NZW YORK, N. Y. 100 SIXTH AVENUE TELEPHONE: WALKER 5.8883

CHICAGO, ILL. SO1 W. JACKSON BLV'D TELEPHONE: HAYMARKET 0422

ATLANTA, GA. 430w. peachtreis st, N.w. TELEPHONE: WALNUT 5140

NEWARK, N. J. 219 CENTRALAVENUE TELEPHONE: MARKET 2.1661

BRONX, N. Y. 542 E. FORDHAM ROAD TELEPHONE: RAYMOND 9-8813

JAMAICA, L. I. -0-08•166th STREET (MERRICK ROAD)
TELEPHONE: REPUBLIC $9-4242$

AND


## REPLACEMENT PARTS • PACES 13-44; 69-100

## RADIO RECEIVERS • PACS 1-12: 101-112

## PUBIIC ADDRESS• PAGES 45-68

## SHORT WAVE APPARATUS • PACES 13-18

```
HOW-TO-ORDER, PAGEI1O
```

COMPIETEINDEX• PAGEIOO

## WHOIESAIE RADIOSERIVICE O:

THE WORLD'S LARGEST'RADIO SUPPLY HOUSE


OW YOU CAN ENJOY "PERSONIC EAR' NOW YOU CAN isten to your radio without disturbing anyone else in the room. The prouram. A simple SILENT-only yochment slips under your plllow, under the attachmen of your oasy-chair or can be held be the hand. The Latayette model this device by orderfurnished Model DAl3-P-Lalay bight, but with "Personic ear." as described at righ. but WMON. $\$ 18.0 .5$
Shpg. wl. 20 ibs. Code
A.C.

2 BAND S pand, c. sverato is
$T$ HIS Latayette 5 fube. proval and enthusiasm the mour seale production makes possible this amazingly low price-a price attractive appearance.

Full 6" Dynamic Speaker
A perfectly matched. $6^{\prime \prime}$ electro-dynamic speaker. (unusually large for receivers in this price range),
will till the average bome with crisp. life-like reproduction.

Automatic Volume Control
Its tube complement consists of a 6D6, 6A7. 75, 41 pentode power output and anonly tound only in matic volume cons-is incorporated.

European Reception
The two bands cover 49 to 130 meters and 175 to 555 meters: this provides recoption of eararope airshort.wave broadasts, and other services. plane commuminated airplane dial ands lits beautiful. ing to a marked degree. soft background of the gold-tinished glow American hardwood for placement entire assembly is compact entel or on the nightin the book-casedroom. 5 -tube, 2 -band a.c. superModel DA-13-1.alayette 110 volts. $50 / 60$ cycles a.c.
 WAKEN. List $\$ 28.90$. 220 -voll a.c. operation
YOUR COST

DYNAMIC SPEAKER
A. thave a radio receiver in the kitchen. in tho Youngster's room, in the play cellar, den. etc.
Simple to operate. and ally efficient. Put it between books, on a mantel.

Automatic Volume Control
A higbly efficient superheterodyne circuit employs 80 rectitier. Annoying fading on distant signals is minimized by the Dolice Calls

Tumes 175 to 555 meters includes many Its tuning range of which are always a source of police broadcasts wherthome listener.

Electro-Dynamic Speaker
Complete enjoyment of the finest musical programs is assured by the use of a masual feature for speaker arer selling in this price range. The color blending of dial wood taste. perbet, comlation in simplatayette 5 -tube a.c. supers $50 / 60$ cycles Model with all tubes. For 110 volt, $7 / 4^{\prime \prime}$ deep. Shpg. The Latayette "PERS the radio-the loud speaker on YOU to hear is SILENT. It is secerel hoom and apartment, hospilal The Latayette model with a.c. Size, $11^{3 / 8}$ long. ${ }^{7 / 8} / \mathrm{m}^{\mathrm{m}}$. Wigh Price $\$ 24.90$. described at the this innovation. wh. 15 lbs. Code
YOUR YOUR

Add $\$ 1.50$ for 220 voll a.c. operation

## 6TUBE AC-DC 511 1901 <br> 

thaso and mano tone onco- womplo powe Ahis lafayelleay more cro wo band cower-excep. a price that is truly b.c.c. superhe you own European hard superholerodynn Two ranges coverin Reception pean broadering recoption to toption Six modecasis, amption of Amorican 180 to 550 ${ }^{25 L 6 G}$. buperhet circure und police cand Euro. bollagt "bubo cm": powerit: aned in the walls. Autormeth eliminates out 2525 z and 607 Gngi . Its features atic Volus the "hol cord". R49C vernier dial, includo an illume Control volt sockend switch ardyamic speake calibrated live and darce. or d.c. Mo peration trom, tront-ol Model ed throughout Solected Amel is no any 110 . suporbet 5 -43-Ladaypelle Buit in Amoricara hard wooc.


 .


 Eithor modol tor Codo FLAMM. Short. Wavo boo to

16.75<br>add





 Codof. bul wisisimiar to Mornd dormi.
1
ALUIE THAT ${ }^{s}$ I7.75 with oynamic speaker Th ihs itily wondor will ion givos no by bafanusually low prour highest Dependication of itarge sale truly frodine produe. The circuit ampable TRE Cire quality tionally fadio trequency is the rellable cuit selectivity. Five gey good sensitive provides trimed ispontodo powe luber sensitivity and adexcep.
 brot cord"0 The obviates the and a K5S ${ }^{6 C 6}$, ${ }^{\alpha}$ Llectro-Drom 190 to 555 covers the of a The seftron out ynarmic motors. matched doutput is olficiently Specticer
avarage bome A built-in with wriak which wanded by a of the sot. Thim pormonisp roproduction. will the plor molding can easily bected aer. placed under thencealed bo trung around part dic. operation the rug. This foalud the divan the the travelor in a grip that that it is plusits a, or and fust plug and wrip makes it a small enough Model $\mathrm{JAl}_{4} \mathrm{~g}$ it in. Wook-eader-lake favorito with 12, complote with lalayette 5 -lube ane anywhero Shpg. wide $83 /{ }^{\text {min }}$ high Fof libovolic.e.d.c. receiver
 Model Ja.36-AsportModel \$9.45 band covoring above List 520.90 ring 800102000 mith with an additional
YOUUR COST
EIther modelt Codo IEBOS.
Exutre convel for 220 -volts, add

mauto sereicice contor corpurtonted ….. $\$ 1.00$

## $T_{\text {Tho }}$ Toocol the "Personic Ear" 



## TUBE AC-DC



## HIGHLY SELECTIVE

Not so long ago owners of direct-current receivers listened with eavy to the superior ceivers quality of their neighbors a.c. re. ceiver, and anxiously awaited the expira. Hon of their lease so that they, too, could enjoy the superiority of a.c. radio sets over the dic. type.

## Equally Good On DC

 However, those days are past. Modern radio now offers the d.c. home the same tine reception that the owner of an a.c. receiver enjoys. This Lafayette 7-tube, a.c.d.c. superheterodyne can be plugged into amy lls-volt socket and assure the listener of tudio-like reproduction. European reception, knife-edge selectivity and more than ample power for the average home. It makes use of a full-voiced electro-dynamic speaker. Up to 2 watts of energy are obtained from a new type octal power output tube which leaturos the new "Beam" type. highly-efticient operation.
## ULTRA-SENSITIVE

An unusually semsittre superheterodyne circuit employs the following tube complement: a 6A7 detector-oscillator, 6D6 i.f., 75 detector - automatic volume control - first audio. 25B6G octal output. 2525 rectlifer, 6G5 cathode-rcy tuning "eye" and a 140R8 ballast tube.

## Foreign Reception

The two bcands with which this receiver is equipped tuno from 46 to 160 meters and irom 175 to 555 meters. Intensely interesting evenings can be spent funing in European short-wave stations, as woll as hundreds of amateurs, police calls, circralt traffic and commercial services. A convenient switch on the front pomel permits easy switching from one band to another.
A technical feature of note is found in the inclusion of an intermediate frequency trap to improve i.t. rejection of unwanted signals; this means "cleaner" receplion on all bands.

## FULL, RICH TONE

The dial is especially novel, A $12: 1$ ratio drive moves a knife-edge pointer across the face of an extra large dial which offers increased simplicity of tuning. Both bands are calibrated directly so that any station cern be lound merely by roferring to its Irequency.

## Cathode-Ray Tuning

## Makes it possible for anyone to tune this

 set with hair-spliting precision. Merely watch the "eye" as it blinks. The cabinel is of American hardwood and is appealing in design.Model ER-15-Lalayette 7-tube, 2-band a.e. d.c. superheterodyno. complete with all tubes. For 115 .volt operation. Size. $141 / \mathrm{m}^{\prime \prime}$ wide. $8^{\prime \prime}$ high. $71 / 2^{\prime \prime}$ deep. Shpg. wt. 17 lb . List Price S35.90
Code TEBBA
s 17.95
For 220 -volt oporation, add 51.00

## Cefayette 6 TUBE AC-DC Superket

HOUSED IN THE NEW COLORED PLASTICS TO BLEND WITH ANY SETTING

## A MODERN SET FOR

 A MODERN HOMEAdd color. cheer, charm and innumerable hours of the world's finest entertainment to your home with these beautifully colored. 6 tube a.c.-d.c. superheterodynos.

In Ivory, Red or Black The cabinet is of the new molded plastic material, beautifully finished in the color of your choice, clean-cut and smart in appearance. All fittings are designed and colored to match tho overall finlsh.

## Dial Has Planetary Drive

It employs the latest, clock-type dial which uses a $5: 1$ ratio planetary drive. Soft illumination brings out its effective coloring with startling beauty. Calibration is both in meters and kilocycles so that the station you seek can be found quickly and simply.

The band covered is from 540 to 1735 kilocycles (173 to 555 meters). embracing the complete Broadeast band and many police calls.

## Rafuyette Стиев SUPERHET 3Bands <br> 18 TO 560 METERS GIANT 7 INCM DIAL FOREIGN RECEPTION <br> A Lhe esmentials of the radlo receiver you <br> A beautiful, oral-shapod dial, fullr $6^{\circ}$

 DYNAMIC SPEAKER TONE CONTROL

6-tub are nook ng are found in this Latayelte 6-tube. J-band a.c.o superheterodyne.

## Unusual Sensitivity

 Six of the letest type tubes are used in a circult dovelspod espocially for sonsituvity and eelectivi $\mathrm{Y}^{\circ}$ a 6D6, 6A7, 76, 75, 42 and 80 rectifior. Automatic volume control zeduces fading and oliminates blasting.
## Brilliant Reprocuction

Is assured with undistorted power output of 3 watt into mm electro-dynamic spoaker that will till your home with studio-like richnoes and fidelity. Full toee control permits a choice of tirm bre to suit your perional taste as to bass of treble emphasis.

World-Wide Reception
You are assyred innumerable, thrilling eva. nings as your dial brings you broadeants trom every eorner of the globe. the valces of hundreds of cmateurs, the torse communications betweon airplane pilots and ground slations and the ever-exciting police calls. Threo bands are furrished: 18.50, 66-187 and 200-560 mete-s. across, makes tuning a dolight for oiery. across, makes the the tamilys ard its indirectly il umione in the tamelys ard it indirectly il uminated black and gold dial blends pleamntly
with the rick tones of the walnut cabizot.

## Hand-Rubbed Cabinet

In appearance, the DR-20 leaves little o be desired. The bighly polished walnut veneer cabinet with lt eurved, upward sweef and cabinet with its eurved, upward sweef and niture that will edd a cheerful and decorative touch to whatever room it is added. Model DA-20-Lafayette 6 -tubs. 3 band a.c. suporhet, with tabes. For 110 volts: $50 / 60$ cycles a.c. Sire. $181 / 2^{\circ \prime}$ wide. $103 /{ }^{\circ \prime \prime}$ high. $81 / 2^{\prime \prime}$ deep. Shpg wt. 28 lbs . Code WELCE. List Price $\$ 39.9]$.
YOUR COSI. For 220 -volt a.c, speration, add

## EXPORT MODEL

Model J-21-Similar to chove, but equipped with a 850-2009 anoter band in place of the $66-187$ mete: band. Code EASTO. Fos $110-$ $220-250$ rolts, $50 / E 0$ cycle a.c. $\$ 23.45$
YOUR cost

# Cfayette 5 TUBE <br> SUPERHET 3Baneds 

3 WATTS OUTPUT HIGH SELECTIVITY

## DYNAMIC SPEAKER

EXCELLENT TONE AUT, VOLUME CONTROL

A ratched electro-dynamic epeaker provides excellent tome quality with power to spare-3 watts-more thas ample for the averego home and its soquirements.

## Compaci-Rugged

The secofver is boused in an attractive, walnut Enishod cabinet $101 / \mathrm{n}^{\circ}$ high. $18^{\circ 0^{\prime \prime}}$ wid and $81 / a^{\circ}$ deop. It in woll suited for use as a sicord receiver in the bed-room. kitchen. office play-room. etc. Its compqet sizo lends to its portability.
Mode DA-11-Lalayotto 5-tube, 3-band, a.c. supathet, with all tubes. For 110 volts, 50/60 cyclea.c. Shpg. wt. 27 lbs . Code WAGNA. Livt 833.70.
$\$ 16.85$ YOUR COST Add 22.00 for 220 -volt e.c. operation.

## EXPORT MODEL

Model J-33-Similar to above, but for the wave bends. This model covere 17.5-51.5. 193-530 and 780-2143 moters. For 110-220-250 volte $50 / 60$ cycle a.c. Shpg. wit 28 lbs . Code EGAㅋE. List \$39.90.
YOUR COST
$\$ 19.95$


4OTHER SENSATIONAL RADIO VALUES - PAGES IOI to 114

## -TUBE ACDC SUPERHET

(

$\mathrm{O}^{F}$F courte you canl Ther in nothing - Fery comer of the tune in mations trom tte world-stroller glad with a musical otto world-stroller. And with a musical qually that will make you glad that music is here to lend its proverbial onchantment. Naturally, It will get you much more than cross-ocean broadcants-there are amateura, police calls, cirplanos in flight, ships at soa and innumerable American stations that will Iood your home with lilting rhapsodies -il rou care for that-or with the stirring bars of the world's lisest music.
Uses Magic Tuning "Eye" According to our engimeore who have delved into its secretw, it performs so superbly because it "has the stuk." It boasts a full 8" lectro-dynamic spoaker, automatic volume control, tone control, over-load-proof diode defector, nolse miaimising control and an r.I. pro-ielector on all bands. Tho tuning "ye" (a 6C5). Is part of the dial and winks at you whenever it wants to tell you that you have tuned your atation in porioctly. Other tubes used are a 6K7G. a 6ABC. a 688G, a.6Q7G. 2-25L6G. and 2-2526G.

Unusual pertormance must be matched with unusual appearance. We accomplished this by obtaining a hand-rubbed, walnut product of the cabinot-maker's highest art.
Model C-48-Domestic model Lafayotto 9-fube a.c.-d.c.. 3-bcmd superhet lor 110/120 volt operation, complete with tubet. Slze, $231 / \mathrm{z}^{\circ}$ operation, complete with tu
Wide, $111 / /^{\prime \prime}$ deep. $13^{\prime \prime}$ high.
Lhpg. Wt. 37 lb
List Price $\$ 85.00$
Code GREBO
YOUR COST
Q $\rightarrow 0$
Model C-47-Export models similar to above except for addition of long-wave band listed above. Code GEL.MA. S 42.51 YOUR COST
Both above for 220 -volt operation add 53.00 . Modal C-46-8-tube oxport model similar to Model C.47. but for $115 / 230$ volts. $50 / 60 \mathrm{cycl}$ a,c, ONLY, Code GOMAT.
$\$ 42.50$

## 13 to 2220 Meters

W. can romomber, not so long ago. when a "good" radio recelver boasted a dozen or 50 knobs and diale, occupied the better portion of the dining soom table, could briag in Pittsburgn on a cold. crisp night, and possossed what was known as "good tone.
But that period of radlo's growing pains is over. Today, the Lalayette ALh.WAVE, 7-Tube a.c.d.c. recolver will bring you stations from every past of the world writh incomparable beauty of tonal reproduction
"Tune-Ease" Dial
Its operation is so simple that every one in the family can tune in any de. sired program. A new, lull-vision. precision-geared dial reads at a glance and provides the fine control necencary for foreign reception.

Plug it in anywhere-it operates on 110 volts alternating or direct cutrent: you needn't worry about the type of current when moving.

Tuning is truly all-wave-13-30, 30 75, 75-200, 200-545 and 850-2220 meters 75. 75-200, 200.54 the air.

## 7 tube AC-DC

A wide-range, $8^{\prime \prime}$ electro-dynctmic speaker provides the quality wisich ham mado this Latayetto model lamsus. Back of this loud speaker is sutficient reserve power for more than average home nends. You can reduce the vol une to soft soothing strains, or pro vide ample dance music for pour partios-in oither case its qualli, it superb. Technical features inciude automatic volume control, tone $=0 n$. trol and phonograph jack should you dosire to add a phomograph unlt for the reproduction of recordinga.
Eine Walnut Cabinet
Tubes used are $2-6 \mathrm{~K}^{\circ} \mathrm{B}$, a 6AB, a 607. a 25A6, 2526 and an L42C ballast tube. All are the most advanced type. Model A-23-Lafayotte 7-tube a.c.-1.c. 5-band A-23-Lalay ite $110 / 120$ volts. 5-band superhet for $110 / 11 /$ n $^{\circ}$ volts. Complote with tubes. Size. $21 / 2{ }^{11 / 4^{\prime \prime}}$ high. $9^{\prime \prime}$ doop. Shpg. Wt. 28 lbs . List $\$ 63.00$. Lint sb3.00.MA.
Code WITMA.
YOUR
COST
Add $\$ 1.00$ for 220 or 250 -volt llaen. Specily voltage when ordering.

# Cafayette 

## 7 <br> TUBE, 3-BRMD A.C. SUPERFET

POWER - sen stivity - selectvity tine riprcdurficn - appecrence world-vice receftor-long. tronble free operation and-lzat but not least-low cost. Al these-cnd more-a"e found in this musucly fine maztel-lype superhetecodyno.

Wit3 Tuning "Yye" The sever letestitpe tubes are: a 6A7, 6D6, 75 F. 6G5 mhode-ray "3Ye", 41 power peatode and 80 rectitier. Automatic volmene coz rol is used for better recepticn and rep:oduction

## Varicble Jone Control

A modern elesto-dynamic speaker offers studio-like lones that can be colored as to bess or treble exphasis by meass of an exts-selective tone control.

## European Reception

Foreign raception is a proven fact with this recuiver. It covers the 3 bands that are of Jratest interest to the histener: 18 to 50 . 66 to 186 and 200 to 560 metors. Band switrh is on the tront panel.
These bands take in Europoan short-wave broadeaste, the $30,40,80$ and 160 meter ama teur bends, airplane communications. police calls, ghip and athor short-wave service. You well as the standard American broadcasts. You will never have dull moment.

## WORLD-WIDE heception

Model DA-31 - Latayette 7-tube. 3band a.c. superhot. with tubes. For 110 volte, $50 / 60$ cycles a.e. Size. $81 / 2^{\prime \prime}$ deep, $19^{\prime \prime}$ long. $10^{\prime} / \mathrm{s}^{\prime \prime}$ high. Shpg. wt. 25 lbs. Code WALLA. List $\$ 47.90$.
823.95 YOUR COST

## EXPORT MODEL

Model J-13 - Covers 18-50, 850-2000 and 200.560 metors. Powered for and 200-560 metors. Powered for 110-220-250 volts. $50 / 60$ cycl a.c. Code ECCOT
YOUR COS
s27.50

## $74{ }^{4}$ Gutwav SIPERTET

## WITH CATHODE-RAY TUNING

W OULD you enjoy the thrill of having a radio receiver that can ofier you everything you desire in sadio? That is both a fine musical instrument and a beautiful addition to your home? Then this Lafayefte 7-tube, 3-band console superheterodyne is the receiver of your choice

## Powerful Superhet Circuit

Soven tubes are employed in this unusually sensitive and selec tive circuit: 1-6A7, 1-6D6, a 75, 76, 6G5 cathode-ray tuning "yo". 42 pentode power output and an 80 rectitier, Automatic volume control prevents blasting when tuning across the dial and maintains distant stations at a constant level.

## Complete Three-Band Coverage

The complete range is split up into three bands: 18 to 50 meters 66 to 186 meters and 200 to 560 meters. These bands offer endless hours of entertainment in bringing you European broadcasts, airplanes in 日light, amateurs throughout the country. police calls and various other short-wave broadcasts.

## Full-Range Dynamic Speaker

A special, heavy $8^{\prime \prime}$ electro-dynamic speaker reproduces the entire audible spectrum with stirring fidelity. Every note reaches you with the flawless quality with which it entered the micro phone at the studio. A tone control offers additional listening pleasure by permitting bass or treble shading to suit your per sonal taste as to timbre
A giant, oval-shaped illuminated airplane dial, with a kniteodge pointer makes tuning a simple process. is in the moder Cabinet construction is in the modern manner, of selected walnut vereer in a
becutiful design: rounded comers, grainad instrument panel, curved sides and bottom and straight-line grille front pillars.
Model D-30-Lafayette 7-tube, 3-band a.c. console superhet, with tubes. For 110 volts $50 / 60$ cycles a.c. Size, $37^{\prime \prime}$ high, $20^{\prime \prime}$ wide. $91 / 2^{\prime \prime}$ deep. Shpg. wi. 56 lbs. Code WACKE. YOUR COST
$\$ 29.95$
WITH TUDES

## 

THE MANTEL MODML
is proferred by some, while cthers lyan toward the console typo shoma bolow. The choice of cabin ot is youra but You have no choice in the techoieul poriec tion offered you by these 8 -mbe, All WAVE superhoterodynes. Fov must ac cept the peerless performance and the outstanding beauty-the precition elec trical and mechanical design-the guar anteed world-wide reception-the long life, trouble-free operation

Each chassis is CUSTOM-BULLT to the rigid spectications of the latest laboratory developments

## $8^{80}$ Dynamic Speaker

Both models use a full $\mathrm{g}^{m}$ electrodynamic speaker, tuning "ero", automatic volume control, the pew tone axpander circuit, fone control and the new Pander circuit, lone control and the new gold-backed glass dial. Full covercge gold-backed glass dial. Full covercge meters with NO SKIPS. The chassis is tully floated on rubber, as is the 3-gang tuning condenser.

Additional lochnical insormation is given below. The semi-madern cabinet is of hand-rubbed walmut vaneer and measures $231 / 2^{\prime \prime}$ wilo, $13^{\prime \prime}$ high and $1111^{\prime \prime}$ deen.
Model 8-81-Lafayette 8-tube. 3-bend mantel receiver. For $90 / 135$ volts, $50,60 \cdot \mathrm{cycle}$ a.c. operaticn. Complote with all tubos. Shpg. wt. 42 lbs. Code BINES. List Price 77950.
YOUR
COST
59.75

Cathode-Ray "Eye" New Tone Expander "Beam Spot" Tuning High-Fidelity Switch

## 18

## IN A CONSOLE CABINET

Never before has so much radio value been offered fer so little moneyl This beautiful console cabinet houses the same chassis and speaker described above and is an exquiate example of modorn design. It stands fully $38^{\prime \prime}$ high, is tinished In walnut veneer and hand-rubbed to a brilliant mirror-like surface. If must be seon to be fully appreciated-and heard to realize itsis mperior technical construction.

## Maximum Sensitivity On Rll Bands

In addition to the featuran outhined above, the chassin employ an ultra-sonaitive superhetorodyne circuit using oight of tho latos type metal tubes: three 6K7.s. a 6C5, a 6Q7, a 6F6. a 6 GS and a sLAMG lull-wave rectibior. Complate graduation in tone from low basi to brilliant highs in enablod through a full-range tone control. Also included is a high-fidelity awiteh to sproad the veloctivity of the intormediate lrequency dircuits. allowing the pas sage of all frequenciesno assuro greator range of autio ropro duction.

Automatic Bass Compensation
A tone compensating circuit is used to automatically iscrease bigh and low trequency response at reduced volume.
round ed front of butt walnut Ored in solid walnut vearar with
 $33^{3 / 2}$ "hgh and $103 / /^{\prime \prime}$ doe p.
Model 8. B2-Ledayetto 8-fube. 3-band console recoiver, complete with tuboan For $95 / 130$ volts. 50/60 cyclo a.c. Shpg. 66 lbs. Code BLIRE, List Price S97.00. YOUR COST

## Chassis, Speaker and Tubes

Model B-80 - Lalayetto 8-tube. J-band chaskis speaker and tubes. For $95 / 130$ volts. $50 / 60$ eycle
 Brave. Lint $\$ 69.50$.
Shpg. wt 32 lbs.
YOUR COST
s34.75
Models doscribed on this page are availablo for 220 -volt 世.e. eperction, Add $\$ 2.00$.

## $p$ <br> Were Staying in we never enjoyed Radio so much before! <br> ALL-



T AEAYETTE presints this ll-tube all-wave. corsole $\Delta$ uperbeterodyne tor the discriminating purchaser who desires to possess and enjoy a muperior instrunent. No modera radio development has been omittedi it in as tine a product as herd-craftsmashbip zan produce.

Tone Expander and Confrol
The fsllowing tube line-up gives the ultra-modera super. hefergdyne circult tremendous power, sensitivity and soloctivity: four $65 F^{5} 3$, thre 6 C 5 's, two 6F6's, a 524 and a 6G.j tuming "oye." Automatic compensation providos increased reuponse of high and low motes ordinazily lost at reduced volumer and a full range sone control pesmits oither bass oz treble omphasis of reproduction to suil the permonal laste.

Uses High-Fidelity Switch
With the tene control in the exteeded treble position, a specicl bighfidelity swith aets upon the intermediate trequency circuits allowing the passag of a wider band of lequencies. This rassures maximum faithfulsess of reproduction. Still another aid to finer tone is the cathode. ray tunine "ye. asssited by the radically now EEAM SPOT fuaing dial. CCMPLETE COVERAGE OF ALL SHORT-WAVES AND THE

Automatic Base Compensation

## Improved 12" Dynamic Speaker

Micrometer Logging Indicator

## 8-Watts Undistorted Output

BROADCAST BANDS IS HRD WICH THREE BAMDS: 16.4-568 mutors
bith NO STIPS. ELT IS
The chassis. It is of magnificent, hand-rubbed walmut veneer, with simple and arrostiag lines that bespeak quality and good testo
Model B -88-Latarelte 11 -tube, all vave, console superheterodyae with all tubes and $12^{\prime}$ dyacmic speaker. For $95 / 130$ velts, $50 / 60$ cyc. es a.c. Size, $26^{\prime \prime}$ vide, $411 / 2$ hgh.
14 deop. 3hpg. Wt 86 lbs.
Code Wrist. List Price $\$ 135.50$.
YOUR COSI

## CHASSIS, SPMAKER AND TUBES

Model 8-87-Chassis and speaker as described above loss console. With all tubes. Size. $161 / 3^{\circ "}$ wide, $93 / 4^{\prime \prime}$ aigh, $101 / 2^{\prime \prime}$ deep. Shpg. Wt. 41 lbs Code WREMO. List Price $\$ 99.00$.


## TWO IZ" Uuditorium Speakers

* Automatic Base Compensation
$\star$ Three Continuous Tuning Bands
* Two Push-Pull 6L6 "Beam" Power Output Tubes
$\star$ 20-Watts Undistorted Output
A S modern as tomorrowl The now TELE-DIAL is truly a radical At step torward in slmplifying the radio receiver, Seventeen station control bultons are arranged around the periphery of an $81 / 8^{\prime \prime}$ dial enclosing a conventional poister-type dial with $5^{*}$ scale, bearing complete calibzations for manual operation of the dial when desired.

Can Be Adjusted By Anyone
The initial adjustment of the TELE-DLAL requires no special knowledge or tools; all necessary adjustments are made trom the tront of the panel in a few momonts, and are accurate regardless of the inexperience of the person making them. The mechanical adjustment on the average automatic turimg dial is accurate to only approximately $71 / 2 \mathrm{kc}$. as compared with up to $21 / 2 \mathrm{kc}$. on the Lalayette TELE-DIALI
A bi-metallic thermostatic condenser is incorporated to com. pensate for drift caused by temperature changes, and improved soaling of condensers eliminates drifi caused by variation of atmospheric moisture coatent.
The powerful superhet circuit employs thirteen of the latest type tubes as follows: one GU7 r.f. amplitier on all bands; one 6CS oscillator: one 6J7 mixezt two 657s as i.f. amplifiers; one 6H6 double dioden two 6C5 audio asd a.v.c.; two 6L6 "Beam Power" output tubes, two 5Y3G rectitiers; one 6C5 tuning "eye." Full, natural quality of reproduction is retained at low volume by an automatic compensating circuits delared automatic volume control is a turther aid to reception.

## covers 15.4 te 568 Mesers

This range is continuous and is divided into three bands: 16.452.2, 51.8.175 and 173.568 meters-the world of short and standard wave broadcasts is at your hinger tips.

The power transformer works on any $50 / 60$-cycle a.c. voltage from 95 to 130 volts without adfustment.
Model 8-96-Lafayette 13-fubo, 3-band console superhet with Tele. Dial tuning, all tubes cand two $12^{\prime \prime}$ speakers. Size, $43^{\prime \prime}$ high. $261 / 2$ wide, $123{ }^{\prime \prime}$ deep.
Shpo. wt. 1101 bs . Code BELVA List Price $\$ 199.00$. YOUR COST Model B.98-Ās above, less Tele-dial. YOUR COST

Add 53.00 additional lor 220 -volt ac.c. operation.

## Chassis, Tubes and Speakers Only

 Model 8-95-Chassis, tubes and speakers oaly, with Tele-Dial as above. $201 / 8^{" 4}$ wide. $121 / 2^{\prime \prime}$ high, $12^{\prime \prime}$ deep. Shpg. wt. 68 lbs. Code BEREI.List Price $\$ 148.50$. YOUR COST
${ }^{\text {s }} 74.50$ Model 8-97-hs above, less Tele-Dial. YOUR COST.
 beauty easy to-aet world in that if is capablo of superbticaly evory broadcast trequency now in use in any part of the world. is housed in an exquisitely designed mantel-type cabinet.

## Cathode-Ray Tuning "Eye"

The ultra-sensitive circuit used incorporates the new CentroMaster automatic control unit and employs the following tubes: tive 6K7's. a 6G5 tuning "eye", 6L7, 6Q7, 6CS, three 25\%6'i aבd FOUR 25L6 "BEAM" POWER TUBES.

## Automatic Tone Control

Every modern dovelopment for the improvement of reproduction is ombodied in this set. Manual tone control permits choice of timbre to suit the personal taste. Automatic compensators further assist in assuring full-range reproductions every note is hecrd -not "lost". The new Prismatone high-fidelity circuit permits wide band passage in the l.f.'s as an insurance of quality in tae audio circuit. Inter-stotion noiso suppression is still another

## guarantee of listening pleasure. <br> Covers EVERY Wave Band

Practically every broadeast band in use today is covered sy this recoiveri tive bands are used to range from 5 to 2060 mete:s. Other features includet panel.controlled phonograph Jack, a stage of r.t. pre-selection ON ALL BANDS, variable selectivit. diode dotection, improved Vision-Master dial scale with precisien. vernier second hand, and a $10^{\circ}$. auditozum lype dynanic specker ordinarily usod in commercial sound systemas.
The cabinet is an outstanding thing of beauty. If is sturdly constructed and finished in matched walnut veneers hand-rubbec io a mirzor-like surlacel size, $237 / 8^{\prime \prime}$ high. $161 /{ }^{\prime \prime}$ by $13^{\prime \prime}$. Model C-65-Latayette 16-tube, 5-band, all-wave, a.c.-d.c., superhet mantel-type receiver, with tubes. For 110 -volt, a.c.od.c. operution. Shpg. wt. 50 lbs . Code GLEBI. List Price $\$ 139.00$.

0NLY Lafayste can offer so much in radio for so little in cost. In this 12 -fube, a.c.-d.c., all-wave superheterodyne, modern engineering has produced a receiver that is equally excelleat on both difect cursent and altorating current.

## Uses R.J. Stage On RLL Bands

Full use is made of twelve high-gain, mult-purpose tubes; they include a 6K7, 6A8, 6B8, 607, three $2526^{\prime \prime}$ s, a 6G5 eathode-ray tuning "eys" and FOUR 25L6 "BEAM" POWER TUBES.

## $10^{\prime \prime}$ Electro-Symphonic Speaker

Tone quality has been emphasized in its design to an unbelievable extent. The endire audio range is reproduced with uncanny fidelity and thrilling brilliancer automatic volume control maintains reception at a constant output.

## Fully Variable Tone Control

A unique tone control offers a choice of emphasis from bass to high treble and sorves also to minimize baci-ground noises it present. Another of the numerous features found in this receiver is the new Virion Master, multi-colored dial scale with two-speed tuning and automalic band indicator.
All short, standard and long broadcast waves aro covered from 16 to 2060 meturs in four bands. The ontire assembly is housed in a tastefully designed mantel-typo cabinot, finishod with polished walnul veneers. Dimensions, $2378^{\prime \prime}$ high, $161 / 6^{\prime \prime}$ wide, $13^{\prime \prime}$ deep. Model C. 61 -Latayetto 12 -tube. a.c.-d.c. allwave superhet mantel-type receiver, with all lubes. For 110 -volt a.c.-d.c. operation. Codu GEBOT. Shpg. wt. 50 lbs List Price 5109.50 . YOUR COST

### 54.95

Add $\$ 3.00$ for 220 -volt operation.
11-TUBE A.C. MODEL
Model C.52-As above, but designed for 110/250 volt, 5060 cycle a.c. operction. Uses 11 tubos. Code GUBIR. List $\$ 109.00$. YOUR COST
${ }^{\text {s }} 54.50$

$$
\text { Add } \$ 3.00 \text { to above price tor } 220 \text {-volt operation. }
$$



## SPECIAL OFFERS! <br> New RCA Pencil

A special, automatic "Resistor Guide" pencil that will save you thme and trouble. Just rotate colorod bands to correspond with your unknown resistor, and presto, you know the value. presto, you know COST \$191.50 FREE with purchoses totalling 50 RCA radiotrons.
TECHNICAL BOOKS


Complete Tube Manual 192 pages of data, circuit design and applications. $21^{\mathrm{c}}$ Above FREE with purchases of 25 RCA Radiotrons.

Socket Layout Guide Tubes and layout diagrams of all sets from 1932. W19962-YOUR COST $39^{\circ}$ Above book FREE with purchases of 50 RCA Radiotrons.

## Cathode Ray Book

Latest data on all cathode ray tubes.
Wl9990-YOUR COST $30^{\circ}$
Above book FREE with purchases of SO RCA Radiotrons.

| Imprinted Stickers For Glass or Metal Tubes |  |
| :---: | :---: |
| Con, |  |
| wiy designed tube |  |
| use with either glass or |  |
| type tubes, lmprinted with your |  |
| ame. address | ess |
| e sure to supply |  |
| ion when ordering). In rolls of . 000 stickers. |  |
|  |  |
|  |  |
| Above FREE with purchases 100 RCA Radiotron tubes. |  |
| FREE! FREE! FREE! |  |
| To all purchasing ECA Radiotrone from Wholesale Radio Service Co., Inc. - Decalcomanias - Dummy Tube Cartons "O. K." Tags-you need only ask |  |
|  |  |
|  |  |
|  |  |
|  |  |

## GLASS TYPE TUBES

| Type No. | $\begin{aligned} & \text { List } \\ & \text { Price } \end{aligned}$ | Net Cost | Type No. | $\underset{\text { Price }}{\text { List }}$ | Net Cost | Type No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 00.A | \$2.00 | \$1.11 | 12A7 | \$2.00 | \$1.11 | 49 |
| 01.A | . 70 | . 37 | $12 \mathrm{Z3}$ | 1.10 | . 60 | 50 |
| 1月4 | 1.75 | . 95 | 15 | 2.00 | 1.11 | 53 |
| 1 A6 | 1.50 | . 81 | 19 | 1.20 | . 65 | 55 |
| $1 \mathrm{B4}$ | 2.00 | 1.11 | 20 | 2.00 | 1.11 | 56 |
| 185/25S | 1.25 | . 68 | 22 | 1.50 | . 81 | 57 |
| $1 \mathrm{C6}$ | 1.75 | . 95 | 24A | 1.00 | . 54 | 58 |
| 1F4 | 1.50 | . 81 | 2525 | 1.20 | . 65 | 59 |
| 1F6 | 2.00 | 1.11 | 26 | . 70 | . 37 | 71A |
| 1 V | 1.10 | . 60 | 27 | . 80 | . 43 | 75 |
| 2A3 | 2.25 | 1.38 | 30 | . 80 | . 43 | 76 |
| 2A5 | 1.20 | . 65 | 31 | . 90 | . 49 | 77 |
| 2 A6 | 1.20 | . 65 | 32 | 1.50 | . 81 | 78 |
| 2 A 7 | 1.50 | . 81 | 33 | 1.25 | . 68 | 79 |
| 287 | 1.50 | . 81 | 34 | 1.50 | . 81 | 80 |
| 573 | 1.00 | . 54 | 35 | 1.00 | . 54 | 81 |
| 6A4/LA | 1.50 | . 81 | 36 | 1.10 | . 60 | 82 |
| 6A6 | 1.50 | . 81 | 37 | . 90 | . 49 | 83 |
| 6A7 | 1.35 | . 73 | 38 | 1.10 | . 60 | 83 V |
| $6 \mathrm{B7}$ | 1.50 | . 81 | 39/44 | 1.10 | . 60 | 84/624 |
| 6C6 | 1.20 | . 65 | 40 | 1.00 | . 54 | 85 |
| 6D6 | 1.20 | . 65 | 41 | 1.10 | . 60 | 89 |
| 6E5 | 1.50 | . 81 | 42 | 1.20 | . 65 | V99 |
| $6 F 7$ | 1.75 | . 95 | 43 | 1.20 | . 65 | X 99 |
| 6G5 | 1.50 | . 81 | 45 | . 80 | . 43 | 112A |
| 10 | 2.25 | 1.38 | 46 | 1.35 | . 73 | 874 |
| 11 | 2.00 | 1.11 | 47 | 1.25 | . 68 | 876 |
| 12 | 2.00 | 1.11 | 48 | 3.00 | 1.83 | 886 |




| List | Net |
| ---: | ---: |
| Price | Cost |
| $\$ 1.20$ | $\$ .65$ |
| 2.25 | 1.38 |
| 1.50 | .81 |
| 1.25 | .68 |
| .80 | .43 |
| 1.10 | .60 |
| 1.10 | .60 |
| 1.50 | .81 |
| .80 | .43 |
| 1.10 | .60 |
| .80 | .43 |
| 1.20 | .65 |
| 1.20 | .65 |
| 1.50 | .81 |
| .70 | .37 |
| 2.00 | 1.11 |
| 1.10 | .60 |
| 1.10 | .60 |
| 2.00 | 1.11 |
| 1.50 | .81 |
| 1.20 | .65 |
| 1.50 | .81 |
| 1.50 | .81 |
| 1.50 | .81 |
| .90 | .49 |
| 4.00 | 2.75 |
| 6.00 | 4.25 |
| 8.00 | 5.75 |

Net
Cost

## IO\% ADDITIONAL DISCOUNT

maytheon and Lalayette tubes are iully guaranteed loz a period of six months from date of purchase (burnouts and brokon glass excepted). We will gladly exchange any lube thet fails to perform satistactorily within this period of time.

SIX MONTHS GUARANTEE
An additional discount of $10 \%$, from "Your Cost" prices, is aveilable with each purchase of 25 or moro Raytheon or Latayotte tubes. Take advantage of this offer to imerease your protits by purchasing lubes in quantity lots.

## RAYTHEON AND LAFAYETTE GLASS TYPE TUBES



# FWITEUR TRANSWITTINGTITBES 

## Cafayette Transmitting Tubes

 Guaranteed for 1000 HoursAll transmitting tubes in the Latayette line, with the exception of the 210 , have pure carbon plates, providing high plate dissipation without overheating. Tbey also provide more constant tube characteristics ander operation, since the carbon plates do not Vary in physical size or warp under hest. Lafayette Transmitting Tubes are Guaranteed Pro-Rata for 1000 hosurs against defective materials and workmanship; broken glass and burncuts are the only exceptions to this guarantee offer
Purpose
Type
203A R.F. or audio amp.- $\mathbf{1 0 0}$ watts plate dissipation.

## RAYTHEON

Transmitting Tubes Eveready-Rayers of the tamous
ing type tubes, makes a complete line of tubes designed solely for amateur use. These tubes are highly efficient, permitting maximum power output with minimum input All buve Isolantite bases, and are ruggedly constructed to provide long, uninterrupted service. Only the popular types are listed-we can supply any Raytheon $x$ 'mitling tube. Type

## Purpose and Output

RK10 R.F. osc., amp., mod. triode- 10 watt.
RK16 R.F. amp., cl. "A" driver, triode- 1.25 wat
RK17 R.F. osc., amp., dblr., pentode- 10 watt.
RK18 R.F. ose., amp., cl. "B" mod. triode- 50 watt
RK19 F.W., high vacuum rect., 1250 V., 600 ma .
RK20 Shielded pent., r.f. osc., emp., 80 watt.
RM21 H.W., high vacuum rect., 1250 V., 600 ma
RK22 F.W., high vacuum rect., 1250 V., 600 ma
RK23 Shielded pent., r.f. osc., amp., 24 watt...
RK24 R.F. osc., amp., mod., for 66 mc. 1.5 watt
RK24 R.F. osc. amp. mod., for 66 mc.- 1.5 watt
RK28 Shiclded pent., r.f. osc., amp.-24 watt. . 200 watt
RK28 R.F. power amp.,cl. "B and "C," pent.-2
RK30 High freq. rf. osc., amp. triode 65 watt.
RK31 Zero bias el. "B" modulator, triode- 140 watt.
RK32 High frequency triode- 65 watt
RK34 Highfreq., r.f. osc, amp., twin triodes- 20 watts
RK35 R.F. amp., osc., dblr., 60 watts.
RK36 R.F. osc., smp., cl. "B" mod., triode-225 watis
RK37 Hi mu osc., rf. amp., dblr.- 60 watls.
RK38 Hi mur.f. ump., dblr. -225 watts.
RK39 Beam power tetrode, plate output 40 watts.
R841 High amp. factor triode, audio amp.- 13 watt.
R842 Low amp. factor, mod., amp., triode -7 watt.
R864 Low microphonic response, mod. preamp.- 90 V . R8872A $H . W$ H., mercury vapor rect., 3500 V., 2.5 amps.

Your Cost $\$ 3.50$

### 4.50

 4.5010.00 10.00
15.50 15.00
5.00
7.50 7.50
4.50 4.50
2.25 2.25
4.50 4.50
34.50 10.00 10.00
1200 12.00
3.50 8.00 8.50
8.00 14.50 3.50 3.25
3.25 3.25 .51
4.00



NEW! THE RCA No. 913 1" CATHODE-RAY TUBE
High-vacuum, low voltage, electroHiatic type. All-metal construction sets as shield. Heater 6.3 volts at . 6 amp. Uned in the same circuits as the largest c-r tubes. Octal-buse.
Net $\$ \$ .60$.

RCA PHOTO TUBES

| No. | Type | Net Price |
| :--- | :--- | :--- |
| 868 | Generai purpose | $\$ 3.70$ |
| 917 | High-vacurm | 4.75 |
| 918 | Hightensitivity | 4.50 |
| 919 | High-vacuum | 4.75 |
| 920 | Twin photo-tube | 5.25 |

## Ceramic 50-Wat Socket



All-ceramic; contacts of end type. ultra-hifrequency.
For base mounting W12899-Type CP38 $\quad$ Your Cost Each....

JOHNSON SOCKETS


## ®(9) deforedt

## TRANSMITTING TUBES

The RCA-deForest line of transmitting tubes has been accepted as the quality standard since the beginning of tudio tranmoiksion. The tubes listed here are licensed for amateur and experimental use only.
Description.

| Type | Description | Net |
| :---: | :---: | :---: |
| 203A | Triode-100 watts plate dissipation | \$15.00 |
| 2044 | Triode-250 wistis plate dissipation | 97.50 |
| 211 | Triode-100 watia plate dissipation. | 15.00 |
| 800 | Triode-35 watte plate dissipation. | 10.00 |
| 801 | Triode 20 watte plate diesipation | 3.45 |
| 802 | Pentode-20 wats plate dissipation | 3.90 |
| 803 | Pentode - 125 watts plate dissipation | 34.50 |
| 804 | Pentode-40 watts plate dissipation. | 15.00 |
| 805 | Triode-125 wat's plate dissipation | 15.00 |
| 806 | Triode-150 wates dissipation | 24.50 |
| 807 | "Beam" screen-grid r.f. amp.-21 watta | 3.90 |
| 808 | Triode - 50 watte plate dissipation. | 10.00 |
| 8308 | Triode-60 watie plate disaipation | 10.00 |
| 831 | Triode-400 wates plate dissipation | 265.00 |
| 834 | Triode - 50 watte plate dissipation | 12.50 |
| 838 | Triode -100 wat s plate dissipation | 16.00 |
| 840 | R.F. pentode -2 volt filament | 6.00 |
| 841 | Triode-15 watte plate dissipation | 3.25 |
| 842 | Triode-12 watts plate dissipation | 3.25 |
| 843 | Triode-15 watta plate dissipation. | 12.50 |
| 844 | Screen-grid r.f. a mp. 15 watts plate dissipation | 18.00 |
| 845 | Triode-75 watte plate dissipation. | 15.00 |
| 849 | Triode- 400 wates plate dissipation. | 160.00 |
| 850 | Screen-grid r.f. amp.-100 watts plate dissipation. | 37.50 |
| 851 | Triode-750 wat s plate dissipation. | 350.00 |
| 852 | Triode- 100 watcs plate dissipation | 16.40 |
| 860 | Screen-grid r.f. amp. 100 watts plate dissipation | 32.50 |
| 861 | Screen-grid r.f. amp. -400 watts plate dissipation | 295.00 |
| 864 | Triode amp. (for pre-amplifiers) ....... | 1200 |
| 865 | Screen-grid r.f. amp- 15 watis plate dissipation | 12.75 5.00 |
| 954 | Acorn pentode, high frequency | 5.00 |
| 955 | Acorn iriode, high frequency.. | 3.00 |
| 956 | Acorn pentode, ligh frequency | 5.00 <br> 75 |
| 1602 | Triode 15 watts plate dissipation. | 2.75 |
| 1603 | Pentude amp. (low micro.) <br> High-Voltage Rectifiers | 3.25 |
| 217 A | Half-wave, high vac- 10 volt filament. | 20.00 |
| 217C | Half-wave, high vac.-10 volt filament. | 20.00 |
| 836 | Half-wave, high vac- 2.5 volt filament | 11.50 |
| 866 | Half-wave, merc. vap. 2.5 volt filament | 1.75 |
| 866 A | Half-wave, merc vap. -2.5 volt flament | 4.00 |
| 872 | Half-wave, merce vap. -5 volt filament. | 14.00 |
| 872A | Hulf-wave, merc, vap. - 5 volt filament. | 16.50 |
| 878 | Half-wave, high vac., for cathode ray | 11.00 |
| 879 | Half-wave, high vac., for cathode ray | 3.00 |
| 885 | Gas triode for cathode ray sweep control | $2.00$ |

AMPEREX TUBES NEW! ZB-120
The "hottest" tube in town! See February "QST" for full dope. Hi-mu, low C;75-watt maximumplate dissipution. The ideal distortionless, zero-bias, class "g" amplifier. Gets you 150 wates output in class "C"' telegraphy. only 3 to 6 wats to drive. Filament 10 volts at 2 amps. Fits std. 50 -watt Eacket

## THE HF-100

For working above 80 me. Two tubes put out 120 watts at 120 mc . Output of one tube in clase "C" is 170 watts at 1500 volts below 30 at 1500 volis below 30 me. Low-C, high-mu; 75 watts maximum plate diasipation. Filament
volts, 10 at 2 amps . Top plate terminal, grid side 4-pin Isolantite base for UX socket. Type HF- 100 Your Cost
s 12.50

## THE HF-200

Plate dissipation 150 watts. Attiinable power output up to 20 mc ., 400 watts; up to 60 me., 350 watt.3. Filament 10 volta at 3.4 amps ; top plate terminal, grid side; standard
50 -watt base. Plate 2000 volts d.c. 50 -watt base. Plate 2000 volts d.c. Type HF-200
Your Cost $\ldots 2$.
$\$ 1$

EIMAC TUBES TYPE 35T
Dissipates 70 watts at 1500 volts Muximum.
$\$ ? .01$

## TYPE 100TH

Dissipates 100 watts at 3000 volts maximum. Fits UX 4-prong socket. Type 100TH-....ST3.51
Your Cost......

## Ceramic Coil Forms

Especially designed for use in transmitters. Threaded and drilled for windings. Can be mounted on plugs or stand-offs. W14347-XR10A- 26 turns. Size
 W14348-XR12A- 28 turns. Size $4 \times 63$ "
Your Cost Each..... $\$ 2.50 .51$

## R100 R. F. Choke

 For receivers and low-power transmitters. Four sections on Imolantite. With long wire leads. Induct., $21 / 2 \mathrm{mh}$., d.c. resist., 50 ohms, rating, 125 ma ., distributed cap., 1 mmid. w14429 - Your Cost Each $36^{c}$

## Buffer Form and Base

 This coil form, drilled for leads, is of Isolantite 13." diameter. 313" long, 1/8" wall. Shpg. wt. 2 lbs.W14571-UR13 complete bulfer coil $\$ 1.50$
assembly. Your cost W14572-Coil form only. \&
Your Cost................ W14573-Plug only.
W14574-Base only

## Shoft Couplings

 Isolantite insulation flashover Takes 1 , shafts. Type TX-9. W8470Your Cost 66c
Type TX 10


Type TX-10-Shaped vas Bakelite insulation Was Bukelite insulation.


## PRECISION UNITS



Rotors insulated from frame; plate shape is sif. Steatite insulation. Pre-loaded worm gear with 20:1 ratio. Micrometer dial.

 $\begin{array}{llll}\text { tions } & \text { Stock No. } & \text { Stock No. } & \text { Cost } \\ \text { One } & \text { W14430 } & \text { W14575 } & \$ 9.00\end{array}$ | Two W14431 W14576 | 12.00 |  |
| :--- | :--- | :--- | :--- |
| 14432 | $W 14577$ | 1440 | Four W14433 W14578 16.50



Four perfectly pitched notes tuned to a perfect chord impossible to play out of tune. Simulates bugle calls,
clock tower chimes, etc. Complete with hammer and book of directions and 80 selections. $121 / 2 \times 8 / / 3 \times 3$
Shig. $w t .6 \mathrm{jbs}$. Shpg. wt. 6 lbs.
witici3-Your Cost

## TRANSMITTING CONDENSERS

## Low Power Type TMS

Insulated with Steatite-Isolantite. Conical front bearing, rear bearing radial with single ball thrust. Size, $21 / /^{"}$ by with single ball thrust. Size, $21 /{ }^{\prime \prime}$ by
$134^{\prime \prime}$ high, $2^{3 / 4}$ " long. Can be mounted on panel, chassis or stand-offs. Type
TMS will withstand 1,000 volts, (airTMS will withstand 1,000 volts, (airgap $026^{\prime \prime}$; type TMSA
2,000 volts, (airgap $.065^{\wedge}$ )

| Stock No. | $\begin{aligned} & \text { Nat'l } \\ & \text { No. } \end{aligned}$ | $\begin{aligned} & \text { Cap. } \\ & \text { Mmid. } \end{aligned}$ | No. of Plates | $\begin{aligned} & \text { List } \\ & \text { Price } \end{aligned}$ | $\begin{aligned} & \text { Your } \\ & \text { Cost } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| W14550 | TMS100 | 100 | 10 | \$2.50 | \$1.50 |
| W14551 | TMS150 | 150 | 14 | 2.75 | 1.65 |
| W14552 | TMS250 | 250 | 23 | 3.00 | 1.80 |
| W14553 | TMS50D | 50-50 | 5-5 | 3.75 | 2.25 |
| W14554 | TMS100D | 100-100 | 9-9 | 4.50 | 2.70 |
| W14555 | TMSA35 | 35 | 8 | 3.00 | 180 |
| W14556 | TMSA50 | 50 | 11 | 3.25 | 1.95 |

W14556

## Moderate Power Type TMC

| W14592 | TMC50 | 50 | 7 | $\$ 4.00$ | $\$ 2.40$ |
| :--- | :--- | :---: | :---: | ---: | ---: |
| W14593 | TMC100 | 100 | 13 | 4.50 | 2.70 |
| W14594 | TMC150 | 150 | 21 | 5.25 | 3.15 |
| W14595 | TMC100D | $100-100$ | $13-13$ | $\mathbf{7 . 5 0}$ | 4.50 |

## Heavy Duty Type TMA

| W14369 | TMA100B | 100 | 23 | $\$ 13.50$ | $\$ 8.10$ |
| :--- | :---: | :---: | :---: | ---: | ---: |
| W14328 | TMA50A | 50 | 9 | 6.50 | 3.90 |
| W14329 | TMA100A | 100 | 16 | 10.00 | 6.00 |
| W14330 | TMA150A | 150 | 23 | 12.00 | 7.20 |
| W14331 | TMA230A | 230 | 35 | 16.00 | 9.60 |
| W14332 | TMA50DA | $50-50$ | $9-9$ | 11.00 | 6.60 |
| W14333 | TMA100DA | $100-100$ | $15-15$ | 17.50 | 10.50 |
| W14334 | TMA300 | 300 | 23 | 12.00 | 7.20 |
| W14335 | TMA200D | $200-200$ | $16-16$ | 15.00 | 9.00 |

ACORN SOCKETS


W14505-Type XCA-SteatiteIsolantite. For RCA 955 triodes. Each W14 W. 14506 -Type XMA-Copper base, with built-in mica by-pass condensers. Each
$\$ 1.20$

## 50-WATT SOCKETS

Glazed ceramic material. Metal
shell with guide slot. Binding post
terminals. Lowterminals. Loweter, 2 / $^{\prime \prime}$ high. W14524-XM-50.
Your Cost Each.
 Similar to above, but all Steatite construction. No metal, XC-50. W14492 Your Cost

## Neutralizing Condenser

## NC Series

 Both plates are Both plates areinsulated from insuated from
ground by glazed ground by glazed
Isolantite pillars; micrometer adjustment. Type NC-800 for RCA800 or similar
tubea. Type NCtubes. Type NC-
150 for 75 T .
150 T , 300T, 852. Type NC-500 for WE 251A and similar large tubes. W14259-NC-800. W14253 N. $\mathrm{C}-150$ Your Cost. .... Your Cost $\mathrm{NC}-500$
Your Cost.


Screen-Grid Coupler

##  <br> Containa 700 henry choke, . 01 mid. condenser, $1 / 4-\mathrm{megohm}$ leak. Types. 101. Shpg. wt. 3 ths. wias09 Your \$3.60 <br> Stond-Off Insulators

 IsolantiteMetal
mounted
top and bot.
tom. Ideal for r.f. chnke
cores. Shaped for maximum




Steatite Small unit is tapped larger
Makeattractive and effi-
cient job.
 W14485
High-Frequency Bushings Small and large bushings complete with hardware. Prices are per pair. Made of Steatite.

| Stock No. Type | Height | Pair |  |
| :--- | :--- | :--- | ---: |
| W14488 | XS-1 | 11 | $45{ }^{\prime \prime}$ |
| W14489 | XS-2 | $13^{\prime \prime}$ | 54c |
| W14490 | XS-3 | $2^{5} 6^{\prime \prime}$ | $\$ 3.00$ |
| W14491 | XS-4 | $234^{\prime \prime}$ | 3.90 |

## NATIONAL Packs

sper 9 words per minute to any speed. Solid silver contacts; al ments at all speeds. A real commercial beauty for hams and pro's. | Shpg. wt. 5 libs. |
| :--- |
| wi4028-Your Cost |
| S |

Model 511 resembles the above but a smaller model ideal for the ham. Fully adjustable. All chrome finished. Shpg. wt. 5 lbs.
W14029- $\$ 6.17$
Your Cost..........

Model 321 Senior Key For the
 o it d
tind the
and and the who is
to start right. $1 / 10$ "silver contacts. Chrome and black finish. All metal base highly insulated. A favorite with
all operators. Shpg. wt. W14039- Shpg. wt. 1 ilbs.
Your Cost.
S1.91

Biggest apeed-key value today. Similar to 501 but smaller; white nickel finish, base black wrinkle; fully adjustable. Base $21 / 2 \times 6^{1} 4 x$ Fuly gasehardened bearings. w14033-Your Cost $\$ 4.85$

## Model 301 Ham Key

Designed es-
 silvercon-
lite base: all metal parte chromed Ideal for the beginner, can be used W11040-
Your Cost


Hi-Frequency Buzzer
Constant frequency buzzer for practice or modulation work. 2 ohms resistance. Shpg W14021-


Designed especially for hum-less short-wave reception. Less tubes. $\begin{array}{ccccc}\text { Stock } & \text { Nat'l List } & \text { Your } \\ \text { No. } & \text { No. Price } & \text { Cost }\end{array}$ $\begin{array}{lrrr}\mathbf{W} 21255 & 5886 & \$ 29.50 & \$ 17.70 \\ \mathbf{W} 13807 & 5880 & 29.50 & 17.70\end{array}$ | $W 13807$ | 5880 | 29.50 | 17.70 |
| :--- | :--- | :--- | :--- |
| $\mathbf{W 1 4 3 8 0}$ | 3580 | 22.50 | 13.50 |

## DUNCO RELAYS

 power circuits. RA1 has 60 -cycla 2.5 volt coil; RD1 has 5 to 6 volt d.c. winding. Dimensions, $11 / 3 \times 2 \mathrm{x}-$ ${ }^{15 / \prime \prime}$ deep. Sh Your Cost. W14031-RDi
$\mathbf{s} 2.00$
$\mathbf{5} 2.00$

# S.W.Receivers Ham 

NEW! HALLICRAFTERS "SKY CHALLENGER"


Embodies many of the features of the 1937 Super SKYRIDER. Is engineered with the thought of satisfying the most exacting amateur and advanced shortwave broadcast fan, without placing too heavy a burden on his pocket book. All frequencies are covered in five bands from 535 to $10,000 \mathrm{kc}$., $(7.6$ to 560 meters) with smooth, continnous electrical band spread. uous electrical bund spread. Features include iron-core i.f. $s$,
(2 stagen), air-trimmed r.f. $s$, a.v.e. switch, stand-by, pitch and tone control, single-signal crystal action, (optional), 4 watts audio. Uses $4-6 \mathrm{~K}^{\circ} s, 6 \mathrm{C} 5,6 \mathrm{~L} 7,6 \mathrm{Q} 7 \mathrm{G}$, 6F6G and 80. Provision for doublet. In crackle-black steel cabinet. W21085-Model S-15 with tubes, less crystal and speaker. Shipping weight, 44 pounds
Y our Cost
${ }^{5} 69.50$

## HALLICRAFTERS SKY BUDDY



A real junior model communication superhet complete with power supply, built-in dynamic and all tubes for only meters in 3 bunds Iron core i.f., band spread a.v.c., beat swilch phone jack. 5 tubes do the work of $816 \mathrm{~A}, 6 \mathrm{~F} 7$ 75, 42 and an 80 . Housed in a crystalline black metal case, $17 \times 71 / 2 \times 85 y^{\prime \prime}$ deep. Provision for doublet antenna. Direct W21052. Sky illuminated calibrated dial. W21082-Sky Buddy, complete with tubes. For 110 -volt, 50/60cycle a.c. operation. Shpg. wit. 22 Ibs.
Your Cost
s29.50

## HALLICRAFTERS SKY CHIEF

Tremendous sensitivity for the amateur and short-wave fan. Three bands cover 17 to 560 meters. Built-in power supply and dynamic sjeaker. Iron-core i.f., beat oscillator, stand-by, a.v.c. on-off switch band-spread control, phone jack, r.f. and uudio gain, $6 \mathbf{G 5}$ Signa Strength Indicator, highly efficien pre-amplifier, illuminated, calibrated Streng th Indicator, highly efficien pre-amplifier, ilial. Tube complement. $78,6 \mathrm{~A} 7,6 \mathrm{F7}, 75,42,6 \mathrm{G} 5$ und an $80-$ airplane dial. Tube complement. ${ }^{\text {ten }}$, ten-tube performance with seven! Operates on 110 , 120 valts, $60-c y c l e$
a.c. Housed in black, crystalline metal cabinet similar in appearance to above; size, $211 / 4 \times 93 / \times 10^{1}$
W21079-With tubes. Shpg. wt. 43 lbs.
Your Cost.
${ }^{s} 44.50$

## HALLICRAFTERS TIME-PAYMENT PLAN

You can now purchase a Hallicrafter receiver on the easy payment plan. Avail yourself of the opportunity to own one of these fine receivers. Write for complete particulars.

## HAMMARLUND "SUPER-PRO"



This new, 1937 'Super-Pro' is a 16 -tube super-heterodyne, designed to meet every rigid specification of the professional operator and advanced amateur. It is in use in commercial, a $r$, po lice, marine and government stations throughout the world, yet so simple to operate that any novice can easily tune in stations from any point of the world. In corporates TWO stages of tuned r.f. on all bands; cov ers the complete range from 15 to 555 meters; FOUR air-tuned i.f. si band spread with a TWELVE-GANG condenser; 4-gang main tuning condenser; all coils on lsolantite; clectrostatic shielded input; three audio stiges; visible tuning meter; varable selectivity from 3 to 16 kc by means of calibrated control on panel; a.v.c and manual gain conin metal cabinet $13 \times 75 \times 8 \frac{1}{2}$ "high, for 110 -volt, 60 -cycle a.c. supply. Crystal filter is optional.
W21040 Model SP-100; less crystal. With tubes, power supply and $8^{\prime \prime}$ Jensen dynamic speaker. Shpg. wt. 65 lbs .
List Price 5405.00.
Your Cost.
$\$ 238.14$
121041 Model SP-110X; as above, but with crysta List Price $\$ 435.00$
$\$ 2.55 .76$
Your Cost
.....................................
with special power upplies and with $12^{"}$ Jensen $\mathrm{Hi}-\mathrm{Fi}$ dynamic speakers. Tell us your needs and we will send descriptive literature and prices.

## RCA ACR-155 COMMUNICATION RECEIVER

RCA's latest contribution to the short-wave field. Tunes continuously from 22,000 to 520 kc ., ( 13.6 to 580 meters), in three runges. Usesall-metaltubesthroughout: 2-6K7 r.f. and i.f. amplifiers, 2-6.J7 oscillators, a 6 L 7 1st detector, 6 H 62 nd detector and a.v.c., 6F5 au-
 do amplifier, 6F6 output pentode and a 5 W 4 rectifer Features include air-dielectric trimmers in antenna, r.f., detector and ascillator circuits, adjustable magnetite-core i.f. transformers, 100-1 vernier, phone jack, a.v.c. switch, stand-by, pitch, tone, audio and r.f gain, $6^{\prime \prime}$ dynamic speaker built-in, operates on $110 / 125$ volts, $50 / 60$ cycles a.c. In two-tune gray metal cabinet, $24 \%$. $\times 10 / / 3 \times 123$ / W21101 RCA 155 complete with tubes-nothing else to buy. Sbpg.
Your Cost Complete
$\$ 74.50$

## NATIONAL NC-100, 100X AND 101X

The NC-100 is a 12 -tube superhet using 10 -allmetal tubes, and tunes from 10 to 555 meters in type of built-in coil astype of built-in coil as-
sembly. The tube complement includes a stage of r.f. on all bands, amplified and delayed a.v.c., a visual tuning "eye". Buitt-in power supply provides excita-
 speaker. The tuning dial
operates a 3-gang condenger; spring-loaded gear train with ratio of $20: 1$ makes 10 revolutions across each coil range. In black, crackle-finished steel case.
${ }^{\text {siteel case. }}$ W21256-NC-100 regeiver with tubes, power supply and $10^{\prime \prime}$ dynamic speaker; less crystal. Shpg. Wt. 72 lbs .
Your Cost
$\$ 120.00$
W21266-NC-100 as above, for battery operation
1.20.1 W21257-NC-100X with tubes, power supply, $10^{\prime \prime}$ speaiser and factory installed crystal. List \$237.50.
Your Cost
\$142.50
w21267-NC-100X crystal model for battery operation.... $\$ 133.00$

## NEW! THE NC-101X FOR THE AMATEUR

Similar to NC-100X, but tunes from 10 to 176 meters in 5 bands with band-spread on each. With crystal. Shpg. Wt. 89 lbs . W21263-With tubes and 10 " speaker

## Your Cost

5 529.01
W21268 As above, but for battery operation
$\$ 120.00$

## NATIONAL HRO SENIOR AND JUNIOR

Professional type communication receivers Use two r.f. pre-selector
stages, two air-tuned, stages, two air-tuned, Litz, i.f. stages, a,v.c. with panel " $S$ " meter (on the Senior), Lamb single-signal crystal fil-
ter (on the Senior) ter (on the Senior), phone jack, send-receive switch, electron-coupled
 is provided with ganged plug-in coils with bandspread: 1.7 to 30 mc . The Junior is equipped with coils to cover the 10 and 20 meter bands.
W21264 HRO-2: $21 / 2$-volt a.c. table model with tubes and coils (10 to 176 meters), less power supply and speaker. List $\$ 299.50$. W21265-HRO-6; similar to above but for 6-volt battery operation. Shpg. wt. 62 lbs. List $\$ 299.50$.
Your Cost, Either Type
ST79.2 W21250-HRO-2; $21 / 2$-volt rack-panel receiver, equipped as above. W21251-HRO-6; rack-panel mounting; for 6 -volt battery operation. W21251-HRO-6; rack-panel mounting; for 6-volt battery operation.
Sppg. wt. 62 lbs. List $\$ 320.00$. Your Cost, Either Typo. W21252-HRO Junior for 2 y/2-volt a.c. operation. With tubes, coils ( 10 and 20 -meter bands). Less power supply and speaker. W21253-HRO Junior for 6-volt battery operation. Equipped as above. Shpg. Wht, 30 Ibs. List $\$ 180.00$. Your Cost, Either Model
W21261 Type 6897 power supply for 2 jij-volt HRO Seniors. For 115 -volt, 60 -cycle a.c. Less tube
Your Cost
$\qquad$

NOTE: We carry a complete line of National. Hammarlund. Hallicrafter, R.C.A. and Lafayette short-wave receivers and parts which space limitations prevent us from listing in this catalog. Write for complete information on any model not listed.


## GENERAL ELECTRIC

## HEAVY DUTY CAPACITORS

Pyranol Fitled; with Porcelain Standofts

| Stock | Cap. | D.C. | List | Your |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| No. | Mid. | Volts | Price | Cost |  |
| W3753 | 1 | 1000 | $\$ 3.00$ | $\$ 1.76$ |  |
| W3754 | 2 | 1000 | 4.50 | 2.65 |  |
| W3755 | 4 | 1000 | 7.00 | 4.12 |  |
| W3756 | 1 | 1500 | 3.75 | 2.20 |  |
| W3757 | 2 | 1500 | 6.25 | 3.67 |  |
| W3758 | 4 | 1500 | 9.00 | 5.29 |  |
| W3759 | 1 | 2000 | 58 |  |  |
| W3760 | 2 | 2000 | 8.00 | 3.09 | 4.70 |
| W3654 | 4 | 2000 | 11.00 | 6.46 |  |

## ThIfont Transmitting <br> Thutest tomanemers

 Oil-impregnated paper dielectric.Finest foil obtain. able. In heavy metal housing waxfilled and sealed.
Black japanned finBlack japanned fin-
ish. Terminals on porcelainstand-offs equipped with solcially designed for mitters and high-po Size $5 \times 3 \times 112^{\prime \prime}$ to 21 capacitance. Shps.

Used with dials listed below Of finest brilliant Bakelite with brass wers for 2, shats. With pointer
Vour Cost Each W13014-Type B $16^{c}$ knurled edre.
$17^{\circ}$ Your Cost Each w13013- Type B. 1\% \% dian Your Cost Each $23^{\circ}$ W13012-Type B. $2: 8^{m}$ diameter Vour Cost Each. W13011-Type C. $2^{\text {\# }}$ diameter, Your Cost Esch. W13010-Type C. $3^{\prime \prime}$ diameter for larger dial

Etched Metal Dials


Polished nickel-silver with black etched markings. $4^{*}$ diameter, 1 Ho"
mounting centers. Marked: Ammounting centers. Marked: Am-
plifier Piate, Amplifier Grid, Oscillator, Antenna, Buffer, Buffer-Doubler, Blank. Specify marking desired. W9858 - Your Cost Each 4 IC As above, but 204 diameter. Availand blank.
and blank.
W9857-Your Cost Each 35
As above. $21 / \%$ diameter; Gain Only. Y903-Your Cost Each. 23 c

## BUD Dual Spaced Condensers



Wide spacing $.060^{\circ}$ Close fitting brass bearings. Isolan-
tite insulation. tite insulation.
Aluminum soldered plate.

|  | plate. |  |  |
| :---: | :---: | :---: | ---: |
| Stock | Cap. | List | Your |
| No. | Mmfd. | Price | Cost |
| W9550 | $4-15$ | $\$ 1.50$ | $\$ 0.88$ |
| W9551 | $6-36$ | 1.55 | .91 |
| W9552 | $7-50$ | 2.00 | $\mathbf{1 . 1 8}$ |
| W9553 | $8-75$ | 2.50 | 1.47 |
| W9554 | $10-100$ | 3.00 | 1.76 |
|  | Dual Units |  |  |
| W9555 | $35 *$ | $\$ 3.00$ | $\$ 1.76$ |
| W9556 | $20^{*}$ | 3.00 | 1.76 |

## BUD Midget Condensers

## Single bearing

 type with heavy aluminum endplate. Positive wiping contact on $\quad$ soldered to shaft. Shaft extends $36 \%$ beyond rear bearing for ganging. All straight line frequency typ have Isolantite insulation

## THORDARSON

ER-POWER TRANSFORMER AND CHOKE COLL Transiormer fully shielded supplies 1200 volts c.t. at 200 $71 / 2$ volts c.t. at 3 amps., 5 volts at 3 amps. (for rectifier). volts $50-60$ cycles ace. Size $5 \times 4 \times 41 / 4$. Mounting centers 3 Choke color-coded leads. Shtpping weight i2 pounds. W226-Your Cost Each, Special Heavy-duty choke to match above; 12 henrys at 250 m 2.45 Heavy-duty choke to match ahove; 12 henrys at 250 ma . 8 high.
$3^{n}$ wide. Mounting centers $23 /$. Shipping weight $8 \mathrm{lbs} . \$$.
W227-Your Cost Each, Special..........................


Filter Choke

## farlinal precision products

## Isoiantite R. F. Choke

For short- and wave receivers and transmit. ters. 4 windings carry inductance 8 mh ., d.c. resistance 70 ohms. Is $1 \frac{1}{3} \times 7 / 8^{\prime \prime}$; on Isolantite spool
W8524-Type CH-8
Your Cosk Each
$65^{\circ}$


Choke Forhipower rigs working in the 20, 160 -meter bands. Six

Isolantite core carry 500 ma con tinuous. Inductance 2.5 mh ., d.c. resistance 8 ohms.
W8522-Type CH-500\$1.
Your Cost Each....
Air-Padding Condensers Isolantite base; soldered brass plates; $.015^{\prime \prime}$ air-gap; only Serew-driveradjust. ment; maintain constant capacity under all climatic condititions. Type APC.


Bakel Coupling Bakelite canvar; brass 4 set-screws for shaft: 4 set-screws for shaft:
overall diameter 1 W8412-Cour C.. 3.5

MIDGET R. F. CHOKE
Juniversal-wound
pies on lsolantite chate in diameter. In.
ductance 2.1 mh ., d.c. resistance $3^{5}$ ohms, rated at 125 ma . With long, tinned copper leads. An efficient space-saver
W10002-Type CH-X
Your Cost Each $\qquad$ $35^{\circ}$

## Cased R. F. Chokes

In aluminum in hi-gain circuits. 3 universal-wound pies. Inductance 10 millth. d.e. resistance 65 ohms rated at 100 ma .
 our Cost
Eakelite-Cased Chokes
pe RFC85-Passes 60 ma Type RFC85-Pas
millih., 215 ohms. W8525 Your Cost Type RFC250-250


## Isolantite Cail Forms

Equipped with a black enameled grip handle. Size $\rightarrow+2$ $11 /^{\prime \prime}$ diameter, $21 / /^{\prime \prime}$ high, orm only. Ample holes are provided for taps, etc
wions
4-prong form W10057-5-prong form W10058-6-prong form Type CF. $\quad$ Cour Cos. 5

H. F. ACORN SOCKET


CRYSTALS


CRYSTALS
Frequency within. $03 \%$ under normal conder normal conperature control perature control In Bakelit. mounting tainless ng: electrude steel

VFI Variable Frequency Crystal A mounted lowdrift 80 -meter crystal whose
frequency is adjustable over widerange. May he used for multiplying. Varia

> tion up to 6 kc. on $80,12 \mathrm{kc}$.


40 or 24 kc on 40 meters.
chine-lapped. Fits any 5 -prong socket. For 40, 80, 160 meters. Specify frequency desired. W13585-Within $5 \mathrm{kc} . \$ 4$.
Your Cost......... Your Cost.......... $\$ 8.0$
W13494-Exactic. $\$ 5.90$
Your Cost.........

Specify minimum frequency desired between 3.5 and 4 mc . Sup sired between 3.5 and 4 mc . Sup
plied accurate to within $\pm 5 \mathrm{kc}$ W13493-
Your Cost
$\$ 8.00$

## HF2 20-Meter Crystols

 Housed in holder shown above, of Vietron $\mathbf{G}$; plugs into any ${ }^{5}$ prong socket. Offers control for 20. 10 and 5 meters. Easily excited. Frequency drift only 20 cycles/ me/C. A ccurately calibrated; guaranteed within . 03 W13515-14 to 14.4 mc . Within 15 kc. of your specification. Complete. Your Cost. wi3496-14........30 W13496-14 to 14.4 mc . Within ${ }^{5} \mathrm{kc}$.Y13497 5 T0. 10 Wi34



## 8C3 "Hom" Crystals

 Amoderatel priced, mounted $X$ cut power crystal
for the 40 and 80 meter ham bands. A powerful oscillator.
Frequency drift 23 cycles/me/C. One piece Bakelite holder plugs into any 5-prong socket and mounts in any poaition. When ordering, specify frequency ( 40 or 80 meter band) and accuracy desired.
W13531 BC3 mounted crystal.
Within 5 kc
Exact integral ke

[^0]
## Band Spread Midgets

 Tank sectionhas and can be locked. Iso ocked. Iso
antite. 3 " shaft front and rear for pauging. Ideal for ham receivers or frequency meters

| Stock No. | $\begin{aligned} & \text { Type } \\ & \text { No. } \end{aligned}$ | Mmid | $\begin{aligned} & \text { Your } \\ & \text { Cost } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| W8516 | MC120R | 20 | \$1.76 |
| W8517 | MC150B | 50 | 1.91 |
| W8518 | MC175B | 80 | 2.06 |

## Dual-Spaced Midgets

For transmitters; .0175" air gap Isolantite insulation; single-hole mount; compact.

| $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | $\begin{aligned} & \text { Type } \\ & \text { No. } \end{aligned}$ | Cap. Mmid. | $\begin{aligned} & \text { Your } \\ & \text { Cost } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| W8468 | MC20sX | 25 | \$1.18 |
| W8488 | MC35MX | 33 | 1.32 |
| W8489 | MC50MX | 50 | 1.62 |
| W8490* | MCD35MX | 33-33 | 2.06 |

*Split-stator condenser.

| Non-corrosive plates; Isolantite insulation; fitted bearings: 4-point bronze wipers; single-hole mount; bushing lock for fixed work; can be ganged; .0245" air-gap; test 500 volts a.c.; plates ure of soldered brass; stop is provided; all are clockwise rotation. |  |  |  |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | No. of Plates | $\begin{aligned} & \text { Cap. Mmid. } \\ & \text { Min.-Max. } \end{aligned}$ | Your Cost |
| W8503* | 3 | 3-20 | 50.82 |
| W8504* | 5 | 4-35 | 88 |
| W8505* | 7 | 5-50 |  |
| W8506 $\dagger$ | 11 | 6-80 | 1.18 |
| W8507* | 11 | 6-80 | 1.18 |
| W8508* | 14 | 6-100 | 1.32 |
| W 8509 | 14 | 6-100 | 1.32 |
| W8510 | 19 | 7-140 | 1.47 |
| W8511 | 27 | 10-200 | 1.62 |
| W8512 $\dagger$ | 34 | 10-260 | 1.7 |
| W8513 $\dagger$ | 43 | 12-320 | 2.0 |

## Dual Midget Candensers Stock Cap. Mmid. Min. Your $\begin{array}{cccc}\text { No. } & \text { Per Sec. } & \text { Cap. } & \text { Cost } \\ \mathbf{W 8 5 1 9} & 140 & 7 & \$ 2.35 \\ \mathbf{W 8 5 2 0} & 100 & 6 & 2.06 \\ & & & \end{array}$ *Semi-circular plates; tMidline

## ITHTPO CRYSTALS

Ground from the
finest quartz. Apfinest quartz. Ap-
proximately $1 "$ sq. proximately $1^{\prime \prime}$ sq. with rounded corners. X or Y cut $1 / 10$ of $1 \%$ or bet ter. Specily fre-
 quency and we w stoek crysta

| Stock | Frequency | Y |
| :---: | :---: | :---: |
| No. | Kilocy cles |  |
| W13501 | 7000-7300 | \$3.75 |
| W13502 | 3500-4000) | , |
| W13503 | 1700 2000 |  |
| W13504 | 500-1700 |  |

## Oscillafing Blanks

Quartz blanks about 1 " square with rounded corners. Furnished X or $\mathbf{Y}$ cut for 80 -meter hand, but uncalibrated. Specify cut. W13461
Your Cost
s1.75
Lafayette Crystal Holders
Sturdy case; solid brass plates; fit 5-prong socket; 13 x 112 high. W13190-For A-T cut. w13191-For 40-meter. Your Cost Each.......

# 2) THUTOLT TRANEFORM 

The TRUTEST transformers and choke coils listed on this page cover practically all the popular types used in amateur stations. In the event that you should require a unit not listed here, we will be glad to quote you low wholesale prices on specifications submitted by you.


Type D Mounting-Fullyshieided. Can be mounted so as to have the terminals above of below chassis.


Type E Mounting-Open type. Has terminal strip on Bakelite.


Type F Mounting-Fully shielded. With nut and bolt terminals.


Type GMounting-Fullyshielded.


Type A Mounting-Tot. closed. Massive die-rast fran. metal end covers. Terminals 2 the ceramic stand-off type.


Type B Mounting-Open type with Bakelite terminal plate and heary die-cast frame. Slotted legs.


Type C Mounting-Flush mounto ing type in combinasion modela only.


Type $H$ Mounting-Similar to type $D$, but equipped with ceramle stand-off insulators.

UloC SPECIALLY PRICED SHIELDED HIGH-POWER TRANSFORMERS UTCC,


These units are made by the United Trans-
former Corporation, makers of the famous UTC line of transformers, and carry the guality mark of that organization. Type " $A$ ", illust rated at left, is housed in a ventilated, silver-finished shield; ceramic hightension terminals are brought out on top. Type " $B$ " is for inverted mounting and has lug terminals. Both primaries for 110 volts, 60 cycles a.c.
Type 20462E-575-525-0-525-575 volto at 500 ma . For p.p. tubes like 6L6, 807, 46, 59 . etc. Shpg. wt. 22 lbs. " $A$ " housing. W5479Your Cost
Type 20462A - Delivers 1000-750-0-750-1000 volts a.c. at 300 milliamperes. Shpg. wt. 21 lbs. Type "A" housing. W5475-Your Cost, Special.

Type 20462 ${ }^{\text {B -Delivers }} 1500-1250-1000-0-1000-1250-1500$ voltg a.c. at 300 milliamperes. Shpg. wt. 25 lbs. Type "A" housing. $\$ 7.35$
$\mathbf{W} 5476$-Your Cost, Special.

Type 20462 C -Delivers $2500-2000-1500-0$ Type "A" shield. Wt. 33 lbs. 511.95 Type 20462D-Delivers 1500-1250-1000-0 1000-1250-1500 volts a.c. at 500 milliamperes. W5478 " Your Cost........ ST1. 175

866 FILAMENT TRANSFORNER

## Type 22283-Similar to " $A$ " shield, but with

 lug terminals. Primary tapped for $105 / 115$ sulation to ground. Shpg. Wi. 5 libs.W5472-Your Cost, Special

## INVERTED MOUNTING TRANSFOOMEERS

Type $20757-600-0-600$ volts at 200 ma ., $2 \frac{1}{2}$ volis et at 10 amps .7 .5 voles (tapped at 6.3 ) at 3 amps., 5 voits at 3 amps . Type "B." Shpg. W.t. 141 bs . W5473-Your Cost, Special. Type 21647 -500-425-0-425-500 volis at 250 ma 6.3 volt. 3 ampe 6.3 volts, ${ }^{2}$ at, 3 amps. 5 vol Wt. 14 lbs.
W5474 Your Cost, Special



HORIZONTAL TYPE With slottedj mounting brackets and hexible wire
leads.

Trutest Power Transformers, engineered by experts and constructed of the finest materials, truly deserve the popularity accorded them in the service field. Each unit is designed to provide ample safety factor under any normal conditions of use. As a result, Trutest Power Transformers are fully guaranteed, under R.M.A. standards, for a period of 90 days, against mechanical or electrical defects. This is your assurance that Trutest Transformers will live up to the claims made for them. To simplify installation, and to preclude any possibility of error in wiring, each unit is furnished with a schematic diagram showing each terminal connection. All Trutest power transformers have 105-115 volt, 50-60 cycle primaries.


With corner mounting crews and lug rews and lu
terminals.

## Flush Mounting Types For 2.5 Volt Tubes

## For 4 Tube Midgets

Secondaries: (1) 650 volts c.t. at 40 ma.; (2) 2.5 volis c.t. at 3.75 amps.; (3) 5 volta at 2 amps. $3 \times 21 / 2^{\prime \prime}$; centers 21/2×2
Wi521-Your
Cost Each
$71^{\circ}$

## For 5 Tube Midgets

Secondaries: (1) 680 volts c.t. at 50 ma.; (2) 2.5 $3 \times 216 \pi$. at amps.; Shog. wt. 4 lbs. W2432-Your Cost Each $\qquad$ $\because 0$

## For 6 Tube Sets

 Secondarics: (1) 70 volts ct. at 70 ma.: (2) 2.5 volise c.t. at 8.75 amps; ; (3) 5 volts at 2 amps. $34 \times 31 /{ }^{\prime \prime}$ " centers $34 / 4 \times 21 / 2$. Whplat-Your cost Eachs 1.35

## For 7 Tube Sets

Secondaries: (1) 700 volls c.t. at $70 \mathrm{ma}$. . (2) 2.5 volts c.t. at 7 amps.; (3) 2.5 volts c.t. at 3 amps.: (4) 6 volts at $3.5 \mathrm{amps} .3 \% / 431 / 3^{\prime \prime}$; centers Shpg. wt. 8 lbs.

## For 8 and 9 Tube Sets

 Secondaries: (1) 700 volts c.t. at $90 \mathrm{ma}$. ; (2) 2.5 volts c.t. at 10.5 amps.; (3) 2.5 volis c.t. at 3.5 ampse; (4) 5 volts at 3 amps centers $31 / 2 \times 21 / 3$Wisk. Wt. Your Cost Each
${ }^{5} 1.70$
For 10 and 12 Tube Sets Secondaries: (1) 700 volts c.t. at 110 ma.; (2) 2.5 volis e.L. at 15.25 amps ; (3) 2.5 volis c.t. at 3.5 amps.; (4) 5 volts at 3 amps . $43 / 2 \times 3 \frac{3}{4}$ centers 3 . $4 \times 3$. Shpg. wt. 9 lbs

## Technical TRUTEST Power

 Transformer Specifications All transformers have core material of first grade annealed silicon steel having a very lowcore loss; per meability remains constant and cannot be destroyed. All meet RMA standards governing regulation characteristics. A varage temperature rise $51^{\circ} \mathrm{C}$. Insulation tested at 1500 volts. Primaries tested at double the rated voltage.

## Horizontal Mounting For 2.5 Volt Tubes <br> For 5 and 6 Tube Sets

 Mounting Area: $3 \frac{3}{3} \times 3 \times 31 / 3$ ". Mounting Cen- 70 ma.; (2) 2.5 volts c.t. at $8.75 \mathrm{amps} . ;$ (3) 5 volts at 2 amps.
Shpg. Wt.. 6 lbs.
Wis04 Your
${ }^{s} 1.35$
For 6 and 7 Tube Sets Mounting Area: $3^{3} \times 3 \times 31{ }^{1}$. Mounting Cenat 70 ma.; (2) 2.5 volts c.t. at 7 amps.; (3) 2.5 volts c.t. at 2.5 amps.; (1) 5 volts at 3 amps , Shpric
s 1.45

## For 8 and 9 Tube Sets

 Mounting Aroa: $3 \$ 4 \times 33^{3} \times 3 / 5^{\prime \prime}$. Mounting Ceners: 3 . $\mathrm{x}^{2}$. Secondaries: (1) 700 volts c.t. 2.5$90 \mathrm{ma} . ;(2) 2.5$ volts c.t. at 10.5 amps ; (3) 2.5
 ${ }^{\text {Shlfig }}$ wiso
For 10 and 12 Tube Sets Mounting Area: $412 x^{31}+38 / 4^{\prime \prime}$. Mounting Centers: $3 / 16 \times 2^{3}$; Secondaries: (1) 700 volts c.t.
at 110 ma : (2) 2.5 volts c.t. at 15.25 amps.; (3) 2.5 volts c.t. at 3.5 amps.; (4) 5 volts at


## Flush Mounting Types For 6.3 Volt Tubes

## For 4 Tube Midgets

## Mounting Area. $3 x$. Mounting Centers:

 $212 \times 2$. Primary: 115 volts, 60 cycles. Secondc.t. at 1.6 amps.; (3) 5 volts at 2 amps. Shifet whe Your
## For 5 TubeMidgets

Mounting Area: $3 \times 2 \frac{1}{2}$ ". Mounting Centera: $21 / 2 \times 2^{\prime \prime}$. Primary: 115 volts, 60 cycles. Secondaries: (1) 650 volts c.t. at 45 ma. ; (2) 6.3 volis Shyg. wt. 4 lbs
Shy. 5636 Your Cost Each

## For 6 Tube Sets

Mounting Area: $3 \times 2,2$. Mounting Centers: $212 \times 2$. Primary: 115 volis, $50-60$ cycles. 6.3 volts c.t. at 2 amps.; (3) 5 volts at 2 amps. Shyg. wt. 4 lbs. Your Cost Each


For 7 and 8 Tube Sets Mounting Area: 33 $\times 33 /{ }^{\prime \prime}$ ". Mounting Centers: Secondaries: (1) 700 volts c.t. at 90 ey Secondaries: (1) 700 volts c.t.t. at 90 ma.; (2) 4 amps. ( (4) 5 volts at 3 amps. $\$ 1$
Shpg wi. 8 ils.
W15ig Your Cost Each

## For 9 and 10 Tube Sets

Mounting Area: $3^{*} \times 33 /{ }^{*}$. Mounting Centers:
 Secondaries: (1) 700 volts c.t. at 100 ma.; (2) amps. ; (1) 5 yolts at 3 amps. $\$ 5$ W2520 Your Cost Each
We can furnish special transformers for other voltages and Irequencies. Submit your specifications and we wIII quote.


Col fletely shielded flush mounting transiormers. Approved by the
Underwriters Laboratories.
Coded leads. Al! primaries for 105115 vales, $50-60$
2.5 Volts- 5 and 6 Tubes Secondaries: 650 ma.; 2.5 volts c.t. th 5 . . . at 50 2.5 volts c.t. at 1.75 imps .; ${ }^{\text {at }} 3$ amps. Dimensions:

2.5 Volt - 6 and 7 Tubes Secondaries: 700 volts c.t. at 70
 3 amps. Dimensions: $333 \times 32.6 x$ wi451 Your cost. $\$ 1.58$

Bottom Shell" Transformers
2.5 Volts-a and 9 Tubes Secondaries 700 volts .t. at 90 ma.; 2.5 voits c.t. at 10.5 amps.; 2.5 volts c.t. at 3 amps: 5 volts at 3 amps. Dimensions: $35 \times 1 / 841 / 4 \times$ wi452-Your Cost. $\mathbf{3} .95$ 6.3 Volts- 4 and 5 Tubes Secondariew: 650 volls c.t. at 50 ma.; 6.3 volts c.t. at $1.6 \mathrm{amps} . ;$ 5 volts at 2 amps. Dimensions
 Your Cost.
6.3 Volts -6 and 7 Tubes Secondaries: 650 volts . T. . at 70 ma.; 6.3 volts c.t. at 2.8 amps.;
5 volts at 3 amps. Dimensions
 8 ibs. ${ }_{\text {W5493-Your Cost. }}^{8} \$ 1.45$ Schematic diagrams showing

Upright Shield Transformers
All primaries for $\mathbf{1 0 5} \mathbf{- 1 1 5}$ volts, 50-60 cycles a.c.
These rully $\mathbf{2 . 5}$ Volts- -7 Tubes

shielded upright mount-formeransiormers are placement purposes or for the new All accurately rated. All have bottom either leads or lugs. Furnished with detailed wiring instructions.


### 2.5 Volts- 6 <br> Tubes

 ma.; 2.5 volts c.t. at 5.25 amps. 2.5 volts c.t. at 3.5 amps ; $; 5$ volts at 2 amps. Shpg. wi. 7 ths. W1956-2.5 Volts- 7 Tubes
secondaries: 750 volts c.t. at 75 ma; 2.5 volis c.t. at 7 amps. (for 4 heaters); 2.5 voits c.t. at 3.5 amps. (for 2 power tubes); 5 volts


### 2.5 Volts- Tubes

Secondaries: 750 volts c.t. at 90 ma.; 2.5 volts c.t. at 10.5 a mps. (for 6 heaters); 2.5 volts c.t. at 3.5 amps. (for 2 power tubes); 5 volis ditamps. ( 80 rect.) Shpg. wt. w1961-Your cost. \$2.35

### 2.5 Volts- 11 Tubes

Secondaries: 750 volts c.t. at 110 ma.; 2.5 volts c.t. at 14 amps . (for 8 heaters); 2.5 volts c.t. at 3.5 amps. (for 2 power tubes); 5 voltu, 2 amps. (for 80 rect.). Shpg. wt.
8 lbs.
$\mathbf{W 1 9 6 3 - Y o u r ~ C o s t . ~} \$ 2.35$


## APEX <br> 8-B.

Gloritone 26-A
Gloritone 26-P
Gloritone

ATWATER KENT
36,37 and $38, \ldots, 4,6 \%$
$40.56,57,42,44,45,52$ Com ${ }_{46,47,53 \text { Complete Pack. }}$ 55 and $55-\mathrm{C}$. Late Types. 60 and
80 and 83
84.

87, 89 and $89-\mathrm{P}, \mathrm{L}, \mathrm{H}-1, \mathrm{H}-2$ 70,7
310.

## BOSCH <br> 28. 48.

Model 20
Model 250-P
Model 312


COLUMBIA RADIO Screen Grid 8

CL132
CL264
CL267
CL482
CL203
CL232
CL102
CL262
CL269
$\begin{array}{ll}W 2363 & 3.40 \\ W 2279 & 3.70 \\ W 2225 & 2.95 \\ W 2227 & 2.95 \\ W 2226 & 2.75\end{array}$

W2305 3.35

| CROSLEY |
| :---: |

EARL and FREED
Earl 21, 22; Freed 55, 56.....
Earl 24, $31,32,33,41$;
Ereed 24, 31, 32, 33, 41 . Freed
6 Earl $24,31,32,33$, 41 ; Freed
EDISON
EDISON
R-4, R-5 and C-4
R-6
R1, R-2 and C-2 (Plate)

## EVEREADY 1,2 and 3.

1,2 and $3 . .$.

## FADA

$10,11,16,17,20,30,31$ and 32 35 and $35-\mathrm{B}$.
$41,42,44,46$ and 47
$43, \mathrm{KP}, \mathrm{KG}, 761,766,76$ 50, 70, 71,72 for E-420 Unit 45 (KU)

## FRESHMAN


Stock Your
No. Cost
W2200 $\$ 3.40$ $W 22013.40$ W5586 2.95
$W 22052.20$ W2484 2.00 W2485 $W 22103.85$ $W 22113.30$ W2480 W2483

W2255 2.10 $W 13764.95$ W1375 6.90 $W 24463.95$ W2246 W2447 3.45 $W 24723.40$

$W 2.45$ | $W 2672$ |
| :--- |
| $W 2474$ |
| $\mathbf{W} .45$ | $\begin{array}{ll}W 2474 \\ W & 3.45 \\ W & 346 \\ W\end{array}$ W2476 3.75 $W 2440$

$W 2378$ $\begin{array}{ll}W 2406 & 2.50 \\ W 2254 & 1.95\end{array}$ $W 2254$
$\mathbf{W} 2260$
3.10
$\begin{array}{ll}W 2260 & 3.10 \\ W 2261 & 3.25 \\ W 2\end{array}$
$W 2261$
$W 2432$
$\begin{array}{ll}W 2432 & 2.95 \\ W 2433 & 3.95\end{array}$
W2433
3.50
3.50
2.20
1.95
2.75
3.25
2.95
2.00
1.75
1.95


GRUNOW
6C. 660, 661
6D, 670, 671
7B, 750, 751
8A, 801 .
9A, 901,902 .
Name of Radio and Model
GENERAL ELECTRIC
H- $31, \mathrm{H}-51$ and H-71, 60 cycle. . W2156 $\$ 2.95$ T-41, 60 cy cle. T-41, 25 cycle. S-22, S-42, 60 cy cle.
T-12, 60 cycle.
K-62, 60 cycle. ....
J-72
J-83 and J-87.
J-85.
GENERAL MOTORS
"A", 120, 130, 140, 150, $160 \ldots$
MA and MB Chassis for 110, 180, 190
252,258, 254,255, 256, 257, ...W 25182.05 S-1-A 216 217 219 250 ......W 2520 ,21.219,260.........W2521 3.05

## GRAYBAR

311,60 cycle
500 and 550, 60 cycle.
340, 60 cycle.
678, RC-3, 60 cy cie
678, RC-3, 25 cy cle.
600,60 cycle.
$700,770,900,60$ cycle
Midget 8,60 cycle
Graybarette No. 4, 60 cycle. GB-9, 60 cycle. $\begin{array}{ll} \\ W 2150 & 1.35 \\ W 2152 & 2.55 \\ W 2153 & 2.50 \\ W 2155 & 2.95 \\ W 2143 & 2.50 \\ W 2154 & 2.90 \\ W 2156 & 2.95 \\ W 2187 & 1.95 \\ W 2188 & 2.20 \\ W 2189 & 2.95 \\ W 2190 & 2.95\end{array}$

## KOLSTER

K-24.
K-43 and K-48
6-J and 6-K
International K-80, K-90
International K-110, K-120
International K-130.
International $\mathbf{K}-140$.

## MAJESTIC

70, 71, 72, 7-BP6, Plate 90 , $91,92,9$ - BP 6 , Plate Filament
180, 8-BP6, Plite Transforme $90-\mathrm{B}$ and $100-\mathrm{B}$
Chassis 15: 151, 153, 154
Chassis $20: 21,22,23$
Chassis 50: 52
Chassis 130: 130 , 131,132
25 Series.
210, 211, 214, 215.
290, 291, 293, 294.
320, 324.
340,344
860,363
371, 373, 370
$300,300 \mathrm{~A}$.
300 , 300 A
810B, 314, 315.
330 , $331,336,77$
380, 381.
800
W5601 3.95 W5602 3.95 W5603 3.95
W5604
$W 5605$
$W 5606 \quad 3.95$

W2054 5.30

$W 2051 \quad 4.95$ | $W 2066$ | 3.95 |
| :--- | :--- |
| 2.75 |  | | $W 2068 \quad 3.75$ |
| :--- | $W 56073.95$ W5608 3.95 W5609 3.95

## Philco

|  | W1909 | 2.35 |
| :---: | :---: | :---: |
| 20 and 220 | W1955 | 2.35 |
| 21 | W1910 | 2.35 |
| 50 | W1951 | 2.35 |
| 65. | W1956 | 2.35 |
| 70 | W1957 | 2.35 |
| 76 and 77 | W1958 | 2.35 |
| 86 | W1960 | 2.35 |
| 87 | W1959 | 2.35 |
| 90 (2-458) | W1961 | 2.35 |

Name of Radio and Model
Stock Your PHILCO-(Cont.)

| 90 (1-47) | W1952 | \$2.35 |
| :---: | :---: | :---: |
| 90 (2-478) | W1953 | 2.35 |
| 91-121 | W1911 | 2.35 |
| 95 and 96 | W1962 | 2.35 |
| 111 and 211 | W1963 | 2.35 |
| 112 and 212 | W1954 | 2.35 |
| 500 Series | W1964 | 2.25 |

## RCA-RADIOLA

#  

44, 46, 47; 60 cycle.
60 and 62 ; 60 cycle.
$66 ; 60$ cy cle.
64, and $67 ; 60$ cycle................W2157 6.95
42 and $48 ; 60$ cycle. . . . . . . . . . . . . w 2155 2.95
42 and $48 ; 60$ cycle.
42 and 48; 25 cy cle
80, 82, 86; 60 cycle.
R7, 7A, $9, ~ R E-16 A$.
R5, R5X.
R-11, 18 and $18-A ; 60$ cycle
R-11, 18 and 18-A; 60 cycle.
R-50,
$R-55$ and RE-20, 60 cycl
R-8, R-10, R-12; 60 cycle.
R-71, R-72
R-73, 75, RE-80 (47's)
R-4, R-6.
R37, R38, R37P 120
.$W 21752.45$
$W 2150 \quad 1.35$
W2152 2.55
W2153 2.50
$\begin{array}{ll}W 2155 & 2.95 \\ W 2143 & 2.50\end{array}$
$\begin{array}{ll}W 2143 & 2.50 \\ W 2156 & 2.95\end{array}$
$\begin{array}{ll}\text { W2156 } & 2.95 \\ W 2187 & 1.95\end{array}$
$\begin{array}{ll}W 2187 & 1.95 \\ W 2188 & 2.20\end{array}$
$\begin{array}{ll}W 2188 & 2.20 \\ w 2118 & 2.95\end{array}$
$\begin{array}{ll}W 2118 & 2.95 \\ W 2189 & 2.95 \\ w 2118 & 275\end{array}$
$w 21122.75$
$W 2117 \frac{2.75}{3.25}$
W2119 3.25
W2454 2.25
R28, R28P, R28BW, RE40,
RE40P, $110,111,115,210^{\circ}$
310
W2008
2.56

R90, R90 $\mathrm{P}, 260$
R-100, E-101
W2014
W2011 5.10
330, $331,128,128 \mathrm{E}, \mathrm{ACR136}, 211$,
$224,224 \mathrm{E}, 322,322 \mathrm{E}$...... W2120
$140,141,141 \mathrm{E}, 240,340,340 \mathrm{E}, \mathrm{W}^{2121} 4.11$
143, 242, 262, 341................ w 2122

## SPARTON

| AC-7, 62 and 63. | W229 | 2.35 |
| :---: | :---: | :---: |
| 930 | W228 | 3.25 |
| 89-A | W231 | 3.00 |
| $689,591,593$ and 931 | W234 | 3.53 |
| 301, 564 and 670 | W235 | 4.50 |
| $600,610,620$ and 73 | W236 | 3.45 |
| 69, 79, 79A, 89. | W1834 | 2.95 |

## STEWART-WARNER

900 and 960 Series, 951, 952,
953, 961,962,963 . . . . . . . . . W 2272
3.55

109, A, B, E . . . . . . . . . . . . . . W2214 2.90
R-119
W1804

STROMBERG-CARLSON
$10,11,25$ and 26.
37.
$w 2370 \quad 3.45$
$38,39,40,41$
635 and 636 .
638, 25-60 cycle
641, 642, 652, 65
846 and 848
$W 56223.95$
W2392 3.45
$W 22563.45$
$W 22494.95$
$\begin{array}{ll}W 2249 \\ W & 4.95 \\ & \end{array}$

VICTOR
R-32, RE-45, R-52, RE-75 . . . W2185 2.65
$100,15,14$ and 17
35, 89 and 57; 60 cycle
$7-11,7-25,7-26$ and $17-8$
$9-18$ and $9-54$
9-18 an
R-6AC
R-11.
R-50, R-65, RE-20.
W2195
$W 2195$
$W 2150$

| $W 2150$ |
| :--- | :--- |
| $W 2155$ |
| 6.95 |


| $W 2157$ |
| :--- |
| $W 2187$ |
| 1.95 |


| $W 2187$ |
| :--- |
| $W 2188$ |
| 2.95 |

WESTINGMOUSE
WR-4.
W2155 2.95
WR-5, WR-6 and WR-7........ W2156 2.95
WR-10A.
WR-14.
$W 2187$
$W 2188$
WR-15.
W2189

## ZENITH

50-60 and 70 Series: ZE-50 2E-60, 2E-70 Power Units Super-Het, 10, 11 and 12.
Super-11
N1980
W1981
3.50

BH chaskis 2021
210-5, 211-5, 270-5
$475,760,767$
$476 \mathrm{~B}, 77 \mathrm{~B}, 775 \mathrm{~B} .$.

We can supply the correct power transformer for any standard radio receiver at lowest wholesale prices.
we witl promp tull inform

# \begin{tabular}{c} \(\substack{STANDARD <br> REPLACEMENT <br> AIIDIO] [RANSFORMERS <br> \hline

\)\end{tabular}

}

## JEFFERSON AUDIO COMPONENTS

y

## Audios

 Type 467-403Straight qudio,ratio $1: 3$. Size: $2 \times 31 / 4 \times 17$ Shpg.
Wour Cost Each
Type 467-404-P 3:1. $2 \times 3{ }^{1 / 217 / 7^{\prime \prime}}$ $76^{c}$ WS44-Your Cost $82^{\circ}$ Type $467-410-$ P.P. Output. Primary 7000 ohms c.t. Sec. for 6-8 ohm voice coll. $31 / 2$ watts. $2 \times 21 / 5 \mathrm{x}$ W54is Your Cost. Type 467-412-P.P. Output -nary 6000 ohms c.t. Sec. for $10-15$ ohm voice coil. 10 watts. $21 / 2 \times 4 \times$ W54is-Your cost. W544-Tube to 200 or 500 ohms.
 W5450 200 or 500 ohms to tube


Universal Outputs
Primary and secondary
tapped to
mateh match all cypes of output tubes to any voice coil
$1 \% \times 2 \% \times 2^{2 \prime}$ Instructions furnished.
Shpg. wt. 21 bz . Shys. wt. 2 lbs.
W 5432 Enct.
 Same as above, core. $2 x 23$ yx 2 " W5433-Your Cost.. $\$$ I.I7 Universal Inputs For use as straight audio, p.p. in-
 W5434-Your Cost
 W5435-Your Cost.
 W5447-Your Cost.

2-Button Mike Trans.


P.P. Inputs Fully shifelded, lug carminals on botcom. High grade pregnated coil. Erechatent frequenEx eharacteristics. Tize: $2 \times 21 / 5 \times 2110$. Size: $2 \times 21 / 2 \times 21 / 2$
shpr. wt. 2 lbs. Shpg wiz 2 lbs. similar to the above, but ierminala


Oversize Audios


Ideal for amplifiers, receivers, etc. Excellent reaponse. Type A approx. $25 / 5 \times 28 \times 31 / \mathbf{B}^{\prime \prime}$; type B same, but with side terminals. W1932-Push-pull Input. Type A. $\begin{array}{lll}\text { Shpg. wt. } 2 \text { libs. } \\ \text { Your Cost, special .... } & 83^{c}\end{array}$ W1913-Straight Audio; 3:1 ratio. Type A. Shpg. wt. $2 \mathrm{lbs} .59^{\mathrm{c}}$
Your Cost.............. w5637-Filter Choke. 30 ohms, 75 ma . (max.). W1840-P.P. Input. Type B. Your Cost W1841-Straight Audio
Type B. Your Cost.

## Cafayette "P. A."

## Audio Transformers

Employ a high grade of high permeablity core material. Each unit individually checked for response and overall performance.
Type A-23 verall Dimensions


## CLASS A OUTPUTS

All secondary impedances of units Aisted below tappedances of units $15,8,5,3$ and 1.5 ohms .
Primary 5000 and 3000 ohmas plate
to plate. Type B m'tz. $\$ 3.75$
Primary 2500 and 1500 ohms plate to plate. Type C m'tr. $\$ 5.05$
W256A-Your Cost. Primafy 8000 ohms plate to plate. Type B mounting. pis to plate. W2562-Your Cost Primary 4000 ohms plate to plate Type C mounting. $\$ 5.45$ Primary 10000 and 6000 ohms plate to plate. Type B m'ty.
W252-Your Cost. $\mathbf{3 . 7 5}$ Primary 6600 ohms plate to plate (for 6L6's self-bias). 35 watts. Type C mounting. $\$ 5.45$ Primary 3800 and 3300 ohms plate to plate (2-6L6's fixed bias or $4-6$ L6's sell-bias). 75 watts. Type W2598-Your cose. $\$ 7.95$

## Mixing Transformers For mixing a 500,200 or 50 ohm

 line to a 500,200 or 50 ohm line Type A mounting.W2594-Your Cost. $\$ 2.95$ Heavy Duty P.A. Choke

 For P.A. amplifiers | For P.A. amplifiers |
| :--- |
| up to 20 watts. 30 |

 d.c. resistance, 125

$\underset{c}{\text { W5638-.... }} \mathbf{C 9}^{\text {c }}$

CLASS A INPUTS
From one plate to two grids. Ratio 2:1 each side. Split secondaries Type A mounting.
$\mathbf{W} 2570-Y$ our Cost. $\mathbf{2 . 7 5}$ From 2 plates to 2 grids. 175 : ratio each side. Both primary and secondary in two sections. Type W2571-Your Cost..
$\$ 3.25$ 600,200 or 50 ohm line to single grid. TypeAmounting. $\$ 3.45$
CLASS B OUTPUTS
P.P. 49, 53, 79, 89 plates to 500 $200,16,8,5,3$ and 1.5 ohms. Type A mounting. P.P. 46 or 59 plates to $500,200,16$, 8. 5, 3.1.5 ohms.Am'tg. $\$ 3.75$

CLASS B INPUTS
Driver plate to 49, 53, 79 or 88 Wrids. A mounting. $\$ 2.95$ Driver 46 or 59 plate to 46 or 59 W2555-Your cost. $\$ 3.25$

Tube To Line Transformer From a low level triode plate to From a low level triode plate to
500,200 or 50 ohms. Type mounting.
W2576-Your cost. $\$ 3.45$ 30 Elenry Filter Chokes

$30 \mathrm{H} ., 50 \mathrm{ma}$ max. d.c.:
resistance 450 ohms. $21 / 2 \times 1 \frac{18}{4}$ s. $2,3{ }^{2}$. Shpg.
$39^{\circ}$


# (T) THORDARSON 

Straight Audio Transformers High quality units, ruggedy const ructed. Designed to mateb a 10,000 ohm plate arincle Class A crid delivering 85, more than 15 watts. Average shpg. wt. 3 Ibs .

| Stock | Typo | Mount | Turn | Dimensions | Mount. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Yous |  |  |  |  |  | | No. No. Fiq. |
| :---: |
| W213 | W213

W239
W239
W265
W266
W257

W266
W267
W268
W268
W210
$W 211$

| 211 | $T 8604^{\circ}$ | 2 EB |
| :--- | :--- | :--- |



## Output Coupling Transformers

Overall Dimensions (Length, Width, Height)

| Stock No. | Thord. No. |  | Size In. | Stock No. | Thord. No. |  | Size In. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| W275 |  | $21 / 2 \times 21 / 6817{ }^{17}$ |  | W328 | $\begin{aligned} & \mathrm{T} 6594 \\ & \mathrm{~T} 6748 \end{aligned}$ |  | 31/2x27/8x.3 |  |
| W276 | T3399 | $2^{2} \times 2^{2} \times 2^{\prime \prime}$ |  | W32 |  |  | 3 |  |
| W278 | T5701 |  | $x^{2} \times{ }^{\prime \prime \prime}$ | W330 | T7575 |  | $3{ }^{3}{ }^{2}$ |  |
| W326 | T6754 |  | $\times 27 / \mathrm{m}^{3 /}$ | W331 | T6792 |  | $31 / 2 \times 2$ |  |
| W273 | T5872 |  | $x^{2}{ }^{\top} \mathrm{n}^{\prime \prime}$ | W400 | T8384 |  | $31 / 423 \times 23$ |  |
| W327 | T6751 | - 3 | x21/2x $21 / 2 \mid$ | W401 | T8387 |  | $35 \times 348 \times 3$ |  |
| Average shipping weight 3 Ths. each. |  |  |  |  |  |  |  |  |
| Stock No. | $\begin{array}{c\|c} \hline \text { Type } & \mathrm{Mtg} . \\ \text { No. } & \text { Fig. } \end{array}$ |  | Primsry Matelse |  |  | Sec. Imp. Ohms |  | Your Cost |
| W275 | R107 | 2 C | Universal |  |  | . 1629 |  | \$1.32 |
| W276 | T3399 | 2 B | P.P. 45, 7 | , etc |  | 6-12 |  | 94 |
| W278 | T5701 | 25 | Universal |  |  | 1 to 29 |  | 1.18 |
| W326 | T6754 | $2 F$ | 19 or P.P | 98 in |  | $4,8,15,500$ |  | 2.35 |
| W273 | T 5872 | 2R ${ }^{\circ}$ | P.P.2A3's | $18^{\prime} \mathrm{s}$ Te | des | $4,8,15,500$ |  | 35 |
| W327 | T6751 | 2 F | P.P.2A5, | $\begin{aligned} & 7,41, \\ & 89 \mathrm{in} \end{aligned}$ |  | $4,8,15,500$ |  | 2.06 |
| W 328 | T6594 | 2F | P.P. 50 in Class A: 2 A 5 , 42 Class $\mathrm{AB}_{\mathrm{i}}$ parallel 79 Class B . |  |  | $4,8,15,500$ |  | 2.35 |
| W329 | T6748 | 2 F | P.P. 45, 71A Class $A$; 43 pentode or 53 Class B |  |  |  | 5,500 | 2.0 |
| W330 | 7757 | $2 F$ | P.P. 2B6 or 6B5 |  |  |  | 15,500 | 2.35 |
| W33! | T6792 | 2 F | P.P. paralle 12.43 |  |  |  | 15,500 | 2.35 |
| W 400 | T8384 | 20 | P.P. 50 Clas AB |  |  |  | 15,500 | 3.53 4.70 |
| W 401 | T8387 | 2 C | P.P. parallel 50 Class AB |  |  |  | 5,500 | 4.70 |

## Mike, Line and Mixer Transformers

Specially designed for Sound or Public Address requirements. Average shpg. wt. $3 / 2 \mathrm{lbs}$.

| $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | $\begin{aligned} & \text { Type } \\ & \text { No. } \end{aligned}$ | $\begin{aligned} & \text { Mig. } \\ & \text { Fig. } \end{aligned}$ | Description | Your Cont |
| :---: | :---: | :---: | :---: | :---: |
| W257 | T2357 | 2 A | Single Button ( 200 ohm) mike to grid | \$1.32 |
| W 402 | T8378 | 2 F | Single Button ( 200 ohm) mike to grid | 18 |
| W 405 | T8608 | 2B | Single Button (200 ohzu) mike to grid | 03 |
| W375 | T6573 | 2 F | D. B. mike ( 200 ohmss) to grid | 1.91 206 |
| W258 | T3020 | 2 A | D.B. mike ( 200 ohmms) to grid | 2.06 |
| W378 | T6372 | $2 F$ | $50,100,150,200$ ohms ( 1 to 4 circuit mixer) to grid | 2.35 |
| W379 | T6194 | $2 F$ | 500 or 125 ohm line to P.P. grids in Class A | 2.20 |
| W380 | T7033 | $2 F$ | Crystal mike to 300 or 50 ohms line (or mixer) | . 35 |
| W384 | T5515 | $2 F$ | Plate or nixer to 200 or 50 ohm line | 1.62 |
| W 38 | T0226 | 2 F | Plate or mixer to 500 or 125 ohm line | 1.62 |
| W 428 | T8321 | 2 F | LinctoP.P. 46,210 , etc.,grids inClass B | 2.20 |
| W299 | T3381 | 2 D | 500 ohm line to $4,8,15$ ohm voice coil | 2.65 |
| W506 | T6048 | 2E | $500,1000,1500,2000,2500$ or 3000 ohm lines to voice coil. 1 to 6 speakers may he connected in paralle to 500 ohm line | 1.76 |

Driver Transformers

| Stock No. | Type No. | Mtg. Fig. | Input <br> Tubes | Output Tuhes | Clave | $\begin{aligned} & \text { Your } \\ & \text { Cost } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| W296 | T5289 | 2 A | $1-46$ or 59 | 2-46 or 59 | 8 | \$2.20 |
| W308 | T6778 | $2 F$ | 1-46 or 59 | 2-46 or 59 | B | 2.06 |
| W338 | T7432 | $2 F$ | 6C5, 6C6\} | $\begin{aligned} & \text { 6F } 6, \text { or } P \text {. } \\ & \text { par. } 2 A 3 \text { 's } \end{aligned}$ | AB | 2.20 |
| W339 | T7201 | 2 F | P.P. 56 | P.P. 45 | AB | 2.20 |
| W316 | T7846 | 2 B | 1-30 | 1-19, 2-30's | B | . 97 |
| W322 | T5463 | 2 F | 1-30, 1-49 | 1-19, 2-49's | 8 | 1.47 |
| W325 | T6747 | 2 F | $1-53 \mathrm{Cl}$. A | 1-53 | B | 1.62 |
| W340 | T8142 | 2 F | 1-6F6 | 2-6F6 (pent or triode) | AB | 2.20 |
| W368 | T8152 | 2 F | P.P.6C5 | 2-6F6 triode | AB | 2.06 |

## THORDARSON

2.5 Volt ( 7 to 11 Tubes) T5602-700 volts ct. at 70 man; 2.5 volts ct. at 9 amps.; 2.5 volts ct. at 1.5 amps . 5 volts at 2 amps . Size, $4^{5} \mathrm{~K}^{3} 3^{3} \times 3^{3}{ }^{10}$, mtg W261-Your Cost
$\$ 2.51$ 25 Volt (8 to 12 Tubes) T5604- $\mathbf{7 0 0}$ volts ct. at 105 ma.; 2.5 volts ct. at 12 amps . 5 volts at 2 antys. Size, $6 \times 3^{3} 1^{1} \times 3^{3}$ W263-Fig. 2 G
Your Cost
2.5 Vote ( 10 to 15 Tubes) Th605-700 volts ct. at 110 ma 8.5 volts ct. at $9 \mathrm{amps} ;$.2.5 volts ct. it 3 amps.; 2.5 volts ct. at 3 a mps.; 5 volts at 2 amps. Size, $5 \times 3^{3} 1 \times 3 \%$, W264-Fig. 2G $\$ 3.38$
6.3 Volt (4 or 5 Tubes) T7078-680 volts et. at 55 ma.6.3 volts ct at 1.5 amps ; 5 volts at
 W514
Your Cost
6.3 Volts ( 7 to 8 Tubes) T7061-770 volts ct. at 70 ma 6.3 volts ct. at 2.5 amps. ; 5 volts at 2 amps . $45 / 5 \times 3 \frac{1}{2} \times 33_{4}$. Fig. 2 G . W321-
Your Cost
s2.35
6.3 and 2.5 Volts ( 11 Tubes) T7550-870 volts ct at 250 mam. (bias tap 80 v.); 6.3 volts ct. at 1.5 amps.; 25 volle ct. at $10 \mathrm{amps} ; 2.5$
volts at 3 amps.; 5 volts at 3 amps.


Power Transformers for Class "B" Receivers T6793- 700 volts ct. at 200 ma ; T6935- $\mathbf{7 7 5}$ volts ct. at 200 ma 2.5 volts ct. at 15 amps.; 5 volts at 6.3 volts ct. at 3 amps.; 5 volts at 3 3 amps. 5 volts ct. it 2 amps. amps. $5 \times 3^{3} 3^{4} \times 4^{3} \mathrm{~g}^{\prime \prime}, \mathrm{mtg}$., $3 \times 2 \mathrm{~K}^{\circ}$ $5 \times 3 \frac{3}{6} \times 43 / 8^{\prime \prime}$, mtg., $35 / 3 \times 31 / 8^{\prime \prime}$. Fig. Fig. ${ }^{2 G}$. Shpg. wt. 12 hns.

54.12

THORDARSON Manuals for Servicemen and Hams
Contains three separate sections dealing with sound
amplifiers, transmitters and service problems. Full of service hints, diagrams, etc. How to build service equipment. Numerous transmitter diagrams for sets from 20 to 1000 watls phone and c.w. Size, $81 / 2 \times 11^{\prime \prime}$. W19987-Loose-leaf type binding.
Your Cost per Copy
TRANSMITTER GUIDE-Just out and io 1937 dope for the ham.
w20024 Your Cost.

#  



## Trutest Standard Replacement Audio Transformers and Chokes

This line of Trutest audio components is exceptionally complete. They are not to be confused with inferior types which ar built to a price rather than a quality standard. All Trutest audio transformers are constructed using a high grade o silicon steel for core material. Coils are wound with unalloyed copper wire of the proper gauge for each particular application. 1nsulation is tested at 1250 volts a.c. Average size of units is $31 / 4 \times 21 / x^{13}{ }^{3}$ " mounting centers $2 \%$. Average shpg. wt. 3 lbs .

## Output Transformers

W1553-Output, Single'45 or 6F6 metal Triode type tube to $6-15$ ohm voice coil.
Your Cost.
W2554-Output Push-pull 468 or 6 Fi6 Triode type tubes to $5-15$ ohm voice coil. ${ }^{c}$ Your Cost
W1555-Output, Single Pentode ' 47 or 6F6 metal Pentode to a $5-15$ ohm voice coil. (15c W1556-
1556 Output, P.P. Pentodes, 47 's, 6F6 metal Pentodes to a 5-15 ohm voice coil. W156 Output, Push-pull, " 49 's Cluss B, to a $5-15$ ohm volce coil.

## Your Cost

$17^{c}$
W1566 Output, Push-pull $243^{\circ} 8^{\circ}$ to a $k-15$ ohm voice coil of dynamic speaker. ( $215 \times 3 \times 2^{\prime \prime}$ ). Cost.
\$1.6?

## Audio Transformers

W1550 Audio, first or second stage of straight audio amplification. Ratio 3:1.
Your Cost
$75^{\circ}$
W1551-Push-pull Input, from single Your Cost $2.5: 1$ Your Cost W1552-Push-puil Inter-stage, Plates and 2 grids. Ratio $1.76: 1$
Your Cost.
W1562-Push-puil Input, Split s.. $75^{\circ}$ (isolated), between 1 plate and 2 grids 1.75:1. Has six leads.

Your Cost
W5491-Push-pull Input, high imperance mary, to couple a screen grid or Pentode deector ( 24,57, etc. ) to p.p. $45^{\prime} \mathrm{s}, 47^{\prime} \mathrm{s}, 2 \mathrm{~A} 5^{\prime} \mathrm{s}$, ete-
Your

## Microphone and Line

 W5448 - Single or double button mike to grid 200 ohms each side of centertap. Your Cost.W1574-Single plate like $56,27,6 \mathrm{C} 5$, 600,200 or 50 ohm line.
W1575-Same as above, but p.p. plates.
W1576-50, 200 or 500 ohm line to orid.
Your Cost, Any Type............... ${ }^{9}$ W5494-2, 4,8 or 15 ohm dynamic speaker voice coil to 250 or 500 ohm line. $\$$ I 48

## Special Line Tramsformer

A apecial transformer with coil wound on a 11/" quency characteristics exceptionally fine. Fre-W1565-500 to 260 ohm line to $1 / 5-1 / 6-1.5-2$ $2.5-4-6-8-10-15$ ohm voice coil.
Your Cost,
special. .........................

## Filter Chokes

| Current | duc | , | num |  |
| :---: | :---: | :---: | :---: | :---: |
| Stock | Induct. | Curr. | D.C. | Your |
| No. | Henrys | MA. | Res. | Cost |
| W1557 | 25 | 25 | 830 | 65 c |
| W1558 | 11 | 60 | 300 | 65 c |
| W1570 | 30 | 125 | 200 | 85 c |


| ilament cransformers |  |  |  |
| :---: | :---: | :---: | :---: |
| Stock | Filament | Filament | Your Cost |
| No. | Volts | Amperes | Each |
| W2388 | 2.5 c.t. | 8.25 | 79c |
| W2443 | $\{2.5 \mathrm{c.t}$ | 5.25 \} |  |
|  | $22.5 \mathrm{c.t}$ | 6.25 \} | \$1.29 |
| W2387 | 2.5 c.t. | 10.5 | 95 c |
| W2441 | 5.0 c.t. | 4.0 | 95 c |
| W5495 | 6.3 ct . | 3.0 | 89 c |
| W5496 | 7.5 c.t. | 3.6 | 2.10 |

## Trutest Small Trans. formers and Chokes



An extremely compact, yet highly efficient series of transformers and chokes particularly suited for use in auto radio recelvers and a.c.ed.c compact radion. They can, however, be used in any type of receiver or amplifier. Unshielded strap mounting type with rust resisting frame. Dimensions 1 佝 $13 \%^{\prime \prime}$. Mounting centers 2 2/8" apart.

## Audio Transformers

## W1619-Interstage audio, ratio 316:1.

W1620-Push-pull Input, ratio $12: 1$.
W1607-Single Output: $45,48,71 A^{2}, 43$, etc. to $6-15$ ohm voice coil.
W1609-Single Output: 47, 39, 33, 2A5, 89, $31,27,42,18$, etc., to $5-15$ ohm voice coil. W1614-Push-pull Output: 48, 48, 71A, 43, W1615-Push-pull Output: 47, 59, 83, 2A5, 89 $31,20,42,18$, etc., to $6-15 \mathrm{ohm}$ voice coil. Your
Any Type


## Transceiver Audios

W1627-Single plate and carbon mike (200 ohms) to a single grid.
Your Cost
W1628-Driver transformer, single 30 to B49, 19, 79, 6 A6 grids. $\quad$ Your Cost 6A6 grids.
w1629-Class $\dot{B}$ output, $49,79,19$ secondary load 5000 or 3600 ohms. Your Cost. ........................ $^{c}$

## Filter Chokes

W1601-10 henrys, d.c. resistance 200 ohms. Maximum d.c. 50 milliamperes.
W1602-11 henrys, d.c. resistance 250 ohms. Maximum d.c. 65 milliamperes.
W1603-13 henrys, d.c. resistance 350 ohms. Maximum d.c. 50 milliamperes. Your Cost
Any Above Type.
W1604-20 henrys, d.e. resistance 500 ohms. Maximum d.c. 35 milliamperes. Your Cost

## Truiteat Tube Tester Filament Transformer

 Supplies
voitages for all types of tuber, in-
cluding batcery and auto types. pact in aize. Has color coded flexible paet is. Primmary tapped at, 105, 115 and 125 voltr, 50-60 cycles a.c. Secondary is $115,2,21 / 2,3.3,5,6.3,71 / 2,15,25$ and 30 volts. Diagram furnished. Whpg. wt. 3 lbs. Cout $\$ 1.3\}$

## UTC Type "913" <br> Transformer



Designed for use With the new oderay tube. Built of finest material and metal case in a metal case having threaded in-
merts for mounting. Primary for 115 volts 60 for cles a.c. Secondaries: Up to 150 volts a.c.; 6.3 volts at 1.2 amps.: 2 ýn amps. Shpg. wt. 7 ibs. $\$ 2.41$

THORDARSON T.9233
"913" Transformer
Primary for 115
volts, 60 cycles. volts d.c. at ${ }^{400} 15$ ma.; 500 volts de at 3 ma.; 6.3 volts at .9 amps.: 6.3 valts at .6 amps .; 6.3 volts at .6
mps : 2.5 volte at amps $: 2.6$ volts at
$1.4 \mathrm{amps} .3^{3} \times 3$
 W579-Your Cost T-9225-Same Primary 2.35 Secondaries: 500 volts d.c. tapped at 430 volts, at 3 ma.; 6.3 volts at .9



## CHROMSHIELD AUDIO COMPONENTS

A high quality line featuring: gleaming chrome plated welded cases; vacuum treated and humidity proof; units fully clamped internally; trim professiona appearance; scientifically correct design. Only popular units listed; others avail C-2 onter ${ }^{3}$. Send ion FREE descriptive literature.
C-2 mig.: $3^{3}{ }^{\prime \prime}$ long, $1^{3} 4^{\prime \prime}$ wide, $21^{1 / 10}$ high. C-3 mig.: $33 / 4^{\prime \prime}$ long, $2^{4}$ wide $23 / 4^{\prime \prime}$ high. C-4 mtg.: $41 / 8^{\prime \prime}$ long, $21 / 8{ }^{\circ \prime}$ wide, $23 / 9^{\circ \prime}$ high.

W5369-Single or double button
mike to 2 grids C-2. $\$ T$ mike to 2 grids C-2. \$I. ${ }^{\text {Your Cost.... }}$ w5370-Single plate and carbon mike to one or two grids. C-2 Mounting. List 53.50 \$2.I? W5371-Single power detector plate to single grid. $8: 1$ ratio. Cmatg.
Your Cost.
W5372-Single power detector plate to p.p. grids. $1 / \frac{1}{2}: 1$ ratio. C-4 mtg. List 53.75
Your Cost 2.25

Output To Voice Coil W5373-Single 250, 45, 59, 6F6 Triode to $15,8,4$, or 2 ohm voice Coil. C-3 mtg Cost

W5374-Same as above for p.p. tubes, C-4 mtg. \$I.80
Your Cost W5375-Single 18, 20, 33, 41, 42 $47,2 \mathrm{A5}, 59,6 \mathrm{~F} 6$ pentode and 89 or 6D5 triode to $15,8,4$, or 2 ohm voice coil. C-3 mtg. List $\$ 2.50$
${ }^{5} 1.50$

Trutiteat Universal Oułput Transfarmer
 Matchea single or p.p. triodeso pentodesin class $A$ or $B$ to any voice coil from. 1 to ohms im$13 / \mathrm{f} 11 / 4 \times 31 / 4^{\prime \prime}$; centers $3 /^{\prime \prime}$ a to $23 / \mathrm{m}^{\prime \prime}$. Whpg. wt. Y lhs. UNIVERSAL AUDIO W1709-1-plate to 1 grid. 8:1 W1710-1-plate to p.p. grids. 2 . Your Cost,
Either Type

## W5365-1 plate to 1 grid. 3:1 ratio

 Your Cos\$T. 40 W5366-1 plate to 2 grids. Split gecondaries. $2: 1$ ratio. C -2 mtg. Your Cost. W5367-P.P. plates to p.p. prids. 1.8:1 ratio. C-3 mtg. \$1. $\$ 5$ W5368-Single or double button mike to grid. C-2 mty. $\$$ I. 50


## New JAMAICA, L. Branch - 90.08 (66St. (Werrick Rd)

W5376-Same as W5375, but for p.p. tubes. C-4 mounting. Cost
$\$ 1.80$
W5377-P.P. 2A3 or 6D5 plates to $15,8,4$ or 2 ohm voice coil $C_{-4}$ mtg. List $\$ 3.00$
$\$ 1.80$
W5378-P.P. 6B5, 6A6, 58, 49, 79, 89 plates or 6 F 6 metal pentode or triodes self-bias, to $15,8,4$ or 2 hm voice coil. C-4 mtg
List $\$ 3.25$
Your Cost
. 1.95

## MIDGET MICAS Type Qugovox Molded Bakelite; ruby mica dielec-

 Molded Bakelite; ruby mica dielec-tric. 450 volts, d.e. Working. Case size, 须" wide, $150^{\prime \prime}$ long. Case mounting centers, $1 / 6{ }^{\prime \prime}$; lug mounting centers, $1^{3}$.

| Stoels No. | Cap. Mid. | $\begin{aligned} & \text { List } \\ & \text { Price } \end{aligned}$ | Youp Cost |
| :---: | :---: | :---: | :---: |
| W4591 | . 00006 | \$0.15 | c |
| W4592 | . 0001 | . 15 |  |
| W4593 | . 00015 | . 20 |  |
| W4594 | . 0002 | . 20 |  |
| W4595 | . 00025 | . 20 |  |
| W4596 | . 0005 | . 20 | 12c |
| W4597 | . 001 | 25 | 15c |
| W4598 | . 002 | . 30 | 18 c |
| W4599 | . 0025 | . 35 | 21 c |
| W4600 | . 003 | . 35 | 215 | ( $\sqrt{(8) \text { Type } 1450}$

Mica dielectric $11 /{ }^{\prime \prime}$ square. 500 volts d.c., working. Tinned lugs.

| Stock No. | Cap. Md. | List Price | Your Cost |
| :---: | :---: | :---: | :---: |
| W4601 | . 00006 | \$0.25 |  |
| W4602 | . 0001 | . 25 |  |
| W4603 | . 0002 | .25 |  |
| W4604 | . 00025 | . 25 |  |
| W4605 | . 0005 | . 25 |  |
| W4606 | . 001 | . 30 | 186 |
| W4 607 | . 0015 | . 30 | 18c |
| W4608 | . 002 | .35 | $21 c$ |
| W4609 | . 003 | . 40 | $24 c$ |
| W4610 | . 004 | . 45 | 26 c |
| W4611 | . 005 | . 45 | 26 c |
| W4612 | . 006 | . 55 | 32c |
| W4613 | . 01 | . 70 | 41 c |
| WY4614 | . 02 | . 95 | 55 c |




## Mounting Condensers

Furnished with mounting rings for
universal mounting. Hermetical sealing maintains original operating
characteristics. characteristics contain separate
sections with common negative grounded to can.

[^1]SPACE-SAVER MIDGET ELECTROLYTICS
Almost half the size of the average electrolytic unit.
Type PBS $5-525 \mathrm{~V} . \operatorname{Surg}-450 \mathrm{~V}$. D.C. Working $-5 i n g l e s$ Type PBS 5- 525 V. Surge- 450 V.D.C. Working - Singles

| Stock No. | Cap. Mfd. | $\begin{aligned} & \mathrm{Siz} \\ & \mathrm{D} . \end{aligned}$ |
| :---: | :---: | :---: |
| W4633 | 2 | 1/2 |
| W4634 |  | , |
| W4635 | 8 | 11 |
| W4636 | 10 | 11 |
| W4637 | 12 | 11 |
| W4537 | 16 | $1{ }^{17}$ |


| Type PBS 2- 250 Volts Surge 200 V. D.C. Working Singles |  |  |  |
| :---: | :---: | :---: | :---: |
| Stock No. | Cap. <br> Mid. | $\begin{aligned} & \text { Size-In. } \\ & \text { D. W. } . \end{aligned}$ | Your |
| W4638 | 2 | 1/2x $8 / 6 \times 276$ | \$0.32 |
| W4639 | 4 |  | . 38 |
| W4640 | 8 | $910 \times 13 / 0 \times 276$ | . 47 |
| W4641 | 10 | , $4 \times 1 \times 21$, | . 53 |
| W4642 | 12 | 11, $\times 13 / 62^{\text {\% }}$ \% | . 55 |
| W4643 | 16 | 11/16x14/32 | . 61 |
| Type PBS 5- 525 Volts Surge 450 V. D.C. Working - Doubles |  |  |  |
| W4644 | 4-4 | $11 / 611 / 6 \times 2^{7 / 6}$ | . 70 |
| W4645 | 8-8 | 17\%0119\% ${ }^{\text {a }}$ | . 88 |


| Type PBS 2-250 Voits Surge 200 V. D.C. Working Doubles |  |  |  |
| :---: | :---: | :---: | :---: |
| Stock No. | Map | $\begin{aligned} & \text { Size-In. } \\ & \text { D. W. L. } \end{aligned}$ | Your Cost |
| W4646 | 4-4 | $11 / 6 \times 3 / 6 \times 2$ | 50.53 |
| W4647 | $8-8$ | $13 / 6 \times 114 \times 27 / 18$ |  |
|  | 8-16 |  |  |
| Type PBS 2-250 Volts Surge 200 V. D.C. Working-Triple |  |  |  |
| W4649 | 8-8-8 | $17 / 8 x^{13 / 8 \times 2}$ | 1. |
| Type.PBS 5- 525 Volts Surge 450 V. D.C. Working-Triple |  |  |  |
|  | -8.8 | $11 \times 115 \times 8$ | 1.3 |



Thes inverter aluminum can condensers are provided with a lockbushing. A vailable in single and double section units Double section units are provided with four leadstive. Thus, the sections are enirely separated.

Single Section Units 525 V. Surge-450 V. D.C. Work | Stock | Cap. | Size-In. | Your |
| :---: | :---: | :---: | :---: |
| No. | Mdd. | Dia. H. | Cost |

 Double Section Units 525 V. Surge- 450 V. D.C. Work | W4655 | $4-4$ | $136 \times 41 / 4$ | $76 c$ |
| :--- | :--- | :--- | :--- |
| W4656 | $8-8$ | $18 / 8 \times 41 / 4$ | $94 c$ |

Triple Section Units Separate Sections: Six Leads

525 V . Surge- 450 V . D.V. Work | W4657 | $4-4-4$ | $136 \times 43 / 4$ | 51.18 |
| :--- | :--- | :--- | :--- |
| W4658 | $8-8-8$ | $138 \times 41 / 4$ | 1.35 |

Insmlated Momnted Units
525 V. Surge; 450 V. D.C
Separate Terminal for Ground.

| W4659 | 4 | $1^{1 \%} \times{ }^{3}$ 3/ | \$0.50 |
| :---: | :---: | :---: | :---: |
| W4660 | 8 | 1\% $\times 4.1$ | . 61 |
| W4661 | 12 | 18184 | 82 |
| W4662 | 16 | 13\% 3 \% | . 91 |

Inverted Midgets An ultra-compact metal
can electrolytic for general can electrolytic for genera threaded hard rubber stem for inverted mounting and two flexible leads. Can is Will withstand high surges

| Type GLS-5 450 V. D.C. Work |  |  |  |
| :---: | :---: | :---: | :---: |
| Stock No. | Cap. Mid. | $\begin{aligned} & \text { Size- } \mathbf{I n}_{0} \\ & \text { Dia. } \end{aligned}$ | Your |
| W4663 | 4 | $1 \times 2$ | 50 c |
| W4664 | 8 | $1 \times 211 / 6$ | 61 c |
| W4665 | 12 | $1 \times 32$ /6 | 84 c |
| W4666 | 16 | $1 \times 4$ | 91 |
| Type GLS250 250 V.D.C. |  |  |  |
| W4667 | , 4 | $1 \times 2$ | 44c |
| W4668 | 8 | $1 \times 21 / 6$ | 56c |
| W4669 | 12 | $1 \times 21 / 6$ | 66 c |
| W4670 | 16 | $1 \times 3$ \%/6 | 81 |

## Cardboard Containe



Flanges. 525 V . Surge- 450 V.D.C. Work \begin{tabular}{c|c|c|c|}
\hline \(\left.\begin{array}{c}Stock <br>

No.\end{array} \right\rvert\,\)| Map. |
| :---: | \& Size In. In. \& Vour <br>

\hline
\end{tabular}



## Type PBM5

Double Section Unit 525 V. Surge 450 V. D.C. Work


## CARDBOARD TUBULAR ELECTROLYTICS



Mounted in cardboard containers, completely sealed and provided with wire leads securely riveted to the condenser tabs. Extensively employed by manufacturers and servicemen in by-pass circ.
dard sets. Light and compact.

Type PR5 450 V. D.C. Working | Stock: | Cap. | Size-Ins. | Your |
| :--- | :--- | :--- | :--- |
| No. | Mrd. | Dia-Long | Cost | W4676

W4677 W4677
W4678
Type PR2-200 V. D.C. Working

## W4679 W4680

$W 4680$
$W 4681$
$W 4488$
$W 4682$
$W 4683$

## T

 W4684 W4685W4687
$W 4688$

Type PR50-50 V. D.C. Working Stock

No. $|$\begin{tabular}{c|c|c|}
Cap. \& Size-Ins. \& Your <br>
\hline Dia.-Long \& Cost

 

\hline No. \& Mrd. \& Dia.-Long \& Cost <br>
\hline

 

\hline W4689 \& 5 \& $8 \times 21 / 4$ \& $\mathbf{5 0 . 2 9}$ <br>
W4690 \& 10 \& $3 \times 21$, \& .38 <br>
\hline
\end{tabular}

## w

 W4$W 4$

$W 4$ | W4694 | 50 | $85 / 4 \times 23 / 4$ | .77 |
| :---: | :---: | :---: | :---: |
| W4695 | $5-5$ | $7 / 8 \times 21 / 4$ | -44 |

Type PR25-25 V. D.C. WorkIng W

## PAPER-WOUND TUBULAR UNLTS

## Non-inductively wound, sealedin waxsealedin wax- impregnated paper tubes. <br> 

| 200-Volt |  |  | 10 |  |
| :---: | :---: | :---: | :---: | :---: |
| Stock <br> No. | $\left\|\begin{array}{l} \text { Your } \\ \text { Cost } \end{array}\right\|$ | Cap. Mfd. |  |  |
| W4704 |  | . 001 | W4725 |  |
| W4705 |  | . 002 | W4726 |  |
| W4706 |  | . 003 | W4727 |  |
| W4707 |  | . 005 | W4728 |  |
| W4708 |  | . 006 | W4729 |  |
| W4709 |  | . 008 | W4730 |  |
| 711 |  | 01 | w |  |
| 712 |  | . 02 | W |  |
| W4713. |  | . 03 | W47 |  |
| W4714 |  | . 05 | W4735 |  |
| W4715 | 10c | . 06 | W4736 | 12 c |
| W4716 | 11e | . 1 | W4737 | 12 |
| W4717, | 12c | 15 | W4738 |  |
| W4718 | 14c | . 25 | W4739 | 15c |
| W4719 | 16e | . 3 | W47a0 | 18c |
| W4720 | 18c | . 5 | W4741 | 21. |
| W4721 | 27c | 1.0 | W4742 | 30c |
| 4722 | 18 c | .01-. 01 | W4743 | 200 |
| W4723 | 21 c | .05-.05 | W4744 | 24 |
| W4724 | 24. | .1-. 1 | W474 |  |

## $600 \cdot$ Volt $1000 \cdot V$ olt

| W4746! |  | . 001 | W4766 |  |
| :---: | :---: | :---: | :---: | :---: |
| W4747 |  | . 002 | W4767 |  |
| W4748 |  | . 003 | W4768 |  |
| W4749 |  | . 005 | W4769 |  |
| W4750 |  | . 006 | W4770 | 12 |
| W4751 |  | . 008 | W4771 |  |
| W4752 |  | . 01 | W4772 |  |
| W4753 |  | . 015 | W4773 |  |
| W/754 | 10C | . 02 | W4774 | 14c |
| W4755 |  | . 03 | W4775 | 16 c |
| W4756 | 12c | . 05 | W4776 | 21c |
| W4757 | 14 e | . 06 | W477 | 22 c |
| W4758 | 15c | . 1 | W4778 | 24 |
| W4759 | 18 c | . 15 |  |  |
| W4760 | 21c | . 25 | 1000 | olt |
| W4761 | 27 c | . 3 | Units | Aro |
| W4762 | 30 c | . 5 | Not M | ade |
| W4763 | 21c | .01-.01 | $\\|^{\prime} \mathrm{T}$ | eso |
| W4764 | 26 c | .05-.05 | Val |  |
| W4765 | 3 | 1-. 1 |  |  | Paper type. Rated at 1600 volts. | $\begin{array}{c}\text { Stock } \\ \text { No. }\end{array}$ | Cap. | Size-In. | Dia.-L. | Your |
| :--- | :--- | :--- | :--- | :--- |
| Cost |  |  |  |  | | $W 4779$ | .01 | $1 / 2 \times 11 / 2$ | 18 c |
| :--- | :--- | :--- | :--- |
| $\mathbf{W 4 7 8 0}$ | .02 | $1 / 1 \times 2$ | 24 c |
| $\mathbf{W} 4781$ | .03 | $06 \times 2$ | 29 c |


| W4780 | . 02 | $910 \times 2$ |
| :---: | :---: | :---: |
| W4781 | . 03 | $96 \times 2$ |
| W4782 | . 04 | 4,46x2 |
| W4783 | 05 | 11,10x2 |


| II-Farad Wets Type WG-5-450 V. Work |  |  |
| :---: | :---: | :---: |
| Stock No. | Cap. Mrd. | Your Cost |
| $\begin{aligned} & \text { W } 4784 \\ & \text { W } 4785 \\ & W 4786 \end{aligned}$ | 4 8 12 | $\begin{aligned} & 87 e \\ & 56 c \\ & 68 c \end{aligned}$ |
| $\begin{aligned} & \text { Type WG-5 } \\ & 350 \mathrm{~V} \text {. Work } \end{aligned}$ |  |  |
| W4787 | 8 | . 53 |
| W4788 | 16 | . 70 |
| W4789 | 20 | . 79 |
| W4790 | 40 | 1.18 |



Type sN-24
For receiver or noisy appliance. Has 2 chokes and
2 condensers. For $110 / 220$ v., a.c. or W4792
52.79

# Thutest elecriouytic Condensers 

Dry Electrolytic Filter and By-Pass Condensers


500 จ. surge 450 v. workcardhoard containers. All with tinned lugs, W3348 has colored leads. Stock Cap. Size Your No. Mid. Inches Cost

 $\begin{array}{lrrr}\text { W3348 } & 8 & 41 / \times 1 / 18 \times 1 / 3 & 38 c \\ W 3349 & 10 & 41 / 4 \times 1 / 81 / 4 & 44 c\end{array}$


## Multiple Units

## All 41/8" high. Lug terminals.

| Stock No. | Cap. <br> Mid. | Size Inches | Your Cost |
| :---: | :---: | :---: | :---: |
| W3337 | 4-4 | 11/8 $\mathrm{c}^{13}$ 㐌 | 48 c |
| W3339 | 4-8 | 11/81\% | 56 c |
| W3342 | $8-8$ | 17/4x12/18 | 60 c |
| W3366 | 8-8-8 | $11 / 1 \times 2$ | 89 c |


| Dry Electrolytic CanType Multiple Sections |  |  |  |
| :---: | :---: | :---: | :---: |
|  | $\underline{x}$ | All are 450 volt working holts su can. Ter are of the and nut a separat trolytic Yenuine Can is ne | ted at <br> s, d.c <br> . 500 <br> minum <br> minals <br> screw <br> tion is <br> e elec- <br> of the <br> self- <br> type. <br> gative. |
| Stock No. | Cap. <br> Mid. | Diam. Inches | $\begin{aligned} & \text { Your } \\ & \text { Cost } \end{aligned}$ |
| W3316 | 8-8 |  | \$0.70 |
| W3317 | 5-15 |  | . 88 |
| W3318 | 8-8-8 | 3 | 1.04 |
| W3320 | 9-9-18 | 3 | 150 |
| W3319 | 8-8-8-8 |  | 144 |
| W3321 | 8-8-18-18 | 3 | 218 |



| Stock | Cap. | Surge | Your |
| :---: | :---: | :---: | :---: |
| No. | Mid. | Volta | Cost |
| W491 | 4 | 500 | 36e |
| W492 | 8 | 500 | 40 c |
| W493 | 10 | 500 | 44 c |
| W494 | 12 | 500 | 48 c |
| W495 | 8 | 600 | 65 c |

Inverted Dry Electrolytics
For inverted, hole-inchassis mounting. Standard size, round aluminum can fits hole for 3/s "stud. Can is insulated from condenser sections. Rated at 450 500 volta surge. Long insulated leads.
$\begin{array}{ccc}\text { Stock } & \text { Cap. } & \text { Diam. } \\ \text { No. } & \text { Mfd. } & \text { In. } \\ \text { W3323 } & 4 & 13 \\ \text { W3324 } & 8 & 13\end{array}$


| Dry Electrolytic Cartridge Condensers |  |  |  |  | Paper Tubulars |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Compact units. Sealed ends cannot pull out |  |  |  |
|  |  |  |  |  | Stock | Cap. | Wkg. | ur |
| In waxed cardboard containers with metal ends and $1^{3}{ }^{\prime \prime}$ wire leads. |  |  |  |  | W3173 | Mid. | Volts 200 | 60st |
|  |  |  |  |  | W3175 | . 01 | 200 | 7 c |
| Stock | Cap. | Wkg. | Sarge | Your | W3168 | . 06 | 200 | 6 C |
| No. | Mid. | Volts | Volts | Cost | W3176 | 1 | 200 | 7 c |
| W3380 | 5 | 25 | 40 | 16 c | W3177 | $\frac{.25}{5}$ | 200 | 7 c |
| W3381 | 10 | 25 | 40 | 18 c | W3179 | . 01 | 400 | 13 c 6 c |
| W3382 | 25 | 25 | 40 | 25 c | W3179 | . 01 | 400 | 6 |
| W3383 | 50 | 25 | 40 | 33 c | W3180 | . 02 | 400 | Te |
| W3396 | $5-5$ | 25 | 40 | 25 c | W3181 | -05 | 400 | 7 Fc |
| W3384 | 5 | 50 | 75 | 20 c | W3170 | . 06 | 400 | 7 c |
| W3295 | 10 | 50 | 75 | 22 c | W3182 | . 1 | 400 | 8 c |
| W3297 | 25 | 50 | 76 | 30c | W3174 | . 5 | 400 400 | 10 c 15 |
| W3387 | 5 | 100 | [50 | 22c | W3184 | . 001 | 600 | 7 c |
| W3388 | 10 | 100 | [50 | 25 c | W3185 | .002 | 600 | 7 c |
| W3392 | 2 | 150 | 300 | 18c | W3186 | . 006 | 600 | 7 c |
| W3393 | 4 | 150 | 300 | 25 c | W3187 | . 01 | 600 | 8 c |
| W3394 | 8 | 150 | 300 | 30 c | W3188 | . 02 | 600 | 8 c |
| W3395 | 4 | 150 | 300 | 32c | W3189 | . 05 | 600 | 8 c |
| W3389 | 1 | 200 | 250 | 16 c | W3171 | . 06 | 600 | 8 c |
| W3390 | 2 | 200 | 250 | 18 c | W3130 | 1 | 600 | 10 c |
| W3391 | 4 | 200 | 250 | 25c | W3191 | . 25 | 600 | 15c |
| W3291 | 1 | 450 | 525 | 20 c | W3192 | .05-. 05 | 200 | 14 c |
| W3292 | 2 | 450 | 525 | 24. | W3193 | . $1-1$ | 200 | 14 e |
| W3293 | 4 | 450 | 525 | 28 c | W3194 | .25-. 25 | 200 | 16 c |
| W3256 | 8 | 450 | 525 | 33 c | W3195 | .05-.05 | 400 | 14 c |
| W3255 | 10-10 | 35 | 50 | 30 c | W3196 | .1-. 1 | 400 | 14 c |

Special Compact Filters For A.C-D.C.

Receivers
225 Volts

## D.C. Peak

Rated 200 working volts d.C. cardboard containers $21 / 1^{\prime \prime}$ long.

| Stock No. | Cap. Mf. | Size | Your Cost |
| :---: | :---: | :---: | :---: |
| W3210 | 4 | $8{ }^{6} 8.86^{\circ}$ | 50.26 |
| W3212 | 8 | $3 \times 1{ }^{0}$ | . 30 |
| W3213 | 10 | 5/3*10 | . 32 |
| W3214 | 12 | $1{ }^{1} 1^{\prime \prime}$ | . 36 |
| W3215 | 16 | $14 \times 1$ " | . 40 |
| W3216 | 20 | $11 / 31^{\prime \prime}$ | . 44 |
| W3217 | 25 | 13/3x1" | .48 |

## Small Dry Electrolyties

525 Volt
Surge
Wax impregnated containers. 450 volt working. $11 / 8^{\circ}$ wide


Special "600" V. Surge Dry Electrolytics

600 yolts
 peak, de. 476 working.
Boxes 11 is Boxe
$27 / 16^{\prime \prime}$.

| Stock | Cap. | Inches | Your |
| :---: | :---: | :---: | ---: |
| No. | Mid. | Thick | Cost |
| W3205 | 1 | 96 | S0.42 |
| W3206 | 2 | 96 | .47 |
| W3207 | 4 | 116 | .57 |
| W3208 | 6 | $11 \%$ | .65 |
| W3209 | 8 | 138 | .67 |



## Exact Dublicate aedeelectroivics




## NEW! I.R.C. VOLUME CONTROLS



A new line of all-purpose volume controis built to the most exact standards. F
turos: Bakelize base for resistance element; multispring noiselas contact arm; recessed terminals; extremely hard element; easily attachable line switch, approved by UnderWriters. Shafts $2{ }^{1}$ " long with that. Bushing correctly tapered, taper indicated in listing as follows: - Uniform B Tone Control or Audio; C-Antenna Shunt or Audio; D-Antenna and Cos; C Bias, F-Ant. and Grid Blas.

| Stock No. | Ohms | Stock No. | Ohms | Stock No. |  | h |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| W9100 | 500 A | W9112 | 15000F | W9123 |  | 200000A |
| W9101 | 1000A | W9113 | 20000 F | W9124 |  | 200000D |
| W9102 | 2000A | W9114 | 25000 D | W9125 |  | 250000 C |
| W9103 | 3000A | W9115 | 25000 A | W9126 |  | 500000 A |
| W9104 | 4000 A | W9116 | 25000 F | W9127 |  | 500000 C |
| W9105 | 5000 A | W9117 | 50000 A | W9128 |  | 500000C* |
| W9106 | 5000 C | W9118 | 50000 C | W9129 |  | Meg. C |
| W9107 | 10000 F | W9119 | 75000 C | W9130 |  | Meg. ${ }^{\text {c }}$ |
| W9108 | 10000A | W9120 | 75000 D | W9136 |  | Meg. $\dagger$ |
| W9109 | 10000 D | W9121 | 100000 I | W9131 |  | Meg. C |
| W9110 | 10000 C | W9122 | 100000 C | W9132 |  | Meg. ${ }^{\text {C }}$ |
| W9111 | 150 |  |  | W9137 |  | Meg. A |
| *Tapped for tone compensation <br> TFader Control <br> Any Volume Control, +0 Your Cost Each |  |  | w9133-Switch Covers Each |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |



## Trutest

tru-imar POTENTIOMETERS
Irutest presents these quality volume controls as a thoroughly reliable line of Features include: extra hard composition wiping contact arm; correct taper; rusition colements; multi-point shaftf. Bakellte frames, metal dust coverg. /fo" bushings. Stock N
 W9070 W9071 $W 9072$
$W 9073$ $W 9073$
$W 9074$ W9074 W9075 $W 9076$
$W 9077$ W9078 W9079 W9080 With Switch Your Cost M Any Type

Tapered for Circuit Antenna Shunt Antenna Shunt, "C" Bias Antenna Shunt Antenna Shunt, "C" Bias and Ant. Antenna Shunt. "C" Bias and Ant. Screen Voltage or Tone Control C" Bias Control Screen Voltage or Tone Control Audio Shunt or Tone Control Audio Shunt or Tone Control Audio Shunt or Tone Contro



Stock Na Without Switch W9081
W9082
W9082
$W 9083$
$W 9084$
W9085
W9086
W9087
W9089
W9090
136

## Truteat EXACT <br> Duplicafe Cantrols

For
VICTOR
R-32
RE-45
R-52
RE-75

W9094
Your Cost Each $\qquad$ $92^{c}$
For RCA-Victor models 42, 48, R-14, R-15, R-17. Dual unit, 10,000 W9093- 25,000 ohms.

SI. 5
PHILCO 20, 20A and 220 Exact duplicate. Dual unit, 285 and 5000 ohms.

## ZENITH 70 SERIES

Late type. Used in models 50, 60 , 70, 71, 72, 73, 77, 712, 722, 723, and 772. Dual unit, with switch. Your Cos
Series 50 contral. Single unit with wwitch. W9096-Your Cost.......75

## Centralab

## Radiohm

POTENTIOMETERS
Centralab controls use these features: patented
rocking contact to the resistor; no change or rocking contact to the resistor; no ch
noise after long service. Patented non-rubbing contact be-
 Shaft milled flat, 21, "long. Diameter band, depth, 10 "; shaft, " "; bushing. $\mathrm{s}^{\prime \prime}$. Bakelite housed with
 Bivider (Uniform); $\$$-Antenna Shunt; A Antenna Shunt and C Bias; Al Antenna Shunt and $C$ Bias A Antenna Shunt and Chunt and C Bias, 2 Tubes; $C$ C- $C$ Bias; $T$ Tube; $\mathbf{A 2}$-Antenna Audio Grid or Tone Control; $P$ Series in R. F. Plate.

| Stock | Res. | Stock | Rea. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Ohms | No. | Ohms |  | Res. |
| W8876 | 500 U | W8858 | 100008 | W8840 | 75000 C |
| W8865 | 1000 U | W8873 | 15000 A | W8862 | 100000 U |
| W8859 | 2000 U | W8931 | 15000. | W8880 | 100000 GT |
| W8866 | 3000 U | W8877 | 20000A | W8878 | 200000 GT |
| W8867 | 4000 U | W8869 | 25000 U | W8694 | 200000C |
| W8868 | 5000 U | W9032 | 25000 C | W8879 | 250000 GT |
| W8842 | 5000 S | W8860 | 25000 S | W8864 | 500000 U |
| W8872 | 10000 A | W8861 | 50000 U | W8841 | 600000 P |
| W8871 | 10000A1 | W8875 | 50000 T | W8874 | 1 Meg. GT |
| W8843 | 10000 A2 | W9033 | 75000 T | W8696 | 3 Meg. GT |
| Your Each Any |  |  | Switeh W8665 Vour | Plat |  |

## CARTER Midgef

Rheostats and Pats. I-Wat
Extremely com. pact rheostats and potentiometers watt. All wound. Rheostats are 1 "/6" diam.; potentiometers ol are $11 / 2^{\prime \prime}$ diameter. Mount in single and hole and project $31^{\circ}$ back of panel. Shaft ${ }^{2}$ " thick extends $132^{\prime \prime}$ No knob included.
Potentlomefers-Type MP

Stock | Stock | Stock |
| :--- | :--- | :--- |
| No. Ohms | No. |
| Noms |  |

 Wheosfots-Type MR


## ELECTRAD UNIVERSAL REPLACEMENT VOLUME CONTROLS

 Employ newly perfected graphite element which can-
not dex or warp. Bakelite case not fex or warp. Bakelite case.
with metal end plate and aluminum shaft. Approved switch can easily be added. Letters following resistance indicate taper: U uniform: $A$-antenna shunt or "C" bias: C "C" bias; Paudio plate control; GT-audio grid or tone control; \&-antenna or audio shumt; H-special taper for metal tube circuits, for bias. Letter $w$ following type number indicates wire wound element. Audio Controls Tapped For Tone Compensation


[^2]ald atandard radio receivers. Write for informarion.

STANDARD SINGLE UNIT CONTROLS

| $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | $\begin{gathered} \text { Mirs. } \\ \text { No. } \end{gathered}$ | Res. Ohms | Stock No. | Mrs. No. | Res. Ohms |
| :---: | :---: | :---: | :---: | :---: | :---: |
| W7905 | 204 W* | 10 U | W7924 | 283 | $10000{ }^{0}$ |
| W8072 | 269W | 20 U | W8158 | 995w | 10000 A |
| W8128 | 270W | 30 U | W8224 | 996 | 10000S |
| W8129 | 271W | 50 U | W7912 | 240 | 10000 A |
| W8068 | 272W | 100 U | W8091 | 573 | 12000C |
| W7915 | 273W | 200 U | W8225 | 875 | 12500 H |
| W7916 | $274 W$ | 400 U | W7902 | 201 | 15000 A |
| W8200 | 991w | 500 U | W7921 | 279 | 25000 U |
| W7923 | 282W | 600 U | W7922 | 280 | 25000 P |
| W7917 | 275w | 800 U | w7913 | 241 | 30000 P |
| W7918 | 276 W | 1000 U | W8226 | 997 | 40000 U |
| W8221 | 992 W | 1500 U | W7906 | 205 | 50000 U |
| W7909 | 232W | 2000 U | W7903 | 202 | 75000 C |
| W7910 | 233W | 3000 U | W7914 | 242 | 100000 GT |
| W7919 | 27TW | 4000 U | W8125 | 281 | 200000 U |
| W7911 | 234 W | 5000 U | W8227 | 998 | 250000 C |
| W7920 | 278 | 5000A | W7908 |  | 25000 GT |
| W8222 | 993W | 6000A | W7904 | 203 | 500000 GT |
| W8223 | 994 W | 7500A | W7907 | 206 |  |
| W8083 | 560 | 7500A | W750 | 20 | 1 Meg. $6 T$ |

Your Cost Each.
Any of The Above Controls


## UNIVERSAL ‘STANDARD’ CONTROLS

Furnished with $3^{\prime \prime}$ aluminum shaft (milled), standard bushing, coverplate and, where necessary, ad justable blas plate.
Stock Part Type Res. Taper Stock Part Type Res. Taper
 $\begin{array}{lllll}W 6675 & \mathrm{H}^{*} & \text { WW } & 1 j 000 & 11 \\ W 6713 & \mathrm{H} \% & \mathrm{WW} & 15000 & \mathrm{~V} 11\end{array}$
W6713 Hr Car. Means Carbon element. WW-Means Wire Wound lement. Has adjustable bias features. t-Means control has lotted shaft for automobile receivers
Your Cost Each. Any of the Above Controls
$59^{\circ}$

## UNIVERSAL "LINEAR" CONTROLS

Similar to the above, but

| Stock | Mirs. | Type | Res. | Stock | Mfrs. | Type | es |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| N0 | No. |  | Ohms | No. | N |  | Pr |
| 6732 | A400P | WW | 400 | W6742 | A20MP* | WW | 000 |
| W6733 | A550P | WW | 550 | W6742 | Y25MP | Car | 2500 |
| W6734 | A1MP | WW | 1000 | W6743 | Y50MP | Car | 500 |
| W6735 | A2MP ${ }^{\text {¢ }}$ | WW | 2000 | W674 | Y100MP | Car | 10000 |
| W6736 | A8MP* | WW | 3000 | W6745 | Y200MP | Car | 20000 |
| W6737 | A5MP* | WW | 5000 | W6746 | Y250MP | Car. | 2500 |
| W6738 | Y5MP | Car. | 5000 | W6747 | Y 500 MP | Car | 5000 |
| W6739 | A10MP* | WW | 10000 | W6748 | Y 1000 MP | Car | 1 |
| W6740 | Y10MP | Car | 10000 |  |  |  |  |
| WW-Wire Wound element. *-Has adjustable bias feature. <br> Car.-Has Carbon element. <br> Your Cost Each, Any Type |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

## UNIVERSAL "TAPPED" CONTROLS

Service a great majority of the receivers using tapped controls. Units howin below are not limited to use in the sets listcet.
Stock Mirs, Res. Tapped Descrintion

| Stock | Mirs. | Res. | Tapped | Description |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| No. | No. | Ohms | At | Name and Model of Set |  |
| W6542 | TRP600 | 6000 | 2500 Wells Gardner 60,63 |  |  |

W6542 TRP600 Ohms
W6543 TRP601 30000
W6544 TRP602 68000

W6545 TRP603 25000
$\begin{array}{lll}W 6546 & \text { TRP604 } & 350000 \\ W 6547 & \text { TRP605 } & 35000\end{array}$
W6577 TRP606 50000

W6578 TRP607 500000 W6579 TRP60 W6580 TRP609 1 Mer W6581 TRP610 1 Meg .

N6582 TRP611 1 Meg W6583 TRP612 2 Meg.
Your Cost Each, Any Typ

EXPLANATION OF YAXLEY VOLUME CONTROL TAPERS No. I. For audio or antenna shunt eircuis.
No. II. For series circuits such as cathode voltage controls.
No III. For antenna shunt and "C" bias circuits.
No. VII. Wire wound element. For antenna and "C" bias

## UNIVERSAL "DUAL" CONTROLS

Consist of two volume controls strapped together and driven by a single shaft. Units listed service practically all receivers.


## SPECIAL "DUAL" CONTROLS

| Stock No. W6683 | Mirs. |  | Res. in Ohms |  | Name of Set |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Type | Front | Rear | and Models |
|  | DRP-114 | WW | 250 | 5000 | Philco 20, 20A, 70, 70A, |
|  |  |  |  |  | 90, 90A (2-45 ${ }^{\circ}$ ), 270, |
|  |  |  |  |  | 270A, 220, 21. |
| W6751 | DRP-117 | W W | 500 | 2500 | Eveready 50 series |
| W6752 | DRP-119 | WW | 8000 | 10000 | Sterling F, 8T |
| W6753 | DRP-122 | WW | 645 | 10000 | Majestic 50, 51, 52 |
| W6614 | DRP-169 | WW | 75000 | 10000 | Mohawk-Lyric 11D. 19D. $34 \mathrm{D}, 29 \mathrm{D}, 19 \mathrm{H}$. $29 \mathrm{H}, 34 \mathrm{H}$, Lyric H, D |
|  |  |  |  |  |  |
| W6619 | DRP-221 | Car | 10000 | 100000 | Zenith 50, 6070 series |
| W6756 | DRP-222 | Car. | 75000 | 32000 | Majestic 100, 180 |
| W6757 | DRP-232 | Car. | 3 Meg . | 3 Meg. | Crosley 132-1, 136-1 |
| W6758 | DRP-239 | Car | 25000 | 25000 | Koister K63, K66, K73. K76, K83, K86, K93, K96, K103 |
|  |  |  |  |  |  |
| W6759 | DRP-240 | Car. | 250000 | 10000 | Earl \& Freed Nr 55, |
| W6760 | DRP-241 | Car. | 5000 | 150000 | NR56AC, 21AC, 22AC |
| W6698 | DRP-115 | WW | 3800 | 3800 | RCA-VictorR32, RE45, R52, RE75 |
|  |  |  |  |  |  |
| $\begin{aligned} & \text { W6761 } \\ & \text { W6762 } \end{aligned}$ | $\begin{aligned} & \text { DRP-242 } \\ & \text { DRP-243 } \end{aligned}$ | Car. Car. | $\begin{array}{r} 10000 \\ 3000 \end{array}$ | $\begin{aligned} & 500000 \\ & 750000 \end{aligned}$ | Eveready 50 (3rd Type) Wells Gardner C, CG. 200, 291, 292, 295 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| $\begin{aligned} & W 6763 \\ & W 6541 \end{aligned}$ | $\begin{aligned} & \text { DRP-244 } \\ & \text { DRP-245 } \end{aligned}$ | Car. <br> Car. | 25000 | $6000$ | Kolster K42, 43, 44. |
|  |  |  | 1 Meg. | 3 Meg . | Stromberg-Carlson 48, $49,50,51$ |
| W6700 | DRP-24 | Car. | 32000 | 50000 | Sparton 410, 420 | WW-Wire Wound element. Car.-Carbon element $\$ 1.47$ Special control for RCA-Victor model RC3, R14, R15, RE17, R42 and R48: G.E. model T41, Weatinghouse model WR4. Yaxley Part No. DRP-116.

W6694-Your Cost
${ }^{5} 1.47$

## VOLUME CONTHOL ACCESSORIES

## YAXLET VOLUME

 CONTROL SWITCHES| Stock Part Pour  <br> No. No. Type Cost | $\square \mathrm{A}$ |
| :---: | :---: |
| $\begin{array}{lrl}\text { W6288 } & 6-9 & \text { S.P.S.T. } \\ \text { W1283 } & 8 & \text { S.P.D.T. } \\ \text { W6289 } & 7 & \text { D.P.ST. }\end{array}$ | ${ }^{8}$ |
| W6290 13 3-P.S.T. 35 |  |
| W6291 14 4-P.S.T. | C |
| MOUNTING BRACKETS | D |
|  | Typ |
|  | W6561-1/" diam., $1 /$ /r $^{\prime \prime}$ "fat. |
| ) |  |
|  | Any Size, |
| For use where control mounts off | Type B- $2^{\prime \prime}$ long, 1/4" diameter |
| the chassis. Plated metal. Ad- | with $1 / \mathrm{z}^{\prime \prime}$ slot. Enclused in tight fitting tube (D). |
| $\text { centers } 11 / g^{\circ} \text { to } 238^{\prime \prime} \text {. }$ | W6559-Your Cost. . . . 2 - |
|  | Type C-2" long, 1/4" wide, ${ }^{1 / / 4 "}$ |
| W6298-Type RB-249. Mounting | thick. Tongue shaped and fitted with tube (D). For use in auto |
| Your Cost Each, T?c | receivers. 2 c |
| Either Type . . . . . . . . . . . | W6560-Your Cost |



## IA C Fixed and Variable RESISTORS

I. R. C. Wire-Wound Variable Resistors


A complete line of adjustable type wire-wound resistors, ranging from 10 to 200 watts maximum capacity The high grade resistance wire is wound on a ceramic core and is covecred by a cement insulating compound having great strength. nonhygroscopic. A narrow section of the coating is left bare, and the adjustable slider makes contact with it. All with one slider. Mounting watt units.
Ohms Ohms

| Ohms | Ohms | Ohms |
| ---: | ---: | ---: |
| 250 | 2500 | 15000 |
| 500 | 3000 | 2000 |
| 750 | 3500 | 25000 |
| 1000 | 4000 | 40000 |
| 1250 | 5000 | 50000 |
| 1500 | 7500 | 75000 |
| 2000 | 10000 |  |

5 pecify resistance desired when ordering.

Type ABA- 10 Watts $13 / x^{8} / h_{5}^{\prime \prime}$. Range up to 10,000 ohms. (See list above).
W5262
Your Cost Each.
$35^{\circ}$
Type DHA 25 Watts 21/2 $x^{9} / 6^{\prime \prime}$. Range up to 25,000 ohms. (See list above).

| No. | From | To | Each |
| :--- | ---: | ---: | ---: |
| W5274 | 7,5000 | 50 c |  |
| $\mathbf{W 5 2 7 5}$ | 7,500 | 15,000 | 56 c |
| $\mathbf{W} 5276$ | 20,000 | 25,000 | 65 c |
|  |  |  |  |

Type EPA -50 Watts 43/2x $x^{3} 6^{n}$. Range up to 75000 ohms. (See list above).

| No. | From | To |
| :--- | ---: | ---: |
| W5286 | 5 | 5,000 |
| W5287 | 7,500 | 25,000 |
| W5888 | 40,000 | 50,000 |
| W5289 | 75,000 | $\ldots$. |

Type HAA -100 Watts $63 / 2 \times 11 / 8^{\prime \prime}$. Available in the follow$\begin{array}{lllr}\text { ing resistances. } & & \\ \text { Ohms } & \text { Ohms } & \text { Ohms } & \text { Ohms } \\ 100 & 2500^{*} & 1000^{*} & 50000^{*} \\ 500^{*} & 5000^{*} & 15000^{*} & 75000^{*} \\ 1000^{*} & 7500 & 25000^{*} & 100000^{*} \\ \text { No. } & \text { From } & \text { To } & \text { Each } \\ \text { W5266 } & 100 & 5,000 & \$ 1.18 \\ \text { W5267 } & 7,500 & 25,000 & 1.32 \\ \text { W5268 } & 50,000 & 1.000 & 147 \\ \text { W5269 } & 75,000 & 100,000 & 1.62\end{array}$

Type HOA-200 Watts $101 / 2 \times 11 /{ }^{\prime \prime}$. Available in sizes marked by asterisk in list above.
No. From To $\begin{array}{lrll}\text { No. } & \text { From } & \text { To } & \text { Each } \\ \text { W5270 } & 500 & 10,000 & \$ 1.77 \\ \mathbf{W 5 2 7 1} & 25.000 & 100.000 & 2.06\end{array}$

ELECTRAD Molded Wire-Wound Resistors

Resistor is molded in a Bakelite housing and provided with $11 / 2^{\prime \prime}$ tinned wire leads. $11 / x^{5} \mathscr{L}^{\prime \prime}$. Sppcity resistance desired.

| Ohms | Ohms | Ohms |
| :---: | :---: | :---: |
| 1 | 25 | 125 |
| 2 | 30 | 150 |
| 3 | 40 | 200 |
| 5 | 50 | 250 |
| 10 | 60 | 300 |
| 15 | 75 | 350 |
| 20 | 100 | 400 |

W7580
Your Cost Each.
Each
89
89
88 c
$\$ 1.00$
1.18
18

Type BT Insulated Resistors

An all purpose line of high quality units that employ the famous metallized element sheathed in an overall covering of mositure prow phenolic compound. Non-inductive and noiseless in operation. Pigtail contact leads are solidly molded to the element. All are R.M.A.
color coded and, in addition, have the resistance value marked on the covering.

|  |  |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Ohms | Meg- |
| ohms |  |  |  |  |  |  |  |


 Kit of 10 type $8 T-1 / 2:-10$ popular $1 / 2$-watt units in a handy container.
W5264
Your Cost Kit of 10
SIC 10
Mit of 10 type BT -1:-10 popular 1-watt insulated units in a handy container.
W5265
Your Cost, Kit of 10


## I. R. C. Precision WireWound Resistors

## 1\% Accuracy

Precession wire sound resistors designed for use as meter multiplies and other applications where great accuracy is a requisite. Guaranteed accuracy $1 \%$. Non-inProvided with solder lug terminals.

| Stock |  | Your | Stock | Your | Stock |  | Your |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Ohms | Cost | No. Ohms | Cost | No. | Ohms | Cost | W5125

$W 5126$
$W$
$\qquad$
$\qquad$

| $W 5127$ | 1000 |
| :--- | :--- |
| $W$ | 2128 |

$\begin{array}{ll}W 5129 & 5000 \\ W & 7130 \\ 7500\end{array}$
$50^{c}$

W5130
ELECTRA TRUVOLT ADJUSTABLE RESISTORS

A high quality line of adjustable resistors ha ving many outstanding features. Fine resistance core, and then wound on a pres grooved lava tube. Element cannot loosen or short. Adjustable clips are tinned for easy soldering. A protecting
insulating sleeve is furnished insulating sleeve isth each resistor. The type B units are also supplied with end brackets for mounting. Self-tapping screws also furnished.

Stock
wo. w7151 $w 7153$ $W 7155$
$W 7156$ $w 7157$ W7159
Your Co


W7632-Extra Sliders. Each


I. R. C. Power WireWound Resistors


Machine wound on non-hygroscopic cores; overall covering of special cement. Molded end contacts.

| Ohms | Ohms | Ohms | Ohms |
| :---: | :---: | :---: | :---: |
| 1 | $500^{*}$ | $4000^{*}$ | $15000^{*}$ |
| 5 | $750^{*}$ | 4500 | $20000^{*}$ |
| 10 | $1000^{*}$ | $5000^{*}$ | $25000^{*}$ |
| 25 | $1250^{*}$ | 600 | 30000 |
| 50 | $1500^{*}$ | 7000 | 35000 |
| 75 | $2000^{*}$ | 7200 | 40000 |
| $100^{*}$ | 2250 | $7500^{*}$ | $50000^{*}$ |
| 150 | $2500^{*}$ | $10000^{*}$ | $60000^{*}$ |
| 200 | 3000 | $12000^{*}$ | $75000^{*}$ |
| $250^{*}$ | 3500 | 12500 | $100000^{*}$ |

Type "AB"-10 Watts $13{ }^{2 \prime}$ "long, $5 /$ /r $^{\prime \prime}$ diam. Range up to 25,000 ohms (see list).
W5210 - Y our Cost Each. $344^{\mathrm{C}}$ Type "DG"-20 Watts $2^{\prime \prime}$ long, "/5" diam. Range up to $50,000 \mathrm{ohms}$ (see list). $\begin{array}{cccc}\text { No. From To Each } \\ \text { w5211 } & 1 & 15,000 & 38 c\end{array}$ $\begin{array}{llll}W 5212 & 20,000 & 50,000 & 44 \mathrm{c}\end{array}$ Type "EP"-50 Watts 412" long, 3 " diam. Range up to $100,000 \mathrm{ohms}$ (see list). Each w $\mathbf{N}$. From To $\begin{array}{lrr}\text { W5248 } & 5 & 5,000 \\ \boldsymbol{W} 5249 & 6,000 & 25.000\end{array}$ $\begin{array}{llll}W 5254 & 30,000 & 100,000 & 85 \mathrm{c}\end{array}$

Each
$65 c$

Type "HA"-100 Wafts $6^{11 "}$ long, $11 /{ }^{\prime \prime}$ diam. Range up to 100,000 ohms. Only in sizes marked with asterisk (see list).

| No. | From | To | Each |
| :---: | :---: | :---: | :---: |
| $\mathbf{W} 5260$ | 100 | 5,000 | $\$ 0.88$ |

$\begin{array}{lrrr}\mathbf{W} 5260 & 100 & 5,000 & \$ 0.88 \\ \mathbf{W} 5261 & 7,500 & 25,000 & 1.03\end{array}$
W5234 50,000 ohms 1.18
$W 5235 \quad 50,000$ ohms
w 5236 100,000 ohms

## Resisto-Chest Free!

## Offered FREE

with every Durchase of 56
type B-1 (2 each type $8-1$ (2 each
of the 28 most popular types) popular ty
resistors. Chest has 7 small
andllarge drawers.
Size: $81 /{ }^{\prime \prime}{ }^{\prime \prime}$
high, 4\%
wide and
$51 / 8^{\text {" }}$ deep. Shag. wt. 6 lbs. Resisto-Chest with 56 selected type $\mathrm{B}-1$ (1-watt) resistors. List $\$ 11.20$. W5208


ELECTRA
Variable Voltage Dividers
S

Type 8-25-Watts-2'1 Long

## Stock No. No.

Ohm
500
600
75
80
1000
1200
150

## Inutest Carbon Resistors <br> \section*{FOR GENERAL REPLACEMENT}

TRUTEST carbon resistors are RMA color-coded for easy identification, and are made of the finest materials and workmanship. Their puaranted accuracy is $10 \%$, plus or minus. The a verage is age variations.


## Free RMA Color-Code Card

With each purchase of three or more TRUTEST color-codistors you will receive a pocket-size RMA are as follows: 2-watt 2 . Dimensions of the units are as follows: 2 -watt, $2^{\prime \prime}$ long; 1 -watt, 1 : ${ }^{\prime \prime}$ long; prool. With tinned they are absolutely moisture proof. With tinned leads.

| Resis. Ohms | 3,Watt Stock No. | 1-Watt Stock No. | 2-Watt Stock No. |
| :---: | :---: | :---: | :---: |
| 200 | W4250 | W8300 | W4450 |
| 300 | W4245 | W4348 |  |
| 400 | W4251 | W4301 | W4isi |
| 500 | W4252 | W4302 | W4452 |
| 600 | W4253 | W4303 | W4453 |
| 700 | W4254 | W4304 | W4454 |
| 800 | W4255 | W4305 | W4455 |
| 1000 | W4256 | W4306 | W4456 |
| 1250 | W4257 | W4307 | W4457 |
| 1500 | W4258 | W4308 | W4458 |
| 2000 | W4259 | W4309 | W4459 |
| 2500 | W4260 | W4310 | W4460 |
| 3000 | W4261 | W4311 | W4461 |
| 3500 | W4262 | W4312 | W4462 |
| 4000 | W 4263 | W4313 | W4463 |
| 5000 | W4264 | W4314 | W4464 |
| 6000 | W4265 | W4315 | W4465 |
| 7000 | W4266 | W4316 | W4466 |
| 1/-WATT SIZE <br> Your Cost <br> Each. |  |  |  |
|  |  |  |  |
|  |  |  |  |
| 10 ATe\|l0 |  |  |  |


| Resis. Ohms | $\mathrm{s}_{3}-\mathrm{Watt}$ <br> Stock No. | $\begin{aligned} & \text { 1-Watt } \\ & \text { Stock No. } \end{aligned}$ | 2-Watt Stock No. |
| :---: | :---: | :---: | :---: |
| 7500 | N4267 | W4317 | W4467 |
| 8000 | W4268 | W4318 | W4468 |
| 9000 | W4246 | W4349 |  |
| 10000 | W4269 | W4319 | W4i69 |
| 12000 | W4270 | W4320 | W4470 |
| 15000 | W4271 | W4321 | W4471 |
| 17000 | W4272 | W4322 | W4472 |
| 20000 | W4273 | W4323 | W4473 |
| 25000 | W4274 | W4324 | W4474 |
| 30000 | W4275 | W4325 | W4475 |
| 40000 | W 4276 | W4326 | W4476 |
| 50000 | W 4277 | W4327 | W4477 |
| 60000 | W4278 | W4328 | W4478 |
| 70000 | W4279 | W4329 | W4479 |
| 75000 | W4280 | W4330 | W4480 |
| 100000 | W4281 | W4331 | W4481 |
| 125000 | W4282 | W4332 | W4482 |
| 150000 | W4283 | W4333 | W4483 |
| 1-WATT SIIEE |  |  |  |
| Your Cost |  |  |  |
|  |  |  |  |
|  | ${ }^{6}$ |  |  |


| Resis. Ohms | s-Watt <br> Stock No. | 1-Watt Stock No. | $\begin{aligned} & \text { 2-Watt } \\ & \text { Stock No. } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| 200000 | W4284 | W4334 | W4484 |
| 250000 | W4285 | W4335 | W4485 |
| 300000 | W4286 | W4336 | W4486 |
| 400000 | W4247 | W4350 | W446 |
| 500000 750000 | W4287 W4298 | $W 4337$ $W 4353$ | W4487 |
| Megohms |  |  |  |
|  | W4288 | W4338 |  |
| 1.5 | W4248 | W4351 |  |
| , | W4289 | W4339 |  |
| 2.5 | W4249 | W4352 |  |
| 3 | W4290 | W4340 |  |
| 4 | W4291 | W4341 |  |
| 5 | W4292 | W4342 |  |
| 6 | W4293 | W4343 | ....... |
| 7 | W4294 | W4344 | . . . . . |
| 8 | W4295 | W4345 | $\cdots$ |
| 9 | W4296 | W4346 |  |
| 10 | W4297 | W4347 |  |
| 2-WATT SIZE |  |  |  |
| Your Cost |  |  |  |
|  |  |  |  |
|  | 3 | 25 |  |

## Trutent 5 AND 10 <br> WATT WIRE-WOUND RESISTORS



Wound with genuine Nichrome wire on ceramic tubes. Most are within
$1 \%$ accuracy. When ordering specify sizes desired.

| Ohms | Ohms | Ohms | Ohms |
| :---: | :---: | :---: | :---: |
| 5 | 400 | 2000 | 10000 |
| 10 | 500 | 2250 | 12500 |
| 15 | 600 | 2500 | 15000 |
| 20 | 750 | 2750 | 17500 |
| 25 | 800 | 3000 | 20000 |
| 50 | 900 | 4000 | 22500 |
| 75 | 1000 | 5000 | 25000 |
| 100 | 1100 | 6000 | $30000^{*}$ |
| 150 | 1250 | 7000 | 40000** |
| 200 | 1500 | 8000 | 50000* |
| 250 | 1750 | 9000 |  |
| *A vailable in 10 -watt size only. |  |  |  |
| W4438-5-watt |  |  |  |
| Your Cost Each |  |  |  |
| W4439-10-watt |  |  |  |

Truiteat insulated CARBON

These high-quality carbon resistors re guaranteed accurate plus or minus $10 \%$. A processed moisture prool envelope coats each. Can be
used anywhere without fear of used anywhere without fear of
shorting. RMA color-coded. With inned wire leads. They are noisefree. Specify resistance desired when ordering.

| Ohms | Ohms | Ohms | Ohms |
| :---: | :---: | :---: | :---: |
| 200 | 5000 | 50000 | 500000 |
| 500 | 7500 | 75000 | 750000 |
| 800 | 10000 | 100000 | 1 Meg . |
| 1000 | 15000 | 150000 | 2 Meg . |
| 1500 | 20000 | 200000 | 5 Meg . |
| 2000 | 25000 | 250000 | 10 Meg . |
| 2500 |  |  |  |
| W5257-1/2-watt, $3 \times 1 /{ }^{\prime \prime}$ |  |  |  |
| Yaur Cost Each |  |  |  |
| W5258 1-watt, |  |  |  |

 RESISTORS


Your Cost Each.

## Thutest SEMI-VARIABLE WIRE WOUND RESISTORS <br> Thutest SEMI-VARIABLE WIRE WOUND RESISTORS <br> The most practical replacement volt-

 age dividers obtainable. Just set the sliders to the desired point and you have a made-to-order voltage divider Adjustable lugs have smali contact buttons so that neveral taps may be used without shorting out much resistance. Each unit equipped with one sliding contact and brackets.

 | Stopk | Resist. | Curr. | List | Your | Stock | Resist. | Curr. | Rist |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| No. | Ohms | Ma. | Price | Cour |  |  |  |  |
| W20740 | 1 | 5000 | $\$ 0.85$ |  |  |  |  |  |
| No. |  | Ohns | Ma. | Price | Cost |  |  |  |
| W20741 | 2 | 3500 | 85 |  | W20770 | 100 | 700 | $\$ 1.300$ |

 ${ }^{w}$

$\underset{ }{W 207}$

<br> \title{

} <br> \title{

}

## 



# Neissner"Build-Your-Own"KITS 

## 5-BAND "COMMUNICATIONS" RECEIVER

### 3.8 TO 555 METERS

14 ALL-METAL TUBES
Especially designed for the ham and advanced short-wave fan. Features completely wired and accurately balanced tuning unit. crystal filter, beat oscillator, noise silencer circuit, 6I. 6 output, amplified a.v.c., variable electrical band expansion, iron-core tirs
band spread. Kit ineludes tuning unit with band-change switeh and $6^{\prime \prime}$ culibrated airplane dial, noise silencer i.I., beat oscillator trans former, matched cryatal filters, two ron-core i.f s, shielded r.f. chokes. W10302-Kit No. 7502: complete as described, with tuning unit, r.f and if coils r.f. chokea and dial; with all diagrams and instructions Shipping weight 12 lbs. List $\$ 50.00$
 Shipping we
$\$ 29.41$
W10303-Model No. 7512-Completely assmmbled, wired and aligned tuning unit only. Shpg. wt. 9 lhs, List $\$ 35.00$
$\$ 20.58$ Your Cost
W10304-Drilled and punched chassis for above. Lead-coated steel (Ternplate), that makes soldering easy, Baked, black crystaline
finish. $13 \times 17 \times 3^{\prime \prime}$. Shpg. wt. 7 I hs. List $\$ 5.50 \mathrm{~S}$ Anish. $13 \times 1$
Your Cost.

## MAJESTIC

## I. F. COILS ONLY



Exact duplicate replacement coils for Majestic recelvers. Al accurately wound only impregnated Coils are supplied less cans and trimmers. Receiver must be re aligned after new coil is installed Stock Maj. Model and Your W8'440 $4428 \quad 15,15 \mathrm{~B}, 150$ W8441 $8384 \quad 15,15 B, 150$ W8443 $5326 \quad 25(1 \mathrm{st})$ W8444 $5327 \quad 25$ (2nd). W8445 $5601 \quad 25 \mathrm{~B}$ (1st) W8446 $5602 \quad 25 B$ (2nd) $\left.\begin{array}{lll}\text { W8447 } & 6506 & 56\end{array} \mathbf{W 8 s t}^{1 \text { st }}\right\}$ W8448 1058966 (1st) $\begin{array}{lll}\mathbf{W} 8449 & 10591 & 66 \text { (2nd) } \\ \mathbf{W} 8354 & 9355 & 116(1 \mathrm{st})\end{array}$ $\begin{array}{lll}\text { W8354 } & 9355 & 116 \text { (1st) } \\ \boldsymbol{W} 8450 & 9361 & 116 \text { (2nd) }\end{array}$ W8451 $6250 \quad 200$ (1st) W8452 6254200 (2nd) W8453 6119210 (1st) W8454 6123210 (2nd) W8455 6127210 (3rd) $W 8355 \quad 7205$ 290,300 (1st) W8356 $7230 \quad 290,300$ (2nd) W8456 7821 310A, 310B. W8457 7812 310A 310 B . 330, 390 (2nd) W845 9094360 (2nd) He459 $9669400{ }^{1 \mathrm{st}}$ W2452 10253460 (2nd W2452 11014800 (2nd) W8462 $10843 \quad 500$ (1st)
W8463-Part No. 7187. Primary coil used in models 290, 300, 310, $330,460,620,800$. Your Cost


## R. F. Chokes

 Wound on a new and highly efficient insulating material known as Crolite. Low distributed capacity. Solder| Stock No. | Millihen. | Your Cost |
| :---: | :---: | :---: |
| W10138 | 2.5 | 2. |
| W10139 | 58 |  |
| W10140 | 10 | 25 c |

W10141


## SIX-TUBE A. C. SUPER-HETS

## Police and Broadcast Model '6"

## Completely Factory Aligned

2 Bands-80-190; 175-550 Meters For those who desire an occasional watch on teur bands. A complete coil kit for building a modern receiver with excellent senaltivity and tuning characteristlcs. Efficient Ferrocart (iron-core)I.I. units are employed. The kit contains 2-band ant., r.f., and oscillator. padding condensers, two intermediate-frequency transformers, three-gang tuning condenser, band change awitch and a 4 calibrated airplane dial. Completely aligned at the factory, and furnlsted with
comprehensive plans and instructions. comprehensive plans
Shipping weight 8 Jbs. W10290-Complete. Your Cost
s. 12


## BROADCAST MODEL "6" KIT

Covers 175 to 550 metors. For the home-builder who is Interested only in the broadcast band. Complete kit comprises shielded antenna coil, shielded r.f. coil, shlelded oscillator, padding condenser, two Ferrocart (iron-core) i.f, transformers, three-gang tuniag condenser and a four-inch calibrated airplane dial. The completed receiver employs six tubee, and is a marvel of selectivity and sensitivity. With complete plans. Shipping weight 8 lbs .
Whort Wave and B'cast
Short-Wave and B'cast Model "6"
2 Bands; $15-55$ and 175 to 550 Meters Build this modern dual-wave, 6-tube superheterodyne receiver. Kit con sists of 2-band ant., r.I., and ose. coils Ferrocart (iron-core) i.f. units; 3-gang tuning condenser: padders; bandchange switch 4" calibrated aeroplane dial and instructions. Shpg. wt. 8 Ibs. w10291-
s9.12
n supply all additional parts necessary to complete any kit listed on this page. Write for special prlees.

KITS
4 AND 5 TUBE T.R.F., A.C. Designed for 110 -volt a.c. operation. The 4 -tube condenser and $3^{\prime \prime}$ airplane dial. Wt. 5 lbe W10296-With all plans Your Cost

The 5 -Tube kit
Similar in deaign to the 4 -tube kit above, excep that an additional r.f. coll is included and a three pang tuning condenser is used. W10297-Shipping weight 5 lbs
s3.67


Your Cost
R.C.A. WAVE-TRAP



Tunes o ver-
all from 400
kc. to 1750
$k c$ en kcrew a $\begin{aligned} & \text { et } \\ & \text { serew a } \\ & \text { justs to i.f. } \\ & \text { inter }\end{aligned}$ interference: 456 .
465 or 520
$k c i o b$ kc.ob and-
kusta over
just the entire broadcast
rangeand down to the police band. Incorporates iron-core unit for increased gain and eelectivlty. Effective for every point on the dial. W10014-Li


Ellminates or greatly reduces annoying squeals, howls, blasting. eross-talk, etc. Tunes from 485 to 1700 kc . Simple to instalf on any set. In metal shield can.
W9067-RCA No. 13467 List $\$ 2.65$
Your Cost

SHIELDED AND UNSHIELDED R. F. CHOKES
Unshielded chores are lattice wound on insulated cores and have lug terminals. Shielded chokes are housed in cans and have leads that can be brought out from top or bottom. brought our from of can: $15^{*}$ diameter by
Size high.

## Unshielded Chokes



## Shielded Chokes



GEN-RAL MULT:

## WAVE ASSEMBLIES

## A lour-band

 superheterodyne assembly and aligned at the factory the factory. 5 Covers 14 to 550 meters when tuned with a 3-gang .00037 mld . tuning con-
denser. Consls denser. Consists of antenna, r.f.. and oscillator coils all shielded, with changeover switch, trimmers and padders. With 2 hi-gnin, 456 kc. I.I. translormers and complete pletorial and schematic wiring diagrams and all instructions. These specifications are so explicit that even the novice is assured of excellent results if care is exercised.
W9875-Complete assembly as described. Wt. 5 lbs.
Your Cost W9887-As above less 1.35 formers. W
Your Cost
t. 5 lbs.
$\$ 7.20$

## Pie-Wound R. F. Chokes



For use in all types of high frequeacy receivers and in low power transmitters. Consists of a continuous four pie winding on a genuine Ceramite spool. Extremely low distributed capacity.

| distributed capacity, |  |  |
| :---: | :---: | :---: |
| Stock | Milli- | Your |
| No. | benrys | Cost |
| W10142 | 2.5 | $\$ 0.29$ |
| W10143 | 5.5 | .35 |
| W10144 | 10 | .39 |
| W10149 | 60 | .48 |
|  |  |  |

MOUNTED CHOKES
Lattice wound
On:bakelite
bobbins and
provided with
soldering lugs.
Extremely low
distributed ca-
paeity. Insizes
shown below.
Stock No. Millihen. Your Cost
W10105
W10102
W10104
W10001
W10000

## Q SHORT WAUE in BROADCAST COILS

Special Ribbed Bakelite Coil Forms Compaet type, made of rided with rimmed tops for easy grip. $2 \hbar_{2}^{\prime \prime}$ high, $11_{4}^{*}$ ciameter sockets. Low-toss, high dielectric strentht Ribbed construction permits air spaced winding, affording maximum eftiWinding, affording maximum efti-
ciency. Six-prong type for three ciency. Six-pr
$\begin{array}{lll}\text { winding coils. } & \\ \text { Stock } & \text { No. of } & \text { Your Cost } \\ \text { No. } & \text { Prongs } & \text { Each } \\ \text { W9988 } & 4 \\ \text { W9989 } & 5 & \end{array}$
Shielded R.F. Coils Provide exceptionzily high gain. All coils are matched to ach other to insure maximum efficiency Mounted on alumieumahield can $=12 \times 234^{\prime \prime}$ bigh and -quipped with
lhreaded spade lugs for mounting. De-
 igned to tune with .000865 mfd . condensers. Furnished with diusrams and instructions.
W10019-Antenna coil on W10020-R.F. Coil only. Your Cost Each Either Type

FOUR-TUBE KIT
w10092-Set of one antenna and Your Cost FIVE.TUBE KIT

|  | Mousm |
| :---: | :---: |

## Composite Oscillator <br> And I.F. Transformer



Used as combination oseillator and 1st if. Eliminaters one tube. Top tuning. No pad-
ding necessaryding necessary -made for special tracking .00036 mfd . condensers. Case $3^{\prime \prime}$ by $2^{\prime \prime}$ w9997-175 square. Wioopg.wt. 3 libs. Wour Cost Each. Either Type

LAMB "QST" Noise

For Super Hets


Operates with any superhet having two or more i.f. stages. Uses 3 tubes: 6J7. 6L7, 6 H 6 . Kit form or wired Chassis $8 \times 2 \times 41 \mathbf{3}^{\prime \prime}$. Less tubes. I.F. Wired Your Kit Your | (kc) | No. | Cost | No. | Cost |
| :--- | :--- | :--- | :--- | :--- |
| 175 | W12698 | $\$ 575$ | W12687 | $\$ 3.95$ | $\begin{array}{llrlrr}456 & W 12699 & 5.75 & \text { W12636 } & 3.95\end{array}$

## DeLuxe Model

Uses additional 6.J7 tube. Can be used with any superhet ragardless of number of i.f. stages, $9 / 8 \times 35 / 8 x$ $512^{\prime \prime}$. Less tubes. \begin{tabular}{cc|cc}
Wired \& Your \& Kit \& Your <br>
No. \& Cost \& No \& Colt

 $\begin{array}{cc}\text { Wi2702 } & \text { Cost } \\ \$ 7.35 & \text { No } \\ \text { Wi2700 } & \text { Cont } \\ \$ 5.25\end{array}$ 

$W 12702$ \& $\$ 7.35$ \& $W 12700$ \& $\$ 5.25$ <br>
$\mathbf{W} 12703$ \& 7.35 \& $W 12701$ \& 5.25
\end{tabular}

## TTITAS BAKELITE

PLUG-IN COIL NITS
 wound For 00014 med conder

## 4-Prong-2 Winding

 W6001617 meters. List $\$ 1.65$ Your Cost
W10041 Broadcast coila coils, 190-550 meters. Your Cost
W10039-tiltra s.w. meters. List 65 c .
Your Cost. $\qquad$
6-Prongs-3 Winding

## W10042-Kit of 4 coils coverin

 16-217 meters.Your Cost
$\$ 1.35$

W10043-Broadcast
cnils. 190-550 meters.
Your Cost
W10044-Untra s.w. coil
meters. List 65c
Your Cost.
$85^{c}$

## Trutent HIGH GAIN I.F. UNITS

Highly efficient design for use where space is limited Employs two-in-one irimmer on Isolantite base, adjust able from top of shield can. Alt leads are RMA colorcoded for ease of installation. Size of aluminum shield ean is $13 /{ }^{13} \frac{3}{6} \times 3 / \sqrt{3}$ "; threaded lug mounting. Two bronze springs hold entire unit in the shield, thus facilitating easy removal for rapid servicing. Primary and secondary windings are single-pi wound. Double tuned Isolantite trimmers.

In 11

| Stock No. | $\begin{gathered} \text { Freq. } \\ \text { Kc. } \end{gathered}$ | $\begin{aligned} & \text { Range } \\ & \text { Kc. } \end{aligned}$ | Set Position | Your Cost Each |
| :---: | :---: | :---: | :---: | :---: |
| W10021 | 175 | 170-180 | Input |  |
| W10015 | 175 | 170-180 | Interstage |  |
| W10016 | 175 | 170-180 | Output |  |
| W10017 | 262 | 250-265 | Input |  |
| W10018 $\mathbf{W 1 0 0 2 5}$ | 262 262 | $250-265$ $250-265$ | Interstage |  |
| W10022 | 456 | 440-470 | Input |  |
| W20027 | 456 | 440-470 | Interstage |  |
| W10034 | 456 | 440-470 | Output | for \$6 |
| W10024 | 456 | 440-470 | Output C.T. |  |
| W10049 | 3000 | -2900-3100 | 1st or 2nd |  |
| W10050 | 3000 | 2900-3100 | Output |  |

Litz-Wound AC-DC Coils 175-550 Meters Matched highgain coils furnished unshielded for use in 4 -tube High impedance primaries with $1-$

bank Litz-wound
secondaries. 210 secondaries. $21 / 4$ long, $7 / 8^{\prime \prime}$ diameler. Tunes denser. Furnished with mounting brackets and diagrams,
W10012-Antenna Coil.
W10095_R.F. Conl.
Your Cost Each.......
Four-Tube Kif
W10056-Kit of 2. One antenna and oner.f.
$63^{c}$

## TUBE BASE SHORT-

 WAVE COILS

Wound on Bakelite tuhe bases with 4 prongs; ft standardsockets. Highly efficient on all waves from 16 to 225 meters. 1) Tunes with either 00014 or . 0015 mfd., condenser. Wound with enameled wire and impregnated to avoid loosening. W9981-Set of four coils Your Cost, Special

HAMMARLUND "XP53" SHORT-WAVE


## PLUG-IN COILS

Provide maximum signal strength and greatest selectivity on all bands. Precision wound on natural, amber-colored ribbed forms. Flange grips for easy handling, and meter indexes for wavelengt h inseriptions. $1 / l_{2}$ " diameter, $27 /{ }^{2}$ " long, exclusive of prongs. Has shelf for padding condenser. Fit standard sockets.

SWK4-4-PRONG KIT

Kit of four 2 -winding coils covering from 17 to 270 meters with 140 mmid. condenser. \$1.76 Individual 4-Prong Coils Stock No. Band-Meters Net Stock No Band-Meters Nei $\begin{array}{lll}\text { W8500 } & 10 \text { to } 20 \quad \text { 59c } & \text { W8501 } \\ \text { W8474 } & \text { Sand-Meters Net }\end{array}$ \begin{tabular}{lll|lll}
W8474 \& 17 to 41 \& 59 c \& W8478 \& 10 to 20 \& 73 c <br>
$\mathbf{W 8 4 7 5}$ \& 33 to 75 \& 59 c \& $\mathbf{W} 4479$ \& 17 to 41 \& 73 c

 

$\mathbf{W 8 4 7 5}$ \& 33 to 75 \& 59 c \& $\mathbf{W 8 4 7 9}$ \& 33 to 75 \& 73 c <br>
$\mathbf{W 8 4 7 6}$ \& 66 to 150 \& $\mathbf{4 4 c}$ \& $\mathbf{W 8 4 8 0}$ \& 66 to 150 \& 59 c

 

W8476 \& 66 to 150 \& 44 c \& W8480 \& 66 to 150 \& 59 c <br>
W8477 \& 135 to 270 \& 44 e \& W8481 \& 1355 to 270 \& 59 c

 

W9790 \& 250 to 560 \& 73 c \& W9791 \& 135 <br>
\& W5 to 2760
\end{tabular}

## SWF LOW-LOSS COIL FORMS

These forms are made of XP53 dielectric. Their amber color is natural. All forms are grooved and equipped with flange grips for casy handling and meter indexes for wavelength inscription. Size 1/2" diameter, 2Y"I ons



For ter clockwise rotation. ${ }^{3}$ upers $h i g h,{ }^{3}$ wide. 1 -gang condens-
pers ers are $1^{3 / 8^{\prime \prime}}$ long; 2-gang con-

COUNTER.CLOCKWISE

| Stock No. W9710 W9711 W9712 | Gangs 1 2 3 3 | $\begin{gathered} \text { Your Cost } \\ \text { so.75 } \\ .84 \\ 1.23 \end{gathered}$ | Stock Na. <br> W9720 <br> W9721 <br> W9722 | Gangs 1 2 3 3 | Your Cost s0.75 .84 1.23 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| . 00041 Mfd. For T. R. F. Circuits |  |  |  |  |  |
| $\begin{aligned} & \text { W9732 } \\ & \text { W9733 } \end{aligned}$ | ${ }_{3}^{2}$ | 1.84 | $\begin{aligned} & W 9734 \\ & W 9735 \end{aligned}$ | $\begin{aligned} & \hline 2 \\ & 3 \end{aligned}$ | 1.84 |
| . 000365 Mfd. For 175 Kc. Superhets |  |  |  |  |  |
| $\begin{aligned} & \text { W9792 } \\ & \text { W9793 } \end{aligned}$ | ${ }_{3}^{2}$ | 1.84 | W9794 W9795 | $\begin{aligned} & 2 \\ & 3 \\ & \hline \end{aligned}$ | .84 1.23 |
| . 000365 Mid. For 456 Kc. Superhets |  |  |  |  |  |
| W9798 $\mathbf{W} 9799$ | 2 3 | .84 1.23 | W9796 W9797 | 2 3 | .84 1.23 |

## bAKELITE BAR KNOBS



Highly polished Bakelite knobs with arrow pointers. For $1 \mathrm{a}^{\prime \prime}$ shafts; set screw type. W13055- $2^{1}{ }^{17}$ long. $3 / 1$ skirt. $11 / /^{\prime \prime} \mathrm{rad}$. 10 for 70c. Your Cost Each. W13053- $11_{4}^{\prime \prime}$ long, ${ }^{8}{ }^{\prime \prime}{ }^{n}$ skirt.
10 for 50 c . Your Cost Each.

## POPULAR BAKELITE KNOBS



M
MODERN BAKELITE KNOBS


Similar to those listed above. Have attractive modernistic designs. Of molded Bakelite, with inserts for ${ }^{3}$ " shafts; set screw type. Type F is especially designed for use with midget
ers; others for general, all-purpose use. Stock Type Diam. Your Cost 10 No. No. Inches Each For


Compact, correctly designed variable condensers for t.r.f. and superhet circuits. All feature heavy aluminum plates, ball bearing rotors and Bakelite insulation. All have low-loss end plates. Twoand three-gang units supplied with trimmers on the side. All shafts; each furnished with a split bushing for $3 / 8^{\prime \prime}$ dials. All types available with clockwise and couners are densers are 2 long; 2-gang condensers are $21 / 2$ long; 3-gang condensers are shipping weight 2 lbs.

CLOCKWISE

## Midgef Variable Condensers

 Non-corrosive aluminum plates, Bakelite insulation, single-hole mounting, $14^{n}$ brass shaft. Ideal for short-wave receivers and small $x$ 'mitters.

## 

WOOD KNOBS Modern beauties for all types of receivers, test instruments, etc. Steel setscrews; all for ${ }^{1 / 2}$ shafts.
Type $C$ is black with chromium inlay, types A and E are of two tone construction. Au with brass inserts.

## STANDARD PILOT LIGHT SOCKETS





DUAL MIDGET TRIMMERS Same as above, but consist of two trimmers
lite strip. Capacitance. 3 to 30 mmfd . each W9776-.Your Cose Each.

Compact Single Condensers
Heavy aluminum plates with brass supports; $14^{\prime \prime}$ brass shaft extens $11 /{ }^{\prime \prime}$ "; ball-bearing rotors; end stop; counter-clockwise rotation. tors; end stop; counter-clockwise rotation.
Overall: $17{ }^{\prime \prime}$ "high, $15 /{ }^{\prime \prime}$ deep, $21 / /{ }^{\prime \prime}$ "wide. Overall: $17{ }^{\prime \prime}$ high, $15 / \mathrm{s}^{\prime \prime}$ deep, $21 / \mathrm{m}^{\prime \prime}$ wide
Supplied less trimmers. Shpg. wt. 1 lb . Stock No. Cap. Mid. Your Cost Each $\begin{array}{lll}\text { W9762 } & .0001 \\ \text { W9763 } & .00014 \\ W 9764 & .00025 \\ W 9765 & .000365\end{array}$

## Truteat SHORT-WAVE CONDENSERS

Single and multiple gang variable condensers of the low shield type. Designed for use with all types of short-wave receivers. Have heavy aluminum plates and ball bearing roiors. All units shown in the listing have counter-clock wise rotation. Shafts are ${ }^{1}$ " in diameter and


Stok
W9716 . Cap. Mid.
W9716
W9717
W9718
W9718 . 00001
W9719 . 00015

## - MIDGET TRIMMERS

These extremely compact trimmers are mounted on Bakelite strips and are ideal for use in short wave sets. 3 to 30 mmfd .
ch ................................ $\boldsymbol{V}^{\text {e }}$

## JEWELLED PILOT LIGHT BRACKETS



W15010-Brass $6^{\prime \prime}$ long. Your Cost W15011-Fibre $6^{" 1}$ long. Your Cost.
W15012-Brass $12^{\text {" }}$ long. Your Cost. W15012-Brass $12^{\text {N }}$ long. Your Cost.
$.10 c$
10 for $40 \mathrm{c} ; 100$ for $\$ 3.50$

Couplings for connecting two or more condensers, rheostats, switches, etc., in tandem. Extenders for lengthening shafts of same. At accurately machined to exact size as specified. 6-82 machine screws used on all couplings and extenders. All types available in brass of insulating material.
 100 for Cost Each, Any Type.

SPLIT BUSHING
Fig. C. For increasing shaft diam. from $14^{\prime \prime}$ to

W9730-Your Cost Each..

## FIBRE AND BRASS SHAFTING

Full length, and straight, if diameter.

## $c$

 V9730-Your Cost Each.,

CROWE 4-BAND AIRPLANE


## DIAL

An attractive, large sized airplane dial especially de signed for use with allcalibrated in four bands as follows: $550-1500 \mathrm{kc}$ (broadcast), $1500-4000 \mathrm{kc}$. 4-10 me., and 9-23 mic Dointer ended knife edge brations-easy to read. Scale diam. 4. and $3 / 8$ "condenser shafts. Knob shaft $\mathrm{K}^{*}$ sameter, Tuning ratio 7 to 1 in 180 degrees. Complete with bronze finished escutcheon 42 / diamerer, in a neat design. Shpg. wt. 2 lbs W9879-For clockwise condensers.
Your Cost,
Each

## NEW LARGE AIRPLANE

 DIALSMulti-Colored Dial Scales Calibrated in 3 different culored bands. For 1/4" and $3 /{ }^{\prime \prime}$ shafts. With iwo pilot light socketsand
bronze finished bronze finish escutchoon. clackwise con
 densers.

43/2" Diameter Dial
Calibrated: 55 to 160 (broadeast, add zero for ke. equivalent); 0 to 100 for short-avaves; 1 to 12 special logging dial. Shpg. wh. 2 lbs. Your Cost Each
$6^{*}$ Diameter Dial
Calibrated: 550 to $1600 \mathrm{kc}, 1700$ to 5000 kc . 5.3 to 15 mc . Shpg. wt. 2 lbs.

Your Cost,
Each

## "GIANT" AIRPLANE DIAL

 Hus $5^{\prime \prime}$ full-vision dial and double knife-edge pointer. Glass lens. Calibrated in $1500-4600$ ke.; $5.8-15.8$ 1500-4600 ke.; $5.8-15.8$me. Last scale also calibme. Lant scale also calib-
rated in meters and word descriptions. Ratio 51, :1 in $180^{\circ}$. Has $1 / 4^{\prime \prime}$ shaft and positive friction grip drive, 2 pilot light sockets and $6^{\circ}$ bronza egcutcheon.
 Takes either ${ }^{1} \mathrm{I}^{\prime \prime}$ or $1 / /^{\circ}$ " shafts. Shyg. Wt. 2 Ihs W9906-For clockwise condensers.
W9907 For counter-clockwise condensers. Your Cost,
Either Type
si. 47

## Friction Drive Rubbers

Eight different types for popular receivers, includingAtwaterKent, R. C. A.. Stewof 24 rubbers. $w 9400$
Your cost. $8 ?^{\circ}$
 All dials listed on this page, encept the Kurz-Kasch, are supplied with a split both $1 / 4^{\prime \prime}$ and $3^{3}$ "condenser shafts.

## PHOSPHOR BRONZE

## DIAL CABLE

Finest phosphor bronze cable 42 strand type made up of in dividual strands wound over a linen core. Provides maximum strength with minimum of stretch. 16 strand cable is
closely braided. closely braided

## Stock Strand



## LINEN DIAL CABLE

Finest black Enen strong braided cord. W9939- 5 ft . Your Cost
W9940- 25 ft Your Cost
W9941- 50 ft Your Cost W9941- 50 ft Your Cost
w9882-100 it. Your Cost

## DRIVE CABLES-BANDS-BELTS

## (c)ar(0) a (

Only the mone popular types are shown. We can supply any cable, band or belt on order at the lowest prices.
Make of Set Model Stock No. Net Atwater Ken: 35, 37 W9822 $\$ 0.15$ Atwater Kent Atwater Kent Bosch
Buscb
Brunswick
wick
15
35,37
44
46
481

Colonial
58.

. 15

General Motors
Kolster**
Kolster
Majeatic No.
5. 22 Rear

No. 1 43, 44
Majestic
Phileo
Phileo
RCA
RCAi
Sparton
Steinite

$$
\begin{array}{ll}
1 & 70 \\
2
\end{array}
$$

52,60

16, $17,64,67$

* Heavy cord
t Linen cord


## NEW WOVEN BELTS

3-ply canvas and 2-ply rubber belting Make and Midel

Stoc
Crowe
All Models
573, 631, 643, 723
$731,733,735,711$
Grunow Grunow Silvertone Silvertone , 1191.835, 941 Zenith 1930. 1940, 1956, 1970
$7170,1941,1981$ Zenith 5S29, 5S56, 980
Zenith
920, 975
Your Cost Ench
Any of the Rbove Types.
w9409

## W9401

 W9402 W9403 $W 9404$W9405
W9406
W9407
W9408
$15^{\circ}$
 6 to 1 Ratio
Two scales on a translucent dial; one scale callbrated from 0 to 100. The other scale from 100 to 0 . Knife edge pointer covers entire scale. For $1 / 40$ and "t" shafts. With escutch
eon. Diameter of scale $3^{15}$
" 15 "
W981s-For counter-clockwise cond
$\cdot 3^{\circ}$

## AIRPLANE DIALS

Attractive globe design on
dial face. Brown figures on dial face. Brown figures on buff colored dial. Positive friction drive-no backlash. Has two pilot bulb sockets. Bronze finished escutcheon. Fits both $\zeta{ }^{\circ \prime \prime}$ and 3" shafts. Black double ended pointer. Scales calibrated $0-100$ (upper) and
 $100-0$ (lower). Shpg. wt. 2 Jbs . For CounterClockwise Condensers.

| Stock No. | Diam. | Ratio | Your Cost |
| :---: | :---: | :---: | :---: |
| W14150 |  | 63/6 to 1 | \$. 70 |
| W11515 | $31 /{ }^{\prime \prime}$ | $81 / 3$ to 1 | . 70 |
| W14152 | $3{ }^{5}{ }^{\text {c }}$ | 10 to 1 | 1.10 |
| W14153 | $4^{7} /{ }^{\prime \prime}$ | 12 to 1 | 1.39 |

## Modern 3-Band Airplane Dial

 This attractive modernistic dial will dress up any rebrated for 3 bands, 550 to 1700 kc . 1.75 to 5 mc ., 5 to 20 mc . Bands clearly marked and all scaies easily and directly read. Ratio 12:1 in $180^{\circ}$ diameter $35{ }^{5}$. For in with both $86^{\prime \prime}$ and $1 /{ }^{\circ}$ " con denser shafts. No necrastiy or special ca ino necrssity will fit standard $3 火$ round opening positive iriction drive that will not slip. Co plete with bronze escutcheon Shpg w. Com W9908-For clockre W9910-For. counter-clockwise cond.
Your Cost, Either Type........

## Kurz-Kasch Dials

Made of molded Bakelite. Requires only one hole for Requires only one hole for
condenser shaft and two small holes to secure and wo sman Dial to secure dial to panel. Dial ratio 8 to 1. No backlash. Fits $1 / /^{\prime \prime}$ shaft. *Indicates for counter-clockwise condensers. Shpg, wit. 1 lb . Stock
No.


Calib-

## MIDGET DIAL

Unbreakable lens; $y^{\prime \prime}$ shaft; takes 76" or 1 " " condenser: 2 bands: $530-1610 \mathrm{kc}$., $1.5-4.2$ me.; pilot lite socket; recwith eacutchoow. $2,4 \times 1 / 2$ 1 lb . For clockwise densers.
Your Cost

## Voltage -REGULATDR - RECTIFERS Oliage and speclat BULBS

## GENUINE MAZDA

 PILOT LITE BULBSThese are genuine GE bulbs of American manufacture. They are used for radio dial illumination, as indicators in test in struments, etc. Shpg. wt. 8 oz . per carton of ten. This list fills every radio
need. No. Type Volts Amp. Each For Ten W12250 $W 12250$
$W 12251$ $W 12251$
$W 12252$ W12252 $\begin{array}{lll}\text { W12259 } & 46 & 6.3 \\ \text { W12254 } & 44 \dagger & 6.3\end{array}$ W1225 Indicat bead" type for a.c.-d.c. sets


Cenuine Tungar Bulbs Air Cell Bulb. Exceedingly low drain, 0.06 ampere Aircell types.
W12274-Carton of $10, \$ 1.18$
Your Cost Each
VICTOR-MAZDA Pilot Bulb Intermediate base, frosted bulb. 110 volts. For use in Colonial, Victor and other receivers. W12253-Carton of 10, \$1.65 Your Cost Each

ITc
Special Auto Radio Bulbs
Round bulb, miniature base. 6-8 volls at ampere. Mazda type No. 50. W12273-Carion of 10,59c Your Cost Each

## DIAL LIGHT COLORING



Kjt of 4 colors, red, green, blue and amber, and bottle of screwtop, widemouth bottle for easy dipping. Drys in 1 minute. Color is permanent. W15185-Your Cost Per Kit

## LINE BALLASTS



Line voltage may fluctuate from 95 to 135 will maintain constant voltage into receiver or amplifier designed for replacement is not isted, give complete details with remittance and we will ship tonce. Shippiag weight 2 lbs.
Stock Replacement Your No. ${ }^{\text {Nos }}$ For Cost W6806 Clarion W6808 Grehe W6816 Majestic $70 \$$
W6817 Majestic 72 W6818 Majestic 80 W6819 Majestic 90 W6805 Sonora
W6823 Stewart-W arner 900
W6823
$W 6824$
Stewart-Warner 900
W6824 Stewart-Warner 960
Automatic Line Voltage Control
A dependable voltage regulator. Small, neat
 compact
Fits any standard outlet. For all A.C. rets up to 9 tubes. Steel clad. air-cooled. Shipping weight 11 b . W16955-List 51.25

$30^{c}$

For a.c. sets Rheostat for adjustment ol ine voltage o exactiy 110 volts. Meter, constantly in ine. Saves tubes, parts. Wt. 3 lbs.
W11021-List S7.00.

## AMPERITE A.C.-D.C. Resistor Tubes

 Seventeen types replace practically all A.C.-D.C. resistor tubes now in use Refer to replacement listings for types replaced by A mperite tubes.
Types 6B, BF40, 50A2, 50B2, 3ER-248, 60R30G, 878R48 and 165R4 replace other tubes with the same designations only

| Stock | Amp. | Stock | Amp. |
| :---: | :---: | :---: | :---: |
| No. | Type | No. | Type |
| W12232 | KL-45 | W12241 | 50.2 |
| W12233 | KL-25 | W12242 | 50B2 |
| W12234 | KL-75 | W12243 |  |
| W12235 | KL-25H | W12244 | BF40 |
| W12236 | KL-501 | W12245 | 3ER-248 |
| W12237 | KL-75H | W12246 | 60R-30G |
| W12238 | 4P-45 | W12247 | 878R48 |
| W/12239 | 3-40 | W12248 | 165R4 |
| W12240 | $50-\mathrm{AB}$ |  |  |
| Your | ost Eac |  |  |


|  | Replages All A.C.-D.C. Ballasts |  |  |
| :---: | :---: | :---: | :---: |
|  | Beginning | With | Ending With |
| Amp. | With | Numbers | Letters |
| KLype | K, L, M or ${ }^{\text {BK }}$ | 36 to 67 | A,B,C or D |
| KL-25 | K,L,M or BK | 10 to 36 | A,B,C or D |
| KL-75 | K,L,M or BK | 67 to 105 | A,B,C or D |
| KL-25H | K,L,M or BK | 11 to 26 | F.G or H |
| KL-501 | K,L,M or BK | 36 to 67 | $\mathrm{F}, \mathrm{G}$ or H |
| KL-75H | K,L,M or BK | 67 to 105 | F.G or H |

Type 4P-45-4-Prong

| Replaces the following | types: |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $140 R 4$ | 140144 | KX42B | LX42D | LX49C | KX55D |
| $140 R 8$ | $50 \times 3 T$ | KX42C | KX49B | LX49D | LX55B |
| $140 R 44$ | $165 R 8$ | KX42D | KX49C | KX55A | LX55C |
| 140 L 4 | $165 R 44$ | LX42B | KX49D | KX55B | LX65D |
| 140 L 8 | $165 L 4$ | LX42C | LX49B | KX55C |  |

Type 50-AB-Octal Bose Replaces the following types: $24 \mathrm{B2} \quad 42 \mathrm{A2} 49 \mathrm{B2}$ 55B2 2 LR 212 49A1 55 Al
42A1 49A2 55A2
Type 3-40-4-Prong Replaces the following types: $\begin{array}{llll}58 & 140 R & 185 R & \text { KX49A } \\ 50 & 165 R & \text { KX42A } & \text { KX55A }\end{array}$

220.Volt To $110 \cdot$ Volt
Line Cord Resistors


For any set up to 7 tubes. American cord equipped with standard male plug and female receptacle; European type resistor cord has foreig pluy and standard receptacle. W5243-Standard
W5244-Foreign.


## NEON GLOW LAMPS

Used extensively in test astruments such as esistance indicators hort testers, ort lesters, continuity esters, etc. Draw a current. Are extremely ensitive. Glow with a brillian orange-red radiance. On d.c. only ne electrode glows (the negative) but gives as much illumination a do both electrodes on a.c. All oper on 105-125 voles a.c. or d.c except the 16 watt types which perate on a.c. only (this voltage is the minfmum striking voltage). Minimum operating volts (approx.); on a.c.- 60 volts; on d.c. 100 volts.

STANDARD EDISON BASE

| Stock | Type |  |  |
| :---: | :---: | :---: | :---: |
|  | No. Finish | Watts Each |  |
| W12265 | G10 Clear | 1/2 | 36 c |
| W12266 | G10 Clear |  | 36 c |
| W12267 | S14 Clear | 2 | 45 c |
| W12262 | S14 Red | 2 | 49 c |
| W12263 | S14 Yellow | 2 | 49 c |
| W12276 | S14 Clear |  | 54 |
| CANDELABRA BASE |  |  |  |
| W12264 | T4y/2 Clear |  | 36 c |
| W12277 | G10 Clear |  | 41 c |
| W12278 | 3 G10 Clear |  | c |
| PORCELAIN RECEPTACLES For Neon Glow Lamps |  |  |  |
|  |  |  |  |
| W13331-Candelabra base. <br> W13330-Miniature. <br> Either Size, Each. |  |  |  |
|  |  |  |  |
| w13327-Standard base. Your Cost Each. |  |  |  |

CLIP.TITE RADIO TUBE SOCKETS - $4=\frac{4}{6}$ 名 BAKELITE

## AND STEATITE CONSTRUCTION

## SUB-PANEL WAFER SOCKETS FOR

 GLASS AND
Sturdily made wafer tube sockets constructed of lami-
suted Baisite Completels. insulated top Selt
aligning, floating one-piece contacts, cadmium plated. Midget sockets aligning, $1 / 2^{\prime \prime}$ mounting centers; standard size sockets have 11196 mounting centers. Octal socket (midget) fits all metal and metal-glass tubes. These sockets are ideal for general replacement purposes or for the new set. Every serviceman and dealer should keep a stock-they are priced exceptionally low. Supplied without markings.

| Standard Size |  |  | Midget Size |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Stock |  | Your Cost | Stock |  | Your Cost | 10 |
| No. | Prongs | Each | No. | Prongs | Each | For |
| W13070 | Four |  | W13114 | Four | c | 15 |
| W13078 | Five |  | W13115 | Five |  |  |
| W13071 | Six |  | W13121 | Six |  |  |
| W13069 | 7, small |  | W13122 | 7, small | 36 |  |
| W13074 | 7, large |  | $W 13125$ $W 13127$ | 7, large |  |  |
| 10 For. | , large | .. 45 c | W13127 | 8, octal |  |  |


| EAMMARLUND Isolantite Sockets |
| :---: |
| Glazed top and sides. rust proof contacts. <br> 2 " " long. |
| No Prongs No. Prongs <br> W8496 W8499 7 L  <br> $\mathbf{W} 8497$ 5 $\mathbf{W}$ $\mathbf{W} 850$ |
|  |
| Any Type. |
| W8532-8 octal......Each.....44e |

These Isolantite sockets reduce losses to a minimum. Suitable
for either standdard sub-pane or baseboard mounting.

\section*{Nock Prongs} | No. | Prongs |
| :--- | :---: |
| W14425 | 4 |
| W14426 | 5 |
| $W 14427$ | 6 | W14440 7 large W14428-Special 6-prong type for National cols.

 W14439 W14477
6-prong

Plug and Socket Cable Connectors
Molded connectors designed to fit the standard tube sockets Removable caps.

| Stock No. | Prongs | Your Cost Each |
| :---: | :---: | :---: |
| W11666 |  | 9 c |
| W11667 | 5 | 12 c |
| W11668 | 6 |  |
| W11670 | 7 S |  |
| W11669 | 7 L |  |
| W11671 | 8 octal. | 18 c |

Heavy Duty Plugs and Sockets
A series of heavy-duty multiple contact plugs and sockets made of molded Bakelite with heavily armored metal caps. Excellent for use with portable P.A. systems. Types A and B have metal cable clamps.


## AMPHENOL

## Cable Connectore



Steel-clad connectors, male and female, for ull types of work. Perfect insulation. Male end has long prongs that are firmly gripped by the spring contacts in the female end. Have rubber grommets in ends o protect cable. Flnished in japanned black. 11/" diameter, 1 Na long. Ideal for P.A., theatre, radio ,etc., work.

## Male Connectors

| Stoca No. Prongs |  |
| :---: | :---: |
| W11471 4 |  |
| W11472 5 |  |
| W11473 6 |  |
| W11474 7 S | Each |
| 10 For. | \$1. |
| Female Connectors |  |
| Stock No. Prongs Your Cost | Your Cost |
| W11475 4 |  |
| W11476 5 |  |
| W11477 6 |  |
| W11478 7 S | Each |

## Locking Metal

## Sleeve Connectore

Designed to fit over the male
and female connectors shown above. Cadmi-
um plated steel,
threaded so that they lock together Diameter overall $11 / 2^{\prime \prime}$, length $21 / 2^{\prime \prime}$. Your Cost, Per Pair . . . . I $5^{\circ}$ Rubber Capped Male and Female Pluge


Molded rubber. Standard socket arrangement of
holes and prongs. Idoal for outdoor use. Handles $1^{\prime \prime}$ long.


## YAXLE <br> 品

YAXLEX Midget Jacks pact. Mount in *" hole. Type A-1 "Infant" jack is no
 Stock Part No. No. Type Cour W6182 A-1 Open Circuit 15 c W6183 A-2 Circuit Closing 23e W6184 A-2A Two Circuit
YAXLEY Junior Jacks
 No. 701. Open Circuit W6451-No. 702. Circult closing W6435 No 702B. Thre mircuit microphone.
Your Cost, Either Type control.
W6452- Your Cost No. 704. Interstage. No. 706 Yur Cast trol. rol.
N 644

Compact extend only the panel. Heavily

## YAXLEY Radio

 Convenience Outlets Antenna and GroundOutlet No. 116 Has two pin jacks marked "Ant" complete with tip plugs.

Your Cost Each

## Aerial,

Ground and Duplex A.C.
No. 216-Ha
two pin tip jack
recepiacles. With two t
Shpg. wt. 1 lb . List $\$ 1.10$
Wetid-Brass
W6415 Bakelite
Your Cost Each
$65^{\text {c }}$


Bakelite insulation, polarized plugs. Positive spring contacts. W6375-No. 635. 7-prong male W6379-No. 645. 7-prong female. Your Cost, Either Type
W6376-No 625 ...... $>$ W6380 No. 615. 12-prong male
Your Cost,

$73^{\text {c }}$
Molded Twin Tip Jacks Shorting Type Circuit is closed when the tips
Red or Black. Specify color.
No. $432-$ S.P.D.T.
W13035-Yout Cost Midget Jack Switches Require little space.
With knob, pointer and on-of plate.
hole mount.
No. $10-$
W 6446
Your Cost 20
No. ${ }^{\text {W6 }} 447$-S.P.D.T.

## YAXLEY Gang Switches

Contact members are heavily silver
plated, and given a smooth hard finish plated, and given a smooth hard finish. Contact shoe, of the self-cleaning type is of pure silver. All switches are proadjustable stop, thus a single switch may be used as a 2, 3, 4, 5, 6 (up to 11), point switch by simply adjusting the stop on front of switch to number of points required. Bushings $3 / 8$ " and extend $38^{\prime \prime}$. Pointer type, bakelite knob supplied.

SINGLE GANG SWITCHES

| Shorting | Non Shorting |  |  |
| :---: | :---: | :---: | :---: |
| Stock No. | Stock No. | Circuits | Poin |
| W6247 | W6263 | 1 Circuit. | 1 to 6 points |
| W6248 | W6264 | 1 Circuit. | 1 to 11 points |
| W6249 | W6265 | 2 Circuit. | 1 to 5 points each. |
| W6250 | W6266 | 3 Circult. | 1 to 3 points each. |
| W6251 | W6267 | 4 Circuit. | 1 to 2 points each MiTCHES |
| W6252 | W6268 | 2 Circuit. | 1 to 6 points each. |
| W6253 | W6269 | 2 Circuit. | 1 to 11 points each |
| W6254 | W6270 | 4 Circuit. | 1 to 5 points each. |
| W6255 | W6271 | 6 Circuit. | 1 to 8 points each |
| W6256 | W6272 <br> THREE | 8 Circuit. GANG | 1 to 2 points ea WITCHES |
| W6257 | W6273 | 3 Circuit. | 1 to 6 points each. |
| W6258 | W6274 | 3 Circuit. | 1 to 11 points each |
| W6259 | W6275 FOUR | 6 Circuit. GANG | 1 to 5 points each. ITCHES |
| W6260 | W6276 | 4 Circuit. | 1 to 6 points each. |
| W6261 | W6277 | 4 Circuit. | 1 to 11 points each. |
| W6262 | W6278 | 8 Circuit. | 1 to 5 points exch. |

## Your Cost Each $\$ 0.59$ <br> $\begin{array}{r}0.59 \\ .68 \\ .73 \\ \hline\end{array}$ <br> .73 .79 .85 .94 1.03 1.18 | 1.18 |
| :--- |
| 123 | 1.32 <br> 1.29 <br> 1.38 <br> 1.62 1.76



No. 1400L-Circuit Opening. For testers and analyzers. 12 poeitions; opens one at a time. $1 \frac{3}{3} \times 2 /{ }^{\prime \prime}$ "3/8" bushing. 2 notched shaft. With W6370-Your Cost. \$2. 5 No. 13124-24-Point TapSwitch. With knob and dial plate. Shpg We. 21 bs List $\$ 3.25$ \$I.9I
W6371-Your Cost.
 Jaych
Switch
lies par-
all 1
with
it panel. Furnished complete with black knob; on-off plate. Mounts in ${ }^{7 / 6}$ hole, up to $\mathrm{s} / \mathrm{m}^{\prime \prime}$ thick, $11 / \mathrm{m}^{\prime \prime}$ deep.

Two Position Switches

$$
\begin{aligned}
& \text { Stock Part } \\
& \text { No. No. }
\end{aligned}
$$

|  |  |  | You |  |
| :--- | :--- | :--- | :--- | :--- |
| No. | Nart |  | Type | Cos |
| N6471 | 730 | S.P.D.T. | $\$ 0.50$ |  |


\section*{$\begin{array}{ll}W 6472 & 740 \\ W 6473 & 745\end{array}$ <br> | $W 6473$ |
| :--- | :--- |
| $\mathbf{W} 6474$ | W6475 733 5-Sprin

D.P.D.

4-P.S.T <br> $$
\begin{aligned}
& \mathrm{T} \\
& \mathrm{Tm} \\
& \mathrm{~T} \\
& \hline \mathbf{T}
\end{aligned}
$$}

Three-Position Switches (Center Position OH) W6440 732 S.P.D.T. W6441 762 D.P.D.T. W6442 763 3-P.D.T | W66442 | 764 | 3-P.D.T. | .91 |
| :--- | :--- | :--- | :--- |

## IS-Point Tap Switch

A single
gang, 15
point la switch of
theshorting
type. Fur-
nished with pointer knob and etched dial plate 15. Positive

wiping con-
tacts. Mounta in a single $s_{8}$ " panel hole. Ideal for use where multiple switching is required.
W6372 Your Cost.

## YATEEY Push

 Button Switches

Non-locking Types Furnished withblack Mounts in single hole, on panels up to $1 / 4$ " thick. W6460-No. 2001. Make Contact. W6461-No. 2002. Break Contact. Your Cost,
W6462 No. 2003.S.P.D.T. $5^{3}$ Your Cost Each

2-pole, 2contact.
W64C4 No. 2005. 2-pole, break Your Cost, Either Type $70^{\text {c }}$ Wour Cost
Your 2006. D.P.D.T.
E Each W6463 No. 2007. Make t Your Cost Each........ $6^{\text {c }}$ W6468-No. 2008
D.P.D.T.

Insulated Tip Jack No. 420 -Bakelite Phone tips nest all the way in jack. Mount in a 14 "hole.
W6505-Red W6506-Blac
W6507-Green
W6508-Yellow
Your Cost Each
Per Pair, 1-red 1-black
W6467-Your Cost.
$c \left\lvert\, \begin{array}{lll}\text { W6535 Biack } \\ \text { W653G } & \text { Yellow } \\ \text { W6537 Green }\end{array}\right.$ W6537 Green Your Cost Each Per pair. 1-red 1-black
w6538-Your Cost.

Round Head Jacks Compact type Insulated
tops. Mount in a single $15^{n}$ hole. For panels up To thick. No. 520 W6534-Red
W6534-Red

We can supply any Yaxfey item not iisted on this page at a dis
count of 40 and $2 \%$ from the list price. No shipping delays.

YAXLEYEt hed Plates
Hard aluminum with numbers etched in white ings. Plates with on-aff position for use with for use with step lor use with step and similar units. and sir
Stoek
No.

Marking
W6224 1 to 2
W6225 ito 3
W6226 1 to 1
W6227 1 to 5
W6228 1 to 6
W6229 1 to 7
W6230 I to 8
W6231 1 tog
W6232 1 to 10
W6233 1to 11
W6234 1 to 12
 Your Cost Each Any Above
Any
Type
Stock Marking
W6243 ito 15
W6223 oto 100
W6214 Volume W6235 Of 1 to 3 W6236 Off- 1 to 4 W6237 Of - 1 to 5 W6238 Of 1 to 6 W6239 Of litor W6240 Off- 1 to B W6241 Off-l tog W.

Tip Jacks No. 416-Round head type. Tinned lux terminal. Mount in a ${ }^{\prime \prime}{ }^{\prime \prime}$ panel hole. List 10 w6437 Your Cost
$6^{c}$


Tip Jack
Tip jack with
positive single
 tant, used fo
test panels, instruments, battery leads, and in sets for aerial and


## Tip Plugs

Type A-For use
with all tip jaeks Ideal for use on test Type A panol apparatus Solderless type
W6438


Cost Each $6^{c}$ Type B
Type B-Same as above," ${ }^{\text {B }}$ but with Whort tip. Your Cost Each. $5^{\text {c }}$ Phone Plugs and Jacks


No. 75-Bakelite boasing. Screw term, coin slots.
W6295 Your Cost
$29^{\circ}$ No. 75 TC-Same as above, with inside loop for tie cord. $35{ }^{\mathrm{c}}$.
W6315-y our Cost...... No. 75A-Same as heavy nickel shell. \$1.3? No. 75-Three-way microphone plug. Bakelite shell. No. 76A-Same as above, with heavy nickel shell. $\$ 1.47$ W6347-Your Cost.
No. 100-Extension jack, fibre shell. For No. 75 plug. $\quad{ }^{\mathrm{C}}$ W6348-Your Cost. No. 100 A -Same as above, nickel shell. For 75 A plug. $\$ T .47$
W6349--Your Cost. No. 101 A Mike jack, nickel shell. For 76A plug. Cost. \$I.62

## Sivitches an¹ Binding Posto

## CUTLER-HAMMER Switches

## Porcelain Base Knife

 SwitchesEspecially suit able for surial and ground. Copper contact Stock No. W16820 W16821 W16823 W16825

Cutler-Hammer switches are approved by the Underwriters.


Toggle Switches Approved type high quality toggle switches metal parts. Single pole units rated 3 amps. at 250 volts; ampor, 250 . Stems $152^{n}$ diam. ngle Pole-Single Throw W12836 stem Per Dozen Each W12835-1" stem Your Cost, Each Per Dozen


Rotary Switches S. P. S. T. Approved by the Underwriters. Bakelite encased. 3 a mps, 125 V. 12 " "shaft for lonob

W12838-... I
Each........ ${ }^{c} 1.59$
Per Dozen....
Single PoleTriple Throw Exposed type. Dead center position. 1/2" w12831-
Each
IO
Single Pole-Double Throw W12834-1/2"stem $1{ }^{c}$ Cost, Each
$31^{c}$
.$\$ 2.21$
Double Pole-Double Throw Y, 12833 - 3 " ${ }^{\text {stem }}$ Your Cost
Per Dozen
Double Pole-Single Th-ow W12817- $4 / 2 "$ entem
Your Cost, Each. $32^{c}$ Per Dozen. $75^{\circ}$ Singlo Pole- Double Similar to above. $1 / 5^{\prime \prime}$ shal W12832-
Your Cost Each "On-05fi" S "On-Off" Swltch Plates Hea vily nickel plated. With locating projection. Marked w12818 "off". W12818 Your Cost Each

## Per Dozen



## C.H POWER SWITCHES

 Stock No. Type Ratings H.P. E.
w12813
S.P.S.T W12814 DP.S.T. 5 amperes $\begin{array}{ll}\text { W12815 S.P.S.T. } & 10 \text { amperes } \\ W 12816 & \text { amper }\end{array}$ 2 Adapted fo panel mounting Bakelite bases, nickeled brass parts. Single long, $1 / 2^{n}$ wide; double pole 11/6" long, ${ }^{1 / 2}$ wide. Stock No. Type Your Cost
W16842 S.P. $\begin{array}{lll}\text { W16843 } & \text { S.P.S.T. } & \text { S. } \\ \text { W16844 } & \text { D.P.D.T. } & 15 \mathrm{c} \\ & \end{array}$

## FEDERALAnti-Capacity

 Switches

Springs are phosphor bronze silverplated, actuated by a cam roller. Rapid operation combined with a minimum of capacity between elements allow for innumerable uses Stock No.
W12852
W12851
Four Pole Double Throw Switch
 Rated 3 ampr.,
125 volts.
Aluminum case, lug strips. Makes 2 and strips. Makes 2 and throw. Shaft extends $11 / \mu^{\prime \prime}$. Mug. centers $11 / 2$ ". Quantity limited. Your Cost


Remote Control Switch


Consists of 20 feet of approved cord, a combination receptacle-plug and "on-off" switch. Completely Wired no tools needed.

## H. © H. Rotary Panel

 SwitchesRated 3 amps., 125 volts. 17 Approved type. F
with knob. Cadmium plated solder lug terminals. Furnished with locknuts. Mount ing sleeve $y^{\prime \prime}$ diam. Shaft extends Stock beyon the threaded sleeve. Stock Sleeve Your Wi2779 S.P.S.T Length Cost $\begin{array}{llll}\text { W12780 } & \text { S.P.S.T. } & 1^{\prime \prime} & 17 \mathrm{c} \\ \text { W12781 } & \text { D.P.S.T. } & 22 \mathrm{c}\end{array}$ W12782 D.P.S.T. \% 39c


## 1. © H. Two-Circmit

Push-Button Switches In normal position, with plunger out, one circuit is "on" and the other "off". When plunger is pressed in, circuits are reversed, Slow make, quick break momentary contacts. Silver plated Iug terminais; laminated Bakelite insulation. Rated 75 wates at 125 volts 8.c. Bushing ${ }^{11 / 2^{\prime \prime}}$ diameter and $\% / 8^{" 1}$ long. n threestandard ty pesshown below


## Metal Plunger

 Used on Supreme Instruments and wi2fla YourCost..
 10 for
$\$ 2.79$
Bakelite
Button Type lite button.

## W12775-Red

 W12776-Black Your $40^{\circ}$
## 10 tor....... Bakelite Tip

 Supplied with a narrow the plunger. W12778-Red wourYost.....32e
Cose

Key Lock Switches Designed for use in auto or portable re-
ceivers. Approved, rated 3 amps., 250 Volts. $\mathbf{W} 622$-S. P. S. T.
Your Cost Each.........35
W6222-D. P.S. T.
Your Cost Each....... $4 \mathbf{c}^{\mathrm{c}}$

## JONES Radio

Jacks and Switches


W12857-Single filament panel con trol jack. $8 / \mathrm{s}^{*}$ hole mount. Bindinx post terminals. Nickel plated brass hardware. Type A.
W12858 - Double circuit panel mount jack (similar to type A) Binding post terminals. hole mount. Binding post terminals.
W12859 - "A" battery panel switch. Push-button type. $3 / 8$ hole mount. Binding posts. All Bakelite insula tion. Nicasel plated brass hardware.
Type B.
Any Cost Each
Any Above
Per
Dozen.

## MALLORY Bias Cell



The ideal solution for the bias problem. Only "1/t" high, 5/8" in diameter. No current potential of 1 volt, plus or minus $10 \%$. Lasts indefinitely. Does parts when used for biasing. Also hot be used with a load. W6419-Cell only.

## Vour Cost Each

HOLDERS FOR ABOVE
These are handy, compact units which hold the cells in a series arrangement. The single is shown. W6420-For one cell. W6421-For 2 cells. W6422-For 3 cells W6423-For 4 cells

## "Easy-To-Remove

## Aluminum Coil Shield

Can locks to base with a bayonet thread. high including base. Holes in basefor leads. Holes in base for leads. W12648 W1264 Each.
10 for
$10^{\circ}$


Aluminum Coil Shield Bright finish aluminum.
One piece. Holes near One piece. Holes
bottom for bolts. W12649-21/621/3" high.
W12650-21/3 $\times 4^{7 \prime}$ high Your Cost
Either Type
0 for

## Aluminum Coil Shields

 Detachable base, permiss quick removal of top. W12640-2y $2 y_{6} \times 358^{\prime \prime}$ high. hig W12640-2 $2 / 2335 /^{n}$ high. Either TypeSHIELDS FOR USE
WITH METAL TUBES


For use with screen Fits over grid cap and prevents radiation from this point. Aluminum sprayed Wlack. Each. 10 for

## BAKELITE TUBING

In natural black. $1 /{ }^{\circ}$
Cut to your lencth any sire
Stock Our length, any size. Per wi3150 W13151 $W 13152$
$W 13153$

## w13154

Natural Tan Bakelite, $1 / \mathrm{m}^{\prime \prime}$ Wall W13129
W13130
W13131


## STEEL

 BRACKETSBlack crystallized lacquer finish Panels must be at least $7^{*}$ high. Mounting holea drilled. W1527-For $8^{\prime \prime}$ base. Your Cost, per Pair. W15272-For $11^{\prime \prime}$ base.

## TUBE SHIELD JACKETS



Will form-fit all dome type (ST) tubes. Complete with bases for wafer sockets with mounting holes $11 / /^{" t}$ to 173, ing $^{2}$ apart. Bodies consist of two identical shells that hug tube shape exactly, thus saving space W13258-For ST14 bulbs with or without cap: 24A, 35, 2A5, 01A, 22, 26, 32, 34, ete. Comprises two halves with grounding clip. W13262-For short ST12 tubes without grid caps: $27,37,56,76,41,84,1273,624$, etc. W13264-For short ST12 tubes with grid caps, such as the $36,75,77,78,79,3$
$6 \mathrm{~A} 7,6 \mathrm{~B} 7,6 \mathrm{C} 7,6 \mathrm{D} 7,6 \mathrm{E} 7,6 \mathrm{~F} 7$, etc.
W13263-For long ST12 tubes with grid caps, such as the 6C6, 6D6, 57, 58, etc. 10 for Cost Each, Any Type


## Relay Racks

Constructed of
$11 s^{\prime \prime}$ steel with
spot-welded cor-spot-welded corners. Finished in black, crystaluse with standard $19^{7}$ panels, and are drilled hor mounting 13 ". Holes are tapped for 10-32 screw. Sub
stantially braced base $16^{\text {" }}$ deep, $19^{3}{ }^{\text {f }}$ wide, prevents wobble and keeps units in correct align-
ment. Ideal for use with all mitters and public address systems. Panels are listed betow. Stock No. Height Weight Cost


## BLACK STEEL CHASSIS OR SUB-BASES

Designed for use with the relay racks described above. Constructed of No. 16 gauge steel finished in black crystallized lacquer. Are furnished with bottom cover plates and bolts for mounting. These chassis are drilled to fit combination brackets and panels. Stock Dimens. Shpg. Your Stock Dimens. Shpg. Your

 W22230 $13 \times 17 \times 2^{\prime \prime} 21 \mathrm{lbs} .210$ W22232 $13 \times 17 \times 3^{\prime \prime} 22$ lbs. 2.30 Cadmo $13 \times 172$ ar milar to the above, but steel mium plated. Size $17^{\prime \prime}$ long, $11^{\circ}$ wide and $235^{\circ \prime}$ deep. Shpg. wt. 18 lbs. W22157-
Your Cost
$\$ 2.20$

## black Crystalline steel panels

These standard panels are 19 " long, and
will fit the relay racks described above. Constructed of $1 / \mathrm{a}^{\prime \prime}$ steel with black erystallized lacquer finish. Available in twelve standard sizes to fill practically every requirement. They are considened
 every requirement. They are P. A. rigs. $\begin{array}{cccc}\text { standard } & \text { amateur and Po. A. rigs. } \\ \text { Stock } & \text { Shpg. Your } & \text { Stock } \\ \text { No. } & \text { Width Wt. lbs. Cost } & \text { No. }\end{array}$

 w22171 W22160 W22161 W22162

$$
\begin{aligned}
& 313^{\prime \prime} \\
& 54^{\prime \prime} \\
& 7{ }^{\prime \prime} \\
& 834^{\prime \prime} \\
& 101 / 2^{\prime \prime} \\
& \hline
\end{aligned}
$$

$$
10 \quad 1.10 \mid W 22168
$$

## RADIO PANELS FOR ALL USES

Black hard rubber and Bakelite panels, s/fon $_{6}$ thick-odd sizes cut to order at 1 :íc per square inch. Aluminum and electralloy panels, ${ }^{1 / 40^{\prime \prime}}$ thick-odd sizes cut to order at le per square inch. 75c minimum order.
Bakelite Mard Rubber Aluminum Electralloy Size Stock Your Stock Your Stock Your Stock Your


 $\begin{array}{llllllrll}7 \times 14 & W 19603 & 1.60 & W 19633 & .98 & W 19664 & .92 & W 22314 & .65 \\ 7 \times 21 & W 19604 & 180 & W 19634 & 1.14 & W 19665 & 1.03 & W 22315 & .78\end{array}$ $\begin{array}{lllllllll}7 \times 21 & W 19604 & 1.80 & W 19634 & 1.14 & W 19665 & 1.03 & W 22315 & 78 \\ 7 \times 24 & W 19605 & 2.10 & W 19635 & 128 & W 19666 & 1.15 & W 22316 & .89\end{array}$


Makes use of a cathode-ray "eye" tube to permit visual indication of correct hairline tuning. Easy to install in any set having a.v.c. Kit includes socket, bracket, bezel, cable and instructions. W11480-Less tube Your Cost.
Raytheon 6E5 tube $77 c$ Raytheon 2E5 tube............ 67 c WL1481 Extra mounting bezel. Your Cost

## GENERAL UTILITY STEEL CABINETS


lent for housing small apparatus. Stock Dimension Shpg. Your
 $\begin{array}{lllll}W 22176 & 8 & \times 10 \times 10^{\prime \prime} & 7 & 139 \\ W 22177 & 11 & \times 12 \times 8 & 9 & 1.79\end{array}$

## Color Coding Enamel

 For color coding minals, etc. Green, blue, red,
and a bottle of thinner. Two brushes are included. Have your own system of color coding. Adds greatly to appearance of your job.
W15258-Your Cost
$29^{\circ}$


## Crystalline Lacquer

For touching up and refinishing metal panels, chassis. Black. W15259-2-ounce can $21^{\text {C }}$

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

## -Phenolic Radio Cement

 For speaker cones, Bakelite, metal, wood, hardrubber, etc w15310-2-ounce canW15311-8-ounce can

## Meter

## Panels

Fit the standard racks. All $19^{\prime \prime}$ long and 51/4" high.

| Stock | No. | Meter | Your |
| :---: | :---: | :---: | :---: |
| No. | Holes | Size | Cost |
| $\mathbf{W} 22222$ | 3 | $2^{\prime \prime}$ | $\$ 0.98$ |
| $\mathbf{W 2 2 2 2 3}$ | 5 | $2^{\prime \prime}$ | 1.45 |
| $\mathbf{W} 22224$ | 3 | $3^{\prime \prime}$ | .98 |
| $\mathbf{W} 22225$ | 5 | $3^{\circ}$ | 1.45 |


|  |  | Nick Bre Mae Ser | eled <br> ass <br> hine <br> ews |
| :---: | :---: | :---: | :---: |
| 6-32 Round Head Screws |  |  |  |
| Stock No. L | Length | Doz. | Gross |
| W14750 |  | 3 c | 30c |
| W14751 |  | 4 c | 38 c |
| W14752 |  | 5 c | 50 c |
| W14753 | 1 " | 5 c | 55 c |
| w14754 | 11/4' | 6 c | 65 e |
| 8-32 Round Head Screws |  |  |  |
| W14755 | 14" | 5 c | 50 c |
| W14756 | 83 | Gc | 55 c |
| 6-32 Flat | Head Machine Screws |  |  |
| W14760 |  | $3 \mathrm{e} \quad 30 \mathrm{c}$ |  |
| W14761 |  | 4 c <br> 5 c |  |
| W14762 |  |  |  |
| W14763 |  | 5 c |  |
| W14764 | 110" | 5 c |  |
| 6-32 Oval Head Machine Screws |  |  |  |
| W14770 |  | 3 c 30c |  |
| W14771 |  | 4 c |  |
| W14772 |  | 5 c |  |
| W14773 |  |  |  |
| W14774 | 13/4 | ${ }_{6 c}{ }_{6}$ |  |

## Cadmium-Plated Steel Machine Screws \& Nuts

 6-32 Round Head Steel Screws Stock No. Length Per 100 Per 1000 W14922 W14924 W14925 W14927w14928 14

## W14929

W14930
W14931

| $W 14933$ | $14 "$ | $27 c$ | 2.05 |
| :--- | :--- | :--- | :--- |

Cadmium-Plated Steel Hex Nuts W14939 6-32x1/" 12c W14940 8-32x ${ }^{3}$, ${ }^{\prime \prime}$ " 16c

## Nickel-Plated Brass

 Round Head Wood Serews Stock No. Size Length Doz. Gr.
## W14780 <br> $W 14782$ <br> W14783

Hex Nuts, Knurled Nuts, \&


Washers

## Bras

Envelope of 20: Ne
Per 100.
w14805-8-32x $14^{\prime \prime}$ hex. nuts
Envelope of 20; Net
Per 100
W14806-6-32x ${ }^{3}$ hex nuts
Envelope of 15; Net
Per 100
W14807-8-32x " hex nuts
Envelope of 15; Net
Per 100
W14808-6-32xin knurled nuts. Envelope of 6; Net
Per 100
W14809-NO 6 washers
Envelope of 25; Net
Per 100
W14810-No. 8 washers.
Envelope of 25; Net
Per 100
Screw Extractors
 Used for removing broken screws, bo!ts
and studs. A hole is and studs. A hole is size of drill is indicated on extractor). then by turning exractor to left, screw and easily. Four sizes in kit. Shps. wis279- Your Cost...... $5^{\circ}$

Escutcheon Serews
Round head, bronze finish. 38 long. Fits any type eacutcheon.
W14934-No. 2 Size
Per Gross
$25^{c}$

## RADIO HARDWARE

 W14687-Box of 40 . Your Cost
$29^{\circ}$
Assorted Brackets
Box of 27 of the most popular angles and brackets used in radio. Brass, nickelplated.
W14838
Your Cost


Right
Angle
Brackets
All are brass, nickel-plated; width is
Very sturdy. Your Cost
 $\frac{\text { W14899 } 11 / 2 \times 11 / 2^{\prime \prime} \quad 31 / 2 c}{\text { Tinned Brass Lugs }}$


W14812-No. 1. W14813-No. 2. W14814-No. 3, solderles type W14816-Ne. 4. 50 " long
Your Cost per 1400 long
Your Cost per 100,
Any Type Lug..........
Mounfing Lugs

| Mounting Lugs <br> Of cadmium-plated steel. Hole in flat end for 6-32 serew; threaded end 6-32. For securing shield can to chassis, bases, etc. W14955 <br> Per 10 <br> Your Cost per 100 |
| :---: |
| Tapered Lugs <br> Fits over all screws up to No. 10; shank fits banana plugs. $114^{\prime \prime}$ long, $1 / 6^{\prime \prime}$ wide. Cut for easy soldering. W12954 <br> Per Dozen. 50 for |

 W14795-Assort.

Grommets

| Insulate holes in metal panels, chassis, electrical appliances, etc. |  |  |  |
| :---: | :---: | :---: | :---: |
| Stock | Fits | Inside | Per |
| No. | Hole | Diam. | Doz. |
| W14755 |  |  | 8c |
| W14766 |  |  | 14c |
| W14767 |  | \% | 16 c |
| W14768 |  |  | 19 c |
| W14769 |  | $38^{\prime \prime}$ | 20c |

Colored Grommets Hard insulating com-
position; with knurled position; with knuried
nut; in red or black. For instruments and where dressy appearance is desirpd.
Red Blac
Red Black Hole Diam. L,
W14688 W1489 W14688 W14689
Your Cost Each
Either Color
W14690 W14691
Your Cost
W14692 W14693 W14694 W14695
Your Cost Each.

No. Inches For Ten

## W9868 $W 9869$

W9870
 12 c
15 c
17 c

## Insulating Pltch

W1486t-14-ounce can. Wt. 3 lbs. Your
Cost $1465-1{ }^{\circ}$ can. Wt. 12 Ihs.
Your $\$ 1.235$
Cost Cost

Assoried Fibre Washers Contains 100 plain and shoulder type to fit $N$ us. 6,8 and 10 screws, as well $1 / 2^{\prime \prime}$ holes. ${ }^{n}$ " and
W14832-Shpg. wit. 8 oz . $24^{\circ}$
$\frac{\text { Your Cost per Box...... }}{\text { Washers }}$

## Insulałing Washers

Of fibre as in assortment above. Used for metal
chassis mounting of parts
Flbre Washers-Shoulder Type Stock No. O.D. I.D. Per 10
 W15023 90 Flat Bakelite Washers 10


## Rivet and Eyelet Punch

 Can be used for rivetting or eyeletting. Resets any size eyeletor rivet in any radio. Two tools are of hardened areel. Holder is steel. Himo with hex sides for noslip grip in vise. Worted rivets and eyelets.
Your $\$$ I.
Cost.


Bakelite Assembled Terminal Strips


For mounting
parts which are to be insulated from
Stock No. Lugs Each 10 For

| Stock No. | Lugs | Each | 10 For |
| :--- | :---: | :---: | :---: |
| W13133 | 2 | $3 c$ | $27 c$ |
| W13134 | 3 | $3 c$ | $27 c$ |
| W13135 | 4 | $5 c$ | $45 c$ |
| W13137 | 6 | $6 c$ | $55 c$ |

FAHNESTOCK Clips


Stock w14823 W14824 $W 14825$
$W 14826$

| Type | Length | Per |
| :--- | :---: | ---: |
| Doz. |  |  |
| Single | $1 /{ }^{\prime \prime}$ | $\mathbf{1 0 c}$ |
| Single | $1^{\prime \prime}$ | $\mathbf{1 1 c}$ |
| Double | $119^{\prime \prime}$ | $\mathbf{2 5 c}$ |
| Double | $1 \%^{\prime \prime}$ | $\mathbf{2 6 c}$ |

## Ornamentol Top

Bronze Finished

# QUALITY El: 

## KRAEUTER PLIERS



You owe it to yourself to own at east two good pairs of pliers. Kraeuter pliers have been acknowladged for years as being the finest Diagonal Cutting A-Cutting jaws of this plier come together perfectly. "They cut the nsulation as well as the wire. Your Cost. $512^{\prime \prime}$ long. $S$ P Long Nose cutting blade that is sharp, and will stay so. Gets into the places that are hard to get at. Your Cose

### 1.05

Needie Nose Pliers
C-Furnished with an extra long finely tempered nose, for reaching wio diflicult places. Length, 6 , Your Cost


## Handy

 Scroteh RemoverFor removing mars and scratchWill fast indefiWill last indefi-
nitely. In durable container. W15520 Your Cost Es. $233^{c}$
Dioganal Cutting Pliers


A very popular plier with all servcemen. $6 \%$ long. Shpg. wt. 3 lbs. W15127-
Your Cost

## Long Nase Pliers


$51 / 2^{\prime \prime}$ polished forged steel. Side cutting telephone type. Shpg. wt. 31 bs . W15241-
Your Cost

## G. M. CO. ELECTRIC HAND DRILL



A sturdy $1 / 4-\mathrm{in}$. hand drill with GENERAL ELECTRIC A.C.D.C. MOTOR and BALL THRUST BEARING in spindle. Special anti-friction bearing on armature shaft. Genuine Almond 3 -jaw geared chuck. Has toggle switch on top of

G. M. Co. Geared Chuck

7 to 1 geared chuck to use drills up to $/ \mathrm{m}^{\prime \prime}$ in your emall electric drill. Gear ing increases power. Shpg. wt. 4 lbs.
pistol grip, easily operated with
thumb. Complete with 9 feet of heavy rubber-covered cable and plug. Shpg. wh. $101 \mathrm{bs} . \$$ \$ $\$ 5.95$
W14726-List $\$ 25.00$. Your Cost, Each.........


10-INCH MOTOR-DRIVEN JIG SAW
Sturdily constructed cast iron frame eliminates all vibration. Grooved table $8^{\prime \prime}$ diam. Jig sa w has a 10 " throat. Takes a $6^{\prime \prime}$ plainend saw blade. Saw guide is adjustable. end saw biade. Saw guide is adjustable. Enclosed top spring. Two-apeed V-pulley
for $7 \%{ }^{\circ}$ belt. Recommended speed, 700 r.p.m. for a verage work Will cut stock up to $11 / 2^{\prime \prime}$ thick. Shpg. wt. 6 lbs. Motor and
blades not supplied.
W14979- 5 T. W14980-Six $5^{\prime \prime}$ blades
Your Cost $\overbrace{}^{c}$ W14698
Your Cost.
84.75

## Motor Chuck-Arbors

 Fit shaft of any small motor in place of pulley.locking nut to hold grinding whetls, saws, etc. $1 / 6$ " three-jaw chuck. Eaws, etc. Unit Motor Your Stock Unit Motor Your
No. No. Shaft Cost w15095* 495 No. Shat Cos $\omega 15096495$
$W 15096490$
W15097 490-A
W15098 $\left.\begin{array}{c}\text { 490-B } \\ \text { *Less Flanges. }\end{array}\right]$
G. M. Co. Hand Frills drills with 9/2" hardened chuck jaws. Accurately meshed gears. Polished hollow handle for stor ing drills. A much needed tool on the 0 radio work bench. 0 Easy-grip handle-top threads on to body. No lust drills with this tool? High speed gears. Shipping weight 2 ibs. knob-List $\$ 2.00$ Your Cost. W14724-Without aide....? List $\$ 1.50$
List Without side knob-
Your Cost.................


## POWER SPRAYER



Operatesfrom
the spark plug the spark plug of any auto spray paint, lacquer, varnish, shellac, any finely mixed free-fowing liquid. Complete with sprayer, pint jar, spark-plug set of adapters and 12 -foot huse, Shpg, we. 11 Ihs. $\$ 2.15$
W14704-Your:Cost.

UTILCO Steel Tool Boxes
A Box For Every Use The "Utility"
Ideal for auto mechanica, radio servlcernen. Will hold many everyday tools. Loose tray with movable par-
titions. Heavy eteel, beautifully titions. Heavy steel, besutifully
finished. Nickel-plated hardware. finished. Nickel-plated hardware. Shpg. wt. 6 lbs
Wis70Your Cost..


## HAND SPRAYER

Air pressure supplied by
any a a to.
mobiletube. Complete with 6-ft. of hose, convalve. Will opray ap proximately four jars from one tire containing 35 lbs, of pressure. Easy to use and efficient in operation. Shpge and 51 hs .

## MOTOR-DRIVEN

 DRILL PRESSHere is the ideal, low-priced drill press for the small shop. It is a light-duty, precision-type drill suitable for wet or dry drilling, and is designed as a real power tool capable of performing protitablework! Maxi mum distance from end of chuck to imum distance from end of chuck 13/" Equipped with $2 /{ }^{\prime \prime}$ " dril chuck and $31 / 8^{\prime \prime}$ adjustable swinging table. Overall height, $20^{\prime \prime}$; width, $31 / /^{\prime \prime}$; depth, $9^{" *}$ For $3 /{ }^{\circ}$ $V$-belt. Spindle speed depends on motor-speed with 800 r.p.m. recommended for average work. recommended speed at which it is worked may depend upon the urer. Shpg. wt. 61 bs
W15133-Less bits.
Vour Cost.

5"x18" METAL TURNING LATHE
Single casting $20^{\prime \prime}$ bed, overall $25^{\prime \prime}$; 18 between centers,
swing
Compound rest; pound rest;
 feed $21 / 2^{\prime \prime}$; longitudinal feed $2^{\prime \prime}$. $4^{\prime \prime}$ face plate accurately turned and machined. Kan $^{\prime \prime}$ V-type 2 -atep cone pulley; takes standard A-type $1 / 2^{\prime \prime}$ V belts or " " belt. Oilite bronze bearings; hollow spindle; takes all No. O Morse taper a ceessories; screw-feed tail stuck; carefully milled bottom fits ways perfectly. Tool port. No shop should be without this lathe. Shipping weight 201 lbs .
W14740-No. 330 lathe.
s7.95
wheel, 9 twist drills cotton buffer, $1 / 164^{n}$ emer Complete as shown. Shpg. wt. 81 bs . $\$ 3$, W14746-Your Cost Your Cost


## SHEET METAL

## PUNCH

Of finest tool steel; tempered for long life. Punches holes for sockets, electrolytios, in metal chassis with blow of hammer. Shpg. wt. 2 lbs .

| Stock No. | Hole | Your |
| :---: | :---: | :---: |
| W15291 |  | Cost |
| W15292 |  | Each |
| W15293 | $1^{11^{10}}$ " |  |
| W15294 | 11/ ${ }^{\prime \prime}$ |  |
| W15295 | 11/8" |  |
| W15296 |  |  |

Pocket Wrench Set


## $5-45-22-3$

Handy pocket wrench set comprising three double open-end units, odd sizes. Made of hardened tool steel. Shipped in a convenient genuine leather case. Shpg. wt. 8 ozs. W15081
Your Cost

## COUNTERSINK



A handy tool for shaping holes in panels of wood, Baketite, fibre, etc. Whisiso Your Cost
$12{ }^{c}$

## TESTING MALLET

 A necessity for every service man. For testing chassis and locating nolses and soose connec tions. Hardwood, walnut stain, waxed; ends fitted with cushion-rubber blocks. W15165 Each.
$35^{\circ}$

## ELECTRICIAN'S TAPE

Both friction and rubber tape are of the highest quality, kept freah by tinpacked in individual boxes. Rubber tape will moisture proof a splice.


|  | CTION | TAPE |  |
| :---: | :---: | :---: | :---: |
| Stock | In | Cost | 10 |
| No | Roll | Each | Rolls |
| W14829 | 2 oz . | 6 c | 55 c |
| W14842 | 4 oz . | 9 c | 5 c |
| W14843 | 8 oz . | 17 c | 1.60 |
|  | RUBBER | TAPE |  |
| W15040 | 4 oz . | 12 c | \$1.10 |
| W15041 | 8 oz . | 23 c | 2.10 |

HIGH-SPEED
BREAST DRILL
Very sturdily con-
structed. Chuck holds
up to 1/2" drill. 3
spring-controlled steel
jaws in chuck, 2-speed
gears. Mahogany han-
dies. Designed for
heavy work and to
minimize fatigue

Your Cost
s 1.98

## A.C.-D.C. ELECTRIC SPEED DRILL

The finest drill value available today. Drills hrough 1/" steel. Its outside diameter of only
 from corners. lias semirecessed switch and recessed brush holders. 110 -volt universal motor operates on a.c or d.c. Takes up to $11^{\prime \prime}$ bita Knurled collar permits easy insertion and remoyal of drin bits without furs. Equipped with long, rubber-covered cable and plug. Aluminum and red paint nish Shpe wt 7 the W14731-Your Cost Complete, Less Bits


Pistol grip handle made of moulded Pistol grip handle made of moulded
rubber. Frame adjustable to various size blades and of very heavy construction. Complete with $8^{\prime \prime}$ blade. Shpg. wt. 28if lbs W15137-


Hack Saw Blades High grade steel. Strictly first quality. Very flexible. Fast cutting and long lived. Fully guaranheed. Will fit above and standard tools.
Stock
W14965
W14966
W14967

## Deluxe Coil Winder

Will wind honey comb, zpiderweb, or solenoid coils of various widths and diameters. Equal in appearance to factory made coils. Includes all accessories neerssary for winding the varimus types. Ilas recorder and indicator that counts turns. Black ensmel finish. Shpg. Wt. 6 lbs.
W14725-
Your Cost $\ldots \ldots .35$

## UNIVERSAL Hack Saw <br> 

Especially good for work in tigh places. Thin quick cutting blade and tension adjusting handle. Whpg. wt. 3 libs. $28{ }^{c}$ c

## W15187-Blades. Each <br> W15187-Blades. Each




## RADIO SOCKET WRENCH SETS

Handy All Steel Set


Will stand the hardest usage. Five interchangeable sockets: ${ }^{\prime \prime}$ ", s/4".虎" "在" and screw driver bit.
Cadmium plated. Sockets easy to remove, yet will not loosen while working. Spare wrenches fit into hollow handle when not in use. Easy to grip. Handy fo the kit. Shpg. wht. 1 lb . W14749-
$3{ }^{\circ}$

## INDESTRO Socket Wrench Set

## 006060

## A sturdy wrench set finished in

 bright cadmium plate with easy grip, black wood handles. With $383^{\prime \prime}$ round knurled nut socket and screw-driver socket. Handy for the serviceman's kit. Shpg. wit. 1 lb W15111-
$37^{\circ}$
SPIN TYPE Socket Wrenches-Straight and Handy


Firm grip, ribbed wooden handles. Cadmium platedfshanks. Have deep holes in ends of shanks that will take long screws up to No. 10. Straight types, $6^{\prime \prime}$ and 9 long. Offset type is $6^{\prime \prime}$ long. These wren ches take standard hexagon nuts.


also has an extra beading tool at . tachment. No. 5, heavy duty type, cuts holes from $1^{\prime \prime}$ to $54^{\prime \prime}$ diameter All but No. 5 fit either round or All but No. 5 square chucks
W14715-No. 5, round shank
W14715-No. 5, square shank
W14717 No. 1.
Your Cost Each
${ }^{\text {s }} 1.88$
Y14711-No. 4. ST.39
W14718-No. 2. Your Cost. 51.10 W14716-Extra blades. Each.. 24 c

## Shockless Screw Driver

Handle and Ferrule are moulded in one piece of Black Composition. 6 long. Shpg. wt. 1 1b.
W15060
Your Cost
$11{ }^{c}$
Per Dozen.

## SCREW "GRIPPER" SCREW DRIVER <br> 

Save time and temper with this driver. Gets into tight places holding the screw and releases it after it is driven. Many chassis need this tool for servicing. Has gripper which stays at any point on shank. Tempered tool steel blade. Shpg. wt. 11 b .

| Stock | Blade | Y |
| :---: | :---: | :---: |
| No. | Length | C |
| W14721 | $4 \mathrm{x}^{5} \mathrm{~g}^{\prime \prime}$ | 34 c |

## 3-IN-1 SCREW DRIVER

## $\rightarrow 0$

Neating type. Smallest nests in handie of next larger and the two together in the largest. Stee blades with brass handles. $41 / 3^{\circ}$ long. Shpg. wt. 1 lb .
Your Cost Each
$1\left({ }^{6}\right.$

## 4-IN-I SCREW DRIVER



Four sturdy tools of diminishing size for all jobs. Each nests within its larger companion. 61/4" long. Whplewt
Your Cost Each

## HANDY STEEL CALIPERS

## Opens

Measures inside and outside ters up to 3 inches, calibratiamters up to sinches, callbrated in knurled locknut. Indispensable to the machinist, constructor, home craftsman, etc. Shpg. wt. 1 lb . W14891-
$10^{c}$

## SOILERING IRONS Sutiss sune

Magic Electrite Pencil


Writes electrically and embosses names, monograms, initials and designs in colors. Following colored foil pieces provided: gold, silver, red, blue, green and purple. Will emboss on any material such as wood, leather, Bakelite, cardboard, etc. Can also be used for permanent identification purposes. Operates on 110 volts, a.c. or d.c. Complete with instructions. Shpg. wist 21 bs.
$78^{\text {c }}$

## SOLDERING PENCIL



Compact, light-weight -you hold it like a penute. Insulated handle, cork finger guard, 6 ft. approved cord and plug. Removable tip. Rated necessary. For all light work. w15155-110 volts W15156-6 volts, d. Your Cost Each
$.73^{c}$


IRON STAND
Made of rust resisting metal. Curved to pre vent rolling. Rug-
gedly built-will last as long as more expensive stands.
$1 \rightarrow{ }^{\circ}$ Your Cos

## Soldering

 Iron Stond \& Holder Lined with ei cular, heat-radiating springs.
Servicemen can pack their irons without waiting for them to cool. Also acts as stand for iron. Iron nests in holder. Shpg. wt. 31 bs . W15231-Your Cost


W15276-Your Cost. 10 for.


W14860-10 for
Your Cost Each

Snap-it-On Iron Holder Raises iron $2^{\prime \prime}$ from bench. Snaps on. 1.80
$18^{\circ}$

## SOLDERALL

Mixture of paste and powdered solder. Will solder $\frac{1}{\text { all metals but aluminum. }}$

MARVEL
SOLDERING IRON
$\xrightarrow{\square} \begin{array}{r}\text { Conserva- } \\ \text { tiver } 1 \text {, }\end{array}$ erates on 110 volts, a.c. or d.c. Nichrome wire element Hardwood handle. Overall length $104^{-7}$, copper tip $2 \frac{3}{6}{ }^{\prime \prime}$. With 4 -ft. cord and plug. Suitable for all radio service and experimental work. Holds its heat well. Can be used in tight corners where a larger iron is likely to damage resistors, condensers, etc. Shpg. wit. 1 lb . W14873.
Your Cost Special....
Per Dozen.

## 1.STCO HIGH QUALITY

 SOLDERING IRONSEsico
preferred
by profes-
sional and

sional and replaceable elements of nickel chrome wire. "Midget" and "Junior" models are wound with Grade A nichrome wire. All models have M14848-MIDGET MODF: W14848-MIDGET MODEL $\$$ I. 3 Your Cost-65 Watt ${ }^{110}$ Volt
W1485 JUNIOR MODEL W1485 JUNIOR MODEL
Your Cost 100 Watt, 110 Volt $\$ .623$ CONSTANT DUTY MODELS w 15190 - 100 Watt, 110 Volt. $\$ 3.23$
 Your Cost


Iron

A genuine Esico A genuine Esico Iron at an ex-
ceptionally low price. This is an excellent iron for thase having only occasional use for a soldering iron-Heating element is of nichrome wire. Heats up in surprisingly short time. Handle is of black wood. Steel shank and brass ferrule. Consumes 55 watts. With 2 tips. Shpg. wt. 3 lbs.
$75^{\circ}$
JACKSON SOLDERING IRON This is a full
size soldering
length. Black enamel
$-20$
handle and nickel
plated metal case. Removable tip "/on "in dia. 50 watt iron. Shpg. wr. 2 lbs,
W14850-List $\$ 1.25$. Your Cost....

## JACKSON Heavy Duty Irons

 110 Volts $\square=-4=-4$ A.C.-D.C.Extra heavy duty irons designed especially for in-
dustrial or shop use. Heating element and all parts are renewable. Tip ing element and ail parts are renewable. Tip

removable. Metal parts nickel plated. Designed for constant service. Shpg. wt. 2 lbs. | 75 watt iron. List $\$ 2.75 \ldots$ |
| :--- |
| W14874-Your Cost......... $\$$. | 100 watt iron. List $\$ 3.75$. 100 watit iron. List $\$ 3.75$

W14853-Your Cost


KESTER Dependable Radio Solder
Preferred by radio men everywhere. Will not spatter. Makes clean joints. users will find it more eco nomica! to buy their solder this way. Flux in core.

|  | Rosin Stock | Core Cost | Acid Stock | Core Cost |
| :---: | :---: | :---: | :---: | :---: |
| Per Tin | W14857 | \$0.15 | W14878 | \$0.15 |
| 1 lb. Spool | W14858 | . 71 | W14877 | . 71 |
| 5 lb . Spool | W14859 | 3.40 | W14879 | 3.40 |

## Trutent DeLuxe Irons



## Trutest <br> "SPECIAL"

Here is the soldering iron buy of the year. A sturdily
 iron, complete with two screw-on tips, approved cord and plug, replaceable clements of quality nichrome wire in porcelain tubes. $60-$ watt iron is furnished with two $90^{76}$ tips. $5-5 \mathrm{ft}$. cord and rubber plug. 75 -watt iron with one "fo" tip and 5-ft. cord, 100 -watt size has one 3" tip and 6-it cord. Shpg. wt. 3 lbs. W14892 60 -wattiron. Your Cost, Complete W14894-75-riatt iron.

Your Cost
$30^{e}$ W14893-100-watt iron. Your Cost

## "AMERICAN BEAUTY" IRON

America's most famous soldering fron. Made for those who want the very best. The very for those who want the very best. The very Metal parts are nickel plated and highly polMetal parts are nickel plated and highly polished. Iriproved heat-proof handles. Length 12.8 tip and cord. Model 3138 . $\$ 5,85$ W15171-Your Cost
$3 \cdot 0$ A smaller "American Beauty" with straight metal case for ease in soldering in corners and tight places. Consumes 50 watts: $7 / 10^{\prime \prime}$ tip. Shpg. Wit. 2 lbs. Model S76 W15172- Your Cost.
. 3.45

## LENK Automatic Blow Torches-Alcohol Type



Type A: Double (A) burner onefor needle point flame, add the attachment for heavy flame. Has cleaning pin in handle. Size: $71 / \mathrm{fx}$ $4^{3} \mathrm{i}^{1} \times 216^{n}$. Wt. 41 lbs W14867-No. 350.
Your
Cost. 2.35 Type B: A handy tool box. Leak proof. Screw cap makes loading easy. Copper heat conductor generates rapidly. Size: $61 / 8 \times 23 / 8 \times 1$, ". Shpg. wt. 2 lbs, W14865-No. 66
Your Cost.


## KESTER Paste

 An entirely new, different, and far more efficientsoldering paste soldering paste flux,-designed
for the service-

man, constructor, and ior speeding-up production. Results in better soldering. Packed
in handy sized tins. Contains 2 oz . of fux. Only small quantity neressary for joints and that little makes a clean, bright joint.
W15278Your Cost

Flux

| Gasoline Type <br> For service men and mechanics. Has flame control, shutof valve, and many other features. Height 71/2" base dia. $3^{\prime \prime}$. Polished brass finish. Capacity ${ }^{3}{ }^{4}$ pint. Shpg. wt. 4 ibs . <br> W1485S-List $\$ 2.00$ S I <br> W14856-Same, but for alcohol. <br> Your <br> Cost |
| :---: |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |



IT IS a far cry from the savage method of com-munication-the primitive relay of the tomtom booming across a jungle- to the clear, crisp, true fidelity sound reproduction of ioday. In the short span of time that sound amplification has stepped from the laboratory to practical application, there have been revolutionary steps forward. Public Address is no longer a fad. It is now a very important adjunct to many commercial and social enterprises-to the concert hall, to the public forum, to the church, to the halls of learning, to carnivals of music and sport, of news and of drama.

Lafayette, long a pioneer in research and practical development of sound amplification equipment, opens another chapter in the history of its technical achievements-a masterwork of modern Sound engineering, designed for the future-an accomplishment that will prove of vital interest to sound technicians.

IAFAYETTE CO.ORDINATED SOUND SYSTEMS! Completely assembled, practical sound systems that eliminate the "guess work" in P.A. No more trouble with speakers that do not match with the amplifier - or with incorrectly selected microphones. No more guessing about how much the entire system will cost. In brief, Lafayette Co-Ordinated Sound Systems are packaged units - most simple to install-ready for instant operation. And they are the last word in design and constructionsimple to operate-life-long in service.

On the following pages we proudly present an array of systems applicable to schools, businesses, churches, theatres, in fact every "sound" need, at prices far below what you would expect to pay for equipment of equal quality. With Lafayette, you are equipped to undertake whatever new sound engineering projects the future may hold in store.

## Latayeffeco.oronatid Ssstem

## 5. 5 " 8 watris Uud feange

## BALLYHOO

cintuyette

FOR USE WITH RNY TYPE OF MICROPHONE


The model 245-A can be used with crys. tal. velocity, sound coll or electro-static type of microphones such as the velophone and velotron. It can also be ulfed with any and veloiron. It can also be uned with any netic or crystal and can also be usid with photo-cells.

## Employs Mixer-Fader

## A mixer fader control permits fading from

 one low gain channel to the other as well as mixing either of the two with the high gain chamnel. A tone control permits vary. ing the high frequency response of the amplitier to suil the individual preforence of amplitier to suil the individual preforsnce of room acoustics. Both input and cutput sockets are on the rear of the amplitier. A shielded input plug as well an an output plug is furnished.The tubes employed include: $2-677^{\circ} \mathrm{s}$, 16N6 and 1-5V4G. Oetel sockets are incorporated in the amplifier and glass type as well as metal tubes can bo used. (Metal only in pre-amp itiez stages.)
Rated output of the amplitier is 5 watts with a peak rating of 8 watts. Overall gain is 130 db at an input impodance of 5 megohms . Six watts of field current is furnished by the amplifier for a 1000 ohm spoaker field. A metal screen cover is available sepa. rately for profecting the top of the ampllier from falling objects and prying fingers.

Output impedance is 7000 obms. Input impedances are 5 megohms for the high gain channel and 500,000 ohms for the low gein channels. Frequency response 2 db 50 to 10,000 cycles. The chassis is of sturdy stoel construction and is tinished in durable and attractive rubber black lacquer. Overall dimensions: $12^{\prime \prime} \times 63 / 4^{\prime \prime} \times 74^{\prime \prime}$ high. It is so designod that a speaker can be mountod upon the top of the chassis making a single compact speaker-amplitier unit which cam then be mounted an a standerd rack panel or in a cabliet if desired. Power consumption from the a.c. line is 60 watts.
Model 245-A-Lafayette 5 to 8 watt Amplifier less tubes and screen. For 110 volts $50 / 60$ eycles a.c. Code ARTAK. Shpg. wt. 14 lbs. List Price $\$ 26.70$.
YOUR COST
s 13.35
Model 245-T-Same as above, but complete with kit of matched tubes.

## YOUR COST

$\$ 16.60$
Model 245-DF-Protective steel screen only as illustrafod on amplifier. Finfshed to match amplifier. Sturdy spot welded construction. Shpg. wl. 5 lbs .
YOUR COST
$\$ .98$


## Witulnlimited

It is practically impossible to list here all of the possible applications for which this new Lalayette 5 to 8 wall "Co-ordl. nated" System can be used. It is capable of such excellent reproduction that no matter what the applicction may be this, the smallest of the "Co-ordinated" Systems, will provide the utmost in performance.

When used as a call or mnouncling system, its crisp, clear reproduction of the human voice will be particularly appreciated. And, when used for the re production of music, the full frequency rasge of cudible scale is faithfully rendered.

True rendition of all musical notes is as sured. Small orchestras, playing in small dance halls, etc., where no great amount of amplification is required, will find this system Ideal for their use. It is also an excellent system for Lestallation in hotels. restaurants and similar places, to plek up the music from orchestra in order to "pipe" it to the lobby, rest room, private dining rooms, etc. Alrport and bus waitlng rooms find it just the thing for announcements of schedules and the entertainment of those waiting-the phonograph turntable turnishes hours of pleas. ant music

# APPLICATIONS 



Irrespective of whother the system is to be used for public address work by a demonsirator, for music amplitication by an orchestra or as a call system, It will ciways consist of three essential units-the microphone-the amplitier-and the speriker. If these three are chosen haphasardly they may work togother satisfactorily but usually do not prove as successful as when all throe are carefully selec'ed and tested together by a competent engineer. To provide some sample means of identitying systems that have beon solected scientifically, Latayette onginoers have chosen to call these yystems "co-ordinated". This is why Latayette "Co-ordinated" Sound S $\mathrm{S}_{\mathrm{F}}$ tems are so much better. Each system will provide the utmost in performance acoustically, electrically and mechanically.

## A Multi-Purpose System

Even though the Latayette 5 to 8 watt "Co-ordinated" Systern is the smallest in the Latayette line it has boen assembled with the same care that is used in assembling the largest system. It is cne of the mont officient systems yot developed cond is equally sulted tor the roproduction of music with all its overtones and for crisp, clear rendition of the human volce. Thus this system can be used lor a call systom between the office and the stock room, the restaurent and the kitchen, the telephone switchboard and the factory, etc. It can be used as a public address system by a window demonstactor, a lecturer, or an ontertainer. And it can be used to reprodice music from an orchestra or a phonograph record with equal facility This feature makes it ideal lor the smaller establishment where quite often the recording takes the place of the orchestra. Sound System Ready to Use


The complete "co-ordinated" system includes the model 245-A amplitier and screen cover. a powerful and full toned $11^{\prime \prime}$ electrodynamic speaker, one of the new Lafayotto Volephone microphones, a modern clutchtype floor stand for the microphone. 25 feet of speaker cable, and a tull complement of tubes for the amplifier. The only accossory not included is a baffle fer the spoaker, the design of which is dependent upon the exact purpose for which the syetom is to be used.
Complete Instructions
Complete instructions for connection and operation of the system are included. These instructions are so clear that even an finexinstructions are so clear that even an laexperienced person can connect the system
and put it la operation in a short time. All and put it in operation in a short time. All controls are on the face of the amp

While the Velephone microphone is included as standard equipment with the system, this system will perform equally as well with cay good quality high impedcance velocity, crystal or sound-cell microphone. Provision is also made in the system to connect a high impedance phono-pickup and other similar high output devices. The sound from these devices can then be mixed with the mizrophono channol to any desired degree.
System Model 801-P-As described consisting of Laiayette model 245-T amplitior, screon cover, Lafayotte $11^{\prime \prime}$ el ectro-dyaamic screon cover, Laiayote cirer cable, Lafaryotte speaker, 25 feet of speaker cable, Lararyette Velephone mike, floor stand and complete Code SANCO. Shpg. wt. 70 lbs . List Price S71.00.
YOUR COST

System Model 802-P-Same as model 801-P, but with Amperite RAH velocity microphone instead of the Lafayette Volephone. Code SAPPO. Wt. 70 lbs. $\$ 33.50$
System Model $803-\mathrm{P}$-Same as above, bu with Shure 701-A crystal microphone and 25 ft of cable. Wt. 70 lbs. $\$ 41.25$
Code SEQRO. YOUR COST
PAGING SYSTEMS



## Cafayette "Co-ordinated"



A NJW AND BコTTER SYSTEM AT A RコASONABLE PRICE

Past experience has shown that the mos popular size of amplitier is in the fifteen watt class. Most dence halls, restaurents. wait class. Most clubs, theatres, etc., are of such a night clubs, theatres, etc.ifare of such a
size that this power amplitier will provide size that this powe
the desired results.
When Latayette engineers stasted to design this now model, therelor, they decided to make this unit even botter than any of the highly popular models previously offered by them. It was to have all of the leatures that would make this model suitable for this type of installation. The experience of the many thouscends of satistied users of Lalayette amplitiers was called usors and their comments and suggestions upon and their comments amd suggostions were careluly studied. They then comaised this information with their knowledge of all of the now developments that have been
made during the past year in sound equipmade during the past Year in sound equipLatayette model 103-A amplitier.
That this model will pertorm better them any previous model cam readily be realized when these new important features are studied: all-motal tubes, mixing and fading tacilities, tone control, speaker field curtent supply, variable output impedances, three input channels, shielded plug-in In put coninput chanaels, shielded plug-in in put connections, plug-in output connections, an terminals on rear of chassis, fused power
line, shielded power transformer, ereen line, shielded power transformer, sereen
cover, triple filtered plate supply, class " $A$ " cover, triple filtered plate supply, class "A
amplification, electronic mixing, crystal, amplification, electronic mixing, crystal,
elocity, sound-cell, velophone, electrovelocity, sound-cel, velophone,
static or velotron mike operation.
TUBE COMPLEMENT: 6 of the latest type, including one 657, one 6C5, one 6N7, two 6N6G and one 5V4G rectitier.

Technical Characteristics
Peak outpul
Rated output into 500 ohm line Hermonic content at 15 watts Hum lovel below 15 watts

20 watts
15 watts
GAIN OF HIGH GAIN CHANNEL At Megohm input impedemce At $150,000^{\circ}$ ohm input impedance $\ldots 125 \mathrm{db}$
GAIN OF LOW GAIN CHANNELS At 500,000 ohm input impedance ..... 95 db At $150,000^{\circ}$ ohm input impedance ... 90 db "Highest value of present day input devices. Frequency Response 2 db 50 to vices. Freque
10,000 cyclos.

## Photo-Cell Operation

The model 103.A can also be used with stemdard type photo-cells without making any changes in the unit whatsoever. When you install a Lafayette amplitior you instal! a complete amplifier that will not go out-ofdate in a short time. With a single Latayette amplifier you can use your system to amplity your orchestra, to amplity the voices of lecturers, entertainers, etc., to amplity phonograph recordings and to operate photo-cell devices.
The photo-cell fecture makes the model 103-A suitable for use with automatic elec-eron-controlled machinery of every description, such as automatic color sorters, counters, wrappers, measurerers, etc. 11 you have a problem involving this type of work write to our engineering department for free assistance and advice.
The model 103-A cam be used with two or more speakers. Field supply current of 16
watts (8 watts for each spoaker) can be obtained from the amplitier to excite two 5000 ohm spaker fields. It desired one speaker with a field resistance of 10,000 ohms can be used. When more than two speakers are used the additional speakers should be of the permanent magnot dynamic or self-excited a.c. type.

## Three Input Channels

 Three input channels are provided. Two ofthe low gain type are for use with phonothe low gain type are or use with phono
pickups and other high output devices; the other chamnel is of the high gain type and is tor use with any modern mike. This chanzel is also for use with photo-cells.
A fader control permits instantanoous lading from one low gain channel to the other, and a mixer-gain control permits mixing the microphone chensel with either of the two low gain channels to any desired degree.
An oversized output transformer olfers output impedancen to match any speaker compul impedancen to match any specker com-1.35-2-4-6-8.15-50-250-500 ohms.
ohms.
Model 103-A - Lalayette 15 watt Amplitior only less tubes and sereen. Dimensions $63 / 6^{\prime \prime} \times 17^{\prime \prime} \times 83 /{ }^{\prime \prime}$ high. For 110 volt $50 / 60$ cycles a.c. Code ANGER. Shpg. wh. 30 lbs. List $\$ 38.90$.
YOUR COST
$\$ 19.45$ Model 103-T - Same as above, but with complete set of matched tubes.
Code ASBAR. YOUR COST ......... $\$ 24.45$
Model 103-DF-Screen Cover for amplifar as Model io3-DF-Screen cover for ampliear as shown in lerge Yllustration. Shpg. Wh. 2J.50


The complete Lafayette 25 watt "Co-ordinatod Sound System is known as model $306-\mathrm{P}$ and consists of the Lafayette model 103-A amplitior, two $12^{\prime \prime}$ auditorium type high tidelity speakers, two flese baffles, one Lafayotte velocity microphone and one floor tand. Like all of the nem Lafayette "Coordinated" aystems this new 15 watt system has unit matched compozents which have has unit matched compozents which have been carefuly gelected to work together by
Lafayette engineers. You don't have to "gayest" or enineers. You don't have to ponents will, work logether satisfactorilyyou "know" whon you buy a Lafayette Co-ordinated" Sound System.

## MENY USES

The model 806-P 15 watt system is an ideal system to use for the majority of permanent installations in dance halls, auditorlums. rastaurants, otc., baving an approximate capacity of 1000 persons Reproduction is unusually clear and true in thelity to the original sound due to the excellent amplitier which is the hear of this system. Lecturers and entertainers like it because it does not do things" to their voices. Orchestra leaders like it because they know it will reproduce faithfully all the shades and nucmess of tone that they strive for so carefully.
The aystem offers complete facilities for putting on all types of ertertainment. It incorporates, as described on the preceding pago, three input chanmels so that enterainment by mears of the microphone, by means of a phono-record or by means of sound oftects records, may be reproduced by this system-a system that is truly complete in every respect.

Only two speakers are supplied with the standard system, but the amplifer included with the system is powerful enough to operate as many as five speakers at 3 -watts each, or ten at $11 / 8$-watts each. In order to obtain some Idea as to the amount of power three watts represents, just recall the maxdmum volume of sound oblainable trom the avarage large mantel typoreceiver (not a midgot)-it is about 3 watts. For additional speakers, refer to pages 74 and 75, and choose either permment magnet dynamic or self-excited a.c. types. Il in doubt, write to our tree consultation department, giving all pertinent information possible.
As explained above, a record player can also be used with this system. For complete descriptions and price information, refer to page 68.

Lafayette "Co-ordinated" 15-Wat Sound System Model 806-P -As described above, includings one Latayette model 103-T amplifier, 103-DF screen cover, one model W-13627 Lafayelte Velocity mierophone with 12 -ff. of cable, one model W. 13647 tloor stand two model W-19238 Lafayette $12^{\prime \prime}$ Concert speakers, two model W-19838 Lafayette lare batfles, 50 ft . of speaker cajle, and a complete set of tubes for the amplifier. Shpg. Wt. 140 lbs . Code SEDIA.
Iist S126.50. YOUR COST
$\$ 63.25$
System Model 807.P - Same as the above, but with Lafayette Velophone mike in place of the velocity mike. Shpg. wt. 140 lbs. Codo SELLO. List Price S123.00. S?
YOUR
COST
System Model 808-P-Same as model 806-P, but rith Shure 701-A Crystal mike, instesd of the velocity mike. Shpg. wi. 110 lbs . Code SELNI. List Price $\$ 134.50 . \quad \$ 67.25$
YOUR $\operatorname{COST}$.


## 1 19



## 20 то 30 watt $D \varepsilon \rho u x e$

## coordinated SiUn Divisitil



THE Lafayetto model 821-P "Co-ordi1 nated" 20 watt Sound System is truly a de luxe system for average use in most sound installations. Theatres, auditoriums, dance halls, night clubs and similar places will find this an ideal systom to use. The many important features included assure a highly satisfactory system for present and huture needs. Practically any type of entertainment can be reproduced through the sys. tem. Its clear and crisp reproduction of the human voice insures maximum intelligibility and its excellent frequency response accounts for the high fidelity reproduction of musical instruments.

Adding to this the ability to reproduce pho nograph recordings this system is without question outstanding example olversatility.
The complete system includes the amplifier described on the preceding page, two dynamic spoakers, two nare baffes, velocity microphone with floor stand, all lubes and nocessary cables.

## Two Mikes Can Be Used

The amplifier has a total of lour input channels permitting the use of cuny two modern microphones at the same time. A built-in mixer makes it possible to mix the sound trom these two microphones together to any desired degree. Veloclty, crystal, Velephone or dynamic microphones can bo used.

The exciting current required by the new olectrostatic type of velocity mike is furnished by the amplitier.

Whon the Lafayette 20 watt "co-ordinated" sound spstem is to be used as the heart of a call or mnounciag system additional speak. ers can easily be added up to the full capacity af the amplifer; the actual maximum number of speakers depending upon the volume desired from each speaker.

## High Fidelity Velocity Microphone

The microphone furnished with the system is the now and improved Lafayetie velocity microphone which is capable of excellent performance even under difficult operating conditions. This microphone is equally suitconditions. This microphone is equally suitable for music and voice and is somewhat directional in pickup but cas be adjusted on the stand in a horizontal position to pickup over an area of 360 degrees. Its impedance is high enough to eliminate the need for a matching trannformer yet is low enough to permit long leads from the maicrophone.
Model 821-P-Lalayette 20 watt Sound System as described above, including model 131-T amplifiez and sereen cover. two model W -19238 Lalayetto concert speakers, two model W-19838 baffes, one model W-13627 Lafayett velocity microphone, 12 ft . of cable Wo 50 ft. speaker cables, one de luxe model W-13528 floor stand and a complete kit of tubes. For 110 volts $50 / 60$ cycles a.c. Shpg. wI. 130 lbs Code SENSE YOUR COST
-If system is desired with phone merely deduct sll ${ }^{0}$ cany other micro and add price of mike desired price quoted


THIS SYSTEM WAS DESIGNED BY YOU - OUR CUSTOMERS


Factory and OFice Managers wanted good Voice Reproduction

Installers wanted a System-easy to install

(52) Any Modern Mike can be used with LAFAYETTE Amplifiers

## IIT:ITCond

## - Characteristies -

Poak powor output
Rated power output into 500 ohms
Harmonic content
Hum level below 30 watts
Field supply
Amplitication (overall gain):
High Gain Chonnels
At 5 megohms input impedance At $150.00^{\circ}$ ohmas hapui Impedance

Low Gain Channels
At 500,000 ohms input impedance
At $150,000^{\circ}$ ohms input impedance
${ }^{-}$Highest value of average input devices.
Frequency response ......... $\pm 1 \mathrm{db}$ so to 10,000 cycles

## Four Input Channels

Four input channels are provided on the Model 264-A ampllitier. Two of these are for use with microphones which can be of the velocity, velotron, volophone. crystal, sound-cell or dynamic types. Theso chompels can also be used with photo-cells for the reproduction of sound-onfim ontortainment of for use with commercial devices such as olectronic sorters, counters. cutters. switehes, etc. Two low gain chanaels are also providod and are for use with phono-pickups, olectric guitars, etc. The controls for these chamaels are incorporatod with the high gain channels so that a single fader serves as a control for both a low gain and a high gain channel. The electronic mixer permits mixing aither the low or the high gain channel controlled by one lader with either the high or the low gain chanzel controlled by the other.

40 watts 30 watts

## Complete Co-ordinated System The complote Lafayetto "Co.erdinated" 30 stem

 System has been especially designed for use in moderatoly large auditoriums, dance balls and similar places. It has ample power to cover audionces as large as 2000 to 3000 persons. It incorporates every leature required tor the finest possible periormance.The microphone furnishod with the system is the new Latarette Volocity, one of the tinest mlcrophones on the market today. It has an excellent frequency response (hlat within plus or minus 3 db from 40 to 10,000 c.p.s.). and an output of minus 64 db . This mike is directional enough to greatly reduce any tendency toward "feed. back. A shock absorber coupling. supplied with the unlt. reduces noises caused by mechanical vibration.

## Two Ruditorium Speakers

Two Lalayette concort type speakers are furnished complete with baflies. These speakern are capable of handling considerable power without distortion and ample coverage can be obtained in most installations with just these two speakers. If desired, however, additional speakers can easily be added. Additional speakers should be of the permanent magzet dynemic type or self exclied a.c. speakers.

## 30 Watt Amplifier

The amplifier, which is the beart of any sound system s the Lafayette 30 watt Model 264-A described above. This amplifier will handle two microphones simultanevelocity, velephone, velotron. dynamic, crye type. Eliner coll microphones can be used promic, crystal or soundhigh impedance type.

## Complete Instructions

Complete instructions are furaished with the syitom for installation cud operation. These instructions are simple and easy to understand. Anyone with even a slight knowledge of radio or olectricity can learn to install and operato this system in a short thme.
Class or Metal Tubes
The Lafayette Model 264-A amplitier is designed for use with elther glass or metal tubes. 'The sockets are of the octel type and can be used with either style of tube as desired. A total of eight tubes are omployed: two $6 \mathrm{I}^{\prime} \mathrm{s}$, two $6 \mathrm{C} 5^{\circ} \mathrm{s}$, one 6 N 7 . (wo $6 L 6^{\prime} \mathrm{s}$ and an 83 mercury tull-wave rectitier. This tube lineup provides four stages which furnish an ovorall gads of 130 db at the rated output of 30 watts (peak output 40 watte); harmonic content. $3 \%$.

## Scientifically Tested

Like all Lafayelte "Co-ordinated" Sound Systems this model has been acientificclly designed, checked and tested under actual operating conditions and is certitied to be correct for the type of isstallation recommended.
MODEL 824-P-Lafcyette 30 watt "Coordinated" Sound System complote as described with one Latayetto 264-T amplitior and acroon cover, two $122^{\circ}$ concert type speakers (Wl9237). two lare baffes (W19833), one Ladayette velocity mike (W13627), 12 ft . of cable, one de luxe floor stand (W13528), two 50 ft . speaker cables, all plugs, etc., and a complete et af tubes for the amplifier. Shpg, wt. 110 lbs . Code SICCO. List \$171.90.
YOUR COST

## COMPLETE SYGTEm




# Cafayefte 

## For Schools • Institutions • Colleges • Auditoriums - Theatres • Factories

## For Large Installations

With vary fow exceptions practically all of the larger installations can be amply served by lhis new Lafayette 60 to 90 watt amplitier and sound system. It has power to spare yet despite this power is compact in size and extremely sizple and economical to operate.
The amplitier is the most complete unit ever developed and includes every possible feature that could be desired. All of the latest improvements are included-"reverse toedback." "automatic volume control." "automatie volume expeasion." "cathode ray eye output indicator," "automatic equalization." "beam power tubes," etc.

## Variable EVC and AVE

Both the automatic volume control feature and the cutomatic volume expansion are of the veriable type. Either of these is available at the tum of a switch. The AVC is a distinct adventage where the input to the amplifier is a variable factor. It prevents blasting and consequent overloading of the loudspeakers and distortion of the sound. The AVE is imporiant whon recordings are to be reproduced because it will compensate for the compression of the sound which takes place when the original recording is made.

## Reverse Feedback

Reverse feodback is also incorparated in the amplitier and makes possible high outputs with a very minimum of distortion. This accounts for the unusually fine quality of reproduction.


This feature is of unusual importance because it compensates for the difforence in power of the various troquencies and provides onerall response which is unusually flat.

## Cathode Ray Eye Indicator

A cathode ray eye output indicator is mounted on the face of the amplifor control panel so thet a constant check is had over the output. This feature is of great help in preventing distortion and overloading.

## Mixing and Fading Facilities

A total of four input channels is provided. Two of these are hich gain for use with micraphones and two are low gein for use with phono pickups and other high gein output devicer. Practically any two channels can be mixed together.

## Technical Characteristics

The pesk power output of the carplitier is 90 watts with a rated output of 60 watts. Harmoric content at 60 watts is $3 \%$. Orerall gain: High galn chennels-140 dby Low gain channeds-88 db; Frequency respanse-50 to 10,000 cecles within 2 db, Oufput Impedances-.35-.6-1.35-2-4-6-8-15-50. 250-500 ohms; Fleld supply -40 watts; Hum level -50 db below 60 wates.

The model 293-A has an unusually wide frequency range trom 50 to 10,000 cyeles with an overall response within 2 db providing true bigh fidelity roproduction.

## 5 Stages-14 Tubes

# Cocordunded SDUND SYSTEMS 

## Railroad and Bus Terminals - Airports - Sport Fields • Arenas • Ships - ete.

## Complete "Co-ordinated" System

A complete Lafayette "Co-ordinated" 60 watt Sound Systom incorporatiog the Lafayette 60 watt amplitier is available. This system includes, besides the cmplifier, four concert type Iafayette dynamic speckers (W19237). four batfles (W19838) for the speckers, one Amperite streamlino velocity microphone (W13565) with 12 ft . cable, one do luxe floor stand (W13528). 50 ft . of cable for each speaker and a complete set of tubes for the amplifier.

## Full Instructions Included

Complote dotaled instructions are included for Installing and operating the systom. Lafayetto "Co-ordinated" Sound Systems are so designed that connection of the various components is a simple matter and the installation can be made in a minimum amount of time.
Model $840-\mathrm{P}$-Lafayette 60 watt "Co-ordinated" Sound System as described above for 110 volts $50 / 60$ cycles a.c. Shpg. wt. 540 lbs. Code SGARI
List Price $\$ 299.00$

## YOUA COST



## Special Custom-Built Cabinet Systems

The Lafayette 60 watt "Co-ordinated" System is also aveilable in cabinet models with complete facilities for all types of entertainment. These systems are expecially designed for use in schools, colleges, institutions, factories, offices, arenas otc. Because requirements vary according to the particular purpose for which the system is to be used these systems are not curried in regular stock but are made up to order-custom-built. However. in order to keep costs at a minimum. certain components aro standard. These components include the cabinet speaker switching panels, etc. By this method we are able to offer the finest systems at a very low cost. We will gladly estimate upon a special systom il the suggested system illustratod at the right does not meet your requirements.

## Many Important Features

The following features are available in these de luxe cabinet systomsi choice of automatic or plain record pleyer; superbetero. dyne radio tuners room speaker switching panels in sets of 10 (up to three sets can be used [ 30 spoakers]), provisions fo-talk. back from room speakers; monitor speakes.

## Suggested School System

A system suggested for the average installation in schaols is illustrated at the right. This system includes a Capehart Autometic Record Changor which will play 12 secords automa ically in sequence-a superheterodyno radio tuner for ghort wave and broadcast stations, switching panels for 30 room speakes arranged so that any one or all of the thirty apockers can be turned on or ofl and with provisions for connecting the individual room speaker to the input of the amplitier so that the teacher in the room can talkeback to the operator of the gystom through the speaker. All controls aro at the correct hoight for ease in operation; the amplitier is operated by means of standard type remote control and the radio tuner is mounted in a slide typo drawer.

## Beautiful Console Cabinet

The complete system is housed in a beautiful bardwood console of mode:n design with doors at the front to totally enclose the system. The record changer is housed in the top of the cabinet and is fully accessible. Nothing has been epared to make this one of the most attractive sound systems ever offered to schools and similar institutlons. The tuner is on a sliding shelf; can be pushed out of the way when not in use.


The system is extremoly simple to operate and requises no apocial knowledge. All controls cre clearly marked so thet it is practically impossible to make an error. The power output is more than ample for most installations of this character and consequently the controls are not very critical. Any type of microphone can bs used with the system-velocity, velotron. dynamic, erystal, sound-cell or velophone.
The system is furnished less the room spoakers and microphones since the type and number of these ifems will vary ac. cording to the particular requirements of each installation. For the speakers we recommend the use of permanent magnet dynamic speakers, a complete selection of these will be found on pages 75 and 76. The type of baffle to be employed with these speakers will very with the conditions surrounding each speaker installation. For the classrooms a plain cablnet cr Iat baflle installation. For the classrooms a plain cabinet cr lat bafie will be entirely satisfactory but for the auditoriums a projector bype of bafle will usually be found necessary. If in doubt as to division for advice. Bo sure to give as complete details as possible to gulde us in our recommendations. We will also glady estimate upon specicl systems built to your order. These estimates are cheerfully given and place you uader no obligation whatsoever.
Model 1030-T - Lafayette 60 watt Standard "Co-ordinutwatt Standard "Co-ordinatscribed above and as illus. trated. For 110 volts $50 / 60$ cycles a.c. Complete with tubes. Overall dimensions: $51^{\prime \prime}$ bigh. $33^{\prime \prime}$ wide, $19^{\prime \prime}$ deop. Shpg. wt. 400 lbs. $5950.00 \operatorname{cost} \$ 75.10$


# COIVERTBLE SOUIDD SYGTEIIS OPERATE FROM BATTERY OR HOUSE CURRENT 

## WATT REMOTE CONTROL Convertible AMPLIFIER <br> This amazingly compact and powerful amplitier will conver any passenger car or truck into a highly efficient sound car.

 It takes up practically no room at all in tae car since it mounts under the dashboard out of the way just like a modern auto radio receiver. And, like an auto radio, it is equipped with a remote control that mounts on the steeriag column where it is always in tront of the operator.Mounts in the Smallest Coupe Without Affecting Passençers

A high gain chamel is for use with microphone inputi crystal or close talking velocity mikes can be used. The low gain channel is for phonograph or similar input devices. A full range tone control is incorporated.
Peak output is 22 watts; output to 500 ohms is 18 wafts at $5 \%$ harmonic content; 15 watts at $31 / 2 \%$. Output impedances: .35-.6-1.35-2.4-6-8-15-50-250-500 ohms. Gain of the high-gain channel is 125.2 db at 5 megohms, 110 db ot 150.000 ohms. Gain of lowgain chamnel is 80 db at 500,000 ohms. 75 db at 150.000 ohms. Tubes used are a 677 , a 6 N 7 and two 6L6 "Beam" power outputs. Operates on either 6 volts d.c. or 110 volts a.c.

Modisl 148-A-Lafayefte remote control convertible amplifier, complete with remote control units but loss tubes. For 6 -volt operation, $12^{\prime \prime} \times 71 / 4^{\prime \prime} \times 71 / 2^{\prime \prime}$. Shpg. wt. 33 lbs. List $\$ 69.00$ Cod AISTE. YOUR COST Model i48-T-Same as above, with tubes. YOUR COST
s34.50 .$\$ 38.27$ ACCESSORIES: Complete descriptions of hond mikes (crystal type), velocity and sound cell mikes on pages 70 and 71 ; pormament magnet dynamic speckers, and suitable dome batfes fully described on Fages 74 and 75.

 6 Volts D.C. or 110 Volts A.C.

## Model 275 A-20 Watis

More powortul and more versatile than the model 148-A amplitior listed above, the model 275-A incorporates four input circuits, two bigh-gain and two low-gain, any two of which can be mixed as desired for simultanaous operation. Comploto tacilitios for any handling the most complex outdoor or indoor installation.

## Incorporates Tone Control

 Tone control is included for adjustment of sound quality, and to minimize leed back at high volumi operation or where difticull acoustic conditions are oncountered.
## Silent Gen-E-Motor

An enclosed, silent Gen-E.Motor furnishes the necessary bigb voltages. Included are master and stand-by switches. multi-impedance output. A maxdmum gain of 140.2 db permitts use of velocity and sound cell mikes. Tubes used are $2-75 ' s, 6 A 6,76$, 6E6, and 4-79's. Current drain is 18 amperes at 6 volts d.c.
Model 275-A-Lalayotto 6 -volt. 20-Watt Con-

 $91 /{ }^{\prime \prime} \times 17 /{ }^{\circ} \times{ }^{\circ} \times 1 / 2^{\prime \prime}$ high. Shpg. $\$ 3 t .37$ lbs.
Codo ACCEES.
YoUR COST.
Model 275.5-Same as above. but with tubes. Code ACILA.
YOUR COST
$\$ 40.95$ Model 275-DF-Sereen for above ....... $\$ 1.35$ A.c. conversion packs for above amplitiors are listed in price box at right.

## Model $266 \mathrm{~A}-30$ Watts

Similar in construction and inherent features to the model 275A described at left, but has a WOREING output into a 500 -ohm line of 30 watts, with a peak of 50 wattsl
watts, with a peak of 50 wattsl 6E6, 4-76's, and 4-79's.
Frequeacy response is exceptlonal: 50 to 10,000 cycles within $31 / 2 \mathrm{db}$. An overall gain of 135.2 db (into 5 megohms) permits the direct use of modern velocity and sound cell crystal microplones. High voltages are obtained from a Gen-E-Motor. Other features include variable output impedances, tone control.
Model 266-A - Lafayette 30-watt convertible ampliting, less tubes and screen. Size, $101 / 2^{\prime \prime} x$ $171 /{ }^{\prime \prime} \times 101 /{ }^{\prime \prime}$ high. Wt. $63 \mathrm{lbs} . \$ 54.50$
Code ADROS. YOUR COST.... Model Z66-S.Same as above, but with lubes,
Code ADEAS. YOUR COST Code PDEAS. YOUR COST
Model $266-0 F-S c r e \theta n$ cover.........$\$ \$ 1.50$

POWER PACKS FOR ALL 3 AMPLIFIERS Model 1045. PP-For adapting model 266A for operation on 110 volts, 60 cycles a.c. Less tube. Shpq. wh. 24 lbs. Code PLUTE. \$TI. Model $1050-\mathrm{PP}-$ For adapting either model 148A or model 275A for operation on 110 volts 60 eyclas a.c. Less tube. Code PLIRE, YOUR COST
59.95 Abovo packs furnishod with screens, and line cords. All use type 83 rectifier.


Portablesystrm
watt andSlip-inlass
W ${ }_{\text {sicigns }}^{\text {INDOW }}$ demonstrators, entertainers, lecturers to small groups, mu. welcome this new Lafayette 5 to 8 watt portable system. It incorporates the Lafayette model 245-A amplitior described on page 46 together with a full toned dynamic loudspeaker within an attractive airplane luggage type carrying case. The speaker is mounted permanently to the case, subber covered cable.
Standard Amplifier Separable From Case
The amplitier merely "slips" into the carrying case and is the standard modol 245-A. It can be placed in any convenient logation and the speaker hung wherever it will distribute the sound most effectively.

Mike and Stand Carried in Case
Both microphone and the stand can be carried inslde the carrying case Yet the case measures only $91 / 4^{\prime \prime}$ deep. $131 / 2^{\prime \prime}$ high and $13^{\prime \prime}$ wide. Total woight including everything is only 28 lbs .
Lofayette Model 342-p-5 to 8 watt Portable System less tubes and microphone. Shpg. wh. 28 lbs, Code SEISE. List Price 551.00.

32301 YOUR COST
Model 850.9 -Same as above, but complote with tubes, a Lafayette Velophone mike, base type desk stand, ready for operation. Shpg. Wt. 33 Lbs . List Price $\$ 79.90$.
YOUR COST 539.75

Carrying Case Available Separately
The carrying case only less the speaker and the amplitier is available separatoly for those who already have the necessary equipment. The inside dimensions are $12^{\circ \prime}$ by $111 / 2^{\circ \prime}$ by $8^{\prime \prime}$ deep. The opening for the speaker is $6 \frac{1}{4}{ }^{\circ}$ in dicmeter.
Model W-22056-Lafayette 5 watt "Slip-in" Carying Case only. Shpg. Yot. 12 lbs. COST


Portable Systrm
watt and Slup-inlase
This is one of the most popular sizes of portable systems ever developed, Last Gear's model far outsold campettive makes. Many orgenizations bought these systems in quantity for use by their salesmen, demonstrators. etc. Their reports and comments were very enthusiastic. In per-
formance, excellence of design and quality of reproduction they were far superior to mything offered at anywere near their price.

This yeas, however, Lafayette ongineers have added so many now improvements to this popular unit that it is without question the greatest value ever offered. Among the numerous valuable features added is a new variable tone control for adjusting the high frequency response of the amplitier, now input circuits for velophone, velotron and other microphones requiring exciting current as well as velocity, dynamic. ous features refer to pages 48 and 49 of this catalog.

Housed in Airplane Luggage Case
The complete system is housed in an attractive airplame luggage carrying case covered with grey fabric and fitted with nickeled hardware. weight of the system is 38 lbs .
Lofoyette Model 359.P-15 watt Portable System less tubes and microphone. Shpg. wt. 48 lbs . Code SECCO. YOUACOST
Model 855-9-Same as above, but complete with tubes, a Lalayette Velocity microphone, a W-13647 tloor stand, ready to operate. Shpg. wit. 75 lbs. Code SHURE. List Price S119.00. 559.50 YOUR COST

Carrying Case Available Separately
The case used for the Lafayette 15 watt Portable System in available separately. Inside dimensions $17^{\circ \circ}$ by $17^{\circ \prime}$ by $8^{\prime \prime}$ deep. Amplitier just slips into case. Available for $8^{\prime \prime}$ or $12^{\prime \prime}$ speakers.
Model W-22057-Latayette 15 watt "Slip-in" Carrying Case only. Shpg. wt. 16 lbs. List Price $\$ 15.00$.

#  

## 20 <br> Portable Systzm and Slip-inlass

One of the most powerful single case systems cvallable, thi now Lafayette 20-watt Portable System is an excellent unit for use wherever consid. erable power output is required yet compactress is esseatial. The ampli. tier employed is the standard Lafayette model 131-A which is fully described on page 50. This amplitier together with two powertul $12^{\prime}$ Auditorium oloctro-dynamic speakers is houved in an attractive airplame luggage type case covered in grey tabric with stripes of apple green.

## Can Be Used With Two Microphones

This system can be used with two microphones simultaneously and is therofore an excellent system for the average orchestra where both a soloist and the orchestra itself must be reproduced. The Eyatem also in. cludes all of the latest Lafayette features such as "Neoodial" controls. metal lubes, tone control, electronic mixing, etc., as outlined on page 50.

## Two Auditorium Type Speakers

Two large $12^{\circ "}$ auditorium type speakers are included with the system. The case splite into two sections with one speaker mounted in each section. Overall dimensions of the case are $18^{\prime \prime \prime}$ wide, $201 / 2^{\prime \prime}$ high, $11^{\prime \prime \prime}$ deep. Total not woight of the system is 49 lbs.
Lafayotte Model 367-P-20-watt Portable System less tubes and microphone. Shpg. wt. 60 lbs . Code SORRO.
$\$ 59.75$ Model $860-\mathrm{P}-\mathrm{Same}$ as above but complete with tubes, a Latayette velocity
microphone W W-13528 loor stand. Shpg. wt. 80 lbs . Code SKUNT. List Price 5167.00. YOUR COST
$\$ 82.95$

## Carrying Case Available Separately

The case is avallable eparately for those already owning e suitablo sys. tem. Inslde dimensions $171 / 4^{"}$ by $181 / 2^{\prime \prime}$ by $10^{\prime \prime}$ deop. Speaker openings $101 / 2^{\prime \prime}$ in dicmeter.
Model W22058-Lafayette 20 -watt "Sllp-In" Carrying Case only. Shpg. wt. 18 lbs.

## YOUR COST

## 30 <br> Portable System and Slip-inCases <br> 

To combine great power output and compactaess in a portable systom has always boen an accomplishmont of Latayette engineors. But in this new Lafeyette 30 watt Portable System they outdid themselves. Here is a system with a conservatively rated output of 30 watts and a peak output of 40 watts (more than enough for a 3000 seat theatre) that is contained complete with all accessories including microphone, microphone stand, 100 teot of speaker cables and two lurge auditorium type epeakers within two very compact carrying cases.

## Sparkling Life-Like Reproduction

In respect to performance no finer system could be desired. It is high tidelity reproduction at its best. All tones trom the lowost to the highest are true to life. It does not "do things" to voices or musle but reproduces them in all their original tonal characteristics.
So many teatures are included in thls system that it is impossible within the limited space avallable to toll about them all. Most of them are fully described on pages 52 and 53 of this catalog. Most important of these include provisions for using two microphones: "neo-dial" illuminated controlss olectronle mixing and fading, otc. The complete system is housed in two carrying cases, the amplifier case measuring $19^{\prime \prime}$ by $111 / 2^{\prime \prime}$ by $13^{\prime \prime}$ high, the speaker case $24^{\circ}$ by $21^{\prime \prime}$ by $12^{\prime \prime}$ deep.
Lafayette Model 372-P-30 watt Portable Systom less tubes and microphone. For 110 volts $50 / 60$ cycles a.c. Shpg. Wi. 105 lbs . Codo STINE. List Price $\$ 155.80$.
YOUR COST
572.91

Model $870 \cdot \mathrm{P}$-Same as above, but complete with Lafayette velocity microphone, J-section, collepsible floor stand, and lubes all ready to go. Shpg. wt. 130 lbs. Code SLOUT.
List Price $\$ 195.00$
YOUR COST

```
s96.95
```


## Cases Only-Speaker and Amplifier

## Lafayette Model W-22059-Amplitier case. Inslde dimenslons 17" by $91 / 4^{\prime \prime}$

 by $\mathrm{g}_{1}{ }^{\circ \prime}$ deep. Black leatherette with nickeled herdware. Shpg. wt. 18 lbs. YOUR cost$\$ 6.50$
Lafayefte Model W-22060-Speakor Case. Inside dimensions 19" by 22" by $103 /{ }^{\prime \prime}$ deep. Black leatheretle with nickeled hardware. Shpg. wi. 24 lbs. YOUR
9.45



合


# 15 wati 

 AMPLIFIER
## Lowest Priced Amplifier

The now Lafayette model $410-A$ is the lowest priced sound-on-fitm amplifier avallable that includes all the features normally found in larger and more expensive units. It comes complete for photo-cell operation and does not require any head amplifers or almilar accessories. And, in addition, it also lacludes exciter lamp supply for any popular type of exciter lamp in use today.

## Beam Power Tubes-Electronic Equalizer

Like the large Lafayette theatre amplitier. the model $410 . A$ also includes an electronic equalizer to compensate for bad room acoustics, optical system limitations, elc. All tubes, with the exception of the rectifier are all-metal type. The two ortput tubes are the new "Beam Power" tubes which mace possible a new high fidelity of reproduction and etticiency.

## Complete Set of Controls

All necessary controls are included: gain; tones equalizatien; exciter lamp supply changeover: a.c. on-of switch. It is a complete system, and will do practicelly anything any of th, larger systems will do (except, of course, for power output). Past experience bas shown that mamy small and moderately large theatres require no more than 15-watts for best results. The peak output of the Lafayette model $410-\AA$ emplitior is 25 -watts. Complefe Technical Specifications: Rated output is 15 wetts: Poak output is 25 watts; Gain trom photocell channels ( 3 megohms) is 128 dbs Gain from mike jack is 115 db . Output impedances are 35 to $15,50,250,500$ ohms (state $\mathrm{jm-}$ pedance desired at temminale): Power lnput for 110 volts, $50 / 60$ cycles a.c.. drein 125 watts; Harmonic Content is $5 \%$ at 15 watts; Fiold Supply 16 watta into 10,000 ohms (can be divided botween two speakers at 8 watts each).

## Installation of System Easy

The completo systom is very eaby to install. Connections iar two oxciter lamps and for two photocells are clearly marked. Cables especially designod for use with photocells and carofully shielded are included with the system. Photocell. apeaker and a.c. line cables are of the plug-in type. A two-position thase mounting pormits adjustment for high or low line voltage merely by shifting the position of the cartridge fuse. Three taps are provided for the adjuntment of the photocell biaz voltage.

## Microphone Operation

A jack for the connection of a mierophone is provided on the amplitier, thus making it possible to use the system as a public address system as well as a sound-on-film system. Model 410-ADF - Latayette 15-Watt Theatre Amplitier end Screen Cover, with photocell cables and plugs, but less tubes. For 95 to 130 volts, $50 / 60$ cycles a.c. Dimensionst $63 / 4^{\prime \prime} \times 8 \mathrm{~N}_{2}$.; $\times 163 /{ }^{\prime \prime}$. Shpg. wt. 50 lbs . Code AGREM.
${ }^{5} 35.50$ Model $410-$ TDF-Same as above, but completo with tubes. $\$ 40.89$

## Portable System

Theatre quality in a suitcase-this most adequately describes the Latayette model 387-P portable. Every thing you could ask for in a pormamont instaliertion is bere, yet it is compact enough to be easily carried from place to place.
Either 16 mm or 35 mm projectorg cam be used. The buils-in electronic equalizer will compensate for any film defect and also for losses that sometimes occur in reductions of 35 mm subjects to 16 mm .

Two electro-dynamic speakers are furnished, Each spoaker is mounted on one hall of the carrying case, which acts as the bathe for the speaker, and is oquipped with a $25-\mathrm{ft}$. length of rubber covered cable and a rubuer covered plug. A pair of rubber covered cable and a rubber covered plug. A pair of shielded cables equipped with shi
Model 387 -P-Lalayette Portable 15-Wett Sound-On-Film Sys. tom complete with two speakers and photocell cables, but less tubes. Houmed in a compact airplano luggage lype cary. ing case meas uring $17^{\circ \prime} \times 17^{\circ \prime} \times 7^{\circ \prime} . S h p g$. wh. 75 lbs . Code AMEGA
s57.50 Model 389-T-Same as the above, but complote with tuhes. YOUR Cost
s62.85


#  THEHTHE SYSTEME 

## PROVISIONS FOR STAGE MICROPHONES!

The Lafayette Co-Ordinated Theatre Systems are available with one or two amplitiers. In dual channel systems, the second amplitier is used as a standby unit, ready for instant operation in the event that trouble dovelops in the amplitier in operation. A spocial switching panol is incorporated in systems where iwo amplifiers are mployeds this unit makes it possible to swing from one amplitier to the other in a momont, and also permits connocting the monitor speaker to one amplifior while the other is being used to reproduco the program.

## Compact Wall Mounting Cabinets

All the units comprising a system are housed in wall type steel cabinets provided with doors at the sides, allowing easy crecess to the wiring lerminals. The systems are so arranged that no oxtornal wiring other than the a.c. line and the stage speakers (also stage mikes when used) are necessary. Wherever dual channels are provided, terminals are mounted on opposite sides of the chassis-photocell leads are always adjacent to the profoctors they serve. In short, installation is extromely simple.

## Complete Selection Available

The complete selection, shown herewith, is varied enough to cover practically any requirement. Lafayette syatems are, how. ever, flexible enough so that any desired combinetion can aasily describiag these systems. as well as the new latayette. and simill-tone" Systems are now avadlable "Facsimili-tone" racinclude sound heads. Write for FREE descriptive circular. System Model 710-P-A deluxe system consisting of two 400-T amplifiers; one model 405-A selector panelf ono model 404-A d.c. exciter panel with remote control, one model 402-A monitor pernel; one model 210-T stage mike panel. Complete system housed in the standers wall rack measuring $201 / 8^{\circ \prime} \times 10^{\circ} \times 50^{\circ \prime}$ high. Shpg. wt. 206 lbs, Code SISTE.
$\$ 395.53$
System Model $711-\mathrm{P}$-Same as the above, but with a.c. exciter pamel model $403-\mathrm{A}$ instead of the d.c. exciter. Rack merssures $201 / 2^{\circ \prime} \times 10^{\prime \prime} \times 50^{\prime \prime}$ high. Shpg. wt. 170 lbs.
Code SNALE. YOUR COST. With Tubes..... $\$ 3$ I. $\$ 3$ Systam Model 705-P-Similar to model 710-P eystem, but does not include provisions for stage microphones. System consizts of: two 400-T amplltiers; one 405-A selector panels one 404-A d.c. excitor with remote control, one 402 - $\AA$ monitor panel. Rack meas. ures ${ }^{201 / 2^{\prime \prime}}$ x $10^{\prime \prime}$ x $41^{\prime \prime}$ high. Shpg. wi. 186 lbs. \$326.50 System Model 712-P-Same as model 705-P. but with 403 A a.c. exciter instead of the d.c. exciter. Rack is $201 / 2^{\circ "} \times 10^{\prime \prime} \times 41^{-}$high. Yhpg. w1. 150 lbs. Code SPLES. YOUR COST, Complete with Tubes System Model 714-P-One model 400.T amplifier; one model 404-A d.c. oxciter and remoto control one 402.A monitor panel, one 210-T tage mike panel. Rack is $201 / 2^{\prime \prime}$
$\times 10^{\circ} \times 41^{\prime \prime}$ high. Shpg. wt. $/ 40$ $\times 10^{\prime \prime} \times 41^{\prime \prime}$ high.
lbs. Code STELO.
YOUR COST.
With Tubes
$\$ 268.25$
System Model $715-\mathrm{P}-$ Same as sys. tem 714-P, but without the stage mike pamel. Rack is $201 / 2^{\circ \prime} \times 10^{\circ}$ $\times 291 / 2$ high. Shpg. wt. 150 lbs. Code SVATO.
YOUR COST.
With Tubes
$\$ 212.50$

System Modol 716-P-Same as model 714-P system listod below. but with model 403-A a.c. exciter instead of the d.c. exciter

or those requiring a minimum of equip Rack is $201 /^{\prime \prime} \times 10^{\circ} \times 14^{\prime \prime}$ high. Wt. 96 lbs .
Code SILVO. YOUR COST. With Tubes.
$\$ 107.50$
System Model $718-\mathrm{P}-\mathrm{Same}$ as above, but with model 404-A d.c. exciter with remote control instead of the a.c. exciter. Rack is $201 / 2^{\circ \prime} \times 10^{\prime \prime} \times 201 / 2^{\circ}$ high. Wt. 160 lbs .
Code SOCRA. YOUR COST. With Tubes
$\$ 180.50$

## Individual Units

Model 400-A 40 -watt Theatre Amplitier, less tubes. For stamdard rack mounting. No cabinet. Size: $19^{\prime \prime} \times 83 / 4^{\prime \prime} \times 91 / 4^{\prime \prime}$. For 110 volis, $50 / 60$ cycles a.c. Wt. 73 lbs . Code ASTAN. YOUR COST. leas tubes
s69.25 Model 400.T-Same as above, but with tubes. YOUR COST
$\$ 75.45$
W22086-Metal cabinet for 400.A or 404-A units. For wall mount ing. Doors on sides. $201 / 8^{\circ \prime} \times 101 / 2^{\circ} \times 10^{\prime \prime}$. Wh. 22 lbs. YOUR COST
89.75

Model 404.A-Lafayette d.c. exciter panel, less Tungar bulbs and remote control stations. Pamel for standard rack mounting. Dimensions: $19^{* \prime *} \times 83 / 4 \times 91 / \not{ }^{\prime \prime}$. For 95 to 135 volts, $50 / 60$ cycles a.c. Shpg. wt. 73 lbs . Code ASTIS.
YOUR COST
\$61.50
W21908-6 ampere Tungar bulbs (G.E.). Two required. YOUR COST Each
$\$ 5.14$
W22257-Remote Control Stationg, $41 / 2^{\circ} \times 21 / 4^{\circ \prime} \times 2^{\prime \prime}$.
Shpg. wt. 9 lbs . YOUR COST Each
$\$ 3.75$
Model 403-A-Lafayotte A.C. Exciter Panel for standard rack
 Model 402-A - Lalayette monitor speaker panel with $834^{\circ \prime} \times 4^{\prime \prime}$. and volume control. Rack mountiag. $19^{\prime \prime} \times$ $83 / 4^{\prime \prime} \times 4^{\prime \prime}{ }^{W}$
YOUR
$\$ 31.50$

## AUBURn 10w/itt kem Sisitm



## The Amplifier

Two input channels are provided, one for a 200 ohm per button carbon microphone and the other lor high imped. otnce inpul dorimperconce as phon pickups. Both tone and volume con-
trols are also provided.

## Speaker Field Supply

The mplifier will supply field current for a 1000 -ohm speaker field at 10 watts. This teature eliminates the need for a separate field exciter and enables you to use a standard d.c. speaker instead of the more expensive types. The micro. phone input transformer is bultin. Five tubes are used in the latest fype of amplifying circuit: 2-2A6's, 2-2A5's and an 83. The rated power output of the amplifier is 10 watts with a peak rating of 14 watts. Overall gain is 74 db into $150,000-$ ohm input.

## Screw Type Terminals

The output impedance is the load required by the output tubes- 14.000 ohms center-tapped. No output transformer is included since this unit is normally turnished with the speaker as stemdard equipment.
A simple to handle screw type terminal strip is provided for connecting carbon microphones to the input of the ampllfier. High impedance input devices are connected by means of a standard type phose plug. Output connection to the speakers is by means of aregulex speaker plug supplied with amplifier.
Model W15861-A-Auburn 10 walt ampliHor for 110 volts 50/60 cyclos her for 110 volts 50,60 cycles a.c. Less
 COST
Model W15861-S-Same as above, but complete with tubes............... $\$ 16.80$

# (1) 

The Complete P. A.System

For installations requiring medium power output this Auburn systom will be found to ft the bill perfectly. For tour. ist camps, parking lots. st campa, pars and demonstrators and simiway places this system than satisfy.
Complete and Ready
to Operate
The system includes all components and is ready to install and operate in a short time. Besides the amplitior the systom includes a high-quality double-button carbon microphone finished in bright chromium, a W13540 desktype mike stand, a special electro-dynamic speaker, W19308, with 25 feot of 4 -wire speaker cable and 12 feet of 3 -wire microphone cable. A complete set of tubes for the amplitier is in-cluded-in short the system is complete and ready to operate. Instructions for operation and installation are simplo.

## Adaptability

Provisions are made in the Auburn 10 watt Economy System for using a record player. Suitable types of record players will be tound illustrated and described on page 68 of this catelog. Other high output devices such as electric guitars. etc. can also be used. See page 71 for the musicians Brush vibration pick-up microphone for all string instruments. System 830-P-Auburn 10-watt Economy Sound System complete with cumplifier Sound System complete with ampier dynamic speaker W19308, one W13645 dyamic speaker wig3os, one W13645 Shure Bros. double button carbon microft. of mike cable, 25 ft . of speaker cable and a complete set of tubes for the amplifier. Shpg. wt. 75 lbs . Code SCRAM. YOUR
$\$ 26.235$

## 

An ldeal low power amplitior for use in a call syatem, inter-communicating aystem, phonograph amplitior, etc. A sturdy, conservatively rated amplitier with excepthonally tine tone quality. Frequency response equal to the finest carbon microphones available. Will supply button current for standard 200 ohm per button carbon mikes. Built-in bum tree mike transformer.
Rated outpul $31 / 2$ watts-peak 5 watts. Overall gain 78 db at 150.000 ohms input impedance. Output impe. dence 7000 ohms. Excellently designed 3 tube circuit employing one 57 voltage amplitier, one $2 A 5$ power amplifier and ane 83 rectifier.

## Terminalsin Rear

All torminals are on the back of the amplifier, the front control panel being entiroly clear of all connections. A gain control and a tone control are on the front pamel and are equipped with deeply etched metal dials. Separate terminals are provided for the microphone input and for the high impedance devices.
A complote system is available lacorporating the Auburn 31/2 watt Amplifier, logether with a dynamic speaker and a Shure double button carbon mike.
W15860-A, AUBURN $31 / 2$ WATT AMPLIFIER for 110 volis $50 / 60$ cycles a.c. Less tubes. $14^{\prime \prime}$ long, $7^{\prime \prime}$ high. $61 / 2^{\prime \prime}$ deep. Shpg, wt. 12 lbs. Code AMSES. \$1 1.50 W15860-S-Same as above but complete with tuben. Shpg. wt. 16 lbs . Code AMTUB.
YOUR COST Complete
. $\$ 12.26$ SYSTEM 831-P-Consists of Auburn $31 / 8$ watt amplitior, one Spocial W19292 electrodynamic speaker with 6 ft . of cable and plug, one Shure Bros. SB carbon microphone, 12 tt. of mike cable, a W13540 dosk type mike stand, complete set of tubes for the amplifier. For 110 Tolts $50 / 60$ eycles a.c. Shpg. wt. 50 lbs . Code SETTE. List Price $\$ 39.90$.
YOUR COST
$\$ 19.95$


AUBUINE E Cly Amplifice \& Systom This model, the most powerful in the Auburn line, has an output of 30 watts and is deigned for use with any stendard dia. phragm type crystal microphone. It has a gain of 104 db at an input impedance of 150,000 ohms. The peak output of the amplsfier is 150,000 obms.
Seven tubes are used in a highly efficient circuit including four 6 B5's, one 6A6, one 6C6 and one b3 rectifies. Frequency response is essentially flat within 2 db from 50 to 10.000 cycles. Both tone and volume controls are provided. 32 watts of speaker field excitation currozt can be obtained from the amplifier into 5000 ohms. Output impedemces available are .35-.6-1.35-2-4-6-8. impedamces available a
$15-50-250$ and 500 obms.
MODEL W15867-A-Auburn 30 watt erystal microphone Amplitier less tubes but complete with output transtormer. $10^{\prime \prime} \times 17^{\prime \prime} \times$ $10^{\prime \prime}$ high. For 110 volts $50 / 60$ cycles a.c. Wt. 60 lbs. Code UMLAS. $\$ 24.75$
Lisi S49.90. YOUR COST .... MODEL WI5867-S-Same as the above but complete with an accurately matched and tested kit of tubes. Shpg. wt. 64 lbs.
Code ALCON. Code ALCON.
YOUR COST
$\$ 31.95$

## 30 Watt Sound System

A complete system is avadlable including the Auburn 30 watt amplitier, two Lafayotto peakers, a Piezo-Astatic crystal miero. phone with stand and tubes and cables. This systom is an idecl one to use whorever considerable power output is required with good tone quality yet where cost is an important factor to be considered. The power output is more than enough for the average size theatre, auditorium, dance hall, etc. SYSTEM MODEL 832-P-Complete Auburn 30 watt System in$12^{\circ \prime}$ auding Auburn 30 watt crystal amplitior, two Lafayatto I2" auditorium type speakers model W19237, one PlezoAstedic eryutal microphone type D-104, one RCA mike stend model W13590, 50 teet of spoaker cable, and a complete $30 t$ of tubes for the cumpllfier. For 110 volts $50 / 60$ cycles acc. operation. Shpg. wt. 135 lbs . Code SPACO. Lint Price 5119.50. YOUR COST

## AUBUR $n$ Inter:Communicating sYSTEMS



## Cafayette

SPEAKER CONTROL PANEL FOR 6Y. DEVICES


This modern power supply converts 110 eycle a.c., to 6 cycle a.c., to 6 volts d.c., at beusedin radio. amplifier and industrial work.
Will supply field supply for three 6-ohm speaker fields. Ideal for use on commercial counting machines and other industrial devices requiring 6 volts d.c. for operation. Uses long-lifo oxide sec-tifier-no tubes to replace. On black enameled steel chassis with protective scrasen size. $81 / 4 \times 61 / 2 \times 63 / 3^{\prime \prime}$ high. With "on-of" switch and ruby light on tront panel.
Model $1056 . \mathrm{PP}$-Wi. $11 \mathrm{lbs} . \quad \$ 18.50$
YOUR COST


Specially designed for use with centralized P.A. systems for hotels, schools, offices, hospitals, etc. OHers a simple and positive means for controlling the operation of from one to ten speakers from a single point. Speakers can be thrown in and out of the circuit. For speakers with output impe dances of 5000 ohms, Metches 500 -ohm out. put impedance of amplifier. On standard 19". rack panel, $83 \%$ hich. Switches numbered and "on-oft" designated. Model 1002 N -Wt. 6 lbs . $\$ T 6.75$ Mode MO COST

## LAFAYETTE VOLTAGE CONTROLLER

 A specially designed aulo transformer for boosting low line voltages or dropping high line voltages to the correct value of 115 volts. Canbe used on all radios. amplitiers and electrical equipment. Tapped from 80 to 155 volts in steps of 5 switch is used to obsain the correct value tain the correct value. Features include a precision, builtin Iriplell ition volt a.c. meter, line on protection, two output receptacles on zear of case, six-foot approved rubber cord and plug, An "on-oft" switch is mounted on the front panel. In black steel case, $61 / 2 \times 7 \times 41 / 2^{\prime \prime}$. For use on $50 / 60$ cycle a.c. onily. Shpg. wt. 14 lbs. W1423-250-watt model.YOUR COST
W1424-500-watt modol. YOUR COST


## - 6

## with

 CATHDDE RAY-EYE
## WIDE RANGE T.R.F. MODEL

## Built-In Power Supply

 Unusual SelectivityT UBES used aro $3-687$ s as rif. amplitiers. 6 H6 amplitier, a 524 rectiter and a $6 \mathrm{G5}$ and a.v.c... a 6 C5 as audio The range of the tuner ls from 19010545 meters. Power supply is bult-in for 110 -volt, $50 / 60$-cycle a.c. operation.
Two output impedances are provided. One is 50.000 ohems. the other 500 ohms. The output level is sufficiently high for use to conjunction with amplifiers having as little as 50 db gain. A.v.c. action can be cut out by means of a control on froni panei to ob. tain maximum fidolity. A manual volume control is provided, and is goverred trom the front panol.
Selectivity is rated at 1000 times 97 kc . wide-an unusual tigure of morit in a tuner of this type.
Model $1016 . T P-L a t a y e t l e ~ W i d e . ~$
Model 1016 -TP-Lalayetle Wide-Range TRF Iuner with panel for standard $19^{\prime \prime}$, rack mounting. With tubes. For 110 volts, $50 / 60$ cycles a.c. Sire, $83 / 4 \times 10 \times 19^{\prime \prime} . \mathrm{Sh}^{\text {Shpg. wt. } 32 \mathrm{lbs} .}$
Code TUMAS. List Price 559.90 .
YOUR COST
${ }^{s} 29.95$
Model 10177.Tp-AR above, but chasxis loss panell for cabinet mountimg. With tubes, Shpg, wt. 29 lbs.
YOUR COST
${ }^{5} 27.95$

## ALL-WAVE <br> WIDE RANCE SUPER <br> Built-In Power Supply High-Fidelity Circuit

## 1 HIS high-quality P.A. funer employs an

 7 tubes: three $6 \mathrm{E} 7 \mathrm{~s}, ~ a 665,6 \mathrm{R}, \mathrm{a}$ a 6 GS cait using Tubes: three 6E7's. a 6C5, 6R7, a 6G5 cathode-ray tuning "eye and a 524MG full-wave rectitier. The power supply is built in. The tuning range covers trom 16.4 to 568 moters in three overlapping bands: 16.4 to 52.2 metors. 51.8 to 175 meters and 173 to 568 meters. High-idelity receptlon is made possible by means of $a$ band-widening switch in the i.f. cricuits. Other features include manual volume control, new "Beam Spot" precision tunlag dial, efficlent band-change switch, diode dotector and a.v.c. Outpute are 50.000 ohms and 500 ohms.Model 1011-TP-Lafayelte All-Wave Superhet Tuner with parael for standard $19^{\prime \prime}$ rack mounting. Complete with tubes. For $95 / 130$ volts. $50 / 60$ cycles a.c. Size. $10 \times 101 / 2 \times 19^{\prime \prime}$. Code TULSA.
Shpg. wt. 28 lbs. List Price 599.90 .
YOUR COST
49.95

Model 1012-TP-As above, but chassis only, less panel, For cabinet mounting. With tubes, Shpg. wt. 24 Hbs
Code TESTA. List Price 595.00.
s47.50

## Cafayette SINGLE \& DUAL SPEAKER Carrying Cases

## Cafayette 100-WATT BODSTER STAGE



Make Up Your Own Demonstrator and Portable Systems


## Makes a HIGH-POWER Job

 of Any 10 or 12 Wati AmplifierNow you can go after the big jobs-serve crowds up to 100,000 people at airports, ball parks, stadia, etc., using your present low-power amplitier-no rewiring-just connect and use, Uses eight $46^{\prime}$ s and two 83 rectifiers-no bettesies-Class B Variactor tilter chokes. Peak output 180 watisj into plate load 125 wetiss into 500 ohms 100 watts; frequency response $50-10.000$ cycles. - 500 Triplett MA for monltoring. Fused for protection. Multi. Model $138-5$ Lifay
all tubes. With Parel for standard $19^{\circ}$. all tubes. With Panel for stamdard $19^{\circ \prime}$ rack mounting. Size. $19^{\circ \prime}$ wide, $101 / 2^{\circ \prime}$ high. $12^{\circ \prime}$ deop. For 110 volis. $50 / 60$ cycles a.c. Shpg. wt. 122 lbs . Code AMHIL. List Price $\$ 130.90$.
YOUR COST

## Steel Cabinet for Above

Of $1 / 16^{\circ \prime}$ steol. finished in black, erystalline lacquar, amply louvred for ventilation. Equipped with lop mad back doors. All joints spot-welded. Nickel-plated snap locks. Shpg. wt. 22 lbs.
W.22003YOUR COS
5.45

# RECORDERS and RECORD-PLAYERS 

## "Vibro-Master" Studio Recorder



A perfected partable home and studio recorder that has everything in the way of a performance that could be desired and at the same time is available at a price within normal reach. For direct and "ott-the-air" recording. for cuditioning, lor P.A. work. Widely used for advertising and commercial purposes. Invaluable as a study aid for singers, speakers and instrumentalists, especially for improving radio technique. voice and dietion. Records on acetate or aluminum dises at 78 r.p.m. and plays back any record up to 12 inches.

## Self-Contained Amplifier

It incorporates a three-stage, high-gain amplitier using five glass tubes. In operation the amplitier is equalized for both recording and play-back circuits. Tho tracking mechanism is of the positive-gear under driven type. 96 lines per inch. Cutting head is adjustable for needle angle and depth of cut. $12^{\prime \prime}$ turnhead is adjustable bim heary duty G.E. motor having close regulation. Waver is completely absent.

## Includes Jensen Dynamic Speaker

 A Jensen $8^{\prime \prime}$ electro-dynamic speaker is part of the cover which can be detached for optional placement. The output into the speaker is 4 watts with a maximum distortion of $3 \%$. As an ald to precision recording the amplitier includes a high-grade meter for visual monitoring. The complets assembly is carried in em attractive Spanish-grained leather case equipped with comer guards, sturdy carrying handle and snap locks.W22100-Vibro-Master Studio Recorder complete with built-in amplifier and Jensen $8^{\circ \prime}$ electro-dynamic speaker, tubes and carrying ease. Less mike. For $110 / 120$ volts, $50 / 60$ eycles a.c.
 YOUR COST COMPLETE
199.50 Also available tor d.c. operation. Write for details. Suitable microphones and microphone accessories and stands are listed on pages 70 and 71 of this catalog.

## Professional Type Recorder



This recorder and play-back unit is deslgneत for use where nothing but the finest results can be tolerated. It will cut coated or aluminum blanks at following features which make it the toremost instrument of jts kind available today.
Motor and Turntable-machined, heavy aluminum. 16" Aywheel type turntable. . G.E. synchronous, solf-sterting. $1 / 20$ h.p. motor suspended in live rubber ... no vibration or waver. Overheod Feed-piroted in universal bearing. ilead-screw worm gear housed to avold clogging . . . ground cone bearings to avold end play in lead screw... automatic spring pressure. lead screw and riding arm are of machined stainpressure... lead screw lead screw for "outside in" or "inside less. steel
out" recording.
Cutting Head Assembly-iravels on machined stainless steel bar, not on lead screw... latch permits control at any point on record. . cam lever lowers cutier smoothly and gently.
Cutting Heod-is of electro-magnetic type (Audak 4A) ... 500 ohms impedance... pressure and cuttíng angle adjustable. Play-Back Pick-up-high tidelity, crystal type .. 100,000 ohms impedemce . . rugged, long-life construction.
Carrying Case-grained leatherette . . . chromlum-plated hardsize. $21^{\circ \circ} \times 21^{\circ \circ} \times 13^{\prime \prime} \ldots$ comer guards ...ctool compartment for convenient storage of tools, needles, script, notes. otc. Panel can be lifted quickly and simply, for repairs and adjustments.
W22101-Professioncl-Type Recorder complete as described. For $110 / 120$ volts, 60 cycles $\alpha . c$. Case size $21^{\prime \prime} \times 21^{\prime \prime} \times 13^{\prime \prime}$. Shpg. wt. 70 lbs.
List Price $\$ 285.00$.
YOUR COST COMPLETE
s213.75 Operation for other voltages and trequencies to order. We can supply lead screws for 96.112 or 120 lines per inch-hor both side out" and oulside in recording. The culting he $\begin{aligned} & \text { above has a } 500 \text {-ohm impederace- } 1500 \text { ohms to order. }\end{aligned}$


# नR BATTERIES \& BATTERY 

## RURAL-POWER GAS GENERATORS



Charges 6 and 12 Valt Batteries Provides Power for Lighting
Four-cycle air cooled engine with suction type carat 5/8 h.p. at 2350 r.p.m. Fly ball govincluded to show rate of charge A push-button self-starter included in model D. Model $C$ usea hand starter, Both have l-quart capacity fuel tanks and are $16^{\prime \prime}$ long. 11 "wide and $10^{\prime \prime}$ high. All furnished complete with generator cut-out, battery leade.

Shipping weight, 70 lhe,
W17239 Model C, for 6-v. batteries, 150 watls.
Your Cost Complete
W17230-Model
Charyeg
s29.95
Your Cost Complete
W17232 - For charging 32 -volt batteries- 250 watts W17233-For 32 -volt lighting - 250 watts Mayda Edison Base 6 -Volt Light Bulb W12255-15-wats. Draws 2.5 amps. Your Cost W12256-25-watts. Draws 4.2 amps .

## RURAL-POWER WIND.

## CHARGER-Free Power!

 For charging 6-volt radio, car and lighting batteries. This new, improved Rural-Power Windcharger charges up to 16 amperes. Constructed using new double-sealed ball-bearing generator that can be removed without dislurbing any other part. The patented tilt control permits operation in 70 -mile $w$ nds Metal sheathing on propellers prevents damage in hail, sleet, snow or band storms. Electrical outlets are shielded, providing perfect protection. Each Windcharger is furnished with an instrument panel consisting of a cutout and indicating ammeter, 6 -foot tower for fat or gabled roof mounting and tail vane. Wt. 65 lbs . Your Cost19.75 SPECIAL WINDCHARGER WIRE Impreganted triple cotton cover. W20871-12 gauge, per ft. W20872-10 gauge, per ft W20873- 8 gauge, per ft.

## 研 <br> EVEREADY A " $B$ " and "C" BATHERIES

## VESTA 2 \& 6-VOLT <br> STORAGE BATTERIES

All feature thick platesleak. proof molded rubber contain-
ers. 2 -volt type has rubber nut and bolt terminals; 6 -volt has radio terminals and bail handle. All are guaran teed.

G-VOLT BATTERIES Stock No. of Amp. Shpg. Your $\begin{array}{lllll}\mathbf{w} 21099 & 13 & 72 & 35 & \$ 5.10\end{array}$ $\begin{array}{lllll}W 21098 & 15 & 84 & 42 & 6.25\end{array}$ W21097 $17 \quad 96 \quad 50$

## 2-VOLT BATTERIES

No external resistor necessary De livers 300 hours of operation at a 16 -ampere drain. Shpg. wt. 30 Ihs W21096-
Your Cost


wo fuse offer complete protec tion. Polarized plug prevents discharging or harming bsttery. With cables, plugs and instructions. For
110 -volt, $50 / 60$ cycle se 110 -volt, $50 / 60$ cycle в.
W15698Your Cost.



Live red rubber bulb and nozzle; beaded float. Shpg. wt. 3 lbs. W15694-
Your Cost Each ........2.24 ${ }^{\text {c }}$


Tungar 5 Amp. Charger For 110 V. A.C.
For charging 6-volt batteries. Delivers a tapering charge of 5 be damaged. with clamp recepiacle for attaching to dash in car. With tube and wecessories. W15699-Wt.151ls
Esch. $\$$ ?




## PIEZO ASTATIC MICROPHONES

## SHUREMicrophones <br> NEW "ULTRA" WIDE-RANGE MICROPHONES

## Model D-2

 Double diaphragm type crystal unit. Output level -64 db. Response flat within 2 db from 50 to 6000 c.p.s. Exonly 21." diameter, onyntick. Ali chrome plated finish. Stand fittink threaded $\operatorname{lor} 1 / 2$ male pipe. Fur-dapters for $j_{4}{ }^{F}$ and nished with adapters for $1 / 4$ " and ft. ol special cable. Shpg. wt. 2 lbs.
Wour Cost
Yo..... $\$ 4.71$ Model D-2H-Sim but hand Shpg.
s 16.17 Your Cost
Model D-2HS-Hand type with wi3622- "push-to-talk" switch. Your Cost $\qquad$ 6.46 Model D-104-Single diaphragm type. Output level -56 db . High diam. $1^{\text {" }}$ thick; chrome finish 5 " -27 threaded fitting

## W13363-

s 13.23
Model D-104M Wut hand


#### Abstract

\$14.70


Model D-104HS-Same as D-104, but with "push-to-talk" switch. Your Cost Model L-1 - Lapel mike.
W13429-
Your Cost $\ldots . . . \$ 10$

## Duo-Diophragm Type



## Model K-2

Arranged so that the forces of $t$ wo opposing diaphragms are applied to one crystal simultaneously. Increases efficiency and (idelity characterflat from 30 to 6,000 ep.s., with a rise of 10,000 cps Out $t 10,0 \mathrm{el}-64 \mathrm{db}$ With 8 ft . of cable $5 / 8^{*}-27$ thread. Ship-w13428Your Cost

Feature true high-fidelity reproduction from 40 to 10,000 cycles; new "Cruciform"' erystal mounting for high output level; dual drive high capacity Graphoil Bimorph erystal: eurvilinear diaphragm; internal screen-protected units; complete barometric compensation; moisturesealed crystals. All units have standard $5 \mathrm{f}^{\prime \prime}-27$ thread for stand mounting and are furnished with single, rubber-covered cable.
wi3640 - Model 700A Wi3640 - Model 700A - Swivel
 head for any titc. ${ }^{8} 8$ in diameter Bright chrome plate overall finish. Semi-directional pickup W13641-Model 701A-Similar to 700A. In rubber-black enamel with chrome bands and fittings. $31 / 2^{\prime \prime}$ high, $2 y^{\circ}$ wide ${ }^{13 / 8}$ deep. Wi3642- ${ }^{1 / 0}$. Finished in rubber-black with circular band diameter only 2, . Your Cost Each. Any Above Models
${ }^{\mathrm{s}} 14.70$ Modernistic Desk Stand, Model $\mathbf{\$ 3 2} \mathbf{C}$-Three chrome circles on modernisher-black finish. Uses automatic friction lock. Base ${ }^{\prime \prime}$ a rich rubber-black finish. Uses autamatic
diam. Adjustable from $7^{\prime \prime}$ to $1^{\prime \prime}$. List 6.50
s3.82 W13643-Your Cost W13643-Your Cost
Floor Stand Model $\mathbf{S} 5 \mathbf{4}$ B - Three extension sections; height $251 / 2^{\prime \prime}$ to $621 / 2^{\prime \prime}$; base $103 \mathrm{~s} \mathrm{~g}^{\prime \prime}$ diam. Finished in black wriakle enamel; Shpg. wt 9 lbs . List Price $\$ 10.00$
W13644-Your Cost
$\$ 5.88$
SHURE Communications

## Type Crystal Mike

 Model $70 \mathbf{S}$ is the first mike designed especially for ham and police voice work.Output, minus 60 db . Load impedance. .5 megohm. Complete with 10 " integral desk stand and 7 ft . of 2 Blackjapan and chrome finish.
W13605-Wt. 3 lbs. $\$$ I. 70
Your Cost.......
Friction Clutch Chrome

## Floor Stond

 Made of seamless brass tubing, triple chrome plated. Heavy, modern base, 10 " diameter. Friction clutch lock varies height Irom 37" to $67^{\prime \prime}$. Female pipe thread, $5 \mathrm{~h}^{\prime \prime}-$27. Net weight, 10 lbs 27. Net weight, 10 lbs
Has no equal for price beauty or durability. W13647

## wpecial $\$ 3.45$

## Cafayelle

## 'FRICTION CHUCK

Utilize a combination friction holding and chuck lockng device. Locking device prevents rod from slipping. All stands listed have a minimum height of $36^{\circ}$ and a maximum of $67^{\prime \prime}$. Rods are of heavy-gauge, seamless brass tubing, triple chromium plated. Equipped with a universal ball and socket joint for both $1 /{ }^{\text {" }}$ pipe and $5 / 8^{\prime \prime}-27$ thread. Cast iron bases covered with spun heavy copper ch
W 13576 -Base diameter $712^{\prime \prime}$. Net weight 8 pounds, Whog wit. 10 lhs
$\$ 4.25$
Your Cost
lbs.
W13528-Base
se diam weight 10 p
hpg. wit. 14 lbs. $\$ 5.25$ w13577-Base diameter $10^{\circ}$. Net weight 18 pounds. Shpg. wit. 22 lbs.

## Portable Telescopic Stands

Similar in construction to above, but use thumbscrew adjustment because of 3 -section make-up.
W13588-From $26^{\prime \prime}$ to $66^{\prime \prime}$, Base 73/". With swivel.
Shpg. wt. 10 lbs .
$\$ 4.95$
w13646-Heavier tubes, base ( $10^{\prime \prime}$ ) and swivel.
Shpg. wit. 14 lbs
Your Cost

CRYSTAL DESK STAND


101/2" high; weighted base. $51 / 2^{\prime \prime}$ diam. Ball and sucket joint, 5/6"-27 to $1 /{ }^{\circ}$ prilliant chromium pith chromium plate. Stand only W13526-
court s2.25

CRYSTAL MIKE CAGLE

Flexible-Singie Conductor Flexible stranded tinned copper single conductor; tinned copper braid shield; cotton wrep and lac quered braid, rubber overall. Wt 10 ths. per 100 ft . W20842-Per foot W16333-50-Foot Roli W16334-100-Foot Roil

## BRUSH BR2S SOUND CELLS

## Note the new low

 iezo cells using Bi morph elements. Output, minus 66 db . Cells arespringmounted within case which is $21 /^{\prime \prime}$ in diameter! Affords $360^{\circ}$ non-directional pickup. Designed to oper-ate directly into grid of "high gain" ampli-
 fier. Furnished with a 3 -prong plug and socket for stand or suspension mounting. Finely woven brass screen finished in dull chromium. List Price $\$ 37.50$ W13632-
522.05

## TYPE B2S SOUND CELL

Uses two erystals in series. Excellent frequency characteristics. Ideal for P.A. and broadeast. Output evel minus 66 db . High impedance. Cast alumiWith 15 ft . ol cable. Base With 15 ft. of cable. Base threaded $\$ / 8$ " 27 . Sereens finished in satin chrome
plate. Shps. wt. 2 lbs. plate. Shp Your
Cost $\ldots 26.46$
 and socket W13624-Each $\$ 27.93$

## MIKE STAND SWITCH

 Mounts Between Stand and MikeHandy stand mounting "onoff" switeh for use with any off switeh for use with any case with rubber-black finish. Standard $5_{8}^{\prime \prime}-27$ thread. Overall height 2 W13639-
Your Cost... \$1.47

## 3 and 8-Wire Shielded

 Locking Connectors

For Crystal and Velocity Microphone Cobles
Connector is locked by threaded brass collar. Bakedite insulation. Use in rain slush and can be Use in rain, slush and can be
stepped on. $13 \mathrm{~K}^{\prime \prime}$ diameter, $23^{" \prime}$ stepped on.
long. Chromium finished. W13490-3-wire female connector. Your Cost Each.
Either Type
$59^{\circ}$
W13491-8-wire octal female
W13492-8-wire octal male.
Your Cost Each,
Either Type
Microphone Stand
Reducers and Swivels

$\qquad$
Stand
Made of solid brass, chrome plated

Bot Fem.

Stock No. Top Male Bot. Fem.


W13439-Model FS-8M. Similar to Model FS-13M but semi-port able type.
Your
${ }^{8} 8.23$
LAPEL VELOCITY MIKE Only $13 / 4 \times 11 / 2 \times 1^{\prime \prime}$. Range 60-7500 cycles. Output
Wiss68-200-oh
w13569-High in-f. cable. cable
Your Cost,
Either Type...... $\$ 7.64$
Replacement Ribbons Packages of 2 ribbons w13567-Supdard
sive $\quad \$ 1.03$
RCA "Aerodynamic"

## Streamlined Mike



Pressure operated microphone with fre-
quency rangeesfent from
100 to 6,000 c.p.s. $1 \mathrm{~m}=$ pedance 250 ohms. Ouiput level - 68 db . Features include: triple chrome plate finish, insensitive to eated up to 1000 feet from amplifier, not affected by wind or weather, With $6-\mathrm{ft}$. of cable. $1 / \beta^{n}$ pipe thread. Slize: $3^{\circ}$ high, $25 / 8^{\circ}$ wide, $333^{\circ}$ deep. Shpg. Wht 4 lbs. No. Mil6226
W13466-
Your Cost........ STS.

Low Impedance Crystal And Velocity Mike Cable


Consists of two conductors, culor coded in a closely woven tinned copper shielding with oute Shpg. wt. 9 lbser. per Abrasion 100 feet. W16079-Per Foot W16.201-50-Foot Ronil W16202-100-Foot Roil

## 3 ond 5 Conductor

 Shielded CobleThree color-coded conductore cightly woven tinned copper shield ye ruter covering of high-percent100 feet. Wire isg. Wt, 10 lbse per 100 feet. Wire is stranded W16145-Per Foot. W16206-50-Foot Roll. Similar to above, but 6 Similar to above, but 6 -co
Shpg, wt. 10 lbs per 100 ft .
N16100-100 ft. $\$ 7.50$
Vowr Cost Per Ft.


Response $\pm 1$ db over entire frombackground noises. Output minus 64 dt (open line). No frequency discrimination center ft. cable. Case of bronze and steel. With dust cover. Shpg we. 10 lbs . W13468-50 ohms impedance. W13475- 200 ohms impeciance
W13463-High impedance. Your Cose, Any Type
$\$ 47.04$
MODELS RAL AND RAH
 Buint to Amperi e
standards. No peaks. Flat response over entire range. Output, minus 68 db (open, line). With swivel bracket, shock absorber and dust cover. Gun-metal W 23618 -RAL. 200 W $13619-\mathrm{RAH} .2000$ ohms. Yeet of cuble. Each. $\$$ I?. 12


## STREAMLINE VELOCITY MIKES

The most advanced velocity microphones made by the eading manufacturer. Provide studio-type reproduction Feature cast, gunmetal finished cases, hand-hammered ribbon will stand even 40 -mile gale, new nickel-aluminum magnets, 8 db hisher output than other or ouder types emovable cable plug assembly, "on-oft'" switch folt des, over, deaign eliminates cavity resonance. 3-year guar antee against defects.

## MODEL RBHn-HIGH IMPEDANCE

Frequency range, $40-11,000$ cycles. Output, minus 65 db . Impedance, 2000 ohms. Permissinle cable, 125 feet. With 25 feet of cable. Shpg. Wt. 81 bs. Your Cost

MODEL RBMn
Low impedance, 200 ohms. Other impedances at no extra cost. Permissible cable, 2000 feet. With 25 feet of cable. Your Cost
s24.70 MODEL RB-Bn
Low impedance - beam type (direcdional lor unusual feedback confeet. With 25 fect of cable.
W13616- $\ldots$. $\$ 24.70$
MODEL RB-BHn
Similar to Model RB-Bn, but high impedance.
Wi3612
Your Cost
s24.70

## AMERICAN MODEL D5-T DYNAMIC MIKE

 New streamlined dynamic mike. High Impedance, 10,000 ohms (high permeability transCormer built-in). Output level -55 db . Re-sponse $\pm 1 \mathrm{db}$. from 50 to $5,500 \mathrm{c} . \mathrm{p} .5 .9 \mathrm{db}$. sponse $\pm 1 \mathrm{db}$. from 50 to 5,500 c.p.s.; $\pm 3 \mathrm{db}$.
from 50 to 7,500 e.p.s. No pronounced peaks. Not affected by temperature changes, humidity or wind noises. Semi-directional. Sireamlined case finished in black with chrome plated grill. 51/2" long, $2 \mathrm{~L}_{2}^{\prime \prime}$ diam. With awivel for $5^{\prime \prime}{ }^{\prime \prime}-27$ thread, 25 feet of rubber covered cable and Amphenol connectors. Shpg. wt. 6 lbs . W13456-Your Cost
$\$ 19.10$

## Cafayetie VELEPHONE MIKE



A velocity type mike using a static field Designed especially for clase-talking purpuses. Will operate on low-gain amplifiers,
80 db or more Re. 80 db or more. Re quires polarizing voltage of from 20 to 300 volts. Output, minus With shock absorber. Bronze finished case. Load impedunce, 5 megs. 12 ft . of rubber


## DESK MIKE STAND



Left. Has $\mathrm{S}^{\prime \prime}$ octagon
ring. Provided with 8 ring. Provided with 8
springs. Ring is removable. Height 9" Wrinkle-black ena me! finish. Shpg.
lbs. w13540Your $\$ 1.18$ DeLUXE BANQUET STAND Right. Height $13^{\prime \prime}$. Has6" removable ring. Is complete with 8 diameter pipe extendiameter pine extenblack wrinkle enamel Ship. wt. 16 lbs
Wars42-5
Each....

## Cafayetce <br> VELOCITY MIKE



Carayelte " 25 " CARBON MIKE

 ton carbon mike for betbrice that de lies competi-
tion. Range, 46 to 7000 cy -
chromium plated frame. Has pure gold ( 24 K .) contacts; duralum inum diaphragm. Unit is $3^{\prime \prime}$ diam-
 Your Cose
${ }^{5} 4.35$

## Microphone Springs

 Fine tempered steel.

## PHONO-MOTORS Record Changers \& ACCESSORIES

## Packard Automatic Record Changers

## Model K

Uses powerful two-speed a.c. motor. Plays eight 1o records automatically, repeating or rejecting any repeats itself until switch
is turned off. Plays $12^{\prime \prime}$ records manually. Dual speed $331 / 3-78$ r.p.m. is turned off Plays 12 records manually. Duat spee chassis of copper plated steel; exposed parts flnished in bronze.
W19820-Changer, leas case. List Price $\$ 47.50$
Your Cost
As above but with universal motor for 110 volts a.c. or 32 lbs . List Price $\$ 55.50$. W21050 Your Cost
W17768-Portable carrying case. List Price $\$ 9.50$.
Your Cost
Your Cost................. K but plays bot to model
$12^{n}$ records automatically. Less case. List Price $\$ 55.00$. 12 records automarica cycle a.c. Your Cost W17754-11 volts d.c. List Price $\$ 63.00$ W17764-6
W21053-Universal 110 volts a.c. or $d$
W21053-Universal 110 volts
List Price $\$ 62.50$. Your Cost.
List Price $\$ 62.50$. Your Cost.... List Price $\$ 10.00$
Your Cost
s27.81
s 32.34 $\$ 4.75$
s32.45
$\$ 37.70$
537.39

## CAPEHART Dual Speed Automatic Record Changer - Model 10-12C

Equipped with the new balanced electricpickup. Excellent device for the home, public address systems, halls, etc. Plays ten $10^{\prime \prime}$ or $12^{\prime \prime}$ records automatically, repeating or rejecting any record at will. The last record on the turntable repeats until the record-changer is restacked, or until the
 off. Volume control is buin. Entire mechanism finished in erackle black. Base $141 / 4 \times 141 / 4 \mathrm{~m}$ : height above mounting board $71_{4}^{\prime \prime}$; depth below panel $3^{13} / 3^{\prime \prime}$. It is equipped with a $10^{\prime \prime}$ turntable finished in gun-metal and covered with equipped with a of ack felt. Striking contrasts and major metal parts wherever this finish is most effective. These units are designed for mounting in cabinets or for rack-panel assembly for which they are admirably suited well as physical arrangement and dimensions Shpywt. 30 lbs.
Wi7750-Mechanism complete, less cabinet
List Price \$100.00. Your Cast
s59.50 Portable carrying case for above. Shpg. wt. 14 ibs. SI 0.05 W17752 List Price $\mathbf{\$ 2 1 . 9 0 \text { . Your Cost. }}$

## Diamond Cutting Needle

## PORTABLE ELECTRIC RECORD PLAYER

 chassis wiring changes are necessary. One tube is used; a 2A7 with sets using 2.5 volt tubes; a 6 A7 with W10599-Less tube $\$ 5.85$ Your Cost
## RCA Home Recording Dauble Faced Blanks

 Made of flexible composition, double faced. To be played back with RCA Victor Home Recording Needles. W381- $6^{6}$ Blanks. Pkg of $4.68^{\mathrm{c}}$ W382-10"Blanks. Pkg. of $268^{c}$ Your Cost ............. ${ }_{\text {Wour Cost }}{ }^{\text {W3 }}$ Blanks. Each. $62^{c}$ Recording Needles for Above W129-Pkg. of 8 .Special Acetate Cooted Aluminum Record Blanks
 Dlanks, but give better results than celluloid or aluminum. These are not supplied in pregrooved types. W349 Size ${ }^{8}$. Your Cost. 50.49 W352-Size 12". Your Cost. . 90 W353 Size 16". Your Cost $\$ 1.65$

## Aluminum Record Blanks

 Plain or GroovedThese blanks are standard for recording in many fields and are capable of extra wide frequency response with litule scratch.

Plain
Stock Your
No. Cost
N 200 Cost
$W 200$ 14e
W201 21 c
W 201
W
W202 29c
W203 42c
W199 69c
$25^{\circ}$ Have no gritty sur race, 80
seratch is seratch is
e 1 im m ated. Cutlike celluloid

Pregrooved Stock Your No. Cost W204 16c $\begin{array}{ll}W 205 & 23 \mathrm{c} \\ \mathbf{W} 206 & 39 \mathrm{c}\end{array}$ W206 39c W207 $W 207$ 55c

## Phonograph Oscillator




This efficient record player uses powerful single speed (78 r.p.m.) up is a wide range unit of the magnetic type, and a volume magnetic type, and line switch contro buitt-in. An. $8^{\prime \prime}$ turntable is employed. Case is the modern striped airplane luggage type, with sturdy clasps and hinge. Size $13 x$ 11 , $\times 66^{\prime \prime}$. With line cord and plug and pick-up connector cable Shyg. wt. 14 lbs W22014
Your Cost
ST5.95
pick-up. ...... $\$ 17.55$
W22015-Your Cost

## Green Flyer Motors and Turntables

These excellent motors are considered standard in the radio and P.A. field. Incorporate silent laminated completely enclosed and run in oil. Oversized, self-lubriin oil. Oversized, seli-lubricated bearings; will not overheat in enclosed cabinet. Has speed dial. Hardware and
speed indicator furnished. speed indicator furnished.
 W102-Single Speed (78 r.p.m.) Your Cost (Shpg. wt. 15 lbas.) Urntable. Your Cost. W100-Two-speed (78 and 33 r.p.m.) $10^{\prime \prime}$ turntable Your Cost (Shpg. Wt. 15 lbs .)
W188-As above, with $12^{\prime \prime}$ turntable. Your Cost

## Universal 110-Volt a.c.-d.c. Motor

With $12^{\prime \prime}$ turntable and change-over switch. For 78 r.p.m. records only. Shpg. wt. 11 lbs.
W126-Your Cost
Similar to above for 78 and 33 i3 r.p.m. recordings.
s11.47 W125 Your Cost
$\$ 13.23$
Sound Truck Six-Volt Motor
For use where power source is limited to 6 volis as in sound truck application. Complete with $12^{\prime \prime}$ turntable. For both 78 and 33 ys r.p.m. recordings. Shpg. w

ST4.I0
Heavy-Duty Dual Speed Motor
Similar to Model W100 above, but with larger field and rotor ( $1 / 22^{\prime \prime}$ onger). Wherever a more powerful motor is needed. Shpg. wt. 15 lbs With $12{ }^{n}$ turntable. For $105 / 120$ volts, $50 / 60$ cyeles a.c. $\$ 10.44$
W120 Your Cost. ................................... 4.
Governor Assembly for any of the above motors. W208-Your Cost
$89^{c}$
W135 Automatie Stop for Above Motors
Your Cost
New Dual Field Recording Motor
A special heavy duty model for making studio type recordings. A double motor is used, with both fields of the eonstant speed type, governor controlled. Two-speed, 78 and $331 / 3 \mathrm{r} . \mathrm{p} . \mathrm{m}$. Speed unaffected by drag of cutting head. Supplied complete with special weighted $12^{\prime \prime}$ turntable, speed change lever, escutcheon plate and all hardware. For 110 volts, 60 cycles a.c. only. Shpg. wt. 18 Ibs. \$21. (1) W224-Your Cost

## atel

 For record Genuine diamond point minum time. Used in broadcasting stations and professional recording studios and phout the country. Cut for high-fidelity. $\$ 1.75$W132-Your Cost
s 1.75
Phanagraph Needles For Recording and Play-back Steel Needles
for Recording W344-For Cellu-
Your Cost5
for 5 ..... Aluminum
Your Cost Each.
Steel Needles for playing back acetate records. Envelope of 12. I( ${ }^{c}$ w209- Your Cost
Bamboo Needles for playing back aluminum records. Envelope of 12 . W343
our Cost

## RCA Phona Needles

 Play-back onlySteel. Half Tone, 75 to envelope. Others 100 to envelope. W153-Full Tone W160-Extra Loud Tone. Your Cost Per Pack
$15^{c}$
Chromficm. Semi-permanent needles. With colored shanks.
needles. With colored 8.anas.
W357-Green ( 78 r.p.m. ).
W357-Green (thr.p.m.)
Your Cost, Eith
Package of Six.
Package of Six..........
For use in automatie phone type. W157-Extra-loud Tone.
W158 Full Tone.
Your Cost, Either Type
Sapphire Reproducing
and Cutting Needies
(A) For recording on celluloid and acetate record blanks. $\$ 3.95$
W196- Your Cost...
$\$ 2.235$
W192-
(A) For recording on pre-grooved compusition and celluloid
W194
Your Cost
$\$ 2.25$
(B) For reproducing standard records.

## NEW! SHURE ZEPHYR PICK-UP



A new, balanced-rack ing crystal reproducer. 50 to 7,000 cycles, $\pm 5$ db. Needle fits in cone grip needle chuck at a tilt to match ch at
grooves. Shock proof; double moisture sealed; double ball-bearings needle pressure of only $21 / 2$ ounces; counterbalanced; high-lift arm; nonresonant; completely shielded; housed in beautiful streamlined black molded Bakelite-10 $0^{\prime \prime}$ "long, $2^{3} 4^{\circ}{ }^{\prime \prime}$ hish, base $2^{\prime \prime}$. With $246-\mathrm{ft}$, shielder cord. Wt. 3 lbs. Model 99A. List $\$ 22.00$ W137-Your Cost
s7.06


Pick.Up Heods and Arm
A new line of universal pick-up heads and a single high quality arm types. All units are finished in atiractiv
walnut.

Pick. Up Heads
Stock Part Imped. Your
No. No. Ohms W180 9661 8.5 East $\begin{array}{llrl}\text { W181 } & 9665 & 30.0 & \$ \\ \text { W182 } & 9669 & 700 & 3\end{array}$ W184 96702800 Pick-Up Arm
Universal type, fits all heads listed above. Balanced perfectly. Part No. 9678
W187-Your Cost
$\$ 3.60$
RCA Pick-Up Coils

| Stock | Part | Resis | Your |
| :---: | :---: | :---: | :---: |
| No. | No. | Ohms |  |
| Cost |  |  |  |

Orthophonic Sound Box
Universal type; fits 2-35. Excellent qualty. Ribbed alumiBronze finish
W350-\$3.01
We can supply any RCA part not shown here at a discount of $40 \%$ from list. Write giving part number and description.


Part No. 6238-For models RE18 and 18A. Matches 20 ohm piek-up Shpg. wt. 2 lhs. ST
wi632-Your Cost Part No. 7083-For models T-5 RE-57. RE-16, RE-16A, R86, RAE68 and R-73. Matches 20 ohm pick-up to grid. $\mathbf{W 1 6 3 3 \text { -Your Cost . \$3.01 }}$ Part No. 7632-For moded 331 Also contains one reactor, two capacitors and two resistors Matches 28 ohm pick-up to grid.
Shpg. wt. 3 Hms . $\$ 2,25$

## RCA Phonograpl

## Modernization Kits

With these Kits, any old style Phono Unit can be brought up to date with a minimum expenditure.
 No. 11080 -iecludes 8.5 o h m pick-up;
pick-up arme col trol and input transformer. Shpg. wt. 10 ibs. List $\$ 16.00 \$ 9.60$
wize Your $\operatorname{cost} \ldots$ No. 9740- Contains 2800 ohms pick-up, pick-up arm and volume control. No transformer aeeded. Shpg, wt. 6 lbs. List $\$ 12.00$ Wis 9
Your Cost

Just Announced for 1937!

## ASTATIC "TRU-TAN" CRYSTAL PICK.UP

The outstanding feaup is its scientifically designed of-set head which follows the en-
tire playing surface of the record practically true to tangent of the circle at all points. This accompliahment assures longer record life and more accurate reproduction. Absolutely Insertiom mechanical resonance throughout the entire audible range. (hertion of needles has been greatly simplified-the head turns $140^{\circ}$ and the needle is dropped in from the top. Telephone black finish with W172-10" Arm. Shpg. Wt. ${ }^{\text {m }}$. Your Cost Each
$\$ 10.29$
W173-12" Arm. Shpg. wt. 5 Ibs. List $\$ 27.50$
\$16.17

## PIEZO CRYSTAL <br> PICK-UPS

In using these pick-ups, the quality of reproduction is limited oolely by the accessory equipment. Extremely light in weight; ball bearing arm. Plays either 78 or $331 / 3$ r.p.m. recordings; no counter-weight necessary W161-8 arm crystalline black. High impedance. $\left.\left.\begin{array}{l}\text { Whg1-8 } 8^{\prime \prime} \mathrm{arm} \\ \text { Shpg. wt. } 3 \mathrm{lbs} . \\ \text { Your Cost.... }\end{array}\right\} \begin{array}{l}\text { W162-12" arm } \\ \text { Shpg. } \\ \text { wt. } 4 \text { lbs. }\end{array}\right\}$

## WEBSTER Hi-Fidelity Pick-Ups

 Magnetic Type-High Impedance An efficient pick-up having a frequency range essentia!ly flat from 100 to 7000 cycles. Unit is so designed that no counterbalance is necessary when used with $33!/ 3$ r.p.m. recordings. Has flat. built-in. High impedance type-no transformer needed. For 10 or $12^{\prime \prime}$. Shpg, wt. 4 lbs.

Model X73A2-In appearance like
above, but contains piezo crystal. 40 to 8000 cyeles. Built-in control High impedance type-needs no transformer
W4ED Your Cost
57.06

## UPCO "Tone Master" Pick-Up

An efficient, wide range
pick-up at an exceptionally low price. Reproduces the entire audible range with great fidelity. For either 10 " or $12^{\prime \prime}$ records. Finished
 quer. Length $71 / 2^{\prime \prime}$ from needle to base center. High
impedance, no matching transformer required. Shpg. wt. 3 lbs. Less Volume Control $\$ 3.35 \left\lvert\, \begin{aligned} & \text { With Volurne Control } \\ & \text { w144-Your Cost... }\end{aligned} .4 .4\right.$

300-Watt Gas Driven A.C. Generator


Furnishes 110 volts, 60 cycles a.c. for operating radius, public address equipment, transmitters, etc. Also furnishes 6 volts d.c. for charging
storage batteries. Blue Diamond 4 -cycle enstorage batteries. Blue Diamond 4-cycle en-
gine, with foot pedal starter operates for 12 grine, with foot pedal estarter operates for 12 crator self-excited. Base $20 \times 11 \times 11^{\prime \prime}$. Wi. 72 lbs W19899-300-Watt belt driven. $\$ 59.95$ Your Cost Complete.
W19894-600-Watt.
W19894-600-Watt, hand crank.
 W19895-1,000-Watt, hand crank Shpg. wt. 300 lbs.
Your Cost $\$$ I 1010
Note: 600 and 1,000 watt types shipped F.O.B. Chicago, lllinois, only. Other sizes
up to 5,000 watts available.

Phono Adapter Sturdily built. With clips. W11643-For glass tubes. W11643-For glass tubes. Your Cost
Each.................


## CRFETEAE

Converters Rotary type, with built-in redio filelude: Fall bearing motor, ball oling necessary; good regulation of output; ex-
tremely quiet operation. Sizes other than
those listed ran be supplied for any use.


## JANETTE Rotary Converters

For operating 110
volt, 60 cycle a.c. elecvolt, 60 cycle a.c. elec-
trical appliances, ratrical appliances, ra-
dios, P. A. systems, etc., from d.c. supetc., Prom d.c. sup
plies. Models available
from 6 to 220 volts as listed below. All prolisted with all-wave radio filters.
If filter is not required, write for prices on
model desired. All are

model desired. All are
rotary type, efficient and long-lived.
All delliver output of 110 volts, 60 cycles a.c.
32 V. D.C. Input 110 V. D.C. Input

| Stock | Output Your | Stock Output Your |  |
| :--- | :--- | :--- | :--- |
| No. | Watts Cost | No | Watts Cost |



## Public Address UnitsowTumpats

## ALL-ALUMINUM "DOME" BAFFLES



All heavy-gauge aluminum construction. $100^{\circ} \%$ weather-proof. Overall length 20", bell diameter. $17^{\prime \prime}$. bell lengih, $10^{\prime \prime}$. Accommodatea all $10,11,12^{\prime \prime}$ speakers. With suspension rings and hardware. w20040 List 58. Vour Cost.

54,71

## Deluxe "Dome" Baffe

Similar to above, but of heavier metal. Includes snap-on weather proof cover,
W20044-List $\$ 15.00 . \$ 8.82$
Adopter Rings For Above For reducing size of opening. Specy kize when ordering

## Giant All-Aluminum

## Parabolic Reflectors

Similar in appearance to above. De igned for use with high-power cone peakers. Its large size offers suffilent loading for reproduction of very low frequencies. Overall length $26^{\circ}$ bell opening $22^{\prime \prime}$. Accommudates 10,11 and $12^{\prime \prime}$ speakers. Spun of heayy-gauge aluminum in natura brilliant color. Shpg. W20092 List 513.50 . \$7.94
A slightly smaller model is available or speakers having an outside diameter of from 8 to $101 /{ }^{\prime \prime}$ ". Length $16^{\prime \prime}$, bell diameter $15^{\prime \prime}$. Shpg. wto 51 bs.
W20093-List 58.00 . \$4.71
Your Cost..........
Proportionately smaller for speakers rom 6 to 8 w 20094 -List $\$ 7.50$. \$ 4. Your Cost

Callapsible Floor Stand For Aluminum Boffles


A truly portablestand weightand fine appearance. Equal in stairo to casttypes. Telescoping sections are of seamlesa steel tubing. Aspecial permits quick and simple adjustment of height which can be varied up to
feet. Its saddle teet. Its $\mathbf{C i n a d}$ ad agraph units. Finished in blackename (non-rusting) finished fittings. finished fittings. rubber-tipped legs W20059-List $\$ 12.50 . \$ 4.35$

CINAUDAGRAPH Air-Column Units and Horns


MODEL FYA UNIT-8'
Handles a steady power input of 5 watts; surges up to 20 watts Diameter $8^{\prime \prime}$, depth $5^{\prime \prime}$. $1 \frac{1}{2}{ }^{\prime \prime}$ diameter voice coil; impedance 6 ohms. Less Transformer. Shpg. wt. 11 lbs. List $\$ 31.00$.
 Your Cost.

MODEL HWA UNIT-10"' Handles a steady power input of 25 watts; हurges up to 30 watts. Diameter $10^{\prime \prime}$, depth $61 / 2^{\prime \prime}$. $2 \frac{1}{2} 2^{\prime \prime}$ coil. impedance ohras. Less Transformer. Shpg wt. 35 lbs. List $\$ 70.00$.
W19386
${ }^{5} 41.16$
MODEL SUA UNIT-10 $0^{\circ}$ Handles a steady power input of 30 watts; surges up to 40 watts, Diameter $10^{\circ}$. depth $6^{\prime \prime}$. 3 3/2 diameter voice coil: impedance 6 . ohms. Less Transforme. Wi9387-
Your Cost.
$\$ 53.80$

## Cafayette

Electro-Dynamic Unit
 Diaphragmis spun from sheets of duralumin. Voice coil impedance is 15 ohms at 1000 cycles.
20 -watt continuous operating capacity; 25 watts peak 6-volt feld draws 1.5 amps. Male thread, ${ }^{\circ}{ }^{\circ}$ ${ }_{\text {W1 }} 13$ libs. List S25.00. $\$ 14.70$ As above
field coil.
w1339-Your cost ${ }^{\text {s }} 14.70$

## WALL MOUNTING <br> ALUMINUM HOUSING

These units are ideal for centraschools offices etc. Of hearygauge aluminum. Equipped Bereen and grille
 diameter $51 / 2^{\prime \prime}$. inside depth 4 ! $2^{\prime \prime}$ " Shpg. wi. 2 lbs. Cost...2.36 With $7^{\prime \prime}$ opening $511_{2}^{\prime \prime}$ depth.
w20062-List $\$ 5.00^{2} \$ 2.94$
Your Cost..........
truck mounting
FOR "DOME" BAFFLE5

> Mounts dome baffles on trucks, walls, etc. Swiveled fordirectional effect. $8^{\prime \prime}$ cast base. Takes Cits141/2" high. Aluminum finish. Shpg. wt. 6 lbs. w20095-\$2.8: Your Cos Saddle and swivel. W20097-

## Cafoyette <br> 6.FOOT TRUMPET

## Removable <br> Tone Arm

Guoronteed
Weother-Proof

## In All Climates

This remarksbly low-priced expon ential trumpet is guaranteed to be $100 \%$ weat her-proof. It is shipped partly knocked-downaled. Has a 212 -foot detachable tone arm with threaded casting for the driver unit. Finished in brilliant aluminum color. Measure 6 feet long, square bell is $30 \times 30^{\prime \prime}$. W20068-List $\$ 25$. $\$ 1$ Your Cost

30-WATT FIELD EXCITER
On black laequer steel chassis
with removable
screen cover
Uses either an
80 or an 83 V
rectifier tube
Has the follow-
ing specifica
using an 83 V it
will deliver 30 watts into a 1000 ahm field (minimum resistance), 24 watts in to 1500 ohms, 20 wates into 2000 ohms, 17 watts into 2500 ohms and 11 watts into 5000 ohms. When using an 80-type rectifier, it will de 16 ver 18 watts into a 67 b-ohm field 16 watts into 1000 ohms, 11 watts
into 2500 ohms and 8 watts into 5000 oh ms. Attractively finished in smooth black. For 110 volts, 60 cycles a.c. Size, $7 \times 33^{8} / 8 \times 63 / 8^{n}$ Shpg. Wt. 8 lbs. Less Tube.
Wls235-List $\$ 13.50 . \$ 6.75$
Your Cost...........

WRIGHT de COSTER Model 2050 Speaker and Trumpe $\$$
For the avo erage P.A.
instalracron where cost is a prime factor but qual.

ity is stil. Ideal for the reproduction of voice and music at outdoor functions, auditoriums, etc. Trumpet is sturdily constructed of wood and Insulite, and is finished in attractive silver Exterior is weather-proofed. Has screen across bell opening. Has scren coil impedance 5.2 ohms ; handles 4 coil impedance 5.2 ohms; handles 4 to 5 watrs continuously. sumes 9 to 10 watts, normal. Over all length of trumpet, $2714^{\prime \prime}$, bell pening, $22^{1}{ }^{1} \times 14^{\prime \prime}$. Shpg. wt. 15 lbs

Supplied Less Transformer W19188-With 1000 -ohm field W19187-With 2500 -ohm field W19189-With 6-volt field
List $\$ 20.50$.
Your Cost,
Any Type
$\$ 10.04$

## ATLAS

FLARED BAFFLES
"Demount-
able" type able type
flared baffe. Measures $14^{\circ \prime}$ deep; $30 \times 18^{\prime \prime}$ down size is $30 \times 16 \times 2$ 1/2" $^{\prime \prime}$ proofed mate-
 prals. Aluminum paint finish. Type " A " will accommodate $10,11,12^{\prime \prime}$ speakers Type "B" up to $9^{\prime \prime}$ speakers. Shpg. wt. 10 lbs
W19838-Type A
W19837-Type B
Your Cost Esch.... $\$ 3.95$

## DIRECTIONAL BAFFLES

These de-
 mountable, directionaf speaker bai fles can be ssembled n a few rnoments and if knocked down for storage. Material is weatherproofed and handsomely finished in aluminum paint. Bell opening, $22 \times 23^{\prime \prime}$; length $25^{\prime \prime}$. When taken down for storage, it measures $27 \times 25 \times 3$ ". Type "A" takes 10,11 and 12 " cones; type " $\mathrm{B}, 7,8$ and $9^{\prime \prime}$ speakers. Shpg. wt. 15 lbs. w20053 Type A W20052-Type B
List $\$ 8.50$
$\$ 5.00$
Flared Exponential Baffle
Similar to the directional haffie de scribed above, but flared on all sides, Guaranteed $100 c \%$ westher-proof in all climates. Bell, $24 \times 36^{\prime \prime}$; 37 " long Takes up to 14 "speakers. Finished in aluminum paint. Wt. 20 lbs. W20039-Less cone housing. List Price 514.50.
58.53

## SPEAKER HOUSING

Designed for use with either flared or directional bafles. Inside diamoter $15^{3} \times 15^{3} / \times 11^{\prime \prime}$. Will fit above unit or one of your own construction. Is completely weather-proofed W20051-
Your Cost.
s2.85

## Public Address/High-Fioelity Speakersis

JENSEN 12" "Hi-Fi"

## P.A. Speakers

Most popular for all p.a. work and for the finer raceiver and centrallized radio systems. Model A12 has a range from 30 to 7500 c.p.s. Handle 12 watts continuously;
18 watts peak. Field wattage max. 18, normal 14, min. 10. Voice coill 8 ohms at $400 \mathrm{c} . \mathrm{p.s}$. Fifficiency second only to $18^{"}$ and auditorium models. Cone diam. $121 / 8^{\prime \prime}$, 12" wide.
Model B12X is similar to the model A12 but is slightly less efficient, and handles approx. 10 watts continuously. Field watt-
onge 1

Stock No.
Model A12 P.A. Speakers (Shpg. wt. 21 lbs.) W19028 W19029 W19034 W19035

## W19036

W19037
W19038
W19039

| W19304 |
| :--- | :--- |
| W19033 |
| Ohms |

860 ohms 4400 ohms c.t. YOUR COST 860 ohms 500 ohms 1000 ohms $\quad 500$ ohms 1250 ohms $\quad 500$ ohms 2500 ohms 4400 ohms c.t. B12-X Speakers (Shpg. wt. 14 lbs 2500 ohms $\quad 500$ ohms c.t. 1250 ohms 4000 ohms 1250 ohms 500 ohms
'12.64


## Speciol A12 A.C. Model

12" model Jensen A12 spexker with special Lafayette field supply using an 83 tube. For 110 volis, $50-60$ cycles a.c. Complete with transformer for 250-500 ohm line. Shipping weight 30 lbs . W19301-Your Cost, Special
s 16.95

## JENSEN Audiłorium Speakers

Handle 18 watts continuously, 25 watts peak. Voice coil 8 ohms at 400 c.p.s. Field wattage 33 max., 26 normal, 20 min. Cone diam. $135{ }^{6}$ Furnished with 500 ohm line transformer
M-20 D.C. 110 volt d.c. 3000 ohm field. Shpg. Wt. 46 lbs w19248 Your Cost
${ }_{35}, 33$
M-10 A.C. 110 v., 60 cycles a.c. with tube.
W19246-Shpg. wt. 56 lhs. Your Cost
$\$ 52.47$

## JENSEN 18" Dynamic Speakers

High fidelity (LIF) models have range up to 9000 c.p.s. Standard fidelity models have range up to 5500 e.p.s. Power capacity 25 watt continupus, 40 watts peak. Voice coil 8 ohms at 400 c.p.s. All with 500 ohm line transformer. A.C. models with tube,

| No | Model | Field | Shps, wt. |  |
| :---: | :---: | :---: | :---: | :---: |
| W19030 | M-18 D.C. (Stand. Fid.) | 110 v.d.c. | 68 lbs. | \$44.2 |
| W19031 | HF-18 D.C. (Hi-Fid.) | 110 v.d.c. | 68 lbs . | 46.3 |
| W19032 | M-18 A.C. (Stand. Fid.) | 110 v. | 78 lbs. | 61.4 |
| W19357 | HF-18 A.C. (Hi-Fid.) | 110 v | 78 lbs |  |

## JENSEN "Q" Hi-Freq

> Speoker and Filter

Tweeter speaker, range 1200 to 8000 e.p.s Handles 5 watts peak. $10,000 \mathrm{ohm}$ field. Voice coil 16 ohms at 3000 e.p.s. Whipping weight, 7 lbs.
W19355 Model Q5-A Your Cost $\$$ S. 3.73
Model F9 filter for above.


## JENSEN P.M. Speakers

These Jensen PM speakers eliminate the field coil used in the conventional electro-dynamic. The subused in the conventional electro-dynamic. The sub-
stitute is a heavy, permanently magnetized, newly stitute is a heavy, permanently magnetized, newly
discovered metal alloy. In performance, these mod discovered metal alloy. In performance, these models equal electro-dynamics of similar size. Have exceptionally fine sensitivity and efficiency
Voice Coil Impedances, 6 ohms at $\mathbf{4 0 0}$ c.p.s.

6" Models PM6-E
$65 \mathrm{~S} \times 3 \frac{3}{} \mathrm{~s}^{\prime \prime}$ deep. Shpg. wt. W19079 Universal Tube W19079 Universal Tube $\$ 3.7$ W19078 500 ohm line $\quad 3.67$ W19081 Less Trans.

## $8^{n}$ Models PM8-D

| B1 $1 \times 4$ Y" | deep. Shpg. Wit. 6 Ibs. |  |
| :--- | :--- | :--- |
| No. | Transformer | Each |
| W19082 | Universal Tube | $\$ 4.70$ |
| W19077 | 500 ohm line | 4.62 |
| W19084 | Less Trans. | 4.03 |

10" Models PM10—C $10^{\text {n }}$ diam. Shpg. wt. 7 Ibs. $\begin{array}{cc}\text { No. } & \text { Transformer } \\ \text { w19085 } & 500 \text { ohm line }\end{array}$ $\begin{array}{ll}\text { W19085 } & 500 \text { ohm line } \\ \text { W19086 } & \text { Universal Tube }\end{array}$ Each W19086 Universal Tube $\begin{array}{r}\mathbf{\$ 7 . 5 0}\end{array}$ w19088 Less Trans. 6.61 12' Models PM12-C
$12^{\prime \prime}$ diam. Shpg. wt. 8 lbs.
No. Transformer W19089 500 ohm line 62 W19090 Universal Tube $\$ 9.11$ 9.26 8.38

## High Fidelity PM Speckers A12-PM

Replace the conventional electro-dynamic models A12A.C. Frequency range up to 7,500 c.p.s. Voice coil impedance 8 ohms at 400 c.p.s. Power handling capacity 12-18 watts. Completely dustproof. Ideal for p.a. systems. Shpg. wt. 21 lbs .

| Stock No. | Input Transformer | Your Cost Each |
| :---: | :---: | :---: |
| W19093 | For 500 olim line | \$21.46 |
| W19094 | Universal, for all tubes. | 21.76 |
| W19095 | Less Input Transformer | 20.44 |

## LAFAYETTE CONCERT SPEAKER

## A powerful $12^{\prime \prime}$ electro-dy

 namic speaker especially well suited for use with public address systems where high quality and power handling capacity are re quired. The speaker will handle 12 watts of audio power continuously, with 18 watt peaks. Frequency range 8,000 c.p.s. Pressed paper 8,000 c.p.s. Pressed paper and three point spider suspension. Voice coil impedance 16 ohms at 400 c .p.s. Heavy steel frame is finishedin satin black enamel carin satin black enamel; car-
ryink handle provided ommended field current 12 watts. Terminal strip on back, fully shielded. Allsupplied less input transformer. Shpg. wit. 25 lbs. W19236 - With 1.000 ohm field coil. W19237 - With $2,500 \mathrm{ohm}$ field coil. W19238 - With 5,000 ohm field coil. Your Cost Each, Any Type
 S19239-c. model, using 80 rectifier. Less Tube.

## s.95 <br> \$8.75

## CINAUDAGRAPH <br> "Magic Magnet" Reproducers <br> * No Field Current <br> * Extremely Wide Range

Feature: polyfibrous cone material, voice coil on a quartz cylinder, nipermag (extremely powerful) may-
nets, no hum, extremely wide nets, no hum, ex
frequency response.

Model MA 6-8-6'
Power capacity 4 to 8 watts. Re somance freq. 120 to $150 \mathrm{c} . \mathrm{p} . \mathrm{s}$. Voice coil dia. $\nexists \mathrm{K}$. impedance 6 ohms. Shipping weight 3 liss. $\$ 3.09$
w19377-Your Cost Model EZ 8-7-8'
Power capacity 5 to 8 watts. Res onance freq. $110-150$ c.p.s. Voice coil 1 dia., impedance 6 ohms. Shipping weight 41 bs. $\$ 4.4$ I Model EZ 8-10-8' Same as above, but with larger magnet. Shpg. wt. 5 lbs. W19379
our Cost ......... \$5.88
Model NZ 10-7-10' Power capacity 8 to 10 watts. Resonance freq. $80-110$ c.p.s. Voice coil $1^{\prime \prime}$ dia., impedance 6 ohms. Shipping weight 5 lbs. $\$ 5.29$
w19380-your Cost

Model NZ 10-10-10 Same as NZ 10-7, but with larger magnet Wt 61 bs. $\$ 7.20$ Model FY 12-12-12' Power capacity 15 to 18 watts. Resomance freq. 60-80 e.p.s. Voice coil $11 / 2^{\prime \prime}$ dia., impedance 6 ohms. Shipping
w19382
Your Cost
SI6. T7
Model HW 13-13-121/2"
Power capaclty 20-30 watts. Resonance freq. 30-50 e.p.s. Voics coil dia 24 n " $^{2}$ impedance 6 ohms Shipping weight 43 lhs Your Cost
$\$ 35.97$
Model SU 18-12-18' Power capacity 25 to 35 watts. Res onance freq. $30-50$ c.p.s. Voice coil $31 / 2^{\prime \prime}$ dia., impedance 6 ohms. W193g4 weight 78 lbs . W19384-
Your Cost
$\$ 67.62$ All models listed above supplied less input transformer

## New Acoustic "VARI-DEFLECTOR'

Take speakers up to $13^{\prime \prime}$ outside diameter and $9^{\prime \prime}$ deep. New modern istic design in black and silver. Can be mounted on any corner or wall surface, either horizontally or vertically. Adjustable deflectors direct sound to desired areas of coverage and eliminate high frequency beam effects. Special internal acoustical construction eliminates resonance and
vibration. Of solid, sturdy acoustic
 material. Mounting brackets furnished with each unit. With badk cover piece. Size: $28^{\prime \prime}$ long, $14^{\prime \prime}$ bigh, $12^{\prime \prime}$ deep. Shpg. wt. 17 lbs W20098-Model VD-12. Your Cost
${ }^{\text {s } 7.35}$

## JENSEN Peri-Dynomic Speaker

Model 3,000. Enclosed type for flush mounting. Con sists of an $8^{\circ}$ PM speaker mounted in a heavy wood cabinet finished in hlack laequer and natural walnut. Panel $12 \times 16{ }^{\prime \prime}$. Directs sound downward at an 18 de gree angle. Ideal for centralized radio systems. Less imput transformer, 6 ohm voice coil.
Shpg. wit 121 bs .
wligo96 Your Cost.
\$T2.2?

## Quality SPEAKERS for Every Requiremenf?

81/2" Dynamic Speaker


For use in radio consoles, medium-sized amplifiers. frequency re sponse; covers the entire audible range with univers. al output transformer to match any output tubes. Shpg. wt. 10 lbs. W19307-With 1000 ohm field W19292-With 2500 ohm field Your Cost Each. Either Type
s2.75

## 11" Dynamic

Same specs. as above. Wt. 13 lbs. W19308 - With 1000 ohm field w19290 - With 2500 ohm field Your Cost Each Either Type s3.40 Special 6" Dynamic
 This midget dynamicis excep structed and shows a fine frequency response. Pressed paper cone. Supplied ess output shog.
W19131-1800 ohm field W 19130-2500 ohm field Your Cost Each Same as above, but with $25005^{c}$ field and output transformer to match single 47,2A5. 61.35
W19124-Your Cost

## Model $149012^{\prime \prime}$

Para-Curve Speaker
 A new wide A new wide
range speaker suitable ceivers, p.a
work, etc Respons axtends to
8000 c 11/2" diam. yoicecoi! has imped. ohms. Power capacity T² $^{1 / 2}$ watts. Standard 2500 ohm field. Field dissipstion 9 watts min., 16 watts dissipstion 9 watis min., 16 watts maz. With universal output trans-
former. $1218 \times 7^{\prime \prime}$ deep. Shpg. wt. former. $1218 \times 7^{\prime \prime}$ deep. Shpg. wt.
17 lhs. $\$ \frac{3}{\text { W193 }}$ Your cost

## Model 1990 Junior

 Stadium SpeakerAhigh

 ed, high ed, high 12 in for p.a.
use, for use, for
the bet terfe
ceivers etc. Will continuously. Voice coil power pedance 10 ohms at 400 c.p.s. Re sponse up to 8000 c.p.s. Furnished with universal output transformer to match any tubes. $121 / 8 \times 8 \% / \mathrm{m}^{\prime \prime}$ Field resistance 2500 ohms. Shipping weight 25 lbs. $\$ 9.75$

## JENSEN Model R Electro-Dynamics



Compact dy pamics for home and auto radi receivers.Ruggedly construct ed. 5 " models with $12^{\prime \prime}$ con nector cords; 6 and $8^{\prime \prime}$ models with $18^{\prime \prime}$ curds. All have hum-bucking coils. Voice coils 5 ohms at 400 c.p.s. (se note below).

F5-R 5" (wt. 4 lbs.) Stock Field Res. Your Cost No. $\left.\begin{array}{cc}\text { Ohms } \\ w 19054 & 3000 \\ w 2057\end{array}\right\}$ E6-R $6^{\prime \prime}$ (wt. 5 lbs.) $\left.\begin{array}{ll}\text { W19059 } & 2500 \\ \text { W19063 } & 1000\end{array}\right\} \begin{aligned} & \$ 3.0\end{aligned}$ W19067 6 (auto)

7 lbs.
D8-R $8^{\prime \prime}$ (w $\left.\begin{array}{ll}\text { W19069 } & 2500 \\ \text { W19073 } & 1000\end{array}\right\} \$ 3.82$

## FS-3 Field Supply

 Maximum continuous rating of 10 watis, sufficient for exciting field coils of all Jensen speakers from F5R to and including B12X. Type $25 Z 5$ rectifier tube furnished. On metal chassis. For 110 volts, 60 cycles a.c. Wit. $101 \mathrm{lbs} \$ 4.0$ I
## JENSEN Model C Elecłro-Dynamics

$\qquad$ A
qu
na
ly
rad
Pa
H
fe
1
co
18 $18^{\circ}$. All with cords. All with hum bucking coils. Voice coil imp. 8 ohms at 400 c.p.s. $8^{7}$ models have power capacity of 6 wats; 10 models capacity 8 waths, (See mode.)

C8.R $8^{\prime \prime}$ (wt. 9 Ibs.) Stock Field Res. Your Cost $\left.\begin{array}{ll}\text { No. } & 2500 \\ \text { w19040 } & 2550\end{array}\right\} \leqslant 4.40$ C10-R $10^{\prime \prime}$ (wt. 11 Ibs.) $\left.\begin{array}{ll}w 19044 & 2500 \\ w 19046 & 1250\end{array}\right\} \quad \$ 5.59$ W19046 1250 (wt. 13 lbs.)
C. $12-R \quad 12^{\prime \prime}$ (w. $\left.\begin{array}{ll}\text { W19048 } & 2500 \\ \text { W19051 } & 1250\end{array}\right\} \$ 6 . T 7$

NOTE. All Jensen model R - ond model C speakers are furnished with UNIVERSAL OUTPUT TRANSFORMER to match any type of output tube.

## Speaker Cement

 Carbon Granules Extrafine quality-not
adulterated. Contains sufficient granules to refill one twobution mike. $39^{c}$
w 13481 Each...

For speaker
cones and voice

$\square$ 3 rapidl

$$
\begin{aligned}
& \text { rapidiv } \\
& \text { W15239 } \\
& \mathbf{W 1 5 2 4 0}
\end{aligned}
$$

$\qquad$
$\qquad$

## Each...sc

## NEW! UNIVERSAL DYNAMICS



A line of high quality dynamic speakers fur VERSAL FIELD COIL ANDUNIVERSAL FORMER. Can be used anywhere, at any time. Field resistance: 2500, $2200,1800,1800$ tapped 700 ohms. Output transformer matchesany type

$$
\text { output tubes, single or p.p. Voice coil imp. shown at } 4
$$ Stock Model Diam.

| Stock | Model | Diam. | V.C. | depth |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| No. | No. | In. | ${ }^{\text {Impp. }}$ | In. | 7 . |
| W19159 | 490 | $6^{\circ}$ | 5.05 ahms | 318 | 8 |
| W19160 | 590 | $8{ }^{\prime \prime}$ | 5.05 ahms |  |  |
| W19158 | 690 | 10" | 5.05 ohms | 5\%16 | 10 |
| W19147 | 990 | $12^{\prime \prime}$ | 5.05 ohms | 7 | 12 |

## 'NOKOIL" SPEAKERS

High quality speakers requiring no field ex-itation- Ntilize new magnetic alloy. Idea or call systerns, p.a. installation, in schools, hotels, ard as secondary extension speakers. Model $198412^{\circ}$ models especially developed or high-powered p.a. installations. All have cadmium plated steel frames. Excellent frequency characteristics. Furnished with universal tube or $500-1000-1500$ ohrm line transformer.

| Stock | Model <br> No. | Diam. | Input Trans. Furnished | Cap. Watts | Wt. Lbs. | Your Cost |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| W19359 | No. | In. | Universal Tube | 31/2 |  |  |
| W19140 | 582 | $6^{\prime \prime}$ | Universal Tube | 3 | 4 |  |
| W19360 | 582 | 6 " | 500-1000-1500 Ohms |  |  |  |
| W19141 | 682 | $8{ }^{\prime \prime}$ | Universal Tube |  | 5 |  |
| W19365 | 682 | $8{ }^{\prime \prime}$ | 500-1000-1500 Ohms |  | 6 |  |
| W19366 | 782 | $10^{\prime \prime}$ | Universal Tube |  |  |  |
| W19367 | 782 | 10" | 500-1000-1.500 Ohms |  | 8 |  |
| W19368 | 1380 | 12" | Universal Tube |  | 8 |  |
| W19369 | 1380A | 12" ${ }^{\prime \prime}$ | 500-1000-1500 Ohms Universal Tube |  | ) |  |
| W19370 $W 19371$ | 1984 1984. | 12" ${ }^{\prime \prime}$ | Universal Tube 500-1000-1500 Ohma | $\begin{aligned} & 15 \\ & 15 \end{aligned}$ | $9\}$ |  |

Special $5^{\circ}$

## A.C.-D.C. Compact

Especiallydesigned for use in a.c.-d.c. midget standard 3000 ohm field and is furnished with an output trans. former to match a single 43 tube. Cadmium plated
 metalirame. w19293-

## Your Cost,

## Each

## 5" Auto Speaker

Same as above, except with 6-volt field and with transformer to match single 41.
W19296- Your Cost S.35

## $6^{\prime \prime}$ Dynamic with

Universal output transformer matches any existing types of out put tubes. Speaker iramefinishedin
cadmiumplate. Shpg. wt. 6 lbs.
W19165-1000 ohms.
W19166-2500 ohms.
W19122-6-volt for auto sets. W19109-1800 ohms tapped at 300 ohms. Your Cost,
Any Type.
s 1.79
We can supply any special fleld coil or output transformer at lowest prices. Write for detais.

## Model 390

 Diameter 5". With output transformer to matchasingle 43.Field resistance 3000 ohms. Voice coil imp. 42. ohms at 400 c.p.s. Field diss. 6 watts max. Shpg. wt. 4 lbs. Cost
s1.91

## "HYFLUX" Magnetics

 Built to exBuit to ex-atandards
staprovide toprovide themaxjmumalit
qual quality perform cellent for

tems, in schools, hotels, etc. Re quire no field excitation. Features include: one-piece seamless cone, metal dust covers, easily accessible screw driver adjustment, Bakelite coil form. Shpg. wt. 4 lbs.
Stock Diam. Imp. Your $\left.\begin{array}{ccc}\text { No. } & \text { In. } \\ \text { W19142 } & 6^{\prime \prime} & 10,000 \\ \text { W19144 } & 6^{\prime \prime} & 7,000\end{array}\right\}$ ? W19143 $8^{8^{n}} \quad 10,000 S 5 \cdot 20$ W19145 8
$\left.\begin{array}{r}10,000 \\ 7,000\end{array}\right\}, 2+2,1$


Delivers 9 watts into 2500 ohms. Uses 2525 tube. Metal chassis has 4 lbs. Less tute. $\$ 2,123$
W19162-Your Cost

Quality Speakers"Accessaries

Balanced Armature Magnefics Employ magnets magnets
and balanced armatures. Very sensitive;
will handle nurprisingly

large volume without distortion. Available in chassis form, or housed in walnut cabinets with front and back grills and $6-\mathrm{ft}$. cord.

| Speaker Chassis |  |  | Speakers in Cabinets |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Dia. | Each | No | Di | Each |
| W19121 | 3 " | \$0.98 | W19106 | 5" | \$2.48 |
| W19230 | $5{ }^{\prime \prime}$ | . 89 | W19107 | 6 | 2.68 |
| W19199 | $6^{\prime \prime}$ | 125 | W19108 | 9 | 3.45 |
| W19119 | $9{ }^{\prime \prime}$ | 1.65 |  |  |  |

## Special 5" Magnetic



## NEW 3"' DYNAMICS!

Now for the first time-an
efficient dynamic speaker measuring only $3^{\prime \prime}$ in diameter! Incorporates all the features of the $5^{\prime \prime}$ and $6^{\prime \prime}$ types, and will handle a surprisingly large volume of sound without distortion. Pressed steel frame, trans former mounted on field housing. Pressed paper cone
 Field resistance 3000 ohms. Overall size $41 / 438 /^{n}$. Long leads. Shpg. w't. 3 lbs. W19298- With transformer to match a single 47, 2A5, 42, 12A7, 25A7.
W19299-With transformer to match a single 43, 45, 12A5.
Your Cost Each,
${ }^{\text {s }} 1.49$

## Rubber Covered 4.Wire Cable

 Idealfor speakers.Heavy rub-
ber cover.
Hemp wrap-

per over each conductor. Will stand up under most severe conditions of use. Conductors color coded. Shpg. Wt. 6 lbs. per 50 ft . W16154-100 Ft. for Si. 25
Your Cost per Foot

## Cement Kit

For Speaker Cones; Voice Coils, R.F. Coils and Chokes. One bottie of all and one bottle of thinner. Complete with brush.
W19499


## Cone Centering Shims

Flexible celluloid shims that will last. Sixteen shims in a handy leatherette folder. Contains four each of the following sizes: $.0125^{\prime \prime}, .010^{\prime \prime}$ ". $0075^{\prime \prime}$ and .005" Takes care of all speakers W19649$K$ it of 16

## Speaker Grille Cloth

 Fine quality figured orna-mental cloth for use behind mental cloth for use behind
mpeaker grilles. Neat appearance.
W19609 - Your Cost. . ?



## EXACT DUPLICATE REPLACEMENT CONES FOR STANDARD SPEAKERS

Stock

W19501 Atwater Kent 43 $55,60,64,66,67$, F4.
W19502 Patho. $15142 . .$. 84, 55B, 627, 87, 90 , ${ }_{85}$ Early Models 83,
W19782 Atwater Kent 43,46 ,
$55,60,64,66,67, F 2$. 55, 60, 64, 66, 67, F2. Part No. 14374

## W19518 Best

W19577 Bosch 5A, 39A W19505 Bosch 48, 58.
W19520 Brunswick S81, S82, 81, w19521 Clarion $60,80,81,81$

| Outer Your | Stock | Outer Your |
| :--- | :--- | :--- |
| Diam. Cost | No. Set or Speaker Diam. Cost |  | rion $60,80,81,85$, ${ }_{60}^{90}, 91,100,120,25-$

W19522 Clanon $51,63,5$ W19525 Claron 220, 260, 25-260 W19527 Claron 320 W19534 Clarion 480
W19574 Colonial 33, LL-18 W19579 Colanial 36,
W19617 Crueley M45, 40 S W19580 Fada 15, 20, 25,32 W19583 Fada 11, 12, KU, KW W19538 Grunow $801,701,751$, 762, 753, 671, 1152 , W19548 Grunow 650, 651, 661, W19519 Jensen D7, D8
W19645 Jensen D9, Inner Spider W19549 Jensen D15
W19551 Jensen D16.


Genuine RCA.VICTOR

## Replacement Cones

We can supply any RCA cone not shown here at a discount of $40 \%$ from list.
Stock
Model
Part Your
W19403 34, 35, $39,50,55,59,80$,
82, 86, RE20, RE569,
W19404 R6, 7,8,9,10, 11, 12, RE,-
18, RE19, $21,14,15,17$,
$8558 \$ 1.20$

W19405 R32, 52, RE45, RE75, 10801 - 90 W19406 R28,28P, RE40,R22,100, 101. 110, 111, 114, 115 300, 301.
W19407 R5, R5X, R5 d.c
W19776 M-34, M-105...
8987
7236
W19410 R37, $38,37 \mathrm{P}, 38 \mathrm{P}, 112$ 120, 121, 122, 142B, w19209 100 A speaker (mag.)

## 9428

 W19210 10C-B, 103 speakers. ... 9190(111

## Celotex Speaker <br> \section*{Baffes}

We will supply bamles with any size hole, to your specifications, at no additional cust. When
ordering, specify hole size ordering, specify hole size
desired. Shpping weight $21 / 2$ lbs. per sq. ft.

| \% ${ }^{\text {/3 Thick }}$ |  | Size | Hole | 1/2" Thick |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Stock | Yow |  |  | Stuck | Your |
| No. | Colt |  | Size | No. | Cost |
| W19714 | \$0.20 | 12x12 | 5,712 or 9 | W19793 | \$0.32 |
| W19715 | . 45 | 18×18 | 71/2 or 9 | W19794 | . 85 |
| W19716 | . 75 | 24124 | $71 / 8$ or 9 | W 19795 | 1.35 |
| W19717 | 1.65 | $36 \times 36$ | 9 or 12 | W19796 | 3.10 |
| W19718 | 2.55 | 48x 48 | None | W19797 | 5.65 |
|  |  | $48 \times 72$ | None | W19799 | 6.95 |

We can supply speaker comes and field coils for any standard speaker at the very lowest prices. When ordering, glve all pertinent information, and If possible, send a sample. Orders promptly and carefully handled.


Replacement

## Field Coils

Exact duplicate replacement speaker Field Coils for
standard speakers. We can supply any special or standard field on special order.

Stock $\quad$ Set or Speaker
No.

Ohms Cour $\begin{array}{lllll}W 19668 & \text { Brunswick } 16 . \ldots & 2500 & \$ 2.35 \\ \text { W19470 Brunswick } & 15,22,32,42 . & 1610 & 2.35\end{array}$ W19686 Crosley Model 57, 58, 69, 10000 W13462 Grunow 5A. W19429 Jensen D7, D8 W19694 Lyric $9^{\prime \prime}$.
W19670 Magnavox D7 (9\%) W19446 Majestic G1 W19447 Majestic G2 W19657 Majestic G4, G5..
W19678 Majestic G3 W19463 Majestic G19F, G19G W19458 Philco 20, 21 (2́768) W19456 Philco 65, 76, 77, 86, 87, W19753 RCA R4
W19411 Rola F4.
W19464 Rola G12
W19474 Rola F6, F8, K7, K9 W19475 Rola F6, F8, K7, K9 W19696 Silver-Marshall 30. W19679 Stewart-Warner 950
W19465 Stewart-Warner R202 W19484 Temple All Models. W19466 Utah Little Giant W19486 Victor RE32, 45, 75


## APEX-Gloritone

 Field CollFor chassis 26. 11500 ohms tapped at 9040 ohms. Also used in U. S. Radio
W19450-25/8 dia., $11 /^{7 \prime}$ deep.
W19655- $2^{1} \mathrm{~s}^{n}$ dia., $1^{\prime \prime}$ deep, $7 / 8$ " hol
W19656-21/" dia., $15 /$ " $^{\prime \prime}$ deep, $13 /$ " $^{\prime \prime}$ ho Shpg. wt. 2 lbs.
Your Cost, Any Type

# notern purese Test Instiuments 



## No. 151 CATHODE RAY OSCILLOGRAPH

Align receivers visually-check distortion and hum-see what you're doing with this modern X-ray of radio. This new instrument utilizes the new RCA type 913 cathode ray tube having a one-inch screen. Extremely -high gensitivity- 1.75 volts (RMS) for full-scale deflection. Vertical and horizontal amplifiers and timing axis have flat response curves from 30 to 10,000 c.p.s. A mplifiers have individual controls Small spot diameter, sharp focus-individual centering controls. All controls on front panel. Cabisration screen and ight shied included all instructions. In gray wrinkle finish metal case with nickel trim Reverse etched nickel-silver panel. Shpg. wt. 16 lhs. w21548-Your Cost, Complete with Tubes
s 47.50

## ELECTRONIC SWEEP TEST OSCILLATOR No. 150

Ideal for every application in which a wide frequency test oscillator is needed. The new electronic sweep circuit incorporated with the unit, makes the oscillator adaptable for use with all types of cathode ray oscillographs, eliminating the need for a separate irequency modulator. Frequency range of the oscillator is from 90 to 32,000 kc . ( 9.4 to 3300 meters) on fundamental frequencies only. Six bands divide up this range. Internal 400 cycle, or external aniplitude modulation. High r.f output- 0.25 volus; negligible leakage; three-step attenuator plus continuously variable control. Large 4 diameter dial is indirectly illuminated, and two vernier ratio of $2: 1$ and $5: 1$ are provided. All bands individually calibrated. Tubes used: 1-6A7, 1-6F7, 2-6C6's, and 1-80. Housed in gray wrinkle lacquer steel cabinet. Size: 133 " long, 91 " hish, $71_{2}{ }^{2}$ deep. Handle on top. Shpg. wt. $19 \mathrm{lbs} . \$ 1$
$W 2547-$ For 110 voles, $50-60$ cycles a.c. Your Cost, Complete with Tubes

## ADDITIONAL RCA INSTRUMENTS

We maintain a complete stock of these instruments at all times.

Audio Oscillator 9633 With tubes. Wt. 11 lbs. $\$ 64.50$
W21456-Your Cost. . Piezo-Electric Calibrator No. 9572. Wt. 2 lbs.
w 21452 - Your Cost $\$ 29.95$ Frequency Modulator No. 9558 . Wt. 8 lbs. $\$ 27.50$ Cathode-Ray Oscillograph No. TMV122B. Complete with tubes. Shpg. wt. 25 lbs. $\$ 84.50$

## DEPENDABLE Model 408 MULTITESTER



A pocket size tester with a meter having a sensitivity of 2000 ohms per volt. Attractive etched Bakelite panel. Meter has multi-range scale with accurate calibrations. Following ranges provided: d.c. volts from $0 / 5 / 50 / 500 / 1000$; d.c. milliamperes from $0 / 5 / 50 / 500$ d.c. amperes from $0 / 5$; d.c. micro-amperes from $0 / 550$ d.e. amperes irom $0 / 5 ;$ d.c. micro-amperes from 0/550;
ohms from $0 / 500 / 50,000 / 1,000,000$. Built-in batteries ohms irom $0 / 500 / 50,000 / 1,000,000$. Built-in batteries
for ohmmeter. Zero adjuster. Wedded steel morocco finished caser. $3 \times 57 / 6 \times 2^{\circ}$. Shpg. Wt. $21 / 2 \mathrm{lbs}$. Wio498-With batteries Shpg. wt. $21 / 2 \mathrm{lb}$
Your Cost.
Same as above, but in "build-it-yoursele" 25 Less hatteries. Shpg. wt. 2 lbs.
W10499-Your Cost...........
$\$ 8.33$


## Precision Volt-Ohmmeter

Ideal for all ordinary service work. Employs a mov ing coil type meter, accuracy 2\%. Following meter ranges: $0 / 50 / 500$ volts d.c.; 0 to 500,000 ohms. Batteries enclosed. Ohmmeter has zero adjustment. 1,000 ohms per volt. Supplied with $30^{\prime \prime}$ test leads. In black Bakelite case $15 / 8 x^{21 / 3} \times 37 / 8 "$ Shpg. wt W11450-Your Cost
57.78

Simplex Volf-Ohmmeter
Similar to above, but with magnetic vane type meter and with following ranges: $0 / 3 / 30 / 300$ volts


## NEW TRANSCO

## CATHODE-RAY

## OSCILLOGRAPH KIT MODEL 913-CR



A complete, highly efficient cathode ray oscillograph kit designed for use with the new RCA type 913 cathode ray tube having a 1 " viewing screen Easy to assemble and wire. Used to align radio receivers, adjust transmitters, for the laboratory, for industrial applications, etc. Highly accurate- easy to use.
An efficient "saw-tooth" sweep circuit is built-in, eliminating the need for any external sweep. Unit also includes a built-in wide range vertical amplifier, with provisions for cutting amplifier in or out. Othe features are: linear sweep with 5 position switch for selection of sweep frequencies; linear aweep amplitude control; finef requency control; positive self-locking synchronization circuit. Kit contains complete diagrams and instructions. Housed in metal case with etched metal panel, Size: $8^{7} h^{6} \times 81 / 8 \times 8 \frac{1}{4 \prime}$. Shpg. wt. 14 lbs . W21542 Complete kit, less tubes and 913 tuhe.


## New CLOUGH-BRENGLE Model 105 Cathode Ray Oscillograph

One of the latest low cost, COMPLETE
 ssillographs. Contains: innear aweap cir cuit, dual amplifiers, synchronizing circuit, beam centering control, five tubes. Uses the new $l$-inch screen type 913 cath-
ode ray tube. Input sensitivity .68 ode ray tube. Input sensitivity .68
volts (RMS) for full scale deflection. Amplified and compensated linear sweep. range from 15 to 30,000 c.p.s. With automatic synchronization for positive locking of image. Amplifiers flat over an extremely wide range. Complete selection of crystalac finished metal case $87 / 8 \times 81 / 3 \times 93 /{ }^{\circ}$. Etched silver and green front panel. For Etched silver and green front panel. For
110 volts, 60 cycles a.c. Shpg. wt. 28 lbs.
w21549
Your Cost, Complete with All Tubes
$\$ 47.92$ TIMEPAYMENTS: $\mathbf{5 5 . 5 0}$ down, and $\$ 5.05$ permonth for $\mathbf{1 0}$ months.
w21457-Model 79-B Audio Signal Generator. . .... Your Cost $\mathbf{\$ 5 5 . 3 7}$ TIMEPA YMENTS : $\$ 6.50$ down, and $\$ 5.70$ per month for 10 months. W21459-Model OC-A R.F. Signal Generator.

Your Cos $\$ 33.81$ TIME PAYMENTS: $\$ 5.50$ down, and $\$ 4.83$ per month for 7 months. w21461-Model OD-A R.F. Signal Generator....... Your Cost $\$ 31.85$ TIMEPAYMENTS: $\$ 5.50$ down, and $\$ 4.83$ permonth for 7 months. W21462-Model CRA-Cathode Ray Oscillograph .. Your Cost 590.65 TIMEPAYMENTS: $\$ 10.00$ down, and $\$ 9.40$ permonth for 10 months. W21463-Model OM-A Inductor Sweep

Your Cost $\$ 63.21$ TIMEPAYMENTS: $\$ 7.00$ down, and $\$ 6.56$ per month for 10 months. W21464-Model 81-A Frequency Modulator........ Your Cost $\$ 33.57$ TIMEPAYMENTS: $\$ 4.00$ down, and $\$ 3.46$ per month for 10 months. W21465 - Model UD-A Power Level Indicator. ..... Your Cost $\$ 27.44$ TIME PA YMENTS: $\mathbf{5 4 . 5 0}$ down, and $\$ 3.85$ per month for 7 months. W21466-Model 88 V.T. Peak Voltmeter. ............ Your Cost $\$ 44.59$ TIMEPA YMENTS: $\$ 5.50$ down, and $\$ 4.57$ per month for 10 months.

## WESTON Model 772 Analyzer

Incorporates a meter having a sensitivity of $\mathbf{2 0 , 0 0 0}$ ohms per volt. Draws extremely ittle current. Following meter ranges a vailable: d.c. volts, at 20,000 ohms per voit,
$0 / 2.5 / 10 / 50 / 250 / 1000$; a.c. volts, at 1000 ohms per volt, $0 / 2.5 / 10 / 50 / 250 / 1000$ id.c. milliamperes $0 / 10 / 50 / 250$; d.c. micro-amperes $0 / 50 / 100$ $1000 ;$ ohms $0 / 3000 / 30,000 / 3$ megohms / 30 megohms; out put meter ranges $0 / 2.5 / 10 /$ $50 / 250 / 1000$. Etched black panel, red and chrome trim In portable case $151 / 8 \times 51 / 8 \mathrm{x}-$ $8^{3} \mathrm{~K}^{2 \pi}$. Shpg. wt. 11 lbs. w 21523
Your Cost, Complete.


20,000 ohms per volt

Model 1240 Master Condenser Tester


Quickly and accurately checks the condition of any type of capacitor including paper, mica or electrolytic types. Defects are easily shown on the legible meter scale. For elecIrolytic units, a "Good-Bad" scale is provided. In testing for break downs, the model 1240 excels in climinating the uncertainty of the "cut and try" method.
D.C. voltage for breakdown tests is available up to 1000 volts in steps of $2,20,60,200,600$ and 1000 volts. The same holds true for a.c. volt ages. A line voltage regulator with a unique shadow type indicator insures accuracy at all times. Furnished in a sturdy metal case with attractive black wrinkle finish. Size: "7/3x69/8x48". Test leads and full instructions included. Shpg. wt. 13 hs. List $\$ 37.25$.
W21487
Your Cost
$\$ 24.33$


MODEL 1503 MULTI-PURPOSE TUBE TESTER

acceasories. Shpg, wt. 26 lbs . Model 1504-As ab Shpg. wt. 29 lbs Shpg. wt. 29 lbs.

Tests all types of tubes, including glass, metal-glass and all-metal types. Provisions for Neon short types. Provisions for Neon short test-separate diode test-emis-
sion. Checks electrolytic capacision. Checks electrolytic capaci-
tors for leakage. Following test ranges also provided: d.c. volts rom 0/10/50/250<500/1000 $(1000$ ohms per vol, a.e volts from $0 / 10 / 50 / 250 / 500 / 1000$ (at 400 ohms per volt); d.c. milliamperes from $0 / 10 / 50 / 250$; ohms from $0 / 1000 / 10,000 / 100,000 / 1$ meg. $/ 10$ meg.; decibels irom minus 10 to plus 15 . In quartered oak case $1531 \times 113 / 8 \times 71 / 2^{\prime \prime}$. With all
45.74
s55.54

## ADDITIONAL TRIPLETT INSTRUMENTS

| These instri <br> Model 1231 | ments kept Oscillator. |
| :---: | :---: |
| Model 1232 | Oscillator |
| Model 1230 | Oscillator |
| Model 1206 | Complete A nalyzer |
| Model 1205 | Complete Analyz |

W21477-Your Cost $\$ 22.86$ W21478-Your Cost 24.50 W21479-Your Cost 15.02 W21485-Your Cost 79.38 W21484-Your Cost 72.54

Model 1207 Complete Analyzer. Model 1210A Tube Tester Model 1310 Tube Tester Model 1502 Tube Tester Model 1260 Audio Oscillator Model 1295 Modulation Monitor Model 1250 V. T. Volimeter. Model 1181 A Portable Laboratory

Model 1200A Master Universal Tester


New tilt type dual meter provides separate a.c. and a.c. meter movements. D.C. meter has 500 microampere movement with $2 \%$ accuracy. Following rangse provided: d.c. volts from $0 / 10 / 50 / 250 / 500 /$ 1000; d.c. ma. from 0/1/10/50/250; ohms from $0 / 500 / 1500 / 1,500,000 /$ $3,000,000$; a.c. volts from $0 / 10 / 50$ / 250/500/1000. Batteries for ohms scales self-contained. With leads and instructions. Shpg. wt. 12 Ibs. List Price 532.50.
W21480-
s21. 23
Kit of parts to build model 1200A W2481
Your Cost
MODEL 1200 B .33
12008: Essentially the same as model 1200 A , but with a more sensitive copper-oxide type a.c. meter.
$\mathbf{W} 21482-c o s$
526.14 W21482-Cost.
MODEL 1220A Tube test adapter for a bove. Complete with all cables and plugs. Shpg. wt. 101 lbs . W21483
Your Cost
59.80 $\begin{array}{ll}\text { W21486-Your Cost } 581.02 \\ \text { W21488-Your Cost } & 19.60 \\ \text { W21489-Your Cost } & 24.17 \\ \text { W21519-Your Cost } & 35.93 \\ \text { W21517-Your Cost } & 27.76 \\ \text { W21516-Your Cost } & 24.33 \\ \text { W21521 Your Cost } & 32.66 \\ \text { W21522-Your Cost } & 37.24\end{array}$

## 

READRITE Model 430 Tube Tester for All Tubes


An up-to-the-minpriced to fit the priced to fit the
pocket of any gerpocket of any ser-
viceman or dealer viceman or dealer: Tests all tubes in-
cludiag the new 8 cludiag the new 8 -
prong metal and glass-metal typess. Teat tubes witb actuas load values applied so that acis obtained. Tests for shorts and leakage. Uses Tr plett Model 221 meter with "Good-Bad" scale. Quartered oak portable cane with cover., $8, / 2 \times 8 \times 6^{3} 4^{\prime \prime}$. For 110 volis, 50/60 cycles a.c. only. Shpg. wt. 10 bs .
${ }^{s} 17.64$
READRITE Model 431 Tuba Tester Same as above, but with REA DRITE "Good Bad" meter instead of Triplett. ST
W2146s-Your Cost

## RANGIER Model 557 AllWave Signal Generator


mediate bands, and leas than $3 \%$ for short wave bands. Completely shielded. Puts out both modulated and unmodulated signass. All bat teries and two 30 cubes are included with
a ceessories. Black leatherette case $12 \times 615 x$ $533^{\circ .}$ Shpg. wt. 13 lbs.
$\mathbf{W} \mathbf{2 1 4 7 0}$

RANGER Model 640-740

## Free Point Analyzer

 A combination free-point tester and volt-ohmCompletein Completeineverydetail for extensive
voltage, current orresistance measurement.
 either direct contact with sockets or by the free-point plugin method. Includes a Triplett square type precision meter reading: $0 / 10 / 50 / 250 / 500 / 100$ volts. a.c. and d.c. at 1000 ohms per volt
(accuracy $2 \%$ d.c. and $5 \%$ a.c.) $0 / 1 / 10 / 50 / 250$ milliamperes d.e; low ohms 0/300; high ohms $0 / 250,000$ with self-contained 1.5 volt battery. Five sockets for testing any type tube. Electro-


We maintain a complete stock of these instruments at all times.
Ranger Model 735 Pocket Volt-Ohm Milliameter. Complete with test leads. Shpg. wt. W21471-Your Cost.

## Addifional RANGER and READRITE Instruments

## Ranger Model <br> Shgy, wht. 21 libs.

# 5UPREME G Tr 

## MODEL 550 DE LUXE TESTER



The finest, modern radio testing instrument on the market today. New Supreme Quadrimeter with indirectly illuminated windows. The following 29 ranges are provided: a.c. 1400. ${ }^{\text {d }} \mathrm{c}$ volts: 7 /35/140 1450/700/1400: $25 / 140$ a mperes: $7 / 35 / 140 / 350 /$ a mperes: $700 / 1400 ; 0 / 14$ amperes (external only) amperes (external only); ohms:
$0 / 2000 / 20,000 / 200,000$ 2 megonms/ mexohms; mid.: $0 / .07 / 35 / 1.4 / 3.5$ $7.0 / 14$; db: -10 to $+6 / 0$ to $+16 /+10$ to $+26 /+20$ to $+36 /+30$ t.0 +46 . Also contains electrolytic and electrostatic capacitor leakage check with self-contained power supply. Ohms scale has zero adjustment. Meter sensitivity is $1000 \mathrm{ohms} / \mathrm{volt}$. Tubes are tested by grid shift. The power supply operates from $110 / 125$ volts, 60 cycle a.c. Panel is of antique bronze
$141 / 4 \times 7 / 2$. With aceessories, instruction manual and adapters. Shpg $14,4 \times 7$ 艮. With aceessories, instruction manual and adapters.
wt. 40 his. W21504 Your Cost, Cash.
Tame Payment Price: $\$ 6.00$ down, $\$ 5.85$ per month 10 months.

## MOCEL 585 DIAGNOMETER

Themost complete service unit of its type a vailable Performs 38 separate test functions, using the exclusive Supreme free reference system of analysis. Quadrimeters, with bi-ndicating needles, are used for radio and tube test ndications. Radio tests include the following ranges: d.c. volts from 0/7/35/140 /350/700/1400; a.c. volts from 0/7/35/140/350/ 700/1400; d.e. milliamperf from 0/7/35/140/
 $350 / 700 / 1400$ and $0 / 14$
amperes; capacity measamperes; capacity meas-
urements from $0 / .07 / 35 / 1.4 / 3.5 / 7.0 / 14.0 \mathrm{mfd}$; resistance from low range of $0 / 200$, and $0 / 2000 / 20,000 / 200,000 / 2,000,000 / 20,000,000$ ohms db . ranges from -10 to $+6 / 0$ to $+16 /+10$ to $+26 /+20$ to $+36 /+30$ to +46 db . The tube tester, with English reading scale in colors, tests all tubes, including the all-metal octal base types, metal-glass types. Power supply operates from 110 volts, 60 cycles a.c. only. Panel as 42 lbs W21503-Your Cost S95.0I
Time Payment Price: $\$ 10.00$ down, $\$ 8.00$ per month- 12 months

MODEL . 500 AUTOMATIC


Tests all tubes for quality on English reading scale, under rated loads. Only 6 sockets for all tests, including octal tubes with filaments terminating at any two positions. Tests cathoderay indicating tubes. Ranges: a.c. and d.c. volts:万/ $140 / 700 / 1400$; d.c. milliamperes: $7 / 140 /$ 700/1400; ohms, 0/2000 20,000/200,000, 2 megs., 20 megs.; db: -10 to 6,0 to 16,10 to 26. Neon tube leakage test. With all accessories.
 Your Cost, Cast.
Time Payment price: $\$ 7.50$ down, $\$ 6.61$ per month for 10 months.

MODEL 505 TUBE TESTER


Teats ALL tubes at RMA rated loads. New, illuminated dual-window meter gives English and arbitrary readings; top scale reads "Good," divisions for close comparison of similar type tubes. Adjustment for power line voltage. Neon tube for leakage tests. Ideal for bench or field. Operates from 110 voits, 60 cycles a.c In hard wood carrying case with detachable lid. Size, $19 \times 14$ Y. $\times 6^{3} /{ }^{\circ}$. With all accessories W21507-Shpg. wt. 30 Jhs.

## Vour Cost, Cash

 month for 10 months.
## TIME PAYMENT PLAN

You can buy Supreme Instruments on time. No red-tape! No complications! Just fill out an application, send it in with the ist payment, and the instrument is shipped. Write for blank.

MODEL 570 SIGNAL GENERATOR
Full coverage from 90 kc . to 60 megacycles in 7 hands. 20 megacycles on fundamentals; 20 to 60 megacycles on harmonics. Electron-ator- Modu-
 lator stage
modulates carrier $30 \%$ at 400 cycles. Laddertype attenuator; jack for external wobbler; unmodulated or modulated r.f. output: 400 cycle audio note; shielded, metal portable case $103 / 2 \times 81 / 255^{n}$. With tube and instructions. For 110 volts, 60 cycles, a.e. $\$ 3$ ?
w21513- Your Cost, Cash Time Payment Price: $\$ 4.00$ down, $\$ 3.90$ per Time Payment Pri
month for 8 months.

## Model 580 Signal Generator

Similar to above, but includes beat frequency audio oscillator ( $50-10.000$ cycles), electronic wobbler and automatic timing circu $\mathbf{W}^{21509-S h p g . ~ w t . ~} 40 \mathrm{lbs}$
Your Cost, Cash.
$\$ 53.85$
Time Payment Price: $\$ 6.00$ down, $\$ 5.44$ per month for 10 months

## OTHER SUPREME UNITS

## W21505-Model 540 Tester

 Your Cost, Cash$\$ 3.66 / \mathrm{mon}$ Time: $\$ 24.00$ down, $\$ 3.66 /$ Model 590 Meter Your Cost, Cash
s36.21 Your Cost, Cash Time: $\$ 5.25$ down, $\$ 4.64 / \mathrm{month}-10$ months. W21532 Model 45
Your Cost, Cash.
$\$$ \$34.15 Time: $\$ 1.00$ down. $\$ 3.82 /$ month 9 months. Wour Cost Cadel 490 Meter $\$ 22.49$ Your Cost, Cash.
nth-5 months Time: $\$ 8.00$ down, $\$ 4.25 /$ month -5 months. Wour Cost, Cash ....illoscope $\$ 9$ I. 109 Time: $\$ 10.00$ down, $\$ 7.68 /$ month 12 months. Wour Cost, Cash Diag. $\$ 144.99$ Time: $\$ 15.00 \mathrm{down}, \$ 12.05 /$ month -12 months W21514-MMdel 520 Bridge $\$ 36.21$ Time: $\$ 4.00$ down, $\$ 3.66 /$ month -10 months.

## MODEL 595 P.A. TESTER


deluxe P.A. and radio tester. Employs a 514×71/" Quadrimeter with illuminated, double windows; sensitivity is 5000 ohms/voit. (200 microa mps). Tests tubes with grid-shift. Ranges: volts d.c. and a.c.: $5 / 25 / 125 / 225 / 50$.
1250; d.c. ma.: $5 / 25 / 125 / 250 / 500 / 1250$ external d.c. current: $0 / 250$ microamps. and $0 / 12.5$ amps.; ohms: $0 / 1,000 / 10,000 / 100,000$; megohms: $0 / \mathrm{i}, 0 / 10 ; \mathrm{db},-10 / 6,0 / 166,10 / 26$; $5 / 125 / 25 / 50 / 125 / 25.0 / 50$ 150 bronze metal panel; gold oak case $207 / \mathrm{I}^{2} 14 \times 7^{7}$. For $110 / 125$ volts, 60 cycles i.c. Sturdy leather handle. With cables, adaptors and complete instructions. Shpg. wt. 351 lis. $\$ 75.50$
W21508 Your Cost, Cash...
W Time Payment Price: $\$ 8.50$ down, $\$ 7.62$ per month for 10 months.

## MODEL 400 TUBE TESTER



Tests all tubes. Employs 5" fan-type meter having sensitivity of 500 microamps ( 2000 ohms per volt). Also provides test ranges: d.c. volts: $7 / 35 / 140 / 350 / 700 / 1400$ : d.c. ma.: 7/35/ 130/350/700/1,400; ohms: 0/4,000/40,000, 400,000 with self-contained battery, 0 to 1 megohms with external 45 -volt battery. For $100 / 130$ volts, 60 cycle a.c. in oak case. Shpg. wt. 25 lbs. Thes Cost, Cash. Time: $\$ 4.50$ down, $\$ 3.83 /$ month 10 months

# WइII allpuriase Instruments 

## GENERATOR



Covers an extremely wid range from 5 to 6,000 meters, ( 50 to $62,000 \mathrm{hc}$.) all on fundamentals. Six ranges are provided as follows: 50 to 180,165 to 550,500 to $1,600,1,500$ to 4,750 . 4,500 ta 17,500 , 16,500 to $62,000 \mathrm{kc}$. Includes output indicator 6 E 5 miniat ure cathode-ray tube. Direct reading air plane dial. Circuit employs 6 C 6 and $2-37^{\circ}$. Threesection attenuator; external 400 -cycle note. Cast aluminum case, 10x$7 \times 41 /{ }^{\prime \prime}$. Case is finished in blue crackle. Incorporates Faraday shield to isolate a.c. lines. For 110 -volt, 60 -cycle a.c. Shpg.wt. 121 bs . Model 36A, complete with tubes W21498-(Write for time payment details) Your
Cost.

HICKOK RADIO-AUDIO OSCILLATOR, Model OS-10


Range: 85 Kc. 50 Jo. In 7 Ranges. Accuracy: Better Than $1 / 2$ of $1 \%$

A thoroughly modern all-wave ascillator using an electron-coupled oscillator to cover 6 to 3,500 meters calibrated to an sccuracy better than $1 / 2$ of $1 \%$. Output is adjustable from $1 / 2$ micro-volt to 3 voits. Two dynatron audio oscillators supply modulation-one fixed at 400 cycles, the other adjustable from zero to 10,000 cycles. An output meter is calibrated in db from minus 10 to plus 15 and from 12 to 40 db .

Has Built-In Power Supply Oscillator ure a 41, 6C6, 6D6 and a 1V. The unit contains its own power supply which operntes from 110 -volt, $40 / 65$-eycle a.c. Size of
case is $11 \times 9 \times 5 \mathrm{l} .1$. Complete with ail necessary case is $11 \times 9 \times 5^{1 / 1}{ }^{\prime \prime}$. Complete with all necessary cornecting cables and complete operating inst etions.
Wa1494-Shpg. wt. 16 lhs
Your Cost
${ }^{s} 47.04$

## SOLAR

Capacitor Tester \& Resistor Bridge Ranges:

00001 To
70 Mfd.
2 To 50 Megohms This new analyzer measurea the capacitance of ALL types of condensers by means of a Wein Bridge; range, Bridge; range,
.00001 mid . to
70.0 mfd. Measures power factor of electrolytios rom zero to $50 \%$, measures resistors from 2 to 50 mesohms; measures leakage resist ance of condensers and all insuation up to 2,000 meg ohms: directy indicates leaks and shorts. Has 5 direct-reading, color-cuded scales; built-in power supply; uses 6 E 5 indicator. 1 V rectifier, neon test lamp. Removable-cover cabinet, 91/2x71/x 61 "
W10437-For 110 v-, 60-cycle a.c. Lens tubes. Shpg, wt. 7 Ibs.

## Your Cost

${ }^{\text {s }} 18.82$
N10438 For $110 / 220$ v. $25 / 60$ cycles, a ${ }^{\circ} \mathrm{C}$. Less tubes. Your Cost. . . . . . . . . . . . . . . . . . . . \$2, 5.32
Set of tubes for above: $(1-6 E 5,1-1 V) . .51 .20$


## BENDIX-DAYRAD RADIO SET TESTER SERIES 58

Test ALL sets-old and new. Incorporates a $4^{\prime \prime}$, square-type meter ha ving a sensitivity o 1,000 ohms per volt. The fol owing ranges are provided A.C. volts: $5 / 25 / 125 / 250 /$ $500 / 1250$; d.e. volts: $5 / 25-$ 125/250/500/1250; d.c. milli a mperes: $5 / 25 / 125 / 250 / 500 /-$ 1250; obms: 0/3000 (base) and 0 to 3 megohms (ful range).
The meter has a zero-return

> adjustment, and an ohmmeter

zero adjustment is also provided. The panel is equipped with plainly marked pin-jack terminals-its operation is so simple anyone can teat any type of receiver with this analyzer. All necessary cable, adapters, test prods and batteries are furnished, in addition to an easy-to-understand, comprehensive set of instructions. Housed in a highly finished walnut carrying case with removable cover; size, $12 \times 11 \times 4^{1} 5^{\prime \prime}$. Shps W21536-(Write for time payment details) Your Cost
s44.10

## YOU CAN BUY BENDIX-

 DAYRAD INSTRUMENTS ON EASY, TIME PAYMENTSThe Bendix Compony has orronged to fnonce purchoses of their test equipment, amounting to $\$ 39.00$ or more, on on eosy. time payment plan. You get from 6 months to 3 years to poyi Write for full detoils.

## Other BENDIX Instruments

 We maintain a coinplete stock oi BendixDayrad service instruments a tall times. Complete details are available on any of the instruments listed below: Write for FREE copies of descriptive literature.Stock Bendix
$w 21537$ Purpose
$\begin{array}{lll}\text { W21533 } & 57 \\ \text { W21539 } & 62\end{array} \quad$ Multo-Meter. $\begin{array}{lll}\text { W21539 } & 62 \quad \text { Test Indicato } \\ \text { W21540 } & 65\end{array}$ $\begin{array}{lll}\text { W21540 } & 65 & \text { Oscillograph } \\ \text { W21541 } & 64 & \text { Oscillograph }\end{array}$ W21543 200 Oscillograph. ...... W2544 22C Counter Tube Tester W21545 20 C Portable Tuhe Tester. 39. W22546 27 Portable Tube Tester 28.90

## NEW! NATIONAL MINIATURE OSCILLOSCOPE FOR THE 913

This new type CRM oscilloscope employs thelittle 913 -type tuhe ha ving a 1 inch screen. The circuit is essenthe larger, National scope, and includes a power supply, with controls for brilliancy and focus, a control
for amplitude of the
 horizontal deflection, and a built-in 60 cycle sweep with provisions for external sweep of any type. In a crackle-finish metal bousing, 41/3x $61 / 8 \times 8^{\prime \prime}$. Shpg. wt. 15 lbs. W21534-Less tubes.


Your Cost W13832-National Oscillnascope for the $3^{\prime \prime}$, type 906 tube. Less tube. (CRO) \$T7.70

RACO All-Wave 54-17,000 Kc. Oscillator
 versal a.c. or d.c. operareading. Metal case $10 \times 6$ tubes. Shpg. wt. $8 / 6$ lbs.
${ }^{51}$ " . Complete with W21502
Your
Cost.

## DEPENDABLE TUBE TESTER

## Model 305C

 An attractive, efficient and quick testing tube checker for dealer or serviceman. Tests all tubes including the metal 8 -prong types. It ncorporates a large Bakelite fan-type meter with Englishreading scales. Includes a separate ine-voltage meter with voltage controls. An ohmmeter, and condenser tester are included. Measures resistance from 10 ohms to 1 megohm-without batteries. Indicates gond, open, shorted and leaky condensers, and measures actual capacitance. Available complete or in kit form. Shpg. wh. 12 lbs. W21495-Completed. Your Cost.
$\$ 21$
W21496-Kit form
.47

## Model 305P Tube Tester

Similar to model 305C above, but designed for both portable and counter use. Cover is removable and compart ment is provided for tubes and tools. Complete with instructions.
W21497-Shpg. wt. 15 lbs.
Your Cost
$\$ 24.00$

## SIMPSON ROTO-RANGER TUBE AND SET TESTER


 Stock No.
W11051
W11052 W11053 W11055 W11056 W11057 W11059

$W 11060$ W11061 $\begin{array}{llrr}\text { W11062 } & 0-50 & 15440 & .59 \\ \text { W11063 } & 0-100 & 6500 & .88 \\ \text { W11064 } & 0-100 & 30888 & 1.91 \\ W 11065 & 0-150 & 9750 & 1.03\end{array}$ W11065 W11066 $\begin{array}{ll}0-150 & 46320 \\ 0-300 & 92640\end{array} \$ 1.91$ | $W 11068$ | $0-500$ | 154400 | $\$ 2.65$ |
| :--- | ---: | ---: | ---: |
| $W 11069$ | $0-60-300$ | 92640 |  |



## Model 55

Panel Mełers
Flush mounting clamp-on type, requiring a $23^{\prime \prime}$ panel hole. Finished in bright nickel plate. All
have narrow rim. D.C. units are solenoid type, a.c. units repulsion type.

| on typ |  |  |  | proper resistors can measure up to 1000 voles. Only $1 / x^{3}$ ". Instruc |
| :---: | :---: | :---: | :---: | :---: |
| D.C | Ma | ters | Your | tions furnished for all changeovers |
| Stock W | $0-5$ | \$2.25 | ¢1.32 | and new instruments. \$? |
| W11100 | 0-10 | 2.00 | 1.18 | 70 |
| W11101 | 0-15 | .00) |  |  |
| W11102 | 0-25 | 1.00 |  | Fuse Mounts |
| W11103 | 0-50 | 1.00 |  | Panel Type |
| W11104 | 0-100 | 1.00 | $50^{\circ}$ |  |
| W11105 | 0-150 | 1.00 | $5$ | Composition base, nickel plated brass contacts. Single hole mount |
| W11106 | 0-200 | 1.00 |  | brass contacts. Single hole mounting. Solder lugs. |
| $W 11107$ | $0-300$ | 1.00 1.00 |  | ing. Solder lugs. <br> W12329-Your Cost |


| Copper Oxide Recfifier |  |
| :---: | :---: |
|  |  |
| milliameters <br> of 15 ma . <br> or less to |  |
|  |  |
|  |  |
| a.c. milli- |  |
|  |  |
| per resis |  |
|  |  |
| 000 volis. Only $1 / 4 \times 3 / 8{ }^{3}$. Instruc- |  |
|  |  |
| tions furnished for all changeovers and new instruments. W10570-Your Cost 2. 2.95 |  |
|  |  |
| Fuse Mounts Panel Type |  |
|  |  |
| Composition base, nickel plated brass contacts. Single hole mounting. Solder lugs. |  |
|  |  |
|  |  |
|  |  |

Copper Oxide Rectifiers Minialure type, ${ }^{3 / x^{\prime \prime}}$
square. For d.c. meters drawing less than 5 ma .
w 10566 W1056
s2.15


Sub-Panel
As above, but for
sub-panel mig Centers $13 /$
W 12330 -
Each... (chthn)


Radio and Auto Fuses


Available in 1,2,
$3,4,5,6,8,10,15$ $20,25,30 \mathrm{amp}$. sizes. Specify size desired. W13189-Tin of 5 (any one size). Your $\operatorname{Cost}$,

## LITTELFUSE PIODUCtS

## LITTLEFUSES for Test Instruments

Designed to protect delicate test in-
struments. Dependable and accurate.
Break circuit immediately on reaching Break circuit immediately on reaching blow point. Length $1^{\prime \prime}$. diam.
May be used on 250 volts, a.c. or d.c. shown below, for magnetic type meter movements

| Stoek No. | Rating Amps. | $\begin{array}{\|c\|} \hline \text { Max } \\ \text { Lnad. } \end{array}$ | Res. On 5 Ma. Load | Your Cost <br> Each | $\begin{aligned} & \text { Your } \\ & \text { Cost } \end{aligned}$ | 「-M Ohms Per ${ }^{V}$ | To Protect Milliammeters |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| W12339 | 1200 | 5 | 500 ohmes | 18c | 51.95 | ever 1000 | Galv |
| W12385 | 1100 | 10 | 110 " | 19 | \$1 9 | 1000 | up to 0-1 |
| W12386 | ! | 25 | 20 " | - | 3 | 500-1000 | 1-10 |
| W12387 | 110 | 60 | 5 " |  | - | 100-500 | 10-25 |
| W12388 | 1/8 | 100 | 3 |  |  | 20-100 | 25-75 |
| W12389 | 1, | 100 | 1.5 |  |  | 20-100 | 25-75 |
| W12390 | 1 | 200 | 6.2 | ${ }^{c}$ | 311 | 10-20 | 75-150 |
| W12391 | ${ }^{3} 8$ | 300 | 3.0 | - |  | 5-10 | 150-250 |
| W12392 | $1 / 2$ | 400 | 2.5 | , |  | 3-5 | 250-350 |
| W12393 | $3_{1}$ | 600 | . 4 |  |  |  | 350-500 |
| W/2394 | 1 | 11000 | . 24 |  |  |  | $500-7500$ |
| W12395 | 2 | 2000 | .14* |  |  |  | 1000-1500 |

High Voltage Littlefuses

 Bakelite Fuse Mounts Molded Bakelite bases. Plated fuse clips are slotted -grip fuse firmly. Easy to mount.

Base size $11 / 6 \times 5 / 8 \times 1 / 0^{\prime \prime}$. Take the $1^{\text {" }}$ Littlefuses (instrument type). Wi2383-Your Cost.... ${ }^{\text {C }}$ For standard 114" radio fuses. For standard 11" radio fuses. W12324-Your Cost ......9c W12327-Your Cost

Lock-tite octal base analyzer plug with grid plug, wired to 5 -feet of wire cable and with 8 -prong socket and all adapters ( 5 in all). Complete, 3 ths.

PPrecision Panel Meters
Universal 3＂1 A．C．－ D．C．Meter Uses copper oxide recti－ fier in ad－
vanced
cir－
cuit；lo ow
losses due to rectification Using mul－ tipliers scales are：
$0-15-150-$ 750 volts a．c．，or d．c．，at 1000 ohms per volt
$0.15-150$ d．c．，ma， $0-1500$ ohms $0-1.5$ megohms．Accuracy on d．e． $2 \%$ on a．C． $5 \%$ With D．P．D．T．
switch for a．c to d．e change switch for a．e．to d．e．change．
W11291 List $\$ 15.00 \$ \$ .80$
Your Cost．．．．．．．．．

## RIPLET／ <br> 321 \＆ 221 O．1 MA．

 Both are the flushtype Molded cases．Flange di－ ameters are，model $321-315^{\prime \prime}$ model proximate resist－ ance 33 ohms． ments with sapphi W11200－Model 321 S． 58 Your Cost Each
Yuizo Model 221 \＄3．
Your Cost Each．．．．

Model 321 Combination Volt－Ohm－Milliammeter W11438－ $3^{\prime \prime}$ Molded case； 100 ohms internal reaistance．Scales read： $30-300-600$ volts， $30-300 \mathrm{ma}$ W11442－As above but with scal reading： $10-50-250-500$ volts． 10 － 50－250－500 ma．， 100,000 ohms． Complete with diagrams． Your Cost Each， Either Type
$\$ 4.90$

## BEEDE FAN TYPE

 FOUNDATION METER Haslarge an type scale，knife edge print－ er．Panel required， ameter．
length $41 / 2^{\prime \prime}$ ，overall depth $15 / 6^{\prime \prime}$ ， height 33 ＂：black molded Bake－ lite case．Internal resistance is 50 ohms：1－milliampere movement Scale reads 0－5－250－750 volts，d．c． $0-2000$ ohms．The rexistance scale may be used to read up to 200,000 ohms or 1 megohm using suitable external resistors．Shpg． $W 11172$
our Cost Each．．．．A．4．

## BEEDE PANEL D．C． MILLIAMMETERS

D＇Arsonval movements accurate within $2 \%$ ．Sapphire bearings， zero adjustment，aluminum pointer and attractive flush－mounting cas Highly efficient and compact．



Incorporate precision engineering，the finest materials and workman－ ship．Molded cases，all terminals molded in，sapphire jewels in adjust－ ble screws．Accuracy within $2 \%$ ．Models 321 and 331 are $31 / h^{\prime \prime}$ diameter（flange），models 231 and $221,25 /{ }^{\prime \prime}$＂．

| D．C．VOLTMETERS Model 321 － 1000 Ohms／Volt |  |  |  |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | Range | List | $\begin{aligned} & \text { Your } \\ & \text { Cost } \end{aligned}$ |
| $\begin{aligned} & W 11240 \\ & \text { W11241 } \end{aligned}$ | $\begin{array}{l\|l} 0-10 \\ 0-50 & \$ \end{array}$ | $\begin{aligned} & 8.25 \\ & 8.25 \end{aligned}$ | ${ }^{55.39}$ |
| $\begin{aligned} & \text { W11242 } \\ & \mathbf{W} 11243 \end{aligned}$ | $0-100$ $0-150$ |  |  |
| $\begin{aligned} & \text { W11244 } \\ & \text { W11245 } \end{aligned}$ | $\begin{array}{r} 0-500 \\ 0-1000 \end{array}$ | $\begin{aligned} & 11.00 \\ & 16.00 \\ & \hline \end{aligned}$ | $\begin{array}{r} 7.18 \\ 10.45 \\ \hline \end{array}$ |
| D．C．VOLTMETERS <br> 125 Ohms per Volt |  |  |  |
| Model <br> Stock No． | 321  <br> Your Range <br> Cost Volts | $\begin{array}{\|l\|l\|} \hline \text { Mode } \\ & \text { Stock } \\ \text { No. } \\ \hline \end{array}$ | $\left\lvert\, \begin{aligned} & \text { del } 221 \\ & \text { Your } \\ & \text { Cost } \end{aligned}\right.$ |
| $\begin{aligned} & \text { W11230 } \\ & \text { W11231 } \\ & \text { W11232 } \end{aligned}$ | \＄3．75 $\left.\right\|^{0.5} 0$ | $\begin{aligned} & W 112 \\ & W 112 \\ & W 112 \end{aligned}$ | 4 |
| $\begin{aligned} & \hline \mathbf{W} 11233 \\ & \text { W11231 } \\ & \mathbf{W} 11236 \end{aligned}$ | $\$ 3.75 \left\lvert\, \begin{aligned} & 0-25 \\ & 0-50 \\ & 0-150 \end{aligned}\right.$ | $\begin{aligned} & \text { W11 } \\ & \text { W11 } \\ & \text { W11 } \end{aligned}$ | 4 |
| W11237 W11404 | 4.58 $0-250$ <br> 6.04 $0-500$ | W11 |  |
| D．C．MELLIAMMETERS |  |  |  |
| Model Stock No． | 321  <br> Your Range <br> Cost Ma． | Mod Stock No． | 221 <br> Your <br> Cost |
| $\begin{aligned} & \hline W 11200 \\ & \text { W11201 } \\ & \text { W11411 } \end{aligned}$ | $\left.1.58\right\|_{0-1.5} ^{0-1.5}$ | $\begin{aligned} & \text { W11208 } \\ & \text { W11209 } \\ & \text { W11415 } \end{aligned}$ |  |
| $\begin{aligned} & \text { W11412/S } \\ & \text { W11202 } \end{aligned}$ | $\left.75\right\|_{0-10} ^{0-5}$ | $\begin{aligned} & W 11416 \\ & W 11210 \end{aligned}$ |  |
| W11203 ${ }^{50}$ | $3.75{ }_{0-25}^{0-15}$ | W1121 W11398 | ${ }^{15} 2.54$ |
| $\begin{aligned} & \text { W112004 } \\ & \text { W11205 } \\ & \text { W11413 } \end{aligned}$ | $3.75 \left\lvert\, \begin{aligned} & 0-50 \\ & 0-100 \\ & 0-150 \end{aligned}\right.$ | $\begin{aligned} & \text { W11212 } \\ & \text { W11213 } \\ & \text { W11417 } \end{aligned}$ | $52$ |
| $\begin{aligned} & \text { W11206 } \\ & \text { W11144 } \\ & \text { W11207 } \end{aligned}$ | $\left.3.75\right\|_{0} ^{0-200} \begin{gathered} 0-250 \\ 0-500 \end{gathered}$ | $\begin{aligned} & \text { W11214 } \\ & \text { W11118 } \\ & \text { W11215 } \end{aligned}$ |  |
| W11396／5 W11397 | $3.75 \int_{0.1000}^{0.750}$ | $\left\lvert\, \begin{aligned} & W 11 \\ & W 11 \end{aligned}\right.$ |  |
| D．C．AMMETERS |  |  |  |
| Model 3 Stock No． | 321 Your <br> Younge  <br> Cost Amps． | Mod Stock No． | $\begin{array}{\|l\|} 1221 \\ \text { Your } \\ \text { Cost } \end{array}$ |
| $\begin{aligned} & \text { W11216 } \\ & \text { W11217 } \\ & \text { W11218 } \end{aligned}$ | $3.75 \underbrace{}_{\substack{0-1 \\ 0-5 \\ 0-10}}$ | $\begin{aligned} & W 11223 \\ & \text { W11224 } \\ & \text { W11225 } \end{aligned}$ | ， |


| A．C．VOLTMETERS |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Model 331 |  | Range Volts | Model 231 |  |
| Stock No． | Your Cost |  | Stock No． | Your Cost |
| W11402 |  | 0－3 | W11403 |  |
| W11273 | 3.75 | 0－5 | W11280 | 2.94 |
| W11274 |  | 0－10 | W11281 |  |
| W11275 |  | 0－15 | W11282 |  |
| W11276 | 3.75 | 0－25 | W11283 |  |
| W11277 |  | 0－50 | W11284 |  |
| W11279 | 4.58 | 0－150 | W11286 | 3.75 |
| W11406 | 5.39 | 0－300 | W11409 | 4.73 |
| W11407 | 10.45 | 0－1000 |  |  |
| W11408 | 6.05 | 0－15－150 | W11410 | 9.63 |

A．C．MILLIAMMETERS

| Mode！ 331 |  | $\begin{array}{c}\text { Model } 231 \\ \text { Stock }\end{array}$ | Your |
| :--- | :--- | :--- | :--- | Range | Stock | Your |
| :--- | :--- | :--- | :--- | | $\begin{array}{c}\text { Stock } \\ \text { No．}\end{array}$ | $\begin{array}{c}\text { Your } \\ \text { Cost }\end{array}$ | $\begin{array}{c}\text { Range } \\ \text { Ma．}\end{array}$ | $\begin{array}{c}\text { Stock } \\ \text { No．}\end{array}$ | $\begin{array}{c}\text { Your } \\ \text { Cost }\end{array}$ |
| :---: | :---: | :---: | :---: | :---: |

 W112667 0－25 W1127
 $\left.\begin{array}{l}\text { W11421 } \\ \text { W11422 }\end{array}\right\} 3.75\left|\begin{array}{lll}0-100 & \text { W11272 } \\ 0-250 \\ 0-500 & W 11423 \\ 0\end{array}\right| \$ 2.94$

A．C．AMMETERS

| Model 331 | Model 231 |  |
| :---: | :---: | :---: |
| Stock | Your | Range | | Stock | Your |  |  |
| :--- | :--- | :--- | :--- |
| No． | Range | Stock | Your |




 D．C．MICROAMMETERS Model 321 Range Model 221 | $\begin{array}{c}\text { Stock } \\ \text { No．}\end{array}$ | $\begin{array}{l}\text { Your } \\ \text { Cost }\end{array}$ | $\begin{array}{c}\text { Micro－} \\ \text { Amps．}\end{array}$ | $\begin{array}{c}\text { Stock } \\ \text { No．}\end{array}$ | $\begin{array}{c}\text { Your } \\ \text { Cost }\end{array}$ |
| :---: | :---: | :---: | :---: | :---: |
| N |  |  |  |  |




\section*{Thermo－Couple Type Radiation Ammeters} Model 341， $3^{\prime \prime}$ Mode1241， $2^{\text {² }}$ Stork Your Range Stock Your | No．Cost Amps． |
| :--- |
| W11391 $\mid$ |



## RI PLET NEW＂GIANT＂ $51 / 4 "$ FOUNDATION VOLT－OIIM－MLLLIAMMETER

Molded phonetic case with $51 /{ }^{\prime \prime}$ flange diam－ eter．Easily read at a distance． $0-1 \mathrm{man}$ ， movement with 100 －ohm internal resistance； any ranges can be assembled to suit your requirements．Model 521 has d．c．scales： $10-50-250-500$ volts， $10-50-250$ ma．，and
$0-100,000$ ohms．Accuracy is guaranteed $0-100,000$ ohms．Accuracy is guaranteed
within $2 \%$ ．Shunts and accessories listed below are those most in demand to make up a complete servicing volt－ohm－milliammeter for bench or portable use．Shpg－wt． 5 ibs W11297－Model 521 meter only． Your Cost


SHUNTS，RESISTORS AND ACCESSORIES
W11443－Bakelito－mounted resistors for volts．
w11444 Bakelite－mounted shunts for milliamps
W11445－Limiting resistor for 100,000 ohms．
W11301－Zero adjuster with knob for 100,000 ohms
W11302－Resistor to read to 1,000 volts（unmounted）
W11303－Limiting resistor with zero adjuster and knob，to read W11304－ 6 to 600 ohms（ 15 ohms at center of scale）
w11305－Two－deck selectorswitch with knob．


D．C．MILLIAMMETERS

| W11379 | $0-1$ | $\$ 9.00$ | $\$ 5.88$ |
| :--- | :--- | :--- | :--- |


| W11380 | $0-5$ | 7.50 | $\$ 4.00$ |
| :--- | :--- | :--- | :--- |
| W11381 | $0-10$ | 7.50 | $4 . ⿹ 勹$ |
| W11382 | $0-50$ | 7.50 |  |

$\$ 1138310.100$放发 4.90
W11384 0－250

## MICROA MMETERS

| W11386 | $0-200$ | 14.00 | 9.14 |
| :--- | :--- | :--- | :--- |
| W11887 | $0-500$ | 10.75 | 7.02 |

WESTON MODEL 301

## A．C．－D．C．

## METER

Rectifier type Used with ex－ ternal shunts and multipliers． Moving coilunit tained rectifier． Alone reads 5 volts and 1 ma．，a．c．，and 50 milli－ volts and 1 ma．，d． $w 10774$ Your Cost
$\$ 13.97$
FOUNDATION0－1 MA．METER ma 50 millivolts Reade 50 $50-1000$ volts； 100,000 ohms．Less resistors．
W10772－Your cost $\$ 7.35$
O－1 D．C．MA．METER Type 301
w10675 Y10675－
$\$ 7.35$

## $2^{\prime \prime} 0.1$ Milliameter

## Type 506， $2^{\prime \prime}$ ，flush mounting

V10817－
Your Cost
$\$ 6.25$
WESTON MODEL 301＇E D．C．MELLIAMMETERS

| No． | Range｜ | List | Net |
| :---: | :---: | :---: | :---: |
| W10675 | 0－1 | \＄10．001 | \＄7．35 |
| W10679 | 0－5 | 9.00 | \＄6．61 |
| W10680 | 0－10 | 9.00 |  |
| W10681 | 0－15 | 9.00 |  |
| W10685 | 0－50 | 9.00 |  |
| W10686 | 0－100 | 9.00 |  |
| W10688 | 0－200 | 9.00 | \＄6．61 |
| W10691 | 0－500 | 9.00 |  |

D．C．VOLTMETERS \begin{tabular}{l|l|l|l}
\hline W10607 \& $0-10$ \& 9.00 \& $\$ 6.61$

 

w10615 \& $0-150$ \& 11.25 \& 8.27 <br>
\hline
\end{tabular}

## MICRO－AMMETERS

| W10701 | $0-200$ | 14.25 | $\$ 10.48$ |
| :--- | :--- | :--- | :--- |
| W10702 | $0-500$ | 14.25 | $\$ .48$ |

A．C．VOLTMETERS
Model 476－31／4＂Diameter

| Stock <br> No． | Approx． | Ohms |
| :---: | :---: | :---: | :---: |
| Volts |  |  |$|$| Yourt |
| :---: | :---: |
| Cost |

## *CAANAIVZER GITTINGS amd CACCESSORIES

PLAIN \& INSULATED BANANA JACKS AND PLUGS
ack "A" has insulated shoulder and fits " 4 " hole; a vailable in red or black to mateh plug "D". Jack "B" is of nickeled brass, $1 "$ long. Plug
"C" is of spring brass, $1 \% 8$ " long. "C" is of spring brass, 138 " long. for solderless connection in red or black. Specify color when ordering. Stock Type Cost Ea. For
No.

| No. | Type | Cost Ea. For |  |
| :---: | :---: | :---: | :---: |
| W12916 | A | 6 c | 55 c |
| W12923 | B | 4 c | 35 c |
| W12919 | C | 4 c | 35 c |
| W12915 | D | 6 c | 55 c |

BANANA PLUGS

## $0-3$ On

Both of brass, nickel-plated; fit standard jacks. Plain plug has 8,'6 screw, ${ }^{3 / 2}$ " long, overall $1^{\prime \prime}$ long.
Insulated plug has screw in side for solderless connections, $1^{17}$ " long. available in red or black. Specify color desired.
w12920-Plain plue
W12921-Insulated plug

## MIDGET BANANA

PLUGS AND JACKS


Insulated plug is $1^{\prime \prime}$ long and jack $8 . /{ }^{\prime \prime}$. Plain plug is $58^{\prime \prime}$ long; jack is sulated types available in red or black. Specify color deslied. W12905-Plain jack W12906-Plain plug Your Cost Each
Per Dozen
W12907-Insulatoed plug W12908-Insulated jack Your Cost Each
"GIANT" BANANA
PLUGS AND JACKS


For heavy duty work as in transmitters; capacity 25 ampe of solid brass, nickel-plated. Your
Stack No. Type
W12993 Jack; ${ }^{2}$, hole
Wost W12991 Pug, Each $\left.\begin{array}{l}\text { W12991 Plug; } 1^{3} \\ \text { W12992 Plug: } 1,28\end{array}\right\}$ I $5^{c}$ Binding Post With
Banana Jock Top
Hole in top takes banana
plug. Hole in stem for wire.
In red or black. Specify
color when ordering.
Wi2945 12 for 80 c
Your Cost Each.....


## TMIIRA SERVICEMEN'S TEST KITS



Thirty-pieces for teat and repair. Include two $6^{\prime \prime}$ hex, $\left({ }^{3}\right.$ kn and $\left.1 / 2^{n}\right)$, two 9 "
 hex wrenches
sorted size insulated serewdrivers, threc assorted size flat top wirenches, one length ( $72^{*}$ ) each of red and black wire, one No. 14915 neutralizing tool and one $5^{\prime \prime}$ compensating serewdriver, an assortment of red and black eest parts including test prods, alligator clips, etc., and one box of assorted radio hardware. Al ne box of assorted radio hardware. Al
52.95

W12888-Your Cost, Complete Kit

## TEST ACCESSORY KIT

Solderless and interchangeable parts for all tests. 2 long and short prod handles, 2 plug-in prongs, 2 plug-in jacks, 2 insuated tapered lugs, 2 insulated needle point phone tips, 2 insulated alligator elips. In red and black for positive and negative dentification. Packed in a neat box W12972-Shpg. wt.
s 1.18


Your Cost, Special

## Miniafure Tube Caps

 For


These tube caps are of nickeled brass and are furnished tinned W14983-Adapter tofitan regular control-grip elip for con-
tacting new miniature tube caps Type A
Your Cosé Each
W14984-Tinned brass grid clip for contacting miniature caps on Type B-Per Dozen Your Cost Each
W14985-Above with wire ferrule. Type C-Per Doze $\qquad$

## 4sind

 W12943-Per Doz. 40c Your Cost Each. Nickel plated brass.
W14881
Per 10
Per 10
Per 100


## Wi2955 $W 12956$ W12956

 W12911Your Cost Each

NATIONAL Grid Clips Freed by a slight
pressure and easily pressure and easily removed. grip end for solder
i

## Senior <br> Tip Plug

All metal tip plug for tip jack use Solderless connection. 15/8" long


Junior Tip Plug
As above, but only 1 "l long. 26

## Standard Tip Plug

ALLIGATOR CLIPS
Available in pulated in
Endstake prods or banana plugs. Insulated types in red and black. Specily color desired. All have firm spring grips that retain their strength. $2^{\prime \prime}$ clip is ${ }^{1} 4^{\prime \prime}$ wide, $2^{3}{ }^{3}$ " clip, ${ }^{3}$ is" wide. Ideal lor meters

Cost
Plain; 2" long Plain; 23 3" " long
Dual-Grid Analyzer Stud Modernizes old analyzer plugs to accornmodate metal or g Your Cost

Tip Jacks Nor test equipment bronze spring. $14^{\prime \prime} \mathrm{mtg}$ hole. Your Cos


Same W14565
Your Cost Each
Same as above, but for larger tubes as 866; also fits ${ }^{2}$ tubing. $\boldsymbol{S}^{c}$

Screen-Grid Clips

H2Fits all standard grid posts. Brass, ti
easy soldering.
W14827
Your Cost Each.
Your Cost, Per Dozen
Your Cost, Per Gross

## Caps for Glass Tubes

 Insulated cap with solderless insulated plugand $12^{n}$ lead. In red or black. State color. W11727-
Your Cost
$15^{c}$
duty type. For transmitting tuhe ( $866^{\circ}$ s etc.). Specify color desired W11729-
Your Cost Each
I ${ }^{\circ}$
Same as W11727, but less plug Heavily insulated spring clip inblack ispecily color.
W14712-Your Cost Each W14719-For metal tubes. Your Cost Each.

\& Glass Tube Cap Fits either type. With
11" lead and pin-tip. In red or black. Specify color with order. W11728-

## INSULATED ANALYZER

 FITTINGSWill add to the appearance and efficiency of any analvzer. All numbers are avallable in red or black; specify color desired when ordering


Needlepoint prods that take standard phonograph needle which is easily replaceable.
Figure 1. 4' test prod with banana plug tip.
Figure 2 Your Cost..... 15 test prod. $\rightarrow \mathrm{c}$ Wiguse $27^{\prime \prime}$ solderless needlepoint
Figure test prod. Your cost IS884- ISc Figure 3, Short test prod, $21 / 2^{\prime \prime}$ long.
W12912W12912
Your Cost Each
Figure 4. Insulated needlepe phone tip plisurated needlepoint W12913-Your Cost
Figure 5. Insulated plug tapered lug.

Insulated Tip Jacks

folderless type;
 tip jacks. Used on test leads for ers, etc. In red and black; specify color when ordering.
W12973-1\%/ ${ }^{\prime \prime}$ long prod.
W12974-11\% long
Your Cost Each.
Per Dozen, Either Type


Midge $\dagger$ Short Jacks Bakelite insulation. ${ }^{8} 6548$ m.g. hole. W6548-Closed W549-
pen Circuit Jack,
our Cost, Each,
 Double Phone Plug Will take phone or

cords or combination of both. In red and black. Tie loop. W14971-Red
W14974-Black
$\frac{\text { Your Cost Each....... }}{\text { Bakelite Extension Cord }}$
Connector
Has two openings at either end forinserting two pin tips.
Sturdily mado of molded Bakelite and incorporates sure-contact grips.
W13051-Your Cost Each. . .
$\qquad$

#  

TEST PROD KIT


Spring prongs at the end of changing from spade lugs to phone tips or to spring clips：
Handles are $6^{\circ}$ Handles are $6^{\circ}$
long， $1 /{ }^{\prime \prime}$ diam－ long，Needle point phone tips for plercing in－ Five foot red and black kink leas wire．Complete with two alli gator clips，two needle point phone W12971－Your Cost．．．．． $5^{\circ}$ Chanceable above，but without inter changeable feature－fixed ends． W12882－Alligator clips． Your Cost per Set． W12883－Phone tins． Your Cost per Set

Laborafory Test Prods Improved type Bronze point with needle point and heavy body．
Double purpose needle prod and phone tip prod．Heavy $5^{\prime \prime}$
 $\rightarrow \infty$ ong handles． $\rightarrow \cos$ do rear red less leads
W12978－With spade tips
W12379－Phone tips．
Wour Cost，Either
Your Cost Each elips．
TEST LEAD BARGAIN！

## $42^{\circ}$

§with phone tips at one end and 3 －inch insulated prods at the other．Flexible leads；both leads and prods W12989
$22^{c}$
Needle and Solderless Tip Prods


Chucks and nuts hold plain phono－ graph needles；easily changed when broken（type A）．Fibre handles $4^{" 1}$ with，diameter，in red and black Type $B$ is a solderless tip equipped with long point
PHONE NEEDLE TIP PRODS $\begin{array}{ccc}\text { Stock Wire } & \text { Your } \\ \text { No．} & \text { Ends } & \text { Cost }\end{array}$ $\left.\begin{array}{ll}\text { W12976 } & \text { Phone Tips } \\ \text { W12975 } & \text { Spade Lugs }\end{array}\right\} \quad 29^{c}$ W12977 Alligator ©＇OOOO ${ }^{36}$ $\left.\begin{array}{ll}\text { W12968 Phone Tips } \\ \text { W12969 Spade Lugs }\end{array}\right\}$ W12970 Alligator．．．．．．．．．．．． 35

Kinkless Rubber Wire Will not kink or knot．Heavy－duty ＂abrasion－proof rubber wall；con－ ains 65 strands of linned copper Wisiso $25-\mathrm{ft}$ coil．
Your Cost．．．．．．．．．．． $50^{\circ}$ Your Cost Your Cost．


## TRUTEST ALIGNMENT TOOL KIT



## NEUTRALIZING TOOL



## 5－IN－I ALIGNER KIT

Combines
in a foun

nut wrenches，miniature blade screwdriver for all aligning and a full－size insulated handle screw－ W15082－Your Cost．
$70^{\text {c }}$
NEUTRALIZING \＆ALIGNING TOOL KIT 14 tools telescope into six units： flexible screwdriver for hard－to－reach－ spots，＂magic＂alignment tool，al－
igator side wrench， 6 ＂insulated driver －metal níb，b／f＂and $3 / /^{\prime \prime}$ nut wrench 1／4＊insulated square nut wrench， hex metal side wrench， $21 / 2^{\prime \prime}$ insulated driver with metal nib， $1 /{ }^{\prime \prime}$ hex slotted insulated wrench driver，＂络＂hex in－ sulated nut wrench， $5^{\circ "}$ insulated W15088－Liat \＄4．50 ．\＄2．65 Similar to above，but less flexible screwdriver and＂magic＂aligning tool．Complete with leatherette case
W15089－ W15089
Your Cost，Complete


Attachments for Tools
Screw on aligning tools having threads as found on aligner No． 14915 described above．
Balneut for Majestic Receivers

socket for $11^{\prime \prime}$ hex and offset tends tool handle $111^{\prime \prime}$ ． $153^{\circ}$ For CROSLE M RECEIVERS
For CROSLEY RECEIVERS Extends tool $11 /{ }^{n}$ ．
Has Rocket in end for 0 ， W1508are nuts．

## W15086

## Your Cost．

IOc
For majestic receivers Similar to


For Phileo，RCA，etc．Screwdriver shank is $7 /$ an $^{\prime \prime}$ diameter－fits into $34^{n}$ hole up to W15105－6＂long Your Cost Each．
W15106－1
 hex socket．Your Cost．．．．I（ ${ }^{\text {c }}$

## Alligator Neutralizing Wrench－Screwdriver



Wrench with $3 / /^{\prime \prime}$ opening．Securely fastened to extra strong high insula tion rod size $1 / 4 \times 41 / z^{\prime \prime}$ ．Hardened steel screwdriver blade．
W14921－Your Cost．．．．．．24e

## Aligning Screwdriver and Hexagan Wrench

A screwdriver and $1 / 4^{\prime \prime}$ hexagonal opening on the other end．Steel Blade length ${ }^{\prime \prime}$ ．

| Stock No． | Length | Your Cost |
| :--- | :---: | :---: |
| W15100 | $6^{\prime \prime}$ | 18 c |
| W15101 | $9^{\prime \prime}$ | 24 c |
| W15102 | $12^{\prime \prime}$ | $30 c$ |

## Hex Sockeł Aligner

$6^{\prime \prime}$ long with brass $17^{\prime \prime}$ socket head Other end has hardened screwdriver bit．Shaft diam．${ }^{3}{ }^{\prime \prime}$ ．

## Adjustable Balancer

All Fenoline－no mets！parts
All Fenoline－no metal parts．
Screwdriver stidea inside aligning wrench；other end has hex socket $W 15192$ Extends $6^{\prime \prime}$ to 11 Your Cost Esch
W15193－10＂to $18{ }^{\circ \prime}$
$34^{c}$
Your Cost Each

## $49^{c}$

## FIBRITE Screw Driver

Ideal for aligning high－frequency Ideal for aligning high－frequency
receivers and short－wave sections． receivers and short－wave sections．
$7^{\prime \prime}$ long；driver at both ends for all trimmers．Diameter，
diameter driver is $6^{\prime \prime}$ long．
W15151－s／is＂diameter
．20c
ALIGNING TOOL SET
$0-2$
One is $6^{\circ}$ long， 3 倍＂diameter with fitted brass wrenches for $15^{\prime \prime}$ and b／＂hex nuts．Other is＂＇s＂rod fitted with screwdriver nib and special magnetic steel．Both of solid Bake－
lite．
Wi5083－Your Cost．．．．．
．

Complete kit for aligning all circuits of all types of receivers．Includes pair of kinklesst wire test prods，flexible tuning wand，alligator－ jaw wrench and driver，brass $1 / 6^{\circ}$ socket head wrench and driver， $6^{\prime \prime}$ insulated alignment screwdriver， $9^{*}$ balancing screwdriver witb $3 / 5$＂insulated socket head，a 3 －in－1 neutralizing and（nesting type－a screwdriver with a ${ }^{3}$ 仍 ${ }^{n}$ trimmer for the new receivers．All are packed in an attractive carton．Shpg．wt． Your Cost，Complete．
52.96

## ＇LITTLEFUSE＂NEON TATTLELITE TESTER

Made to fit the pocket． Used for dotecting open uses，live lines，open cir cuits，polarity，continuity cests，etc．Tiny neon lamp will glow on as little as 0. ma．Leads are color－coded and have phone tips．Can be used in making strobo－ scopes and oscillators． W11310
Your Cost Each $59^{\circ}$

## NEON TESTER



With this new Test－O－Lite you can find blown out fuses immediately Will check any voltage between 110 and 550 volta－－either a．c or d．c Will also check spark－plugs，radio sets，household appliances，etc． Neon lamp is protected by molded Bakelice case．
W12983－Yo

## POLY－IRON Resanator Alignment Wand <br> For determining correct alignment． A $6^{\prime \prime}$ flexible rubber rod；one end brass loaded－the other，core steel． Placing either end in magnetic field of coil will indicate inductive con－ dition；whether aligned or whether above or below resonance．59 W14978 Your Cost．．．．

SOLID TUNING WAND
Similar to above in action，except stead of boy is solid insulation in W14976－Your Cost Each $59^{c}$


Knuried Nut Wrench

For tightening or removing $5 / 6^{\prime \prime}$ to 12 ＂knurled nuts．Overall length W15267 Each．
\＄T．IB
NEW＂PENCILITE＂
With Magnifying Lens
A new pocket flashlight Ideal for use by physicians； dentists，radio servicemen and mechanics，etc．Has a pocket clip like a pen．Is $512^{\prime \prime}$ long， $4 / 8^{\prime \prime}$ diameter． Momentary push ewitch on top，or turn of top keeps light on stexdily．Fumished complete with long life bulb and battery．Red and black W15028 Each
 Your Cost per Set I $2{ }^{c}$

## NEW MICRO－LITE

$91 / 2^{\prime \prime}$ long， $3 / /^{\prime \prime}$ diameter．With athachment ring．
W17723－Your cost．

## 

## GHIRARDI'S RADIO PHYSICS COURSE

Second Revised Edition
 The radio "bible" for beginners, studentsand technicians. Has 972 pages and over 500 every phase of radio, photo-cells, television, talkies, elements of d.c. and simple, every-day language. It answers any question that might pos. sibly pop up. Used in technical schools throughout the country. 2nd revised edition; heavy cloth binding. Sent post-paid anywhere in U. S. A.

## Ghirardi and Freed

Modern Radio Servicing 2nd revised and greatly enlarged edition. 1300 pages of practical
facts on up-todate servicing: how to construct and operate modern test equipment:locatingand eliminating noise; cathode-ray align-
 ing: antennas, auto radios etc. Profusely illusetc. Shpg. Wt. 5 lbs , photos, charts,
et W19958-Your Cost. 4.11

## Field Service Data

 and Answer BookThe ideal pocket book for the job. 436 pages. Lists i.f s of 5424 sets Electrical diagrams of all makes oi cars; clearing ignition noise, numerous charts, codes, tables. In heavy lonseleat binding. $\mathbf{w 1 9 9 5 9 - y ~ o u r ~ c o s t ~} \$ 2.50$ Save Money! The two books listed above when ordered tonetherBoth Books.
s6.00

## R.C.A. MANUALS


complete series of service manuals
covering all covering all
the RCA rethe RCA re-
ceivers made ceivers made
hetween 1923 and 1936. The most complete information a vailable. Exceptionally low in price.
Stiff covers. fabric covered and lettered in gold. Shippink weight each, 3 pounds.


| Stock No. | Year | Pages |
| :---: | :---: | :---: |
| W19971 | 1923-1928 | 672 |
| W19969 | 1929-1930 | 604 |
| W19997 | 1931-1932 | 604 |
| W19950 | 1933 | 340 |
| W19964 | 1984 | 384 |
| W19965 | 1935 | 532 |
| W19966 | 1936 | 549 |
| Your Cost |  |  |

Sprayberry's New
Voltage Tables
All voltages at the sockets of 1468 receivers from 1927 to date. Each table reads at a glance. Completely into the pocket for use while on the job.
Your Cost.
$.98^{c}$

## GERNSBACK'S SERVICE MANUALS

Volume No. 6-The latest! 1200 pages; 2500 illustrations. Shpg. Wt. 8 Ibs. W19954 Your Cost, Volume VI Volume No. 5-1000 pages; includes all- $\$ 5$ short-wave. Shpg. wt. 4 tbs. W19953-Your Cost, Volume Volume No C-1934 edition Shpg, we. 4 lbs. Wi9918- Your Cost, Volume IV Volume No. 3-1933 edition; Shog.w. 4 lbs. Whag. wt. ${ }^{4}$ ibs.

## Official Auto-Radio Manuals

Flexible-covered, loose-leaf books, $9 \times 12^{*}$. Volume I covers set up to 1934-200 pages, 600 illustrations. Volume II covers all 1934 models- 240 pages, 500 illustrations.
W19982 Volume 1. W20002-Volume 11.
Your Cost, Either Copy.
Official Refrigeration Service Manuals
W19904-Volume i: 340 pages 1200 diagrams, flexible looseleaf. W19917-Volume 1i; JUST OÚT! 352 pages, over 300 illustrations. Shipping weight each, 4 pounds.
s4.75
Shpping weight each


NEW! MALLORY-YAXLEY ENCYCLOPEDIA
The most amazing book ever published for the serviceman! Over 12,000 different models completely anolyzed in one compact. complete book! Gives all data on i.f. peaks, volume controls, tone controls, tube complements, condensers, transformer circuits, vibrators, and comprehensive circuit diagrams that you can read and understand. Also complete inductance, resistance, capacitance, and other electrical data neces-
sary for intellizent servicing. Over 200 sary for intelligent servicing, Over 200 pages; full $8 \mathrm{t} / 2 \times 11^{\prime \prime}$ size, bound in a
waterproof, washable cloth cover. Only a waterproof, washable cloth cover. Only a low price quoted, you
Shipping weight 3 lhs. Shipping
w19994
Your Cost Each, Special


ERPETUAL MANUAL No. 7
Volume No. 7 -The very latest! Covers everything in receivers for 1936. 1600 pages. W19951Your Cost
s 9.80
Volume No. 6-1250 pagea covering all gets of 1935 of 115 manufacturers. 90 -page index covers contents of all 6 volumes. W19942
7.35

Volume No. 5-Covers 1934 receivers. 1200 uages; 940 sets of 112 manufacturers Your Cost
s. 7.35

Volume No.4-1060 pages, Covers June 1933 through to March 1934. W19976-Rider's Manual, Volume No. IV Your Cost, Postpaid
Volume No. 3-Covers middle of 1932 to June 1933. W19924-Rider's Manual, Volume Na. III Your Cost, Postpaid.
s. 7.35 W19925 Rider's Manual. Volume No. II Your Cost, Postpaid.
Volume No. 1-Covers from 1919 through to 1931. W19926-Rider's Manual. Volume No. I
Your Cost, Postpaid.
ABOVE POSTPAID ANYWHERE IN U. S. A.


## The Cathode-Ray Tube of Work

## By John F. Rider

This is the finent book on the subject available, and should be in the library of every sreviceman and should be in the library or every osillogram. amateur. Learn how to interpret an oscillogram. an easily understood manner. Practical usage for the serviceman, student, amateur and technician.
pages prof usely $\mathrm{lllustrated}$. W20017-Your Cost.
"Servicing Superheter. odynes" by Rider w19927-
Whour cost

Servicing Receivers By
Resistance Measuremen
By John F. Rider
W19923
Wour Cost

## Frank C. Jones'

"Radio Handbook"
Just released and well-worth waiting for. Beyond a doubt handbook on short-wave receivers, transmitters, accesmories, aerials, theory and prac-
 tice ever assem-
bled and pre-
sented to the ham and serviceman; 456 pages: hundreds of illustrations charts, diagrams, tables, etc. Includes a coupon which entities you to receive the supplement which is to be published later in the year. Covers elementary a.c. and d.c., radio theory, antenna theory and practice, chapters on cathoderay television, fever machines, ultra high frequency. Covers everything in frequency. Covers everything in
simple language, yet omits nothing. simple language, yet omits nothing.
Shpg. Wit. 3lbs. $\$ T .51$
Wig999-Your cost.

Radio Amateur's Call


The only publication listing all radio amateur stations throughout the entire world. Also
short-wave com-short-wave com-
mercial stations. Contains all abbreviations, "Q", "R" and "T" systems, press and weather schedules Latest edition. 320 payes. Shpg. wt W19936- $\qquad$
RADIOCRAFT LIBRARY Published by RADIOCRAFT mag. azine for your edge and profits. Written in simple, everyday language. All new 6 and up-to-dzte, can be slipped into the pocket List
 $50 c$ each.
W19905-Radio Set Analyzers. W19906-Modern Tubes.
W19907-The Superhet Book W19908-Radio Hookups.
W19909-How to Become a Serv-
W1990 M-N
W19911 Radio Wrinkles.
W19912-Radio Questions and
Answers.
W19913-Auto Radios and
Servicing.
W19914-Home Recording.
W19915 How to Build and Op-
erate Short-Wave Recelvers.
W19923-How to Become an Amateur Radio Operator. W19934-Point-to-Point Resist -
ance Measurements.
W19961-P.A. Installation and Servicing.
Your Cost Each,
Any Title. $\qquad$
A.R.R.L. HANDBOOK

1937 edition. 416 pages of informathoroughly.
W19949-
101
How to Become a Rodio Amateur W19935Your Cost. Radio Amateur's License Manval W19940$25^{\circ}$ Your Cost
the
Hints and Kinks for the
Radio Amateur, Vol. 2 W19981-
Your Cost


Has sliding switch. W13380-

HOME MIKES

REALPHONES-Twin Set


The new 2-way telephones that oprato on dry cells. Signal buzzer concealed in base. Set comprisus a pair of handsets with cradles and 35 It. of twisted wire-only batteries to be added. Communicates over 1000 feet. Complete instructions supplied. Shpg. wit. 7 lbs.
$\underset{y}{W}$
Phone ond Speaker Cords Cotton Braid Insulation Stack No. Type Feet Cost $\begin{array}{llll}\text { No. } & \text { Type } & \text { Feet } & \text { Cost } \\ \text { W13955 } & \text { Double* } & 5 \\ \text { W13956 } & \text { Doublet } & 5 \\ \text { W13957 } & \text { Singlet } & 5 & \text { 14c }\end{array}$ Extension Cords-Tinsel Center Double cotton braid insulation. Stock No. Feet Your Cost $\begin{array}{lll}\text { W13946t } & 10 & 23 \mathrm{c} \\ \text { W13947t } & 30 & 27 \mathrm{c} \\ \text { S }\end{array}$ - Spade tips one end; straight tips other. $t$ Pin tips botb ends.

Junior

## Model

Similar to the studio model, but in 2 differently designed case and with a push-button instezd of a
sliding switch. Lowest priced mike that really works. W13379

Major Bowes' Amateur Microphone Anyone can connect this mike to any radio set. Does not infere with reception. Swltch on mike permits you to change from your program to radio reception. With 20 ft. of rubber covered cable.

## TWO-WAY CODE SET



Each unit has adjustable key, code buzzer and blinker light. Two units are furnished for 2-way communicastructions. Ideal for developing code speed. Less batteries.
Shpg. wt. 4 lbs.
W14000
Your Cost Per Set... \$I.9I

## HEADPHONES



## BRUSH CRYSTAL PHONES

A piezo-electric head-set that meeta laboratory requirements. 60 to 10,000 cycles. Exiremely rensitive to weak signals. Weight complete is only 6 ounces! Uses two-plate bimornh element provided with silver elec rodes. Brown Bakelite. W13924 High impedance S
Your Cost Per Set.....

## "EMPIRE" DX TYPE HEADPHONES

Made especially for DX fans. Have featherweight aluminum shells and a one-piece adjustable headband of apring steel. Each unit has a poweruI bi-polar magnet and a BAKEreaches out for greater DX. Shpg. 2000 - 1 hm
$2000-0 \mathrm{hm}$ Headset
W13892-Complete. Your Cost
W13893 3000 ohms
Your Cost

$\$ 1.25$
W13894-Cap for a bove. Each 12 c
EMPIRE" SIngle-Unit Headsets Similar to above, but one phone. Clock-steel band permanently attached; with $43 / 2 \mathrm{ft}$. cord. W13896-1000-ohm single set.

FROST DX Specials
Extremely sensitive. Polished
a 1 uminum shells; Bakelite caps;adjustable Webbed band. 20000 ohms. 5ft. cord.
Your
Cost.
Standard Headsets 2000-0hm Set Pir $\$$ I. W13933-Per Pair \$5 5 $3000-\mathrm{Ohm}$ Set W13981-Bakelite Cap
W13982-Diaphragm.
w13895-Diaphragm Your Cost. W13897-1 Wis
Your Cost

BRANDES Headphones


The genuine Brandes phones. Polished aluminum shells, Bakelite earcaps. 2000 ohms resistance. Adjustable, web-covered flexible steel headband. Shpg. wt. 2 lbs. W13925-Complete. S Your Cost
W13936-Bakelite Cap
W13937-Diaphragm.

1.59 . 5
 List Price S1.00. W13889-Your Cost

cient contact with a sensitive point W13916
Your Cost
Mounfed Golena Crystal Galena (lead aulphide) has been used for years be cause of its extreme sensitivity. These units have been carefully selected and
 W23900
Your Cost
$5^{c}$
Super-Sensifive Crystal Gets more stations and
gets them louder. Each gets them louder. Each crystal is meter-tested
after selection on actual reception. Of highest quality galena
W13901-Meter tested. Your Cost.
$.12 c$

## Fixed Crystal Defector

 Supersensitive point ound by meters and fixed permanently. In Bakelite case with screw connections. Will stand high-voltageWi3913 Meter-tested. Dust-proof. An easily adjusted crystal unit equipped with a super sensitive minaral and cata whisker o maintain most effi

## "Little Wonder" Crystal Set

 Usees a supersensitive crystal and tunes over the broadcast band. The lowest priced radio receiver made. Just connect phones and aerial and many stations are heard with good volume. Shpg. wt. 1 lb . C
## PHILMORE 2-Tube Battery Set

 In Portoble Carrying Case Employs 1-30 and 1-49. Single control tuning; volume control. Used with headphones. A vailable in kit form or factory wired. Everything contained in small carrying case. Batteries will last a long time. Less headphones. W13834- Complete kit ofparts less tubes and batteries. Your Cost.
W13835-Factory wired and tested, less tubes, headphones and batteries. $\$ 5.98$ Kit of tubes; 1-30, 1-49. Kit of Eveready batteries: $\mathbf{3}-\mathrm{No} .781 \mathrm{C}^{\prime}$ s, ${ }_{2}-$ No. 4 cells. Your Cost

Stand With Crystal Ball and socket swivel arm for contacting any point on crystal. Attractively mounted. Furniahed with Crystal. Extra
 sensitive; tested fo W13917-Complete.
 Your Cost.
 W13921 Envelope of 3 $8^{c}$

Ear Phone Cushions
Made of sponge rubber

|  | Made of sponge rubber to protect ears from pressure of headphones. w13940-For all fones. Your Cost Per Pair 10 Pairs. $\qquad$ |
| :---: | :---: |

## Double Phone Plugs

Will take one or two phone or
cords or a combination of both Metal parts, brass, nickel-plated. Colored insulation cap. Has tie loop for protection. W14974-Black W14971-Red

# "SPIDER WEB" ALL-WAVE ANTENNA SYSTEM 



A trans-oceanic communications type antenna for the bome. Consists of a series of doublet antennas and an improved transmission line to the receiver. Completely factory assembled-all connections made. Requires space only 38 feet across, with 12-foot veri.cal clange Range 140 to Full instructions furnished with W17135-RCA No. 9685-System. List $\$ 8.95$. Your Cost
Hogh Frequency Kit Increases range to 70,000 kc.
5.37 Shipping weight 21 bs . W17136-Your Cost
$90^{\circ}$
RCA RK-40 "SINGLE DOUBLET" KIT


Designed to meet demands for an easily installed and low-priced allwave antenna. Has a band coverage of 140 to 18000 kc . ( $17-2150$ meters), and is highly efficient on all bands within this rance. The system is factory assembled and soldered; merely tie to con venient supports, and the antenna is 40 . and 49 ft ., junction box, 75 ft . transmission line, entrance tube, receiver eoupler and accessories. With instructions. Shipping weight 4 lbs. List $\$ 5.50$. \$3.30
 Rentical wih that the receiver coupling transformer has been omitted. Shipping weight $3!\%$ lbs.
ceiv
W17088-Your Cost
TACO All-Wave Master System

## Cafayette <br> "Standard" Kił

Fspecially designed for all-wave roception. Contains $2-40 \mathrm{ft}$. rolls heavy enameled wire, 50 ft . transmission line, a receiver matehing eoupler, aerial spreader, 2 insulators, $6^{\prime \prime}$ porcelain screw eye, 2 nail-it-knobs, 2 lead-in strips, ground clamp and instructions. Shpg. wt. 5 lbs, W16474-List Price $\$ 3.00$ Your Cost Each.

## Cafayelle



## De Luxe All-Wave Kit

A modern, efficient all-wave antenna that will improve reception over the entire broadcast and short wave bands. Contains the following equipment: 2-50 foot coils of $7 \times 2.1$ bar copper aerial wire; $1-50$ foot coil of special weat her-proofed twisted trans mission line: 1-anterna crossover junction block; 2-3" glass insulators 1-" "Antennatrol" impedance mateh ing unit; 2-porcelain nail-knobs; 1-porcelain lead-in tuhe; 1 doublet window lead-in strip (Fahnstock type)
W16479-Your Cost.

## ALL-WAVE ANTENNA KITS

 Shpg. wt. 5 lbs.
## Cafayette "Economy" All-Wave Kit

Completely assembled, all connections made-easy to instal Contains the following: $2-25$ foot coils of $7 \times 24$ bare copper wire $1-50$ foot coil of weather-proofed transmission line; $3-3$ " glass insulators; 2-7, $75^{\prime \prime}$ Bakelite screw-eyes; 1-"shur-grip" ground clamp. In attractive box. Shpg, wt. 5 lbs.
$97^{\circ}$

## Cafayetle

Low Cost Aerial Kits
Contains 100 ft 7-24 copper wire, 50 ft . No. 18 rubluer-covered lead-in wire, 25 ft . ground wire,

## 73

Easily installed by any serviceman.
 Complete instructions furnighed. Shipp
W17006-TACO Na 301 - Your Cost

RECEIVER COUPLERS
W17007-For Exposed Wiring. Your Cost Each W17008-For Conduit Wising. Your Cost Each Write for FREE master antenna installation data book Highly efficient on al bands. A single system will serve $u_{1}$ to 25 receivers. Foundation kit, contains $1-80 \mathrm{ft}$. coil of $7 / 20$ tinned aerial wire; 1 transfer unit; 1- 55 ft . coil of No. 18 twisted-pair transmission line; 3-7 inch Navy type insulutors; 2 -strain insulators; 1 -double
lightning. Less receiver couplers. approved arrester. copper ground clamp, lendn strip, two porcelain insulators and two nail-i knobs. Everything
aerial. Shpg. wt. 5 ths. aerial. Shpy. Wt. 5 ths
W16476-Your Cost.

Standard Aerial Kit Contains 90 ft $7 / 25$ copper wire, 25 ft . lead-in, 25 ft . ground wire, two porcelain insulators, copper ground clamp, lead-in strip, two nailknobs. All the essentials for a dependable zerial system at an unusually low price. Shpg. wt. 2 lbs. W1647T-Your Cost.... $^{2} 9^{c}$

## Beldenamel

 Aerial Wire Finest grade copper, heavily enameled length is wound on a Shipping weight per $100 \mathrm{ft}, 4 \mathrm{lbs}$ W16232-7x20 Beldenamel. Suited for short wave aerial systems. 25 1000 ft . Your Cost 1000 ft . Your Cost...... $\begin{array}{r}w 16229-7 x 22 \\ 75 \mathrm{ft} \text { Belde } \\ \hline\end{array}$ 100 ft . Your Cost. 150 ft . Your Cost 1000 ft . Your Cost Solid Beldenamei W16233-No. 10100 ft. Your Cost W16230-No. 12
100 ft Your Cost1000 ft . Your Cost.
w16231-No. 14
100 ft . Your Cost
 mel.
s0. 51

carge path. Size glazed porcelainwith nickel-plated hardware. Idealasstandoff for apparatus, Hardware can be removed if deaired for insertion of any,

Universal Coupler
 With ChangeOver Switch FOR ALL BANDS

Correctly matches the impedance of the antenna to the input impedance the antenmi to thoused in an alu minum can. W17078-Your Cost..... 4

## RNBACH STAND-OFF INSULATORS

Made of highly, Made of white, brilliantly









Made of white, brilliantly
glazed Steatite, offering maximum insulation. For the mounting of condensers, coils, tube sockets and high-frequency apparatus. The sizes listed below are adequate for most needs.
W17001-55 "high, 5/" base diam. threaded both ends 6-32. Your Cost Each
W17002- $1^{\prime \prime}$ high, $11 /{ }^{\prime \prime}$ base diam. threaded both ends 8-32. threaded both end
w17003-13/" high, $7 /{ }^{\prime \prime}$ " hase diam. threaded both enda 10-32. I $2^{c}$ servatively rated, of 10,000 . Your

W17061 $W 17061$
$W 17062$ W17063 W17064 W17065
sizo-In.
$1^{1 / 6 \times 1 / 8}$
$1 \frac{1}{3} \times 1^{3}$ 5
$3=1 h_{2} \times 413$78 c
29 c

## Economy Aerial KIt

 Contains $90 \mathrm{ft} .7 / 27$ copper wire. 25 ft . rubber-covered lead-in, leadin strip, ground clamp, two nail knobs and two porcelain insulators. The lowest price kit on the market made up of first quality materials. Shipping weight 2 lbs . W16478Your Cost
$37^{\circ}$

Universal Set Caupler
Permits use of ungrounded transmission line with any receiver on ali
bands. Easy to aftach and mounts near
set. With in-
 struetions. ${ }^{\text {Wructions. }}$ Your Cost. .....2489


Highty efficient for noise reducing antennas. Consists of twisted rubbercovered conductors covered by a weather-proof cotton outer braid. Shpg. wt. ( 100 ft ), 4 lbs
Wi7is2-100 ft. coil. Wi7152-100 ft. coil. w17184-500 it. coil. 8 Your Cost.

## Shielded Transmission Line

## (acutremprogarpons

A 10 -strand wire covered with live rubber, a lacquered cotton braid and a woven, tinned shield. W16240 $50 \mathrm{Ft} \quad 100 \mathrm{Ft} .500 \mathrm{Ft}$ Your Cost $60 \mathrm{c} \quad \$ 1.10 \quad \$ 5.25$

## AERIAL ACCESSORIES

## Arresters

## ONLT EACH EA

Housed in brown, glizzed porcelain pproved. With brass screw ter minats. $\left.1 \times 1-\frac{y}{2} \times 3-1\right)^{\prime \prime}$ ovarall. T $0^{c}$ 12 for $\$ 1.00 \quad 100$ for $\$ 7.90$

All-Bakelite Arrester


Molded Bakelite housing. Approved by Underwriters. Non-airgap type. 16705-Shpg. wit. 1 lb Your Cost Each.

Brach Neon Arrester


Uses a NEON TUBE instead of airgap or resistance. By far the most sensitive arrester made; slightest induction is shunbed to ground. W16700
Your Cost Each
$59^{\circ}$

## NEON ARRESTER FOR <br> DOUBLET ANTENNAS

W16701
Your Cost Each
$82^{\text {c }}$
Arrester for Doublets


A new approved arrester for the doublet type of
antenna. Is of the ar-gap type care fully insulated from ground. Housed in heavy, gluzed porcelain. Wt. 11 b .
W16950-10 for $\$ 1.75$ Your Cost Each

## Shiclded

Flectro.
Static

## Arrester



A lightning arrester and static noise reducer in one! Contains condenser and choke coil which act as noise reducing filter, and a shield over ground. Porcelain housing with nickeled hardware.
W16755-
Your Cost Each
$43^{\circ}$

## Polarized Antenna and

 Ground ConnectorConvenient for connecting aerial and ground
from set to lead-ins. Confrom set to lead-ins. Consists of male and female plugs with metal tabs polarized so that the plug can not be inserted !neorrectly. Eliminates dangling wires and improves installation
Your Cost Per Set
Insulated Staples For holding inside leadin and ground
place. Per 100
Your Cos
I1 ${ }^{\circ}$
Per 1000
We carry the world's largest stock of antemna equipment and kits and can furnish you with aerial material for any type of installation for any type of installation band and any power.

## INSULATORS Pyrex Insulators (a)

Used by the U. S. Army and Navy. commercial services and amateurs The finest glass insulator made Nock Length Power Your
No. Inhes Rating Cost
 $\begin{array}{llll}\text { W16806 } & 71 / 2 & 1 / \mathrm{Kw} . & .75 \\ \mathbf{w i} 6807 & 12 \% & 1 / 2 \mathrm{Kw} . & 2.06\end{array}$

## GLASS INSULATORS



Special tem pered glass, un-
affected by heat affected by heat
or cold. High tensile strength. Ridged. W1684,-2 2 long. Your Cost Each Lots of 100 W16850-3" long Your Cost Each. Lots of 100. W16851-4" long Your Cos

## .

Antenna Wire

## Porcelain Insmlators

Strain insu-
lators made lators made
of glazed porcelain.
 W16802-21/2" long Your Cost Each. 10 for 22c High-quality heay 100 for $\$ 2.05$ celain insulators. "/4" holes. W26803 32" long Your Cost Each 10 for 55 c

100 for $\$ 5.25$


## Wall Insulator

For supporting wiring or apparatus. Glazed, ridged porcelain; 24/8" high. Plated nut and

W16735-Sh ${ }^{\text {Mg. }}$ Wit. 8 oz .
Your Cost Each.
Your Cost for 10


Large Stand-Off Extra-heavy glazed porcelain. Ribbed body for increased for | nire. |
| :--- |
| W1 | Net Each Lots of 10 .

## PORCELAIN TUBES

Brings lead-in into building without cutting wire or causing leakage. Needs hole: takes $3 / 3$ "Wire. W16860-5" long
Your Cost Each
Your Cost Per 10


## NAIL-IT KNOBS

Heavy white porcelain. Leather washer under nail head. $133^{\prime \prime}$ high, $1,5^{\prime \prime}$ diamter. Slotted for 2 wires.
W16977 Your Cost Each. 10 FOR
 Inde
$\square$ tenna use. $25-\mathrm{ft}$. hank
W16155-
Your Cost.
Your Cost.


## Accessories

Aerial Lead-In Strips




## Special Ground Clamp

Makes a vise-like grip on pipe. Sharp-pointed screw penetrates paint and rust and makes perfect contact with clean
metal. Has nut on screw for kround wire. W17105
Your Cost Each

 10 FOR.
100 FOR


35 c
$\$ 3.15$

## Plated Ground Rods <br> 53

Used wherever a pipe ground is not available. Heavy steel yoke for driving head, $\frac{8 / 7 " \text { drawn stoel, }}{\text { plated. Shpg. wt. } 4 \mathrm{lbs} \text {. }}$ $\begin{array}{ccc}\text { Stock } & \text { Length } & \text { Your Cost } \\ \text { No. } & \text { Feet } & \text { Each Per } 10 \\ \text { W17187 } & 4 & 27 c\end{array}$ | $\mathbf{W 1 7 1 8 7}$ | 4 | $27 c$ | $\$ 260$ |
| :--- | :--- | :--- | :--- |
| $\mathbf{W 1 7 1 8 8}$ | 6 | $38 c$ | 3.70 |

## Antenna Lead-In Clip

Heavy bronze with brass nut and screw. Solderless fastener for lead-in and aeria Wour Cost Each $5^{8}$

## Aerial Tension Spring <br> 

Automatically keeps proper tension in aerial and prevents sag. Consists of 2 hooks with porcelain rings interconnected with a powerful spring. Shpg. wt. 11 lb .

## W16487

Your Cost Each
Galvanized Guy Wire
Special grade of
tough, annealed
galvanized wire.
Excellent for guy.
ing antenna masts. Will resist rust.
W16156- $50-\mathrm{ft}$. roll
Your Cost.


Screw-in. Knobs For attaching lead-in or ground wires to posts or buildings. Wire passes lain. With screw $3^{\text {/ }}$ long. lain. With screw $3^{\prime \prime}$ long.
W16972Net Each.
10 for 21c 100 for $\$ 1.95$
W16986- ${ }^{\circ}{ }^{\circ}$ long
Net Each.
10 for 39 c


Made of the finest copper obtainable. All rolls are guaranteed to be full ength and slandard guage as specified. For any type aerial.


 \begin{tabular}{c|c|c|c|c}
No. \& Size \& $\begin{array}{c}\text { Per } \\
\text { Coil }\end{array}$ \& $\begin{array}{c}10 \\
\text { W16041s }\end{array}$ \& $\begin{array}{c}25 \\
\text { W16045 }\end{array}$ <br>
\hline \& $7 / 24$ \& 28 c \& $\$ 2.70$ \& $\$ 6.50$ <br>
\hline

 

\hline \& W16045 \& $7 / 22$ \& $37 c$ \& 3.60 \& 8.75 <br>
\hline

 EnameledStranded-100-Ft. Coils 

$\begin{array}{c}\text { Stock } \\
\text { No. }\end{array}$ \& Size \& $\begin{array}{c}\text { Per } \\
\text { Coit }\end{array}$ \& $\begin{array}{c}10 \\
\text { Coils }\end{array}$ \& Coils <br>
\hline

 

$\mathbf{W 1 6 1 1 6}$ \& $7 / 24$ \& 39 c \& 53.80 \& $\$ 9.25$
\end{tabular}



 No. Size Coil Coils Coils | W16118 No. 14 | 41 c | $\$ 4.00$ | $\$ 9.75$ |
| :--- | :--- | :--- | :--- | :--- |


1000-FOOT SPOOLS
Emameled
Stranded Bare

Stranded | Stock | Your |  | Stock | Youtr |
| :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Cost | Size | No. | Cost |




## Enameled Copperweld

Solid Antenma Wire

Tough steel core completely covered with high conductivity copper. Has tough enamel coating. Has much greater tensile strength. greater tensile strength.
Wour Cost, per 100 Feet $8^{\circ}$ W20886-No. 14 Gauge ${ }^{\circ}$
Your Cost, Per 100 Feet $0{ }^{\circ}$

copper. ind rub ber easy-strip insulation. For leadins, ground leads or aerials. Shpg. Wt. 2 Lbs. per 100 Ft. Specily length when ordering.
W16200- $\quad 25 \mathrm{Ft} .50 \mathrm{Ft} .100 \mathrm{Ft}$. Single Coil... 11 c 20c 38 c Lots of 10 _ . $\$ 1.00 \quad \$ 1.90 \quad 3.70$ W16217-1000-ft. coil. $\$ 3.75$
Your Cost............ 3.7 Best Grade No. 14 LeadIn Wire
Solid tinned copper core. Heavy (14) rubberinsu
erproof outer braid
${ }^{\text {erproof outer braid. A Code wire. }}$ $W 16203 \quad 25 \mathrm{Ft} .50 \mathrm{Ft} .100 \mathrm{Ft}$. Single Coil... $27 \mathrm{c} \quad 52 \mathrm{c} \quad \$ 1.00$ Lot of 10, ea. 26 c 1 ot of 25 , ea. 25 c Shpg. wt. lbs. 2


## SPECIAL VALUE! <br> Cotton Twisted Pair mousa

18 Gauge 1/4" R.C. wire with a cotcon covering offered at prices below the aetual market. 2 colors-white or yellow and green mixture. specily color.
w20902-Your Cost:
$95^{\circ} \leqslant 2.25 \leqslant \$ 8.40$

## All Rubber <br> Parallel Lamp Cord

Approved Type

Developed to meet the demand for an abrasion and water-proof wire The two conductors are sheathed in a coating of tough live rubber. A ridge between these conductors allows them to be easily separated without lear of ruining the insulation. In Black, Green, IVory and Shpr. wt.. per 100 color desired. Whpg. wt., per Gaut.e Your Cost Per Ft 100 Ft . 500 Ft . $112^{\circ} \$ 1.25$ \$5.60

## Heavy Rubber Cord



The thick belt of flexible rubber that covers the conductor is made of smooth oil-resisting, abrasion proof, bigh quality rubber. Especially suitable for outdoor work, in garages, for portable devices, or on any job where ability to withstand abuse is a prime factor. Shpg. wt. 7 libs. per 100 ft .

Stock NO. 20945 18-2-wire 31/ 52.95 W20946 16-2-wire 4c 3.75 20947 14-2-wire W20948 18-3-wire 4c 3.75

## Beavy Twisted Pair


8tandard $3 / 4$ " rubber wail, 14 gauge Fineat wire obtainable for jobs that call for a wire of large current carrying capacity and ability to stand plenty of abuse Shpg. Wt. c.lbs. per 100 ft

W20890-
Your Cost,
Per Foot.
$2112^{\circ}$
Parallel Silk Cord

## 

Consists of two conductors laid parallel and covered with braided silk. Has inner braid. Approved by Underwriters. The neatest cord or portable lamps, extension lights. te. Available in popular colors Shpg. wt. 3 lbs. per 100 ft.

18 Gauge ${ }^{1}$ "R. C.
W20897-Black W20899-Brown w20898-Old Gold
W20900-Maroon
Your Cost, Per Foot.
$125 \quad 500$ 1t $1 / 2$
18 Gauge ${ }^{1 / 2}$ R, C.
W20891-Black W20893-Brown W20892-Old Gold
W20894 Maroon
Your Cost, per Foot
100 ft. . . $\$ 1.75$


Popular type for connecting radio receivers, lamps, etc. Overall covering of silk braid.

$$
18 \text { Gaugo-1/4" Wall }
$$

W20836-Marnon W20838-Brown W20837-Old Gold
Your Cost, Per Foot
$100 \mathrm{ft} . . .85 \mathrm{c} \quad 500 \mathrm{ft} . . . \$ 4.05$
20 Gange - $1 / 4^{\prime \prime}$ Wall
W20839-Maroon W20841-Brown W208d Uld Gold
Your Cost, 25 Feet
$100 \mathrm{ft} . . .75 \mathrm{c} \quad 500 \mathrm{ft}$.
$273^{\circ}$
 Bakelite Handle

## Plug

Genuine Bakelite with handle grip. Prevents handle grip. Prevents
pulling out wires. Sturdy prongs.
W13281 Your Cost Each... 3 Carton of 25.

## Without Randle

Same as the above, but without the handle grip.
Per Dozen. 20c
Per 100. . $\$ 1.50$
Soft Rubber Handle Plug Handle plug made of soft rubber. Cannot crack or break. Best type to use for portdeaners, etc. Cleaners, etc. W13301Your Cost E.
Carton of 10.


## Trio Plug

 Bakelite. Three outets from 1 plug. W13282Your Cost EachPer Dozen.
$\qquad$ $1+$

## Fused Trio Plug

Same as above, but fused. Prevents main fuse from blowing; protects appliances.
W13249-

## Fused Cord PIug

Snme as the above fused trip plug,
but attacher directly to the cord. W13229
Your Cost Each

## Bakelite Outlet



Made of brown Bakelite. Screws into the baseboard. Easy to use and install. W13312 Your Cost Each. . ?


## Feed-Thry Switch

 Bakelite. Compact and very sturdy. Wach $^{\text {W13275- }} 4^{\mathrm{C}}$ Cach Carton of 10.. $\$ 1.20$
## Push Button

 Pearl button. General Furpose.
## BATTERY CABLE



A high grade, heavily insulated cable with each lead a different color for easy identification.
$\begin{array}{cccc}\text { Stock No. } & \text { Per } & \text { Per } \\ \text { No. } & \text { Wires } & \text { Ft. } & 100 \mathrm{Ft}\end{array}$

| Stocix | Nires | Ft. | 100 Ft |
| :---: | :---: | :---: | ---: |
| No. | Win |  |  |
| W16089 | 3 | 2 c | $\$ 1.95$ |
| W16090 | 4 | $21 / \mathrm{c}$ | 2.45 |
| W16091 | 6 | $31 / 2 \mathrm{c}$ | 3.0 |
| W16092 | 6 | 4 c | 3.50 |
| W16093 | 7 | 5 c | 3.95 |
| W16094 | 8 | 515 c | 4.95 |
| W16095 | 9 | 6 c | 5.50 |
| W16096 | 10 | 7 c | 6.50 |

## Bell Ringing Transformer



## Fitzall Flatiron

 Element Fits over $90 \%$ of the standard irons, including G.E. Hot Point, Sunbeam, etc. W13270 Carton of 10$\qquad$

## Heater Elements

Best grade Rpsistance
Best grade Rpsistance
wire with standard base wire with standar
to fit all heaters.
W13304-Cone Shape. Your Cost Each Carton of 10
W13305-Straight Type Your Cost Each Carton of 10.

Nickel Chrome Element
600 watt spiral wound elements. Exact size, no W13317-bs dia.
Your Co ast Each
Your Cost Each


Plug Fuses
Crystal mica window makesinspectioneasy. Not to be confused cheap type of plug chat often comesapart when inserting All ratings marked directly on top of fuse.
W13200- 6 amp . W13201-10 amp. W13202-15 amp. W13203-20 amp. W13204-30 amp .

Your Cost
Each Carton of 5


## TELEPEONE WIRE



Service men will find this wire of great use in general work, especially great use in genera work, especialar
when hooking up the very popular when hooking up the very popular
inter-communication phones in pri-nter-communication phones in private homes. No, 19 Gauge.

## 2-Conductor

W20895-Wt. 2 lbs. per 100 ft . 100 Ft .600 Ft .1000 Ft Your Cost $\$ 1.70 \quad \$ 8.10 \quad \$ 15.40$ 3-Conductor W20896-Shpg. wht 3 lbs. 100 ft . Your Cost $\quad \$ 2.15 \quad \$ 10.15 \quad \$ 19.40$

## Single Fixture Wire


Silk covered single conductor fixture wire available in White, Maroon and Old Gold. Specify color desired.

| W20916-Your Cost: ${ }^{18}$ Gaull |  |  |
| :---: | :---: | :---: |
| 100 Ft | 500 Ft . | 1000 Ft |
| 70c | 53.30 | \$6.50 |
| 18 Gauge-1/4" Wall |  |  |
| W20915-Your Cost: |  |  |
| 100 Ft . | 500 Ft . | 1000 FL |
| 60c | \$2.55 | \$4.90 |
| 20 Gauge-1/4" Wall |  |  |
| IW 2091 | ur Cost |  |
| 100 Ft . | 500 Ft | 1000 Ft |
| 50c | \$2.15 | \$4.20 |

Asbestos Beater Cord


Heavy asbestos covered wire with an overall braid of tightly woven rayon. Used on toasters, electric irons, heating pads, etc. Shpg. wt. 3 lbs. per 100 to
W20931-Your Cost:
$\begin{array}{ll}\text { Per Ft } & 100 \mathrm{Ft} \\ 2 \mathrm{c} & \$ 1.45\end{array}$
500 Ft
$\$ 6.95$

## ARMORED CABLE

## 

For auto, radio, outdoor, P. A. sysFor auto, radio, outdoor, P. A. sys-
tems and oil burner instaliations. tems and oil burner anstalations. Armor when grounded acts

Shpg. wt. per $100 \mathrm{ft} 8 lbs.$. Stock No. 1 FL. 100 FL . $\begin{array}{lrr}\text { W20855-1-Cond. } & 2 \mathrm{c} & \$ 1.60 \\ \mathbf{W} 20856-2-C o n d . & 3 \mathrm{c} & 2.60 \\ & \end{array}$ | W20856-2-Cond. | $\mathbf{3 c}$ | $\mathbf{2 . 6 0}$ |
| :--- | :--- | :--- |
| W20857-3-Cond. | 4c | $\mathbf{3 . 6 0}$ |

## Power Cord and PIuc <br> 

Attractive, hi-quality 6 -foot cord with sturdy plug. For replacement on sets, appliances, etc.
W13285-Your Cost..... I

## NICHROME WIRE

 Three standard sizes furnished on one spool, to take care of all repair work. 10 ft coiled
100 ft . uncoiled 100 ft. uncoiled
in. Shpg. wt. 3 lbs and 50 ft. of ribbon. Shpg. wt. s los
W13226--
Your
s2.20 NOTE
We carry a tremendous stock of wire at all times and are prepared to make large quantity shipments at special prices.

#  <br> <br> belden radio wire 

 <br> <br> belden radio wire}


## Push-8ock

 Solid Wire No. 20 solid tinned copper wire with push-back double wrap colanese colored braid paraffined.Easily worked No stripping necessary. In green, blue, red, yellow or black. Specify color desired when ordering. W16066-25-ft. eoil. Your Cost W16067 1000-ft. spool. Your Cost.
Stranded Push-Back Wire Similar to the above, but with No. 20 stranded wire. In green, blue, red, yellow or black. Specify color desired when ordering. w160ct-25-ft. coil. Your Cost w16069-1000-ft. enil. Your Cost.
$22^{\circ}$

$20^{\circ}$ red. Specify color desiredon order.
 Stranded tinned copper. Double serve of Celanese, coloced braid paraffined. In red or blacż, specify


Yellow or natural. Specify color. W16290 $25-\mathrm{ft}$. coil.
Your Cost.........

1000-Foot Spools
1000-ft. spools available in brown or

## Filament Lead Wire

No. 14 wire ( 41 strands of No. 30). color. 3 lhs. per 100 ft . W16158-25-ft. coil. Your Cost.
W16159 500 ft-apoo

## Cossh Back WIRE

## Solid Tinned

 Copper Core TypeNo stripping is necessary. Just push back the double cotton-covered moisture-
prooled braid. No. 20 wire. Four colors for circuit identification. Weight 2 lbs . per 100 feet.


## Stranded Tinned

 Copper Core TypeVery flexible wire of multistrand tinned copper: strand tinned copper;
equivalent to No .20 . Cotton braid pushes back easily. A vailable in 4 col ors. Weight, 2 lbs. yer 100 feet.

## 25-Foot Coils

W16350-Red W16352-Black W16354-Red W16356-Black W16351-Green W16353-Yellow W16355-Green W16357-Yellow Your Cost ( 10 for 99 c ), I C Per Coil

50-Foot Colls
W16358-Red W16360-Black W16359-Green W16361-Yellow Your Cost ( 10 for $\$ 1.90$ ), ${ }^{c}$ Per Coil.

100-Foot Coils
W16366-Red W16368-Black W16367-Green W16369-Yellow Your Cost ( 10 for $\mathbf{\$ 3 . 5 5 )}$, $36^{\text {c }}$

## 1000-Foot Spool

W16374-Red W16376-Black w16375-Green w16377-Yellow Your Cost, Per Spool

No. 14 Tinned Solid Copper Push-Bock Wire Designed for heavy-duty work in power amplifiers, transmitters, etc Cotton wrapper with heavy lacquer insulating material and final
layer of impregnated cotton braid. Eigh breakdown voliage. layer of impregnated cotton braid. High breakdown voltage
25-Foot Coils
100-Foot Colls


Per Coil.
$29^{c}$
Your cost,
il.
$\$ 1.07$

## RUBBER-COVERED HOOK-UP WIRE

Colored Rubber Wire


Stranded and tinned copper wire covered With a live colored rubber compound. very fiexible; easy ly. A vailable in three 25 Foot Coi 25 Foot Coils
w16272-Red Your Cost Each W16273-Black $3^{c} 10$ For w16274-Green
$-3$
1000 Foot Spools
W16108-Red Your Cost Each $\left.\begin{array}{l}\text { W16109-Black } \\ \text { w16110-Green }\end{array}\right\} \$ 4.20$

SERVICE WIRE KIT


Contains about 200 feet total of lengths from 4" to $24^{\text {"-p }}$-push-back, rec hookup, shielded, twisted, lamp rec hookup, shielcedeads, spashetti, cord, heavy a.c. ibs
W16299-In box
Your Cost.
$25^{\circ}$

Service Wire Bundles


FOR CLEAN

Lengths range from $2^{\prime \prime}$ to 1 foot. Both ends tinned. Include, pushback, rec hookup, lacquer
W16049-1-1b. bundle
Your Cost.
Your Cast.
w16048-2-
Your Cost.
W16047-3-lb. bundle.
W16046-5-lb. bundle.

Heavy Duty Stranded

NO. 16 RUBBER COVERED W16280-black W16281-red Your Cost $\begin{array}{ccc}50 \mathrm{Ft} . & 100 \mathrm{Ft} & 500 \mathrm{Ft} \\ 34 \mathrm{c} . & 66 \mathrm{c} & \$ 3.15\end{array}$

Stranded No. 14 Gauge W16121-black W16120 red Your Cost. . 39 c . $\quad \mathbf{7 5 \mathrm { c }} \quad 100 \mathrm{Ft}$

Stranded No. 12 Gauge W16122-black W16123-red $\begin{array}{cccc}\text { Your Cost. } & 25 \mathrm{Ft} . & 50 \mathrm{Ft} \text {. } & 100 \mathrm{Ft} \\ 90 \mathrm{~F} & \$ 1.75\end{array}$

## Spaghetti and Bus Bar

 Highestcambric
tubing.


Red, yellow, green and black.
W15960-Specify Color
Per 30-Inch Length
Your Cost 10 Lengths.

## ROUND TINNEO COPPER BUS

 SIZENo. 14-2-FOOTLENGTHS W15965- 10 Lgths. 100 Lgtha. Your Cost. 15c $\$ 1.30$ SIZENo. 12-2-FOOTLENGTHS $\begin{array}{lll}\text { W1596e- } & 10 \mathrm{Lgths} . & 100 \text { Lgth } \\ \text { Your Cost. } & 24 \mathrm{c} & 52.15\end{array}$
## BELG WIRE

An excellent grade of
No. 18
W16338-1/2 lb. roll
Your Cost
W16051-25 ft . roll Your
Cost

## WIRE STRIPPER

Strips insulation from wire easily and cleanly, Saves
time. Cutting edge of lempered steel that will retain its hardness. W15044 Each



## Feraldparnose SERVICE KITS

10 Candohm Units


Standard equipment in many of the present day receivers. Shielded resistors; flbre insulation; wire wound. Mounting flanges on each unit. Ten popular sizes. W3851-
 $59^{c}$

15 Bias Resistors


Filteen assorted wire wound resistors designed for biasing tubes, center tapped filament resistora, etc. Shpg. wit. 2 lbs. W3850
Kit of 15 ,
$23^{\circ}$

## 10 DIAL SCALES



Contains 10 dial scales, including: fan type, drum type, etc. Several "all-wave" dial scsles supplied Scales are all sizes and colors-all are usable.
Your Cost

## RMA Color Coded Carbon Resistors



Specify stock number of type and resistance desired.

| Ohms | Ohms | Ohms | Ohms |
| :---: | :---: | :---: | :---: |
| 100 | 3000 | 30000 | 250000 |
| 150 | 5000 | 35000 | 300000 |
| 200 | 6000 | 50000 | 400000 |
| 250 | 7500 | 60000 | 500000 |
| 500 | 10000 | 70000 | 750000 |
| 600 | 12000 | 75000 | 1 Meg. |
| 760 | 12500 | 80000 | 5 Meg. |
| 900 | 13000 | 90000 | 2 Meg. |
| 1000 | 15000 | 100000 | 1 Meg |
| 1500 | 17500 | 125000 | 3 Meg. |
| 2000 | 20000 | 150000 | 5 Meg |
| 2500 | 25000 | 200000 |  |
| W5239-1/2 Watt |  |  |  |
| W5240-1 Watt |  |  |  |
| Either | Type, | ach. |  |
| 100 for. . . . . . . . . . . . . . . . . . 52.25 |  |  |  |

## 2.WATT COLOR-CODED <br> CARBON RESISTORS

## Similar to above, but 2-watts.

| Ohms | Ohms | Ohms | Ohms |
| :---: | :---: | :---: | :---: |
| 700 | 4500 | 15000 | 50000 |
| 1000 | 5500 | 20000 | 60000 |
| 1400 | 6000 | 25000 | 70000 |
| 3500 | 7000 | 30000 | 75000 |
| 4000 | 10000 | 35000 | 200000 |
| W5245 | Speci | ize. | -c |
| Your | ast |  |  |
| Each. |  |  |  |
| 100 for |  |  | \$4.50 |

100 R. M. A. Color-Coded Carbon Resistors

All RMA color coded-just These resistors are used These resistors are used
every day in the course of repair work. Kit contains approximately the following: $25-1 / 4$ watt, $25-1 / 2$ watt and $50-1$ watt resistors. All popular replace ment values. Shpg. wt. 2 Ihs. W3852-
Kit of
$100 \ldots . . .20$

50 ASSORTED RESISTORS Similar to a bove kit, 50 resistors. Comprises $y_{1}^{\prime}, V_{2}$ and 1 watt, resistors all RMA color coded.


25 TUBULAR BY-PASS CONDENSERS


Contains 25 popular tubular bypass condensers, are of standard capacity and working voltage. Capacities range from . 00025 to imid. Shpg. Wt. 2 lbs. Your Cost, Kit of 25.
 Twenty-five assorted $1 / 4, \frac{1}{2}$ and 1 watt resistors. All coded. Shpg, wt. 1 lb.

## W3867-

KiT OF 10 POPULAR SIZE ELECTROLYTICS

10 POPULAR VOLTAGE DIVIDERS


A kit of 10 selected voltage dividers made up of vitreous enameled and open wire wound types With wattageratings
from 20 to 75 wates. Re from 20 to 75 wates. Re wayn handy around the hop since they can be used for powe
Shpg. wt. 4 lbs .


## ASSORTMENT OF 10 VOLUME CONTROLS

Contains 10 assorted volume controls, each new and useable. All of standard manufacture, and designed for standard radio circuits such as: C bias, antenna shunt, tone control, etc. Several types with 3 witch included. Shps. wt. 3 lbs.
 Ten.


An assortment of $\mathbf{2 5}$ high quality mica condensers in a wide range of usable capacitics. All popular types. Include Bakelite cased units with pigtail leads, solder lugs, and other standard mounts.

## W4167- 25

Klt of 25
Your Cost, Special.


25 METAL CASED BY-PASS UNITS


All popular sizes, unused, in per fect condition. Wide range of capacities. In drawn metal containers with mounting acilitif W3309-


Ten assorted radio knobs, including wood and Bakelite typea with set screws and springs. W9662-

10 R. F. CHOKES
 chokes with inductances ranging have leads-brand new. Wt. 2 lbs. W10110-
Kit of 10
25 Bakelite and Fibre Insulators


Envelope of 25 assorted pieces of fibre and bakelite in all shapes and sizes. Includes insulators, socket locators, washers, terminal strips. W15266-
Envelope of 25.


## Automatic Charge Rate Regulator

Advances the charging rate of the generator byapproximately 5 amperes when a set or appliance is turned on, but automatically
returns the gen-
 returns the generator to the original charging rate when the equipment is not operating. Thus generator and battery are saved from being overtaxed. Easy to install; full instructions included. Shpg. wt. 3 lbs. wheg. wt. 3 Your Cost.

## MICROPHONE DESK

 STANDA banquet type deak stand with wooden base and steel pipe standard. Base is $7^{2}$ in diameter. Heavy metal stem is 11/0" in diameter. Overall height $10 \% 8^{\prime \prime}$. Finished in dark gray, $32^{\prime \prime}$ pipe thread at top. Shpg. Wt. 3 lbs.
Your

## Your <br> Cost

AT Menernerner
Adapter for above: Changes $12{ }^{\prime \prime}$ pipe thread to fit 5f-27 thread. For all popular microphones. W13556-
W13556-
Your Cost Each...

Wafer Tube Sockets

The 5-prong
sockets have mount ing, centers ${ }^{127}{ }^{2 \prime}$ apart. The 6 and 7-prong sockets have mounting centers $13 / 8^{\prime \prime}$ apart. Limited quantity svailable.
W13128-5 prong, 10 for 15 e Your Cost W13159-6 prong
W13193-7 prong, 8 mall. Your Cost Each
50 for. . . . 60c
100 for
60 for.
 . TRANS FORMER
Forfirst or Factory peaked at 175 kc Double tuned. Trimmers on
Isolantite base. Withby-pass Metal case 1 1 3 x1 W2165-Your Cost Each.... $9^{c}$

## 11,500 OHM FIELD COIL

 21/3 diameter, high; hole. Long wire'leads.

H. \& H. Toggle Switch D.P.S.T.


Mounts back of panel. Kated 3 amps. at 125 volts. Bakelite case. Serew terminals. W12819Your
Cost

## Genuine MAJESTIC

 TransformersGenuinefactory parts, in perfect conused. Only a limited quan-
tity tity of each $n$ e
prices.
W2104-Plate transormer 70 series (7BP6 pack Your Cost Each w2105-Filament tran -4 0 series. Past No. 61. Shmer for


## $\star$ ULTRA.COMPACT DRY ELEC. <br> trolytics - Lower Your Inventory

## 

## PILOT Micas

 FFnest rubs mica Bakelite casesMountwihtwi Mount with wo hardware furnished Individually boxed Capacities marked.

 $\xrightarrow[\substack{\text { coc } \\ \text { n } \\ 100}]{ }$

Special Offer Of Mica Condensers

In surrdy molded Bakelite cases. All of stundard and popular manu: facture. Specify capacity desired
when ordering when ordering.
$\begin{array}{cccr}\text { Cap. } & \text { Cap. } & \text { Cap. } & \text { Cap. } \\ \text { Mfd. } & \text { Mrd. } & \text { Mfd. } & \text { Mfd. } \\ 000005 & .0006 & .00015 & .00035\end{array}$ $\begin{array}{llll}.000005 & .0006 & .00015 & .00035 \\ .00001 & .00005 & .0002 & .0005\end{array}$ $\begin{array}{lll}.00002 & .0001 & .00025 \\ \mathbf{W} 4189 & 100 \text { For....... } 51.75\end{array}$ Your Cost Each. W4188 Specify eap. desired. .001 mfd . $.003 \mathrm{~m} / \mathrm{d}$. 006 mfd . $.002 \mathrm{mfd} . \quad .005 \mathrm{mfd}$. Your Cost, 100 For, $\$ 2.503{ }^{\text {Each }}$ Each.

Dual Section Unit 4 Mfd .450 V .4 Mfd .150 V .


In cardboard container with lug terminals. Common negative. Size 31/2x11/2x1"; mtg. fange centers
W2863-Your Cost.
IG
10 Mfd. 25-Volt

8 Mfd. 225 V. ElectroIytic
Unit
Tubular type in cardboard container provided with leads. Positive lead red, negative lead is black. For general replacements. Limited quantity. 41/6x11/8".
W2801-
Your Cost Each
10 For.
'Midget'

## 

## Two-Gang Condenser

 .000365 Mfd. Aluminum plates, split end plates for tracking, Eachsection 000365 mfd . With trimmers. $16^{\prime \prime}$ shaft extends $8 / 8$
deep. $17 / 3^{\prime \prime}$


Triple By-Pass Unit




Your Cost


| Stock | Cap. | Work. | Your | Stock | Cap. | Work |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Mfd. | Voles | Cost | No. | Mfd. | Vork | Your |
| W2686 |  | 35 | S0.15 | W2692 |  | 200 | S0.25 |
| W2687 | 6-5 | 35 | . 21 | W2693 | 16 | 200 | -. 28 |
| W2688 | 25 | 50 | . 25 | W2694 | 20 | 200 | -30 |
| W2689 | 50 | 50 | . 35 | W2695 | 2 | 550 | . 22 |
| W2690 | 4 | 200 | . 21 | W2696 | 4 | 550 | . 22 |
| W2691 | 8 | 200 | . 24 | W2697 | 8 | 550 | . 35 |

Bystocking only a few of each of the numbers listed below, any replacement job involving filter or by-pass condensof. Units are especially com-paet-only $3^{\prime \prime}$ long by $3{ }^{\prime \prime}$ deep. Make up required blocks by ganging urits (use 6-32 bolts and nuts) as shown in the illustration above. Save complete blocks by replacing defective sect ons only. All have separate negative and位位s. Impregnated cases.
$\star$ BARGAIN OFFER $\star$ Inverted Wet ELECTROLYTICS
An unusually low price on these standard wet electrolyticcondensers. Allinverted for mounting with palnut bushings exteng. Threaded bushings extend $1 / 2 \mathrm{n}$. Aluminum containers; solder lug terminal. All 450 volts working, 500 volts peak.
A $2700-8$ Mfd.
w2701-16 Mid.
Your Cost
Each,
Either
Type.........
10


Flush-Mounting 7.Tube Transformer Completely shielded; bottom
shell type with long color coded leads. Primary for 115 volts, $60-60$ ondaries: Secnoltage $325 / 325$
volts at 75 ma . 63

volts at 75 ma ; 6.3 volis c. t. at 1.2 amps. ( 4 heaters); 2.5 volts c. t. at 3 amps. (2-power tubes); 5 volts ar Shpg. wt. 31 bs W2239-Your Cost.
$95^{c}$
6-Tube Power Transformer
 Fully shieided upright mounting transformer withcolor codedleads. Primaryfor 110 volts. 50-60 cycles. aries: high voltage delivers 600 volts c.t. at 70 ma.; 5 volts at 2 amps . ( 80 rect.); 2.5 volts c.t. at 3.75 amps . ; 6.3 volts at 1.4 amps. ( $2-42^{\circ} \mathrm{s}$ ). Size:

$95^{\circ}$

## Midget Pentode Output



Single pentodeoutput transformer (for 47, 2A5, 42, etc.)dealgnedto mount directly on speaker $115 \times 1 \frac{1}{4}$ ". Matches a $5-15 \mathrm{ohm}$ voice Coil. Shpg. WL. 1 lb.

I@c

SPECIAL VALUES IN DRY ELECTROLYTICS

8 Mfd. 450 Volt Dry Electrolytic Condenser


In cardboard containers with flanges. Long insulated leads for connections. Of standard man-ufacture-built to high standards and fully gnd ${ }^{\prime \prime}$ "eed. Overall size: $4, / 4^{\prime \prime}$ long, $a^{\prime \prime}$ "wide 11b. List Price 95c. W3200-10 For Your Cost Each Special.

## Dual 8 Mfd. 450 Volt

 Dry Electrolytic

Cardboard container with flanges. Four leadsseparate sections. Standard manufacture-fully guaranteed. Size: 41/2" long, 15/" wide and 11b. List Price $\mathbf{3 1 . 4 0 \text { . }}$ W3201-10 For,
Your Cost Each Your Co
Special.
$\$ 3.50-1$
$30^{c}$

Suited for use in a.c-d.c. midgets. Four secat 35 . 16 and 8 mid , at 200 volis peak, $5-5 \mathrm{mfd}$. at 35 volts peak. Color coded leads. Size: Price $\$ 1.75$.
W3202-10 For
Your Cost Each Special.


## Push-On Knobs



High quality Bakelite knobs, push on tyme, for milled shats. W9931-Type A. 11/3" diam., $13 / 3$ skirt. Brown Bakelite W9932-Type B. Philco type. J/8" diam. top, 4 bas Either Type 100 for

## Metal Cased Dual By-Pass Units



High quality bypass condensers in circular aluminum cases. Pigtail wire mon negative. All conservativelyrated conservativelyra working voltage. Metal collar for mounting. Limited quantity.

| ock | p. | Si |  |
| :---: | :---: | :---: | :---: |
| No. | Mid. | In |  |
| W733 | .05-. 05 | 11/2 |  |
| 734 | .1-. 1 |  |  |
| 735 | .1-. 25 | 21 | 100 For |
| 7736 | .25-. 00 | 31 |  |

10-Watt Field Exciter


Delivers a full 10 -watts into ohms. Uses 80 rectifier. Perfectly filtered. Heavy duty transformer. With 6-foot rubber covered cord. Screw terminals. For 110 volts, 60 cycles a.c. On crinkle lacquer finished metal chas-


## Maroon Spaghetti

Highest grade. Maroon color. Takes No. 16 wire. 30 -inch leng ths W15959
Your Cost, per fength ...... $\$ 3^{\circ}$
Pre-Ampllifier With Electronic Mixer

## SPECIAL SpeakerValues

A PRICE SCOOP! MAGNAVOX 10" DYNAMICS


An amazing bargain value in these ex-tro-dynamic speakers. $10^{\prime \prime}$ cone diameter. Field resistance 900 ohms (can be
used to replace 1,000 used to replace Iove for public address systems, large radios, etce Complete former out trans-

aing cone. Wide frequency range. Handles 5 -watts. Shpg. wt. 15 lbs.

W19349-Your Cost, Special Same as above, but less output tr
W19350- Your Cost, Special.
ransformer.
s. Coil. 456 Kc.
Composite oscillator and 456 kc . i.f. coil Top tuning. Isolantite base trimmers. Leads base trimmers. Leads, for i.f. connections,
lugs for oscillator connections. $3^{\prime \prime}$ high, 1 \% ${ }^{\text {" }}$ diameter W10053-Your Cost


## Shielded I.F. Coil

Fully shielded
175 ke. i.f. coil for use with high gain tubessuch as 6 C 6 . 6D6, ete.
 60,000 ohm load resistor. In can $13 / 5 \times 11 /{ }^{\prime \prime}$ Lug terminals.
W10086-
Your Cost Each

## I.F. Transformers

Double tuned i.f. trangformers ideal for set builders or for replacernent purposes. Trimmers on Isolantite bases, and are top tuned. In standard round leads. High gain.
W10036-175 kc
W10035 456 kc .
Your Cost,

1.F. Image Suppression Trap


Wall Receiver Coupler Fitsstandard wall outlet. Equipped with jack, and coupler wired to rear terminals. Used to couple receiver to a master antenna. Plate finished in grained brass
and has markings "A" and has marking "A" phone tip plugs. $19^{c}$

New Deluxe Pre-Amplifier


## - For Up To 3 Mikes

## This pre-amplifier-electronic

 mixer when used in conjunction with old, low gain amplifiers (up to 0 db ) will permit the use of new high-fidelity velocity andsound cell microphones, and perw mit studio type mixing and fading of 3 input channels. Each channel is equipped with an individual gain control; in addition, a master
gain and tone control are provided. A crain of 50 db is afforded by the preamplifier. The 6 -volt model uses 6-6A6's, and the $21{ }^{\prime}$-volt model uses $675{ }^{\circ} \mathrm{s}$. Assembly is housed in a steel cabinet $10 \times 7 \times 5 \%$ g". Input impedance is 500,000 ohms; output impedance to match grid of input tube All controls Suitable power supply for use with these units is listed at right. Shpg. wt. 11 lbs .
Model 204-A-21 2 -volt model Model 205-A- 6 -volt model.
LESS TUBES.
Your Cost Each, Either Type.

Model 1046-PP Power Supply For use with above units. For 110 volts, 60 cycles a.c. Steel chassis $61 / 2 \times 6 \%$. Uses 80 rectifier. Wgt. 19
lbs, Less tube. $\$$ I 0.95
Your Cost Special 10.25

## - For 1 Mike - Gain 56 DB

When used with any amplifier having a gain of 60 db or over. the unit will permit use of crystal, sound cell and velocity mikes. Provides an overall gain of 56 db obtained from a highly efficient circuit which employs two 6C6 tubes. Ont pedance 500,000 ohms and the output will match the input out of any standard amplifier grid of any standard from am Power can plifier, or from power pack listed at the left. Enclosed in a heavy steel case finished in rubber black. Size 101 x $71 / 4 \times 51 /{ }^{\prime \prime}$. Equipped with a volume control and socket for power. Filaments take .6 amps at 6 volts; plates require 180 to 300 volts. Shpg. wt. 20 1bs. Less Tubes.
Model 224-A
Your
Cost Special.


Volume Control With Switch For Auto Sets Has a slotted shaft to take auto re mote cable having a that tongue．Po－ total resistance
200,000 ohms． Tapered for audio grid circuits．Has a built－in line switch． $78{ }^{\prime \prime}$ bush－


W6355－Your Cost
$1 / 2$－Meg．Rheostat With

## Switch



800 Ohm 10－Watt


Varnished Insulating Paper


Forinsulating trans－ former windings， coils，etc． 100 feet to a roll． $21 / 5^{\prime \prime}$ wide Each $15^{\circ}$ 10 Rolls for $\$ 1.2$

## Screen Grid Clips



Heavily plating clip，
spring complete with a long
length of insulated wire．
W15262－For glass tubes


100 for

## Auto Filter Pack

Contains：one 375
mind．and one .5 mfd． 400 volt mid． 200 volt dry midectrolytic papacy－ tors，one 300 ohm ＂ A ＂choke and one ＂A＂choke．In met－ cal container $3^{3}{ }_{4} X$


## Shielded Antenna Coil



Fully shielded in alu－ minum can 2！＂${ }^{\prime \prime}$ high by 13 ＂diameter．Silk covered primary and secondary Windings． mfd．variable conden－
wioost－Your cost

## FIBRE TUBING FOR



## COILS

Finest quality fibretubing． Especially well suited for winding all types of coils． Stock No．Dimensions Your Cost


100 for

## 3－Gang Condenser

 For Short Wave Sets

These condensers were made for a nationally known manufacturer Each section has a capacitance o .00046 mfd ．Two of the sections have standard spaced plates with split end plates；the third section has extra wide spacing for more elf－ ficient oscillator tuning．so sha？ extends $112^{\circ}$ ．Size： $5 \frac{1}{4}{ }^{\circ}$ deep， 31 ， wide， $128_{8}^{\prime \prime}$ high．shpt．wt． 2 hs． W9628－
Your Cost
.5 Mfd .1000 Volt Cased Condenser
 A high voltage by－pass
condenser suited for condenser suited for
use in radio receivers use in radio receivers
and low－powered transmitters Rated .5 mfd ．， 1000 volts dee． working voltage．Per－ fectly sealed in con－
fainer and provided with leads． $41 / 5 \mathrm{x} 2 x^{3 / 4 "}$＂ W498－
Special

$$
\operatorname{urcost}
$$

## $\star 75 \%$ DISCOUNT ON $\star$ PHILCO OUTPUT METERS

An essential for every ham，serviceman and ex－ perimenter．For checking the output of tuners， amplifiers，etc．＂Shadowgraph＂meter shows variation in output by a variable shadow on the celluloid screen．Comes complete with two Wired－in in a crackle dry cells for pilot metal case $5 \times 3$ light． Housed in a crackle finished metal case $5 \times 31 / 6 x$－ for connections．Furnished with long ins jacks test leads and adapters to place under insulated
 test leads and adapters to place under output tubes（universal）．Shipping
weight 4 lbs．Limited quality． weight 4 lbs．Limited quantity．
W10901－List Price $\$ \mathbf{1 2 . 5 0}$
Your Cost Each．
special

## Push－Pull 6 Lb Output Transformer

 At high quail shielded transformer
made $b y$ made by
Thordarson． Primary jim pedance 6000 ohms plate to

plate，matches | plate，matches |
| :--- |
| p．p．6L6＇s | $v o l$ plate．）Sec－ ondary for 2 ohm voice coil．Bind－ ing posts on sides． $351 \times 2,1 \times 3^{n}$ Shag．wt． 4 lis． isis－Your cost \＄1I

## 15 Henry Filter Choke



75 Ma．
A fully shielded filter choke for use in power am－ Rlifiersoetc． Raced naut 75 ma maximum d．c．Resistance （d．c．） 800 ohms．Lug terminals． W1542－ Your Cost． She above，but unshielded． W1543．Yt． 3 lbs．

THORDARSON Type Z Screen Grid Coupler Used to couple a screen grid stage of audio or a power output tube． Consists of wal iron core coils in a fully shielded case．


Primary s．95
ductance 200 henry at 5 ma ．dec． Binding posts on side． $33 \frac{1}{2} \times 31 / 2 x=$


## Full－Wave Vibrator

 TransformerOpenframetype
with long leads．
6－volt primary：
secondary de－ livers 225 voles at 40 milliam－ pores（each side
duty core，bis
Overall size： $230^{n}$ huge insulation．
 or general replacement purposes Shag．wto 4 lbs
Whisift

## 3－Gang Condenser


capacit－ has two Bakelite strips for mount－ shaft extends $1^{1 "}$ ．Size： $6 \frac{10}{}{ }^{\prime \prime}$＂ 1 long $3{ }^{2}$ wide， $2^{3}$ 采 high．Shag，wt W9694－Your Cost．．．．．．IS

## 4－Gang Condenser


$\star$

On front unit is d．p．d．t．An aluminum
plate acts as a shield between the
two sections．A $3 / 2$ bushing keeps the switch $1^{-1}{ }^{3 / 2}$ bushing keeps Threaded bushing is $3 / \sigma^{\prime \prime}$ diam．and extends 4 ＂．Shaft is $21 / 3^{"}$ long， milled，and $1 \mathbf{W}^{\prime \prime}$ in diameter W12962
Your Cost Exch．
$15^{\circ}$

## 13 Contact Switch <br> 4－Position Rotary

 Pos．
No． Pos．
No． Pos．
No．
 Pos．
No． Pos．
No． Pos．
No． Pos．
No． Pos．
No．
 Four pie－wound sections on Is－
olantiteform．
al 2.5 millihenrys， 50 ohms d．c．re－
sista ace，distrib－ used capacity 1 mid． W10106－
Your Cost Each


5－Meter Interruptor Pos．
Nos．
Double gang
switch with all
Bakelite insulation
and silvered，self
cleaning contacts． cleaning contacts．Rear unit has ae d．p．d．t．and one s．p．s．t．member


Tubular Cartridge Paper By-Pass Units A line of standard size tubular bypass condensers at extremely low prices. Tinned copper leads.

| Stock | Cap. | Wkg. <br> No. | Your <br> Moud. |
| :---: | :---: | :---: | :---: |
| Volts |  |  |  |
| Cost |  |  |  |

## FORD-MAJESTIC "B"

## Power Supply For

## $40-18805 \mathrm{~B}$

Complete pack. Conformer brator, filter condensers condensers
 Set uses 2-6E7's, 1-6A7S, 1-6C7, 1-6Y5 and 1-42. Entire unit plugs into 6prong socket on chassis. All parts rubber cushion floated Shpg. wt. 8 !bs.
52.05

## 1 Mfd. 600 Volf

Paper Condenser


High voltage paper conpower receivers or low power transmitters. In
impregnated cardboard impregnated cardboard case withinsulated leads.
$3 \times 17 / 8 \times^{13 / / 6^{7}}$. $\quad .1 \mathrm{mfd}$., 600 voits d.c.
W2698-
Your Cost
14
10 for.

## 375-Watt Słep- <br> Down Transformer

220 V. A.C
 110 V. A.C.
Heavy duty type step-down transiormer rated conservatively at 375 watts. Primary for 220 volts, a.c. output 110 volts a.c. Fully shielded in crackle finished metal line cord and plug, and receptacle for the appliance to be used. Shpg. wt. 16 lbs . W1418-Your Cost.. 2y. 2

PHILMORE "Vest Pocket" Crystal Set

Only $3 \times 1 \frac{3}{3} x$ $1^{11}$ "n Built-in tal detector. Tipjacks for phones; single phone may be used. Leads for ant, and gnd. $38^{\circ}$

|  | Quantify Limifed RADIO TUBES AT NEW LOW PRICES-RCA LICENSED |  |  |  |  |  | ED |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Offered at prices far below the present market quotations. All brand new, first quality, RCA licensed. Packed in factory cartons, Guaranteed for 90 days (burnouts and broken glass excepted). |  |  |  |  |  |  |
| Type | Each | Type | Each | Type | Each | Ty | , |
| 146 ${ }^{1} 18$. | 39 c | 6E5 |  | ${ }_{34}^{33}$ | 322 390 | $\left.\begin{array}{l}57 \\ 58\end{array}\right\}$ | c |
| ${ }_{1} \mathbf{C 6}$ |  | $6 \mathrm{F7}$ | 39c |  | 30 c | ${ }^{714}$ | 25 c |
| 1 V | 29 c | 6G5 |  | ${ }_{37}^{36}$ |  | 75 76 | 29 c 27 c |
| $2 \mathrm{2A3}$ | 49c | $\left.{ }_{12 \text { 12A }}{ }^{124}\right\}$ | 49 c | 37 <br> 38 | 27 c | 76 77 | 23 c 32 c |
| 245 <br> 246 | 32c | 1273 | 32 c | 39 | 29c | 78 ) |  |
| 247 | 39c | 2585 | 35 c 19 c | ${ }_{42}$ | 32c | 80 82 | $22 c$ $30 c$ |
| 287 285 |  | 12. | 25c | 43 | 35 c | 83 | 32 c |
| 523 | 28 c | 22 | 399 | 45 | 22 c | 83V | 49 c |
| 6A4 ${ }^{646}$ | 39 c | ${ }_{26}^{24}$ | 35 c 21 c | 46 47 | 32 c | 84 | 29c |
| 6A6 | 39 c | 27 | 22 c | 48 | 49 c | $\left.{ }_{89}^{85}\right\}$ | 32c |
| 685 | 49 c | ${ }^{30}$ \} | 298 | 50 55 |  |  |  |
| $6 \mathrm{B7}$ 66 | ${ }_{32 \mathrm{c}}^{29 \mathrm{c}}$ | 31 | 398 | 55 56 | 29 c 24 c | 183 485 | 49c |

## TOBE Aerials

Windo-Pole An efflcient allwaveantenna that does not require the use of wires. the use or wines. work. Takes only a few minutea to install. Consists of
threesteen sections threesteel sections totalling 8 -ft. in length. Has insu-
lated steel clamp lated steel clamp for mounting to
any window sill and comes complete with insulated lead-in strip.


Twin Phono Jock
 Bakelite moldedstrip for standard phone tips.
 ed phono.
W13030
Your Cost Each

## ROLA G-12 Hi-Fidelity Speakers

High quality d.c. dynamics having an unus ually wide range; easentiaily fiat irom
$8,000 \mathrm{c} . \mathrm{p} . \mathrm{s}$. Voice coil impedance 8 ohms . Full $8,000 \mathrm{c} . \mathrm{p.s}$. Voice coil impedance 8 ohms. Fuil
$12^{\prime \prime}$ diameter cone. Pressed steel frame finished in instrument black, and carrying handle provided. Size $127 / /^{\prime \prime}$ wide, $121 / /^{\prime \prime}$ high, 73 " deep. 675 ohm speaker for 110 volts input; 1,000 ohm speaker for 140 volts input; 1,250 ohm speaker for 150 volts input. Both furnished with input transformer to match 250 and 500 ohm line. Shpg. wt. 26 lbs. W19240-675 ohm field W19245-1250 ohm field


## Special Transmitting Chokes

 Smoothing and Swinging Types A complete line of beavy duty smoothing and filter chokes ideal for hams par. Work, etc. Fully shielded in ventis but the 200 ma . units which have lug terminals. Made by United Transformer Co. Average Shpg. wt. 15 lbs.

## Swinging Chokes

## Smoothing Chokes

|  |  |  |  | Your | Stock | Induct. | Ma. |
| :--- | :---: | :--- | :---: | :--- | :--- | :--- | :--- |
| Stock | Induct. | Ma. | Your |  |  |  |  |
| No. | Henrys | D.C. | Cost | No. | Henrys | D.C. | Cost |
| W5464 | 20 | 200 | $\$ 1.75$ | W5468 | $5-25$ | 200 | $\$ 1.75$ |
| W5465 | 20 | 300 | 3.25 | W5469 | $5-25$ | 300 | 3.25 |
| W5466 | 20 | 400 | 4.00 | W5470 | $5-25$ | 400 | 4.00 |
| W5467 | 20 | 550 | 5.50 | W5471 | $5-25$ | 550 | 5.50 |

Midget Radio Cabinet

Your
Cosi
$15^{c}$
each


An attractive hardwood cabinet of the mantel type. Constructed of walnut veneers with a darker base piece, Speaker grill back $3{ }^{\mu}$ " dial prill cloth. Cutouts for 352 dia (airplane type) and four controls. $8^{n}$ deep; inside dimensions: $13^{11} \frac{1}{4} x$



Attractive molded radio knobs of the push-on spring type. W9625-Type A: Brown Bakelite, round knob, ${ }^{17}$ diam. top, $13 / \mathrm{s}^{\prime \prime}$ W9624-Type B: Black molded hexagon type. Decorative top. $1^{\prime \prime}$ hexagon
diam. For shafts.
Your Cost Each. Either Type
100
For
${ }^{5} 1.50$

## Arvin-Motorola

 VibraforExact duplicate replacement. For Arvin models 7, 17, 27, 37 and 17A; for Motorola models 57 , $75,100, F 7, F 100$ GM100. Also used in Zenith models 5610 ,
5616 and 1935 models. Wt. 2 lbs.
W14626-10 for $\mathbf{\$ 8 . 5 0}$ Wach.
Eat
$.25^{\circ}$
20 Ohm "Hum Bucker"
Potentiometer type,
with slotted shaft for
screw driver control.

## W8341-

W8341- Cost.
10 for


Permits easy mounting of 913 cathode ray tube in any chassis. Outir assembly for the 913 (long insulated leads), and a universal mountine bracket. Full instructions included. List $\$ 1.00$. $3^{c}$
W11489-Your Cost


## MALLORY REPLACEMENT VIBRATORS for all Standard Auto Radio Sets

$\begin{array}{cc}\text { Stock } \\ \text { No. } & \begin{array}{c}\text { Nameand } \\ \text { Model }\end{array} \\ \begin{array}{c}\text { Type Your } \\ \text { No. Cost }\end{array}\end{array}$

| Arvin |  |  |  |
| :---: | :---: | :---: | :---: |
| W6137 | $15,25,35,45$ | 296 | 5265 |
| W6135 | $15,25,35,45$ |  |  |
|  | (2nd series) |  | 5 |
| 613 | 10A. 20A, 20 B . |  |  | W6136 7, 17, i7A 37, 18, 28, 3829.42 .65 w6096 $61 \mathrm{~B}, 62 \mathrm{~B}, 517 \mathrm{~B}$ ${ }^{527 \mathrm{~B}}, 617 \mathrm{~B}$, $627 B \quad 245 \quad 3.23$

## W6114 424, $534 \quad 222 \quad 3.38$ <br> ${ }_{W} \mathbf{W} 6137{ }^{6136}$ 66, $776 \quad 296 \quad 2.65$ <br> $\begin{array}{ll}W 6168 & 816 \\ \mathbf{W} 6136 & 126,136,416,\end{array}$ <br> $$
\begin{array}{ll} \begin{array}{l} 6,136,416, \\ 446,656, \\ 237 Q, 467 Q \end{array} 29.4 & 2.65 \end{array}
$$ <br> w6136 566 Belmont 666 , 690, ${ }_{880 \mathrm{~B}, 8} 880 \mathrm{C}$ <br> W6135 660 <br> $\begin{array}{llll}\text { W6140 } & & & \\ 1932 & \text { Mndels } & 311 \mathrm{~S} & 2.35 \\ & & \end{array}$

## w6125 52 Bosch

$634 \mathrm{~A}, 139$


| $W 6106$ | $150(E d .1)$ | 219 | 4.41 |
| :--- | :--- | :--- | :--- | W6127 45A,45C. $160 \quad 271 \quad 3.53$ $\mathbf{w} 6123$ 79C

$\begin{array}{llllll}W 6136 & 736,737,738 & 294 & 2.65\end{array}$
W6096 600, 636, $637 \quad 245 \quad 3.23$
Buick-Olds.-Pontiac
W6113 980393
W6114 $980459-980455$
W6130 980441
W6130 5442.45-6
W6130 $393884-5$
W6130 544267-8
W6130 $405045-6$
W6167 $980507-8-9$
W6130 $982006-7-8$
W6130 983506-7
W6106 OGW Stand. W6106 06W Master W6104 2721 (062) W6106 2722 (072A) W6123 6U2

| Mallory Replacement Vibrators are admittedly the finest on the market today. A great majority of the auto radio manufacturers use them as original equipment. For greatest efficiency use only Mallory Vibrators-they cost no more than inferior makes. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | st |
|  | Chevrolet |  |  |  |  |  |
| 11 | 364441 |  | Hudson-Terraplane <br> W6112 MajesticHead 220B $\$ 3.82$ |  |  |  |
| 6114 | ${ }_{601176-7}^{600249565}$ | 222 <br> 273 C | W6135 | 651 HE |  |  |
| 6130 | 601814 | 273 C 3.23 |  | 650 |  |  |
| 6130 | 601662 | ${ }_{273 C} 3.23$ |  |  | 2 |  |
|  | 601574 |  |  |  | 29.4 | 2.65 |
| $w_{w 6167}$ | 985100-20 |  |  | $\mathrm{H}^{6}$ |  |  |
|  | Clarion |  | Lafayet |  |  |  |
|  | R100 (4 | 205 | w | S177 |  | 23 |
| W6137 | 6 -Prong | 2962.65 | W6 | 06 |  |  |
|  | Colonial |  | W612 |  |  | 2.65 |
| 613 | 106B Supp. |  |  | L-23, AM |  | 2.65 |
| W61 | 164 | 3.82 | W613 | C60, LW10 | 294 | 65 |
| W6137 | 164 B | 2.65 | Majest |  |  |  |
| W6127 | 150 | 3.53 | W6112 | 116,116A, |  |  |
|  | Crosley |  | W6112 | 40-18805 | ${ }_{2208}^{208}$ | 3.82 3.82 |
|  | $103,5 \mathrm{Al}$ | 2233.53 | Sontgomery War |  |  |  |
| W6169 |  |  | ${ }_{\text {w } 6135}^{\text {Montgomery }}$ |  |  | 2.352.653.97 |
| W6097 |  | 2173.38 | W61 | ${ }_{62,062}^{62-118,62-166}$ | 253 |  |
| 130 |  |  |  |  |  |  |
|  |  | 273C 3.23 | W6133 |  |  |  |  |  |
|  |  |  |  | 5Y, 62-1 | ${ }_{296} 286$ | 3.23 2.65 |
| W6170 | A156, A266 <br> De Wald |  | $1 a$ |  |  |  |
|  |  |  |  |  |  |  |
| 113 |  | 2212.6 | W61 |  |  |  |
| 135 |  | ${ }_{202}^{292} 2.35$ | W611 |  |  |  |
| W136 | 517,606,607   <br> Emerson 294 2.65 |  |  | 77. |  |  |
|  |  |  | W61 |  | 2 |  |
| w | 5, | 2.65 | W611 | 44 | 235 | 4.26 |
| W6132 | 51 | 3.53 | W612 | Dual 6,T | 253 | 2.65 |
| W6125 | 6. | $253 Y 2.65$ |  | 50, 60, 80, 90 |  |  |
|  |  |  |  | 67. 79 |  |  |
| W6112 | $\begin{aligned} & \text { Tjejes } \\ & 4 \end{aligned}$ | 22083.82 | w | ${ }^{62} 58$ | ${ }_{234}$ |  |
| w6122 | Philco (all | 500 P 1.77 | Phil |  |  |  |
| W6137 | Lincoln | 2962.65 |  |  |  |  |
| General Electric |  |  | w6170 | 1936 Models. 817,818,819 | $501 \mathrm{P}$ | 1.77 |
| W612 | ${ }_{\text {C60 }} \mathbf{4 0} 0 . \mathrm{C} 41, \mathrm{~B} 52$ | 3.53 |  |  |  |  |
|  | C61 | 244 |  | RCA-Vict |  |  |
| 14 | D50, D | 287 M 3.23 | W6127* | M |  |  |
| W6136 | D72. N60 | $294 \quad 2.65$ |  |  |  |  |  |  |
| W6098 | N51 | $248 \quad 3.23$ | W6123 | M | 253 | 2.65 |


|  | Name a | $\begin{gathered} \text { Type } \\ \text { No. } \end{gathered}$ | $\mathrm{Yo}$ |
| :---: | :---: | :---: | :---: |
| w6171 | 5M, 6M, 6M2 | 2249 |  |
| 6165 | M123 | 224 | 4.12 |
| W6136 | H-6, M109 | 294 | 2.65 |
| W6134 | M101.104, 108 | 0828 |  |
| W6099 | BT6-5, B | 285 | 3.20 |
| Sears-Roebuck |  |  |  |
| W6136 | 7128 (4 pr.). |  |  |
|  | 7128 |  |  |
| 17 | $4400,107 \mathrm{HA} 62$ | 6249 | 23 |
| 136 | 7157, 7167 |  |  |
| 127 | 1859 |  |  |
| 6127 | 7117, 1859A | 27 |  |
| Sparton |  |  |  |
|  | 33, 38A, 333 |  |  |
| 114 | 36 | 222 |  |
| ewart.Warne |  |  |  |
|  | $\begin{array}{r} 1171,1172, \\ 1311,131 \end{array}$ |  |  |
|  | 1121, |  |  |
|  | ${ }_{\mathrm{R} 1322}$ |  |  |
| 6136 | 131.R |  |  |
|  | 182 |  |  |
| Stromberg-Carlson |  |  |  |
|  | 3, 33A |  |  |
|  | Uta |  |  |
| w6 | "B" Elimi | 22 |  |
| Wells Gardner |  |  |  |
| W6135 | V6Z2, $\mathrm{Z6Z1}$ | 292 |  |
| 613 | 25 | 286 |  |
| W6146 | 25 Y 1 | G28 |  |
| W6104 | 062, 06 |  |  |
| W610 | 072. 072 | 211 |  |
| 10 | 06 W | 210 |  |
| 106 | 06 |  |  |
| 12 |  |  |  |
| w | 26B1,26B5 | F25 | 3.23 |
|  | 6 N . | 29 | 2.65 |
|  | K | 248 |  |
| Westinghouse |  |  |  |
| W6136 | WR25 (4 pr.) | 294 |  |
| w | WR26 (6 pr | 296 |  |
| Zenith |  |  |  |
| W6137 | 7, Ford |  |  |
| W6135 | 460 | 292 |  |
| W6136 | 668.680 | 294 |  |
| Cup Adapter, when purchased with |  |  |  |
| W6148-Your Cost |  |  |  |
|  |  |  |  |

RADIART UNIVERSAL REPLACEMENT VIBRATORS


TYPERU-1 TYPERU-2 TYPERU-3 TYPERU-4 TYPERU-6


WJJ

A group of five vibrators that will service practi-
cally any auto or farm ( 6 -volt) radio on the market cally any auto or farm ( 6 -volt) radio on the market
today. All built of high grade materials and instrutoday. All built of high grade materis
ment adjusted for peak performance.
TME BU-1: Non-synchronous, standdiam., $3^{1} f^{\prime \prime}$ high. For use in Arvin, Bosch, Buick-Olds.-Pontiac, Chevrolet, Delco, Motorola, Philco, Sparton, Stewart-Warner, United Motor Service Zenith. Shpg. wt. 21 bs . List $\$ 3.00$ W14247-Lots of $12 \ldots$ Each $\$ 1.47$
Your Cost, Each
TYPE RU-2: prong base 31/" high. For use in Firestone, Stewart-Warner, Wells-Gardner, etc. Shpg. wt. 2 lbs . List Price $\$ 4.50$. Lots of 12 ... Each $\$ 2.20$.
W14248-Your Cost, Esch

TYPE RU-3:
: Non-sync prong base $3^{1 / 2}$ h $112 "$ diam. art-Whrner 1937 Shpg wit. 2 lbs . M. 1937. Stew Lota of 12 ...Each $\$ 1.71$. 2 bs. List Price $\$ 3.50$ W24249 Your Cost. Each

Synchronous ......
TMP OU-4. Synchronous, standard 5
$3 \frac{1}{2}$ high. For use in Delco, United Motor Service, Sentinel6-Volt Farm. Shpg.wt.2lbs. List Price 54.50 Lots of 12. Each $\$ 2.20$. T1220 vour cos, zach
TYPE RU-6: Synchronous, standard 6 3 $\mathrm{kN} \mathrm{\prime}$ high. For use in Zenith 6 -Vole Farm sets. Shpg. wt. 21 bs. Lots of 12 ... Each $\$ 2.20$. W14251-List $\$ 4.50$. Your Cost Es. S2. 20 . 5

## HULL Aułomobile Compass



An ingenious device that enables the automobile driver to tell the direction in which he is travelling. Easy fool-proof. Letters are in white and are large -helpfulin night driving. Out fit consists of compensating unit that maintains accuracy regardess of the amount of metal in the car. Suction caps rasten to the windshield. Full inThs. List $\$ 3.00$.
W8405 Your cost. ST, 45
LITTELFUSE Auto Fuses
Lower resisttandard fuses. 11/4x3"
W12320-5 amps.
W12321-10 amps.
W12322-15 amps.

## Auto Radio ficcessories

## BUMPEROD Aerial



An efficient all-purpose auto antenna that can easily be attached to the bumper of any auto (frontor rear bumper). Sturdy in construction; will not break under strain.

Three piece telescopic height $8-\mathrm{ft}$. steel, parkerized (rustproof) and finished in black japan. Colored decorative knob on top. No driling fits all cars. Shpg. wt. 2
Ibs. List $\$ 2.50$. $\$$ Yost.
W22032-Your cost.

## DX-CAR-TENNA



Provides the ultimate in auto radio reception. Offers a minimum of wind
resistance. The Car-Tenna is not resistance. The Car-Tenna is not
short circuited or affected by ice or rain. It has a suriace area equivalent to more than 50 ft . of No. 16 copper wire. Constructed of "/0"cupper tubing, heavily chrome plated.
Furnished with 10 -feet of insulated lead-in wire and five decorative mounting insulators. Full instruetions included. Complete length of

## For 2 and 4 Door Sedans

 W16248-Wt. 3 lbs. $\$ 3.23$Your Cost........... 3.2

For All Coupes
W16249 Wt. 3 lbs. $\$ 2.94$
Your Cost..........
ADJUSTABLE PLATE


An improved plate rust proofed metal.
Presents great
djustable surface pick-up area. Adjustable from $28^{4}$ to $44^{\prime \prime} .75_{2}^{\prime \prime}$ wide. Complete with brackets and lead-in wire Shpg. wto 3 lbs.
Yis241-
ST0 1
Auto Ignition Wire
 Wraided wire. $\mathbf{W} 20851$-Per Foot
W20852-100 Ft.

## Fuse Retainer

Two piece connector of heavy metal, with fibre inside insulation. Heavy spring contact. 21/2" long. W12372-10 for $60 c$
Your Cost
Antenna Connector Two-piece metal container, fibre inside insulation. enntact. 10 for 50 c . W16714-Your Cost

No. 9792 TOPTENNA


Fits all cars-no drilling in stee tops. Steel rods are triple chrome plated. Molded Bakelite insula tors. Special cement furnished for suction cups. Eliminates wheel static and motor noise. Chromum button furnished to restore cowl if antenna is removed from car. With instructions. Shpg. wt 3 lbs List $\$ 5.00$.
W2202A
Your Cost.....

## RCA Di-Pole Antenna

This RCA noise reducing antenna, n operation, acts as a counterpoise with the carrall length and antenna. The overall length and eight are adjustable so that th unit will fit any car. With instructions. Shpg. wt. 3 lbs. \$1. 55
W22018-Your Cost Each............................

## REMOTE CABLE AND FITTINGS

A complete kit of all the fittings, gears, housing ends and remote cable necessary to complete practically any job involving remote cables. Comprised of 23 assorted fittings, gears and housing ends, and 20 feet of cable. Handy steel swedging tool included. $.150^{\prime \prime}$ cable and fittings for $.150^{\prime \prime}$ cables. In metal box finished in orange lacquer. Shpg. wt. 5 lbs.
$\$ 11.50$

BELDEN Tinned Shielding


Fine mesh closely woven. Shpg wt., per $50 \mathrm{ft} ., 2$ lbs.
Stock In. Your Cost No. Diam. Per Fl. 50 Ft. $\begin{array}{llll}\text { W16214 } & 13,4 & 21 / \mathrm{c} \text { c } & \$ 1.05 \\ \text { W16215 } & \text { \%" } & 4 \mathrm{c} & 1.75\end{array}$ $\begin{array}{llll}\mathbf{W} 16216 & 531 / 3^{\prime \prime} & 101 / 2 \mathrm{c} & 4.59\end{array}$

Shielded Ignifion Wire


Standard 2 millimeter wire with heavy rubber wall, lacquered braid and overall covering of tightly woven tinned copper shielding. First quality. Shpg. wt., 100 ft. spool, 4 lbs
W16211 Per Foot
Your Cost
w16213-10


RCA
WHIPTENNA
No. 9793
Takes only a few minutes to install. Attaches to the hinge pin oriaycar. um plated with umplated with molded allweather rubber insulation. Extremely efficient -maximum signal pick-up. Extremely flexible, guaranteed not to break. Eliminates wheel static and motor noises. One model fits all cars. Shpg. wt. 21 lbs

## W22025

List $\$ 3.50$.
Yaur

AERO-TOP ANTENNA


Provides increased pick-up. Stream lined with the turret top. No drilling -fits all cars. Two $50^{\prime \prime}$ chrome plated rods with two ivory Bukelit plated rods with "added Bakelit chrome plated $18^{\prime \prime}$ rod with ivory chrome plated 3 lbs tip. Shpg. wt. 3 lbs.
W22033--For cars W22033-Your Cost w22034 For c... wath windshield that do not open. Your Cost
 W8310-

## AERO-TOP ANTENNA

 Your Cos

Used for shielding of interference creating circuits. Closely woven extremely flexible
 one. List \$2.25

## SINGLE CHANNEL

Very rugefficient.
Made of
rustrust
proofed
metal St $\begin{array}{r}\text { No } \\ \text { Drill } \\ \text { ing }\end{array}$ with flex-
ible molded rubber insulators. 50 " long. Comes complete with lead-in wire and adjust able brackets. Easy 10 install-no holes to drill. Shpg wt. 8 l hs.

## W16243 Your Cost

## $95^{\circ}$

## DOUBLE CHANNEL

Two of the above, for installation on both running boards. Provides greatlv increased pick-up. Shpg. wn. 5 lbs .
W16244 Your Cost.
1.80

0

## DOUBLE RUBERALL AUTO AERIAL

$\qquad$
Trombone type deluxe car antenna. Steel rods entirely sealed in rubber, eliminating loss of efficiency caused by corrosion, enow and ice. Equip-
ped with new umbrella type ruber ped with new umbrella type rubber Can be installed on any car without drilling. Instructions furnished. Shpg. wt. 6 lbs .
w22035-Your Cost.
\$1.4
Telescoping Door Hinge

## Aerial



Can be easily attached to the door hinge on any car. Takes only a few minutes to install; no drilling necessary. Three piece, telescoping, total height 5-1t. Chromium plated. Molded rubber insuator. List \$3.25.
W22036-
Your
Cost...
Y.

## "Trombone" Anfenna

A directional antenna that delivers maximum pick-up with a minimum of ignition noise. Open end mounts toward the front or motor side of ear. Comes complete with shielded lead-in wire and adjustable mounting brackets. Easy to install. Shpg. wri 3 lhs.
W16242-Your Cost.
$65^{\circ}$

## Triangle Auto Antenna



Fibrex insulation pieces. Sash cord antenna wire sufficiently long for all installations. With tension spring and eye bolt assembly. Antenna lead fixed to lead-in wire. Shpg. wi 6472 Ys. Your Cost. . . . . $59^{\circ}$


Genuine RCA part No. 7604 , used in models M-34, M105 used in G.E. mode type. Wt. 2 lbs. Wach. \$3.60

## Auto Radio Noise Ellminotor

Built along entirely new principles for the purpose of rejecting ignition and ouner electrical noises from the antenna system of the auto radio. Does away with spark plug suppressors. In-
stalled with a few simstalled with a few sim-
ple connections by any-

W14202-\$1.26

# Futo Radio ficcessories 

GEN-E.MOTOR Auto "B"


Eliminators With Rodio Filter

Combined motor and generator operating from a 6 -volt storage battery. $358 \times 53 / 4 \times 4^{\prime \prime}$. Wt. 17 lbs . Stock Vols Cur. Your $\begin{array}{llll}\text { No. } & \text { Out. Ma. Taps } & \text { Cost } \\ \text { W14209 } & 180 & 30 & 90 \\ \text { W10.78 }\end{array}$ $\begin{array}{lllll}\text { W14203 } & 180 & 30 & 90 & 510.78 \\ \mathbf{W} 14210 & 200 & 40 & - & 10.58\end{array}$ \begin{tabular}{llll}
$\boldsymbol{W} 14228$ \& 225 \& 50 \& - <br>
\hline

 $\begin{array}{lll}W 14229 & 250 & 50\end{array} \quad$

10.58 <br>
\hline
\end{tabular} w14211 For Sound Trucks $\begin{array}{lll}W 1421 & 300 & 100 \\ W & 14180^{*} & 300 \\ 100\end{array}$ 19.98 W14180 300100 - 16.17 For 32-Volt Lighting Plants $\begin{array}{llll}\text { W14213 } & 13 \overline{3} & 671 / 2 & 13.52 \\ \text { W14222 } & 180 & 90 & 13.52\end{array}$ $W 1422180$ W14212 $180 \quad 221 / 2,45$

*Less filter. 67!2, 90,

## GEN-E-MOTORS Only

In Cadmium plated cases $25 / 8 \times 57 / 8$ 4. Shpp. Wt. 8 lbs

225 V . at 50 ma . Drain 3.8 . Delivers 225 V at 50 ma . Drain 3.8 A 250 V . at 50 ma . Drain 4.2 A Your Cost Each, Either Type
5.64 W14233-32
Your Cost Your
\$ -10
For replacement in Ford-Majestic units. 250 V. 50 ma . $\$ 7.64$

## "Remote-O-Cable"



One machine does ALL Cable work
List Price- $\$ 47.50$
W8413-Your Cost

## Auto Radio Cable Fittings


Should be part of the equipment in every auto radio serviee shop. It does the following with the utmost spered: removes old cable fittings; swedges cable to prevent -anraveling; cuts cable to exact length; Designed for both 130 and $150^{\prime \prime}$ eables. With this, a length of cable and housing and an assortment of fittings, any remote control cable job $7!5 \times 51 /{ }^{n}$. Shpg. wt. 231 bs . $\$ 37.24$

Kit contains 8 hard rubber insula tors, inter-connecting lead and 8 feet of special shielded lead-in covered with processed braid. Shpg Wt. 8 his. List $\$ 5.50$. $\$ 3.23$
Wi6253 Your Cost Set of four insulators. For one
running board. Shpg. wt. 5 lbs, W16254 List $\$ 2.00$ Your Cost

Trutest Auto Radio Suppressors


Stock Type N5283 W5278 Type Spark Plug $W 5253$ C Type C Cable Type for Buick w5279 D Elbow Cable Type 5 for 55 Stindard Distributor
 Your Cost Each ...
J.F.D. 1937 BUICK Running Board Insulatar Kit


JID AUTO RADIO PRODUCTS

Contains 8 special hard fibre insulators, 8 -feet of low-loss heavy lac quered lead-in protected by a shielded 100 m covered with procexsed braid, and 8 -feet of intercon-
necting lead (wateroroofed). Full necting lead (waterproofed). Full instructions included. Shoy wt ${ }^{7}$ libs. List $\$ 5.50$ Cost. $\$ 3.23$
W5293-Type F. Distributor suppressor for Ford V-8.


## Each.

Type G. Wire wound suppressors, low resistance type ( 500 ohms) Will not reduce speed of car. In Bakelite case; moisture proof. W5296 -Spark Plug Te proo W5297 Sparki Plug Type W5297-Distributor Type Your Cost Each, Either Type


1937 OLDSMOBILE Running Board Insulator Kif


## Housing Ends

## TI 0000

Made of brass. Fit exactly. Popu lar types shown. Order by stock number according to the illustrations shown above.

## W8429-Type A W8292-Type D

 W8430-Type B W8293-Type E W8430-Type BW8431-Type
Your Cost Each.
Your Cost
Any Type

## Auto Condensers



## Dome Light Filfer

Eliminates the
noise indome light wifing. Has condenser-choke. W14208

## Ammefer Condensers

Eliminates noiseinammeter, horn etc. Has lug. $\underset{\text { Each }}{\text { W14218- }}{ }^{\circ}$


## SPRAGUE Oll and

 Gas Gauge Filfers For late 1935 and 1936 Ford V8 Similar in appearance to above Wi4203-Oil Gauge Filter Your Cost Each.........29Wheel Static Eliminafor Eliminates rront wheel
noise. Fasy to install in each hub cap. W5294 -
Your Cost Each


## Gear Fittings

 Made of brass, accurately machined

## Remote Roto-Cable and Housing


A type for practically every automobile remote control cable now in use. Made of tinest materials, accurately machined. Mateh old fitting


 Your Cost Each, 100 for
Any Above Type
$6^{c}$

Box of 120 Fiłłings
An assort ment consisting of 20 different types of cable fittings, gears, housing ends, etc., totaling 120 pieces. All exuctly duplicate popular fittings of standard manufacture. With an assortment of this type, any cable job can be easily and quickly accomplished. Housed in an attractive metal box with a emovable tray and compartments for each

[^3]

Finest quality cable for auto radio remote controls. Cable ends swedged - cannot unravel. A vailable in standard lengths, cable only or cable in foot.


|  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Artiele | Artiele Poge Cords, Extension......87 Couplers, Antenna.88, 94 | Article | BLIC ADDRESS <br> Amplifiers <br> 46. 68 | Switches-(Con |
|  | Couline Shafts |  | Amplifiers .... | Push-Button, <br> 38, 39, 90 <br> Hotary $\text { 88. } 39.95$ |
|  |  | LAFAYETTE ${ }_{\text {Aerial }}^{\text {Kits....... } 88}$ |  |  |
|  | Crystal Ho | Amplifier |  | e |
|  |  | Converter |  | Wave-C |
|  | Crystal Sets.......87, 96 |  |  | witch Pla |
| AMPLIFIERS, PUBLIC ADDRESS $\qquad$ |  | Phonographs Preamplifiers ........ 68 | DIO RECEIVERS $1-12,15,87,101 \cdot 114$ |  |
| Analyzers $78,79,80,8$ |  | Public Address |  |  |
| Analyzer |  | (eyearers | Automatic .......... 72 |  |
| Appliances, Electrical 108,109 | Drills | Tranafor | Records, Phonograph . ${ }^{\text {a }}$ | Tapa, Electrical....... 90 |
|  |  | Tubes |  | Fest Prod |
| Audio Transformers $\text { 21. } 22,23,73,93,95$ | 87 | Transmitting Tubes 13 | Relays | Testers and Analyzers |
| 21, 22, 23, 73, 93, 95 | Earphones <br> Electrical Accessories. . 90 | Likhtning Arresters..... 89 | $\begin{aligned} & \text { Remote Controls, } \\ & \text { Auto .............. } 103 \end{aligned}$ | $31,78,79,80,81,95$ |
| Auto 96, 97, 98, 99, 103 | Electrical Accessories.. 0 | Line Ballasts.......... 36 | RESISTORS | oasters $, \ldots \ldots \ldots 10,14,109$ |
|  | Appliances ... 108, 109 | Line Noise | Carbon .....30, 31, 92 | Tools, Alizning. ....... 85 |
| $B^{101,102,103}$ | Electrolytic Condenser: <br> $16,17,24,25,26,93$ | Reducers ........24, 26 | Kits | Tool Boxes............ . 42 |
|  |  |  | Line Co | Transformers Audio |
| Baffles, Speaker 74, 75, 77 <br> Bargains-IMPORTANTsee Pages 92.96 | Exciter Lamps......... 18 | Meters ........16, 82, 83 |  |  |
|  | Extension Cords....... 87 | Meter | Wire Wound $30,31,95,96$ | $\begin{aligned} & \text { Bell-Ringing } \\ & \text { Filament ..... } 18,23,90 \end{aligned}$ |
|  | Extension Shafts..... 34 |  | 14, 16, 32, 96 | I. F........ 33, ${ }^{\text {Microphone, }}$ 23, $71,{ }^{\text {a }}$ |
| Binding Posts $\ldots . .39,84$ |  | Acc | 3 | 3 |
| Books | ilter Chokes $14,16,18,22,23,95,96$ | Carbon |  | 16, 18, 19, 20, 22, 93 |
| Brackets, Ansle...40, 41 Brackets, Pilot Light. . 34 | 96 | Crystal ${ }_{\text {Dynamic }}$. . . . . . . . . ..$^{70}$ | S | Step-down.......16. ${ }^{\text {S }}$ |
| Bulbs, Pilot. | Interference $\ldots \ldots$ 24, 26 | Dynamic ${ }_{\text {Dibbon }}$.............. 71 |  | Vibrator |
| Bulbs, Tung | Field Exciters 74, 76, 94 | Ribbon | Scales ${ }_{\text {Screw }}$ Drivers....... 43,85 | MRANSMITTING EQUIP- |
| ${ }_{\text {Buzzers }}^{\text {By-pass }}$ Condensers ${ }^{\text {che. }} 14$ | Fittin | Transformers 22, 2s, 71 | Service Manuals...22, 85 | MENT |
| $\begin{aligned} & \text { By-pass Condensers } \\ & 24,25,93,94,95,96 \end{aligned}$ | Forms. | Motors, Phonograph... 72 | Set Builders' |  |
|  |  |  |  | TRUTEST ......... |
| Cabinets, Radio....... 96 |  |  |  | Ay-Pass Condensers 25 |
| Cables, Dial............. 35 <br> Cables, Microphone 70, 71 <br> Cables, Remote Control |  |  |  | ers 18.19 1. 31 |
| $\text { 98, } 99$ |  |  |  | Resistors ${ }^{\text {Variable }}$ Condensers, 34 |
| Cameras Ray........ 108Cathode RayOscillographs $\ldots 78,81$Cases, Carrying | Nows, the popular short-wave publication, in its May 1937 issue, fully |  |  |  |
|  | les |  |  |  |
|  |  |  |  | Cathode-Ray ....... 13 |
|  | ual |  |  |  |
|  | PANY, INC., cam supply every part necessaryreceiver. WRITE TODAY FOR A FREE PARTS |  | PRICE LIST | Photo .... . . ii, 12, ${ }^{\text {P6 }}$ |
|  | every component. You'll find the pric standard high-fle service excellent. |  | btainable-the | Transmitting ...... 13 |
| Chokes <br> Filter <br> $14,16,18,22,23,95,96$ R. F.....14, 17, 32,95 <br> Kits <br> Kios |  |  |  | Voltage Regulator. . . 36 |
|  |  |  |  | Tube Shields ....19, 80, 81 |
|  |  |  | 14, 17, 34 <br> Shaftings $\qquad$ 28, 34, 84 | Tuning Indicator..40, 82 |
| Alligntor . . . . . . . . . 84 | Generntors .......69, 73 <br> Generators, Signal 78, 80 <br> Ground Clamps........ 89 <br> H | Needles, Phonograph.. 72Needles, Recording.... 72Neon Tubes....... 36Neutralizing Tools..... 85Noise Eliminators |  | Tungar Bulbs........36 |
| Battery |  |  | Shartings $\ldots . .28$, 34, 84ShieldingShielding Cans........... 98Sho | Tungar Chargers......69 |
| Fuse . <br> Screen |  |  |  |  |
| ocks, Electric. .... 1 |  |  |  | Vacuum |
| Code Practice Sets.... 87 Coils | $\begin{array}{\|l} \text { Handsets } \\ \text { Hardware } \end{array}$ | Noise Eliminators ${ }_{\text {24, } 26,33,98,99}$ | SHIPPING INFORMATION .... 110 |  |
| Antenna ..........95 |  | Ohm Indicators........ 31 | Short Wave Receivers | Variable Condensers ${ }^{\text {a }}$ |
| Forms F . $32,14,12,33,83$ |  |  |  |  |
| Oscillator ......... 33 | Home Recording Outfits........... $.68 ~$ | Oscillators, Phonorraph |  | Voltage Regulators, ${ }^{\text {36, } 66}$ |
|  | \| | Oscillators, Test, $78,79,80,81$ |  | Volume Controls$27,28,29,95,96$ |
| Spenker | Ice Cream Freezer..... 108I. F. Coils. .32, 33, 93. 94 I. F. Coils. $32,33,93,94$ | Oscillographs ..78, 80, 81 Outlets, Baseboard ..... 90 | Soldering Irons and Accessories .......... 44 |  |
| Shields |  |  | Speaker Accessories$77,93,94$ | W |
| ondensers |  | Output Meters........s |  |  |
|  | Insulators, Aerial..88, Insulators, Stand-off 14, 88,89 |  | ${ }_{\text {Spenker }}^{\text {Sones....... }} 878$ |  |
| $24,25,93,94,95,96$ | Irons, Electric........ 108Irons, Soldering.......44 | Ponels Phone Cords.......... 88 |  | Wave Traps.............. 32 Wind-driven Chargers |
|  |  | $\underset{\text { Phone Plugs }}{\text { Phonographs }}$ (....38, 87 | Speaker Units........ 74Speakers, Dynanic | Window Strips. . . 69.104 |
| Electrolytic,$24,25,26,93$ | Irons, Soldering....... 44 |  |  | Wire |
|  |  | ${ }_{\text {Adapters }}^{\text {Aders }}$ Mat.......73 | Speakers, Magnetic$76,77,94$ | Aerial $\ldots . . .88,89,98$Bell $\ldots . . . . . . . . . . .9191$ |
| ilters <br> $16,17,24,25,26,93$ |  |  |  |  |
| its $\cdots \ldots . . .16 . . . .92$ | Jig Saws................ 42 | RecordsPilot Light Bulbs...... 36 | Speakers, Permanent Mannet | ${ }_{\text {Fixture }}^{\text {Bus }}$. . . . . . . . . . . . . ${ }^{91} 90$ |
| Mica ${ }_{\text {Short }}$ Wave...14, 16, 164 | Keys, Transmitting . . . 14 |  | $70,71,92$ |  |
| Transmitting 14, | Kits, Aerial .......32, ${ }^{88}$Kits, Coil.......... 32 | Plugs, Attachment |  |  |
| Varinble ${ }^{\text {a }}$ |  |  | Staples <br> Storage Batteries <br> St..... 69 |  |
| 14, 16, 17,34, |  | Pluys, Attachment 37, 38, 90 |  | Magnet . ............. 91 |
| Cones, Speaker | Barzain ......... . 92 | Plugs,Puga, Tip....... 38.84Potable Receivers. 112 | Storage Batteries ${ }^{\text {S }}$ Suppressors, Ignition. 699 |  |
|  | Kits, Test..........84, 88 |  | Swlithes | Push-Back ............91 |
|  |  | Portable Receivers...112 Power Packs...14, 94 Power | Anti-Capacity ....... 39 | Rubber-Covered$70,71,77,85,89,90,91$ |
|  | Kits, Wire <br> Knobs. | Power Transformers 16, 18, 19, 20, 22, |  |  |
| venience Outlets . . 38 |  | Pre-amplifiers .......... 94 |  | $\left\lvert\, \begin{aligned} & \text { Wind Charger } \\ & \text { Wrenches ......... } 69 \\ & \hline \end{aligned}\right.$ |
| 10 Rotery... ${ }^{\text {\% }}$ | Radio $\begin{aligned} & \text { 16, 34, 94, } \\ & \text { Knobs, } \\ & \text { Insulator......86 }\end{aligned}$ |  |  |  |

## You are in Good Company... with a Lafayette AUTO RADIO

## 5 TUBE :asay

- XCELLENCE of performance, couplad with dis - tinctive appearance and a real low price. makes this receiver an unusual buy. It is compact. -asy to install, powerful, sensitive and selectiveyet is offered at a price within the reach of every car owner and motor-boat owner,


## Uses Five High-Cain Tubes

 Five modern type tubes are used in the superbet circult: a 6A7 detector and oscillator, 6D6 i.f. amplitior, 75 lst audio and 2nd detector, a 41 pentode power output tube and an 84 full-waye recti fier. The output (over 1 watt) is hendled with tine tidelity by a dynamic speaker.
## Noise Suppression Circuit

A built-in noise suppressor circuit makes the use of spark-plug suppressors unaecessary in all but the most difficult cases. Thus, installation in made much more simple, and quality of reproduction is onhanced.

## Single Unit Construction

The entire recoiver, including speaker, controls and tuning equipmont, is housed in a single steel case tinished in brown crackle lacquer. Dial is tlluminated. Only catenna and battery consections need be made-the entire installation can be accomplished in a bort time. The physleallay-out is such as to permit the teplacing of tubes without the necessity of removing the chasals. A heary cloth grillo keeps dust from entering the speaker. The case is louvred for ample ventilation to insure against damage from overheating.

## FEATURES TONE CONTROL

Other features included in this automobile receiver are: a full-range tone control, 10 -kilocycle selectivity, less than 5 -ampere drain from the car of boat storage battory (at 6 volts), attractive dial calibrated in kilocycles and easy-grip knobn.
Model JA.I-Lafayetto 5 -tube auto radio complete with fubes, generator condenser, distributor suppressor and mounting and sorvicing instructions. Dimensions, $61 / 2^{\prime \prime}$ wide. $111 / 2^{\circ "}$ deep, $5^{\prime \prime}$ high. Shpg, wt. 20. lbs. Code VELBA. List Price $\$ 31.90$. YOUR COST COMPLETE
$\$ 15.95$

## 6tube UutoRadio

SINGLE UNIT MOUNTING UNDER THE DASH OF ANY CAR

Full-Range Tone Control
A variable tone control is on the front panel. Model JA-5-Lafayetto 6-tube Automobile Radio complote with all tubes. With generator condenser, distributor suppressor and mounting and gervicing instructions. Skpg. wt. 22 lbs .
 YOUR COST


FIGHT-tube performance using only six fubes Lis fectured in this 1937 Latorette Auto Radio. It is housed in a single compact assombly which mounts under the dash of any car, and it can be installed in a low minuten with a minlmum of la and effort.
Automatic Volume Control
A sonsitive superheterodyne circult uses a 6A7, two 6D6's, a 607, 41 pentode power output tube a $6 \mathrm{Z4}-84$ and a full-wave plug-ln vibrator. Fulf use is made of a sensitive automatic volume control circult which does much to overcome fading while driving by absorption areas.
Suppressorless Operation A built-in noise suppressor circuit mekes the need of supprossors needless except in exceptionally noisy cases. This feature adds economy. smoother car operation and greater appreciation of reception.

## Dust-Proof Dynamic Spealuer

Bad road conditions hold no dangers for this sturdily constructed recelvors the electro-dynamic speaker with which it is equipped is assured against dust inclusion by a beavy, dust-proof cloth grille.
The dial is of the full-vision, direct high-ratio vornier drive type, with no-glare illumination. Calibration is in irequency.

## Single Unit Mounting

The ontlre assombly is mounted within a brown crackle-tinished stoel case measuring $1.1^{\circ}$ long, $71 /$ 月 " $^{\circ}$ wide. $5^{\prime \prime}$ high. Modern chrome trimmings add conniderably to the overall appearance. All controls aro on the front panel directly in front of the operator and within easy reachs control knobs are of the oasy-grip type, and are designed to match.


44
Model B-92 is regularly furnished only with drive cables and control foundation. Mounting plates, dials and knobs are extra and can be supplied for ) 1 actically any make of car for $\$ 1.00$ additional. When ordering these accessories be sure to specity tine make and yeor of your car.

## DEW TAILDR-MADE*



## 6TUBE SUPERHET

TTHE Lalayette Model B-93 6-tube auto radio bears the $T$ HE Lalayette Model B.93 6-tube auto radio bears the above, but is somewhat smaller for those who seek a lower priced unit: at this price it is an exceptional value.
ADVANCED SUPERHET CIRCUIT: Incorporates two 6D6's, 6 C6, $41,75,84$ and a plug-in vibrator.
UNIVERSAL ANTENNA CIRCUIT: The antenna coil and lead are so arranged as to be adaptable to the capacitances of all makes of car antennas
BUILT-IN FILTER CIRCUIT: Normally. spark-plug suppressors are completely unnecessary.
DUST-PROOF DYNAMIC SPEAKER: Is hermetically sealed to guard against damage from dust. Pin jacks are provided for the use of a second speaker if desired
DIODE AUTOMATIC VOLUME CONTROL: Eliminates tading and blasting, thus adding to the lite of the tubes.
FULL-RANGE TONE CONTROL: Enables complete graduation of tone from low base to brilliant highs.
UNIVERSAL CONTROL: Its remote airplame type control is adaptable to practically every model of automobile. The drive cables and foundation control is furaished, dial. mounting plate and knobs are extra (see note below). EASY INSTALLATION: The set mounts on the fire-wall by means of 3 heavy bolts. Battery lead has outside fuse, Everything is included in the one compact assembly. Undistorted power output is 3 watts. Current consumption is 6 amperes at 6.3 volts. The wave-length covered is from 190 to 560 meters. Finished overall in green wrinkle with chromium-plated grille. Will tit in 1937 Ford cars.
Model B-93-Latayette 6 -tube radio; with all tubes, genera. tor condenser. distributor suppressor cand remote control foundation unit with shafts, but less dials, plate and knobs. Size, $83 / \mathrm{px} \times 7 / 16 \times 63 / 16^{\prime \prime}$. Shpg. vit. 24 lbs.
Code BESAT. List Price $\$ 47.90$.
YOUR COST
\$23.95

## AUTO RADID SETS

## 7 TUBE SUPERHET <br> Supressorless Operation

T HE peer of all auto radio sots is now available to you 1 at a price that fs ordinarily paid for the average run of receivers. There is mothing liner in the tield. Only the Lafayette Deluxe Model D-37 offers consoletype tone quality, and split-hair separation of stations and an even thow regardless of the type of road or street you are traveling.
7 WATTS UNDISTORTED OUTPUT: Åre obtained from the 6N7G twin-triode power output tube. The other tubes are a 6K7. 6A8, 6K7G. 6Q7G, 6JSG, OZ4 rectitier
AUTOMATIC VOLUME CONTROL-TONE CONTROL: AT two highly desirable features; fading and blasting is elim. inated and tone quality is shaded to suit YOU.
DIRT-PROOF DYNAMIC SPEAKER: Gives you the superb tone you are seeking. Dust can not enter to cause trouble. Provision is made for use of external speaker such as is described below. Just plug in.
UNIVERSAL MOUNTING: Mounts on any make car-quickly and easily. Plays on any type aerial. A SENSITIVITY CONTROL adds to smoothaess of reception.
Model D-37-Lafayette 7-tube DeLuxe auto radio superhet. With all tubes, generator condenser, distributor suppressor, drive cables. remote control foundations less dial mounting plate, knobs. Shpg. wt. 24 lbs. Size, $111 / 4^{\prime \prime} \times 53 / /^{\prime \prime} x$ $73 /{ }^{\circ \prime}$. Code WEBRA. List Price $\$ 61.90$.
YOUR COST
YOUR COST
Dash control mounting kit for any make car. add \$1.00 Specify year and make of car when ordering grounds or any reasonable distance away from your car. Merely plug this cased dynamic speaker into the jacks provided on the set, run the cable out to its full 50 ft . (additional cable at $31 / 2 \mathrm{c}$ per
 toot). and tune in. Shpg. wt. $14 \mathrm{lbs} .5(6,0)$

## ExtraDynam-

 ic Speaker Enjoy your auto radio in the summer bungalow, at the water's distance away trom Model 986-Speaker and cable

## USTRUMENT PADEL CODTROLS

 Zowe REMOTE COMTROLS

DeSOTO '37



FORD '37

Pair of $231 / 2^{\prime \prime}$ cables for atandard Crowe controls. Fittings on one end only. (See other fittings on page 9.) Shpg. wt. 3 lbs. W. $9250-$ YOUR COST \$I.IS Special 231/2" cables for 1937 Philco controls Fittings both onds. Wt. 3 lbs. W.9251YOUR COST


## MATCHED PANEL CONTROL KITS

Stoch No. Car Model and Year W.9257-Buick 40. 60. 1937 W-9258-Buick 80. 90, 1937 W-9259-Buick 1936 W.9260-Cadillac 1936 and 1937; La Salle 1936 and 1937 W-9261-Chevrolet 1937 W.9262-Chevrolet 1936 W-9262-Chevrolet 1936 W-9264-Chrysler Airliow 8, 1937
W.9265-Chrys. Royal '37 W-9266-Chryslor Airstream W-9267-Chrysler Airstream 8. 1936

W-9268-DeSoto 1937 N-9269-D.Soto Airflow '36 W-9270-DeSoto Alrstream DeLuxe, 1936
W-9271-D.Solo 1935 W-9272-Dodge 1937

All panel control kits are supplied with knobs, and dials calibrated in kilocycles (for counter-clockwise condensers). Clockwise dials can be supplied on order, at no additional cost. Slock No. Car Model and Year W-9274-Lincoln Zephyr

1936, Ford 1935,
Ford Stand. and
Deluxe early 1936 W-9275-Ford Standard late 1936
W-9276-Ford DeLuxe late W-927?-Ford DeLuxe 1937 W.9278-Ford Stand. 1937 W-9279-Ford 1934
W-9280-Terraplane 1936 W-928i-Lafayette 1937 W-9282-Lafayelto 1936 W-9282-Larayel W-9283-Nash 1937
W. $9284-$ Nash 1936

Control Assemblies For counter-clockwise condensers. Clockwise controls supplied on order only. All controls less switch (supplied with ewitch at additional 76c

| No. | Ratio | Eac |
| :---: | :---: | :---: |
| W-9252 | 6:1 | 006 |
| W-9253 | 8:1 |  |
| W.9254 | 12:1 |  |
| -9255 | 16:1 |  |
| -9256* | 16:1 | \$2.94 |
| For 1937 | Philco | (wit |



FORD '34

Cas Model and Yeat W-9285-Olds. 1937 W-9286-Olds. 1936 W-9287-Packard 115. 1937 W-9288-Packard 120, 1937 W.9289-Packard 120, 1936 W-9290-Packard 120, 1935 W.9291-Plymouth Dol. '37 W.9292-Plymouth Del. '36 W-9293-Plymouth DeLuxe late 1935
W.9294-Pontiac 1937 W-9295-Pontiac 1936 W-9296-Pontiac 1935 W-9297-Stud. Pres. 1937 W-9297-Stud. Pres. 1937
W-9298-Stud. Dict. 1937 W-9298-Stud. Dict. 1937 W-9299-Stud. Dict. Busf nass Coupe 1937 W-9300-Stud. Dict. 1936 W-9301-Universal Under Dash Mig. Kit
YOUR COST.\$
Any above


CHEVROLET '37


DeSOTO '36


Light and Power From YOUR Plant

## Install Your Own Lighting System



Wire your own barn, house, summer bungalow, etc., for city lighting convenience using 6-volt storage batteries charged by a Rural Power Plant or Windcharger. Easily and quickly installed. A puli of a chain and you have eye. of a chain and you hation, solt illumination.
Complete wiring kit (B) contains: 100 ft . No. 8 weather-proof wire. 25 ft . drop cord. 6 pull-chain sock. ets. 6 porcelain cleats, 6 nall-it knobs, 2-6" porcelain tubes, porcelain entrapee switch and fuse block, $2-30$ ampere fuses. 4 oz. friction tape, 4 oz. rubber tape. W-17240-
\$5.75
Rit "A" contains 3-25 watt bulbs Kit "A" contains 3-25 watt bulbs
and $3-15$ watt bulbs. Frosted type with standard Edison base. Fos 6.volt lighting. Ideal for treilers. W. 17241 YOUR COST
$\$ 1.80$

## RUREL-POWER Gas Driven Generators

These units are designed especially for economical operations for farms. summer bungalows, boats, trailers, etc., and are available for 6, 12 and 32 -volt battery charging, as well as belt-driving appliances. The engine is rated at $3 / 8 \mathrm{~h} . \mathrm{p}$. . and is a 4 -cycle, single-cylinder, "L." head, air-cooled type with suction carburetor. It features tyball type of governor and low-tension ignition.

A mounted ammeter indicates rate of charge. Model $D$ is equipped with a push-button self-starter which operates from the battery; a special winding makes possible this convenient device. In addition, it is equipped also with a rope hand-starter for emergency. Model C is furnished with a rope hemd-starter only. All units are equipped with built-In rodio noise fitters ond exhaust silencers.


Both models have one-quart fuel tanks and will operate 5 hours at one filling at 150 watts. Overall dimensions are $16^{\prime \prime}$ long. $11^{\prime \prime}$ wide and 10" high. All units are furnished with generator cut-outs, battery leads and clips and complete instructions. It can be placed into operation within a few moments after it is unpacked.
W-i7230-Model Di charges 6 and 12 -volt storage batteries at $150-250$ watts. With both push. button and hand-starter.
Shpg. wt. 70 lbs. YOUR COST $\$ 35.75$ W-17239-Model C; for charging 6-volt storage batteriess 150 watts. With rope hand-starter only. We. 70 lbs.
YOUR COST
s29.95
W-i7232-For charging 32 -volt storage batteriesi 250 watts
YOUR COST YOUR COST
\$44.96
W-17233-For 32 -volt lighting systems. Rated at 250 watts.
YOUR COST
s 44.96

## RURAL-POWER WINDCHARGER

## Controlled Power from the Wind-FREE! Charges ALL 6-Volt Batferies

Now you can do away with the inconvenience of run-down radio auto mobile, tractor and lighting batteries-as well as the cost of recharging them. The new, improved Rural-Power Windeharger charges up ing 16 amperes using a new type of double-sealed ball-bearing generator which can be removed for inspection or repairs with. out disturbing any other part.

## OPERATBS IN 70-MILJ WINDS

A new. patented tilt control permits operation in 70 -mile winds and is automatic in operation. The angle of the propeller is in constant shift while in operation as the velocity of the wind varies. Electrical outlets are shielded from ice, sun and rain for positive action. Propeller edges are metal sheathed against hail. sleet. sand and snow

Each unit is supplied with an instrument panel consisting of a cut-out and indiceting ammeter. 6-foot stoel tower for flat or gable roof, tail vane and complete instructions. Wi. 65 lbs. W-17224
YOUR COST COMPLETE
$\$ 19.75$


## 4tube Two Band <br> Superhet

E NJOY city-quality reception on the farm, in your ammer bungalow, on your boat or traler. This Lalayette 6-volt, 2-band superheterodyne has ALL. the tealures which make for pertect reception.

## Hutomatic Volume Control

Four of the latest type tubes offer unusual seasitivily selectivity and tone quality: they are a lA6, 1A4. 6T7G and a 41 pentode power output. This tube foeds a GENUINE 6" PERMA-FLUX SPEAKER

## Buropean lieception

The two bands cover 48 to 150 and 175 to 560 meters: these ranges cover American and European broadeast reception, police calls, amateurs and others.
No dry batteries whatsoever are usedi All necessary power is obtained from a single 6-volt battery. The cabinet is of attractively finished hardwood: size, $151 / 8^{\prime \prime}$ wide, $87 / 8^{\prime \prime}$ high, $8^{\prime \prime}$ deep.
Model DA-14-Lalayette 4-tube, 6-volt, 2-band superheterodyne complete with all tubes, Code WEFAR. Shpg. wt. 22 lbs. List $\$ 41.70$. YOUR COST
$\$ 23.85$
Storage battorios are listed on page 69.

## 7 TUBE 6VOLT 3ßand Superhet

 - receiver is designed especially for rural homes, summer bungalows. trailers, boats and wherever the lack of commercial power necessitates the use of ezergy from sorage batteries. Tube-for-fube, it offers the same excellent performance that is obtained from alternating current receivers.

## Has Built-In Power Pack

There is no expense or fuss with old-foshioned "B" batteries. A highly elficiont integrel power pack fumishes the high voltage for the tubes. There is only one battery used-and that ls the
6 -volt storage battery. 6 -volt storage battery.

Covers 18 to 550 Meters
Practically completo coverage of the short-wave bands is had with three-band tuning; 18 to 52 , 53 to 167 and 175 to 550 meters. These ranges cover European and American standard and sbortwave broadcasts, amateurs, police calls, cir-craft and mumarous other commercial services that will prove a source of unfalling interest for many evenings.


With Permanent Magnet Dynamic Speaker

An up-to-the-minute superheterodyne circuit uses a 1 A6. a 30 1.44. $6 \mathrm{S7G}$. $6 \mathrm{T7G}$. 6 LL G and a 19 twintriode power amplitior. The latter feeds into a genuine $6^{\prime \prime}$ Permenent-Magnet dynamic loud speaker which offers brilliant reproduction over the major
portion of the audio spectrum. yet it consumes no energy,

Automatic Volume Control
Fading of distant stations and undesirable blasting when tuning from one local station to another are minimized with a now automatic volume control circuit which adds greatly to the pleasure of listoning and distance-hunting

Wide-Range Tone Control A continuously variable tome control offers a choice of bass or treble emphasis to suit the personal taste of the listener. The cabinot is a thing of beauty, with simple moders lines, of attrac. tively finished hardwoods with confrasting tones.
Model DA-16-Latayette 7-tube, 3-band, 6-volt superheterodyne mantel-type receiver, with all tubes. For 6 -volt battery operation.
 Yode WEROT, Lint Price 563.00 .

Suitable atorage batteries are listed on page 69.

## 6 tube 6 volt 3 Band 5uperhet

 F ULLY the equal of a.c. operated models of nuperheterodyne has everything that can be de. sirod in a receiver which is to be operated on a storage battory.
## European Reception

Complete broadcast and short-wave coverage is provided by the three separate tuning bands: 18 to 51.8 meters. 53 to 166 meters and 174 to 560 moters. The desired band can instantly bo solected by mooms of a conveniently located and color-coded switch on the tront panel.

## Has Tone Control

An advanced circult. incorporating the latest developments. employs the following six tubes: a 1A6, 30, 1A4, 6T7G, 6L5G and a 19 twin-triode power output tube. This tubo delivers approximately two wattsl-more than ample for the aver. age home. Tone control is an additional feature.

P-M Dynamic Speaker
Sonsitivity and seloctivity are unusually finestations are brought in all over the dial. and even the closest can be separated. A Permanent Magnet dynamic speaker delivers theatre-liko reproduction, and consumes no eneray
oproduction, and consumen no energy, rated in frequency for each band, and finished rated in frequency for each band, and finished $\overrightarrow{\text { walnut-loned background. The set usos no bat. }}$ teries othor than the six-volt storage battery.


\section*{Special Batteny Sets 7or the Farm

## Lafayette <br> 7-Tube <br> 7-Tube 2-Volt Super

 ESIGNED espocially for rural districts or wherever commercial power is not available. This powerful 3.band superheterodyne uses geven of thelatest tubes: a 1 A 6 , 19, 1A4, 1B5, two $30^{\circ} \mathrm{s}$ and a 6 E .

## Covers 18 to 560 Meters

 Three separate tuning bands cover the short-wave and broadeast chanhels as follows: 18 to 51.8 meters, 53 to 166 meters and 174 to 560 meters; thus offering reception of European broadcasts, amateurs, police calls and other services.Batteries used include three 45 -volt " $B$ ", one $41 / 2$ volt "C" and an Eveready "A" Pack, Battery drain is exceptionally low. Other features include: Latest Permanent Magnot Speaker, tull-range tone control. now calibrated, gold-backed dial, band-selector switch and a beautiful walnut cabinet. Model DA-28-Lafayette 7-tube, 3-band, 2-volt battery superhet, with tubes but less batteries. Size. $103 /$ " " high. $^{\prime \prime} 181 / 2^{\prime \prime}$ wide, $81 / 2^{\prime \prime}$ deep. Shpg. wt. 26 lbs .

Code WOENA. List $\$ 47.90$ List \$47.90
YOUR COST kit Eveready batteries. including "A." pack. YOUR COST . $\$ 4.94$ As above, but with Eveready Air-Cell instead of "A." pack. YOUR COST
${ }^{\text {s } 23.95 ~}$


A "Life-Saver" For Batteries


## Gafayette

## 6-TUBE, 32-VOLT

 BATTERYLESS SUPERHET
## 18-550 METERS A.V.C. ACTION

WNERS of 32 -volt power systems re now assured of radio performance equal to that obtained by those using commercial power. The highly-developed superheterodyne circuit employs six of tho latest high-gain tubes: a 6 D66, 6A7. 75, two ${ }_{48}$ 's and $\propto 76$. Power output is brilliantly handled by a $61 / 2^{\prime \prime}$ electrodynamic speakor.No batteries are used-the sot is entirely olectrically operated.

## 3 Tuning Bands

Complete coverage is atlorded by the 3 -band tuning range from 18 to 550 meters. This includes European stations, amateurs, aireraft, police calls and commercial ship and shore stations. A band selector switch is used to select the desirod range and is controlled from the front pamel.

## 5" Airplane Dial

A $5^{\prime \prime}$ illuminated airplane-type dial with \& three-color scale, makes
 tuning $\alpha$ simple process. Each band
is individually calibrated, the veris individualy calibratedi the ver-
nier ratio is nier ratio is $12: 1$ an unbreakablo
lens protects the dial from accidonal lens protectis the dial irom accidental
damage. All knobs are toned to damage. All knobs are to
match the attractive veneers.

DYNAMIC SPEAKER TONE CONTROL
The total energy drain from the power source is only 35 watts-the equivalent of 1.1 amperes-less than equivalent of amp other roceiver of its type. A asy other receiver of its type. A feature of this receiver is found in
the wide-rango tone control which the wide-rango tone control which permits continuous variation trom the personal taste of the listener.

## Beautiful Cabinet

The graceful. modern-style cabine is beautifully faced with figured butt walnut having a high polishod fin ish. Contrasting grained hardwoods. combined with an attractive speaker grille, a bronze escutcheon and matched knobs blends into a perfect hotsing for this receiver.

We know of no other receiver that will offer as much day-in and dar: out satisfaction for the 32 -volt plan owner as the Latayette model M-31 all-wave superbeterodyne.
Model M-31 - Lafayetto 6-iubs. 3band, 32 -volt batteryless superhet. with tubes Size. 143/4 high, 11" with tubes, Size. Wt. 21 lbs.
wide. $81 / \mathrm{s}^{\prime \prime}$ deop. Wig
Wide, $81 / 8 \mathrm{VBE}$.
Code VA .90 .

## Safuyette

## 5-TUBE, 2-VOLT 2-BAND SUPERHET

78 HE outstanding value in battery receivers for 19371 - ALL BATTERIES ARE CONTAINED WITHIN THE CABINET-no mossy connecting wires or unsightly batteries outside the cabinet. Three 45 -volt "B's" cond an Eveready "A" Pack fit meatly within the cabinot. Five of the latest high-gain tubes are used: a 1C6, 34, 1B5. 33 and a SE1. Power is ample for all purposes and tone is excellent

## Tunes European Broadcasts

Two tuning bands are provided, covering American Two turis from 174 to 560 metors, and the shortwave Europan broadeasts from 484 to 132 meters. These curopean broadcasto in polle amatours throughout he country and numerous other shortweye communications. The band switch is on the panel.
Model D-29-Lafayette 5-tube, 2-band. 2-volt battery superbet with all tubes but less batteries. Size. $18 \mathrm{j} 4^{\prime \prime}$ wide. $101 /$ /" high. $^{\prime \prime} 12^{\prime \prime}$ deep. Shpg. Wi. 22 lbs List Price $\$ 33.90$. Code WINAI.
YOUR COST
Complete kit of Eveready batteries for above, including "A" pack. YOUR COSI
$\$ 4.40$
pack.

## Youn Tauboite Recordds sounv betrir

 ON THESE


110-V.
A.C. A-C-MATIC IRON -


Fully automatic 6 lb . iron, with complete range of ironing heats. Provides even ironing temperature for all types of material. Features : button saving nooks, heel stand, humb reat and the famous Calrod ong life element. Finished in chrome-plate. For 110 volts a.c. only. Consumption, 660 watts. W25043
Your Cost
53.01

NEW GRILLETTE SANDWICH TOASTER


Will toast 2 sandwiches at a time, fry eggs, grill bacon, etc. Grill surface $10 \times 5 \frac{1}{2 \prime \prime}$. With grease cup so that no drippings can stain tableware. All nickel-plate finish with black base and "cool-grip" handle. Guaranteed. For 110 volts, a.c., or d.e. Shpg. wt. 5 lbs. W250\&4-Lers card.
Your Cost Each
$98^{\circ}$

## ELECTROMIX

## SUITABLE

## FOR ALL

A most inexpensive but exceedingly useful device. Designed as a combination mixer and whipper in one unit. Can be uned anywhere because of its portability. Detachable stainless beater cleans instantly and easily. The glass container is of modern design and holds more than one pint. Motor operates on 110 volts, 60 cycles a.c. only. Equipped with an amplegrip handle through which passen the approved cord and plug. Shipping weight 6 lbs. \$1
Y2505 our Cost. Your Cost
"DETECTO" SCALES


Designed eapecially for the amart bathroom and will blend pleasantly with any color-scheme or ittings. Created in the modern manner this scale is almost a necenaty in the scale is almost a necensity in the modern home. Arranged so that a floating rack brings the dial to a quick stop. Ivory enamel finish with black mat. Shpg. wt. 10 lbs W25011Your Cost.

THE IRWIN 16 MM . MOVIE CAMERA A REAL MOVIE CAMERA FOR ONLY \$9.95!


## Up to 50 Feet of Film

A real photographic instrument that permits anyone to take perfect movies lor home projection. Features optica! spyglass finder for exact focusing of objects to be photographed-quiet. graphite-packed motor with rust proof brass frame and gears-film magazine for loading in bright daylight in a few seconds-black satin compact case. Film is sent to Irwin Company for development; charge is only 30 c . Takes standard 16 mm . size film.
W25173-Less film
$\$ 0.95$ Your Cost............ above. Your Cost.
W25175-Magazine of 50 feet of fireproof, safety film. \$I.S1 Your Cost

THE IRWIN 16 MM. PROFESSIONAL-AMATEUR MOVIE PROJECTOR FOR THE HOME For 110 Volts A.C. Only
Shov your own movies at home, functions, church parties or business demonstrations. Projects all 16 mm . fllms including those laken with the ahove camera. ${ }^{400 \text {-it. }}$ capacity ( 15 -minute show); no flicker; powerlul, pre-focused lamp; precision lens; separate ewitches for motor and lamp; fan-type shutter: tilting device for proper screening; device for quick framing; cool-type, double construction for lamp house; amooth, quiet, dependuble, electric motor driven operation; speed control on motor; operates from 110 -volt, 60 -cycle a.c.; furnished with approved cord and plug. Shpg. wt. 10 lbs .
W2si7s-With one reel. 80... 95


## "Dolly Madison" Elecłric

 Ice Cream Freezer There's nothing like it at the price. A modern time and labor saver. Beautiful in appearance; attractive cream color finish silver-like cadmium hardware and msin frame; compact motor centered on tub is of direct drive type with gears running in grease and operates from any a.c. outlet which provides 105/115 volts, $50 / 60$ cycles. Employs a unique combination handle and lock. Extremely simple to ciean. $131 / 4$ high, $10^{\prime \prime}$ overall diameter. With $61 / 5$ ft. rubber-covered cable and plug. The tube is sturdily constructed of F wood stock and is wire-bound for added strength.w25177-2-quart capacity. Shpk. wt. 15 lbs.
$\$ 6.95$


Midget cleaner weighs only $41 / 5$ Ibs. With attuchment reaches from floor to celling. Fixed brush lovesens surface dirt. With glam deodorizer and insect repeller, and a can of dichloride crystals. Sealed-in mo tor (for $105 / 125$ volts a.c. or d.c.) requires no olling. With 15 ft . cord and plug. Shipping weight 9 lba. W25038-
Your
Cost...........

## Vacuum Cleoner

 Model AY-1
G.E.alatestand finest. It Incorporatel every leature you have found lacking in other cleanersand then some. Rubber wheels your floors. G.E. yourfloors. G.E.
trouble-free trouble-free motor is sealed-In-needs no oiling and operaten oa either a.c. or d.c. Just plug it intoany 110 volt ocket. Has seven bladedfan powerful suction ceta all the dirt. Tulted horsehair revolving brush. New ing brush. Ne type dust bag. Body motor case and cap or lightwelght aluminum. Rubber front and sides. Furnished with 18 -loot rubber cov ered cord and unbreakable plug. Size: $42^{\circ}$ high, $14^{\prime \prime}$ wide, $12^{\prime \prime}$ deep. Guarnateed for 1-year. Finish: polished aluminum with blue dust-bag. Shipping weight, 20 lbw. W25039-
Your
s21.95

## GILBERT Model B112 Hand Vaeuum Claaner



For thorough cleaning of auto upholitery, draperiea, atair carpets, clothing and dozens of other things that require a small cleaner. Wight that require an in one hand, it suckes phough to use in lint dust and lint of hard-to dirt, dust and lint out oi with fully get-at corners. Equipped with imy guaranteed Gilbert 110 veral mo-tor-operates
$(25-60$ cy
on

or d.c. Black vacuum bag with motor in chrome and nozzle finished in aluminum. Cannot mar furniture. Size, $61 / 451 / 4 \mathrm{x}$ | 18 K |
| :--- |
| $\mathrm{w}^{\circ}$ |

W2s

#  

Toastmaster De Luxe Hospitality Tray


A new deluxe combination that is unequaled for beauty and at the same time is completely practical. Built around the newly designed, fully automatic Toastmaster 2 -slice tosster. It pops up finished toast to any deaired degree of brownness deaired-it needs no watching. Bright chrome plate metal parts with moderniatic etched deaign. Base, handlea
and other molded parts are dark brown Bakelite. Permanently at and other moded parts are dark brown Bakelite. Permaneatly at-
tached cord and plug. With the toaster there is the large walnut sarving cray; four individual "lap trays;" two graceful little appetizer serving tray; lour individual "lap trays;" two graceful little appetizer
diahes, in the new china vogue. Toastmaster knife and cutting hard. dishes, in the new china vogue. Toastmaster knife and cutting board.
Overall dimenaions, with toaster: height $71^{\prime \prime}$ " width $16^{\prime \prime}$, Overall dimenaions,
Shye. wt. $17 \%$ lbs.
Whys. Wt. 1712 lbs. 4-individual trays and serving tray
$\$ 17.60$

## STANDARD HOSPITALITY TRAY

Similar to the above, but with glass relish dishes and without the four individual serving trays. Shpg. wt. 12 lbs .
W2507S-Your Cost
s 14.75
Two-Sllce Toastmaster Toaster only. Shps. wt. 7 Ibs. $\$$ IT.
W25076-Your Cost....................................
FOLDING WALNUT SERVING STAND
Fits both standard and deluxe models. Solid walnut, folding type, Simplifies gerving. Shpg. wt. 11 lbs. W25077-Your Cost.

## "RED LION" CYLINDER-TYPE VACUUM

## CLEANERS

Guaranteed
For 1 Year
Heary-Duty
SILENCED

## Motor

Sealed In
Oil


The vacuum cleaner you have always wanted is now available to you with 1937 improvements-SILENCED and increased suction, (40 ths. water lift-at half the usual price! Why carry a heavy cleaner around with you. This type merely slides along with you. It covers every cleaning need from hard-to-get-at corners to ceiling moldings. Its attachments cover every need-walls, upholatery, floors, rugs, mattresses, deodorizing and moth-proofing. The powerful motor is SILENCED, sealed in oil and operates on 110 volts a.c. or d.c.- it requires no sttention. Fittings include two long wands, or d.c.e-it oval brush, small dust brush, laţe crevice nozzle, large rug nozzle and extra-long cord and plug. The barrel is finished in beautiful mottled lacquer-will not chip or crack. All metal parts are handsomely chrome plated. Furnished with a leatherette case for convenient storake; size, $213 / 5 \times 1 / 2^{\prime \prime}$. Consumes 250 watts. List Price $\$ 69.50$ Wour Cost Complefe. Shpg. Wt. 30 lbs.
-39.95

## STANDARO MODEL CV-2

Similas to above, but smaller, seml-gilenced motor with $34-1 \mathrm{l}$. lift. All metal parts nickel-plated. Case size, $20 \times 6^{\circ}$. Consumes 250 List Price $\$ 49.50$. Shpg. wt. 20 lbs W25138-Model CV-2 Your Cost Complete.
"HOSTESS" CLOCK


A new wall-type kitchen clock that fulfills the two major requirements for kitchen duty: aceupate time keeping and beauty of appearance has a $y_{1}$ dial and is $2^{\prime \prime}$ deep. Case iv of Beeteware and is a vailable in
jvory or green. Nicral (similar to chromium) trimmings. Full sweep ehromium) trimmings. Full sweep second hand; ivory
W25003-Green
W25004-Ivory
Your Cost Emeh
3.95

## G.E. "HERALDER" ELECTRIC ALARM CLOCK



This unusually attractive clock incorpo patesal2. hour alarm mechanism
with a pleaswith a pleasing note. Con-
tains a selftaing a self-
starting synstarting syn-
chronous moror, sealed in oil-requires no attenion. In gleaming black Textolite case with ivory dial, black hands and gold sweep second hand; drum sests on two gold-finished tubular metalfeet. For 110 volts, 60 -cycle a.c. only. $41 / 4 \times 43 / 4 \times 2^{8} \jmath^{\prime \prime}$ W25007-
$\$ 3.75$

## WHITE CROSS COFFEE MAKER SET

New, efficient, beautirul-for the lover of good coffee. Bowls of new formula, heat-prool glaks, attractively banded in platinum. Lower bowl has Bakelite, easy-grip pouring handle, furnished with eceanter cover for easy pouring. Siove finished in chrome plate with Bakelite side handlea. Tpay is hard decorated, chrome plated. Card furnished. Uses 600 watts. W25051 6-cup coffee maker and tray combination. Model 447BTS. Shpg. wt. 8 lbs. List Price 56.55 . Cour Cos
W25052-
Your cosecup coffee maker, less tray W250s3 Shpg. wt. 8 lbs


Your Cost Complete
W2506-8-cup coffee maker, less tray

## Your Cost

## The New Clipshave Electric Razor



Do away with the cost and mes of brush, lather, water, lotions and blades. Shave at your deak, if you wish. Absolutely sale - cannot nick, cut, scrape or mart. Can not hurt the tenderest slin even when there sre moles or other protusions present. Ideal for women as well as men. Operatee on 110 volta anc. or d.e. W25107-
$\$ 7.50$

## TOBE Electric Razor

 Radio Noise Filter Don't annoy your neighbors and family when shaving. $50^{\circ}$Genuine ROLLS Razor Lasts a Life-Tlime


The Rolls Razor has been worldfamous for many yeara. This unusual razor uses the finest Sheffield tool steel and is hollow-ground just like the barber's straight ra-zor-but has the added features of safety and convenience. Has self-contrined hone and strap; a few strokea on the mechanical stroker, then a stropping and the blade is perfect. Lasts a lifetime. The first cost is the last. Contalned in nickeled compact case, ideal for home or travel. Wt. 2 lbs. W18150 No. 2 Rolls $\$ 6.65$

SLIP-IN, ELECTRIC VENTILATING FAN


A sturdy $8^{\prime \prime}$ lan mounted in an attractive metal lrame. With two adjustable louvres for bad weather. Wire guard protecta blades. Mounta like a screen or can be permanently installed. Length adjustable from $24^{\circ}$ to $32^{\prime \prime}$. With 6 ft. cord and plug. For 110 volts, 60 -cycle a . only. Shpg.wt. 10 lbs. $\$ 2.75$
W18159-Your Cost.

## DUOCHIME ELECTRIC DOOR SIGNAL

This new chime strikea mellow harmonic note, easy on the nerves. No special wiring is necessary. Merely substitute for the existing bell or buzzer without adding any additional wiring or apparatus. Used where 2 signals are needed, as Used where 2 aignals are needed, as
for front and rear doors. Has iwo for front and rear doors. Has two
distinctive notes. In ivory enamel. With full instructions. $\$ 5$ enamel. With full instructions. $\$ 3.96$
w25093 Your Cose.

## MOLOED NITE LAMP

An ideal night light. All molded construc tion. Black base, ivory shade. With 7 watt, G.E. bulb. Has "on-off" switeh and 4 -foot silk cord and plug. Operates on 110 plug. Operates on 110 high, 4 diarn. Shade.
W25117-
Your Cost Complete.


# PLEASE READ THIS PAGE CAREFULLY BEFORE ORDERING WHOLESALE RADIO SERUIEE CO., IIE. 

"The World's Largest Radio Supply House"

\author{

Mail Your Orders to Warehouses at: <br> NEW YORK, N. Y. <br> 100 Sixth Ave. <br> Phone: WA lker 5-8883 <br> CHICAGO, ILL. <br> 901 W. Jackson Blvd. Phone: Haymarket 0422 <br> | ATLANTA, GA. |
| :---: |
| 430 W. Peachtree St. |
| Phone: Walnut 5140 |

}

HOW TO ORDER- Use our convenient order blank. than ONE item to a line. Make sure you write the exact stock number and that the price is the one quoted for item that you want. Specify how we shall make shipment. Check the preferred square: "Express", "Parcel Post", "Freight", "Boat", or "Beat Way". We shall follow your instructions. If these are inadequate, we will change them if we feel that such a change is to your better interest. Merchandiae may be shipped by exprese if you specify this on your order. Radio sets should be ordered shipped by express or if quantity warrants. by freight.

DOMESTIC
Wholesale Radio Service Company, Inc. Wys for cash and sells for cash. That explains our low-price policy. We cannot afford to carry credit acenunts and we pass on to our customers the savings effected by the elimination of costly bookkeeping departments. We ship C.O.D. if desired, providing a deposit of $20 \%$ accompanies your order. C.O.D. parcels may
be ahipped ONLY to all parts of the United States and its territorial be ahipped ONLX to all parts of the bited States and its territoria, pussessions. as most banks refuse to handie such a tation costs saves you oxtra collectation cost
tion costs.

## TRANSPORTATION <br> ALLOWANCE-

On all radio orders (excluding seta) for $\$ 25.00$ or more, deduct $2 \%$ from the total as a transportation allowance, except on Lafayette and National Co. products. Foreign orders excepted.

| Zone Numbers |
| :--- |
| Distance in Miles |
| from Shlpping Point |
| Cost for 8 oz. to 1 Ib. |
| Cost for Each Addi- <br> tionai ib. or Fraction |

## FORE GN_Orders from foreign countries receive carelul

 anioned to ensure very prompt and satisfactory delivery. packed and shipped to ensure very prompt and satisfactory delivery.Our terms on ALL foreign kales are as follows: Payment in New York by letter of credit against documents, or $50 \%$ deposit WITH ORDER, balance aight draft againat bill of lading. These conditions will not apply to certain countries where rigid exchange control conditions exist. In countries where rigld exchange control exists, merchandise plus transportation charges must be paid for in full in New York before sajpment pan be made. All quotations F.O.B. 100 Sixth Avenue, New York, with slight additional charge for export packing. ORDERS UP TO with slight additional charge for export packing. PLUS SHIPPING CHARGES Remittance by dralt on New York bank in U. S. currency CHARGES. Remittance by draft on New York bank in . S. currency. We do not recommend that you send us foreign checks, as shipment will be delayed until cleared. Cablo address 'Whoirad . New ork.
The a verage Parcel Post rate on foreign shipmenta is 14 C per pound. Insurance rate a verages $11 / 6 \%$ of the order's value, with a minimum rate of 25 cents.
Our catalog prices are F.O.B. warehouse, packed for domentic ahipment. For special export packing and delivery to pier, there is a slight additional charge covering our extra costs. There is no extra packing charge for shipments to points outaide the United States which can be forwarded packed as for domestic shipment.
FINAL PRICES shown in this catalog are net, F.O.B. been deducted, Including $2 \%$ discount for cash. Prices arresublect to change without notice. We give customers the benefit of all reductions taking place after catalog is printed.

SENDING MONEY The salest and best way to press or telegraph money order, bank drafts or firm checks. Do not send cash. If absolutely necessary to remit cash, send by registered muil only. Do not hesitate to include sufficient postage or other carrying charges. Overpayments are promptly refunded. Insufficient posiage oftert delays shipmento needlessiy.

> Save Time and Money
> Do Not Split Your Order
> If you are in need of cmy merchomdise whlch you cannot find In our calalog, write telling us zour requirements. Our speclal order department will make every effort to supply your needs, at lowest wholesale prices. We have on hand at all times the world's larget stock of radio parts and equipment.

# Local Sales and Display Rooms at: 

NEWARK, N. J.
219 Central Ave.
Phone: Market 2-1661
BRONX, N. Y.
542 E. Fordham Road Phone: RA ymond 9-8813
JAMAICA, L. I.
90-08 166th St. (Merrick Rd.) Phone: RE public 9-4242

## RETUBNANG MERCMANDISE—If you

necessary to return any merchandise for adjuatment, please write in advance stating full details. We will immediately forwurd the necensary hhipping instructions. Your cooperation in this reapect will be apprerhipping instructions. Your cooperation in this reapect When returning ciated and will help us to give you better service. When returning merchandise, pack caref ully, insure, and write poturning to us.

## POSTAGE CMARGES are based on weight of

shipper's city to your address. The rates are determined by zonea Each zone comprises a certain mileage radius from the point of ahipment. You can easily eatimate the postage costs from our nearest warehouse to your town from the following chart. If in doubt about the zone you are in, as regarde our nearest warehouse, consult your local postmaster. Total weight of your shipment can be eatimated by adding welghts of individual articles as given in catalog and then adding approximately 2 libs. for packing. Parcel poet packages must be shipped prepald. Plesse be sure to include postase with your remittance. All items are F.O.B. point of shipment.

|  | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| to | $\begin{aligned} & \text { Not over } \\ & 150 \mathrm{mi} \text {. } \end{aligned}$ | $\begin{aligned} & 150 \text { to } \\ & 300 \mathrm{mi} . \end{aligned}$ | 300 to 600 ml . | $\begin{aligned} & 600 \text { to } \\ & 2000 \mathrm{ml} . \end{aligned}$ | $\begin{gathered} 100080 \\ 1400 \mathrm{mi} . \end{gathered}$ | $\begin{aligned} & 1400 \text { to } \\ & 1800 \mathrm{mi} . \end{aligned}$ | Over <br> 1800 ml. |
|  | 8 c | 9 C | 10 c | 11 e | 12 c | 14 c | 15c |
| c | 1.1e | 2 c | 3.5c | 5.3 c | 7 c | 9 c | 11. |

## -ARCEL POST RATES Parcels up to 8 oz

 any where in U.S.A. for 6c. RATES FOR PARCELS OVER 8 OZ. any where in 70 pounds. The limit of size on all parcel post packages is one hundred 70 pounds. The limit of size on all parcel post packages one hundred inches in length and girth at widest point combined, Example: a package 35 inches long, 10 inches wide and 5 inches high, measures 65 inches in length and girth combined. (Length 35 inches,NSURANCE_All parcel post packagen are covered and postage should be added to the amount sent. Charges are as follows: When value of parcel is up to $\$ 5.00$ the extra charge is $5 \mathrm{c} . ; \$ 5.00$ to $\$ 25.00$ the extra charge is 10 c .; $\$ 25.00$ to $\$ 50.00$ the extra charge is the charge for each $\$ 50.00$ additional is 5 c . extra. If you are doubtful as to the correct amount do not hesitate to send us sufficient postage. WE GUARANTEE to refund any excess.
C.O.D. SMIPMENTS Tranaportation charges on higher than those fully prepaid. C.O.D. charges in addition to the regular postage coste outlined are as follows, including insurance: When value of parcel is up to $\$ 5.00$ the extra charge is $12 \mathrm{e} . ; \$ 5.00$ to $\$ 25.00$ the extra charge is 17 c .; $\$ 25.00$ to $\$ 50.00$ the extra charge is 22 c .; $\$ 50.00$ to $\$ 100.00$ the extra charge is 32 c .; $\$ 100.00$ to $\$ 150.00$ the extra charge is $40 \mathrm{c} . ; \$ 150.00$ to $\$ 200.00$ the extra charge is 45 c . For each $\$ 50.00$ value above $\$ 200.00$ the charge is 5 c . more (including insurance). Post Office also charges an extra small money order fee on each C.O.D. parcel. You can save these foes by remitting in full.

## EXPRESS \& FREIGHT SHIPMENTS

are sent tranpportation charges collect. If your atation has no agent, please send sufficient money to cover transportation. Chargea are the same either way. All over-payments are promptly refunded. Rates vary with the shipping point.

## Mail Your Orders to New York, <br> Chicago or Atlanta

Completely stocked warehouses in New York, Chicago and Atlanta assure you lmmediate delivery regardless of your location. Visit our beautiful display rooms in New York, Bronx, Jamaica, L. I., Chicago, Newark and Allanta. You will find tralned technician always ready to help solve your problems.

J. E. SMITH. President

National Radio Instifute, Established 1914 The man who has directed the hame atudy traning of more men for tbe Radio Industry

## MISETES PROOF



EARNED $\$ 50$ FIRST MONTH IN SPARE TIME

I knew nothing about Radlo. After four lessons I Lexan serviciny Radur. earnlag $\$ 60$ the first month. . ast win-
ter 1 made as blah as $\$ 100$ a month il ter 1 made as high as 8100 a month ${ }^{\text {an }}$ Weat time. road Fiontion, su

OWN BUSINESS PAYS $\$ 300$ A MONTH

- I now have my own Radio bustnews W'ilch shows three hundred dollars a 10 mith prolit--thanks gaain to Na. iunal Radio. - Fration St., Philadelphia, Penna.



## CHIEF OPERATOR BROADCASTING

 STATION$\because$ When I completed 20 lessons, I obLalned my Radto Brondcast Operator's Hicense and trumedlately Joined station WMPC, Where $\frac{1}{}$ am now Chet OperLson St., Lapeer, Mich.

MAKES $\$ 50$ TO $\$ 60$ A WEEK
"I am maning between $\$ 50$ and $\$ 60$ a Week after all expenses are pald and I arn gettitut all the Radio work l can
 Knoxville, Tena.


## Get My LESSON on

## Radio Servicing Tips-FREE

I'u prove that my Training gives practical money-making information, that it is easy to uncerstand-that it is just whal you nerd to master Radio. My armple lesson text. "Radio Receiver Trouble Their Cause and Remedy" covers a long list of Radio receiver troubles in A.C., D.C., battery, universal, auto. T. R. F. superheterodyne, all-wave, and other types of sets. And a cross reference and other types of probable cause and a quick way to locate and remerly thene set troubles. A special section is devoted to receiver check-up, alignment, balancing, neutralizing and testing. Get this lesson free. No nhllgation.


Do you want to make more money? The worldwide use of Radio has made many opportunities for you to have a apare time or full time Radio service business of your own. Three out of every four homes in the United States have Radio sets which regularly require repairs, servicing, new tubes, etc. Nany sets are old and will soon be tubes, etc. Nany sets are old and will soon be
replaced by new models. I wll train you at repaced by new models. I will train you at home in your spare time to sell, install, service, all types of Radio sets to start your own Radio your spare time while learning. Mall coupon for my 64-page book. It's Free-it show what I have done for others.

## Many Make \$5, $\$ 10, \$ 15$ a Week Extra

 In ${ }^{\prime}$ Spare Time While LearningPractically every neighborhood needs a good spare time serviceman. The day you enroll I start sending you Extra Money Job Sheets. They show you how to do Radio repair jobs that you can cash in on quickly. Throughout your training I send you plans and ideas that have made good spare time money from $\$ 200$ to $\$ 500$ a year-for hundreds of fellown. My Training is famous as "the Course that pays
for itself."

## There's E Real Future in Radio and Television for Trained Men

Radio already gives jobs to more than 800,000 people. In $19368,000,000$ receiving sets were sold. Set sales increased $32 \%$-tube sales $28 \%$ sold. Set sales increased $32 \%$-tube sales $28 \%$
over 1935 . There are over $28,000,000$ Radio sets in operation on which approximately $\$ 68,000,000$ are spent eaca year for repairs, servicing, tubes. etc. Every year millions of these sets go out of date and are eplaced with newer models, creatIng money-making opportunities for trained men. Over 140 factories build sets. Over 3,000 make parts for sets. Television sets may add to these many opportunities soon. The Radio induatry is new, still groving fast! A few hundred $\$ 30$, $\$ 50$, \$75-a-week jobs have grown into the thousands in less than tventy years.

## Get Reedy Now for Your Own

Radio Business and for Jobs Lke These
Radio broadcasting rtations employ engineers, operators, atation managera and pay up to
$\$ 5,000$ a yeaz. Spare time Radio set gervicing pays as much as $\$ 200$ to $\$ 500$ a year-full time jobs with Radio jobbers, manufacturers and dealers, as much an $\$ 30, \$ 50, \$ 75$ a week. Many Radio Expertr own and operate their own full time or part rime Radio sales and service businesses. Radio manufacturers and jobbers em-
ploy testers, inspectors, foremen, engineers, aervicemen, paying up to $\$ 6,000$ a year. Radio operators on ships get good pay and see the world besides. Automoblle, police, aviation, commercial Radio, and loud speaker systems commercial Radio, and loud speaker systems are newer fields offering good opportunities now and for the future. TELEVISION promises to open many good jobs soon. Men I have trained are holding good jabs in these branches of Radio. Read their atatements in my 64-pare book. Mail the coupon.

## I Send You Special Radlo Equipment

 To Cive You Practical ExperienceMy Course is not all book training. I send you special Radio equipment and show you how to conduct experiments and build circuits which illustrate important principlea used in modern Radio recelvers, broadcast stations and loud apeaker installations. I show you how to build lesting apparatus for use in spare time work from this equipment. You work out with your hands the things you read in the lesson books. My Free Book tells you about this $50-50$ method of training-how it makes learning at home interesting, quick, fascinating, practical. Mail coupon.

## Save Money-Learn At Home

Money Back Agreement Protects You
I am no sure that I can train you at home successfully that I agree in writing to refund every penny you pay me if you are not satisfied with my Lessons and Instruction Service when you minish my Course. I'll send you a copy of this agreement with my Book.

## Find Out

What Radio and Talevision Offer You.

$$
\text { Get My } 64 \text { Page Book Free Now }
$$

Act Today. Mail the coupon now for my Free Lesson and my book, "Rich Rewards in Radio." Both are free to anyone over 16 years old. My book describea Radio's spare time and full time opportunities and those coming in Television; opportunities about my Training in Radio and Television; tellsabout my Training in Radio and relevision; shows you actual letters from men I have trained, telling what they are doing and earn-
ing. Find out what Radio ollers YOUI MAIL THE COUPON in an envelope, or paste it on a penny post card-NOW!
J. E. Smith, Preaident National Radio Institute, Dept. 7DF8 Washington, D. C.

## 

J. E. Smith, President, Dept. 7DF3

National Radio Institute, Washington, D. C.
Dear Mr. Smith: Without obligation, send me the Sample Lesson and your free book about the spare time and full time Radio opportunities, and how I can train for them at home in spare time. (Pleasc write plainly.)
Name.
Address.
City . .
 4TUBE AC-DC


5-TUBE AC-DC SUPERHET IN COLORS FOR EVERY ROOM FOUR beautiful color combinations to match the color available in your hom. These excellent little recelvers are availabie in ivory with gold trim, red with gold trim, biod to introduce a clashing note into an otherwise perfect room setting.

Self-Contained Aerial
In addition to their artistic appearance, they incorporate technical fectures that makie ideal "second" receivers for the bed-room, kitcten, den, play-cellar, otc. No asrial installation is required-plug it into any 110 -volt oullet, a.c. or d.c.-equclly fine results are had with either current.

Full-Tone Dynamic Speaker A modern electro-dynamic speaker is conjunction with a 43 pentode power output tube ofters roproduction that will amazeayou with lts realism; the other tubes used are a 6C6. 6D6, 6月7 and a 2575 rectitior. All standard-wave hmerican broadcasts and many police calls are covered trom 175 to 555 meters. Tuntag is accomplished with an illuminated thash dial, multi-colored to match the coloration of the receiver. Size. $11 \times 71 / 2 \times 51 / 2^{\circ \prime}$.
Model FA.6-Lafayette 5-tube a.c.-d.c. superhet, with tubes. For $110 / 125$ volta c.c. or $50 / 60$ cyclen a.c. In ivory, red. black or maple-specily color desired when ordering. Shpg. wt. 12 lbs. Code KITTA.
List Price $\$ 2 \% .90$.
YOUR COSI

Cafayette 5 TUBE ACDC Compact PORTABLE Superhet
8 PRING is here-and with It thought of the open oad, the (asd you pond and moonlit nights. Leave the city sis sou wish. tainers and orchestras-its merry-making madeaps-the-minute news services.

A Handsome Piece of Luggage No matter where you go the Latayette AC.DC Compact Portable will keep you entertained. Plug it into any 110 -volt secket and tune in mo aerial is required. It offers mo problem in transits measuring only $73 / 8 \times 10 \times 71 / 4^{\prime \prime}$. it is much smaller than m lady's overmight bag, and, if we must say so. quite lighter in weight. It is available in block, alligotor and ton to malch y.vur other luggage

Full-Size Dynamic Speaker Its highly-etficient superhet circuit use; a 6A7, 6D6. 6C6, 43 and a 2525 . Band coverage if from 175 to 555 meter*. Has a built-in aerial. multi-colored illuminated dial and operates on $110 / 125$ volts d.c. or $50 / 60$ cycles a.c. Model FA-3 - Latayette 5 -tube a.c.-d.c. compact portable sujerhet, with tubes. In black, alligator and tan. Specify color when ordering. Shpg. wt. 12 lbs . Code EEBNL. List Price \$29.90. YOUR COST.

Compact PORTABLE
DESIGNED for the samo spring-stricken travelers described and prescribed for abover but a wee mite maller for the more easily wearied. This litlle traveler's and is equipped with a eerrying handle, nickel-plated smap locks, front cover and housed in a sturdy wooden case neatly covered with the new "edrplane" cloth.
With Electro-Dynamic Speaker In spite of its unusually small size (it measures only $81 / 8^{\prime \prime}$ wide, $61 / 8^{\prime \prime}$ high and $6^{\prime \prime}$ deep), It contains a full-siz. electro-dynamic speaker which assures the listenet of excellent tome quality.

Time-Tried T.R.F. Circuit
Four of the latest type tubos are used: a 6D6, 6C6, 43 and a 2525 rectifier. Other feafures include a built-is aerial, illuminated flash dial. wave coverage from meters and operation on $110 / 125$ volts d.c.. or 50 cycies trasting brown stripes. Model FA-2-Lafaryette portable, with tubes. Shpg. wt. 9 lbs . Code $\mathbb{K} A$.KA. List Price $\$ 21.90$. YOUR


In Ivory and Gold-Black and Gold Add $\$ 1.00$ for $220-$ rolt a.c. operation. Red and Gold-All Maple

## GPerfect Companion THE RADIO THAT WILL PLAY CCuILOíeide!



## AT HOME•ON SHIPS•IN TRAILERS•IN BUNGALOWS•ETC•

The Most Sensational Radio Development of the Year!
TAFAYETTE again takes the lead in presenting the hrst outstanding radio achieve ment for 1937-ONE receiver that operates on a 6-volt storage battery or 110 volts a.c., WITHOUT CHANGES OF ANY KIND, and incorporates every up-to-the-minute radio feature in cluding 2 -band European reception.

## Built for the Trailer

Here indeed is a boon to trailer owners. It operates pertectly on the car or trailer battery and provides song and cheer while rolling along. When you return to your home, place it in your llving room (it's an aftractive piece of furniture). plug it into any 110 -volt a.c. outlet and tune in your favorite program.

## For the Motor-Boat

Now you can add zest to life on the bounding main. Equip your cruiser with this duo-power superhelerodyne and increase the pleasures of your cruise or fishing trip. When you reach port, take it to the hotel with you and enjoy radio in your room-your own radio-to tune in the stations YOU prefer as you desire them.

complete
WIH TUBE
WITH TUBES
$\star$ OperatesFroma 6-Volt Batteryor 110 Volts R.C.
$\star$ CoversShort Waves
$\star$ Aut. Vol. Control

* Alnico Speaker
$\star$ Full Tone Control
$\star$ For The Trailer


## A Standard Home Receiver With 1937 Utility

Enjoy its superior performance in your home during the winter season, and take it with you to your summer bungalow for the same perfect reception-you save the cost of another radio set.

## European Reception

Technically, it is a masterpiece of modern design and construction. Slx modern, high. gain tubes are used: a 6AB, 6K7, 607 $12 \mathrm{A5}$ $25 Z 5$ and an L49C ballast. Two bands ofler European reception on 18.4 to 52 mands onler standärd American broadeasts meters. Technical features include tone control and automatic volume control. The dyamic speaker is of the wide-range. Alnico full-noating Permanent Magnet type. A modern cabinet of twotone Americản hardwood olfers a striking appearance $;$, sixe, $183 / 4^{\prime \prime}$ long $81 / /^{\prime \prime}$, deep. $93 / 4^{\prime \prime}$ high. The $5 \times 6^{\prime \prime}$ airplane dial is finished in gold. Model D-32-Lafayette 6 -tube, 2 -band, duopower superhelerodyne, complete with tubes. For 6 volts d.c. 1110 volts a.e. Shpg. wt. 26 lbs. Code WUSOT. List Price $\$ 65.00$. your
s32.50


DAYS FRE

OUR FAMOUS GUARANTEE STILL HOLDS Order any Lafaryette receiver-Put it through its paces-Right in your own home-during good weather and bad weather-Make it pull in distant stations and locals-Listen to its full, rich tones-Then ask yourself, "HaveI ever seen or heard a better buy?"

Take a full 30 days to decidel Right in your own homel li for any reason you are not satisfied and delighted, return your Lafayette at any time withla 30 days and your money will be promptly and cheerfully refundedl (Transportation charges are, of course, excluded.)


Lafayette
1937's BEST BUY
This 7-tube, 2-band a.c., superheterodyne represents the finest ralue we have ever olfered. Feature-for-feature it equals, and in many cases surpasses, recoivers seling at twice the cost. It offers beftef tone, ray tuning, exceptionally aftractive appearance and numerous other outstanding fea. tures at a price that challenges any and all competition.
Improved Airplane Dial A new dial is used which is more than a mere instrument for station designation. "Giant""-size in its proportions (it measures $\left.41 / 2 \times 41 / 2^{\prime \prime}\right)$. it is a thing of beauly. its gold background blending harmoniously with Calibrations are unusually legible, and the dial length spread considerably to facilitate ease of tuning. Soft-glow illumination is employed.

30 Day FREE

MODERN BEAUTY Trial

FOREIGN RECEPTION
FLAWLESS TONE
ABUNDANT POWER
CATHODE RAY TUNING

9-TUBE RESULTS
Full use is made of even latest-type multi-purpose tubes to obtain the action of what only recently requirpd nine tubes.
The tube complement comprises: a 6DG. 6A7. 75. 76, 41 pentode power amplitier. 6G5 cathode-ray tuning "eye" and an 80 zectifier.

Aut. Volume Control
Nutomatic volume control is a circuit feature: this refinement prevents unpleasant "blasting" when tuning across the dial boon to DX'ers.

Uses Tuning "Eye"'
Heretotore available only in the highest price receivers, the cathode-ray tuning aid is included in this little wonder. It makes it possible for anyone to tune in a reproduction.

Quality Tone Control
Reproduction to suit the personal tasto is made possible with a new. widerange tone control which permits an exceptionally tine variation of bass and Ireble emphasis. With it you cen color your favorite programs to please your musical palate, and to reduce back-ground noises.


HEAR EUROPE DAILY
Two bands are used to cover 49 to 130 meters and 175 to 555 meters; this permits reception of European broadcasts, amateurs. police calls, airplane tralfic and other commercial short-wave communications.

6" Dynamic Speaker
Its tonal beauty will thrill you. Every note is reproduced with studio. like realism for your fullest appreciation. Listening to this receiver is indeed a relaxation. You must hear it to appreciate it.

Stunning Cabinet
The entire assembly is tastelully designed to blend with the tinest surroundings. Inlays offer a modern two-tone effect which is American hardwoods are used throughout for ruggedness and durability.
Model D.34-Lafayelte 7-tube, 2-band a.c. superhet, with tubes. For 110 volt, $50 / 60$ cyclo a.c. Size. $153 / /^{\prime \prime}$ long. $81 /{ }^{\circ \prime}$ high, $71 /{ }^{\prime \prime}$ deep. Shpg. wi. 23 Ibs. Code WANRO. List $\$ 40.00$ YOUR COST.

Add $\$ 2.00$ for 220 volt a.c. operation.


[^0]:    We can supply special Bliley and Lafayette erystals for all purposes -for transmission, short-wave and broadcast bands, for receiving, and for all laboratory requirements.

[^1]:    Multiple Section Units

    525 V. Surge 450 V. D.C. Work \begin{tabular}{|c|c|c|c|}
    \hline Stock \& Cap. \& Size-In. \& Your <br>
    No. \& Mf. \& Dia.-H. \& Cost

 

    \hline W4630 \& $8-8$ \& $21 / 2 \times 41 / 5$ \& $\$ 1.06$ <br>
    W4631 \& $8-8-8$ \& $3 \times 416$ \& 1.59

 

    $W_{4631}$ \& $8-8-8$ \& $3 \times 41 / 8$ \& 1.59 <br>
    $W_{4632}$ \& $9-9-18$ \& $3 \times 41 / 8$ \& 2.20
    \end{tabular}

[^2]:    WG8095-S.P.S.T. (101) Volume Control Switches WG8094-S.P.S.T. (104)....35c WG7839-S.P.D.T. (102).....35c Wpecial for auto (104)....35c WG7840-D.P.S.T. (103).....35c
    We earry a complete lise of Electrad exuer diuplicate conirnis for

[^3]:    W8432-Your Cost
    W8432-Your Cost.

