm{mtg}$.
TELELECTRON OT-101H-Horiz. B.O. trans., for oper. at 15750 cyc. K5518 Your Cost 102 U. $\$ 3.25$ TELECTRON OT-102V-Vert. B.O. trans. for oper. at 60 eycles.

## Encased B. 0.

Transformers
Same as above, in $15 / 8 x$ $18 / 523$ 体" shield cans.
$\times 5520$ TELECTRO OT.103H, Horizontal


Your Cost
$\times 5521$ TELECTRONOT-104V Vertical Your Cost
$\$ 3.95$

able,

## TELECTRON Yoke

 Matching Transformers Designed specifically to match TELEC TRON DY-1S and DY-2L magnetic defection yokes shown at left to outputs of suitable deflectiob sumplifier circuits. Housed in roundedHorner stel cases fin corner steel coses hn ished in black wrinkle. Cans meas- Mtg. by means of 4 studs. TELECTRON YT-111H-Designed to properly match horizontal windings of DY-1S and DY-2L yokes, or other yokes having a horizontal coil inductance of 3 mh . To secure highest possible transformer efficiency, a low-loss "Hipersil" core is utilized. Tape for peaking connection, for controlling return trace time.

## K5522

TELECTRON YT-111H
Your $\begin{aligned} & \text { Yost } \ldots \ldots .10\end{aligned}$
TELECTRON YT-113H—3a as above except for conventional transformer iron core.
$K 5523$
TELECTRON YT-113H
Your
s 12.75
TELECTRON YT-112V—For properly matching vertical yoke windings of DY-1S, DY-2L yokes. Five difierent output taps to match vert. def. coils under wide variety of circuit conditions.
K552
TELECTRON YT-112V
Your
Cost

## CLAROSTAT Volume

Control Kit

## An assort-

 ment of volcontrols with attachable switches, ser wards of 95 . of standard replacement replacement in a neat steel cabinet. Contains 17 controls, 8 switches, 4 glassinsulated flezible resistors. In. cludes Clarostat Volume Control Selector or eross-index of various brands and types. Shpg. wt. 6 lbs . K7091
Your Cost
$\$ 17.79$
SHURE
 which replace 58 standard types. Exclu sive lever principle reduces needle pressure, increases output valtage, gives better tracking. Standard mtg. dimensions. Extra pin, rounding jacks included. grounding jacks included.
Kour Cost
Yi328.

## GON-SET F. M. Converter

The "GON-SET" F.M. Converter is designed to operate in conjunction with recent model receivers covering the 42 to 50 megacycle band. By attaching the "GON-SET"' Converter to the old F.M. tuner or receiver, the new 96 to 104 megacycle band will automatically be available on the old receiver. There are no tuning adjustments or trimmers to set on the "GON-SET" converter-it is factory tuned.
Shield has top openings for rapid dissipation of heat. Flanged base has two mounting holes. Complete with one 6C4 tube, necessary wire and instructions. K17121 Your Cost
\$14.95
SAMSPhotofact Folders If this
is you... Here's
"How-
? ? ? ? To-
Do"


## No Service Problem Can Stump You

 When You Use Photofact Folders! Set of PHOTOFACT FOLDERS Gives You- Disassembly Instructions. Photofacts takes the set apart before your eyes. This single feature actually saves the servicer more time than the cost of a single set of folders,
- Dial Cord Information. "Easy-to-see" diagrams \& instructions - Replacement Parts Information. Accurate electrical and nechanical specifications of every part in a set.
- Record Changer Folders. Illustrated record changer information. You will be amazed at the simple, logical servicing proce dures. Highly technical information made crystal clear.
- Changes, Corrections, Additions. No new data on existing equipment escapes us. We keep you up to date at no extra cost.
- Personal Service. SAMS Institute gives technical information and sends countless schematics to servicemen without charge. SAMS also gives servicemen business aids at no cost.
- Continuity, Consistency. The only continuing, consistent method of locating information. No more waiting or hunting. Predigested information. No more confusion. It's all simplified!
Speed up work, make profits bigger, lick every service problem. Fullpage schematics, clear-cut photos, original technical dope tell you everything in a jiffy about every radio manufactured since Jan. 1, 1946. 30 to 50 folders in each set, plus membership in the Howard $W$. Sams Institute with its many free privileges. Since 10 to 20 new sets of folders are issued each year, you may order set numbers published but not indicated below, and they will be mailed as soon as they are received by us.
K19982-Volume I, Sets 1 to 10, including handsome de-luxe hinder with extension feature for adding more sets.
$K 20100$ Individual sets, specify set number
K19986-De-luxe binder only.
18.39


## AERMOTIVE Permeability Tuner With $5^{\prime \prime}$ Slide Rule Dial

This slide rule dial embodies the latest developments to assure highest efficiency. Construction guarantees durability. tuner can be used in place of the variable condenser in a superhet-
erodyne circuit. Finished in gold, erodyne circuit. Finished in gold, buff, and brown, while pointer is red. Each unit is pre-tracked at the factory and is ready to use.
 tate window, hook-up diagram, ch tate window, hook-up diagram, chassis drilling diagram and instruction sheet $43 / 3^{\prime \prime} \mathrm{H} \times 6^{\circ} \mathrm{W} \times 11 / 4^{\circ} \mathrm{D}$, excluding $1^{\prime \prime}$ long, $1 / 4^{\prime \prime}$ diam. control shaft.
K9915 AERMOTIVE A210
Your Cost, Complete
AERMOTIVE Permeability

## Tuner

Includes complete broadcast band Includes complete
tuning assembly with dial and tuntuning assembly with dial andor A matched oscillator coil ing dacked with each unit. It may be is packed with each unit. It may be used in place of the variable con-
denser and dial assembly in a superheterodyne circuit. Dial is richly finished in gold. buff, and brown, while the pointer is red. Each unit
is pretracked at the factory and is
ready toked aneluding hookup diagam chasgis drilling diagram and instruction sheet. Dimensions are

shaft.
K9917-AEROMOTIVE A230
Your Cost, Complete
s2.85

## newly developed equipment

## LABORATORY TYPE RCA TEST EQUIPMENT



## Wide Range Portable Lab Oscilloscope

- Flat- 10 cycles to 5 mc . Hi-voltage for photography. For hi-speed transients, Multiple-function controls short pulses, television. Time base voltages and 6.3 - Calibrated meter meas- volts ac for external use. ures comparlson volt- Ideal for square wave test.


## Vert.

Amp. Defl. Sens. 1000 V on 2nd anode $3 \leqslant \mathrm{~V} / \mathrm{in}$ peak to peak.
1500 V on 2 nd anode $\frac{3 / 4}{4} \mathrm{~V} / \mathrm{in}$. peak to peak.
Horiz. Froq. Range- 10 cycles to 500 kc ., flat $\pm 2 \mathrm{db}$.
 Vert. (With atten, cable-1 meg. parallel w/ 15 memf. Input Amp. With direct cable- 1 meg. parallel w/70 mmf. Imped. Direct (no cable) Sawtooth Time Base- 20 cycles to 250 . parallel $\mathrm{w} / 50 \mathrm{~mm}$ Sawtooth Time Base- 20 cycles to 250 kc . per second
$\left\{\begin{array}{l}\text { Max. Speed- } 1 \text { microsecond per inch. } \\ \text { Rep. Rato Single sweep to } 50 \mathrm{kc} / \mathrm{sec} \text {. }\end{array}\right.$ Blanking-Return trace blanked on triggered defiection.
Applications: This portable Power Supply- $\mathbf{3}$. $105-125$ volts, $50 / 60$ cycles, 200 watts.
fronted pulses. Ideal for detailed observation and examination of extremely short, sharpduced by television synchronizing and deflection circuits, ignition systems, pulse generators, radar equipment and other electronic devices. Waveforms may be expanded to twice the screen diameter. A calibrated voltmeter gives direct voltage readings. The triggered sweep feature is particularly suited for: photographic study of transients, television signal expansion, checking square wave rise thotographic and for checking irregularly timed pulses. Other unusual features include signal-triggered defection, line frequency deflection and blanking of the return sweep
Tube Complement: 3 RCA-6AC7, 3 RCA-6SN7, 1 RCA-6H6, 4 RCA-6AG7, 1 RCA-6SH7, 1 RCA-5U4G, 1 RCA-2X2/879, $1^{\prime}$ RCA-OD3/VR150, 1 RCA-3KP1 (cathode ray tube) Supplied with both direct and attenuating input cables. Light blue grey-wrinkle finish.

$\$ 475.90$


## Wide Range Audio Voltmeter

## Excellent response over - Acute sensitivity ( .00 entire audio range.

 ac)- Unvarying meter readings despite line voltage changes or tube replacements Wide range ( $1,000,000$ to 1).
Over

High Frequency VoltOhmyst 6 Instruments in Onel
One

1. VHF Voltmeter-$r$-f voltages to 100 V
rms up to 17 mc .
Audio Voltmeter V -afto $100 \mathrm{~V}, 100$
A-C Voltmeter
A-C Volt meter
to 1000 V with multiplier
2. D-CVoltmeter - to
3. 100 V in 6 ranges.

1000 meg on one

6. F-M Indicator-discrim. voltages, moni tor, etc. SPECIFICATIONS
D-C, 6 RANGES: $0-3.10,30,100.300,1000 \mathrm{~V}$. A-C, With probe- 0 to $3,10,30,100 \mathrm{~V}$ 6 Ranges Probe 86 mult. - 0 to $300,1000 \mathrm{~V}$ Frequency $\left\{\begin{array}{c}\text { Using probe directly, } 30 \mathrm{cyc} \text {. to } \\ 250 \mathrm{mc}\end{array}\right.$ Frequency 250 mc
Response $\begin{aligned} & \text { Probe and leads, } 30 \text { cyc. to } 30 \mathrm{mc} \\ & \text { Probe and mult., } 30 \text { cyc. to } 15 \mathrm{kc}\end{aligned}$ Resistance 0 to $1,000,10,000,100,000$ ohms 6 Ranges ( 0 to $1,10,1,000$ megohms Equivalent Shunt Res.
(ohms)
(mmf.
Input Using
(At 1 mc (ohms) (mmf) Imped. $\left\{\begin{array}{l}\text { probe } \\ \text { directly } \\ \text { Probe }\end{array}\right\}$ 10 mc
250 mc
1 kc 32,000
100
$, 650,000$ $1,650,000$
14.5
13
13
2
2 Applications: FM and television measure ments . . all a-c measurements in radio receipers from power transformer to output transformer . . . d-c measurements directly at the grid, plate, screen or cathode terminal bias celi voltages..AAFC and FM discrimi nator voltages. . AVC voltages... .d-cresist ances ... insulation leakage ... oscillator strength, etc. The WV-75A can be used for quick and accurate checking of voltages in h-f quick and accurate checking of voltages in h-f standard AN integral femaie fieting for direct standard AN integral fema
connection to coaxial lines.
Power Supply:105/125V,50/60cyc., 15 watts Description: The WV-75A Voltohmyst is an electronic voltmeter, employing a newly devel ped diode probe for reading peak-to-peak r-f voltages up to a frequency of 250 mc . It wil also read a-c and d-c voltages up to 1000 volts and d-c resistances up to 1000 megohms. Grey wrinkle finish with brush chrome panel.
Uses 2 RCA-6K6GT/G. 2 RCA-6AL5, and 1 RCA-6X5GT/G tubes. $955^{\circ} \mathrm{x} 6 \%^{\circ} \times 6 \%^{\prime \prime}$. Shpg.wt. 17 1bs.
$K 21677$ WV-75A
$\$ 125.00$
CLARKSTAN
Sweep
Frequency
For Checking
Audio Systems
and
Components
Characteristics: A new method of making instantaneous frequency response runs. Correction factors included; no charts or graphs needed. A vast improvement over the time consuming and laborious tone record formerly used. Now all you need is an oscilloscope and a sweep frequency transcription. A few quick adjustrments and the job is done.
Uses: 1. Sweep frequency generator-tests all components of audio systems. 2. For the broadcast engineer-make quick checks of entire transmission system. 3. For production testing of reproducers, amplifiers, transformers, etc. 4. Locates harmonic distor-tion-seen as a bright irregular line running through the middle of the pattern. 5. Laboratory use - being logarithmic. higher frequencies are swept at a faster rate, permitting observation of transient response. 6. For FM stations-detects dynamic AC axis shift of playback reproducers.
Specificatlons: Range - $60-10,000 \mathrm{cps}$ on $16^{\text {"records; }} 70-10,000 \mathrm{cps}$ on $12^{\prime \prime}$ records. Amplitude-constant below 500 cps ; velocity constant above 500 cps . Sync pulse 200 microseconds. Rep. rate 20 cps . Froq. Marker pulses at $1,3,5,7$ \&o 10 thousand cps. Response $16^{\circ}$ at 33 db . Vinylite- 12
$16^{\circ}$ at $331 / 3$ RPM.
K11975-No. $1000 \mathrm{~A}, 12^{\prime \prime}$
K11976-No. $100 \mathrm{~A}, 16^{\prime \prime}$.

## last minute specials

JFD Remote－O－Cable Replacer The Most Efficient Auto Radlo Tuning Cable－Servicing Machino In Use To－ day！
1．Swedges shafting to prevent unravel－ ling．2．Cuts shafting to exact length． 3．Replaces old fittings on new shafting． 4．Casing groove makes cutting easy． Completely redeslgned to meet modern servicing requirements，this machine is a vital necessity in the workshop of every auto－radio serviceman．
Use Old Fittings On New Shafting－ No need to wait for special lengths or odd fittings．No Dolay－Shafting of any enath immediately available．No Loss Of Heads Or Shafting－Shafting of any make radio immediately changed to fit any dashboard head．Front－ Rear－Anywhere－Radio control in any part of the car．Exact Length Of Shafting Does lt－Maximum tuning efficiency
 K15055－Y our Cost，Onily


## 11／4＂x $1 / 4^{\prime \prime}$ Fuses


$3 A G$ type fuses， $1 / 4^{\prime \prime}$ x $1 / 4^{\prime \prime}$ ．These are standard fuses made by a well－ known manufacturer and are being offered at this special price only as long as the present aupply holds out．Available in 1／8，5，，／4，and $11 / 3$ ampere sizes．All are rated at 250 volts．Buy in assorted lots of 100 and save money．Quantity limited No．Amp． $\mathbf{K 1 2 3 3 0} \quad \mathrm{K} 12337^{\text {Amp }}$ Any bize above－ Any bize above－ 100－Your Assortment

## Midget Variable

A splendid buy in a midget variable condenser．Idea or communice－ lons receivers and transmitters Ceramic insula tion．Ball bear ings on each end Rotor and stator plates firmly ataked in position． 360 degree rotation．$/ /^{\prime \prime}$ knurled shaft．Approx．capacity 6 to 50 K9708－Your Cost


High Voltage Mica Condensers


High voltage molded mica conden－ sers designed for power amplifiers and low power transmitters．Ideal for grid and plate blocking and R－F bypass．Several standard makes．All have high Q charac－ teristics． $11^{\prime \prime}$ zi $1 / 8^{\prime \prime}$ and up to ${ }^{7}$ thick．Insulated mounting cen ters， 15 脌＂．Terminal mounting centers， $1 \%$ ．Tolerance $\pm 10 \%$ Stock Cap．Test Work
 $K 3433$
$\times 3434$
$K$ $K 3434$
$\times 3435$ K 3435 K3436
$\times 746$ Any Size． Your Cost Each $50 L 6$ Outputs Replacement outpu transformer for ayer－ age power sets．High Cuality，famous make． 21／8＂centers．Shippi lbs．
K1610－Your Cost
$60^{\circ}$ $\$ 5.40$

## Speclal！Carbon Microphone

Special Signal Corps 200 ohm carbon hand micro phone．Made by one of the largest and best known manufacturers to rigid Army specifications．Single button is sealed in a plastic case．＂Press－to－Talk＂ button on side．Hook and metal fittings heavily plated．Furnished with highest quality 5 －foot rubber cable terminating in a PL－68 threc contact plug．Mierophone cover included．Completely moisture and fungus proof．Packed for your pro－ tection in heavy metal foil containing bag of dehy． drating agent．Quantity limited．Shipping weight 2 lbs．

${ }_{K} 13605$－Your Cost
$\$ 2.45$

## 2000 Ohm Headset

A truly sensational valuel Genuine Signal Corps HS－16 2000 ohm headset with 5 －foot cord for only $\$ 1.891$ In original moisture－proof packing．Bi－ polar magnets，bakelite cap and shell，adjustable headband．Shipping wt． 2 lbs．
\＄1．89

## Single Headphone

An excellent buy．Adjustable headband．D．C．re－ sistance 50 ohms；A．C．impedance 300 ohms at 1000 cycles．Supplied with adjustable headband and 3 －foot cord with phone plug PL－ 55 attached．Bakelite cap and shell．Shpg．Wt． 2 Ibs．
K13904－Your Cost．．．．．．．．．．．．．．．．．．．．．．．


## PL－55 Plug

Standard Army－Navy type phone plug． Single circuit Bakelite shell． $1 \mathrm{~s} / \mathrm{m}^{\prime}$ shell． 37 overall．Quantity limited． $\mathbf{1 9} 9^{\text {c }}$
 10 for $\$ 1.75$
Thigh Clamp Transmitting Key We have a limited quantity of this spectacular item．A general purpose transmitting key built on beavy die－cast metal base；all mounted on a swinging bracket thigh clamp． If desired，key can be removed by unserewing from clamp． $1 /{ }^{\prime \prime}$ silver contacts．Well insu－ lated．Adjustable bearings．Supplied with 5 －foot cable and plug PL－55．Shpg．Wt， 4 lbs． K14007－Thigh Clamp Key J49．
Your Cost，Only
$69{ }^{\text {c }}$


## Precision Switches

Light precision units．Require only 4 oz，pressure and ．001＂travel to operate．Underwriters ap－ proved．Rated at 10 A 125 V A．C．， 5 A 250 V A．C． 3A 460 V A．C．SPST type has easily removable cam actuating lever arm（normally open）．SPDT
 has easil
K12822－SPST
K12823－SPDT
$.49 c$
$59 c$
K12824－SPST，norm．closed，red

Vibrator Special Amazing replacement vi－ brator value．4－prong
non－synchronous． non－synchronous． 12
volt．Replaces Mallory volt．Replaces Mallory
G 826 or equivalent．Can G826 or
K6023
Your Cost
69 ${ }^{\text {c }}$

## $\leftrightarrow$ TRUTEST Electric Welding Outfit

Counter Clockwise Rotation．Here＇s your chance to get a 2 or 3 gang variable condenser at ridiculous cost！Heavy metal plates on both ends．Ball－bearing rotors and bakelite insulation． Low－loss end plates．Supplied with trimmers on the side of each section．Shafts $1 / /^{\prime \prime}$ diameter，
 ection 420 mmf ．Shipping weight 2 lbs ． K9709－2 Eank
31.29


## Oll－Filled Transmitting Condensers

 Take advantage of the rapidly diminishing supply of these fine．dependable units．Oll filled－thoroughly impreg nated．Besides their convenient size，they are light in weight，have low dielectric stress and insure long life at higher operating temperatures．Sturdy，ceramic insulation at terminals．Double－screw and solder lug on each ter－ minal for best connections．All supplied less mounting feot．Shipping weight 3 lbs．| Stock No． | Cap． Mfd． | Can Dimensions $H \times W \times D$ in． | D．C．Working Voltage | Your Cost |
| :---: | :---: | :---: | :---: | :---: |
| K4150 | 4 | $3^{13}$ 价 $213 / 2 \times 1{ }^{19}$ | 600 | 794 |
| K4151 | 6 | $45 / 8 \pm 23 / 2 \times 1$ 价 | 600 | 52.49 |

## Special High Voltage Condenser

Cylindrical in shape，this condenser was built to the highest standard of quality．Built to withatand 7500 volts D．C．working，it msy be operated continuously at up to 10 percent above this rating．Can is $2^{*}$ diameter x 27 ＂long．Ceramic insulation protrudes $11 / 2^{\prime \prime}$ above can．Limited quantity． K4153－0．03 mid．， 7500 V D．C．working．

SI． 95

## 2－Section＂Bathtub＂Condenser

A compact superior－grade oil－impregnated con－ denser．Non－inductive paper sections in a one－ piece drawn metal case with soldered bottom plate $0.25 \times 0.25 \mathrm{mfd} 600 \mathrm{VDC}$ K4156－Your Cost．

Antenna Current Meter

$21 / 6^{\prime \prime}$ diameter face，white on black scale and numbers．External ther－ mocouple furnished．Meter re－ quires 2 ＂diameter mounting hole， extends 13 ＂behind panel．Han－ dles up to 750 ma ． K11402－Wt． 11 lb ．
\＄1．50 Your Cost

## Wire－Wound

 Resistors Famous make，machine wound on non－hygro－ scopic cores． K5001－ 8 Watt， 10.000 ohms． Ohms．Each K5002－25 Wate 25000 ohms． 245 Kach． K5003



The complete outfit for welding， soldering，braxing and cutting． soldering，braxing and cutting． Use it at home，in the shop，or carry it with you to the job．It
operates from any 110.120 volt operates from any $110-120$ volt
line，either a．c．or d．c．It＇s easy ine，either a．c．or d．c．It＇s easy to use，too anyone can do a good job with a few hours practice．Use it to repair broken garden tools． water tanks and pipes，bicycles． pots and pans and innumerable other pieces of equipment．The welder is SAFE－no fumes，and it＇s ECONOMICAL－current au－ tomatically shuts off when torch is lifted from the work．The outfit comprises：power unit；both metal－ lic and electric flame welding torches；generous supply of metal－ lic rods and carbons；a guard mask；flures for various metala： ground wiring and an asbestos block．Shipping weight 151 bs． K14869 Complete $\$$ I4．95
Welding Outfit．．．

# R.M.A. resistor specials 

## Truteat

5 and 10 Watt WireWound Resistors


Tolerance Within $\mathbf{2 \%}$ These Trutest resistors are wound with genuige nichrome wire on fine ceramic tubes. Guaranteed accuracy $2 \%$; most are within $1 \%$ ing, specify size desired.

| Resistor Values In Ohms |  |  |  |
| :---: | :---: | :---: | :---: |
| 5 | 300 | 1750 | 9000 |
| 10 | 400 | 2000 | 10000 |
| 15 | 500 | 2250 | 12500 |
| 20 | 600 | 2500 | 15000 |
| 25 | 750 | 2750 | 17500 |
| 50 | 800 | 3000 | 20000 |
| 75 | 900 | 4000 | 22500 |
| 100 | 1000 | 5000 | 25000 |
| 150 | 1100 | 6000 | $30000^{*}$ |
| 200 | 1250 | 7000 | $40000^{*}$ |
| 250 | 1500 | 8000 | $50000^{*}$ |
| In 10-watt size only. |  |  |  |
| K4438-5-Watt Resistors |  |  |  |
| Your Cost Each, Any Size. . 18e |  |  |  |
| K4439-10-Watt Resistors |  |  |  |

SPRAGUE "KOOLOHM" Resistors
$\rightarrow$ Guaranteed 5\% Accuracy
$\rightarrow$ New Type of Coating
$\rightarrow$ No Shorted Turns
EXCLUSIVE Employ new type, completely insu. lated resistance wire. Insulation has high di-electric strength, with stands red heat and is impervious to moisture. Encased in tubular ceramic shells which permit mounting in contact with metal parts wire leads on each resistor pigtail racy guaranteed $\pm 5 \%$.

Resistor Values In Ohms

| Ohms | Ohms | Ohms | Ohms |
| :---: | :---: | :---: | :---: |
| 10 | 250 | 2500 | 20,000 |
| 20 | 300 | 3000 | 25,000 |
| 25 | 400 | 5000 | 30,000 |
| 30 | 500 | 7500 | 40,000 |
| 50 | 750* | 10,000 | 50,000* |
| 75 | 1000 | 12,000* | 60,000* |
| 100 | 1250 | 12,500 $\dagger$ | 70,000* |
| 150 | 1500 | 15,000 |  |
| 200 | 2000 | 17,500* |  |

Type 5K-5 Watts. $11 / 8 x^{13 / 6 "}$

| No. | Ohms | Each |
| :---: | :---: | :---: |
| K7513 | 10 to 5,000 | 30c |
| K7514 | 7,500 to 10,000 | 31e |
| $K 7515$ | 12,500 to 15,000 | 35 c |
| K7516 | 20,000 | 39 c |
| K7517 | 25,000 | 49 c |
| K7518 | 30,000 | 53 c |
| K7519 | 40,000 | 60 c |
| Type 10K-10 Watts. 18/4x ${ }^{1 / 4 \mathrm{~m}^{\prime \prime}}$ |  |  |
| K7520 | 10 to i0M Ohms | 34 c |
| K7512 | 12M, 15 M Ohms | 38 c |
| K7521 | 17,500 \& 20,000 | 42 c |
| K7522 | 25,000 | 49 c |
| $K 7523$ | 30,000 | S3c |
| K7524 | 40.000 | 64 c |
| K7525 | 50,000 | 71 c |
| K7526 | 60,000 | 88 c |
| K7527 | 70,000 | 99 c |



Truitest Semi-Variable Wire-Wound Resistors
Vitreous enamel coated. Adjustable lugs have small contact buttons so that several taps can be used withBracketsing out much resistanc 25 Watts $\left(2 \times 8 / 8^{\prime \prime}\right) \quad 50$ Watts $\left(41 / 2 x^{5} 8^{\prime \prime}\right) \quad 75$ Watts $\left(6 \times 3 / 8^{\prime \prime}\right)$
 $\mathbf{K} 20825$ - Extra sliders to fit any of the above resistors. Eac

## SERVICER'S SPECIALS!



Heres another Lafayette EXCLUSIVE serviceman's offer that helps you to build profits! Our tremendous buying power makes this offer All are R.M.A. coded and held to acceptable tolerances. Specify stock number of type and resistance desired

Resistor Values in Ohms

| 100 | 750 | 3000 | 12500 | 30000 | 80000 | 250000 | 116 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | $\begin{array}{rrrrrrrrr}150 & 900 & 5000 & 13000 & 35000 & 90000 & 300000 & 2 & \text { Megs. } \\ 200 & 1000 & 6000 & 15000 & 50000 & 100000 & 400000 & 21 / 2 & \text { Megs. }\end{array}$ $\begin{array}{rrrrrrrrr}250 & 1500 & 7500 & 17500 & 60000 & 125000 & 500000 & 3 & \text { Megs. } \\ 500 & 2000 & 10000 & 20000 & 70000 & 150000 & 750000 & 5 & \text { Megs. }\end{array}$ $600 \quad 2500 \quad 12000 \quad 25000 \quad 75000 \quad 200000$ 1 Meg. 10 Megs. 100 for

K5239
i夕 Watt Size K5240 1-Watt Size SHS: An assortment of 100 popular resistor 1 -watt resistors. Shpg. Wt. 2 lbs.
K 3848 -Kit of 100 Your Cost
\$1. 49

## 10-Watt Adjustable Wire Wound Resistors

High quality vitreous eaamel coated djustable wire wound units. Lug ter minals. $1 \frac{3}{4} x^{3} / \%^{\prime \prime}$ O.D.; with mounting
brackets. Specify rasistance.
Resistor Values in Ohms


## Trutest <br> 2-Watt Carbon Resistors

Heavy-duty carbon resistors, absolutely moisture proof. RMA color coded for easy identification; made of the finest material and workmanship. Guaranteed Resistance values will not vary at normal average are within $5 \%$. Resistance values will not vary at normal voltage. Ideal for replacement across small voltage divider sections, bleeders, etc. Also, for public address amplifiers or for test instrument replacement. Size 2" L. x 1/2"O.D.


| Trutest <br> 1/2 and 1-Watt Insulated Resistors |  |  |
| :---: | :---: | :---: |
|  |  |  |
| Improved carbon resistors. Heavy porcelain insulating shells. Impervious to moisture, heat and mechanical strain. Guaranteed accuracy $10 \%$; average $5 \%$. Ideal in congested wiring areas. Resistors may touch without shorting. watt units $3 / x^{7} / \mathbf{x}^{\prime \prime}$ dia. 1-watt units ${ }^{15} / 6 x^{7} / a^{\prime \prime}$ dia. RMA coded. Approx. 300 units to 1 lb . |  |  |
| 1/2-Watt <br> Stock No. | Resist. Ohms | 1-Watt Stock No. |
| K4250 | 200 | $\begin{aligned} & \text { K } 4300 \\ & \mathrm{~K} 4348 \\ & \mathrm{~K} 4301 \\ & \mathrm{~K} 4302 \\ & \mathrm{~K} 4303 \\ & \mathrm{~K} 4304 \\ & \mathrm{~K} 4305 \\ & \mathrm{~K} 4306 \\ & \mathrm{~K} 4307 \\ & \mathrm{~K} 4308 \end{aligned}$ |
| K4245 | 300 |  |
| K4251 | 400 |  |
| K4252 | 500 |  |
| K4253 | 600 |  |
| K4254 | 700 |  |
| K4255 | 800 |  |
| K4256 | 1000 |  |
| K4257 | 1250 |  |
| K4258 | 1500 |  |
| K4259 | 2000 | $\begin{aligned} & \text { K } 4309 \\ & \mathbf{K} 4310 \\ & \mathbf{K} 4311 \\ & \mathbf{K} 4312 \\ & \mathbf{K} 4313 \\ & \mathbf{K} 4314 \\ & \mathbf{K} 4315 \\ & \mathbf{K} 4316 \\ & \mathbf{K} 4317 \\ & \mathbf{K} 4318 \end{aligned}$ |
| K4260 | 2500 |  |
| K4261 | 3000 |  |
| K4262 | 3500 |  |
| K4263 | 4000 |  |
| K4264 | 5000 |  |
| K4265 | 6000 |  |
| K4266 | 7000 |  |
| K4267 | 7500 |  |
| K4268 | 8000 |  |
| K4246 | 9000 | $\begin{aligned} & \text { K4349 } \\ & \text { K4319 } \\ & \text { K4320 } \\ & \text { K4321 } \\ & \text { K4322 } \\ & \text { K4323 } \\ & \text { K4324 } \\ & \text { K4325 } \\ & \text { K4327 } \end{aligned}$ |
| K4269 | 10000 |  |
| K4270 | 12000 |  |
| K4271 | 15000 |  |
| K4272 | 17000 |  |
| K4273 | 20000 |  |
| K4274 | 25000 |  |
| K4275 | 30000 |  |
| K4276 | 40000 |  |
| K4277 | 50000 |  |
| K4278 | 60000 | K4328 |
| K4279 | 70000 | K4329K 4330 |
| K4280 | 75000 |  |
| K4281 | 100000 | K4331 |
| K 4282 | 125000 | $\begin{aligned} & \text { K4332 } \\ & K 4333 \end{aligned}$ |
| K4283 | 150000 |  |
| K4284 | 200000 | K4334K4335 |
| K4285 | 250000 |  |
| K4286 | 300000 | K4336 |
| K4247 | 400000 | K4350 |
| K4287 | 500000 | K4337 |
| K4298 | 750000 | K4353 |
| K4288 | 1 Meg . | K4338 |
| K4248 | $11 / 2$ Megs. | $\begin{aligned} & K 4351 \\ & K 4339 \end{aligned}$ |
| K4289 | 2 Megs . |  |
| K4249 | $21 / 5 \mathrm{Megs}$. | K4352 |
| K4290 | 3 Megs. | K4340 |
| K4291 | 4 Megs. | K4341 |
| K4292 | 5 Megs. | K4342 |
| K4293 | 6 Megs. | K4343 |
| K4294 | 7 Megs. | K4344 |
| K4295 | 8 Megs. | K4345 |
| K4296 | 9 Megs. | K4346 |
| K4297 | $10 \mathrm{Megs}$. | K4347 |

## $1 / 2$-Watt Size <br> Your Cost <br> Each

12 For ...38c 100 For. $\$ 2.88$ 1-Watt Size
Your Cost
Each
12 For ...48e 100 For. $\$ 3.60$


# last minute specials 



The "Max-Mixer" provides a low-cost method of adding to and mixing up to two more mikes than provided for by regular input of any amplifier. By plugging its cable into the mike input of an amplifier and then plugging one to three high impedance mikes into the "M-M" the user can regulate each mike by a separate volume control. Individual instruments and voices can be blended to any desired proportion. Small enough to be placed on a stand or table near the operator for finger-tip control. Eliminates use of contact mikes which incorporate a volume control. The controls on the "M-M" serve the purpose. The case itself acta as a shield. The dubonnet color panel is etched. Six feet of flezible shielded mike cable is provided. Cable has screw-on connector Separate phone plug adapter is also furnished for use es a phone plug on amplifiers using or use as a phone plug on amplifiers using a phone jack type of input connection. Shpg.
wt. 3 lbs. K13680-Speco "Max-Mixer". \$0.
Your Cost Each.............

## 16" Transcription Player



- For records up to 16
- 2 Speeds, 78 and $331 / 3$ R.P.M.
- Constant speed heavy duty motor for silent, amooth operation.
- $105-115 \mathrm{~V}$. 60 eycles AC only
- Overall size including wood mount, $211 / 2^{\prime \prime}$ long, $51 / 2^{\prime \prime}$ high, $10^{\prime \prime}$ deep. The chassis plate is $10^{\prime \prime} \times 16^{\prime \prime}$
This unit is precision built and expertly engineered. It fills the need for an efficient, trou-bie-free unit at \& reasonable price. It is especially well suited for use by wired music studios, broadeast stations, and in the home where superior recorded entertainment is desired superior recorded entertainment is desired. The motor is of the constant speed type, incorporating oversize bronze bearings. It runs cool-nc overheating! Full "floating mount" panel sc that no metal touches metal. Unit is Underwriters Approved. The drive wheel and idler have special formula neoprene "tires" that are ground for concentricity. These "tires" result in the turntable being driven without slipping. Assures longer life for the unit. Speed control on the panel permits instant selection of desired speed. Switch has center "Off" position. When on "Off" position the drive wheel is disengaged. 16" turntable embodies special reenforced construction similar to an automobile flywheel. The entire assembly is shipped in a sturdy wood frame that can serve as a display or for permanent instellations. Finish in dull black permanent instellations. $F$
laequer. Shpg, wt. 20 ibs.
K23364-Modes TP-16
Your Cost
$\$ 78.80$


## RA YTHEON Transformer \& Choke Components



K-42, K-48


K-43


K-45


K-46


K-47


K-49

All these are brand new, hermetically sealed finished in smooth gray enamel.

Filament Transformers
 5 Vct (d) 13.5 amps
 6.3 V @ 2.4 ampset 6.3 V @ 2.25 amps 6.3 V @ 0.6 ampsct

K48 10Vet @ $13 \mathrm{amps} 37 / 3 \times 5 \times 71 / 6^{\prime \prime} \mathrm{H} \$ 2.95$ K 47 6V @ $2.5 \mathrm{amps} 3 \mathrm{x} 4 \times 21 /{ }^{6}$

89c All above have 115 Volt Primary.

Chokes
Cur-

Ind. rent
No. Hys. MA DC.




## Two 500 Ohm Chokes

Two 500 ohm chokes in a three quarter inch channel bracket mounting type. $K 30$ - 30 henries @ 50 ma . K29-15 henries @ 500 ma . Your Cost Each.


## PP 6L6 Output X'former

Here is a very famous make of transformer. It is a 30 watt 6 L 6 push-pull output type 6L6 push-pull output type
transformer. Has upright transformer. Has upright mounting. Secondaries of $6,8,250$, or 500 ohm impedance. Shpg wh
K28-PP6L6.
Your Cost Each. 4.59


Each
$\qquad$

## K43 600

## Government Surplus

An assortment of receiving, transmitting and special purpose tubes at considerable saving to you. These Tube specials will be available to you as long as they last. The quantity is extremely limited so get your order for these valuable tubes in today . . . don't hesitatel K41-6AL5 Min. Twin Diode
K $40-6 \mathrm{SH} 7$ H? Amp. Pentode
50.45
.52

K39-954 Acorn Detector Amp. Pent. K38-1629 Magic Eyc ( 6 E 5 with 12 V fil.) K37-1625 Beam Power PA ( 807 with fil.) K 36 - 2 V 3 G 脢Wave Hi Vacuum Rect.
K 35-7193 (2322) Cavity Magnetron X'mitting pulse tube. Res. Freq.

K34-6AK5 VHF min. 7 pin class A RF
K33-EIMAC15E Triode 20 W plate dis.
1.95 K32-3E29 (879 B) Tetrode $X$ 'mitting. 4.95

## 5-Tube Punched Chassis

This Lafayette special is a spe cial of the first order. It is a sturdy all steel chassis which is already for assembly by you. The chassis is punched for five tube sockets, for coils, and for a 5 " speaker, and other component parts. Overall dimensions are: $34 / y^{" x} 8^{\prime \prime} \mathrm{z} 11 / 3$ ". The corners take P-K tap screws for mounting on bottom of P-k tap screws for mounting on bottom of Cabinet. This is an ideal chassis for a 5 tube AC-DC superlhet. Shpg. wt. 2 lbs.


AERO Record Player


This AERO Record player is a quallty unit in every respect and measures up to many units in the higher price field. The motor is noiseless, operates on $100-120$ volts AC 60 cycles 78-79 R.P.M. Has a SHURE type crystal pickup P-63, $8 / 1 \mathrm{oz}$. Needle pressure. Pickup response is $30-10,000$ CPS. The turntable is plastic (a cotton base bakelite) with ball bearing. The case is of one piece drawn aluminum with a hammered brown lacquer finish. The unit has a precious point needle 10,000 play Thit "as a precious pownted The 'On-On switch is mounted on the base Rubber covered power 10 shielded amplifier leads with pin plugs. Pressed board bottom with rubber plug feet. Overall dimensions are 12 " $x 10^{\prime \prime} \times 31 / 6^{\prime \prime}$. Shpg wt. 6 lbs.
K22257-AERO Record SII..... SI
Player. Your Cost.........

## KELNOR Electric Irons

One of the finest light
weight soldering irons. Cuts down fatigue. Increases accuracy. Illuscration is just about $1 / 3$ actual size. The KELNOR is guaranteed for one year against electrical one year aganical defects The tip chanical defects. The tip the center of the through permits tio to berrelpermits tip to be adjusted longer or shorter, The angleiron weighs only 9 ounces and comes equipped with 6 ft . of cord. Heating element coils are of highest quality resistance wire and the lead wires are hermetically sealed in ceramic insulation. Despite its very light weight KELNOR irons are ruggedly constructed to give trouble free service indefinitely. The tube is welded to the barrel. For use on 115 Volte AC or DC.
K14822-Model A3-100
(100 watts). Your Cost K14834—Model A3-125 (125 watts). Your Cost

## Oil Filled Condenser

 These oil-filled condensers are for high-voltage filter applications in high-voltage filter applications inhigh-fidelity Public Address am-high-fidehity Pubic Address am plifiers, power supplies for short wave portable transmitters and transceivers. They are rated at 600 DC: working volts. The 2 mfd. unit is $27 / 8$ inch long by $11 / 2^{\prime \prime}$ in diameter. These condensers have one insulated terminal, the other is the can.
K $50-2 \mathrm{mfd}$.
59

## Coaxial Cable <br> Released by U. S. Govt.



Just arrived at our warchouses a limited supply of coarial cable especially engineered for the U.S. Government for use by Army, Navy and Signal Corps. Can be used in television as test leads and for transmitting energy from Imitters to antennas. The SUPPLY IS LIMITED so order today. *Armored
No. R.G. Impedenance
K20863 8U 52 ohms 285 O.D. per $\begin{array}{rrrrr}\text { K20864 } & 26 \mathrm{U} & 48 \text { ohms } & \text { *. } 525 \text { O.D. } \\ \mathrm{K} 20865 & 29 \mathrm{U} & 53.5 \text { ohms } & .116 \text { O.D. } \\ \mathrm{K} 20866 & 62 \mathrm{U} & 93 \text { ohms } & .146 \text { O.D. }\end{array}$ $\mathrm{K} 20866 \quad 62 \mathrm{U} 93 \mathrm{ohms} \quad .146$ O.D.

## baftery chargers and fungar bulbs



Used in battery chargers, "A" eliminators, etc. Can replace Rec ticton bulbs of equal rating. No. Tested. Shpg. wt. 2 lbs. K21900 A. 6 amp. Your Each K 21901 B .6 amp . $K 21901$ B 2 amps.
$\$ 2.94$
K21902 $\mathbf{C} 2$ amps. 53.6
$\begin{array}{lll}\text { K21904 } & \text { B } & 5 \mathrm{amps} \\ \mathrm{K} 21903 & \mathrm{D} \\ 6 & \text { amps }\end{array}$ $\$ 3.67$
3.67
$\begin{array}{rlrr}\text { K21903 } & \text { D } & 6 \text { amps } \\ \text { K21911 } & \text { D } & 15 \text { amps }\end{array}$ Tungar-Type Bulbs (A) 0.6 amp . K21905-Your Cost ...... $\$ 2.40$ (B) 2 amp., less tip. K21907-Your Cost (C) 21 amp , with tip. (D) -6 amp . K 21908 amp
K21909-Your Cost

## 5-Amp. <br> Tungar Charger



For charging any -volt battery at home. Delivers ull 5 amperes and tapers off as battery charges, thus preventing damage to cells due to overcharg ng. Ho mecepta for attaching o car and amme ter so that battery can be charged Without removing it from car. Complete with tube and all accesories. $110 \mathrm{v} ., 60$ cycles a.c. only We. 13 1bs $K 15699$
Your Cost
\$13.72
Mazda 6-Volt Bulbs
Edison base bulbs for use in 6 -volt lighting circuits. Frosted. K12255-15 watts. Draws 2.5 amps.

K12256-25 watts. Draws 4.2 amps.
Your Cost
Elther Type, Each......2580


Rectiffer Type F16C3m opper sul paide type, re places old type numbers X 16 ME116: also MEIIO: also replace types 16 C3B XB16 and M16. For replacement in Mallory charsers and boosters and in many other makes as well. Shipping weight 21 lbs
K437
Your Cost Each
s. 4.02

Radio and Auto Fuses Type 3AG: 14x
 May be assorted for quantity price. K13189-Specify

| $1)$ | Pkg of 5 | Per 100 |
| :---: | :---: | :---: |
| 2 3 |  | 3.15 |
| 5. | 12c | \$2.15 |
| $\left.\begin{array}{l} 10 \\ 15 \end{array}\right)$ | 1 |  |
| 20. | 9 c | \$1.60 |
| 35 | 12c | 2.15 |

## MALLORY Battery Chargers


tery Booster Dry disc rectifie type 4 to 2 ampe tepering charge Has external cir-
cuit breaker with quick bresker with Perforated for thorough ventila tion. With $6 \cdot \mathrm{ft}$. cord for light socket and a $4-\mathrm{ft}$. cord with clamp-on receptacle for dash mounting. Dimensions $41 / 2 \times 71 / 2$ z31/2". Finished in black wrinkle For 115 volts, $50 / 60$ cycles a.c operation. Shipping w. 5 lbs. K15696- \$7.3I

Model 6AC6 Charger


Delivers 6.4 am peres tapering charge. Employs dry-disc rectifier Has circuit breaker and large meter in dicating rate of charge. Finished in black wrinkle and chromium. Size: $6 x 81 / 4 x^{4} 1 / 2^{n}$. With 6 fit. a.c. cord 6 -ft d.c. cord and receptacle for dash mounting. For 115 V . 50/60 cycles a.c. Shpg. weight 8 lbs.
K15698
Your Cost

## ${ }^{5} 10.42$

## ELECTROX Battery

 BoostersModels
C and B
cost of only a few pennies for cur rent. You can now keep your bat tery in peak condition. Save the cost of rental batteries and the ex pense of recharging. You can now charge your battery while it is stil in the car-overnightl Selenium plates assure long life and fine operation No bulbs, no movin pert parts, no upkeep expense. Amme ter located on top for easy reading. Attractive steel and plastic case Perforated sutou for aircooline. Thermal cutout automatically cuts off current to prevent over henting. Reset button on top of case. Complete with 6 ft . A.C cord and plug and 5 ft . cord with battery clips. Size: $61 / 1 \mathbf{x} \mathbf{6 1 / 1 2 \times 8 1} 6^{\circ}$. Shipping weight $81 / 6 \mathrm{lbs}$.
K15692-Model B. Cap. 6 ampa. Your
\$12.69
K15693-Model C. Cap. 10 amp: Shpg. Wt. 10

17.15

Type D-02002 Battery Eliminator
 A compact space saving unit, designed to supply an output of 1.5 volts at 0.250 Vmps D.C. operating from the ordinary 11 ghting circuit. Consists of transformer of two winding type and full wave copper wire rectifier in metal case $3 \Sigma 23 / 2$, with a 4 ft . attachment cord with plug and output terminals. Will pro-
vide D.C. for operation of one or two 4 ohm vide D.C. for operation of one or two 4 ohm Morse Sounders. K15689-
Your Cost Each
$\$ 6.12$
Type A3V Battery Ellminator Designed to replace two dry cells the A3V Electrox Eliminator is capable of wide application in the telephone industry and for commercial and industrial uses wherever 3 V . of D.C. is required. Where added voltage is needed two or more A3V units can be connected in serfes. Connected directly with the
ordinary 110 V .60 cycle lighting circuit, it delivers ordinary 110 V .60 cycle lighting circuit, it delivers a D.C. output of 3 V., 0.15 amperes. Transformer, $3 \times 21 / 2^{\prime \prime}$ metal can. Supplies noiselesa current for the operation of magneto telephone transmitter
K1568:
Your Cost Each
$\$ 4.41$


Model AR-1 Battery Eliminator
Here is the battery eliminator you have been wait ing for. An ezceptionally high-grade battery elim-inator-compact, rugged, dependable-for oper ating auto radios, and for other applications which
require Direct Current with very low ripple component. No attention is required by the serviceman. This Electroz battery eliminator is ideal for radio servicemen to test automobile radios, or for demonstrating them in salesrooms. The unit is mounted in an attractive, well ventilated steel case, with black wrinkle finish. Overall dimensions are $113 / 2 \pi 71 / 4 \pi 64 /$ " high, and weighs $^{2} 0 \mathrm{lbs}$. AC input- 115 volts, DC output- 6 volta at 15 amperes. Has $6-\mathrm{ft}$. AC cord and plug with heavy binding posts for DC leads. Case has rubber feet for bench or floor service.
K15690-Model AR-1 Battery Eliminator
Your Cost Each
s36.75

## ELECTROX Battery Charger

## Model "D'? Battery Charger

Ideal for small service stations, garages, farms, radio repair shops and other places where it is necessary to charge from one to three batteries at a time. Easily portable, weighs only $151 / 2 \mathrm{lbs}$. Simply connect battery clips to terminals, plug A.C. Cord into lighting circuit, set pointer switch to number of batteries to charge and the 1-2-3 does the job. Rectifying element is of long life Selenium. No bulbs; no upkeep expense. Selector switch with indicator for three batteries. Thermal cutout automatically cuts off current if unit is overioaded. Steel case with plastic top. Perforated steel sides for ventilation. With 5 ft.
battery leads with clips and 6 ft . A.C. Cord with plug. $61 / 8 \times 1 / 8 \times 81 / 4 \mathrm{t}$. battery leads with clips and 6 ft . A.C. cord with plug. $61 / 8 \times 61 / 8 \times 81 / 4$. 10 amps.
K15691-
 Your Cost.

# converters, inverters and genergtors 

## VARI-PLATER Electro Plater

## For plating

## - Gold - Chromium <br> Copper <br> - Cadmium <br> - On metals Nickel On non-metals

 The Vari-Platers have been designed which is both simple and easy to oper
ate. Anyone can start their own profitable business or enhance their present one with the use of this unit. It is being used successfully by jewelry and novelty companies, automotive accessory shops, plant jeweiry and novelty companies, automotive accessory shops, plumbing suppliers, lighting fixture companies, maintenance shops, plumbing suppliers, lighting fixture companties,
business machines parts shops, gift shops, electrical appliance shops, business machines parts shops, gift shops, electrical appliance shons,
etc. The variable D.C. voltage ranges from zero to eight by rotating large knob located on front panel and selected voltage is indicated on large D.C. Voltmeter. Several units can lic combined to raise voltage or amperage. You get instantaneous DC power with no warm up period, just plug into your 110 V . A.C. $50 / 60$ cycles source. There
is no waste of current input-no loss in voltage drop. $131 / 5^{\circ} \times 91 / 44^{\prime \prime}=16^{\circ}$.
Shipping wt. 65 los.
K22599-Vari-Plater Electro Plater, Model K-25 SI25.0.
(25amperes). Your Cost Each...................

## ATR DC to AC Inverters



Madels Model
For
6,
12
32
110
and
220
Volts
D.C.

Especially recommended for use with radio receivers, phono-radio combinations and similar equip ment. Exceptionally well filtered Designed for quiet, long-life oper ation. Standard models are equipped with ten-contact plug-in vibrators. All models listed below have 110 V . A.C. output. Both Intermittent and Continuous output wattages are indicated. Size of standard model $\left.77 / 888^{2} 16 \times 41 /\right)^{\prime \prime}$ -Heavy Duty 77/8 $\times 958 \times 61 / 4^{\prime \prime}$. Shpg. wt. standard models 181 lbs Stock D.C. Volts Watts Your No. Input Int. Con. Cost N17242 $\quad 6 \quad 85 \quad 75$ Input Int Cost $\begin{array}{lrrrr}\text { K17242 } & 6 & 85 & 75 & \$ 22.44 \\ \text { K17243 } & 12 & 125 & 100 & 22.44 \\ \text { K17244 } & 32 & 150 & 100 & 23.23 \\ \text { K17245 } & 110 & 250 & 150 & 23.23 \\ \mathbf{K} 17246 & 110 & 325 & 225 & 33.52\end{array}$ $\begin{array}{lllll}\text { K17245 } & 110 & 250 & 150 & 23.23 \\ \text { K17246* } & 110 & 325 & 225 & 33.52\end{array}$ $\begin{array}{lllll}K 17247 & 220 & 250 & 150 & 24.70\end{array}$ 28 Heavy duty model. Shpg. wt. 28 lbs.

## Hydrometer

Live red rubber bulb and nozzle; beaded float. Wt. 2 lbs. $33^{c}$
K15694 Your cost PORTA-POWER Battery Eliminator


Replaces A and B batteries in portable and farm sets for use with
$110-120 \mathrm{~V} 50 / 60$ cyeles AC . Ideal for 4 to 6 tube 1 KV batter $\%$ sets. Completely filtered and hum-free. Shpg. Wt 5 lbs
K15697-Porta-Power Eliminator Your
Cost
Cost \$3.62
11/2V."A"-90V."B"Combination Battery Pack
Combination A-B battery for farm receivers. Size: $1511 / 105416 \mathrm{z}$ 7 " Shpg. wt. 251 bs.

$\mathbf{K} 20619$. K20619 Your Cost It For operating on 110 yolts, 60 cyckes AC. Will For operating on 110 volts, 60 cyckes AC. Will lic address systems, etc., from DC supplies. All of the Janette rotary converters are equipped with radio interference filters. All are specially manufactured to convert DC to 110 volts, 60 eycles AC. As shown in the list below, the Janette converters will handle the following yoltage input ranges: 110-115 volts DC; 32 Volts DC; and $220-230$ volts $\mathrm{OC}_{\mathrm{i}}$-all converted to 110 volts 60 cyeles ACl From 220-230VDC From $\mathbf{1 1 0 - 1 1 5}$ VDC To 110 V .60 cycles Tromin 110 V .60 cycles Stock Output Your Stock Output Your No. Watta Cost No. Watts Cost $\begin{array}{llllll}\text { K19816 } & 150 & \$ 51.78 & \text { K19804 } & 150 & \mathbf{5 4 9 . 8 0} \\ \text { K19814 } & 225 & 59.58 & \text { K19809 } & 225 & 57.60\end{array}$ | $K 19817$ | 300 | 71.58 | K19805 | 225 | 57.60 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 000 | 59.60 |  |  |  |  | $\begin{array}{llllll}\mathrm{K} 19818 & 500 & \mathbf{9 3 . 7 8} & \text { K19815 } & 500 & \mathbf{9 1 . 8 0}\end{array}$



From 32 VDC To 110 V .60 cycles Stock Output Your No. Watts Cost $K 19801 \quad 150 \quad 549.80$ $\begin{array}{lll}K 19802 & 300 & 69.60\end{array}$ $\begin{array}{lll}\text { K19813 } & 500 & 91.80\end{array}$

## E-L Vibrator Inverters



Designed to make possible the peration of standard 115 -volt AC equipment and appliances from various DC voltages. For every popular inverter applications. InputOutput



LAFA YETTE Heavy Duty Gas-Electric Plants

Economical Operation
Compact Design

- Light Welght

All Voltages

- Air-Cooled


The new Lafayette Gas-Electric Plants provide a full line of units that fill every heavy duty requirement. They answer the ever increasing demand for generators of greater out put with attending low first cost, economical operation and minimum space requirements.

## FEATURES:

Capacity: 600, 1000 , or 1500 watts. Voltages -32 Volts DC, 110 volts AC. The 32 volt DC plants are designed for use with 32 volt storage batteries, the average charging rate (depending on condition of battery) 600 watt plant, 18 a mperes; 1000 watt plant, 25 amperes; 1500 watt plant, 38 amperes. The 110 -volt DC and AC plants are for direct connection to load.
Generator: 4 pole, self-ezcited-mounted on the crankshaft of engine (NO COUPLING). Large fan mounted on the armature as sures cool operation and prevents accumulation of dust or dirt. All windings thoroughly impregnated with insulating comporad. Large commutator and collector rings. Accurately balanced F: nature. 1800 rpm. All parts easily aecessible by merely removins the end cover.
Englne: 4 cycle, single cylinder L head, air cooled. High tension moisture-proof flywheel magneto. Pump and splash lubrication. Float feed, adjustable carburetor. Flyball type, adjustable fully-enclosed governor, operating in oil. SAE babbitt-lined bearings. One piece, special ailoy cams and cam gear, heat-treated crankshaft, counterweights drop forged integral with shaft. Alloy steel, completely enclosed valves. Aluminum alloy connecting rod, large split bearing on crank pin. Aluminum alloy piston, fitted with two compression rings and one oil control wing. Oil bath air cleaner. Heat resisting enamel finish.
Starting: Push button electric starting is standard on the 32 volt DC and 110 volt AC plants ( 12 volt battery required for the electric starting of the 110 volt AC plant) also euxiliary rope-pull starter.

Remoto Control Type: Push button starting and stopping from a remote point an optional feature available on the 110 volt AC plants. The remote control feature is built into the plant-not furnished separately. Operates from a 12 -volt battery which is included in the price of the remote control feature.
Filier and Shlelding: All units listed below are furnished complete with filter and shielding for the operation of radio receivers. There is nothing difficult or complicated about the operation of Lafayette generating sets. At the mere touch of a button or turn of the starting crank, smooth, steady dependable power is made instantly desilabe. Simple angedness constitute the and design, and these factors, combined with low first cost and minimurn operating and maintenance costs, make Lafayette plants the ideal units for every power supply need. All Lafayette generating sets are designed and built to the highest standards of performance and dependability-the ultimate factors to consider in purchasing power supply equipment. Engines and generators are of ample size to
deliver full rated load in continuous service, and to handle reasonable deliver full rated load in continuous service, and to handle reasonable overloads for short periods of time. On many units, up to $50 \%$ overload may be carried momentarily (as in starting electric motors) and a $10 \%$ to $25 \%$ overload for periods up to two hours. The engine employed in every Lafayette generating set is of the most suitable type for the unit-rugged, dependable, easily started, economica in operation. Fuel and maintenance costs, because of highly efficient engines and generators, are exceptionally low. Undue vibration and noise are eliminated by the inherent balance, precision workmanship and scientific design of all Lafayette units. Lafayette units are powerful, dependable, economical. In addition, they are of the newest, most modern compact design, and are extremely light in weight. All are air-cooled for trouble-free operation. This is the ideal unit for electrical power supply where you need it, when you need it most. Will supply electricity anywhere, anytime.

| Stock No. | Model No. | Rated Output Watts | Output Voltage | Shpg $W_{t}$ | Dimensions in Inches | $\begin{aligned} & \text { Your } \\ & \text { Cost } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K22592 | BA-6 | 600 | 110 V. AC 60 cyc. | 190 | $27 \times 22316 \times 21$ | \$199.40 |
| K22593 | BA-10 | 1000 | 110 V. AC 60 cyc. | 225 | 27x22 1/2x21 | 281.42 |
| K22594 | BB-6 | 600 | $32 \mathrm{~V} . \mathrm{DC}$ | 190 | 27x2215x 21 | 163.65 |
| $K 22595$ | BB-10 | 1000 | 32 V . DC | 220 | 27x22 1/2x21 | 205.04 |
| K22596 | BA-15 | 1500 | 110 V. AC 60 cyc. | 475 | $40 \times 26 \pm 32$ | 338.32 |
| $\times 22597$ | BA-20 | 2000 | 110 V . AC 60 cyc. | 480 | 40x26x32 | 394.70 |
| K22598 | WA-25 | 2500 | 110 V. AC 60 cyc. | 615 | 56x29x35 | 445.96 |

In addition to the units listed directly above, we can supply such accessories and additional equipment as a remote control for starting from remote points, units for keroscne operation, a magnetic reguator, and units for 220 volts, or for 50 cycle operation. Write for prices, or for any additional information on Lafayette units.

## industrial electronic controls

## Scientific Design•Rugged Constructlon. Engineered for Industrial Applications

## Photo Relay

his unit is
elf contained
 in a strong crackle finish cast alumi num housing The width is $3^{\prime \prime}$ the depth 3 1/2"the height $5^{\prime \prime}$. The base is designed for mounting directly on aectrical con dult. This provides the means of electrical connec. tions as well
as support for the unit assuring good contact for any secondary switching arrangement. The primary supply voltage is $115 \mathrm{~V} 50 / 60$ cycle AC. Contacts are of pure silver rated at 5 emps. Screw-driver adjustment enables operation up to 35 feet. Tubes used are 1 921 photo and 1 2D 21 thyratron. Speed: 1/20 second for operation; $1 / 4$ second for release. Shpg. wt. 4 lbs.
K15860-Type R-010.
Yoasr Cost Each
542.01

## 2-1n=1 Photo Relay-Counter Small and compact.

 this one unit combines the functions of both a photo elec tric relay and elec trically actuated digit counter. You need only one unit. no wires. All in one small

| The |
| :--- |
| The | base provides for direct mounting on a stand ard $1 / 2^{\prime \prime}$ electrical conduit. Ease of installation and dependability make this counter ideal for application to such problems where it is impossible to touch objects being counted or where they are so small you are liable to miss some. Counting mechanism is tamperproof. Operating voltage is 115 V AC. Two connections $6^{\prime \prime}$ below counter base. Operating range is 25 ft . Speed is 400 per minute maxi-K15861-Type C-010. Your Cost Each.

$\$ 52.50$

## Electronic Timer



For continuously repeating a definite cycle of time. For time delay-action a timing short in tervals. You can also time sequences such as filling tanks curing operations, heating, spot weld ing and induction soldering. Fits into a $5^{\prime \prime} \times 7^{\prime \prime} \times 31 / 2^{\prime \prime}$ case.
Case designed for wall mounting. The relay armature is the only moving part in the unit. The timing ele ments are high quality sealed resistor and capacitor. Timing range is $1 / 10$ th second to 60 seconds. Pure silver relay contacts. Operating voltage 115 V 60 cycle AC. Less than $2 \%$ variation in repeat cycle timing. With GL-502A Thyratron. Shpg. wh 4 lbs K15862 - Type T-010
Your Cost Each
s36.00

## Photocells And

## Their Application

By 2 worykin and Wilson. From their wealth of experience the authors have compiled this highly useful treatise on photoelectricity Many practical details are given Theory and practice fully covered Covers sound, movies, television facsimile transmission, etc. 348 pages. 2nd Edition.
$\$ 3.43$
NOTE: The timer design permits complete interchangeability of equipment; that is, machine process calibration for one timer applies to all timers, permitting the use of a atendard dial without calibration.

## Typical Uses of

 SPECO-RHEIN Controls\author{

- Automatic light control <br> - Production recording <br> - Burglar alarm <br> - Safety control <br> - Switch control <br> - Smoke detection <br> - Machine shut-off <br> - Fire detection <br> - Turn on and off outdoor illumimated signs <br> - Valve control <br> - Open or close doors <br> - Gas mixture control <br> - Flame control <br> - Sorting <br> - Humidity control <br> - Counting <br> - Photo plate exposure control <br> - Bottle filling control <br> - Inspection for size <br> - Inspection for color <br> - Imspection for weight <br> - Inspection for finish <br> - Package wrapping control <br> - Paint spray control <br> - Liquid level control <br> - Liquid flow control <br> - Paper pinhole detection
}

Photo-Relays offer automatic protec tion, reliable control, accurate count ing, infallible timing in industry. These units are not in the toy class but are sturdily, accurately made for long time trouble-free operation necessary in industrial use. The units are housed in cast aluminum cases, strong enough to protect them from accidental shock damage. The component parts of these units are of high quality, carefully tested and inspected before assembly. Sensitive relays and highly accurate adjustments are eliminated through incorporation of a positive trip "OnOff" control circuit.

## Light Source Unit <br> 

This unit is self-contained in a cast aluminum housing which is identical in size and appearance to Photo Relay units described at top of ance to Photo-Relay units described at top o
page left and rizht. The base is provided Page left and right. The base is provided
with mounting for $11 / \mathrm{m}$
electrical conduit. with mounting for $11 / 2^{\prime \prime}$ electrical conduit The lens is of $2^{\prime \prime}$ diameter and prefocused No other adjustment mormally required Lamp used is of 21 candle power of the single contact automobile lamp type. Supply voltage is $115 \mathrm{~V} 50 / 60$ cycle AC. Sh
hpg. wt. 31 lbs K15864-Type L-010.

S9.00

## Accessories For Special Conditions

 Infra-Red Filters. These very fine filters Infra-Red Filters. These very fine filters K15865-Type F-010.SI.05
Your Cost Each Lens shield. This lens shield is supplied to installed by removing three screws and using the shield instead of the lens mounting ring For use when photo relay units are placed out of doors in direct sunlight. \$ K 15866 Type L.010A. Each...

Quick Change Photo Relay


This unit has the same mechanical specifications as the R-010 described to the left. The tions as the R-010 described to the left. The
mounting of this unit, the R-011A, is differ mounting of this unit, the R-0llA, is differ-
ent. A plug-in mount is provided with 5 connecting prongs which plug into a mounting stand. This allows for quick replacement of the entire mechanism in applications where repair time must be kept to the absolute minimum. Height is measured from center o lens to bottom of basc. Shpg. wt. 51 bs . K15858-Type R-011A stand. Your Cost Each $\qquad$

## Electronic Relay Switch



This unit provides a means of switch ing an electical current off-and-on where it is impossible to provide a direct electrical contact to carry the
required load. This relay has been derelay has been de-
signed to obtain a signed to obtain a reliable contact from the touch of two conductors
mall current may, or thru which only a very small current may, or can, flow. May be applied where the contact making instrument, or medium, is only a damp thread. It operates on the condensa tion of moisture between two points located closely together; on a liquid column of mer cury such as a contact thermometer, or any conductive liquid such as milk, chemicals, and even distilled water. These features make it possible for this unit to be used as a liquid level control without the use of a float to increase the life of sensitive limit switehes feeler arms or water type relays. Especially adaptable for use with combustibles because of the low voltage and microamperes of cur rent necessary for operation. Designed to mount in case $5^{\prime \prime} x 7^{\prime \prime} x 31 /^{\prime \prime}$. Operating voltage is 115 V 60 cycles AC . Pure silver relay contacts rated at $5 \mathrm{amps} A C$ non-inductive load. Screw-driver adjustment provides op eration over range of probe resistance of 5,000 ohms to 7 megohms. Neon lampsinsure cor rect connection and operation. If an error is made in connection or any changes in supply made in connection or any changes in suppiy line, these lamps will glow. Tube used in the circuit is a Ty
ping we. 4 lbs Mingwt. 4 lbs.
Your Cost Each
s28.50

## Industrial Electronic Control

A concise guide to the understanding of elec tronic control circuits for the industrial user By William D. Cockrell, This book is writter to bring to the electrical man a workin knowledge of industrial electronics which will form a background for intelligent selling, in stalling, and servicing of electronic equip ment. In a non-mathematical, simple treat ment it covers the fundamental facts of elec ment it covers the fundamental facts of elec tron tube operation and the application the tube in the basic circuits of industria electronic control appa
pages, 1
K19968
Your Co
$\$ 2.45$
GUARANTEE: Speco-Rhein electronic controls are guaranteed against defects in material or workmanship for one year from date of purchase, except tubes, which are guaren teed by manufacturer.

## ballast resistors and voltage controls

## Line Cord Resistors

Flexible, sturdy cords for AC-DC radios, field supplies, phono oscillators, etc. Voltage drop ratings are at .3 amps. This value subtracted from your line voltage gives voltage applied to tube filaments.

| No. | Ohms | Your |
| :---: | :---: | :---: |
| K5322 | 135 |  |
| K5332 | 150 |  |
| K5331 | 160 |  |
| K5323 | 180 |  |
| K5330 | 200 |  |
| K5324 | 220 |  |
| K5325 | 250 |  |
| K5329 | 290 |  |
| K5242 | 310 |  |
| K5326 | 330 |  |

Hi-Resistance Line Cord | K5320 | 560 | SI. |
| :--- | :--- | :--- |
| K5304 Ra. | 960 | R |

## Universal Resistor Cord

One cord fits any type set. Any normally used resistance from 22 to 330 ohms in one cord. Full instruc-
tions included.
K5321 Each ......

## Special AC-DC Cords

 With Pilat Light TapLike above, but 4 -conductors, with pilot light tap. Tinned leads.
Stock Total Tapped at Your

| K5334 | 165 | 30 |  |
| ---: | ---: | ---: | ---: |
| K5335 | 180 | 25 |  |
| K5336 | 200 | 40 |  |
| K5337 | 200 | 25 | Each |
| K5339 | 280 | 40 |  |
| K5309 | 360 | 80 |  |
| K5311 | 510 | 80 |  |
| K5315 | 560 | 80 |  |
| K5317 | 960 | 80 | Each |
| $\mathbf{K 5 3 1 8}$ | 1950 | 360 | $\$ 1.21$ |

## 220 Volt to 110 Volt <br> Line Cord Resistors

 Standard Plug
For any set up to 7 tubes. American cord equipped with standard male plug and female receptacle; European type resistor cord has foreign plug and standard receptacle. $\begin{array}{lll}\text { Stock Total } & \text { Your } \\ \text { No. } & \text { Ohms } & \text { Cos }\end{array}$

| Standard Plug Types |  |  |  |
| :--- | :--- | :--- | :---: |
|  |  |  |  |
| K5243 | 300 | $\$ 1.41$ |  |
| K5319 | 560 | 1.41 |  |
| European Plug Types |  |  |  |
| K5244 | 300 | 1.41 |  |
| K5333 | 560 | 1.41 |  |

and
andJFD Cont1mental Adapter For use in converting American male plug to Continental Klug. K 338 -Each $18^{c}$

## JFD Exact Duplicate

 Ballast TubesPrecision made. Exact units.
Stock Type

6846 C91973 Lafayette
$\begin{array}{lll}\text { K6846 } & 81973 & \text { Pilot } \\ \text { K6849 } & 5459 & \text { Belmont-GM }\end{array}$

## AMPERITE AC-DC Ballast Tubes

By using these fine regulators, tubes are kept to within $5 \%$ of their correct voltage, even if the line varies from 85 to pilo volts. Furnished complete with starting resistor th

- indicates special unit

Any Type Eelow, Your Cost Each
REPLACES ALL AC-DC BALLASTS


## Type

| $\begin{aligned} & \text { Type } \\ & 3-40 \end{aligned}$ | $\begin{aligned} & \text { No. } \\ & \text { K } 12228 \end{aligned}$ | Type E137* | $\begin{gathered} \text { No, } \\ \mathrm{K} 12236 \end{gathered}$ | $\begin{array}{r} \text { Type } \\ \text { KL-50H } \end{array}$ | $\underset{\mathrm{K} 12221}{\mathrm{No.}}$ | $\begin{aligned} & \text { Type } \\ & \text { KL50E } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4P-45 | K12233 | KL-25 | K12229 | KL 50 S 1 | K12450 | BKV51DJ* |
| 165R4* | K12235 | $\mathrm{KL} 2 \mathrm{2H}$ | K12230 | KL-50S2 | K12452 | 100-77* |
| 200 R • | K12232 | KL-45 | K12223 | KL-50S3 | K12231 | 100.70 |
| $250{ }^{\circ}$ | K12245 | K1-A8J* | $K 12234$ | KL 75 | K12246 | 100-79 |
| 20R4* | K12237 | KL-75H | K12222 | L55B |  |  |

$.73^{c}$

## REPLACES ALL AC-DC BALLASTS



| Beginning With <br> K, L, M or BK |
| :---: |
| K, L, M or BX |
| K, L, M or BK |
| $\mathrm{K}, \mathrm{L}, \mathrm{M}$ or BK |
| BL or BM |
| L, M or BK |
| L |
| K or L |
| K or L |

Numbers
10 to 36
10 to 36
36 to 67
36 to 67
67 to 105
67 to 105
40 to 100
40 to 100
40 to 100
36 to 67

Ending With
A, B, C or D
$\mathrm{F}, \mathrm{G}$ or H
$\mathrm{A}, \mathrm{B}, \mathrm{C}$ or D
$\mathrm{A}, \mathrm{B}, \mathrm{G}$ or or H G or H
S 1
S 2
S 3
E

## KL-50E

36 to 67

 | 50A2 | 140 R 8 | 140 L 44 | LX 42 B | KX49B | LX49C | KX55C |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 50B2 | 140 R 44 | 165 L 4 | LX 2 C | KX49C | LX49D | LX55B |

 | 140R4 | 140 L 8 | $165 R 44$ | LX49B | KX55B | LX55D |
| :--- | :--- | :--- | :--- | :--- | :--- |

Type 3-40-4 Prong replaces the following types:

| $5 B$ | 50 | $50 X R$ | $140 R$ | $165 R$ | $185 R$ | KX42A |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | KX49A

KX55A

## JFD Step-Down Ballast For Radios

Step-down from 220 V . to 110 V . Permits use of Ameri can-built radios with 110 V . circuit in foreign countries with a 220 V . line.
Step-down from 220 V . to 110 V . Permits use of Ameri-can-built radios w th 110 V . circuit in foreign countries with a 220 V . line.


| Stock <br> No. | JFD | No. |
| :---: | :---: | :---: |$\quad$ Description $\quad$| Your |
| :---: |
| $\mathbf{3 0 0}$ Mill Tubes, $\mathbf{3 0 0} \mathbf{~ o h m ~ c o l d - r e s i s t a n c e ~}$ |



$\mathbf{3 0 0}$ Mill Tubes, $\mathbf{3 0 0}$ ohm cold-resistance K7029 458 Amer. fem. and Amer. male | K7030 | 459C Amer. fem. and foreign male |
| :--- | :--- | $\$ 1.76$

1.76
150 Mill Tubes, 475 ohm cold-resistance

| K7031 | 478 | Amer. fem. and Amer. male |
| :--- | :--- | :--- |

1.76

150 Mill Tubes, 560 ohm cold-resistance
K7034 464 Amer. Fem. and Amer. male
1.76
1.76

Wh JFD Adjustable Ballast Tubes

## Exact Duplicate AC-DC Resistance Tubes

JFD improved air-cooled adjustable AC-DC ballasts have these improvernents: air-cooled perforated shell; larger insulating surface: longer life, heavier resistance wire; exact adjustments made.
$\left.\begin{array}{l}\text { K6856-Type A, } 8 \text { prong } \\ \text { K685-Type B, \& prong }\end{array}\right\}$ Your Cost Each $\ldots . .88 c$ K6857-Type B, \& prong

Lots of 5-sic ea.


## CLAROSTAT Metal Tube Resistors

Universal type for al AC-DC midgets. Tube will operate re
gardless of pilot light burnouts; protects condensers and resistors in set. All actal base.

Stock K6842 K6845 K6847 $K 6848$
$K 6850$ $K 6850$
$K 6851$ K6851
FREE

For AC-DC Tubes Beginning with Letters BK, BL, K, L, M BK, BL, K, L, M BK, BL, K, L, M BK, BL, K, L, M BK, BL, K, L, M

Numbers From 10 to 23 23 to 55
23
to 55 23 to 55 60 to 92
60 to 92 $\begin{array}{ll}60 \\ 92 & \text { to } 92 \\ 105\end{array}$

Ending in Letters
A, B,
A $, ~ B, ~ C, ~ D ~$
D


Ballast Guide Book of 32 pages, with every orde

Replacement Ballasts
Only popular models listed; others supplied on order. Shpg. wt. 2 lbs.

|  | Stock | No. Type |
| :---: | :---: | :---: |
|  | K6805 | Brunswick |
|  | K6806 | Clarion 51, 53, |
| , |  | 55. |
| \%, $\because \cdot \%$ | K6808 | Grebe |
| $\bigcirc$ |  | SK4, HS-5 |
|  | K6816 | Majestic 70, 72 |
| \% $\because \cdot \cdots$ | K6818 | Mujestic 180 |
|  | K6819 | Majestic 90 |
|  | K6805 | SonoraA30-32 |
|  | K6823 | S. W. 900 |
| - | K6824 | S. W. 950 |
|  | K6825 | S. W. R100 |
| Your Cost |  | 5 |

## AMPERITE

Special AC Tubes Exact units for popular sets.

| Stock No. | Amp | For Use In Models |
| :---: | :---: | :---: |
| K12455 | 0-20 | Brunswick 14, 21, 31 |
|  |  | Brem. Tully S81, 582 |
| K12456 | 11-20 | Bruns. S14, S21 |
| K12457 | 90 | Brem. Tully 82, 84 |
| K12605 |  | Majestic 90 |
|  | Cost | Each. 70 serie |
| Any A | bove | Typ |
| K1222 | 0, Am | pe |
| RCA | art | 186892 |
| Cost |  |  |
|  | RO | TAT |
|  |  | Line |
|  |  | Regu |


|  |  | Regi | ors |
| :---: | :---: | :---: | :---: |
|  |  | For any 1 | /120 vo |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  | Rating | 8 Tubes in |  |
| N6811 |  |  |  |
| K6812 | 100 |  |  |
| K6813 | 150 | 8, 9, 10 | Eaci |
| K6814 | 200 |  |  |
| K6815 | 250 | 2 Type 50 | \$3.37 |

## TRUTEST Ballast <br> \section*{Resistors}

雷For use in all AC-DC midget sets. The K 55 types
are for $2-6.3$ and $2-25$ volt tubes; type K49 is for use with 36.3 and $2-25$ volt tubes. Shipping weight 1 low, Any Type Listed Be -

## Your Cost

Each
Lots of 10, assorted
s.

Each
5

## tock No. Type |Stock No. Type

| K6859 K42B | K8936 100-70 |
| :---: | :---: |
| K7026 K42C | K8937 100-77 |
| K7025 K49A | K8938 100-79 |
| K6873 K49B | K6868 165R4 |
| (16040) | (X49) |
| K6874 K49C | K6869 165R8 |
| (16040) | (50A2) |
| K6870 K55B | K7023 L42B |
| Y-TU-9 | K6876 L49B |
| 3613 | 2UR224 |
| 115.53 | 69-2033 |
| M6871 K55C | K6877 L49C |
| (5536) | (69-2037) |
| K7042 K80B | K8935 L49D |
| (60-92A) | K8941 L55C |
| $\begin{gathered} \text { K6860 2VR215 } \\ \text { L55B } \end{gathered}$ |  |

JFD Replacement Line
Cord For Motorola Sets


Eight foot cord containing two resistance elements, 1100 and 280 ohms. Has 4 terminals. Essential replacement for all Motorola porreplacemeat Nos. 41D, 51D, 52D, 41H K5295-JFD No. \$I.2I

## pilot light bulbs and brackets

## Candelabra Base <br> 110-120 V. Pilot Lights. Genuine GE Mazda lamps. Type S-6 $K 12257$ ${ }^{8}$ watts Each... 16 C <br> K 12258 <br> ${ }_{\text {Each }}$ watts 27 C cone shape, 7 watts. Avail able in white frosted. <br> K12280- <br> Each <br> Tubular Candelabra Base 110-120 V. Pilot Lamp <br> New 4-watt lamp for use behind small panel open. ings, dials, etc. $1 / 2^{\prime \prime}$ diam.. 110" long. <br> K12272 <br> 10 For <br> ost Each. 39 ${ }^{\text {c }}$ $\$ 3.56$

## VICTOR Pilot Buib

 Intermediate base, frosted bulb. 110/120 volts. For Colonial, Victor, otherYour Cost Each
Carton of 10
19c
Theatre Exciter Lamps For sound-on-film. Each
 diameter, single-contact
bayonet base. bayonet base.
$\begin{array}{ccc}\text { Type } & \text { Volts } & \text { Amps. } \\ 105 & 10 & 5.0\end{array}$ $\begin{array}{ccc}105 & 10 & 5.0 \\ 107 & 10 & 7.5 \\ 854 & 8.5 & 4.0\end{array}$ Any Type. Your Cost Type T-5: 15 Each


## Jewelled Pilot

 Brackets - For amplifiers.女ransmitters, etc. Faceted jewels Standard brackets have $1 / 2^{\prime \prime}$ jewel rehave quiring ${ }^{1 / 2}$ jewel re. hole. Brackets have 11 ". hole Available with Cande labra 110 V Miniature Beyde and Miniature Screw base sockets.> Standard Sixe Base Stock No. Stock No.

Type Green Red Amber Min.Sor. K6433 16c K6432 16c K6434 16c Min. Bt. K6456 18 C K 645418 C K $6458 \mathrm{i8c}$ Cand. K6427 19e K6426 19c K6428 19c Faceted Jewels Only

- K $643012 \mathrm{C} \mathbf{K} 6429$ 12e K6431 12c Assembly with $\$_{4}$ " Jewel
 Cand. K 633335 C K 633442 c K 633535 c


## Front Removable Jewel

 Brackets

For test panel mount in $111{ }^{\prime \prime}$ " hole. 3/" Jewel removable; bulb can be replaced from front. Miniature screw base. Tubular bulbs.
$K 6416-$ Red $K 6417-$ Green K6418-Amber K6425-Opal Any Type.

## Each.

$27^{\circ}$
Same, but Miniature Bayonet base. K6408-Red K6409-Green Any Type.
$27^{c}$

\section*{Glant 1" Jewel Brackets <br> $1^{*}$ diam. faceted jewels. Candelabra takes 3 or 6 watt 110 V . bulb. <br> |  | Can. | Minia- | Bay- |
| :---: | :---: | :---: | :---: |
| Color | delabra | ture |  |
|  |  |  | K6405 |
| pal | K6321 | K6324 | K6327 |
| Green | K6322 | K6325 | K6328 |
| Amber | K6323 | K6326 | K6329 |
| Any T | Abov |  |  |

## Genuine EVEREADY Pilot Light Bulbs



Both pilot and flashlight type bulbs are listed below. $6-8$ volt bulbs are for 6.3 volt receivers. Bead colors aid in identifying bulb types. Eveready bulbs are standard in most makes of radios.

Tubular Bulb, Miniature Screw Base (A)

| Stock No. Type Bead Color | Volts | Amps. | Ea. | 10 For | 100 For |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | ---: | ---: |
| K12274 | 48 | Pink | 2.0 | .06 | 15 c | 50.95 | 58.55 |
| K12250 | 41 | White | 2.5 | .50 | 9 c | .58 | 5.22 |
| K12251 | 42 | Green | 3.2 | .35 | 12 c | .78 | 7.02 |
| K12254 | 40 | Brown | 6.8 | .15 | 9 c | .58 | 5.22 |
| K12252 | 46 | Blue | $6-8$ | .25 | 9 c | .58 | 5.22 | $\begin{array}{llllllll}\text { K12252 } & 46 & 46 & \text { Blue } & 6-8 & .15 & 9 c & .58 \\ & & 6-8 & .25 & 9 c & .58 & 5.22\end{array}$

Round Bulb, Miniature Screw Base (C)
$K 12273 \quad 50$ White $6.8 \quad .20 \quad 10 \mathrm{c} \quad .64$
Tubular Bulb, Miniature Bayonet Base (B)

| K12260 | 43 | White | 2.5 | .50 | $9 c$ | .58 |
| :--- | :--- | :--- | :--- | :--- | ---: | :--- |
| K12259 | 49 | Pink | 2.0 | .06 | $15 c$ | .95 |
| K12283 | 45 | White | 3.2 | .35 | $12 c$ | .78 |
| K12249 | 44 | Blue | $6-8$ | .25 | $9 c$ | .58 |
| K12284 | 47 | Brown | $6-8$ | .15 | $9 c$ | .58 |

5.76

### 5.22 8.55

Round Bulb, Miniature Bayonet Base (D) $\begin{array}{llllllll}\text { K12261 } & 51 \\ K 12285 & 55 & \text { White } & 6-8 & .20 & 8 \mathrm{c} & .51 & 4.59 \\ & & \text { White } & 6.8 & .40 & 8 \mathrm{c} & .51 & 4\end{array}$

## FLASHLIGHT BULBS

G-31/2 (C) is small round. G-41/2 (C) is large round. TL-3 (E) is lens bulb. P-31/2 (not illustrated) is pre-focussed miniature flange type bulb. Stock No. Type Bead


Color
Green Volts K12201 14(G.31/2)
K $\begin{array}{lll} \\ \mathrm{K} & 2203 & 222 \text { TL-3) Wrown } 6.0 \\ 2.2\end{array}$ $\begin{array}{llll}\mathrm{K} 12204 & 112(\mathrm{TL}-3) & \text { Pink } & 1.1\end{array}$ $\begin{array}{lll}\text { K12205 } & \text { 233(G-3 } 5 \text { ) } & \text { Purple } 2.3 \\ \text { K12206 } & \text { PR2(P.31/ } & \text { Blue } \\ 2.4\end{array}$ $\begin{array}{llll}\text { K12207 } & \text { PR } 3(\mathrm{P}-31 / 5) & \text { Green } & 2.4 \\ \mathbf{K 1 2 2 0}\end{array}$
Amps.
.30
.30
.50
.25
.22
.27
.50
.50
.30

|  | $10 F o r$ |
| ---: | ---: |
| $9 c$ | 50.58 |
| $9 c$ | .58 |
| $10 c$ | .64 |
| $9 c$ | .58 |
| $9 c$ | .58 |
| $9 c$ | .58 |
| $13 c$ | .82 |
| $13 c$ | .82 |
| $10 c$ | .64 |

$\$ 5.22$
5.22
5.76
5.22
5.22
5.22
7.38
7.38
5.76

## General Electric Neon Glow Lamps

Useful as indicators on panels, in test equipment and many other purposes. Low current and long life-over 3.000 hrs .

| $T-2$ $N E-2$ | T | $-31 / 4$ <br> NE-5I <br> yonet |  | T-4 $1 / 2$ BULBS $\qquad$ |  | $\begin{aligned} & \text { E-30 } \\ & \text { esistor } \end{aligned}$ | $\begin{gathered} s-14 \\ N E-36 \\ \frac{1}{3} \\ \hline \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Stock No. | $\begin{aligned} & \text { Lamp } \\ & \text { No. } \end{aligned}$ | $\begin{array}{c\|} \text { Cur- } \\ \text { rent } \\ \text { M.A. } \end{array}$ | BUL | Base | Length | Watts | Your Cost Each | $\begin{aligned} & \text { Box } \\ & \text { of } 10 \end{aligned}$ |
| $K 12240$ | NE-2 | 0.3 | T-2 | NONE |  |  | \$0.08 |  |
| K12241 | NE-51 | 0.5 | T-31/4 | Min. Bay. |  | 1/25 | . 10 | . 90 |
| K12268 | NE-48 | 2.0 | T-4 ${ }^{\text {S }}$ | D.C. Bay | $11 / 2$ | 1 | . 35 | 3.18 |
| K12242 | NE-16 | 2.0 | SEE | NOTE EE | ELOw | , | . 42 | 3.78 |
| K12243 | NE-17 | 2.0 | T. $41 / 2$ | D.C. Bay. | $11 /{ }^{\prime \prime}$ | 1 | . 45 | 4.00 |
| K12270 | NE-32 | 10.0 | G-10 | D.C. Bay. |  | 1 | . 45 | 4.00 |
| K12271 | NE-36 | 20.0 30.0 | S-14 | D.C. Bay. | 3\%" | 3 | . 54 | 4.88 5.76 |
| Note: N | NE-42 | 30.0 | S. 14 | 48) meets ${ }^{\text {d }}$ | 3 | 3 | 63 | 5.76 |

## Screw Base Types For 105-125 Volts

| K12264 | NE-45 | T.41/6 | Can |  |  | . 39 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $K 12247$ | NE-57 | T-4 3 / | Can |  | 4 | . 39 |  |
| K12266 | NE-30 | G. 10 |  |  |  |  |  |
| K12267 | NE-34 | S-14 | Med. Scr. | $21 / 10$ | , |  |  |

## Screw Base Types-For 210-250 Volts




## NOTE! All above prices include all Federal Excise Taxes.



2-Contact Bayonet Metal Shell Sockets
 Bakelite base. Screw terminals. K13332
Each.

K13389
Each


Ts Eye Takes candelabra base bulbs type
S. 6 . Fo r panelsop to $1 / /^{\prime \prime}$ thick.
" diameter glass jewel with set of 4 color discs-red-green-amber -white. Polished chrome. Jewel K14174
Your Cost
$70^{c}$
K14175 Similar to above, but with red or green faceted 1 " jewel. Specify color.
K14176 Same but with miniature bsse.
Either Type,
$70^{c}$
1" Enclosed Pilot Light
Underwriters
Approved sin. gle unit socket assembly unheat. All porcelain and brass con. struction. For standard S-6 lamp. removable from front of panel. 1 * hole for mounting Faceted red or green jewel in chromed brass.
K14140-Red Jewel
K14141-Green Jewel
Either Type,
Your Cost
$85^{\text {c }}$
JOHNSON Panel Light A convenient reflector for panel mounting. Shell base. Easy to mount in a siggle
Removable reflector casing. Re-
flector of stainless steel.
K6436-
475
Pilot Light Sockets
Miniature, Candelabra, Bayonet Base


Miniature Bayonet Candelabra 12 c each 12 c each 11 c each 10 for $\$ 1.1410$ for $\$ 1.14 \quad 10$ for $\$ 1.05$ 100 for $\$ 10.80100$ for $\$ 10.80100$ for $\$ 9.75$

| A K6510 | A 6488 | A K6539 |
| :--- | :--- | :--- |
| B K6511 | B 6489 | B K6557 |
| C K6512 | C 6490 | C K6540 |


| D K6513 | D 6514 | C K6540 |
| :--- | :--- | :--- |

Pilot Light Sockets


Underwriters style sockets with fibre insulation. 12" leads. Bayonet type only.
K6491-Type (B)
K6494-Type (D)
Any Above, Each
10 For (May be .... T

## Porcelain Receptacles

 A sturdy porcelain receptacle for use with pilot lights or neon glow lamps. Two screws provide secure wires. Mounting holes areadin Wires. Mounting holes are spaced which has $2^{\prime \prime}$ cens ercept K13327. which has $2^{\prime \prime}$ mounting centers. K13331-Candelabra 8c Ea. K13327-Edison......i11/2c Ea.
# MALLORY quality vibrafors 



FREE with every purchase of a Mallory Vibrator -a handy 36 pare Vibrator Guide. Useful replace ment data on all auto radios and battery sets installation notes, parts numbers, cross references.

## These 12 Mallory Vibrators Will Meet $90 \%$ of All Your Replacement Needs

| Stock No. | Type No. | Base Dia. | Your | Stock No. | Type | Base Dia. | Your Cost |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K6096 | 245 | 21 | \$4.06 | K6074 | 716 | 30 | \$4.06 |
| K6097 | 246 | 38 | 4.06 | K6084 | 852 | 14 | 2.41 |
| K6098 | 248 | 44 | 4.06 | K6086 | 854 | 11 | 2.41 |
| K6171 | 249 | 49 | 4.06 | K7276 | 859 | 8 | 2.41 |
| K6130 | $273 C$ | 29 | 4.50 | K7293 | 870 | 14 | 2.41 |
| K6136 | 294 | 10 | 2.41 | K7275 | 1100 | 8 | 2.41 |

By effecting substitutions, the Mallory standardization program has materially reduced the number of vibrators needed to meet your requirements. The 12 basic types listed above cover $90 \%$ of your reypes isted above cover $90 \%$ or your reMallory vibrators has been simplified so that replacements may be made easily and that replacements may be made easily and been reduced from 101 to 65 , yet there is a
right vibrator for practically every application. Complete line includes 8 -contact units (both interrupter and self-rectifying types) for heavy load conditions, and 4 -contact interrupter units. Those marked (*) have patented hermetic seal for re placements where corrosive fumes, exces pive moisture or high altitude condition must be overcome Replucents ben must be overcome. Replacements can be made easily and quickly.

| No. | Type | Volts | Base | Each | No. | Type | Volts | Base | Each | No. | Type | Volts | Base | Each | No. | Type | Volts | Base | Each |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K6114 | 222 | 6 | 20 | \$4.50 | K1282 | 264 | 6 | 38 | \$4.06 | K6118 | F502P | 32 | 9 | \$4.88 | K6065 | *F826C | 32 | 8 | 54.06 |
| K6096 | 245 | 6 | 21 | 4.06 | M6126 | $270 B$ | 6 | 23 | 4.88 | K6093 | 505P | 6 | 8 | 2.03 | K6109 | *G826C | 12 | 8 | 4.06 |
| K1278 | 245A | 6 | 21 | 4.06 | K6127 | 271 | 6 | 24 | 4.88 | K7285 | 506P | 6 | 36 | 3.23 | K7292 | 839 | 6 | 8 | 2.82 |
| K6088 | 245C | 6 | 28 | 4.06 | K6148 | Cup A | dapter |  | . 79 | M6071 | 507P | 6 | 10 | 2.03 | K6084 | 852 | 6 | 14 | 2.41 |
| K6100 | W245 | 4 | 21 | 4.06 | K6102 | 271 HD | - 6 | 24 | 4.88 | K6073 | 514 | 6 | 30 | 4.06 | K6n85 | 853 | 6 | 10 | 2.41 |
| K7280 | W245A | 4 | 21 | 4.06 | K6130 | 273C | 6 | 29 | 4.50 | K6074 | 716 | 6 | 30 | 4.06 | K6086 | 854 | 6 | 11 | 2.41 |
| K6097 | 246 | 6 | 38 | 4.06 | K6167 | 273D | 6 | 31 | 4.50 | K6062 | *725C | 6 | 32 | 4.50 | K7276 | 859 | 6 | 8 | 2.41 |
| K1281 | 246A | 6 | 38 | 4.06 | K6133 | 2865 | 6 | 44 | 4.50 | K6064 | *G725C | 12 | 32 | 5.32 | K6076 | 860 | 6 | 14 | 2.41 |
| K7283 | W246 | 4 | 38 | 4.06 | K6146 | G286S | 12 | 44 | 6.12 | K6107 | 742 | 6 | 32 | 4.06 | K7293 | 870 | 6 | 14 | 2.41 |
| K6169 | 247 | 6 | 46 | 4.06 | K6128 | 289 Y | 6 | 49 | 4.06 | K7289 | 743 | 6 | 38 | 4.06 | K7296 | 901 M | 6 | 8 | 2.03 |
| K6101 | F247 | 32 | 46 | 4.50 | K6135 | 292 | 6 | 3 | 2.82 | K7291 | 744 | 6 | 22 | 3.23 | K6079 | 952 W | 6 | 16 | 4.06 |
| K6098 | 248 | 6 | 44 | 4.06 | K6136 | 294 | 3 | 8 | 2.41 | K1277 | 748 | 6 | 44 | 4.06 | K6080 | 953 W | 6 | 16 | 4.06 |
| K6171 | 249 | 6 | 32 12 | 4.06 3.23 | K 6103 K 6105 | F294 F297 | 32 32 | 8 33 | 3.64 4.06 | K6121 K 6063 | *G749C | 12 | 21 | 5.32 3.67 | K6081 | 954 | 6 | 39 | 4.06 |
| K6123 K 6124 | 253 253 | 6 | 12 13 | 3.23 3.23 | K6105 | F297 | 32 6 | 33 51 | 4.06 3.23 | K6063 | *825C | 6 | 8 | 3.67 3.23 | K7275 | 1100 | 6 | 8 | 2.41 |

Base Diagrams-Mallory Vibrators


## MALLORY Vibrapacks

Flexible, heavy-duty vibrator power supplies for supplying high voltage direct current from a stor age battery or similar d.e. source. For use with receivers, amplifiers, transmitters, etc. Four volt age outputs in 25 volt steps. Efficient and compact. Tube rectifier type is required where " $B$ " minus cannot be at ground potential.

No. Type Vitg. Output Voltage K6090 VP-551 6.3 125-150-175-200 K6094 VP-552 6.3 225-250-275-300 K6091 VP. 553 6.3 125-150-175-200 K6095 VP-554 6.3 225-250-275-300 $\begin{array}{llll}\text { K6066 } & \text { VP-555* } & 6.3 & 300 \\ \mathrm{~K} 6067 & \text { VP-557* } & 6.3 & 400\end{array}$ K6092 VP-G556 12.6 225-250-275-300 100 ma . Self-Rect. 13.8 K6068 VP-F558 $\quad 32.0 \quad 225-250-275-300 \quad 100 \mathrm{ma}$. Tube Rect. 14.41 ©Special Dual Packs for high output. Output voltage not adjustable.
Type VF-223 Filter-For ail single unit packs where utmost hum Type VF-223 Filter-For ail single unit pack
suppression and voltage regulation is required.
K6060-Your Cost

## Replacement Vibrators for Vibrapacks

No. Vibrapacks Type Ea. No. Vibrapacks Type Ea. K6062 VP-551, 552, 540 725C $\$ 4.50$ K6064 VP.G556 G-725C $\$ 5.32$
 $\dagger$-Two vibrators required

## MALLORY VP-540 Filtered Vibrapack

A complete "B" power unit that operates from any 6 volt storage battery and delivers 250 volts at 60 ma ., closely matching the power requirements of most auto, marine and aircraft receivers. The self rectifying unit is fully filtered-no additional filtering required for the average installation. Comes complete with overall dust cover and special mounting bracket for easy installation in mobile equipment. size: $7 / 1 / 2 \times 315 / 651 / 8$
Kigh. Shpg. wt. 9 ibs.


2-Voit Vibrator for Chargeable Battery Portables
The 2-volt vibrator, Type T-4000 is a synchronous type to replace Models LB530 and LB530X K6025-Each

NOTE: Should you be unable to determine the exact type of vibrator required for your auto or home radio send us the maker's name and model number; when ordering, and we will supply the proper type.

## auto radio accessories

## Thitest Auto Radio Suppressors



High quality suppressors housed in black molded cases. All popu lar types are shown and listed. No. Type Description K5283 A Standard Spark Plug K5246 A Special for Ford V8 K5278 B Compact Spark Plug K5247 B Compact Spark Plug Type for Ford V8 $K 5253$ C Cable Type for Buick $K 5285$ D Elbow Cable Type K5279 E Standard Distributor K5293 F Distributor Type for Ford 1936 and earlie K5277 F Distributor Type for Ford 1937-'38-'39-'40 K5256 * Elbow Type for 1938 10 For ..... Plymouth $\mathbf{H 1}^{\mathrm{C}} \mathrm{Ea}$ Like "A" with elbow connector

Wire Wound Units (G) Most efficient type. Do not im pair motor efficiency. Low d.c. re sistance, high inductance. Act a r.f. choke. Extra rugged. K5296 Spark Plug Type K5297-Distributor Type 35 c 10 (Assorted) For $\qquad$ 53.15

## Master Distributor Unit

 0.7.thermetically to moisture and heat. Eliminates need for other suppressors. D.C. resist 10.000 ohms. 5 For.
$\frac{311 / 2^{\prime \prime}-96^{\prime \prime} \text {. Each. }}{\text { ICA Rocker Antenna }}$
1CA Rocker Antenna
A new swivel antenna Fits conver or flat sur faces of every type of car. Admiralty brass, triple chrome plated, weather is tamper, weather proof $48^{n}$ shielded cable 2 Section \$2.94 K20494-23 桨" $\quad 72^{\prime \prime}$
3 Section $\$ 3.33$
Each.......
All ICA antennas are equipped Aith Motorola and Delco fittings.

Dome Light Filter


FORD V8 Condensers


K14219-Type A. ForV8 mod. els up to 1936. Your Each2.6c 10For $\mathbf{\$ 2 . 3 5}$ Cost Each
K14199-Type (B) for '37 to '41. 10 For $\$ 2.35$

Auto Radio Cable Fittings


## Detidill



| - | $\bigcirc$ | 10 | 12 |
| :---: | :---: | :---: | :---: |
| .150" | .130" |  |  |
| No. | No. | Type | Each |
| K8414 | K8312 | 0 |  |
| K8415 | K8313 | 1 |  |
| K8421 | K8319 | 7 |  |
| K8416 | K8314 | 2 |  |
| K8418 | K8316 | 4 |  |
| K8422 | K8320 | 8 |  |
| K8411 | K8323 | 11 |  |
| K8417 | K8315 | 3 |  |
| K8419 | K8317 | 5 |  |
| K8420 | K8318 | 6 |  |
| K8423 | K8321 | 9 | c |
| $K 8424$ $K 8329$ | $\begin{aligned} & K 8322 \\ & \mathbf{K 8 3 3 0} \end{aligned}$ | 10 |  |

Finest quality cable for auto radio remote controls. Cable ends swedged cannot unravel. Shpg. swedged-cannot

| wt. 1 lb . per foot. |
| :--- |
| $.130^{\prime \prime} \quad . \quad 150^{\circ}$ |
| Only |


| 130" | .150" |  |  |
| :---: | :---: | :---: | :---: |
| No. | No. | Length | Each |
| K8299 | K8433 | $18{ }^{\prime \prime}$ | c |
| K8300 | K8434 | $24 *$ | 47 c |
| K8301 | K8302 | 30" | 0 c |
| K8303 | K8435 | 36 | 68 |
| Cable | and St | 1 Hou |  |
| 8304 | K8437 | 18* | 73c |
| 8305 | K8438 | 24* | 89 c |
| 8306 | K8307 | $30^{\prime \prime}$ | \$1.12 |
| K8308 | K8439 | $36^{*}$ | 1.29 |

Wheel Static Eliminator Eliminates front wheel noise. Easy to install. Rust
K $\times 5294$
7 c
Your Cost
Each
10 For

## 7 c

LiTTELFUSE Auto Fuses

$\square$| Type 3AG. |
| :--- |
| $25 \mathrm{v} .11 / 4 \mathrm{x} 1 / \mathrm{a}^{\prime}$. |


| K12320-5 |  |
| :---: | :---: |
| K12321-10 amps. |  |
| 12322 - 15 amps. |  |
| K12323-20 amps. |  |

Antenna Connector Aरि $\quad$ Two-piece metal inside insulation.
K16714-12 For 65c
Your Cost Each

ndensers
Standard
auto radio
condensers designed to
eliminate
generator
noise. Fully shielded. Dirt and oil proof. $\begin{array}{cccc}\text { No. } & \text { Mfd. } & \text { Each } & 10 \text { For } \\ \mathbf{K 1 4 2 2 0} & .25 & 20 c & \$ 1.80\end{array}$
$\begin{array}{lccc}\text { K14215 } & .5 & 20 c & \$ 1.80 \\ K 14216 & 1.0 & 36 c & 2.07 \\ K 14198 & 3.24\end{array}$
K14216 $1.0 \quad 36 \mathrm{c}$
K14198-Similar to above,
K. but

MOTOROLA 65 and 70

## Condenser

 High voltage con-
denser. Consists of two. 0008 mfd .1000 volt units in a single housing. Four leads. Made by Sprague. 10 c 5 For

# affayette Radio radio wire trievision inc. 

## SEND MAIL ORDERS TO NEW YORK WAREHOUSE ONLY

# NEW YORK 13, N. Y. <br> 100 Sixth Ave. <br> Phone: WAlker 5-8883 

BOSTON 10, MASS.
110 \& 130 Federal St. Phone: HUBbard 0474

NEWARK 2, N. J.
24 Central Ave.
Phone: MArket 2-1661

## HOW TO ORDER

Use our conventent order blank (additional blanks sent on requeat). Make sure you write the exact stock number and that the price is the one quoted for the item you want. Specily how We shall, make shipment "Parcel Post", "Express", etc We shall follow your instructions, but will change them wherever we are sure that such a change is to your better interest. Please keep all correspondence or remarks relative to your order on a separate sheet of paper. Make sure you include sufflcient postage; all overpayments promptly re funded (if overpayment is under $10 \&$, we will eredit your account).
NOTEA In many instances it is impossible to show shipping weights. In practically all cases, it is a simple matter to estimate the weight of each article. Please include sufficient postage. We will credit you with any overpayments.

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We buy for cash and sell for cash; this explains our low price policy. We do not carry credit accounts, and we pass on to our customers all savings effected by the elimination of costly bookkeeping. We will ship C.O.D. if desired, providing a deposit of at least $20 \%$ accompaniea your order. C.O.D. parcels may be shilpped ONLY to places in the 48 states of the U. S. and to U.S. territories. On small orders, full remittance saves extra collection costs.

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## ALLOWANCE

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If you find it necessary to return any merchandise for adjustments, please write in advance stating the following: reason for return-when and where purchased-number of sales slip (if purchased over the counter). from is received daciager, obs your shent irom the postmaster or express agere and mail it to us. Use a beparate sheet of paper for all adjustment matter; do not add remarks money in the package you return. When money in the package you returning merchandise, pacis carefly, insure, returning merchandise, pack careldes, insure, packages and letters when returning to us.

## FINAL PRICES

Prices shown in this catalog are net, and except where marked POSTPAID, do not include poatage. All discounts have heen deducted, including $2 \%$ discounts for cash. Prices are subject to change without notice; we give customers the benefit of all reductions taking place after the catalog is published.

## POSTPAID ITEMS

Items marked "Shipped Postpaid" do not require poatage. Please note that Postpaid items refer only to shipments made within the 48 states of the U. S. (not U. S. possessions).

## SENDING MONEY

The safest and beat way to send money is by Amerjcan Expross; Post Office or Telegraph Money Order; bank drafts; firm checks; sticyps. Do not send cash. II absolutely necensary to remit cash, send by registered mail only. Do
not heaitate to include aufficient postage; overpayments are promptly refunded.

## PARCEL POST RATES FOR ALL ZONES

Parcels up to 8 ounces may be shipped snywhere in the United States for $6 \&$ Parcel post shipments to any zone must not exceed 70 pounds. The limit of size on all parcel post packages is 100 inches in length and girth com-
bined, at widest point. Example: a package 35 in. long, 10 in . wide and 5 in . high measures 65 in . in length and girth combined (length 35 in., plus twice 10 in . width, plus twice 5 in . height, equals 65 in .)

|  |  |  |  | ZONES |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Weight <br> In <br> Pounds | $\begin{aligned} & \text { First } \\ & \text { Up to } \\ & 50 \mathrm{Mi} . \end{aligned}$ | Secand 50 to 150 Ml . | $\begin{aligned} & \text { Third } \\ & 150 \text { to } \\ & 300 \mathrm{Mi} . \end{aligned}$ | $\begin{aligned} & \text { Fourth } \\ & 300 \mathrm{to} \\ & 600 \mathrm{Mi} . \end{aligned}$ | $\begin{aligned} & \text { Fifth } \\ & 600 \mathrm{to} \\ & 1000 \mathrm{Mi} . \end{aligned}$ | $\begin{aligned} & \text { Sixth } \\ & 1000 \text { to } \\ & 1400 \mathrm{Mi} . \end{aligned}$ | $\begin{aligned} & \text { Seventh } \\ & 1400 \text { to } \\ & 1800 \mathrm{Mi} . \end{aligned}$ | $\begin{aligned} & \text { Eighth } \\ & \text { Over } \\ & 1800 \mathrm{Mi} . \end{aligned}$ |
| 1 | $\$ 0.09$ | \$0.09 | \$0.10 | \$0.11 | \$0.12 | \$0.13 | \$0.15 | \$0.16 |
| 2 | 11 | . 11 | . 12 | . 15 | . 18 | 20 | 24 | 27 |
| 3 | 12 | . 12 | . 14 | . 18 | 23 | 27 | 33 | . 38 |
| 4 | 13 | 13 | 16 | . 22 | 28 | . 34 | . 42 | 49 |
| 6 | . 14 | . 14 | . 18 | . 28 | . 34 | 41 | 52 | 61 |
| 6 | . 15 | . 15 | 20 | 29 | 39 | 48 | 61 | 72 |
| 7 | 16 | . 16 | 22 | . 32 | . 44 | . 56 | . 70 | 83 |
| 8 | . 17 | . 17 | 24 | . 36 | 50 | 63 | 79 | 95 |
| 9 | . 18 | 18 | 26 | . 39 | 56 | 70 | 89 | 1.06 |
| 10 | . 19 | . 19 | 28 | . 43 | 61 | 77 | 98 | 1.17 |
| 11 | . 20 | . 20 | . 30 | . 46 | . 66 | 84 | 1.07 | 1.29 |
| 12 | . 22 | . 22 | 32 | . 50 | 72 | 92 | 1.16 | 1.40 |
| 13 | - . 23 | 23 | 34 | 54 | 77 | . 99 | 1.26 | 1.51 |
| 14 | . 24 | 24 | . 36 | . 58 | 82 | 1.06 | 1.35 | 1.63 |
| 15 | 25 | 25 | 38 | 61 | 89 | 1.13 | 1.44 | 1.74 |
| 16 | 26 | 26 | 40 | 65 | . 94 | 1.21 | 1.53 | 1.85 |
| 17 | 27 | 27 | . 42 | 68 | . 99 | 1.28 | 1.63 | 1.97 |
| 18 | 28 | 28 | 44 | 72 | 1.05 | 1.35 | 1.72 | 2.08 |
| 19 | 29 | 29 | . 46 | 75 | 1.10 | 1.42 | 1.81 | 2.19 |
| 20 | . 30 | 30 | 48 | 79 | 1.15 | 1.49 | 1.91 | 2.31 |
| For Fach Added 1b. Add | 14 | 1 | 24 | 4 \% | 6 \% | $7 ¢$ | 9 9 | 11 \% |

## EXPRESS CHARGES

Express charges are also determined by the signee from shipper. The following chart indiweight of the shipment and distance of the con- $\mid$ cates charges. Add $3 \%$ Federal Exclse Tax.

| Maximum Distance in miles | 50 Mi . | 150 Mi . | 300 Mi . | 500 Mi . | 750 Mi . | 1000 Mi | 1500 Ml . | 2000 Mi . |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| cost up to 5 lbs . | \$0.65 | \$0.65 | \$0.65 | \$0.70 | \$0.75 | \$0.85 | \$0.90 | \$1.12 |
| " 10 lbs . | 70 | 70 | 72 | 81 | 92 | 1.05 | 1.29 | 1.76 |
| " 15 lbs . | 70 | . 76 | 84 | 97 | 1.13 | 1.16 | 1.68 | 2.39 |
| 20 Ibs. | 74 | . 85 | 95 | 1.12 | 1.34 | 1.88 | 2.07 | 3.02 |
| " 25 libs | 80 | 94 | 1.06 | 1.28 | 1.56 | 1.60 | 2.47 | 3.65 |
| 35 lbs . | 92 | 1.11 | 1.28 | 1.59 | 1.98 | 2.03 | 3.25 | 4.91 |
| 45 lbs. | 1.04 | 1.28 | 1.51 | 1.90 | 2.40 | 2.47 | 4.03 | 6.17 |
| 55 lbs . | 1.15 | 1.46 | 1.73 | 2.22 | 2.82 | 2.91 | 4.82 | 7.42 |
| " " 75 ths. | 1.19 | 1.74 | 2.18 | 2.84 | 3.67 | 3.79 | 6.39 | 9.94 |
| " . " 95 lbs. | 1.19 | 1.74 | 2.24 | 3.12 | 4.22 | 4.38 | 7.85 | 12.46 |
| For Ea. 100 lbs. | 1.19 | 1.74 | 2.24 | 3.12 | 4.22 | 4.38 | 7.85 | 12.59 |

## INSURANCE

Parcel post insurance rates are: 3 \& for parcels valued up to $\$ 5.60 ; 10 \mathrm{c}$ for parcels from $\$ 5.01$ to $\$ 25.00 ; 15 \&$ for parcels from $\$ 25.01$ to $\$ 50.00$; 25 for parcels from $\$ 50.01$ to $\$ 200.00$. Al parcels that we snip are insured
Express insurance rates are: for shipments under $\$ 50.00$, nu extra insurance charge; for shipments valued from $\$ 50.00$ to $\$ 150.00$ charge is 10 . For each additional $\$ 100.00$ value or portion thereof, charge is $10 \&$.

## EXPRESS \& FREIGHT SHIPMENTS

Express and freight shipments are sent transportation charges collect. If your station has no agent, please send sufficient money to cover transportation. Charges are the same either
way. All over-payments are promptly refunded.

## C. O. D. SHIPMENTS

Transportation charges on C. O. D. parcels are alightly higher than those sent prepald. C.O.D. charges in addition to the regular postage costs outlined above are as follows (including insurance): When value of parcel is up to $\$ 2.50$ the extra charge is 15 ; from $\$ 2.51$ to $\$ 5.00$ the extra charge is 20 ; from $\$ 5.01$ to $\$ 25.00$ the extra charge is 30 ; from $\$ 25.01$ to $\$ 50.00$ the extra charge is 40 ; from $\$ 50.01$ to $\$ 100.00$ the extra charge is 50 f from $\$ 100.01$ to $\$ 150.00$ the extra charge is 55 ; from $\$ 150.01$ to $\$ 200.00$ the extra charge is 604 . The Post Office also charges extra charge is 60 . The Post one order fee on each C. C . D . an extra small money order fee on eacting in full.
NOTE: Equipment built or ordered especially to meet customers' requirements not aubject to exchange, credit or refund Al orders for special merchandise must be accompanied by a deposit.

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IR UNSURPASSED
IGH FIDELITY REPRODUCTION


ALTEC-LANSING MULTI-CELL DIA-CONE SPEAKER
is on ideal high-fidelity reproducer for use in conjunction with the fine components shown on this page. Its 15 -inch dia-cone with high-irequency multi-cellular horn dif"dream". high-fidelity rodio.phonograph combination. For technical dapa on this and other fine speokers see page 40 . Shpg. wl. 17 lbs. K19234-Altec-Lonsing Model 603 Speaker. Your Cost. \$82.32

GARRARD RC-60 AUTOMATIC MIXER-CHANGER has inng
been the choice of produce, of the world's finest radio-phono combinations. Our engineers have increased its reproducing qualitles by incorporating the famous, new General Electric variable roluctance pick-up to provide the ultimafe in respors 13.
from your fine recordings. Full dotalls on the slandard Garrord RC-60 on page 13 from your fine recordings. Full detalls on the elandard Garrord
$\mathbf{K 2 2 3 9}$-Garrord RC-60 Cnanger with G.E. pick-up. Shpg, wf. 20 lbs. Your Cosi \$69.50

## hallicrafters SX-42

- 540 KC to 110 MC, con. tinuous in six bands.
- Separate, calibrated bandspread dial - for amateur 3.5, 7. 14, 28, and 50 MC bands.
- Wide band FM, AM, CW available from 27 to 110 MC.
- New FM band-channel numbers clearly marked.
- BFO functions over entire receiver range.
- Two FM limiters for maximum quieting.
- Coaxial, precision-built main and bandspread controls.
- Wide vision tuning dials precision calibrated.
- Four-position switch for PHONO, FM, AM, CW.
- Over 8 wotts push-pull audio oułput.
- Flat response from 60 to 15,000 cycles.
- Phono inpuł at rear.
- Split-stator VHF tuning
- Temperature-compensated HFO minimizes drift.
- "Alrodized" steel top provides full ventilation.
- Chassis and panel remov. able as a unit.



## HALLICRAFTERS SX-42

all you want in a versatile RECEIVER! Just think, in one outstanding unit you get a superior stonding unir You get a superior
standard and VHF communicotions receiver; a standard, short-wave ond receiver; a standard short-wave and
FM broadcast receiver: and a high fidelity phonogroph ompllfier. All this over an amazing frequency range of 540 kilocycles to 110 megaeycles ( 550 to 2.85 meters).
FORAMATEURAND PROFES. SIONAL! Versotility and clear performance to sotisfy the most exacting short-wave enthusiast. Precision engineered to make possible reception from the remote corners of the world in addition to on extremely wide bandspreod control, seporate controls for erystal phasing, variotion of CW pitch, selectivity, AVC, and a noise limiter are provided for critical adiustments.
A SHORT-WAVE RECEIVER THE FAMILY CAN USEt Everyone con use this receiver with eose. Color coded this receiver with eose. Color coded controls moke it possible for the entire fomily to enjoy this fine receiver,
AMAZINGLY NATURAL RESPONSEI AMAZINGLY NATURAL RESPONSEI
Musical reproduction of true high Musical reproduction of true high fidelity is assured by on audia system with response curve essentially flat from 60 to 15,000 eveles ond an
undistorted power autput of 8 watts. Unsurpassed for listening pleosure on braadcast or phono operation.

## R-42, R-45

The R-42 and the R-45 (special rock mounting version of the R-42) present the greafest innovation in speaker design in recent vears. This is the first speaker of its size to offer the advanfages of the boss reflex principle. Heretofore the highly desirable bass reflex feofure has been ovailable only in large cabinet-type speakers. Now in this sleek, highly functional design, matching the new line of Hollicrofters receiver bass reflez oerformance is available in a rugged yet compact speaker that offers a new high quality of reproduction. The R-42 was designed as a

SUPERB ENGINEERINGI Hallicraf ers - famed makers of war-winnin ers - tamed makers of war-winnin
electronic equipment have built int electronic equipment have built in
this great receiver all the engineerin this great receiver all the engineerin!
odvoncas goined by their experience advoncas goined by their experience
Split stator funing. Dual if trans Split stator funing. Dual if trans
formers. Two FM limiter stoges. Co oxial locking knob which permit free rotation of main or bandsprea control while the other is firmly hel in position. Automatic changeove from norrow AM band to wide-bonc FM (bands 4 and 5)
CONTROLS: 8and selector, mai luning, bandspread, dial lock, vol ume and power off, AVC, noise limil er, receive/standby, selectivity, tone sensitivity, crystal phasing. PHONO FM-AM-CW switch, CW pitch. "S' meter adjustment on rear of chassis. FIFTEEN TUBES: 2-6AG5 RF amp 1.7F8 converter, 1-65K7 if amp. is $65 \mathrm{G7}$ If amp., 1.6 HS AM rect.-nois lim., $2-7 \mathrm{H} 7 \mathrm{FM}$ limiter amp., $1-6 \mathrm{H} 6$ $\lim _{\text {FM }}$ 2.7 discrim., $1-65 \mathrm{Ll}$ oudio inverter FM discrim. I-6SL7 oudia inverter,
2.6 V , beam-power oudio fubes, 1-7A 2. 6 Vo beam-power oudi tubes, I-7A
BFO.FM funer amp., I-VRi50 voltage reg. 1-5U4G rectifier
K21178-Hallicrafters Model 5X-42. Shpg. wl. 80 lbs. $\$ 275.00$
Your Cost...... K21179-Adiustable bose for 5X-42 Provides "eve-angle" view of controls. Shpg. wt. 10 lbs. $\$ 7.5010$
Your Cost Your Cost.

## SPEAKERS

companion plece to the $5 \times-42$ re ceiver but may be used with any other receiver. Speaker size is 8 inches. A two position switch on the front panel permits communications or high fidelity reception. Terminals on rear for 500/600 ohm line. R-42 size: $121^{\prime \prime}{ }^{\prime \prime}$ deep $\times 111^{\prime \prime}{ }^{\prime \prime}$ high $x ~ 17^{\circ}$ wide. R-45 size: $121 / 2^{\prime \prime}$. Shipping weight of each model is opproximately 25 lbs.
 Kinn


[^0]:    Here's Lafayelte's answer to the great demand lor o popular priced rodio-phonograph cont binotion. We offer this Iruly versolile value binolion. We ofer this iruly versolile value capable of providing you with excellent radio and recorded enterlainment. This combination set has mony fine tealures-mosi important of which is its fine sound reproduclion abilitv. You own a "box seal" 10 a world of enterloinment with on MC-13. You will be delighted with its exacting tones, its compact, attrac. lively finished mahogony vaneer cabinel and best of all its high value at low cost. Try the MC. 13 on our fomous 30 day home Irial plan.

[^1]:    250 Volts D. C. Working
     K1220 KR212

    450 Volts D. C. Working
    

[^2]:    11 there is any Item not listed on these pages, we can supply it. Simply list your requirements and manufacturer's part number If known.

[^3]:    De-Luxe HInged Steel Cabinets
    Attractive streamlined cabinets, with full length piano hinge and removable front panel. Ventilating louvres on sides. Finished in alate gray ripple enamel. All less chassis. Wes. same as at left.
    No. H.L.D. Panel For Chassis Each $\begin{array}{lllll}\mathrm{K} 22037 & 8 \times 10 \times 8^{\prime \prime} & 8 \times 8^{\prime \prime} & 7 \times & 7 \times 2^{\prime \prime} \\ \mathrm{K} 22088 & 82.94 \\ \mathrm{~K} 22089 & 8 \times 12 \times 8^{\prime \prime} & 8 \times 10^{\prime \prime} & 7 \times 9 \times 2^{\prime \prime} & 3.09\end{array}$ $\begin{array}{llllll}K 22099 & 8 \times 16 \times 8^{\circ} & 8 \times 14^{\circ \prime} & 7 \times 13 \times 2^{\prime \prime} & 3.97 \\ K 22090 & 9 \times 17 \times 11^{\circ} & 9 \times 15^{\prime \prime} & 10 \times 14 \times 3^{\prime \prime} & 6.17\end{array}$ $\begin{array}{ccccc}\text { K22090 } & 9 \times 17 \times 11^{\prime \prime} & 9 \times 15^{\prime \prime} & 10 \times 14 \times 3^{\prime \prime} & 6.17 \\ \text { K22091 } & 12 \times 20 \times 12^{\prime \prime} & 12 \times 18^{\prime \prime} & 10 \times 17 \times 3^{\prime \prime} & 7.35\end{array}$

