ACRATONE Engineers have a new complete 1933 lines of receivers incorporating all the latest radio improvements, including “Ghost Tuning” and the use of the new type 57 and 58 Triple Grid tubes which entirely eliminate cross-talk and give a maximum of tonal quality. Automatic Volume Control, heretofore only found in the most expensive sets, is now made available to all. Of course the built-in aerial and phonograph jack features have been retained. All these features make ACRATONE the fastest selling high quality midget on the market. Sixteen models, covering every requirement, make it the most complete line of midget sets ever presented.

**Features:**

- GHOST TUNING*
- Automatic Volume Control
- Built-In Antenna
- New Triple Grid Tubes
- Phonograph Jacks
- Illuminated Full Vision Dial
- Beautiful Walnut Cabinets
- 200 to 600 Meter Models
- 200 to 2000 Meter Models
- 75 to 600 Meter Models
- Radio-Phonograph Models

*What is Ghost Tuning?

Hitherto, every set, no matter what its price, picked up all man-made static, had a sizzling, whishing noise between stations, with frequent cracking and regenerative squalls. With “GHOST TUNING,” Acratone engineers have eliminated these troubles 98%. Complete silence reigns between stations which come in like the snap of a whip. This new feature will be a revelation to your ears. It raises radio reception to the highest level of perfection.

Acratone Engineer have also developed the lowest priced and most compact radio-phonograph combination. House in a beautiful two-tone walnut cabinet, 24” high, 18” wide and 15” deep, with hinged top. Furnished with either 200-600 meter or 200-2000 meter chassis. Equipped with silent induction motor of 78 r.p.m., Acratone Hydro-Electric Pickup, radio-phonograph switch, separate volume control for phonograph, midget cup and arm rest.

Model 47, with 200-600 meter chassis for 110V. 60 cycle A.C. operation, less tubes... $33.50
NOW with NEW TYPE Tubes

**MODEL 17**

Six Tube Superheterodyne

with Automatic Volume Control

**$19 \text{ for } 220 \text{ V. A. C., }$20.50**

Cat. No. 84, 1-55, 1-56, 1-57, 1-58, 1-247 and 1-280

**Tubes Used**

Set of Universal Tubes, $3.50

Set of Arcurus Tubes, $4.50

**Selectivity**

The pre-selector stage of this receiver allows but 10 K.C. to pass while its intermediates are tuned in band pass fashion, insuring extremely fine tuning. Although this makes the circuit highly selective, it does not cut side bands, which tend to distort or ruin good reception. Every stage is carefully tuned and balanced at the factory, so that no receiver which does not perform as above described passes inspection.

**Super Sensitivity**

The owner of this receiver need not listen with marvel to his neighbor's boast of world-wide radio reception. He too can enjoy the thrill with the powerful ACRATONE SUPERHETERODYNE. Distant stations come in without fading and distortion, and sound like locals.

**Cabinet**

This splendid receiver is housed in a carefully finished walnut cabinet of real- ly enchanting design. The handsome Fleur de Lis grill has grace and beauty of lines as well as lending toward simplicity, rather than elaborateness. 17 in. high, 15 in. wide, 5¾ in. deep.

**Construction**

All the parts going into the manufacture of this receiver are of the highest quality obtainable. Only the best of standard equipment is used, assuring durability and longevity. All components are securely mounted on a heavy steel chassis.
Here is the Ultimate in Radio

MODEL 35

Acratone

'DualWave' 15 TO 600 METERS
SHORT & LONG WAVE RECEIVER

Automatic Volume Control
12" Jensen Dynamic Speaker

Visual Tuning — Dual Rectification

Superheterodyne Circuit for Transcontinental Reception. Using Push-Pull Pentode and Variable Mu Tube... with all Modern Radio Improvements. (12 Tubes in all—two 58's, two 57's, four 56's, two 247's and two 280's.)

Short-Wave Circuit from 15 to 200 Meters—for International and Other Short Wave Reception. Simply Switch Knob for Short Wave or Regular Broadcast.

This marvelous new SUPER-HETERODYNE chassis is the latest product of the ACRA-TEST Laboratories and is truly the Ultimate in Radio.

This receiver has been designed and built, from the ground up, for maximum results on both short and broadcast wave bands. It does not require operation by an "expert." All wave bands are covered by the single dial, and the change from one band to another is accomplished by simple, convenient switches. There are no "plug-in" coils to be changed.

CIRCUIT
Seven tuned circuits, each of which is set at the factory for maximum sensitivity and selectivity. Overlapping of the closely situated amateur stations completely avoided. The superheterodyne circuit is the most stable and sensitive one known and is unsurpassable for extreme distance, power and selectivity.

SHIELDING
Every part mounted on the chassis is completely enclosed in an electrostatic shield, and interstage capacity is avoided. The chassis gives the appearance of a precision built instrument costing several times its price.

TUNING
Simplified single dial for all waves, full vision, illuminated. Broadcast band calibrated in kilocycles. Smooth, positive friction vernier drive with no backlash. Visual indicator for "silent tuning." This means that you can tune in any station accurately before turning the volume on. Dualite range indicator on both models. Illuminated band indicator on Model 35 with dial numerically calibrated for short waves.

TONE CONTROL
A special feature is the continuously variable "selectone" which allows the operator to choose any tone from high treble to low base.

POWER
In this receiver you have a reservoir of power for any occasion. Local stations come in with auditorium-filling volume and distant stations come in like locals by the use of automatic volume control in the Model 35. The tremendous power of this set, always in reserve, is rarely put into full use.

CHASSIS
The carefully designed chassis of this receiver is made of the best grade No. 18 gauge cold rolled auto body steel. Electroplated in gold bronze finish. Each component is carefully and securely fastened and so spaced as to evenly distribute the weight.

Cat.
No. 35

12 TUBES

for the price of one receiver!

NEW

12 TUBES

Circles the Globe

WorldRadioHistory
Terms:

20% CASH MUST ACCOMPANY ALL ORDERS.
Our terms are strictly NET CASH. Remarkable values and extreme discounts given by us make it worth your while to buy that way.

Where full cash remittance accompanies the order, 2% discount may be deducted; otherwise a 20% deposit is required with all orders, balance C.O.D.
All goods are shipped f.o.b. New York.
WE SELL WHOLESALE ONLY.

RETURNING GOODS—A "Return Merchandise Tag" must be secured from us before any goods are returned. Returned goods must be shipped back in original containers. Write fully reason for return and give us complete instructions regarding adjustment. Merchandise that is defective within the limits of the manufacturer’s guarantee will be repaired or replaced FREE OF CHARGE. Items misused will be repaired or replaced and a reasonable charge made for such repairs.

HOW TO ORDER—Write plainly, order by catalog number and mention items desired, quantity and price. Be sure to include sufficient postage when ordering via Parcel Post, otherwise shipment will be made by express, charges collect.

EXPORT ORDERS
Orders to be shipped outside of the United States must have full remittance plus postage as the majority of countries do not have C. O. D. service. Large orders for shipment by railroad or steamer, must be paid in full, plus shipping charges by means of Irrevocable Letter of Credit or New York draft.
All our foreign shipments are understood to be delivered Ex-Warehouse or Railroad Terminal, New York City.

RATE OF EXCHANGE
Wherever the rate of exchange on foreign money is considerable, we reserve the right to add an amount sufficient to cover this difference to merchandise shipped.

Our Guarantee

WE POSITIVELY GUARANTEE each and every item in this book to be exactly as illustrated and described. We further guarantee all merchandise to be free from defects in workmanship and material. Any part or parts proving defective will be repaired or replaced promptly.

WE GUARANTEE to give you the benefit of any reductions which may take place during the month; this assures you of rock bottom prices at all times.

Due to the tremendous volume of merchandise we handle and the small margin of profit we work on, it is impossible for us to test out each piece of apparatus before shipping, and we expect the dealers to make his own minor repairs when needed. However, we will gladly repair or replace any defective merchandise, providing the dealer pays transportation as this would wipe out our profit in most cases. For any damage to merchandise in transit we expect the dealer to handle his own claim with the transportation company.

OWING TO THE HIGH COST OF HANDLING AND THE SMALL MARGIN OF PROFIT, WE CANNOT ACCEPT ANY ORDERS FOR LESS THAN $3.00.

We reserve the right to ship via express collect any orders on which insufficient postage has been remitted by customers.

We reserve the right to make refunds on any items out of stock.

Bank References:
MIDLAND MARINE BANK, NEW YORK
CORN EXCHANGE BANK, NEW YORK

MORE and more radio dealers and servicemen are learning that it pays to deal with Federated. We have thousands of letters from pleased customers who land our service. Federated is today considered the largest radio replacement parts house in the country. It carries a tremendous stock of over 3,000 items. With its huge purchasing power, Federated is able to buy right always, and pass big savings on to its customers. Our six branches, located at points of vantage on the Eastern seaboard, are maintained in the interest of speedy service, because we realize that speed is an important factor in our business. We employ an engineering staff composed of expert technicians in every field of radio—service, public address and transmitting, and these men are always at your service. Federated is constantly alert to the requirements of its customers—that’s why it has some 40,000 satisfied ones. Are you one of them?

Advertising Manager

We meet all competition

If you see any item in this catalog listed elsewhere at a lower price, we will meet this price providing it is taken from a current catalog. Simply cut out the ad and attach it to your order or state the name, issue and page of catalog in which you have seen it. We make this offer because we know that many dealers would like to concentrate their purchases with us and save transportation charges.

No Sales Tax Will Be Added to Prices Shown in This Catalog

Federated Purchaser Inc. 25 PARK PLACE, NEW YORK CITY

WorldRadioHistory
**ACRATEST**

**Silencer Kits**

*For All Makes of Automobiles except Buick, etc., with overhead valves. These use Cat. No. 6534 suppressors.*

<table>
<thead>
<tr>
<th>Cylinders</th>
<th>Cat.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>6231</td>
<td>$1.50</td>
</tr>
<tr>
<td>6</td>
<td>6232</td>
<td>$2.95</td>
</tr>
<tr>
<td>8</td>
<td>6233</td>
<td>$3.35</td>
</tr>
</tbody>
</table>

*Kits for Buick, Willy-Overland and other cars with overhead valves.*

<table>
<thead>
<tr>
<th>Cylinders</th>
<th>Cat. No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>7024</td>
<td>$1.50</td>
</tr>
<tr>
<td>6</td>
<td>7026</td>
<td>$2.90</td>
</tr>
<tr>
<td>8</td>
<td>7028</td>
<td>3.35</td>
</tr>
</tbody>
</table>

---

**ACRATEST**

**Spark Plug Suppressor**

*Silencer in weatherproof tube. Cannot short circuit or loosen. Connects from spark plug wire to spark plug.*

**Price 20c ea.**

**ACRATEST**

**Spark Plug Suppressor**

*For all Buick, Willy-Knight, and other "overhead valve" cars.*

**Price 20c ea.**

**ACRATEST**

**Distributor Suppressor**

*Used in center of distributor cap or coil. Remove distributor wire, insert split end, insert wire in other end.*

**Price 20c ea.**

---

**HERCULES**

**Flexible Car Antenna**

*Easy to Install*.

**Price $1.98**

---

**New Adjustable Length**

**I. C. A. Auto Antenna**

*To Set*

**Price $2.35**

---

**Generator Silencers**

**MODEL M**

*Fitsen case to generator or other metal part of car and connect wire to cut out the generator.*

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Mfd.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>6448</td>
<td>5</td>
<td>58c</td>
</tr>
<tr>
<td>6449</td>
<td>1</td>
<td>66c</td>
</tr>
</tbody>
</table>

---

**Ward DeLuxe Car Antenna**

*FEATURES*

1. More sensitive in most cases Excel Roof Reception.
2. Triple Action Spring Suspension.
3. Inexpensive Shock Absorbers.
4. Universally Adaptable to Every Automobile.
5. All Parts Rustproof and Sturdily built.
6. High Tension Non-Shorting Lead Wire.
7. Ward Rubber Splash-Guard Furnished with each Antenna.
8. Permanent, Efficient and Easy to Install.
9. Cannot Break or Crush.
10. Proven performance on Philco, Motorola, Majestic, General Motors, Sarton, Crosley and all other makes of Auto Radio.

*Shipping weight, 5 lbs.*

**Price $2.37**

---

**Ward Royal Automobile Antenna**

*Same in appearance and construction as the WARD DeLux Antenna, except that the trim has been omitted in order to bring it down to a popular price.*

**Price $1.98**

---

**UTAH**

**Remote Tuning and Volume Control**

*Efficient and Easily Installed Illuminated Dial*
ROLA DYNAMIC SPEAKERS

Series "K"
These are the new 1932 Rola Model K Series with greatly improved reproduction. Where previously the K series was specifically designed for use with midget sets, the new K series was engineered for public address and large auditorium work mainly. Extremely large field pots are used, giving greater magnetic strength as well as finer tone reproduction. Greater undistorted output can now be handled without overload.

Single P. P. Output
\[114 \text{ K-5} \quad 61/2 \times 51/2\] 9.00 \quad 5.95 178
\[142 \text{ K-8} \quad 91/2 \times 51/2\] 11.00 \quad 6.95 179
\[143 \text{ K-7} \quad 91/4 \times 51/2\] 12.00 \quad 7.25 181
\[144 \text{ K-9} \quad 11 \times 51/2\] 15.00 \quad 8.95 183

Equipped with either single or Push Pull transformer. Standard field coil resistance, 2500 ohms for excitation by 40 to 80 milliamperes of direct current at 70 to 150 volts.

Magisterial Dynamic Speaker
As Used in Magnificent 70, 80 and 90 Receivers. Without Output Transformer. Diameter of Cone, 9 in. Complete with connecting cable and terminal strip. Very rugged construction and suitable for replacement in other sets and for public address installations.

Cat. No. 137 $5.95

ROLA No. 106 D.C. Electro-Dynamic Loud Speaker
For 110-125 V. D.C. 1000 Ohm Field.

Waldorf Finish cabinet, 33 1/2 in. high, 23 3/4 in. wide, 18 3/4 in. deep. With Valcom de Gence embroidered metal front and side panels.

List Price $55.00

Cat. No. 106 $9.85

Series "F"
These new Rola speakers are designed for use with midget radio sets and small electric phonographs. They are highly suited for multi-speaker installations, such as in hotels, schools and hospitals. Overall diameter of "F" series is 9 inches.

Model F-2, for 45 tubes in push-pull.

Cat. No. 186 $3.75

Model F-P, for one 47 Pentode.

Cat. No. 187 $3.75

Model M-U, Unit less input transformer.

Cat. No. 188 $3.25

Model F-S, same as Model F-P, but 6 in. overall diameter.

Cat. No. 199 $2.75

Magnavox D.C. Dynamic Speaker Chassis
Made by the pioneer speaker manufacturers with all the precision that goes into quality manufacturing. The frequency response range of these speakers is from 35 to 10,000 cycles, giving perfect reproduction from the lowest to the highest tones.

Required only 40 ma at 90 to 200 volts. For single 247, 233, 238 Pentode.

Cat. No. 147 $2.95

Dynamic Speaker Field Coils

Cat. No. Speaker Our No.

6549 Colonial 33 \quad 1.00
1791 Freedman 80, 85 \quad 1.45
1782 Jensen 1,000 Ohms \quad 1.45
1787 Peerless 7,000 Ohms \quad 1.25
6819 Radiola 104 \quad 1.50
6192 Radiola 80, 82, Westinghouse \quad 1.50
1748 RCA Phonograph 1,000 Ohms \quad 2.00
1745 RCA Phonograph 8 Ohms \quad 5.00
6022 Victor R54, 94, 954, 76 \quad 1.80

Midget Set Table

This radio table of simple construction, yet handsome design, finds its place in the home where space is a factor. Constructed of selected gum stock and handsome in lighted. 22 1/2 in. high, 13 in. wide, 17 1/4 in. long.

Cat. No. 507 $2.50

Utah 12-Inch Stadium A. C. Dynamic Chassis

SPECIAL MODEL

110 Volt A.C. or 60 Cycle

A superior heavy duty unit for home, theatre, large hall or outdoor use. Capable of handling extreme volume without distortion. Employs Westinghouse Dry D i s s Rectifier and extra heavy transformer suitable for 110 volts 25 and 60 cycle A.C. current light-socket supply for field excitation.

Individually packed. Shipping weight, 24 lbs.

List $30.00

Cat. No. 166 $8.95

Genuine Victor D.C. Dynamic Speaker Chassis

Complete with plug for connection to the Victor amplifier.


Cat. No. 149 $5.95

RADIOLA

Model 106 Speaker D. C. Chassis

This speaker has a field resistance of 1000 ohms and is designed for 110 volt D.C. operation. It can, however, be used as a choke in A.C. Sets or a field excluder unit built to furnish the necessary excitation. Comes equipped with output transformer designed to match any single tube up to the UX-260. Voice Coil impedance 1.5 to 1.1 ohms. 10 driver in. overall cone diameter.

Cat. No. 114 $5.95

Colonial 10' D. C. Dynamic Speaker Chassis

900 OHM FIELD

WITH 4 FEET PLUG AND CABLE

For push-pull 245. Used in all Colonial and Silvertone 1911 sets.

Cat. No. 133 $3.50

August-September, 1932

Page 7

WorldRadioHistory
**RCA Photophone Dynamic Speaker**

Here is the genuine RCA Photophone Dynamic Speaker chassis used with Western Electric Sound Systems in theaters. Suitable for public address installations in dance halls, auditoriums, churches, schools, etc.

Cat. No. 161  
**$7.50**  
Less Baffle

For A.C. current this Speaker has a field exciter, Cat. No. 85, that uses 2-380 tubes.

Speaker as above with Exciter.  
**LESS TUBES**

Cat. No. 110  
**$13.25**  
**$9.50**

**SPECIAL!**  
**Offered for the First Time**

RCA Photophone Dynamic Speaker With 6 Volt Field for Public Address Auto Trucks

Genuine Photophone Speaker with 6 volt field coil for use with a 6 or 12 volt battery. For electioneering and advertising trucks.

Cat. No. 152  
**$15.00 each**

**OPERADIO**  
Automobile Dynamic Speaker

"The Last Word in Auto Dynamics"

Field Resistance 6 Ohms.

For Push-Pull 238

Cat. No. 153  
**Our Price $3.95**

The product of one of the oldest speaker manufacturers, this auto dynamic is very sensitive and will carry ample volume. Housed in an attractive black crystalline metal case 9" in diameter, with 3 mounting brackets.

**Sonochorde A.C. Dynamic Speaker**

The New Sonochorde Electro Dynamic Speaker represents a distinct advance in sound reproduction and mechanical design. A new method of tone suspension allows for a small air gap resulting in a highly concentrated magnetic field. A hum bucking ring which balances out the induced A.C. current in the voice coil and built into every unit.

A.C. Electro Dynamic Speaker for 110 V. 60-60  
Cycles A.C. Operation.

Cat. No. 340  
**Our Price $9.50**

Also Furnished With 2,500 Ohm D.C. Field

Cat. No. 541  
**Our Price $3.95**

**Utah Dynamic Auto Speaker**

8 In. Pull Dynamic Speaker of Utah's high standard.  
Field Speakers supplied with 12 in. leads.  

List Price: **$10.00**

Available for use with 112A, 171A, 23, or 23A tubes in SINGLE or PUSH-PULL OUTPUT, housed in an attractive metal case with movable side-brackets which facilitate mounting at any desirable angle.

Cat. No. Type  
105 Single 171, 232, 236, 238  
106 F.P. 236, 238  
**445**

**A.C. Field Exciter**

Here is a unit that has been looked for far and wide and is finally presented to you as an efficient field exciter. It uses 2-280 tubes in parallel, giving an output of 110 m.t. at 160 volts. It is suitable to use this to run either dynamic speakers or dynamic units. It is built small and compact and to take as little space as possible.

Cat. No. 85  
**Our Price $5.50**  
Less Tubes

**OPERADIO**  
"Reflex Field" Speaker Chassis

**Overall Diameter, 9 In.**

The unique construction of the Operadio Dynamic Speaker places it in a class by itself. The field coil pot is located in front of the diaphragm instead of the rear and is supported by extra heavy rigid cast iron frame, making the speaker rattle proof and ultra sensitive. Supplied in standard field ohmages and for all power tubes, at a sensationally low price.

**SINGLE OUTPUT**

Cat. No. Tubes Field Ohms  
106 171A, 245 2500  
101 245 2500  
103 171A, 245 1800, tapped at 500  
104 247 1800, tapped at 500

**P. P. OUTPUT**

105 171A, 245 2500  
106 245 2500

All at the Remarkably Low Price of  
**$2.65 each**

**Jensen "Concert" D.C. Electro-Dynamic Speaker**

Model D7 D.C.  
2500 ohm Field  
18 in. Diameter  
6 ohm Voice Cell

These units contain suitable push-pull transformers and are absolutely hum-free. Connect directly to the set — no outside wires.

As most standard manufactured A.C. sets are engineered for D.C. speakers of this ohmage, the possibilities for connection with this really good speaker are unlimited.

The wise merchant or repairman will take advantage of this exceptional "buy." Never before offered at a cut price. The available quantity at this price is limited Act quickly.

List $27.50  
Cat. No. 121  
**Our Price $5.75**

**CARTON OF 2, $11.00**

Original factory packing of 2 in a carton.

**Our Price $5.50**
Kolster K-6 Speaker

Sty.,
12 1/4" high.
16" wide.
7" deep.

List Price
$35.00

Cat. No. 134

Our Price $3.35 ea.

Equipped with a highly sensitive oversize magnet and a driving unit that is one of the finest, the Kolster responds instantly to the faintest impulse. It faithfully reproduces both voice and orchestras from the faintest whisper to the fullest volume of a brass band. Yet, due to its special construction, the Kolster cannot rattle or blare at any frequencies, and it always brings out the lower notes in their full musical value.

RCA-Radiola

Speaker 103

R C A Loud Speaker 103 beautiful in appearance and super in its ability to reproduce music faithfully. Its frame and pedestal are molded in one piece and completely decorative design of the instrument.

Cat. No. 103
$3.43

Premier Magnetic Speaker

Cat. No. 5366

Our Price $1.50

FEATURE SPECIFICATIONS
UNI®—A new development—simple in construction and extremely efficient—magnet of “Chrome” steel.
CORE—6 in. diameter standard made from moisture proof fabric formed into specially designed shape.
MOUNTING—Non-metallic brackets requiring a maximum span at its widest pole of 6½ inches.
QUALITY—The Premier Magnetic Speaker is highly efficient and covers the tone range in a surprisingly satisfactory manner. Tone quality is excellent, and those that are skeptical about such results from a good magnetic speaker have an agreeable surprise in store when they test the “Premier.”

STEWART WARNER

Magnetic Speaker

Chassis

It is the only magnetic speaker having laminated pole pieces increasing the magnetic flux. Coil impedance 4500 ohms, maximum 1250, 246, 260, or 221 tubes.

Cat. No. 150

Our Price $1.95

For many years this has been the standard of comparison in speakers. A short time ago this speaker chassis was used by such well known manufacturers as Amplicon, Newcombe-Hawley, Marco, Stewart-Warner, etc. This speaker reproduces the full musical scale with as much fidelity and quality as a dynamic. Its ability to handle a great deal of volume without rattle or distortion makes it applicable for use as a monitor or wall address speaker. Special cobalt steel magnet and oversize coils make for faithful reproduction. Will handle 450 volts without burning out.

FROST FONES
The Standard of Quality
2,000 Ohm

Frost Fones continue to maintain their popularity with the radio public. There is a very definite demand for thoroughly high grade phones at a reasonable price and Frost Fones satisfy the exacting demands of those wishing to obtain extremely sensitive instruments. Light in weight, comfortable to wear and easily adjusted. All materials used are of the very highest quality, and these phones are made in a plate white, for over thirty-five years has manufactured high grade telephone equipment. For testing radio parts or complete sets—for lining up condensers—for peaking intermediate transformers or any similar uses these phonos may be depended upon to give perfect satisfaction.

In cases where extremely weak signals are to be recorded, special arrangement of the relation of diaphragm to pole pieces is affected to give very desirable results. Shells are of polished aluminum with black composition cap.

Cat. No. 6200
$1.65

Eismann Magneto Phones
Cat. No. 5723
$1.45

Genuine Brandes Superior Phones—2,000 Ohms
Cat. No. 3607
$1.25

Genuine Baldwin Type C Phones
Cat. No. 7123
$3.95 pr.

Genuine Nathaniel Baldwin Units
Cat. No. 4262

Our Price 50c

We Can Furnish Cones and Voice Assemblies for the Following Standard Dynamic Speakers

<table>
<thead>
<tr>
<th>Make of Speaker</th>
<th>Size</th>
<th>Cat. No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atwater Kent</td>
<td>11&quot;</td>
<td>559</td>
<td>$2.75</td>
</tr>
<tr>
<td>Colonial 33</td>
<td></td>
<td>553</td>
<td>2.55</td>
</tr>
<tr>
<td>Deutar</td>
<td>9&quot;</td>
<td>554</td>
<td>1.50</td>
</tr>
<tr>
<td>Eveready</td>
<td>9&quot;</td>
<td>555</td>
<td>1.90</td>
</tr>
<tr>
<td>Eveready</td>
<td>11&quot;</td>
<td>556</td>
<td>2.25</td>
</tr>
<tr>
<td>Farrand</td>
<td>7&quot;</td>
<td>557</td>
<td>2.25</td>
</tr>
<tr>
<td>Farrand Ind. Dyn.</td>
<td>11&quot;</td>
<td>558</td>
<td>1.35</td>
</tr>
<tr>
<td>First National</td>
<td>9&quot;</td>
<td>559</td>
<td>1.90</td>
</tr>
<tr>
<td>Freed-Eisemann</td>
<td></td>
<td>560</td>
<td>2.60</td>
</tr>
<tr>
<td>Farnsworth, NFB</td>
<td></td>
<td>562</td>
<td>2.25</td>
</tr>
<tr>
<td>Jensen DC7</td>
<td></td>
<td>563</td>
<td>2.25</td>
</tr>
<tr>
<td>Kolster</td>
<td>11&quot;</td>
<td>4269</td>
<td>1.5</td>
</tr>
<tr>
<td>Magnavox</td>
<td>7&quot;</td>
<td>565</td>
<td>2.25</td>
</tr>
<tr>
<td>Majestic 70, 90</td>
<td></td>
<td>566</td>
<td>1.80</td>
</tr>
<tr>
<td>Newcohn-Hawley</td>
<td>7&quot;</td>
<td>567</td>
<td>2.25</td>
</tr>
<tr>
<td>Oxford</td>
<td>7&quot;</td>
<td>568</td>
<td>1.95</td>
</tr>
<tr>
<td>Oxford</td>
<td>11&quot;</td>
<td>569</td>
<td>2.25</td>
</tr>
<tr>
<td>Philco, any model</td>
<td></td>
<td>570</td>
<td>1.50</td>
</tr>
<tr>
<td>Pearco</td>
<td></td>
<td>571</td>
<td>1.90</td>
</tr>
<tr>
<td>Sterling</td>
<td>7&quot;</td>
<td>572</td>
<td>2.25</td>
</tr>
<tr>
<td>Stromberg Carlson</td>
<td>11&quot;</td>
<td>573</td>
<td>2.25</td>
</tr>
<tr>
<td>Symington</td>
<td>9&quot;</td>
<td>574</td>
<td>1.95</td>
</tr>
<tr>
<td>Symington</td>
<td>11&quot;</td>
<td>575</td>
<td>2.10</td>
</tr>
<tr>
<td>Peerless copper coil</td>
<td>7&quot;</td>
<td>576</td>
<td>2.50</td>
</tr>
<tr>
<td>Peerless copper coil</td>
<td>9&quot;</td>
<td>577</td>
<td>2.75</td>
</tr>
<tr>
<td>Peerless copper coil</td>
<td>11&quot;</td>
<td>578</td>
<td>2.75</td>
</tr>
<tr>
<td>Peerless wire wound</td>
<td>7&quot;</td>
<td>579</td>
<td>1.45</td>
</tr>
<tr>
<td>Peerless wire wound</td>
<td>9&quot;</td>
<td>580</td>
<td>1.65</td>
</tr>
<tr>
<td>Peerless wire wound coil</td>
<td>15&quot;</td>
<td>581</td>
<td>2.75</td>
</tr>
<tr>
<td>Temple</td>
<td>7&quot;</td>
<td>582</td>
<td>2.40</td>
</tr>
<tr>
<td>Temple</td>
<td>10&quot;</td>
<td>583</td>
<td>2.75</td>
</tr>
<tr>
<td>Temple Auditorium</td>
<td></td>
<td>584</td>
<td>2.75</td>
</tr>
<tr>
<td>Utah</td>
<td>7&quot;</td>
<td>585</td>
<td>1.90</td>
</tr>
<tr>
<td>RCA 106</td>
<td></td>
<td>586</td>
<td>2.00</td>
</tr>
<tr>
<td>RCA 104</td>
<td></td>
<td>587</td>
<td>2.60</td>
</tr>
<tr>
<td>RCA 105</td>
<td></td>
<td>588</td>
<td>2.80</td>
</tr>
<tr>
<td>VICTOR RE32, etc.</td>
<td></td>
<td>6519</td>
<td>1.55</td>
</tr>
<tr>
<td>Wright DeCosters</td>
<td></td>
<td>658</td>
<td>1.95</td>
</tr>
<tr>
<td>Wright DeCosters</td>
<td>10&quot;</td>
<td>589</td>
<td>2.75</td>
</tr>
<tr>
<td>Zenith</td>
<td>11&quot;</td>
<td>591</td>
<td>2.25</td>
</tr>
</tbody>
</table>

Victor Cone and Voice Coil

For Victor Models R32, R52, RE45 and RE75

These are the famous Stevens Burley cones edged with soft velour. Voluting is for quick installation and precisely fitted.

Cat. No. 6519

Our Price $1.35

Phonotex Diaphragm for Kolster Magnetic and Dynamic Speakers

11½ in. Diaphragm with soft leather border.

Cat. No. 4269

15c ea.

Can be used for replacement on other magnetic speakers.

Cat. No. 4289A—Voice Coil for Above, 55c
**ARCTURUS TUBES**

Arcturus Radio Tubes have earned a reputation for absolute dependability. Their country-wide popularity is based on extreme efficiency of operation and unusual length of service.

Arcturus Tubes carry the endorsement of the Federated Purchaser and are guaranteed for a period of six months from date of sale.

Quick-Action—Arcturus pioneered the original quick-action tube. Immunity to Overloads—Arcturus Blue Tubes resist overload as high as 50%. Less Hum—Comparative tests show that Arcturus Tubes have 52% less hum than other tubes.

Long Life—Arcturus Tubes have established an unchallenged world's record for long life. Life-Like Tone—Comparison in any receiver shows the improved tone of Arcturus Blue Tubes.

**124—Screen Grid**

Another 7 second Arcturus tube.

List Price, $1.65

<table>
<thead>
<tr>
<th>No.</th>
<th>Type</th>
<th>List</th>
<th>Net</th>
</tr>
</thead>
<tbody>
<tr>
<td>126</td>
<td>Amplifier</td>
<td>$ .85</td>
<td>$ .45</td>
</tr>
<tr>
<td>145</td>
<td>Power Amplifier</td>
<td>1.10</td>
<td>.59</td>
</tr>
<tr>
<td>150</td>
<td>Power Amplifier</td>
<td>6.20</td>
<td>2.28</td>
</tr>
<tr>
<td>130</td>
<td>2V. Automobile Tube</td>
<td>1.65</td>
<td>.87</td>
</tr>
<tr>
<td>UXO99</td>
<td>Detector-Amplifier</td>
<td>2.55</td>
<td>1.23</td>
</tr>
<tr>
<td>UV099</td>
<td>Detector-Amplifier</td>
<td>1.75</td>
<td>1.75</td>
</tr>
<tr>
<td>101A</td>
<td>Detector-Amplifier</td>
<td>.80</td>
<td>.42</td>
</tr>
<tr>
<td>015A</td>
<td>Detector-Amplifier</td>
<td>1.55</td>
<td>.82</td>
</tr>
<tr>
<td>125</td>
<td>Screen Grid Amplifier</td>
<td>3.15</td>
<td>1.66</td>
</tr>
<tr>
<td>071A</td>
<td>Power Amplifier</td>
<td>.95</td>
<td>.51</td>
</tr>
<tr>
<td>131</td>
<td>2 Volt Amplifier</td>
<td>1.65</td>
<td>.87</td>
</tr>
<tr>
<td>180</td>
<td>Full Wave Rectifier</td>
<td>1.05</td>
<td>.55</td>
</tr>
</tbody>
</table>

**132—2-Volt Screen Grid**

List Price, $1.35

<table>
<thead>
<tr>
<th>No.</th>
<th>Type</th>
<th>List</th>
<th>Net</th>
</tr>
</thead>
<tbody>
<tr>
<td>56</td>
<td>Detector-Amplifier</td>
<td>$1.30</td>
<td>$ .66</td>
</tr>
<tr>
<td>57</td>
<td>Triple Grid Amplifier-Detector</td>
<td>1.65</td>
<td>.87</td>
</tr>
<tr>
<td>58</td>
<td>Triple Grid Super-Control Amplifier</td>
<td>1.65</td>
<td>.87</td>
</tr>
<tr>
<td>82</td>
<td>Amplifier</td>
<td>1.30</td>
<td>.69</td>
</tr>
<tr>
<td>46</td>
<td>Class B Amplifier</td>
<td>1.55</td>
<td>.82</td>
</tr>
<tr>
<td>134</td>
<td>Super-Control R.F. Pentode</td>
<td>2.80</td>
<td>1.48</td>
</tr>
<tr>
<td>208</td>
<td>Wunderlich</td>
<td>3.00</td>
<td>1.76</td>
</tr>
</tbody>
</table>

**New Arcturus Tubes**

**15 Volt A.C. Types**

The tubes below all take 15 volts for lighting the filament.

<table>
<thead>
<tr>
<th>No.</th>
<th>Type</th>
<th>List</th>
<th>Net</th>
</tr>
</thead>
<tbody>
<tr>
<td>26</td>
<td>Detector</td>
<td>$4.00</td>
<td>$2.32</td>
</tr>
<tr>
<td>28</td>
<td>Amplifier</td>
<td>3.00</td>
<td>1.59</td>
</tr>
<tr>
<td>48</td>
<td>Amplifier</td>
<td>3.00</td>
<td>1.59</td>
</tr>
<tr>
<td>30</td>
<td>Power Amplifier</td>
<td>3.00</td>
<td>1.59</td>
</tr>
<tr>
<td>32</td>
<td>High Mu</td>
<td>3.00</td>
<td>1.59</td>
</tr>
<tr>
<td>22</td>
<td>Screen Grid</td>
<td>7.50</td>
<td>3.97</td>
</tr>
</tbody>
</table>

**Additional Arcturus Tubes**

- **133—2-Volt Pentode**
  - List Price $2.50
  - $1.48

- **137—6-Volt General Purpose**
  - List Price $1.50
  - 95c

- **Type “PZ” (247) Pentode**
  - List Price $1.00
  - 85c

- **551 Variable Mu**
  - This is the new “Variable Mu” tube. Its use will eliminate cross talk, distortion, hum and receiver noise.
  - List Price $1.65
  - 87c
**100% Guaranteed Tubes**

**Free Replacement for Six Months**

These tubes, the product of one of the largest tube manufacturers in the country, are absolutely "first" quality and meter tested to the highest specifications. Tubes not found equal to the performance of any other tubes on the market will be replaced. Packed in attractive 2-color boxes.

**OVER 100,000 OF THESE TUBES HAVE BEEN SOLD BY US DURING THE LAST SIX MONTHS**

---

**A. C. Field Exciter**

**For Dynamic Speakers and Units**

This exciter is of the latest type, designed for either the '63 or '63 mercury vapor rectifiers. A switch is provided by which the exciter may be adapted for either of these tubes, depending upon the output required. The '63 tube delivers as much as two 280's, and the '63 gives an additional increase of 40% over the '63.

**Special Purpose Triad Tubes**

<table>
<thead>
<tr>
<th>Type</th>
<th>List</th>
<th>Our</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-Tel</td>
<td>$7.50</td>
<td>$3.38</td>
</tr>
<tr>
<td>T-866</td>
<td>3.50</td>
<td>1.58</td>
</tr>
<tr>
<td>C.N.A.</td>
<td>9.00</td>
<td>6.33</td>
</tr>
<tr>
<td>Pec 2</td>
<td>13.50</td>
<td>8.69</td>
</tr>
<tr>
<td>Pec 3</td>
<td>18.00</td>
<td>11.03</td>
</tr>
<tr>
<td>2060</td>
<td>7.50</td>
<td>4.65</td>
</tr>
<tr>
<td>1924</td>
<td>5.00</td>
<td>3.08</td>
</tr>
<tr>
<td>282</td>
<td>3.50</td>
<td>2.21</td>
</tr>
<tr>
<td>283</td>
<td>4.00</td>
<td>2.48</td>
</tr>
<tr>
<td>285</td>
<td>5.00</td>
<td>3.12</td>
</tr>
<tr>
<td>286</td>
<td>6.00</td>
<td>3.65</td>
</tr>
<tr>
<td>287</td>
<td>7.00</td>
<td>4.38</td>
</tr>
</tbody>
</table>

**Cat. No. 7147** $5.50 Exes Tube

**Complete Descriptive folder sent on request**

---

**PHOTO-ELECTRIC**

**Radiootron UX-867**

**RATING AND DATA**

- **A. C. Supply Voltage (maximum):** 200 volts
- **Anode Current (maximum):** 20 Microamperes
- **Window Diameter:** 1 1/2 inches
- **Approximate Sensitivity: Dynamic:** 30 Microamperes
- **Maximum Overall Dimensions:**
  - **Socket, UX or Navy Type Diameter:** .315 in.
  - **Length:** 1 1/4 in.

**For Experimental Purposes Only**

Photo-Electric Radiootron UX-867 is a highly sensitive, general purpose photo-cell of the central anode type. An output of from 1 to 5 volts can be obtained with excellent fidelity.

**USES FOR UX-867**

This tube can be used for talking movie sound equipment, for light intensity measurement, for television purposes and also may be used in operating a relay to indicate when lights are on or off, and also for burglar alarm, and for experimental purposes.

**Cat. No. 867 — List Price $37.50**

**Our Price $2.95**

---

**Cunningham TUBES**

Every tube we ship is carefully tested and guaranteed to be fresh New Stock, in perfect condition, sold with the manufacturer's warranty. Specify RCA or Cunningham.

**Type** | **Description** | **List Price** | **Our Price** |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Detector Amplifier</td>
<td>$3.09</td>
<td>$1.76</td>
</tr>
<tr>
<td>13</td>
<td>Detector Amplifier</td>
<td>2.80</td>
<td>1.65</td>
</tr>
<tr>
<td>46</td>
<td>Class B Amplifier</td>
<td>1.65</td>
<td>.91</td>
</tr>
<tr>
<td>55</td>
<td>Duo Diode Detector</td>
<td>1.65</td>
<td>.91</td>
</tr>
<tr>
<td>56</td>
<td>General Purpose Triode</td>
<td>1.50</td>
<td>.77</td>
</tr>
<tr>
<td>57</td>
<td>Triple Grid Amplifier</td>
<td>1.65</td>
<td>.91</td>
</tr>
<tr>
<td>99</td>
<td>Triple Grid Super Control F. O.</td>
<td>1.65</td>
<td>.91</td>
</tr>
<tr>
<td>112A</td>
<td>Amplifier</td>
<td>1.58</td>
<td>.91</td>
</tr>
<tr>
<td>120</td>
<td>Amplifier</td>
<td>1.50</td>
<td>.77</td>
</tr>
<tr>
<td>171A</td>
<td>Amplifier</td>
<td>.95</td>
<td>.61</td>
</tr>
<tr>
<td>199V</td>
<td>Detector Amplifier</td>
<td>2.75</td>
<td>1.61</td>
</tr>
<tr>
<td>199UX</td>
<td>Detector Amplifier</td>
<td>1.50</td>
<td>.77</td>
</tr>
<tr>
<td>200A</td>
<td>Super Detector</td>
<td>4.00</td>
<td>2.83</td>
</tr>
<tr>
<td>201A</td>
<td>Detector Amplifier</td>
<td>1.05</td>
<td>.61</td>
</tr>
<tr>
<td>210</td>
<td>Power Amplifier</td>
<td>7.00</td>
<td>4.12</td>
</tr>
<tr>
<td>222</td>
<td>3-Volt Tube</td>
<td>2.05</td>
<td>1.96</td>
</tr>
<tr>
<td>224</td>
<td>Screen Grid</td>
<td>1.03</td>
<td>.61</td>
</tr>
<tr>
<td>224A</td>
<td>Quicke Hater B.G.</td>
<td>1.65</td>
<td>.91</td>
</tr>
<tr>
<td>224B</td>
<td>A. C. Amplifier</td>
<td>.85</td>
<td>.59</td>
</tr>
<tr>
<td>227</td>
<td>A. C. Amplifier</td>
<td>1.05</td>
<td>.61</td>
</tr>
<tr>
<td>233</td>
<td>2-Volt Power Amplifier</td>
<td>.70</td>
<td>.40</td>
</tr>
<tr>
<td>237</td>
<td>2-Volt Output Tube</td>
<td>.65</td>
<td>.39</td>
</tr>
<tr>
<td>232</td>
<td>2-Volt Output Tube</td>
<td>.65</td>
<td>.39</td>
</tr>
<tr>
<td>232S</td>
<td>2-Volt Output Tube</td>
<td>.58</td>
<td>.35</td>
</tr>
<tr>
<td>233</td>
<td>D. C. Amplifier</td>
<td>.95</td>
<td>.61</td>
</tr>
<tr>
<td>235</td>
<td>Super Cont. B. G.</td>
<td>1.65</td>
<td>.91</td>
</tr>
<tr>
<td>236</td>
<td>B. C. R. F. P. M. D. C.</td>
<td>1.65</td>
<td>.91</td>
</tr>
<tr>
<td>237</td>
<td>D. C. Hater B. G.</td>
<td>1.85</td>
<td>1.10</td>
</tr>
<tr>
<td>240</td>
<td>Hi-Mu Amplifier</td>
<td>.80</td>
<td>.53</td>
</tr>
<tr>
<td>246</td>
<td>Power Amplifier</td>
<td>1.05</td>
<td>.61</td>
</tr>
<tr>
<td>247</td>
<td>Power Amplifier</td>
<td>1.00</td>
<td>.61</td>
</tr>
<tr>
<td>250</td>
<td>Power Amplifier</td>
<td>1.90</td>
<td>1.16</td>
</tr>
<tr>
<td>260</td>
<td>Power Amplifier</td>
<td>2.70</td>
<td>1.66</td>
</tr>
<tr>
<td>261</td>
<td>Half Wave Rectifier</td>
<td>5.20</td>
<td>3.06</td>
</tr>
<tr>
<td>262</td>
<td>Full Wave Rectifier</td>
<td>5.20</td>
<td>3.06</td>
</tr>
<tr>
<td>263</td>
<td>Full Wave Rectifier</td>
<td>5.20</td>
<td>3.06</td>
</tr>
<tr>
<td>264</td>
<td>Rect</td>
<td>.50</td>
<td>.35</td>
</tr>
<tr>
<td>265</td>
<td>Variable Mu</td>
<td>1.65</td>
<td>.94</td>
</tr>
<tr>
<td>266</td>
<td>Voltage Regulator</td>
<td>2.80</td>
<td>1.88</td>
</tr>
<tr>
<td>267</td>
<td>Ballast Tube</td>
<td>6.70</td>
<td>2.88</td>
</tr>
</tbody>
</table>
Power Transformers

Here is at last a most complete line of replacement power transformers, which are the result of the most exhaustive research and compilation of records which embrace every electrical set ever placed on the market. The transformers below will suit over 90% of the receivers on the market today. They have been manufactured to our specifications by the largest and best known manufacturers in the country and have a wide margin of safety and are of improved design. They will make a set function like it never functioned before and once an Acra-Matic power transformer is installed in a set, your customer’s transformer troubles are over. The transformers have been so designed that they are universal in application, that is they can be mounted in any position, vertical or horizontal. The laminations are of a special steel designed by our engineering staff and their purest electrolytic copper wire is used for the winding. Every dealer and serviceman should have several of these types of power transformers in his stock, so that he is prepared at all times to replace the power transformer in any set without the slightest delay. Our transformers may not be the cheapest on the market, but they are the best that money can buy no matter what you pay for them. Order an assortment and convince yourself of their special merits.

Universal Midget Replacement Power Transformer
For All Midgets Using Up to 4-224, 1-245 or Pentode and 1-280 Tubes
Supplies the following voltages:
- 2 3/4 V. at 7 amperes
- 575 V. at 2 amperes
- 575 V. at 80 mils.
Rectified: 225 V. at 30 mils.
1 & 2 — High
2 — Center tap of high
4 & 5 — V. (224)
7 & 8 — T. of 6 and 8
9 & 10 — Primary
6 & 8 — 2 3/4 V. 7 A. (244)
Size 3 3/4 in. x 3 1/4 in. x 3 5/8 in. Cadmium Plated Frame. This midget power transformer, although of small dimensions, is very rugged, and will furnish sufficient current for 4 screen grids, 1-245 or Pentode amplifier, and 4 x 4 rectifier tubes, without overheating. It will hit 90% of the midget sets on the market, like Oliver Junior, DeWald Audion, Melora, Radi- diate, Croxley, Audion, etc., having the power transformer mounted in an upright position. For midgets using side-mounted power transformer, use our Cat. No. 5187, having the same characteristics as this one except for method of mounting.
Cat. No. 5186
Our Price $1.19

“250” Power Transformer
Supplies Filament and Plate for 6-227 or 224, 2-250 and 2-281
With 1200 V. C.T. Plate Winding at 160 Mils.
This transformer is ideal for transmitting and public address operation. It has a 2 1/2 volt winding at 12 amperes, 2-7/16 volt windings at 3 amperes and a 1200 volt center-tapped plate winding at 160 millampere. Lug terminal arrangement identical to our Cat. No. 6190.
Cat. No. 3700
Our Price $1.75

Heavy Duty Side Mounting Midget Power Transformer
For Sets Using 4-224 or 227, 2-245 or 247 and 1-280
Size: 3 3/4 x 3 1/2 in.
Mounting holes 3 1/2 in. C. to C.
Cat. No. 2532
Our Price $2.40

Supplies the following voltages:
- 2 3/4 V. at 7 amperes
- 550 V. Hi. at 2 A. C.T. to shield.
- 2 3/4 V. at 3 amperes.
Features:
1—Electrostatic Shiel'd.
2—Heavily insulated coil
3—Special silicon core.
A sturdy, compact power unit capable of supplying filament and B current to any receiver using the above mentioned tubes. Easy to install anywhere. This transformer is built to a price but for long life and steady performance. No laminations hum.

“250” Power Transformer
Supplies Filament and Plate for 6-227 or 224, 2-250 and 2-281
2 & 4 — 7/16 V. (224)
3 — C. T. of above.
6 & 8 — 3/4 V. (224)
7 & 8 — 2 3/4 V. (224)
6 & 8 — 2 3/4 V. 7 A. (244)
Size: 3 3/4 x 3 1/4 in.
Mounting holes 3 1/2 in. C. to C.
Cat. No. 5190
Our Price $3.50
**Acratest**

**Midget Set Power Transformer**

For All Midget Sets Using 5-224, 2-245 and 1-280 Tubes

Can also be used as replacement in other sets where space is limited.

With Upright Mounting.

**Price $2.85**

Supplies the following voltages: 2½ V. at 8½ amperes, 2½ V. at 2 amperes, 1½ V. at 3 amperes. 636 V. at 120 mills. 600 V. at 70 mills.

Size only 4 in. x 4 in. x 3½ in. Equipped with safety fuse block. For 110-120 v. 50-60 cycles A.C.

Cat. No. 5194

**$1.45**

This transformer is particularly useful in oscillators, short wave sets, short wave converters, power supplies for tuners, pre-heatrers for tubes, tube checkers, mike and photo-cell amplifiers. Very compact construction. Carefully designed for continuous operation under normal load and may be operated at 25% overload for reasonable lengths of time.

**Cat. No. 6250**

**$1.95**

This transformer is a perfect replacement in about 90 per cent of all standard tube checkers. Many experimenters are looking for such a transformer as this for laboratory work. The fixed voltages of this transformer are 1½, 2½, 5, 6 and 7½ volts, though the 2 volt and 3 volt tubes may be run off the 1½ and 2½ volt windings as their current is low and on low current the voltage goes higher.

**Cat. No. 6024**

**Size: 3½ in. x 3½ in. x 2 in.**

**Our Price $1.45**

**Acratest**

**Side Mounting Midget Power Transformer**

For All Midget Sets Using Up to 4-224, 1-245 or Pentode and 1-280.

Fully Enclosed in Cadmium Plated Case

**Price $3.85**

Thordarson 250-281 Power Amplifier Transformer

Supplies: 2½ V. at 7 A, 7½ V. at 2½ A., 110 V. at 2 A, 240 V. at 2 A. C.T. Same appearance as No. 6918 above.

Cat. No. 7187

**$3.95**

**Acratest**

**Filament and Plate Supply Transformer**

For Short Wave Adapters and Oscillators

Supplies 2½ V. for 4-227 Tubes and 165 V. at 20 Mills.

1 and 2—High Voltage

3 and 4—3½ V. (227)

Cat. No. 5194

**$1.45**

**Acratest**

**Tube Tester Replacement Transformer**

Supplies 1½, 2½, 5, 6 and 7½ Volts at 2 Amps

All from a single common

**Cat. No. 6024**

**Size: 3½ in. x 3½ in. x 2 in.**

**Our Price $1.45**

**Acratest**

**25 Cycle Midget Transformer**

For 224, 225 or 551, 245 or 247, and 280 Tubes

Upright Mounting

4½ in. long, 3½ in. wide, 4½ in. high

**Cat. No. 5454**

**$2.95**

**Acratest**

**Midget Receiver Replacement Power Transformer**

For Sets Using up to 2-224, 235 or 551, 1-245 or 247 and 1-280 Tubes

Supplies the following voltages: 2½ V. at 8½ amperes, 2½ V. at 2 amperes, 1½ V. at 3 amperes. 636 V. at 120 mills. Rectified: 375 V. at 120 mills.

Size only 4 in. x 4 in. x 3½ in. Equipped with safety fuse block. For 110-120 v. 50-60 cycles A.C.

**Price $1.35 ea.**

**Acratest**

**Replacement Transformer**

With Universal Mounting Brackets

For Sets Using Up to 5-226, 1-227, 2-250 and 2-281 Tubes.

Size: 4½ in. x 3½ x 4½ in.

**Cat. No. 5193**

**Price $3.95**
Type P—9 Tubes

Size 4x3\(\frac{3}{4}\)x3\(\frac{3}{4}\)"
Chassis opening 2x2\(\frac{1}{2}\)"

1 & 2—Primary
3 & 4—2\(\frac{1}{2}\) V. at 125 A
5 & 6—225 V. at 60 Mils
6—C. T. of High grounded

Type P—12 Tubes

Size 4x3\(\frac{3}{4}\)x3\(\frac{3}{4}\)"
Chassis opening 3x3\(\frac{3}{4}\)"

1 & 2—Primary
3 & 4—2\(\frac{1}{2}\) V. at 18 A
5—C. T. of above
6—C. T. of above
7 & 8—2\(\frac{1}{2}\) V. at 225 V.
9 & 10—2\(\frac{1}{2}\) V. at 1\(\frac{1}{2}\) A.
11 & 12—225 V. at 110 Mils
6—C. T. of High grounded
8—C. T. of above

Our Price $1.95

Our Price $2.85

Type P—9 Tubes

Size 4x3\(\frac{3}{4}\)x3\(\frac{3}{4}\)"
Chassis opening 2x1\(\frac{1}{4}\)"

1 & 2—Primary
3 & 4—1\(\frac{1}{2}\) V. at 7\(\frac{1}{2}\) A
5—C. T. of High grounded
9 & 10—2\(\frac{1}{2}\) V. at 225 V.
11—225 V. at 110 Mils
6—C. T. of above

Type P—12 Tubes

Size 4x3\(\frac{3}{4}\)x3\(\frac{3}{4}\)"
Chassis opening 3x3\(\frac{3}{4}\)"

1 & 2—Primary
3 & 4—1\(\frac{1}{2}\) V. at 18 A
5—C. T. of above
6—C. T. of above
7 & 8—1\(\frac{1}{2}\) V. at 225 V.
9 & 10—1\(\frac{1}{2}\) V. at 1\(\frac{1}{2}\) A.
11 & 12—225 V. at 110 Mils
6—C. T. of High grounded
8—C. T. of above

Our Price $1.95

Our Price $2.85

Filo Replacing Power Transformers

$2.85 each

Radiant Step-Down Transformer

Primary 220 120 Adjustable
Secondary 110/120 160 Watts.

Our Price $4.25

Step-Down Transformer

Input: 220-250 Volt, 50-60 Cycle, A. C.
Output: 110-120 Volt
Rated at 160-180 Watt
For use in localities where 220 volt, 60 cycle A. C. current is supplied. These transformers adapt current of that voltage to A. C. Radio or other Electric Appliance which consumes up to 180 watts. En- Size: 4x3\(\frac{3}{4}\)x5\(\frac{3}{4}\) In. Case and easily Shipping wgt. 6 lbs. mounted.

Our Price $3.15

Kolster-Earl Power Transformer

For Replacement in Receivers Using 220, 227, 77A and 228 Tubes.

1 & 2—Primary
3 & 4—Plate
5 & 6—Plate
7 & 8—C. T. of Plate
9 & 10—220 V.

3\(\frac{3}{4}\) in. long, 3 in. wide, 12 & 13—115 V.
3\(\frac{3}{4}\) in. tall.

Weight 2 lbs.

A very popular replacement transformer which can be used in many of the A. C. receivers like Earl, Freer, Kolster, Phildarmonic, King, etc. Mounting Bracket.

Cat. No. 2559 $1.95

Acradest Replacement Power Transformers

Type F—5 Tubes

3-224, 1-247 and 1-280

Size 4x3\(\frac{3}{4}\)x3\(\frac{3}{4}\)"
Chassis opening 2x2\(\frac{1}{2}\)"

1 & 2—Primary
3 & 4—2\(\frac{1}{2}\) V. at 7\(\frac{1}{2}\) A
5 & 6—225 V. at 60 Mils
6—C. T. of High grounded

Our Price $1.95

Type F—8 Tubes

5-224, 2-247 and 1-280

Size 4x3\(\frac{3}{4}\)x3\(\frac{3}{4}\)"
Chassis opening 2x2\(\frac{1}{2}\)"

1 & 10—2\(\frac{1}{2}\) V. at 9 A.
6—C. T. of above
2 & 11—2\(\frac{1}{2}\) V. at 3\(\frac{1}{2}\) A.
7—C. T. of above
3 & 12—6 V. (280)
4 & 12—675 V. at 90 Mils
8—C. T. of High
5 & 16—Primary

Our Price $2.25

Type F—12 Tubes

9-224, 2-247 and 1-280

Size 4x3\(\frac{3}{4}\)x3\(\frac{3}{4}\)"
Chassis opening 2x3"

1 & 9—2\(\frac{1}{2}\) V. at 18 A.
6—C. T. of above
2 & 10—2\(\frac{1}{2}\) V. at 3\(\frac{1}{2}\) A.
7—C. T. of above
3 & 11—2\(\frac{1}{2}\) V. (280)
4 & 12—675 V. at 110 Mils
6—C. T. of High grounded to frame
8 & 15—Primary

Our Price $2.35

Our Price $2.35

(Continued from First Column)

(Continued from First Column)

©WorldRadioHistory
Microphone Shielded Input Transformer

This unit is the result of many months of designing and testing. The frequency is exceptionally flat, 30 to 10,000 cycles, over 7000 cycles. Primary is split 100 ohms each side of the secondary impedance is of the order of 400,000 ohms. A larger unit than this listing will cost the same price. The size is 3½ x 3½ x 3½ inches. Matches impedance of all standard type carbon 2-button microphones.

Cat. No. 2625 $2.50

Two button. Unshielded Microphone Transformer

Same characteristics as our No. 2625

Cat. No. 5596 $1.25

Two button unshielded microphone transformer with 600 ohm winding for standard pickup and a center tapped secondary so that it may be used with push-pull tubes.

Cat. No. 7145 $1.95

Universal Replacement Filament and Power Transformer

Oversized Power Supply

For 227, 224, 226 or Pentode and 220 tubes can be used as replacement in 90% of receivers in the market today. All taps mounted on one side of the transformer. Adaptable for 105 to 125 volts, 60 cycle A.C.

Size: 4½" long, 1½" wide, 3½" high.

Supplies the following voltages:
- 2¾ volts at 3 Amps.
- 2½ volts at 3 Amps.
- 2¼ volts at 3 Amps.
- 1½ volts at 3 Amps.
- 1¼ volts at 3 Amps.

Rectified: 200v. at 100 mils.

Cat. No. 2560 $3.85

The center tap of the 227 filament winding and the center tap of the high tension winding are grounded to frame. The 2560 Replacement Power Transformer is designed to be used for replacement purposes in all radio sets which use the following combination of tubes:

- 227's with 226's or a combination of
- 227's and 226's.
- 224's.
- 245's.
- 246's.
- 248's.

The Transformer is designed to supply both plate and filament voltages. The Transformer will deliver 100 M.A. at 200 volts when a standard 260 ohm choke is used, and with a 3 MFD. Condenser ahead of the first choke. The primary is tapped at 105, 115 and 125 volts to take care of any voltage conditions.

Cat. No. 6031

Width, 3¾ in.

Height, 3½ in.

Weight, 4½ lbs.

Length, 3¾ in.

$2.85

2½ Volt Filament Transformer

Delivers 2½ V. at 5½ amps.

The T-290 Transformer finds its principal use in short wave sets where it is desirable to light the filament of two or three tubes. Excellent for pre-headers.

Primary: 115 volts.

Secondary: 2⅞ volts at 5.50 Amps.

Length, 3½".

Height, 2⅞".

Weight, 1 lb.

Cat. No. 6022

Our Price $95 ea.

2½ Volt Filament Transformer

Delivering 12 Amps. Center Tapped

This transformer is of the same appearance as the above except that it delivers 12 amperes and is center tapped. Very useful for pre-headers, short wave converters, tuners and tube testers.

Cat. No. 6620

Our Price $1.10 ea.

7½ Volt Filament Transformer

Same appearance and size as above, but delivers 7½ volts at 8 amps.

For transmitters, amplifiers, etc.

95c

General Replacement Power Transformer

For Sets Using: 4-226, 1-227, 2-171A and 1-280 Tubes Complete Hook-up enclosed with each transformer.

This transformer is designed primarily for the earlier model receivers for which it is very difficult to obtain replacements because of the discontinue of manufacture. Five to seven tubes can be operated in connection with this power unit as follows: 3 to 4 No. 226, 1 No. 227, 1 or 2 No. 171A, 1 No. 280. The high voltage is 600, center tapped, 75 MA. Assembled in brackets for quick installation and equipped with solder lug providing convenient method of connecting into

Cat. No. 6031

Width, 3¾ in.

Height, 3½ in.

Weight, 4½ lbs.

Length, 3¾ in.

$2.85

BRAND NEW VICTOR Replacement Power Transformer

For Models: R-32, R-52, RE-48 and RE-75

Cat. No. 6830

Our Price $2.95

Do not confuse this transformer with surplus and reconditioned transformers which we and other mail order houses have been selling for as low as $1.95. This transformer is the current product of one of the largest transformer manufacturers in the country who have been making quality products for 18 years. The original manufacturers specifications have been not only adhered to but a greater safety factor added and the transformer finished better all around, so that it has eye value besides standing up under the severest test. When you install this transformer in a set you may rest assured that it will stay installed as long as the set lasts. The electrical characteristics of this transformer are as follows: 1½ Volts for 5-226 tubes; 2⅞ V. for 227, 2⅞ V. for 2-245 tubes, 8 V. G. T. for 280 rectifier and 800 V. G. T. at 150 mls. high. Can is 4½ x 4½ x 3½ inches. Weight 8 lbs.

Surplus Victor Power Transformer

These transformers have been removed from discontinue Victor Amplifiers, and are guaranteed to be in perfect working order. They are scrathed here and there due to handling. Not perfectly perfect. A marvelous buy at $1.95.

Cat. No. 2358 $1.95

General Purpose Replacement Power Transformer

For Kolster, Brandes, Earl, Freed, and Atwater Kent Sets Using—227, 224, 245 and 280 Tubes

Extra heavy 2½ V. winding will supply filament voltage for up to 9-227 or 224 tubes. Size of tube: 6¼ in. x 4½ in. x 3½ in.

Cat. No. 3728 $2.50

Two No. 10 wires: 2½ V. (227, 224).

Two stranded tinned wires on one side: High grade stranded tinned copper wire on same side: O. T. of high.

Two No. 18 wires on same side: 5 volts (280).

Pair of No. 20 twisted wires on same side: 1½ V. Tap of primary.

No. 20 twisted wires on one side: Primary 120 V.

Two No. 18 wires on same side: 2½ Volts (245).

Pair of twisted No. 18 wires: O. T., of 2½ V. (245).
Complete AK 37, 40, 42, 44 Power Pack Replacements

These packs are housed in a can identical with the original, but without the cover, as the old cover will fit. Price according to original specifications and guaranteed. Does not include replacement strip or socket.

Since its introduction by us to the trade this power pack has met with the highest praise and approval. Each set is new, supplied with manuals, etc., in complete original cartons.

For 230, 245, 260, 280 and Arcturus 15-volt Tubes

Dongan Shielded Power Transformer

For 224, 227, 245, 280 and Arcturus 15-volt Tubes

Cat. No. 6504

15x5/8x2 3/4" Weight, 5 lbs.

Our Price $4.50

Genuine Earl and Fred Power Transformers

For Model Nos. 21, 22, 55 and 58

Cat. No. 2522

Our Net Price $3.00

Complete with bracket and strip.


Cat. No. 3738

Our Price $4.50

Aceastest

Universal Replacement Power Transformer With Universal Mounting Brackets

ELECTROSTATICALLY SHIELDED

For Sets Using 227, 2245 and 1-280 Tubes

Height, 3 1/8 in; Width, 3 5/8 in; Thickness, 4 1/8 in; Mounting Holes, 3/4" x 3/16", Vertical, 3 1/4" x 3/8".; Weight, 6 3/4 lbs.

Cat. No. 5414

Our Price $2.25

Power Packs for Other A. K. Models

Cat. No. Models Sets

$3.95

$9.00

Replacement Power Transformer for Atwater Kent Model 37 Sets

Built to highest specifications and with a safety factor.

Cat. No. 2642

$2.75

Earl and Kolster Power Transformer

Same transformer as above with bracket ready for mounting in set.

For 6—245, 2—277, 2—171A and 1—280

Cat. No. 2575

Our Price $2.25

For 25 Cycles, $3.00

Kolster Power Packs

5528 6J
5529 6K
5530 6M
5531 6P
5532 6R

Supply filament and plate voltages for above sets. Can be used for other sets and for electrification of battery sets.

Cat. No. 6013

Our Price $9.85 ea.

Atwater Kent 55, 55C Replacement Power Transformer

Our Price $4.95
RADIOLA POWER TRANSFORMERS

Made for replacement in Radiola sets but can be utilized in other sets using the same tubes. All brand new merchandise.

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Part No.</th>
<th>Set No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>9261</td>
<td>8235</td>
<td>17, 19, 33, 61</td>
<td>$1.95</td>
</tr>
<tr>
<td>3272</td>
<td>8172</td>
<td>44, 48</td>
<td>$2.25</td>
</tr>
<tr>
<td>3279</td>
<td>GW202</td>
<td>44, 46, 220V-A.C.</td>
<td>$2.50</td>
</tr>
<tr>
<td>3281</td>
<td>61950</td>
<td>46, 48</td>
<td>$2.50</td>
</tr>
<tr>
<td>3261</td>
<td>8344</td>
<td>80, 62</td>
<td>$2.65</td>
</tr>
<tr>
<td>2977</td>
<td>GW147</td>
<td>65</td>
<td>$3.85</td>
</tr>
<tr>
<td>3876</td>
<td>61735</td>
<td>80, 82, 84</td>
<td>$3.85</td>
</tr>
<tr>
<td>5430</td>
<td>RCA-Victor</td>
<td>34, 35, 39, 37</td>
<td>$3.85</td>
</tr>
<tr>
<td>5251</td>
<td>RCA-Victor</td>
<td>RE-14, 15</td>
<td>$3.85</td>
</tr>
<tr>
<td>5976</td>
<td>Radiola 104</td>
<td>speaker 6009</td>
<td>$4.50</td>
</tr>
<tr>
<td>5919</td>
<td>8239</td>
<td>41</td>
<td>$5.50</td>
</tr>
</tbody>
</table>

CROSLEY Power Transformer

Replacement Part No. 8145

For Sets Using 3—226 Tubes
1—227 Tube
1—171A Tube
1—280 Tube
For 110—60 cycle A.C.
Size 4x3½x2¾ in.

Cat. No. 5075

95c ea.

Red—High Frequency Volt. Black (with thin braid)—Prl.
White—3 V. (280) 60, 60, 60, 25 cycle
Double Wire—5 V. C.T. Heavy Black—½ V. (228)
Medium Black—½ V. (227).
Thick Black—5 V. C.T. (171).

Earl Transformer Coil and Terminal Strip

Ready to be assembled with laminations of old power transformers.
For Earl Models 31, 32, 32C and 41.
Fried Models 76, 79, 700, 65, 90, 95.
Cat. No. 3172

$2.25

We Also Carry in Stock the Following Power Transformer Coils:

Receiver Model Coil Cat. No.
Columbia—500 2002 3173
Columbia-Kolster—660 4235 3174
Kolster—25-cycle for sets requiring 1100, 1½, 1¼, 1¼ and 2½ V. 3448 3176
Kolster—25-cycle transformer using 550, 5, 1½, 2¼ V. 3558 3176
Kolster—K34 3504 3177
Earl—25-cycle 78, 79, 95, 47 3178
Earl—220 Volts 21, 22, 55 3179
Earl—320 Volts 21, 22, 55 3180

Our Price $2.00 ea.

Freshman Filament Supply Transformer For 226, 227, 224 and 171A Tubes

Has following leads:

1½ V. (226), 2½ V. (227, C.T. (171A) 3½ V. (112A)

Cat. No. 3724

95c ea.

General Replacement Power Transformer

For Sets using: 5-227, 2-171A and 1-280 Tubes.

Our Price

$1.95

Weight, 6 lbs.
1-2—5 V. (2500)
2 & 12—HI (250 V. at 500 mols.)
3-125 V. tap of primary
4 & 13—5 V. (171A)
8-13 & 13
11-13 T. of 3 & 12
2 A.C. Transformer for sets that will stand abuse and not overheat in the worst conditions. Silicon steel laminations are tightly packed and held in place by iron frames to eliminate vibration. Coil wound with pure electrolytic copper and all terminals are brought out to bakelite strips and fastened to lugs for easy connections. Mounting feet make it easy to install this transformer.

Filament and Plate Supply Transformers FOR 216, 250 and 281 TUBES

1 & 2—500 Volts
3 & 6—½ Volts
4—C. T. of 5 & 6
5—½ Volts
6—C. T. of 5 & 6
9 & 10—Primary
11 & 15—Bias Resistance

4¾ in. long, ¾ in. wide, ¾ in. tall
Weight, 6 lbs.

Cat. No. 5074

$1.50

RADIOLA Power Transformer For Radiola 104 Speaker

Primary operated in series with UV76 Ballast tube.
Furnishes filament and plate current for 2-281, 1-210 and 3-109 tubes in series. 3½ V high, 4½ Volts. 2—8.4 lbs. Weight, 10 lbs.

Cat. No. 6009

$4.50

Filament Supply Transformers

The ideal transformer for testing panels and for converting battery sets for A.C. operation, with B Eliminator.

Cat. No. 2810
2½ V. 9 Amp.
$1.95

2914
1½ V. 7 Amp.
$2.25

Zenith Power Transformer

For Models 52, 53, 54, 55, 60, 61, 62, 64, 67, 602, 613, 622, 642, 672, 71, 72, 73, 77, 522, 532, 542

ELECTROSTATICALLY SHIELDED

Part No. 96-96

Employing 227, 245 and 280 tubes
6½ high, 6½ wide, 4" deep.
Weight 10 lbs.

Cat. No. 5422

$4.50

ZE7 Filament Transformer

Supplies:
2½ Volts at 6 Amp.
1½ Volts at 7 Amp.
7½ Volts at 3 Amp.
3½ in. long, ¾ in. wide, ¾ in. high.

Cat. No. 5736

$1.25

Filament and Plate Supply Transformer

for 226 Tube. For B Eliminators and conversion of D. C. dynamic speakers to A. C.

600 V. C. T. at 50 Mils, 5 V. at 2 amp.

Cat. No. 3838

$1.85
**Acralest Transformers**

**ACRALEST Audio are already ranked among the finest available. Much care is exercised to see that only the highest quality core and coil go into their construction.**

**Acralest Shielded Push-Pull Audio Transformers Permalloy Laminations**

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>2285</td>
<td>Audio Transformer, ratio 4/1, for use in 146 or 2nd stage........ 9.95</td>
<td></td>
</tr>
<tr>
<td>2699</td>
<td>Push-Pull Output, ratio 20/1, for use with 171A, 245, 260, 261, for connection direct to 10 ohm voice coil of dynamic. .35</td>
<td></td>
</tr>
<tr>
<td>2586</td>
<td>Push-Pull Output for use with above tubes, ratio 30/1, for connection to high impedance voice coil of dynamic. 1.80</td>
<td></td>
</tr>
<tr>
<td>2566</td>
<td>Small heavy duty 80 henry choke, 125 MILA, matches above transformers. .. 10</td>
<td></td>
</tr>
</tbody>
</table>

**Acralest Midget Dynamic Speaker Output Transformer**

This type of transformer is standard equipment on such midget dynamic speakers as Bob Jones, Oxford, Guam, Magnavox, Utah and others. These transformers are extremely popular because of their efficiency and small size, 1 1/2 x 3 x 2 1/2 inches. A good many users of midget sets have an early edition of this transformer which proved unsatisfactory and resulted in poor quality and burn-out. Replace them with the new and improved type. They are all designed for standard voice coils.

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Description</th>
<th>Our Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>2282</td>
<td>Single tube output for use with 171A and 245, .......... 7.90</td>
<td></td>
</tr>
<tr>
<td>2283</td>
<td>Single Pentode output for use with 233 and 247, ........... 7.00</td>
<td></td>
</tr>
<tr>
<td>2284</td>
<td>Push-Pull Output for use with 171A and 245, .......... 7.00</td>
<td></td>
</tr>
<tr>
<td>2285</td>
<td>Push-Pull Pentode output for use with 233 and 247, .......... 7.00</td>
<td></td>
</tr>
</tbody>
</table>

**THORDARSON 30 Henry Choke**

100 MILS AT 200 OHMS

<table>
<thead>
<tr>
<th>32 x 3/4 in.</th>
<th>Weight 2 lbs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cat. No. 7166</td>
<td>39c</td>
</tr>
</tbody>
</table>

**Unshielded Push-Pull Audio Transformers With Permalloy Laminations**

**CONCERTONE PUSH-PULL AUDIO TRANSFORMERS**

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>2673-74-57</td>
<td>2647</td>
<td></td>
</tr>
</tbody>
</table>

Their use in audio circuits gives increased sensitivity, greater distance, and insures a good volume of clear, pure and undistorted reproduction of programs, with all the vital harmonics and rich overtones so essential to true tonal quality. Heavily insulated throughout, safe for use with power tubes, assembled and sealed into a beautiful black enamelled metal case.

The primary impedance is extremely high and exactly correct for A.C. tubes. Sealing makes it impervious to moisture and eliminates the possibility of opens, either primary or secondary.

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>2667</td>
<td>Push-pull Input, lugs on bottom, for use with 171A, 245, 250, 247, 231, 233, 240, .......... $1.45</td>
<td></td>
</tr>
<tr>
<td>2680</td>
<td>Push-pull Output, lugs on bottom, ratio 30/1, for use with 171A, 245, 260, 261, for connection to 10 ohm voice coil of dynamic 1.45</td>
<td></td>
</tr>
<tr>
<td>2679</td>
<td>Push-pull Input, lugs on side, for use with 171A, 245, 250, 247, 231, 233, 235, 240, recommended for use where fine tone quality is wanted, due to the flat response curve of this transformer 1.80</td>
<td></td>
</tr>
<tr>
<td>2676</td>
<td>Push-pull Output, lugs on one side and tip jacks on other, ratio 30/1, for connection direct to dynamic voice coil, for use with 171A, 245, 250, 231, .......... 1.45</td>
<td></td>
</tr>
<tr>
<td>2684</td>
<td>Push-pull Pentode Output, for connection direct to voice coil of dynamic, for use with 247, 233, 238, .......... 1.85</td>
<td></td>
</tr>
<tr>
<td>2714</td>
<td>30 Henry, 165 MILA Choke, with lugs on bottom like 2647, .......... 1.20</td>
<td></td>
</tr>
</tbody>
</table>

**Acraste Choke**

30 Henry, 150 MILA

Lugs terminals on bottom.

Cat. No. 3714

**Our Price $1.20**

Unshielded Push-Pull Audio Transformers

**Horizontal Mount**

Here is a compact transformer which equals in performance any one on the market today. The ease of mounting and wiring of these instruments makes them suitable for almost any set. The highest quality silicon steel and pure drawn copper go into this splendid transformer.

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>5417</td>
<td>3-1 Audio with leads and mounting brackets for 171A, 245, 247 or 250, .......... .65</td>
<td></td>
</tr>
<tr>
<td>5418</td>
<td>Push-Pull pentode output to 10 ohm voice coil .......... .80</td>
<td></td>
</tr>
<tr>
<td>2567</td>
<td>4-1 Tapped Input with leads and mounting brackets for 171A, 245, 247 or 250 amplifiers .......... .85</td>
<td></td>
</tr>
</tbody>
</table>

**Acraste Unshielded Push-Pull Audio Transformers With Permalloy Laminations**

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>5831</td>
<td>3 to 1 Straight Audio for use with 1st or 2nd stage .......... 0.65</td>
<td></td>
</tr>
<tr>
<td>5834</td>
<td>Push-Pull Input for use with all standard tubes .......... 1.20</td>
<td></td>
</tr>
<tr>
<td>5870</td>
<td>Push-Pull Output for use with 171A, 245, 250, 231, for connection to magnetic speakers or to dynamics having built-in input transformers .......... 1.00</td>
<td></td>
</tr>
<tr>
<td>5855</td>
<td>Push-Pull Output for use with above tubes, ratio 30/1 for connection to 10 ohm voice coil of dynamic .......... 1.00</td>
<td></td>
</tr>
<tr>
<td>5838</td>
<td>Push-Pull Output for use with the above tubes, ratio 20/1 for connection to high impedance voice coil of dynamics .......... 1.00</td>
<td></td>
</tr>
<tr>
<td>5860</td>
<td>Push-Pull Output for use with Pentode tubes only (247, 233, 235), for connection direct to voice coil for dynamics .......... 1.00</td>
<td></td>
</tr>
</tbody>
</table>

**Acraste RF Choke**

85 Millihenries

With Mounting Brackets

Cat. No. 2871

**17c ea.; $1.75 doz.**
Microphone or Phonograph Input Transformer

Large Audio Mounting

This is an excellent transformer for use on any amplifier or audio receiver. It matches the standard microphone via, 200 ohms on each side of center tap for double button microphones, and a 1,000 ohm phonograph pick-up. The secondary of this transformer has an impedance of 280,000 ohms.

Cat. No. 6915

Our Price $1.95

Filter Choke to Match

15 Hertz at 150 Mils. identical in appearance to the 6915 transformer.

Cat. No. 6916 95c ea.

Push Pull Output Transformer to Match No. 6915 Input

This transformer is used for coupling a stage of 227, 226 or 201A in push-pull to a stage of 171A, 245, 247, 210 or 250 in push-pull. Both the primary and secondary of this transformer are center-tapped. Excellent for use in public address amplifiers where fine quality is necessary.

Cat. No. 2729

Our Price $2.75

Thordarson Interstage Double Audio Transformer

This transformer is used for coupling a stage of 227, 226 or 201A in push-pull to a stage of 171A, 245, 247, 210 or 250 in push-pull. Both the primary and secondary of this transformer are center-tapped. Excellent for use in public address amplifiers where fine quality is necessary.

Cat. No. 2729

Our Price $2.75

Thordarson Push-Pull Transformer

From Output of 2-245, 2-247, or 2-250 to any reasonable push-pull input. The 9 ohm winding is for connection to the voice coil of the 9 ohm speaker. The 18 ohm winding is for connection to the voice coil of the 18 ohm speaker.

Cat. No. 5620

Our Price $5.60

Thordarson Push-Pull Output Choke

Same size and appearance, matched in same tubes.

Cat. No. 5621

Our Price $9.50

Concertone Sealed Audio Transformer

For Highest Quality Reproduction Over Entire Musical Scale

Cat. No. 6030

Ratio, 3 to 1 3-1/16 in. High 2-11/16 in. Wide 3/4 in. Deep, incl. Terminals Mounting Hole Centers 224-1, 2 in Weight, 2 1/2 lbs.

Our Price $1.85

Shielded Universal Output Transformer

For Use With All Types of Tubes, Coupled to Either Voice Coil or High Impedance

Cat. No. 6029

Width, 3-1/16" Length, 2-11/16" Height, 3/8" Mounting Hole 2x1/16" Centers, Weight, 2 1/2 lbs.

Our Price $2.85

T. C. A. Push-Pull Input Audio Transformer

Standard input replacement audio transformer used in Push Pull formation employing 171, 245 and 250 type tubes. Core is of permalloy steel laminations bound by convenient mounting bracket which also serves as a shield. Dimensions: 2x2x1/4".

Cat. No. 5658

Our Price 75c
Universal Replacement Audio Transformer

A small and compact transformer, ideally adapted to tight places and can be used in any set, A.C. or D.C., using straight audio amplification. It has two sets of brackets for horizontal or vertical mounting. Size, 1¼ in. high, 2½ in. wide and 2½ in. deep. Weight, 4½ lb.

RCA Matched Push-Pull Input Transformer and Output Choke

Used in all Radiolas but are small and compact and can be used in any set. Can be mounted horizontally or vertically.

**INPUT**
- Terminal 1—Grid
- Terminal 2—Plate

**OUTPUT**
- Terminal 1—Plate and Speaker
- Terminal 2—Supply

**CHOKES**
- Terminal 1—Plate and Speaker
- Terminal 2—Supply

**Price**
- Cat. No. 2556 $49c per pair

**Output Choke Only, Sold Separately**
- Cat. No. 2557 15c ea.

Universal Push-Pull Input Transformers

An ideal replacement job because of its compact size, efficiency and low price. Puts under sub-panel of practically every set, including midges. Universal mounting brackets. Approximately 3 in. cube. Wt. 1 lb.

New Universal Tapped Output Transformer

For Use with All Types of Tubes, Coupled to Either Voice Coil or High Impedance

Engineering ingenuity has endowed this world-patented output transformer with features insuring flexibility beyond the average conception, together with quality and workmanship expected only in a transformer of much higher price. It is Universal in every sense of the word—it can be used for coupling any combination of tubes (Nos. 171, 246 or the new 247) or single tube or push-pull) to any dynamic or magnetic speaker either low, medium or high impedance voice coil. A patented bracket permits mounting in any position.

The windings are thoroughly impregnated. Each transformer is supplied with complete instructions for installing, including impedance chart.

**Our Price**
- Cat. No. 6028 $1.05 ea.

Victor Audio Transformer With Pick-up Coil Winding

For Replacement in All Victor Sets
Can be used for any tube of high impedance. Has special winding for phonograph pick-up. Magnetically shielded preventing inter-stage feed-back. RATIO 3¼:1.

Terminals are numbered:
- 1—Phone coil
- 2—Bias
- 3—Ground
- 4—Plate
- 5—Grid

**Our Price**
- Cat. No. 2581 75c

**Price**
- Cat. No. 2518 95c Each

DYNAMIC Output Transformer

for Coupling 171, 246, 255 to Voice Coil
for single tube output on set

**Price**
- Cat. No. 2637 35c ea.

**Price**
- Cat. No. 2515 85c Each

BRUNSWICK Low Impedance Input Transformer

For low impedance phone pickups and used in Brunswick Models 32 and 42.

**Price**
- Cat. No. 7204 $1.35

Stromberg Carlson Choke

30 Henries, 60 Mils Feriality Laminations D. C. Resistance 1009 Ohms

**Price**
- Cat. No. 3718 55c

Stromberg Carlson Filter Chokes


**Price**
- Cat. No. 5252 65c

1/4 Amp. D. C. Choke

For Power Supplies and D.C. sets. 4 in long, 2¾ in. wide. 6% in. tall. Weight 11 lbs. Bakelite terminal strip.

**Price**
- Cat. No. 5118 90c

ERLA Audio Transformer

Fully Shielded

**Price**
- Cat. No. 2515 85c Each

SANGAMO Quality Transformer

Type "CXIII" Push-Pull Output Transformer. The impedance of this transformer is designed to match UX-171 and GX-371 and UX-250 and GX-350 power tubes.

**List Price**
- Cat. No. 3568 $1.15
Atwater Kent Replacement Transformers
Cat. No. For Models
6866 20, 30, 25, 37
6896 41, 1st audio
6897 41, 2nd audio
P.P. Input
7057 40-42-46 Audio...... .50c
7058 46 Input.............. .50c

Amertram Audio Transformer
Volume and Tone Quality
Cat. No. 2577
$95 each

Double Audio Transformer
Cat. No. 2512

RCA-VICTOR Output Transformer
Output to 10 Ohm Voice Coil
For Radiola 48, 47 and 66. Can also be used in N. 198 Speaker with 2 1/10 mfd. condensers.
Part No. 6019
1/2"x3/4"x3 in. tall.
Cat. No. 5625

Our Price $1.40

ARL AND FREED Audio Transformer
For Model 41 Receiver
Also used in Freed Model 56
Cat. No. 3720
$1.50

Push-Pull Input Transformer for above models, in same can.
Cat. No. 3726

Our Price $1.85

KOLSTER Double Audio Pack
Cat. No.
5587
$1.95

Part No. A90002. Used in Models K20 and K21. Ratio 3/4 to 1 D.C. Resistance Pts., 1500 ohms each, Sec. 7250 ohms each. Lead in yellow spaghetti to core of both transformers. Transformers mounted at right angle to each other. 3½" long, 2" wide, 3½" tall.

Victor Push-Pull Audio Transformer
Terminals are numbered:
Input
1—Plate
2—B plus
3—Ground
4 & 5—Grid
Output
1 & 2—Leud speaker moving coil
2—B plus
3 & 5—Plate
Can be used with 171A, 245 or 260 type tubes.
Electrostatically shielded. Impregnated against laminating vibration, assuring amplification on all frequencies.
Output Mates Moving Coil on All Dynamic Speakers
Cat. No. 5744

Our Price 90c Per Pair

Kolster Double Choke
Part No. A58010
Used in Models 65, 66, 68, 69, 61,F
Cat. No. 5543

Our Price $1.95

Kolster Output Choke
100 Mills tapped at 50
Same dimensions as Audio Transformer.
Cat. No. 3723
95c

Superior Shielded Audio Transformer
A real quality job for pure tone and volume.
Ratio 3/4 to 1
Cat. No. 2513
Price 69c

RCA Double Filter Chokes
Contains Two 30 Henry 30 Mill Chokes
This heavy duty, rugged, double Filte Choke is ex- cellent for all types of filter circuits and experimental work in receiving sets, power amplifiers, eliminat- ors, transmitters and vari- ous other purposes. Made by General Electric 5/4 to 1/2 C. Company for Radio Corpor- ation of America, and is RCA Replacement No. 8333 for the Radiola 33, 18 and 17.
Cat. No.
2500

Our Price 48c

RCA Speaker Filter
Protects the voice coil of magneto and dyna- mics. Prevents muffling and prevents them from blowing out. Clarifies tone. Hand- some bronze case and 8 ft. silk cord.
Part No.
G.W.69
Cat. No. 6889
75c

Grebe Audio Transformer
Contains 4% silicon steel laminations. Excellent for Public Address Systems. 3/4 in. long, 3/4 in. wide, 4 in. tall. Weight: 2 lbs.
Cat. No. 5105
95c ea.

Grebe Input Audio Transformer
Same Size and Appearance as the Audio Transformer Shown Above.
Cat. No. 6651
$1.50 ea.

Kolster First Audio and Interstage Pack
Cat. No. 3334
$3.85

Part No. 13506. Used in Models 803 and 805. Mounted on steel base, with all extra leads. 6" long, 3½" wide, 3½" tall.

Eagle Push-Pull Output Transformers
Shielded Output
No. 2514 $1.50
Unshielded Output
No. 2517 95c
No Liquid, Lightweight—Long Life, Compact

SELF HEALING
Surge limiting characteristics. Unlike wax paper condensers the chemical features of these condensers are such that they will limit high voltage surges when the set is turned on or off thus preventing to a large extent burst in tubes and paper condensers. Where only rated at 600 volts peak, these units will withstand momentary over-voltages as high as 600 volts without producing any detrimental effects on the condenser. The electrolyte of Dry Farads condensers is such that when the condenser is broken down due to the application of over-voltage, it will heal itself as soon as the over-voltage is removed.

Summary of Why Acratest Dry Farads Should Be Used:
1. Low cost per microfarad per volt rating.
2. High voltage rating.
3. Low Voltage leakage.
4. No liquids to run or leak out.
5. Long life.
6. Saving of space, less space required per microfarad than paper or similar condensers.

Multiple Anode Upright Units, Type M
Peak Volts 500 Mounted with Rings
4¼" High

Single Section Electrolytic Condensers
Type I—Inverted
Diameter 1¼" Peak Volts 500

Mounting Brackets for Cardboard Condensers

C Bias Condensers for Pentode Tubes

Cardboard Container Electrolytic Condensers

Tubular Pigtail Electrolytics
These low voltage tubulars embody all the characteristics of the 600 volt Acrates Electrolytics. They are hermetically enclosed in a non-hygrosopic tube sealed at both ends. Connections are made by means of the pilots at each end. Polarity is indicated by the wax color at the ends, the positive having red wax and the negative black. These units are highly efficient as C Biases for Pentode tubes.

Acratest “Power” Filter Electrolytic Condensers
800 volts working, 1000 volts peak
These newly developed electrolytics make possible the construction of transmitters and power amplifiers at extremely low cost. These condensers are very compact for their capacity enabling their use in any outfit.

Features
1. High capacity.
2. Low leakage.
3. Puncture-proof.
4. Self-healing.
5. Long life.
7. Excellent Filter action.

Price 5c Each
Acratest has a high standard of accuracy and efficiency for all paper dielectric condensers. In general all new condensers are wound non-inductively of pure linen paper and tinfoil, especially processed to insure maximum insulation resistance in excess of that required by the N. E. M. A. standards. All condensers are conservatively rated to insure long life performance and maximum results.

- Wax sealed paper dielectric sections coated with hard black wax which thoroughly protects sections from moisture, equipped with two insulated stranded wire leads and very useful for the service man in repairing sections for filter blocks or bypass condensers.

- A complete series of condensers to fill almost any by-pass requirement. Very useful and employed in almost all popular circuits. Very practical, conservatively rated and will continuously operate at the D.C. used under proper conditions. Non-inductively wound, freedom from leakage and the utmost durability.

### Acratest Non-Inductive Hangup Replacement Sections

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Cap.</th>
<th>D.C.W.V.</th>
<th>Our Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>2991</td>
<td>.25</td>
<td>200</td>
<td>$0.18</td>
</tr>
<tr>
<td>2993</td>
<td>.50</td>
<td>200</td>
<td>$0.22</td>
</tr>
<tr>
<td>2995</td>
<td>1.00</td>
<td>200</td>
<td>$0.34</td>
</tr>
<tr>
<td>2999</td>
<td>1.25</td>
<td>200</td>
<td>$0.54</td>
</tr>
<tr>
<td>3000</td>
<td>1.50</td>
<td>300</td>
<td>$0.72</td>
</tr>
<tr>
<td>3001</td>
<td>1.50</td>
<td>300</td>
<td>$0.72</td>
</tr>
<tr>
<td>3003</td>
<td>.30</td>
<td>400</td>
<td>$0.40</td>
</tr>
<tr>
<td>3005</td>
<td>.50</td>
<td>400</td>
<td>$0.72</td>
</tr>
<tr>
<td>3007</td>
<td>.50</td>
<td>400</td>
<td>$0.72</td>
</tr>
<tr>
<td>3009</td>
<td>.50</td>
<td>400</td>
<td>$0.72</td>
</tr>
<tr>
<td>3011</td>
<td>.50</td>
<td>400</td>
<td>$0.72</td>
</tr>
<tr>
<td>3013</td>
<td>.50</td>
<td>400</td>
<td>$0.72</td>
</tr>
<tr>
<td>3015</td>
<td>.50</td>
<td>400</td>
<td>$0.72</td>
</tr>
<tr>
<td>3017</td>
<td>.50</td>
<td>400</td>
<td>$0.72</td>
</tr>
<tr>
<td>3019</td>
<td>.50</td>
<td>400</td>
<td>$0.72</td>
</tr>
</tbody>
</table>

### Acratest Standard Condensers

- A complete series of condensers to fill almost any by-pass requirement. Very useful and employed in almost all popular circuits. Very practical, conservatively rated and will continuously operate at the D.C. used under proper conditions. Non-inductively wound, freedom from leakage and the utmost durability.

- High Voltage Filter Condensers

- Electrolytic Condensers

Two New Type Acratest

Multiple Section Inverted Metal Container Electrolytic Condensers

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Capacity</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>7153</td>
<td>4-4 Mfd.</td>
<td>$.90</td>
</tr>
<tr>
<td>7151</td>
<td>6-6 Mfd.</td>
<td>1.00</td>
</tr>
<tr>
<td>7155</td>
<td>8-8 Mfd.</td>
<td>1.20</td>
</tr>
<tr>
<td>7157</td>
<td>10-10 Mfd.</td>
<td>.97</td>
</tr>
<tr>
<td>7159</td>
<td>12-12 Mfd.</td>
<td>1.86</td>
</tr>
<tr>
<td>7158</td>
<td>6-6 Mfd.</td>
<td>1.10</td>
</tr>
</tbody>
</table>

Multiple Section Cardboard Container Electrolytic Condensers

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Capacity</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>7169</td>
<td>4-4 Mfd.</td>
<td>$.76</td>
</tr>
<tr>
<td>7160</td>
<td>8-8 Mfd.</td>
<td>.90</td>
</tr>
<tr>
<td>7164</td>
<td>9-9 Mfd.</td>
<td>1.10</td>
</tr>
<tr>
<td>7162</td>
<td>4-4 Mfd.</td>
<td>.90</td>
</tr>
<tr>
<td>7163</td>
<td>4-4 Mfd.</td>
<td>.90</td>
</tr>
<tr>
<td>7164</td>
<td>6-6 Mfd.</td>
<td>1.00</td>
</tr>
</tbody>
</table>

See Our Complete Filter Condenser Listing on Page 93
Pigtail Condenser Replacement Kit

**JUST THE ASSORTMENT FOR THE SERVICEMAN**

**Cat. No. 3528**

**$2.00 per Kit**

Kit Contains 20 Pigtail Cardidge Condensers:

<table>
<thead>
<tr>
<th>No.</th>
<th>Mfd.</th>
<th>D.C.W.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>.01</td>
<td>200</td>
<td>$1.10</td>
</tr>
<tr>
<td>6</td>
<td>.05</td>
<td>200</td>
<td>$1.70</td>
</tr>
<tr>
<td>6</td>
<td>.08</td>
<td>200</td>
<td>$2.30</td>
</tr>
</tbody>
</table>

**NON-INDUCTIVE Universal BY-PASS Condenser Kit**

Contains a assortment of sizes commonly used in all sets. Very handy for the service man.

Contains 12 Assorted Condensers as follows:

<table>
<thead>
<tr>
<th>Type</th>
<th>Mfd.</th>
<th>D.C.W.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>2...6</td>
<td>200</td>
<td>$1.60</td>
<td></td>
</tr>
<tr>
<td>2...1</td>
<td>Mid.</td>
<td>300</td>
<td>$2.20</td>
</tr>
<tr>
<td>2...6</td>
<td>Mid.</td>
<td>400</td>
<td>$2.80</td>
</tr>
<tr>
<td>2...1</td>
<td>Mid.</td>
<td>500</td>
<td>$3.40</td>
</tr>
<tr>
<td>2...6</td>
<td>Mid.</td>
<td>600</td>
<td>$4.00</td>
</tr>
</tbody>
</table>

**Tubular Condensers**

These condensers are made of the highest grade of electrical fibre tubing and those listed are most commonly used. Units are completely dipped before sealing, thus making the actual unit itself moisture proof and the entire unit is hermetically sealed. Very useful in general replacement work and employed in most every circuit.

**Cat. No. 3531**

Contains 12 Assorted Condensers as follows:

<table>
<thead>
<tr>
<th>Type</th>
<th>Mfd.</th>
<th>D.C.W.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>2...6</td>
<td>Mfd.</td>
<td>200</td>
<td>$1.80</td>
</tr>
<tr>
<td>2...1</td>
<td>Mfd.</td>
<td>300</td>
<td>$2.40</td>
</tr>
<tr>
<td>2...6</td>
<td>Mfd.</td>
<td>400</td>
<td>$3.00</td>
</tr>
<tr>
<td>2...1</td>
<td>Mfd.</td>
<td>500</td>
<td>$3.60</td>
</tr>
</tbody>
</table>

**PIGTAIL Cartridge Condensers**

This condenser is by far the most useful of all condensers on the market and a real aid to the service man for making repairs. It is a small, compact unit, hermetically sealed and completely insulated. Furnished with tinned pigtail leads which permit free soldering to all parts of the circuit and very handy for general replacement work. Order a complete range now for your service department.

**Cat. No. 3529**

**$3.25 per kit**

**Tubular Condenser Kit**

An assortment of the small tubular fibre condensers ready for any repair job indispensable to the modern service man.

**Cat. No. 3531**

Contains 12 Assorted Condensers as follows:

<table>
<thead>
<tr>
<th>Type</th>
<th>Mfd.</th>
<th>D.C.W.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>2...6</td>
<td>Mfd.</td>
<td>200</td>
<td>$1.50</td>
</tr>
<tr>
<td>2...1</td>
<td>Mfd.</td>
<td>300</td>
<td>$2.00</td>
</tr>
<tr>
<td>2...6</td>
<td>Mfd.</td>
<td>400</td>
<td>$2.50</td>
</tr>
</tbody>
</table>

**$2.40 per kit**
MICAMOLD Trimmer Condensers

A sturdy, accurate centralizing, balancing or trimmer condenser, for use in balancing multiple tuned circuits, or equalizing separate condensers gauged for single control. Bakelite base, mica di-electric, heavy phosphor bronze spring plates with fine serrulation resistance and plates are trimmed to permit easy soldering.

For T. R. F. Circuits
Cat. No. Capacity From...
2881 5 to 25 Mfd.
2882 25 to 50 Mfd.
2883 5 to 100 Mfd.

For Superheterodyne Circuits
Cat. No. Capacity From...
2884 100 to 150 Mfd.
2885 150 to 200 Mfd.
2886 200 to 250 Mfd.
2887 250 to 300 Mfd.

Precision Mica Condenser Standards 1% Tolerance

Acratcst, in accor dance with many requests, is now fulfilling a long wanted use for the radio laboratory, amateur set builder and experimenter. We are listing and stocking a complete line of mica condenser Standards which can be used in critical circuits in tuned radio frequencies and superheterodyne circuits, and can also be used as a check for checking capacity bridges and microfarad meters.

These condensers are built of a selected grade of clear India mica, tested to be free of all foreign matter and subjected to severe voltage tests and molded in genuine bakelite under laboratory supervision. They are not affected by moisture or temperature conditions. These condensers are all adjusted to a normal tolerance of 1% of their rated capacity with extremely high insulation resistance. Power factor. Accuracy is maintained under the most trying conditions.

Cat. No. Capacity Our Price...
5708 .00005 $ .28
5709 .00001 .24
5710 .00015 .34
5711 .00026 .24
5712 .0005 .24
5713 .001 .32
5714 .0025 .34
5715 .0062 .36

R.C.A. Buffer Condenser

.002 on each side of Common Negative
Cat. No. 2910

$1.25 Dozen

MICAMOLD Molded Mica Pigtails

Size 4½ x 4½

Particularly adapted for quick replacement. Wires can readily be bent at any angle and the condenser itself can be mounted in the smallest possible space.

Cat. No. Priced Our Price...
6626 .00005 .18
6630 .0001 .18
6631 .00015 .18
6632 .00025 .18
6633 .00035 .18
6634 .0005 .18
6635 .00075 .12
6636 .001 .14
6637 .002 .14
6638 .0025 .18
6639 .003 .18
6640 .005 .21
6641 .008 .21
6642 .0035 .21
6643 .004 .21

MICAMOLD Bakelite Condenser Kit

Cat. No. 3529

Type J

A very useful mica condenser kit of the commonly used capacities in every circuit.

Contains 35 Condensers Assorted Capacities $2.95 per Kit

Utility 8 Mfd. Electrolytic Condenser

Working Voltage 450

Primarily designed for replacing obsolete types electrolytic condensers, this condenser can be easily mounted by drilling two small holes in chassis, through which the screws fit and are tightened with nuts. 4½" high, 1½" dia.

Two wire leads for easy connections.

Cat. No. 6930

59c ea.

MICAMOLD Bakelite Condenser Kit

Type A

Contains a complete assortment of the commonly used condensers used with tuned and neutralizing, circuits, or equalizing separate condensers gauged for single control. Bakelite base, mica dielectric, heavy phosphor bronze spring plates with fine serrulation resistance and plates are trimmed to permit easy soldering.

Cat. No. 3530

$3.50 per kit
Non-Inductive Compact Type Filter Condensers
Type GF, Rated at 400 V. D.C. (250 rms. A.C.)

A brand new type of filter condenser of the manufacturer's type, at a very attractive price. Soldering terminals make connections to these condensers a tripping matter of a few seconds. Excellently insulated and built to stand up, they are furnished for use in circuits demanding full load duty.

Our Catalog. Our Net
Non Type Capacity Price
3777 OP 18 .45 Mfd. 9/4/16x1 .28
3777 OP 25 .33 Mfd. 9/4/16x1 .37
3777 OP 50 .50 Mfd. 9/4/16x1 .50
3777 OP 100 . 1.00 Mfd. 9/4/16x1 .60
3777 OP 200 2.00 Mfd. 9/4/16x1 .65
3777 OP 400 4.00 Mfd. 9/4/16x1 1.00

Non-Inductive Compact By-Pass Condensers
Type GB, Rated at 200 V. D.C. (120 rms. A.C.)

Now, a brand new type of by-pass condenser of the manufacturer's type, at a very attractive price. Effective shell construction, small and neat, they are effective to the nth degree. Providing effective and unimpeded radio frequency paths and methods of non-interfering direct current obstacles, type GB should be in your specifications. For continuous operating voltages up to 200 volts D.C. (120 rms. A.C.)

Our Catalog. Our Net
Non Type Capacity Price
5298 GB 10 .15 Mfd. 9/4/16x1 10.18
5297 GB 15 .22 Mfd. 9/4/16x1 10.24
5296 GB 50 .50 Mfd. 9/4/16x1 .21
5295 GB 100 1.00 Mfd. 9/4/16x1 .32
5287 GB 200 2.00 Mfd. 1/2/14x1 .50
5281 GB 400 4.00 Mfd. 1/2/14x1 .80

Non-Inductive Uncased Filter Condensers
For Continuous Operating Voltage up to 600 V. D.C. (400 rms. B.A.C.)

Without doubt the newest, uncased type made, type NU is also electrically perfect. The condenser winding is impregnated in a hygroscopic compound and the whole is wrapped in a waxed paper wrapper, thus making the condenser absolutely moisture-proof. If you have been looking for a truly dependable uncased filter condenser to employ in all your repair work, be sure to recommend type NU as the finest obtainable. Equipped with rubber covered wire leads that won't pull out, it is a real "bo" that you will always use in preference to others.

Our Catalog. Our Net
Non Type Capacity Price
3792 NU 9.10 Mfd. 11/3/16 x 3/16 $10.00
5279 NU 25 .25 Mfd. 21/2/14x 1/2 .24
5260 NU 25 .25 Mfd. 21/2/14x 1/8 .20
5281 NU 100 1.00 Mfd. 21/2/14x 1/8 .46
5282 NU 300 3.00 Mfd. 21/2/14x 1/8 .97
5283 NU 400 4.00 Mfd. 21/2/14x 1/8 1.35

Non-Inductive High Tension Transmitting Condensers
Because of their small size and light weight they are extremely cellular for use in portable equipment. Some of them are used in aircraft transmitters, etc. Among the advantages we boast is the fact that the condenser is enclosed in a small paper container which the object of minimizing wave or heat or damage. Amateurs who are just beginning with high tension will find the first transmitter will do well to get these dependable units.

(Continued in next column)
Replacement 3 Section By-Pass Condenser for Atwater-Kent
For Models 47, 48, 49, 52, 54, 56 and 60.
Cat. No. 2984
$0.90 ea.

Speaker By-Pass Condenser for Atwater-Kent
For Models 37, 38, 40, 42, 44 and 46.
Cat. No. 2985
$0.65 ea.

Colonial Replacement By-Pass Condenser
Used in Colonial 32
Colonial Part No. 1288A
Yellow—1/4 Mfd. 250 V.
Green—1/10 Mfd. 200 V.
Brown—1/4 Mfd. 200 V.
Red—1/10 Mfd. 200 V.
Can is negative.
Cat. No. 3211
$0.65 ea.

Triple By-Pass Condenser
3—1/10 Mfd.
Sections
In metal can with mounting screw. Very useful for by-passing both bias and high voltage. Made for Peerless Courier Sets.
1 1/4 x 1 1/4 x 1/2 in.
Cat. No. 2904
$0.39 ea.

Victor By-Pass Condensers
1/10 Mfd.
Used in all 1299 Victor Sets.
2 3/4 x 1 5/16 x 1/2 in.
Cat. No. 5726
15c ea.; $1.60 doz.

CROSLEY Replacement By-Pass Condensers
These condensers are electrically and mechanically identical to the manufacturer's originals and are fully guaranteed.

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>2780</td>
<td>W6471</td>
<td>$.02</td>
</tr>
<tr>
<td>5819</td>
<td>W7044</td>
<td>.30</td>
</tr>
<tr>
<td>2988</td>
<td>W4013C</td>
<td>.30</td>
</tr>
<tr>
<td>5529</td>
<td>W30449</td>
<td>.40</td>
</tr>
<tr>
<td>5819</td>
<td>W32412</td>
<td>.40</td>
</tr>
<tr>
<td>5811</td>
<td>W20446</td>
<td>.55</td>
</tr>
<tr>
<td>5812</td>
<td>W7758H</td>
<td>.55</td>
</tr>
<tr>
<td>5848</td>
<td>W8428</td>
<td>.55</td>
</tr>
<tr>
<td>5403</td>
<td>W20187</td>
<td>.65</td>
</tr>
<tr>
<td>5213</td>
<td>W20186</td>
<td>.65</td>
</tr>
<tr>
<td>5396</td>
<td>W25426</td>
<td>.55</td>
</tr>
<tr>
<td>5399</td>
<td>W4919</td>
<td>.65</td>
</tr>
<tr>
<td>5407</td>
<td>W23995</td>
<td>.30</td>
</tr>
<tr>
<td>5408</td>
<td>W7755</td>
<td>.30</td>
</tr>
<tr>
<td>5409</td>
<td>W4959</td>
<td>.30</td>
</tr>
<tr>
<td>5411</td>
<td>W4313A</td>
<td>.30</td>
</tr>
<tr>
<td>5412</td>
<td>W23736</td>
<td>.30</td>
</tr>
<tr>
<td>5427</td>
<td>W30448</td>
<td>.30</td>
</tr>
</tbody>
</table>

Eveready and Bosch Replacement By-Pass Condenser
For Model 52 and All 1928-30 Sets
This condenser is also applicable to many other standard sets.
Cat. No. 2983
Our Price 65c ea.

Zenith Quadruple .2 Mfd. By-Pass Condenser
Replacement Part No. 22-66
Used in Models 52, 53, 54, 55, 57, 61, 64, 67, 68, 61, 682, 71, 72, 74, 77.
Fading is one of the characteristics of the above sets. You can stop this nuisance by replacing the old type leaky condenser with this cold-dipped Acratase bypass condenser.
Cat. No. 6478
85c ea.

Sparton By-Pass Condensers
Used in all Sparton sets.
Cat. No. Size
5833 1/4 Mfd.
6094 1 Mfd.
6095 4-1 Mfd.
List $1.50

Potter By-Pass 3 MFD. COMPACT
600 VOLT TEST
Cat. No. 2759
30c ea.

Potter Midget By-Pass Condensers
Working Voltage 300
Cat. No. Capacity
7188 1 Mfd. .75 Mfd.
7181 .3 Mfd. .75 Mfd.
6607 .2 Mfd.
12c ea.

RCA-Victor Uncased Condensers (600 V. D.C. Working Voltage)
This genuine R. C. A.-Victor uncased condenser is composed of the highest grade materials. They are compact and moisture proof, impregnated in special heat resistant compound.
Cat. No. Size
2926 1 Mfd. 55c each $3.50 doz.
2929 2 Mfd. 50c each 5.50 doz.
2930 4 Mfd. 50c each 9.00 doz.

Reinforced Spring Wafer Sockets
Bronze Prongs
Phosphor Non-Shorting
4 Prong
280, 281, 171A, 245, 201A
Cat. No. 4064
Our Price 5c ea.

MAIL ORDERS TO
See Terms on Page 5
Federated Purchaser Inc.
25 PARK PLACE, N. Y. C.
or to our nearest branch
Atwater Kent Replacement Condenser Block

FOR MODEL 37 SETS
Cat. No. 5001
$2.20 each

Also furnished for 25 cycles for same price.

This filter assembly for Atwater Kent sets is not to be confused or compared with similar but inferior imitations being offered for less money. Our block is manufactured in our own plant out of the finest ingredients and under the supervision of Acrastest engineers. Only brand new condensers are used and no old, leaky sections which are often used in imitations. Every condenser is thoroughly oil cured and impregnated with wax and pitch for protection against moisture. The working voltage of our condensers is far in excess of the original manufacturer’s specifications. Two full size choke coils are used and the entire assembly is housed in attractive new can of exact physical dimensions. The color scheme of the wire leads are exactly as the original, making it very easy to replace the old block with the Acrastest. Compare the Acrastest block with others and you will see why it pays to get the best even if it costs a little more. Once an Acrastest block is installed in a set it will outlast the set.

RCA Filter Block and Output Choke Assembly

For Radiolas 18, 33 and 51
Cat. No. 2710

Special 39c ea.

R.C.A. Part 8328
Contains 2-1 mfd. filter condensers, 1-1/2 mfd. output condenser and a choke coil.

There are over half a million of these various types of Radiola receivers on the market and every dealer should be prepared for service calls on them by having a stock of six of these genuine replacement condensers in stock.

Fada 1 Mfd. Condenser
400 volts, D.C.
2 in. x 5/16 in. x 5 1/2 in. high
Cat. No. 2973
35c ea.

Our Price $2.85 ea.

This filter assembly for Majestic Sets is not to be confused or compared with similar but inferior imitations being offered for less money. Our block is manufactured in our own plant out of the finest ingredients and under the supervision of Acrastest engineers. Only brand new condensers are used and not old, leaky sections which are often used in imitations. Every condenser is thoroughly oil cured and impregnated with wax and pitch for protection against moisture. The working voltage of our condensers is far in excess of the original manufacturer’s specifications. The entire assembly is housed in attractive new can of exact physical dimensions. Compare the Acrastest block with others and you will see why it pays to get the best even if it costs a little more. Once an Acrastest block is installed in a set it will outlast the set.

Genuine Atwater Kent Filter Condensers

For AK38 and AK ‘B’ Unit.

Cat. No. 7052
50c

Model Y
Condenser and Choke for Model 36 and B Unit.
Cat. No. 7053
50c

Cat. No. Set
5026 70 Series
5027 90 Series
5028 90 Series
6678 90B & 100B
5029 Majestic R
5030 Majestic B

Our Price 95c

Radiola Filter Condenser Blocks

Original Condenser Blocks made expressly for these sets.

Cat. No. Part No. Set No. Price
2714 8289 17 2.15
2716 8333 WQ12 18, 33, 51 .30
2715 8476 WQ60 44, 46, 47 .70
2720 8466 WQ10 60 .75
2729 8487 WQ37 66 1.00
6508 8238 64 1.95
6509 8382 67 2.75

R.C.A. Condenser Blocks

Cat. No. Westinghouse Part No. Price
2176 2.20
2714 8289 17 2.15
2716 8333 WQ12 18, 33, 51 .30
2715 8476 WQ60 44, 46, 47 .70
2720 8466 WQ10 60 .75
2729 8487 WQ37 66 1.00
6508 8238 64 1.95
6509 8382 67 2.75

Every condenser block listed on this page is brand new in original factory packing and fully guaranteed.
Polymet 2 Mfd. Auto Condenser

With base mounting brackets. Just the thing for using across the car generator on auto radio installations.

Cat. No. 5605

65c

Dubilier 4 Mfd. Condenser

PL610

2x1\frac{1}{2}\times1\frac{1}{4} in.

Cat. No. 5603

95c

Dubilier .6-C-6 Buffer Condenser

Excellent for Mike Amplifier Filter

PL629

35c ea.

Faradon 4 Mfd. 600 V. Condenser

3\frac{1}{4}\times2\frac{1}{2}\times2\frac{1}{2} in.

Suitable for AC Line Filters.

Cat. No. 5604

$1.75

G. E. 3 Mfd. 600 V. Filter Condenser

With Leads and Mounting Bracket.

\frac{5}{8}\times\frac{3}{4}\times1\frac{1}{4} in.

Cat. No. 6045

49c ea.

Dubilier 1 Mfd. 400 V. Condenser

FL195

1 Mfd. 400 D.C.W.V. With Mounting Brackets

2\times1\frac{1}{2} in.

Cat. No. 5607

75c

General Electric 4 MFD. High Voltage Filter Condensers

D.C. Working Voltage, 800 V.

These General Electric Filter Condensers are tested from 3 to 5 times their rated value, thus assuring a sturdy, scientifically designed product, far exceeding the average filter Condensers now being used. Encased in a sturdy metal container with 8 inch flexible insulated wire leads. Equipped with handy mounting brackets.

Dimensions: 6\times\frac{3}{4}\times1 in.

Cat. No. 6044

69c

Dubilier 4 Mfd. Filter Condenser Blocks

PL571

600 volts working test for replacement in all eliminators and electric sets.

Cat. No. 2924

$1.50

Utility Voltage Condensers

in Metal Cans With Mounting Lugs

Working

Cat. No. Mfd. Volts Price

3150 1, $50 .50

3153 2, $50 .75.

These condensers are guaranteed to easily withstand their rated working volt—and we will replace free of charge any condenser that breaks down within one year.

Cat. No. 5445

85c

RCA 20 MFD. Filter Condenser Block

Excellent for A.C. line filters and speaker filters, also on transmitters. \frac{3}{4} in. long, 2\frac{1}{2} in. wide, 5\frac{1}{4} in. tall.

Part No. DL282843

30c ea.

\frac{1}{2} Mfd.—1,000 Volts

As used in Peerless Sets 100 Volts, for Kylatron Speakers

Note: These condensers were made for Kylatron Speakers. You will find them necessary if you do any repair work on Peerless Kylatron Sets.

Cat. No. 2903

30c ea.

Sprague Electrolytic 8 Mfd. Condenser

A tremendous advancement in filter condenser construction. With round edged anode made of a single piece of aluminum without welding or soldering. Offers high capacity in compact space. Absolutely puncture proof self healing. Screw socket facilitates installation in every type of set. Rated 8 mfd. at 400 volts D.C.

Cat. No. 6809

List Price $2.50

Our Price 49c ea.

Our Price $1.85

Stromberg Carlson 7 MFD Filter Condenser

For RCA 104 Power Speaker 600 Volt Test


4\frac{1}{4}\times5\frac{1}{4} in.

Cat. No. 3721

30c ea.

3.9 Mfd. 1000 V. in same can.

Cat. No. 3730

$1.50

3\frac{1}{4} Mfd. 800 V. unmounted

Cat. No. 3731

75c

2 Mfd. 300 V. lu can.

Cat. No. 5748

75c
Headquarters For Genuine Majestic Replacement Parts

Our Prices as Low as 30% Off Regular List

Cat. No. Items For Models Part No. List Price Our Price
5458 Filament Trans. 190 619 $9.00 $1.50
5460 Plate Trans. 180 820 8.00 1.50
5454 Filament Trans. 70 Series 61 8.00 2.50
5468 Plate Transformer 70 Series 67 8.00 1.50
5461 Fil. & Plate Trans. 90 Series 426 10.00 2.85
5462 Double Choke 180 5.00 1.50
5472 Fil. & Plate Trans. 90B, 100B 12.00 5.25
5485 Filter Choke, 100 Mills 70 Series 66 5.00 1.50
5459 Double Filter Choke, 250 Mills 90 Series 281 5.00 1.80

Majestic Resistors
Cat. No. 5466 25c ea.
Cat. No. Size Part No. 6859 1000 ohms 5467 2170 ohms 102 5468 2600 ohms 399

Dynamic Speaker Cable
Part No. 199
Cat. No. 4398 25c

8 Wire Cable
(Chassis to Pack)
Packed No. 200, Model 90
Cat. No. 4396 60c

Majestic “A” Replacement Condenser
For Majestic “A”
Cat. No. 5031 $2.25 each
3000 Mfd.

Majestic By-Pass Condenser Blocks
Cat. No. Capacity Model Part No. 5446 5-5 70 717 5447 5-5 90 718 5448 .5 180 714

30c ea.

Push-Pull Transformers
Cat. No. Type Models Part No. 3833 Input 70, 71, 72 5470 Output 70, 71, 72, 189 64 5468 Output 90 5459 Straight Audio 70, 71, 72, 90 5481 Input 90 6814 Phone 62 1713

Our Price $1.50 ea.

Yaxley 1/4 Ohm Hum Buckers
Majestic Part No. 106
Cat. No. 5469 25c

Our Price $1.50 ea.

MAJESTIC I. F.
Superhet Transformer
Cat. No. 6818 95c

Used in Majestic Super and tunes to 175 K.C. Aluminum housing, with 6 wire leads.

4 Gang Condenser
Cat. No. 4356 45c

A high quality condenser with electrical and mechanical refinements that stamp it as a leader.
The individual sections of this fine unit are scientifically matched, careful shielding, compensating condensers in each section. Capacity. 0.0005.

Also furnished in 3-gang, same capacity.
Cat. No. 4370

Our Price 65c

MAIL ORDERS TO
See Terms on Page 3
Federated Purchaser Inc.
or to our nearest branch
25 PARK PLACE, N. Y. C.

WorldRadioHistory
CLASS B TRANSFORMERS
Audios – Chokes
Power Supply
(Circuit Diagrams Free
With Each Item)
Class B Amplifiers, a recent development, have already won the enthusiastic acceptance by servicemen, engineers and amateurs. Every radio enthusiast is anxious to build his own Class B Amplifier, but they have been hampered in securing the special parts going into its make-up. Below we have assembled a complete line of audio transformers, power transformers, and chokes especially designed for Class B operation. Particular care was taken in their design to insure best tone quality. The best silicon steel is used for the cores and pure electrolytic copper wire for the coils.

Class B Power Transformer
Supplies filament and plate for 10 tubes. Has 5-2½ volt windings. For the ‘B’ Rectifier Electrically shielded.

Cat. No. 7125
$2.85

Class B Coupling Transformer
For a Single 46 Intot-46’s
Cat. No. 7127
$1.95

For 2-227 or 56’s Into 46’s
Cat. No. 7144
$1.95

For 2-243’s Into 46’s
Cat. No. 7128
$1.95

Class B First Choke
Cat. No. 7126
95c

Class B Second Choke
Cat. No. 7129
95c

Acratest Special Matching Transformers For Mixer Panels
Each of these transformers were designed for a particular purpose, in connection with public address and studio use. With these transformers as a base, input and output mixing panels may be constructed at exceptionally low cost. Excellent frequency response and high efficiency were the primary considerations in their design.

Cat. No. Description Price
7131 Microphone to 200 or 500 ohm line transformer. Two or more of these may be used for two or more microphones on one line $4.50
7132 Microphone to 500 ohm trans-former. Pour of these transformers, with their secondaries in series for 4 miles into 500 ohms. Diagram furnished $4.50
2623 Plate of 232, 224 or 227 Tube to 200 or 500 ohm input transformer. Primary impedance 250,000 ohms $2.75
7133 Plate of 280, 56 Tube to 200 or 500 ohm input transformer $4.50
7134 4000 and 500 ohm line from one to six 15 ohm FLOICE COILS $4.50

The New U. S. Signal Corps “Speed Bug” Wireless Key

Cat. No. 246
$10.50

The SPEED-BUG was made for and approved by U. S. Army Signal Corps and contains all the improvements over former sending machines. Enables sharper, clearer, smoother and faster operation. Will establish reputation for yourself as a good sender. It is truly a bug for the operator who insists on having the best. You can send signals as slow as eight words per minute or as fast as you desire. Its ease of manipulation actually rests the arm and encourages good sending without extra effort.

THE WINCHESTER
Electric Pick-Up
Removable new features and precision craftsmanship which assure superiority for the new WINCHESTER PICK-UP.

Beauty of Appearance: Highly polished bakelite throughout.

Twin Spring Compensation: An ingenious construction by which the pressure of the Pick-Up on the record is under minute control. The control provides permits adjustment from the full weight of the Pick-Up on the record to feather-weight contact.

Ball Bearing Tracking: The needle is able to follow the record grooves no matter how light the contact.

Volume Control: Smooth and silent in operation.

Construction: Ruggedly built to provide an enduring service. Minimum wear on vital parts, avoiding all risk of chatter.

Faithfulness of Reproduction: A matchless fidelity of tone with response from very low frequencies to extreme high frequencies, with total absence of needle scratch.

Cat. No. 7138 $4.95

I. C. A.
Code Practice Set
Attaches to any radio. Simplest and lowest priced code practice set. Easy way to learn wireless telegraphy. Can be attached to any radio set and need not be disconnected from set to receive broadcasts as the adapters fit the I. C. A.

Cat. No. 7139
List Price $2.50
$1.47

Visual Tuning Meter
With Escutcheon Plate
A high resistance type milliammeter used in the plate circuit for visual tuning. The circuit is brought to resonance when the needle swings to its furthest position. The translucent dial is illuminated through the rear window of the case complete with cable leads, attachment studs and nuts.

Cat. No. 6762
88c
Complete
Frost Variable High Resistances set a high standard of excellence both mechanically and electrically. The improved resistance element is the longest wearing and most constant on the market. Absolutely stable in operation and is not affected by humidity or temperature changes. Contact produces a perfectly smooth, continuously variable adjustment of resistance. Units are non-inductive.

The Engineer realizes that properly designed and well built wiping contacts are recognized in the electrical field as being the most dependable and best type of movable contact for use in electrical circuit controls. This is true because such contacts afford uniformly low contact resistance and this in turn is the result of the wiping action which automatically keeps the contacting surfaces clean and highly polished. The Engineer also knows that the access and long life of a wiping contact depends upon obtaining a low frictional component, that is, one well below the point where cutting or scoring takes place and that this highly desirable condition is largely determined by the character of the materials used in the respective members, the original condition of the surfaces forming the contact and the unit pressure involved.

FROST-RADIO
No. 70 Series Composition Element Volume Controls
Supplied with three terminals. May be used either as potentiometers or variable resistors.

FROST-RADIO
No. 80 Series Volume Controls
Contact resistance of these switches is not only low but uniform as well, which makes this unit particularly adapted for use in automobile sets.

You can associate these controls directly with the GRID circuit and still there will be no pick up from the power circuit.

Switch Cam is Cold. Shaft is insulated. Positioning lugs for preventing rotation of the control on the panel are provided in accordance with requirement of the Underwriters' Laboratories.

Insulated thimble and shaft has been worked out so that capacity between these members and "live" parts of the control is less than 5 micromines. The breakdown in series of 2000 volts.

Like all our highest grade controls, these No. 80 series units have sufficient wiping contact to insure keeping down corrosion on the contacting member. Yes! The No. 80 is quiet in operation.

Our Price
45c
Without Switch
50c
With Switch

Our Price
65c
With Switch

Our Price
70c
Without switch

We are prepared to quote special prices on all Frost Volume Controls to Manufacturers, Jobbers and large service organizations.
FROST-RADIO
No. 40 Series Composition Element Volume Controls

The No. 40 series have been in use by several of the largest manufacturers in the country for the past year and a half and in every case have given complete satisfaction. The high insulation provided between the shaft and live parts allows the use of this control in circuit positions where the potential to ground may be several hundred volts, in addition to a 3/8-in. thread. These features the absence of inductance and any appreciable capacitance particularly adapts this control to use in radio frequency circuits where de-tuning cannot be tolerated.

A positive wiping action between the resistance element and the disc, limited in degree and uniformly distributed over the entire area of rotation is obtained by a special disc, firmly secured and accurately positioned over frosted cone carrying the resistance element.

The narrow contacting surface and polishing action, together with the hard resistance element, obtain unusually smooth resistance progressions and to maintain true curve forms regardless of whether the high or low limit is specified.

Cat. No. | Ohms | Cat. No. | Ohms
---|---|---|---
6180 | 5,000 | 6185 | 25,000
6181 | 3,000 | 6186 | 50,000
6182 | 3,000 | 6187 | 75,000
6183 | 5,000 | 6188 | 100,000
6184 | 10,000 | 6189 | 250,000
6190 | 500,000

Our Price 50c ea.

FROST
40 Series Dual Potentiometers

Panel Mounting Tone Control

FROST-RADIO
No. 1880 Series Composition Element Type

(Bakelite Case and Cover—Shaft Not Insulated)

No. AC1880 Series

Entire shell and back cover are of genuine bakelite which prevents capacitance and inductance. Available with most critical resistance gradients and will carry a maximum amount of current. Is of the time-tried and proven rocker arm—roller contact assembly, utilizing our latest improved resistance element.

This is the Frost Control With Interchangeable Shaft

These Frost controls have interchangeable shafts and the standard resistance can be used in sets similar to Stromberg-Carlson and Zenith, which were designed with a special shaft that can be taken from the old control and be replaced in the new. We continue to guarantee Frost resistance curves and numbers to be within commercial standards of electrical and mechanical accuracy.

Without Switch

Cat. No. | Ohms | With Switch
---|---|---
6124 | 5,000 | 6129
6125 | 10,000 | 6129
6126 | 15,000 | 6129
6127 | 25,000 | 6130
6128 | 50,000 | 6131
6130 | 75,000 | 6132
6132 | 100,000 | 6132
6133 | 250,000 | 6132
6134 | 500,000 | 6132

Our Price $1.35

With Switch

Our Price $0.60

Cat. No. 4354

List Price, $2.35

Our Price $1.90

Table Tone Control

Tone control is the keynote of 1937 Radio. All the better types of sets are provided with tone control. That is the outstanding difference between present sets and those of a year ago. A radio set is obsolete without a Tone Control.

Table model beautifully finished in black and gold; faked baleen; long connecting cord.

Panel Mounting Type

Cat. No. 4357

List Price, $1.90

Our Price $1.05

Acratone Table Mount Tone Control

Enclosed in a beautiful black and gold crystaline case, with wire and adapters. Can be installed in a jiffy.

Cat. No. 6961
Ad-a-Switch Wire Wound Units and Switch Coverplates

The Clarostat Wire Wound Controls have been specially designed to fill the dealer’s and servicemen’s demand for reliable wire wound single controls which can be used either with or without switches as required. They eliminate the necessity of keeping on hand duplicate sets of controls, one set with switches and the other without them. By stocking these units, all that is necessary is to keep some switchless units and a few switch coverplates.

The plain dust-guard coverplate supplied can be piled off and a Cat. No. 6730 switch type dust-guard coverplate can be snapped in to enable to convert the switchless units into a switch unit.

When used without switch, the only difference is that the 35-degree rotation of the control has no effect on volume due to the design that portion of the resistance element has zero resistance to allow for control of the switch, when the switch is employed.

Cat.
No. 0.47
5927 50 Standard Potentiometer, $0.47
5928 100 Standard Potentiometer, $0.47
5929 200 Standard Potentiometer, $0.47
5930 300 Standard Potentiometer, $0.47
5931 400 Standard Potentiometer, $0.47
5932 600 Standard Potentiometer, $0.47
5933 750 Standard Potentiometer, $0.47
5934 1000 Standard Potentiometer, $0.47
5935 1500 Standard Potentiometer, $0.47
5936 2000 Standard Potentiometer, $0.47
5937 3000 Standard Potentiometer, $0.47
5938 4000 Standard Potentiometer, $0.47
5939 5000 Standard Potentiometer, $0.47
5940 6000 Standard Potentiometer, $0.47
5941 7500 Standard Potentiometer, $0.47
5942 10000 Standard Potentiometer, $0.47

**Power Clarostat**

Heavy duty variable resistor for radio power units, transmitters, or general electrical applications. A favorite for line-voltage control. Dissipates heat rapidly and efficiently. Popular as control in audiomagnifiers.

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Model</th>
<th>Resistance</th>
<th>Carrying Range</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>5943</td>
<td>290</td>
<td>100 ohms</td>
<td>20-100 ohms</td>
<td>80 watts</td>
</tr>
</tbody>
</table>

Our Price $2.06 ea.

**Clarostat Phonograph Pick-Up Control**

A Clarostat Graphite Element Volume Control of the potentiometer type for hand adjustment of the phonograph pick-up unit and the radio receiver or amplifier.

Supplied with two tilt jacks and cord with phone type, a handsome bakelite case with knob to match. May also be used for the control of the headphones and magnetic speakers.

**Automatic Line Voltage Regulator**

Here is perfect Line Voltage control. Not a plain fixed resistance, but an Automatic Line Voltage Regulator for safe operation on fluctuating voltages.

<table>
<thead>
<tr>
<th>Cat. No. 5961</th>
<th>Pot. for 60 to 100 watts.</th>
<th>Cat. No. 5962</th>
<th>Pot. for 100 to 150 watts.</th>
</tr>
</thead>
<tbody>
<tr>
<td>5963</td>
<td>500 Standard Potentiometer, $0.50</td>
<td>5964</td>
<td>600 Standard Potentiometer, $0.60</td>
</tr>
<tr>
<td>5965</td>
<td>750 Standard Potentiometer, $0.75</td>
<td>5966</td>
<td>1000 Standard Potentiometer, $1.00</td>
</tr>
<tr>
<td>5967</td>
<td>1500 Standard Potentiometer, $1.50</td>
<td>5968</td>
<td>2000 Standard Potentiometer, $2.00</td>
</tr>
<tr>
<td>5969</td>
<td>3000 Standard Potentiometer, $3.00</td>
<td>5970</td>
<td>4000 Standard Potentiometer, $4.00</td>
</tr>
<tr>
<td>5971</td>
<td>5000 Standard Potentiometer, $5.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Our Price 95c ea.

<table>
<thead>
<tr>
<th>Cat. No. 5985</th>
<th>2500 Standard Potentiometer, $0.25</th>
</tr>
</thead>
<tbody>
<tr>
<td>5986</td>
<td>3000 Standard Potentiometer, $0.30</td>
</tr>
<tr>
<td>5987</td>
<td>4000 Standard Potentiometer, $0.40</td>
</tr>
<tr>
<td>5988</td>
<td>5000 Standard Potentiometer, $0.50</td>
</tr>
<tr>
<td>5989</td>
<td>6000 Standard Potentiometer, $0.60</td>
</tr>
<tr>
<td>5990</td>
<td>7500 Standard Potentiometer, $0.75</td>
</tr>
<tr>
<td>5991</td>
<td>10000 Standard Potentiometer, $1.00</td>
</tr>
</tbody>
</table>

Our Price 25c Each

**Clarostat Phonograph Volume Controls**

Life tests conducted in our laboratories under the severest and most grueling conditions have demonstrated unquestionably that the Clarostat Graphite Element Volume Control will withstand the average receiver or sound equipment and will continue to function efficiently without any change in overall resistance.

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Suggested Use</th>
<th>With Switch</th>
</tr>
</thead>
<tbody>
<tr>
<td>5971</td>
<td>1,000 Antenna Tuned</td>
<td>5972</td>
</tr>
<tr>
<td>5973</td>
<td>1,000 Standard Potentiometer</td>
<td>5974</td>
</tr>
<tr>
<td>5975</td>
<td>2,000 Antenna Tuned</td>
<td>5976</td>
</tr>
<tr>
<td>5977</td>
<td>2,000 Standard Potentiometer</td>
<td>5978</td>
</tr>
<tr>
<td>5979</td>
<td>3,000 Antenna Tuned</td>
<td>5980</td>
</tr>
<tr>
<td>5981</td>
<td>3,000 Standard Potentiometer</td>
<td>5982</td>
</tr>
<tr>
<td>5983</td>
<td>4,000 Antenna Tuned</td>
<td>5984</td>
</tr>
<tr>
<td>5985</td>
<td>4,000 Standard Potentiometer</td>
<td>5986</td>
</tr>
<tr>
<td>5987</td>
<td>5,000 Antenna Tuned</td>
<td>5988</td>
</tr>
<tr>
<td>5989</td>
<td>5,000 Standard Potentiometer</td>
<td>5990</td>
</tr>
<tr>
<td>5991</td>
<td>6,000 Antenna Tuned</td>
<td>5992</td>
</tr>
<tr>
<td>5993</td>
<td>6,000 Standard Potentiometer</td>
<td>5994</td>
</tr>
<tr>
<td>5995</td>
<td>7,000 Antenna Tuned</td>
<td>5996</td>
</tr>
<tr>
<td>5997</td>
<td>7,000 Standard Potentiometer</td>
<td>5998</td>
</tr>
<tr>
<td>5999</td>
<td>8,000 Antenna Tuned</td>
<td>5999</td>
</tr>
<tr>
<td>6000</td>
<td>8,000 Standard Potentiometer</td>
<td>6001</td>
</tr>
<tr>
<td>6002</td>
<td>9,000 Antenna Tuned</td>
<td>6003</td>
</tr>
<tr>
<td>6004</td>
<td>9,000 Standard Potentiometer</td>
<td>6004</td>
</tr>
<tr>
<td>6005</td>
<td>10,000 Antenna Tuned</td>
<td>6006</td>
</tr>
<tr>
<td>6007</td>
<td>10,000 Standard Potentiometer</td>
<td>6007</td>
</tr>
</tbody>
</table>

**Constant Impedance Controls**

For constant impedance work in radio and sound equipment and also in phone lines, bakelite wire windings are necessary because of the low resistances used and the need to cause all units on one shaft must change uniformly.

**Dual Type “L” Pad**

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Type “L” Pad</th>
</tr>
</thead>
<tbody>
<tr>
<td>5998</td>
<td>25 ohm for vote coil control</td>
</tr>
<tr>
<td>5999</td>
<td>300 ohm for line or microphone</td>
</tr>
<tr>
<td>6000</td>
<td>500 ohm for line or mixing transformer control</td>
</tr>
<tr>
<td>6001</td>
<td>2000 ohm for phonograph or high impedance speaker control</td>
</tr>
</tbody>
</table>

Our Price $1.75
**ELECTRAD “R P” CONTROLS**

**Centralab Twin Potentiometer**

10,000 to 250,000 Ohms
Used in Earl 21, 22

**Freshman Models “M” and “N” Volume Control**

**Genuine Crosley Volume Controls**

**Replacement for Radiola 33**

2000 Ohm Potentiometer

**Victor Part**

Frost Twin Volume Control

**Without Switch**

60c each

**With Switch**

85c each

---

**Volume Controls for Stromberg Carlson**

**Replacement Volume Control**

For RCA 18, Victor R-14, R-15, Westinghouse WR-4, Graybar and G. E. Sets

**Our Price**

$1.45

**Genuine Majestic Volume Controls**

**Without Switch**

60c each

**With Switch**

85c each

---

**ELECTRAD**

Accurate, Smooth Operating and Compact. The shafts are extra long to meet any mounting condition. May be had with or without a built-in power switch. The types listed below can be used as replacements in 343 standard models of receivers.

---

**Centralab Twin Potentiometer**

10,000 to 250,000 Ohms
Used in Earl 21, 22

An ideal volume control for all sets. Will not burn out, operates quietly and uniformly always.

**Our Price**

$1.35

---

**Genuine Crosley Volume Controls**

These controls are identical, both physically and electrically to the old controls, but embrace several improved features since developed.

**Our Price**

$1.45

---

**Replacement for Radiola 33**

2000 Ohm Potentiometer

List Price

$1.35

For Radiola 33, Insulating strip (easily removed) for metal panels.

**Our Price**

60c

---

**Victor Part**

Frost Twin Volume Control

FOR MODELS

RE32, 35, 55, 75
4300-4300 OHMS

**Our Price**

25c

---

**Without Switch**

60c each

**With Switch**

85c each

---

**Genuine Crosley Volume Controls**

**Without Switch**

60c each

**With Switch**

85c each

---

**ELECTRAD**

Accurate, Smooth Operating and Compact. The shafts are extra long to meet any mounting condition. May be had with or without a built-in power switch. The types listed below can be used as replacements in 343 standard models of receivers.
**CLAROSTAT**

**Speaker and Phonograph Fader**

This control enables one to operate either two phonographs simultaneously or speakers, control the volume of each and fade them on and off at will. This is a fourth terminal potentiometer. 

**Cat. No. 2857**

3000 ohms—2000 ohms.

**Our Price $1.35**

**Accatone**

Modulator

A volume control—for use with phonograph pick-ups, power amplifiers and microphone hook-ups. Obtains better tone quality. Controls volume from whisper to maximum, has a 24-inch phone cord.

**Cat. No. 3610 90c**

**Our Price 18c ea.**

Clarostat 2000 Ohm Potentiometers

New Type

Air Cooled

Used in famous sets

**Cat. No. 3759**

**15c ea.**

Naald Bakelite Short Wave Plug-In Coils

16 to 200 Meters

The finest grade litz wire wound on bakelite forms. Will fit standard UX sockets.

**Cat. No. 7180**

$1.50 per set of 4

**HUM CONTROL**

20 Ohm with Center Tap

Used to eliminate A.C. hum. Only a few left at this price.

**Cat. No. 3734**

10c each

**YAXLEY**

Panel Mount Hum Control Wire Wound

**Screwdriver Type**

**Cat. No.**

Size

Price

5469

1/2 Ohm

$2.75 dozen

Carter 3000 Ohm Volume Control

Wire Wound

Tapered Resistance

Bakelite case. Short ¼-in. shaft for metal panel mounting.

**Cat. No. 3767**

3763 900 V.C. 35c

6569 2500 45c

$2.75 dozen

**Stromberg Carlson Rheostats**

(Made by Amoco)

**Cat. No.**

Size

Ohms

20 Ohms

30 Ohms

250 Ohms

**Our Price 20c ea.**

**ACRATEST, JR.**

Combination Volume Control and Switch

**TERMinals—Three are provided, permitting connection of resistance unit as potentiometer or rheostat.**

**SIZE—1/8 in. diameter—1 in. deep overall including switch.**

**FINISH—Nickel over brass—not steel. ACTION—Smooth, positive and sturdy. Designed especially for midget and auto sets.**

**Cat. No.**

Ohms

5877 1000

5879 5000

5889 10000

**Our Price 55c ea.**

Centralab Slide Contact Volume Controls and Potentiometers

**Perfect Slide shaft. Contact. No wiping. No Noise. Standard 1/4 in.**

**Cat No.**

Size

Desc.

3735 25.00 Ohm Potentiometer

3775 1,000 Ohm Volume Control

3777 5,000 Ohm Volume Control

**Our Price 25c ea.**

**CLAROSTAT MIDGET** Volume Control

Compact, neat, convenient 0-500,000 ohm range in several turns of knob. Micrometric adjustment. One-hole mounting. Convenient screw terminals. Many applications in present-day sets.

**Cat. No. 3808**

**Our Price 30c**

**Electrad 250,000 Ohm Volume Control**

Wire Wound—bakelite frame.

**Cat. No. 3890**

25c ea.
ELECTRAD
Truvolt Fixed Resistors
(Every Fixed Unit Can Be Made Adjustable)

Electric TRUVOLT All-Wire Resistors are especially recommended for use in eliminators and power packs. These resistors are available in all the usual voltage ratings and a wide range of fixed values. Through the use of extra sliding clips their intermediate values can readily be obtained. This exclusive Electrode feature is greatly appreciated by service men, since it makes the TRUVOLT All-Wire Resistors ideal for replacement.

---

### Cat. No. 5861

**Type B—25 Watts**

<table>
<thead>
<tr>
<th>Type</th>
<th>Resistance in Ohms</th>
<th>Current Milliampere</th>
<th>Price Each</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-02</td>
<td>00</td>
<td>4.000</td>
<td>0.09</td>
</tr>
<tr>
<td>B-03</td>
<td>10</td>
<td>1.000</td>
<td>0.09</td>
</tr>
<tr>
<td>B-05</td>
<td>000</td>
<td>3.000</td>
<td>0.09</td>
</tr>
<tr>
<td>B-075</td>
<td>000</td>
<td>2.000</td>
<td>0.09</td>
</tr>
<tr>
<td>B-1</td>
<td>000</td>
<td>1.000</td>
<td>0.09</td>
</tr>
<tr>
<td>B-15</td>
<td>000</td>
<td>6.000</td>
<td>0.09</td>
</tr>
<tr>
<td>B-25</td>
<td>000</td>
<td>2.000</td>
<td>0.09</td>
</tr>
<tr>
<td>B-5</td>
<td>10</td>
<td>1.000</td>
<td>0.09</td>
</tr>
</tbody>
</table>

### Cat. No. 5863

**Type D—75 Watts**

<table>
<thead>
<tr>
<th>Type</th>
<th>Resistance in Ohms</th>
<th>Current Milliampere</th>
<th>Price Each</th>
</tr>
</thead>
<tbody>
<tr>
<td>D-02</td>
<td>00</td>
<td>4.000</td>
<td>0.09</td>
</tr>
<tr>
<td>D-03</td>
<td>10</td>
<td>1.000</td>
<td>0.09</td>
</tr>
<tr>
<td>D-05</td>
<td>000</td>
<td>3.000</td>
<td>0.09</td>
</tr>
<tr>
<td>D-075</td>
<td>000</td>
<td>2.000</td>
<td>0.09</td>
</tr>
<tr>
<td>D-1</td>
<td>000</td>
<td>1.000</td>
<td>0.09</td>
</tr>
<tr>
<td>D-15</td>
<td>000</td>
<td>6.000</td>
<td>0.09</td>
</tr>
<tr>
<td>D-25</td>
<td>000</td>
<td>2.000</td>
<td>0.09</td>
</tr>
<tr>
<td>D-5</td>
<td>10</td>
<td>1.000</td>
<td>0.09</td>
</tr>
<tr>
<td>D-75</td>
<td>000</td>
<td>4.000</td>
<td>0.09</td>
</tr>
</tbody>
</table>

### Cat. No. 5862

**Type C—50 Watts**

<table>
<thead>
<tr>
<th>Type</th>
<th>Resistance in Ohms</th>
<th>Current Milliampere</th>
<th>Price Each</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-02</td>
<td>00</td>
<td>4.000</td>
<td>0.09</td>
</tr>
<tr>
<td>C-03</td>
<td>10</td>
<td>1.000</td>
<td>0.09</td>
</tr>
<tr>
<td>C-05</td>
<td>000</td>
<td>3.000</td>
<td>0.09</td>
</tr>
<tr>
<td>C-075</td>
<td>000</td>
<td>2.000</td>
<td>0.09</td>
</tr>
<tr>
<td>C-1</td>
<td>000</td>
<td>1.000</td>
<td>0.09</td>
</tr>
<tr>
<td>C-15</td>
<td>000</td>
<td>6.000</td>
<td>0.09</td>
</tr>
<tr>
<td>C-25</td>
<td>000</td>
<td>2.000</td>
<td>0.09</td>
</tr>
<tr>
<td>C-5</td>
<td>10</td>
<td>1.000</td>
<td>0.09</td>
</tr>
<tr>
<td>C-75</td>
<td>000</td>
<td>4.000</td>
<td>0.09</td>
</tr>
<tr>
<td>C-10</td>
<td>000</td>
<td>1.000</td>
<td>0.09</td>
</tr>
</tbody>
</table>

### Extra Sliders—Cat. No. 5832—6c. Each

<table>
<thead>
<tr>
<th>Type</th>
<th>Resistance in Ohms</th>
<th>Current Milliampere</th>
<th>Price Each</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-100</td>
<td>000</td>
<td>4000</td>
<td>0.09</td>
</tr>
<tr>
<td>C-200</td>
<td>000</td>
<td>2000</td>
<td>0.09</td>
</tr>
<tr>
<td>C-300</td>
<td>000</td>
<td>1000</td>
<td>0.09</td>
</tr>
<tr>
<td>C-400</td>
<td>000</td>
<td>500</td>
<td>0.09</td>
</tr>
<tr>
<td>C-500</td>
<td>000</td>
<td>250</td>
<td>0.09</td>
</tr>
<tr>
<td>C-750</td>
<td>000</td>
<td>100</td>
<td>0.09</td>
</tr>
</tbody>
</table>

---

**Flexible Wire Grid Resistors**

While Acraestat Wire Grid Resistors are utilized in all high grade radio sets, they are especially adapted for use in small eliminators, such as Hedge set, automobile and Aeroplane receivers, etc. They are all-wire, completely covered by impregnated fabric, compact, non-conductive and can be sent into any desired shape. These Resistors are made of fine Nichrome wire wound in a specially treated silk core. In many cases they can be connected directly between the terminals of two components in a radio receiver, thus eliminating extra wiring connections.

**Our Price**

**15c ea.**

---

**WIRE WOUND Grid Suppressors**

<table>
<thead>
<tr>
<th>Type</th>
<th>Ohms</th>
<th>Price Each</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-500</td>
<td>5000</td>
<td>14</td>
</tr>
<tr>
<td>C-400</td>
<td>4000</td>
<td>15</td>
</tr>
<tr>
<td>C-300</td>
<td>3000</td>
<td>17</td>
</tr>
<tr>
<td>C-250</td>
<td>2500</td>
<td>19</td>
</tr>
<tr>
<td>C-200</td>
<td>2000</td>
<td>21</td>
</tr>
<tr>
<td>C-150</td>
<td>1500</td>
<td>22</td>
</tr>
<tr>
<td>C-100</td>
<td>1000</td>
<td>24</td>
</tr>
<tr>
<td>C-75</td>
<td>750</td>
<td>26</td>
</tr>
<tr>
<td>C-50</td>
<td>500</td>
<td>28</td>
</tr>
<tr>
<td>C-25</td>
<td>250</td>
<td>30</td>
</tr>
<tr>
<td>C-10</td>
<td>100</td>
<td>32</td>
</tr>
</tbody>
</table>

---

**$1.00 per Doz. Asst.**

25 PARK PLACE, N. Y. C. or to our nearest branch
A CRATEST carbon resistors are the result of years of experimenting to produce a resistor that will be absolutely moisture proof and stay permanent regardless of atmospheric conditions.

The Cratatest resistors all have a highly glazed surface which makes them non-hygrosopic in character and the only resistance of this kind that will not absorb moisture. These resistors are a solid molded mass, strong and durable.

Another very important feature of these units is the fact that they have no voltage co-efficient. They are conservatively rated and the temperature rise in operation is unusually low. Tin wire leads are soldered to the caps of the resistors which are forced on under a high pressure, thus insuring a permanent, noiseless contact. This is a very important feature in resistors as it eliminates any possibility of poor contact.

All resistors are laboratory tested and labeled with the proper resistance value and will maintain their accuracy under the most trying conditions.

Cratatest resistors are guaranteed to be the finest on the market, noiseless, unbreakable, moisture proof and durable. The 2 watt resistors, 1 watt and ¼ watt all have the same characteristics.

**ONE-HALF WATT**

Size: 
1 Inch Long

<table>
<thead>
<tr>
<th>Ohms</th>
<th>Ohms</th>
<th>Ohms</th>
</tr>
</thead>
<tbody>
<tr>
<td>250</td>
<td>1,000</td>
<td>2,000</td>
</tr>
<tr>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>2,000</td>
<td>1,000</td>
<td>1,000</td>
</tr>
</tbody>
</table>

28 Megs. (Used on Condenser Microphones)

Cat. No. 5880

10c ea.; $1.00 doz.

Utility Carbon Pigtail Resistors

**A REAL BARGAIN**

Cat. No. 4600—7c each

1 Watt Units

<table>
<thead>
<tr>
<th>Ohms</th>
<th>Ohms</th>
<th>Ohms</th>
</tr>
</thead>
<tbody>
<tr>
<td>875</td>
<td>7,500</td>
<td>10,000</td>
</tr>
<tr>
<td>1,250</td>
<td>8,750</td>
<td>10,000</td>
</tr>
<tr>
<td>2,500</td>
<td>10,000</td>
<td>10,000</td>
</tr>
<tr>
<td>5,000</td>
<td>10,000</td>
<td>10,000</td>
</tr>
</tbody>
</table>

**10c ea.; $1.00 doz.**

Carbon Resistor Kit

Contents: 33 1 Watt Carbon Pigtail Resistors

One Each of the Following Assortments:

**$2.75 kit of 33**

**TWO WATT**

Size 2”

<table>
<thead>
<tr>
<th>Ohms</th>
<th>Ohms</th>
<th>Ohms</th>
</tr>
</thead>
<tbody>
<tr>
<td>250</td>
<td>500</td>
<td>750</td>
</tr>
<tr>
<td>750</td>
<td>1,250</td>
<td>2,000</td>
</tr>
<tr>
<td>2,000</td>
<td>3,000</td>
<td>5,000</td>
</tr>
</tbody>
</table>

Cat. No. 5185

15c ea.; $1.75 doz.

Carbon Resistor Kit

Contents: 25 2-Watt Carbon Pigtail Resistors

**$3.50 per kit of 25**

Carbon Resistor Kit

Contents: 37 ½-Watt Carbon Pigtail Resistors

**$2.05 kit of 36**
Laboratory Model and Speed Control Clarostat

E especially adapted to control of variable speed motor in television and other precise work. May be installed as a heavy-duty variable resistor for laboratory work, provided with heavy metal casing, protected screw binding posts, and short-circuit button. Carrying capacity of 80 watts.

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Model</th>
<th>Resistance Carrying Range Capacity</th>
<th>000s</th>
<th>80 watts</th>
</tr>
</thead>
<tbody>
<tr>
<td>545</td>
<td>Laboratory</td>
<td>¼-10 ohms</td>
<td>500s</td>
<td></td>
</tr>
<tr>
<td>645</td>
<td>Laboratory</td>
<td>200 to 10,000 ohms</td>
<td>100s</td>
<td></td>
</tr>
<tr>
<td>647</td>
<td>Speed Control</td>
<td>20-500 ohms</td>
<td>500s</td>
<td></td>
</tr>
</tbody>
</table>

**Our Price $2.94 ea.**

New Improved Ground Aerial

The Underground Aerial That Makes Reception Better

A new installation that overcomes the difficulties of overhead aerials—yet uses nothing in damn and improves the tone qualities of radio reception. By being placed in the ground it does away with unsightly overhead wires, eliminates the risk incidental to installing high tension and lightning hazard—diminishes electrical interference and static; the new sub-antenna is permanent—once installed no further attention is necessary. Easy to install. Note Illustration.

Cat. No. 4218 $1.50

Grid Bias Divider

125,000 Ohms for R.F. and detector voltages of 250 Volt Power Pack Length 3 In.

Cat. No. 4017

**Our Price 50c ea.**

Colonial Voltage Divider

Same size and appearance as No. 4017 above, except that it is ¾ In. diameter and dissipates 10 watts. Used in Colonial 32, 53, 84

Cat. No. 5727

**Our Price 75c ea.**

We carry Voltage Dividers for over 200 standard receivers. See page 96 for complete list.

MAIL ORDERS TO
See Terms on Page 5

Federated Purchaser Inc.

26 PARK PLACE, N. Y. C. or to our nearest branch

5 Watt Wire Wound Pigtail Resistors

A resistor designed to meet the demand for a reasonably priced and compact high-resistance unit. Recommended for use in 1200, Airplane, Automobile and other receivers where space and price are limited. Terminals are of No. 18 tinned copper wire securely embedded in our 3-coat Baked Insulated Enamel.

**FEATURES:**

1. Special Enameled Insulating Enamel. Bonded at low temperature of only 400 degrees F. Acid, Oil, Moisture and Fire Proof. Every unit receives three coats of enamel to eliminate possibility of shorting or leakage at minus rated resistance.

2. All Acratrest Resistors are wound with Double Coat Enamel Alloy Wire that has a very low temperature coefficient.

3. Every connection, between terminal and wire, on Acratrest Resistors are Hard Soldered. There can be no noise as there often is when a Mechanical Connection is used.

**Our Price 20c ea.**

30,000 Ohms........ 25c Ea. $2.75 Doz.
40,000 Ohms........ 25c Ea. $3.50 Doz.
50,000 Ohms........ 25c Ea. $4.00 Doz.

Micamold Bakelite Grid Leaks

Cat. No. 4036

**Our Net Price**

40c Per Box of 10

HAMILTON Voltage Regulator

The popular price regulator of a well-known manufacturer. 20-50 Watts

**Our Price 45c ea.**

ACRATEST PRECISION TYPE RESISTORS are wound with the best grade of enameled wire. Every splice of wire is carefully checked for insulation breakdown, diameter and temperature coefficient before entering production. To our knowledge we are the only company using double insulated wire. Every splice of wire used in the manufacture of our units receive two BAKED coats of enamel insulation.

PRECISION Wire Wound Resistors

2 Watts, 2½ in. long. With binding posts on both ends. Tolerance, 1%. Accuracy noiseless, dependable.

Used in Telephone Amplifier, Voltmeter Multiples, Meter Shunts, Photo Cell Circuits, Sound Record Amplifiers, Tube and "H" Pads, Attenuators, Decade Boxes, Bridge Assembly.

ACRATEST PRECISION TYPE RESISTORS are wound with the best grade of enameled wire. Every splice of wire is carefully checked for insulation breakdown, diameter and temperature coefficient before entering production. To our knowledge we are the only company using double insulated wire. Every splice of wire used in the manufacture of our units receive two BAKED coats of enamel insulation.

**Our Price 22c Doz.**

30,000 Ohms........ 25c Ea. $2.75 Doz.
40,000 Ohms........ 25c Ea. $3.50 Doz.
50,000 Ohms........ 25c Ea. $4.00 Doz.

Wire Wound Voltage Dividers on Lava Tubes

Cat. No. 4036

Our Price 45c ea.
Wire Wound Resistors & Voltage Dividers at unheard of prices!

Wire Wound Fixed Resistance on Baked Lava Tubes

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Ohms</th>
<th>Size</th>
<th>Watts</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>3908</td>
<td>5</td>
<td>5 in.</td>
<td>10</td>
<td>$.25</td>
</tr>
<tr>
<td>3950</td>
<td>8</td>
<td>5 in.</td>
<td>50</td>
<td>$.25</td>
</tr>
<tr>
<td>3974</td>
<td>12</td>
<td>5 in.</td>
<td>75</td>
<td>$.25</td>
</tr>
<tr>
<td>3910</td>
<td>21</td>
<td>5 in.</td>
<td>95</td>
<td>$.25</td>
</tr>
<tr>
<td>3909</td>
<td>32 C.T. 6 in.</td>
<td>109</td>
<td>$.25</td>
<td></td>
</tr>
<tr>
<td>3902</td>
<td>55</td>
<td>2 in.</td>
<td>56</td>
<td>$.20</td>
</tr>
<tr>
<td>3916</td>
<td>40</td>
<td>1/4 in.</td>
<td>27</td>
<td>$.20</td>
</tr>
<tr>
<td>4013</td>
<td>100</td>
<td>1/2 in.</td>
<td>10</td>
<td>$.15</td>
</tr>
<tr>
<td>3975</td>
<td>100</td>
<td>2 in.</td>
<td>10</td>
<td>$.25</td>
</tr>
<tr>
<td>3952</td>
<td>100</td>
<td>2 in.</td>
<td>10</td>
<td>$.20</td>
</tr>
<tr>
<td>3991</td>
<td>100</td>
<td>2 in.</td>
<td>10</td>
<td>$.25</td>
</tr>
<tr>
<td>3931</td>
<td>100</td>
<td>2 in.</td>
<td>25</td>
<td>$.25</td>
</tr>
<tr>
<td>3989</td>
<td>250</td>
<td>5 in.</td>
<td>25</td>
<td>$.20</td>
</tr>
<tr>
<td>3929</td>
<td>400</td>
<td>2 in.</td>
<td>25</td>
<td>$.20</td>
</tr>
<tr>
<td>3909</td>
<td>450 C.T.</td>
<td>25</td>
<td>$.20</td>
<td></td>
</tr>
<tr>
<td>3936</td>
<td>500</td>
<td>2 in.</td>
<td>10</td>
<td>$.25</td>
</tr>
<tr>
<td>3921</td>
<td>600</td>
<td>2 in.</td>
<td>10</td>
<td>$.25</td>
</tr>
<tr>
<td>3984</td>
<td>3100 C.T.</td>
<td>25</td>
<td>$.20</td>
<td></td>
</tr>
<tr>
<td>3917</td>
<td>700</td>
<td>2 in.</td>
<td>10</td>
<td>$.25</td>
</tr>
<tr>
<td>3958</td>
<td>750</td>
<td>2 in.</td>
<td>10</td>
<td>$.25</td>
</tr>
<tr>
<td>3978</td>
<td>781</td>
<td>2 in.</td>
<td>10</td>
<td>$.25</td>
</tr>
<tr>
<td>3921</td>
<td>800</td>
<td>2 in.</td>
<td>10</td>
<td>$.25</td>
</tr>
<tr>
<td>3971</td>
<td>900</td>
<td>3 in.</td>
<td>50</td>
<td>$.30</td>
</tr>
<tr>
<td>3942</td>
<td>920</td>
<td>3 in.</td>
<td>50</td>
<td>$.30</td>
</tr>
<tr>
<td>3953</td>
<td>1000</td>
<td>3 in.</td>
<td>50</td>
<td>$.30</td>
</tr>
<tr>
<td>3955</td>
<td>1000</td>
<td>3 in.</td>
<td>10</td>
<td>$.20</td>
</tr>
<tr>
<td>3961</td>
<td>1500</td>
<td>4 in.</td>
<td>50</td>
<td>$.30</td>
</tr>
<tr>
<td>3959</td>
<td>2000</td>
<td>4 in.</td>
<td>25</td>
<td>$.20</td>
</tr>
<tr>
<td>3967</td>
<td>2000</td>
<td>4 in.</td>
<td>25</td>
<td>$.20</td>
</tr>
<tr>
<td>3989</td>
<td>600 C.T.</td>
<td>40</td>
<td>$.40</td>
<td></td>
</tr>
<tr>
<td>3912</td>
<td>2500</td>
<td>2 in.</td>
<td>5</td>
<td>$.25</td>
</tr>
<tr>
<td>3994</td>
<td>2850</td>
<td>1 1/4 in.</td>
<td>10</td>
<td>$.25</td>
</tr>
<tr>
<td>3943</td>
<td>3500</td>
<td>2 in.</td>
<td>25</td>
<td>$.20</td>
</tr>
<tr>
<td>3944</td>
<td>4000</td>
<td>2 in.</td>
<td>25</td>
<td>$.30</td>
</tr>
<tr>
<td>3945</td>
<td>4500</td>
<td>2 in.</td>
<td>25</td>
<td>$.30</td>
</tr>
<tr>
<td>3991</td>
<td>6000</td>
<td>2 in.</td>
<td>10</td>
<td>$.25</td>
</tr>
<tr>
<td>3998</td>
<td>6000</td>
<td>6 in.</td>
<td>100</td>
<td>$.55</td>
</tr>
<tr>
<td>3947</td>
<td>6000</td>
<td>6 in.</td>
<td>25</td>
<td>$.40</td>
</tr>
<tr>
<td>3948</td>
<td>7500</td>
<td>2 in.</td>
<td>25</td>
<td>$.30</td>
</tr>
<tr>
<td>3925</td>
<td>12500</td>
<td>2 in.</td>
<td>25</td>
<td>$.30</td>
</tr>
<tr>
<td>3917</td>
<td>30000</td>
<td>4 in.</td>
<td>25</td>
<td>$.35</td>
</tr>
<tr>
<td>5677</td>
<td>30000</td>
<td>2 in.</td>
<td>20</td>
<td>$.75</td>
</tr>
<tr>
<td>3944</td>
<td>40000</td>
<td>6 in.</td>
<td>75</td>
<td>$.55</td>
</tr>
<tr>
<td>3970</td>
<td>40000</td>
<td>6 in.</td>
<td>75</td>
<td>$.55</td>
</tr>
<tr>
<td>3946</td>
<td>50000</td>
<td>6 in.</td>
<td>75</td>
<td>$.55</td>
</tr>
</tbody>
</table>

General Utility Voltage Dividers

- 50 Watts
- 17,500 Ohms
- Tapped at 3400, 8600, 6500.
- 7/8 in. long, 3/8 in. diam.
- On baled lava tube.

Cat. No. 3913 $2.00

Cat. No. 3900 $2.00 ea.

General Utility Tapped Resistor

For Receivers, Power Amplifiers and "B" Eliminators.

Used in Koester and Brandsen Sets.

20 Watts—4 in. long.

Cat. No. 4014 $39.00 ea.

1,000 Ohm 10 Watt Wire Wound Resistors

Suitable for bias for 265 tubes; and used for many other purposes.

10 watts. 1 1/4 in. long.

Cat. No. 3924 $10.00 ea.

540 Ohm "C" Bias Resistor

Used for taking off "C" Voltage from and B Eliminator.

15 Watts. Tapped at 60, 90, 120 ohms.

2 1/4 in. long.

Cat. No. 5103 $15.00 ea.

Filament Series and Grid Resistors

For Atwater-Kent

61 D.C. Set

Cat. No. 6008 $95.00

Per Set of 3

Other AK Resistors

Cat. No. Ohms 50 C.T. 15c
7165 30000
7166 1000
7167 800

Edison Base Resistor

20 Ohms for Bosch 48 D.C.

Can be used for conversion of an A.C. set, screen grid and 245 filament supply. Simply hook 3 in series, making a total of 60 ohms.

Cat. No. 5848 $85.00

HY-WATT CARBON Resistors on Lava Tubes

5 WATT—

11 1/4 INCHES LONG

Cat. No. Ohms Color 5000 Ohms Color
3908 1,000 Green 3907 55,000 Black
4707 10,000 Black 3933 130,000 Red
3932 20,000 D. Green 3929 250,000 Maroon
3933 22,000 Black 3960 600,000 Brown
4708 25,000 Black 3961 1 1/4 Meg. Black
3944 50,000 Orange 3923 3 Meg. Orange
5805 50,000 D. Gray 3924 100 Black
3925 60,000 L. Gray 3955 30,000 Orange

Our Price 15c ea.

$1.50 Dozen, Assorted

Replacement Resistance Strip for Atwater Kent

37 Volume Control

Also Used in AK 28, 38, 40
Burnt out or defective strip replaced in kit.

Cat. No. 3713 $40.00 ea.

Ward-Leonard D. C. Voltage Regulator

50 Ohms—300 Watts

Original resistor as used in Grebe R6K Receiver.

For converting A.C. sets to D.C. where screen grid tubes are used.

Cat. No. 4245 $2.00

WorldRadioHistory
Voltage Dividers Used in All TEMPLE Receivers

While these Wire Wound resistors, baked on lava tubes were primarily designed to be used in Temple sets, they can be adapted for use in many other standard receivers, amplifiers and eliminators. Conservatively rated and all brand new.

30c
Cat. No. 3864
6550 Ohms, divided 750, 5200, 900 Ohms. Used in Temple Models 8-80, 8-80 and 8-90.

35c
Cat. No. 3867
33 Ohms—Used as Voltage Regulator in Temple DC Sets. Can be used in place of Voltage Regulator Tube in any set.

30c
Cat. No. 3861
500 Ohm Resistors for Audio Bias.

25c
Cat. No. 3865
250 Ohms with 200-50 taps. Used in Temple DC Sets.

Ward Leonard Vitrohm
8350 Ohm Voltage Divider
Tapped at 5,000, 3,000 and 350 Ohms. 6 in. long.

Cat. No. 3914
30c each
7850 Ohms
Tapped 750, 7000, 100-4 in. long.

Cat. No. 3863
30c each
$3.50 dozen

Victor Voltage Divider

For all 1030 Model Receivers. Total 2,525 Ohms tapped at 200, 1,350, 260 and 775.

Cat. No. 3170

Our Price 65c ea.

Aerovox Crosley Voltage Divider

5,000 Ohms tapped at 2,000, 25 watts, 4 in. long. Wire wound on baked enamel.

Cat. No. 3965

Our Price 50c ea.

Wire Wound Vitreous Enameded Resistors

Acratost vitreous enameded resistors are made of the best grade of fused electrical refractory tubing which have the same coefficient of expansion as the porcelain enamel and wire, permitting safe heavy loads without fear of injury to the resistor. We use the highest grade of resistance wire, wound on refractory tubes. Acratost resistor contact points are securely made by a scientific process, whereby the resistor at the contact point practically becomes an integral part of the supporting or mountain lugs, thus eliminating any possibility of open circuits caused frequently by poor joint contacts. Fired at 1200 Deg. Fahrenheit, durable and permanent. A large assortment carried in stock to meet every requirement.

Our Price 35c ea., $3.00 doz.

Freshman Fixed Resistances Wire Wound—Baked on Lava Tubes

18,000 ohms total used in Freshman N Models. Tapped as follows: 2100 ohms, 4300 ohms, 3000 ohms, 3250 ohms.

Cat. No. 3963

Our Price 65c ea.

Radiola 28 Voltage Divider

USED IN 104 PACK
Wire wound on bakelite. Identical to original. This item is usually very difficult to secure and every service man should have a few on hand.

Cat. No. 6756

Our Price 75c ea.
ATWATER KENT
Model 55 Replacement R. F. Coils

1¼ in. diameter, 3½ in. high. Primary winding on separate form.

Cat. No. 2551 $1.50
Per set of 3 Coils

RADIOLA
Super Heterodyne Coils

Used in Radiolas 64 and 67, Victor Models 9-18, 9-54 and 9-56.
Enamel wire on bakelite form. ¼ in. diameter x ¾ in. long. B.P. chokes included.

Cat. No. 3732 $1.35 per set of 3

RCA Screen Grid RF Coils for Radiolas 44 and 46

Complete with mounting brackets, screen grid lead and trimmer condenser.

Cat. No. 4168 $1.35 per set of 3

Aluminum Tube Shield, Cap and Base

One-piece aluminum shield for 222 and 644 screen grid tubes. Outlet hole at top for wire connector. Shield only.

Shield, Cat. No. 4171 15c
Base, Cat. No. 4172 15c
Tube Clip, Cat. No. 4173 2c

Per set of 3 Pieces 18c

3 Pc. Shields
For New Type Tubes 55, 56, 57, 58
Cat. No. 7173
20c Per set of 3

Genuine Victor Radio Frequency Coils

Complete set of 4 coils consisting of 1 Antenna coil and 3 RF coils. Diameter 1¼ in., height 2¾ in. For .00035 condensers.

Cat. No. 4169
50c per set of 4

Transcontinental Screen Grid R. F. Coils With Shields for .00035 Condensers

These coils may be used in any set. They are space wound with enameled wire on bakelite tubing. Coils are equipped with mounting brackets which are attached to the aluminum shields. Two tapped holes correspond to two holes in the shield. These high grade coils will give 100% efficiency in any receiver.

Cat. No. 4136
57c per set of 4

Band-Pass, Detector and Oscillator Coils

An unusually fine superhet can easily be built with this unique coil combination. These coils incorporate a 10 K.C. band pass coil combination and a first detector and oscillator combination. They will make a sensitive, selective superheterodyne which will receive from great distances. A special feature of these coils is the cap on shielded coil which removes all semblance of image frequencies and harmonics. These coils tune with our 8261 4-pole condenser and cover the entire broadcast band. Using these coils with the intermediates, condensers and other equipment listed on this page will make up a low priced superhet of advanced design. Wiring diagram and instructions furnished with each set.

Cat. No. 6634
$1.75 per set of 2

New Design “Conoid” Screen Grid R F Coils

Completely Shielded

Diameter, 2 in. Height 1¾ in.
A completely shielded coil, air-wound and self-supporting. Each lug is marked with its respective connection. These coils come in matched sets especially tracked on accurate straight line frequency condensers. Enclosed in copper cans with removable bases for easy mounting on chassis with two screws. This facilitates wiring as the coils may be removed while the rest of the wiring is done. The coils are extremely selective and rugged. With a set of these coils you are sure that the coils, shields and condensers are matched. Made for .00035 condensers.

Will operate with the 235, 239 tubes and with the new automobile carbon heater tubes, although in some cases it has been necessary to remove the primary of the coil to prevent oscillation.

Cat. No. 3217
98c Set of 3
Consisting of 1 Ant. and 2 R F. Coils
Cat. No. 3216
$1.30 Set of 4
Consisting of 1 Ant. and 3 R.F. Coils
Superheterodyne R.F., Detector and Oscillator Coils

- Enameled Wire Wound on Bakelite Tubing

Everything is superhet this year. Be up-to-date and revamp your old set or build a good superhet from the diagram we furnish free with these coils. In conjunction with a three-pang superhet \( z \), a variable condenser, these coils will tune in stations from great distances with 10 K.C. separation. The antenna coil is separate while the first detector and oscillator coils are on one form to assure perfect coupling.

Cat. No. 5197 $5.00 set

Complete with Diagram

AUTOHYNE Super-Het Coils

Cat. No. 6973

Coil Kit Price $2.95

This system saves the use of an extra oscillator tube and lowers the cost of construction of the receiver. The stability obtained from the Autodyne circuit assures its universal adoption.

With this set of high gain coils and I.F. transformers exceptional sensitivity and selectivity may be had. This entire set of coils are matched at the factory so that the builder may be assured of a precision receiver capable of receiving stations many thousands of miles away.

The Autodyne Kit Consists of:
- High gain antenna coil.
- High gain interstage coil.
- Autodyne coil and intermediate combined.
- 175 K.C. Intermediate frequency transformer.

With complete diagram of a Modern Superhet using our Kit—Detector and Oscillator, 1st IF, 2nd Detector, 1st Pentode, 1st Rectifier.

I. C. A. RF Chokes

For general use in broadcast and short wave receivers. Its choking effect extends from 14 to 600 meters and its distributed capacity is very low.

Cat. No. Millihenries
- 4000 40
- 8000 80

Our Price 60c ea.

High Gain Intermediate Frequency Transformer

These well-shielded, sharp-tuning interstages are the thing for that new super you are planning. Close coupling between primary and secondary assures high voltage gain, enabling reception from great distances. The 175 K.C. unit is furnished complete with a diagram of one of the finest superhets you have ever heard. The 465 K.C. unit is furnished complete antenna and ground while the 100 K.C. using the new band-switching coils.

FEATURES:
1. Condenser adjustment through top of can.
2. Aluminum shield with holes for wires.
3. Heavy steel supporting brackets.
4. Coils properly wound and shielded.
5. Compensator.
7. Mounted on porcelain base.

Diameter: 2-3/2 in.
Height: 2-11/16 in.
Sold in Sets of 3 an 5.

Our Price 95¢ ea.

Complete With Diagram

BAND-PASS Or Pre-Selector Coil

For .00035 MFD Condensers

Suitable for use on any receiver. This coil will add selectivity to the broadest set. It is specially designed for the antenna stage. The coil is extremely high in gain. It has three windings—a primary and two secondaries. The primary is connected directly between antenna and ground while the lower secondary is connected to the stator of one tuning condenser. The other secondary is connected to the grid of the tube and stator of the condenser.

Cat. No. 6910

Our Price 70¢

R. F. Choke 4 Millihenry

Suitable for short wave and superheterodyne receivers.

Cat. No. 6755

Our Price $1.00 doz.

Broadcast High Gain R F Coils For .00035 Condensers

There are especially designed for the discriminating set builder. Their special features are:
1. Choke acts at high plate impedance.
2. Capacity coupled primary.
3. Low distributed capacity.
4. Ease of mounting—fits into tube socket holes.
5. Compactness.
6. All connections marked.

The coils are matched at the factory, which is extremely important if selectivity and sensitivity are to be assured. Everybody is now leaning to High Gain Coils.

Cat. No. 6907

Set of 3—$1.50

Cat. No. 6908

Set of 4—$1.95

Broadcast and Short Wave High Gain R F Coils

For .00035 Condensers

Range: 70 to 200 Meters, 200 to 600 Meters.

Same coils as above. Cover the Television, Police, Airplane, Foreign and Amateur Bands. Coils are merely tapped in one spot for wave changing. Short wave end is separate heavy winding.

Set of 3—Cat. No. 6909

Our Price $1.75

Per Set

Air King Short Wave Plug-in Coils

A reasonably priced short wave plug-in coil set. for circuits requiring high amplification with low loss. Forms are of bakelite, Hands engraved with identifying coil number. Four coils in set, covering range from 15 to 210 meters when used with .0001 midget condenser.

Cat. No. 4300

$1.50
Genuine RCA-Victor and Brunswick Catacombs

Brand New!

These catacombs were used in the RCA and Victor sets a few years ago. They are extremely compact and contain both the intermediate frequency and audio units. Due to their peculiar construction it is hard to replace any parts in them and so a new catacomb is necessary.

Cat. No. 6221


Cat. No. 6220

5-tube Superheterodyne Catacomb for RCA models: 25, 29AC, 50, 10A, 10AC, 29AC; Victor models: Hygenor, Borgia, Cromwell, Tuscany, 9-15, 2-35, 2-40, 2-25; Brunswick models: BR-1B, Cordova 8, 2-0, BR-4, EXP-4J.

Our Price $5.50 ea.

Genuine Victor R.F. Coils

Ant. Coll
Cat. No.
5370

R.F. Coll
Cat. No.
5376

Blank Receiver or Amplifier Chassis

Cat. No. 6939

Steal Base for Power Amplifier or 6 Tube Midget Set

Cat. No. 5478

Price 35c

Our Price $1.50 Per Complete Set

Complete R. F. Coil Assembly

For Radiola Models 17, 18 and 33

Consists of Antenna coil and 3 R.F. coils with R.F. chokes, trimmer condensers and R.F. by-pass condensers mounted on metal terminal strip ready for installation in above Radiola models and many other sets. Coils are 1% in. dia. by 1% in. long.

Cat. No. 3733

Our Price $0.66 ea.

Our Price 5c each

50c per dox. Ass't

"Push-Down" Spring Binding Posts

Nothing to turn—makes positive strong contact.

Cat. No. 5465—"Antenna"
Cat. No. 5468—"Ground"
Cat. No. 5467—"Phono"

EBY Triple Binding Posts

"Short Ant," "Long Ant" and "Gnd"

Unremovable top posts mounted on bakelite strip.

Cat. No. 4106

Our Price 16c ea.

EBY Binding Posts

Cat. No. Marked Cat. No. Marked
4065 Plus 5686 15V
4066 — 5686 Spkr. Plus
4675 Blank 5687 Spkr. —
5670 Cl — 5688 1/16"
5686 6VT. 5689 .w.
5680 65V. 5690 .g.
5682 A— 5691 Cnd.
5693 Long Ant. 5693 90V.
5684 Short Ant.

EBY Twin-Jacks

In a brown bakelite strip.

Cat. No. 4060
Marked "Phono"
Cat. No. 4069
Marked "Speaker"

Our Price $0.71 ea.

EBY Twin-Posts

Two EBY non-removable binding posts, bakelite molded in brown composition and mounted on a bakelite strip. The antenna post insulated from metal panels.

Cat. No. 4068
Marked "Field"
Cat. No. 6689
Marked "Ant-Gnd."

Our Price $0.86 ea.

Special Dual Ratio Dial and Escutcheon for Dual Wave Sets

This 8 to 1 ratio dial can be instantly changed to a 50 to 1 ratio dial by throwing a lever. Ideal for short and long wave sets, because a very slow moving dial is essential on short waves. Very ingenious yet simple construction. Nothing to break or snap. 2 1/2 in. wide, 3 in. high. Transuscends celluloid dial.

Cat. No. 7171

$2.50

Eby Twin-Jacks

In a brown bakelite strip.

Cat. No. 4060
Marked "Phono"
Cat. No. 4069
Marked "Speaker"

Our Price .06c ea.

Power Amplifier

Or Midget Chassis Base of Heavy Gauge Steel

1 1/4" long
9 1/4" wide
1 1/2" tall
Weight, 4 lbs.

Green Finish
18 1/4" in. long, 9 1/2" in. wide, 1 1/4 in. tall.
Weight, 4 lbs.

Cat. No. 4399
75c

Earl and Freed RF Coil

Used in all Earl and Freed sets. Diameter 1/4 in., height 2 in., with brackets.

Cat. No. 5375
45c ea.

Service men and set builders who make their own will welcome the opportunity of securing this fine automobile steel spot welded chassis. It is large enough to accommodate up to 13 tubes 17 1/4 inches long, 8 1/4 inches wide and 3 inches tall.

Cat. No. 5391

89c ea.

Steel Base for Power Amplifier or 6 Tube Midget Set

All ready cut and drilled for a 6 tube layout. Just the thing for the set builder and experimenter. 1 1/4 in. long. 6 1/4 in. wide. 2 3/4 in. tall.

Cat. No. 5478

Price 35c

Kolster Variometer (Antenna Coupler)

Used in Kolster K20, K-22, Columbus 981, G1 and G3. A very hard to get item. If you service Kolster, you should have a few in stock at this low price.

Cat. No. 5356

75c
New Illuminated Drum
Smooth Positive Action

New type cable drive permits smooth, positive regulation, entirely free of backlash. Standard 1/4 in. shaft and 1/8 in. coupling—celloid, scale, beautiful engraving—calibrated in numbers from 0 to 100.

Cat. No. 4201
1/4 in. Shaft
Cat. No. 4202
2 1/4 in. Shaft

Our Price 78c
Complete with Dial Light Socket
Escutcheon Plate for this Dial
Cat. No. 4042
17c Each

Illuminated Drum Dial
For Short and Long Wave and Television Sets
Cat. No. 6903

Our Price $1.25
Complete
No Calibrations on Dial!
Beautiful Escutcheon Plate to Match
Instead of the usual numbers the calibrated dial has 4 different colored bands running around it, so that a different color may be allocated for each wave band. For 3/4" shaft. Complete with pilot light socket and plate. 2 1/4" dia., 5" high.

Midget Set Escutcheon Plate
2 1/16 in. high
3 1/4 in. wide

Cat. No. 4043

Our Price 15c
Hammerlund Triple Compensator

Three compensating condensers mounted on a strip of bakelite 6/8 inches long.

Cat. No. 3008
Our Price 35c ea.

Metal Belt Friction
Drive Tuning Dial

Outside diameter of dial 3 1/2 in. Shaft hole for 1/4 in. or 1/4 in. shaft.
Cat. No. 4041
1/4 in. Shaft
Cat. No. 4128
1/4 in. Shaft

Our Price 75c
Complete with Pilot Light Socket

Spring Friction Drive
Tuning Unit

Outside diameter of dial 3 1/2 in. Shaft hole for either 3/4 or 1/4 in. shaft. Pyramid in transparent scale of 0 to 100.
Cat. No. 4040
3/4 in. Shaft
Cat. No. 4127
1/4 in. Shaft

Our Price 50c
Complete with Pilot Light Socket

Midget Fan Dial

A very compact full vision dial with translucent strip and pilot light socket mounted on rear top. Attractive bronze escutcheon plate to match.
Dia. 3 in., 3 1/4 in. high,
2 1/4 in. deep.
For 3/4 in. shaft.

Cat. No. 6911
Our Price 60c
Complete with Plate

Fan Dial and Plate

For Midget Receivers
Fan dial with very legible black numerals. For 3/4" shaft. Handsome bronze escutcheon plate. 2 1/2" long, 3 1/2" diameter.
Cat. No. 6904
Our Price 60c
Complete with Plate and Socket

Escutcheon Dial Plates
of Latest Designs

Cat. No. 4042
Cat. No. 4046

Coin Embossed Bronze Finish. Modernistic Design. Especially suited for Drum Dials, similar to our Cat. No. 4201-4202.
4 in. high, 2 1/4 in. wide.

Our Price 25c

The New ‘Spot Tuning’ Illuminated Dial and Escutcheon


Complete with pilot light socket.

Cat. No. 5505
Our Price 67c

Medium Sized
Escutcheon Plate

For Either Midget or Larger Sets
Size: 3 in. high,
2 1/4 in. wide

Cat. No. 4044

Our Price 18c

Complete Full Vision
Dial and Escutcheon Plate

With Pilot Socket

Cat. No. 4045
1/4 in Shaft
Cat. No. 4047
1 1/4 in. Shaft

Our Price 90c

MAIL ORDERS TO 
See Terms on Page 5

Federated Purchaser Inc.

25 PARK PLACE, N. Y. C.
or to our nearest branch
Complete Line of Modernistic Bakelite Knobs

Two-Tone Walnut Knob
Dia. 1¼", ½ in. shaft
Cat. No. 5126
Our Price $1.10 doz.
Dia. 1 in., ¼ in. insert and set screw
Cat. No. 5127
Our Price $1.10 doz.

Hexagon Two-Tone Walnut Knob
Dia. 1¼", ¼ in. insert and set screw
Cat. No. 5128
Our Price $1.30 doz.
Dia. 1¼", ¼ in. insert and set screw
Cat. No. 5129
Our Price $1.20 doz.

Ornamental Top Walnut Knob
Dia. 1¼", ¼ in. insert and set screw
Cat. No. 5141
Our Price 95c doz.

Octagon Pyramid Top Walnut Knob
Dia. 1-1/16", ½ in. insert and set screw
Cat. No. 5130
Our Price $1.15 doz.

Vernier Port Dial
Ivory, Plate, Black
Dia. 4 in., Reading 0-180
Cat. No. 5142
Our Price 59c each
Dia. ½ in., (for Midget and auto sets)
Cat. No. 5143
Our Price 49c each

Walbert Univernier Dial
Calibrated 0-180, Ratio 10-1
Bakelite knob, Riched plate.
Cat. No. 4117
10c ea.

Genuine Walnut Wood Carved Knobs
Dia. 1¼"
Cat. No. 3565
Dia. 1¼"
Cat. No. 3289
Dia. 1¼"
Cat. No. 3352
Dia. 1½"
Cat. No. 3561
Dia. 1½"
Cat. No. 3718
Dia. 1½"
Cat. No. 3717
Dia. 1 1/2-16"
Cat. No. 3717

Our Price for Any of the Above Knobs
10c ea.; $1 doz.
Assorted

Ornamental Knobs
Brown Bakelite Knob with Metal Overlay, Diameter 1¼", Insert ¼ in.
Cat. No. 5106
15c ea.
$1.50 per dozen

Grecian Design Drum Dial Escutcheon Plate
4 in. x 2¼ in.
Burnished Bronze Finish
Cat. No. 5107
18c ea.

Genuine Walnut Knob
Diameter 1¼" inches for ½ inch Shaft
With Set Screw Two-tone Finish
Cat. No. 6692
60c per dozen

Escutcheon Plate for Midget Sets
Burnished Bronze Finish.
2 in. wide, 3½ in. tall.
Cat. No. 5108
Our Price
15c ea.

Full-Vision Dial and Pointer
For replacement on sets now using ordinary dials. Simply remove the old-fashioned dial, slip the escutcheon plate over condenser shaft and replace old dial with a small knob. Will enhance the appearance of any set. Bronze finish only with translucent celluloid dial strip. Can also be used as an illuminated full-vision dial if panel is cut out.

Our Price
25c Complete

Naald Bakelite Tuning Knob
1¼ in. shaft with set screw.
Black only
Cat. No. 3405
8c ea.
75c per dozen

Kurz-Kasch Bakelite Knob
for rheostats and volume controls.
Mahogany and Black
Cat. No. 4123
5c ea.
50c per dozen

Tuning Condenser Assembly
As used in Radiolas 17, 18 and 33.
Complete with aluminum drum and cable.
Capacity .00005. 9½ in. long, 3½ in. wide, 5 in. high.
Cat. No. 5796
$1.50
YAXLEY

Phono to Radio Switch
mount jack type.
Used in Peerless Sets, with knob.
Cat. No. 4109

25c each
$2.75 Dozen

Single pole double throw, very fine as ill-capacity switch.

Carter 5 Channel
Double Arm Selector Switch
With Bakelite Knob and Escutcheon Plate
Same appearance and construction as Cat. No. 5486 described above, except that no impedance coils are included. Excellent for all public address work.
Cat. No. 5487

Price $1.00

CARTER “IMP”
Inductance Switches
List Price $1.00
Cat. No. Pt.
5484 3
5485 4
5486 5

40c ea.

Complete with Bakelite Arrow knobs. Compact and rugged and will stand up under hard usage. All metal frame, cadmium plated. Positive snap action. Diameter of frame 1½ in. Extends back of panel only 3/4 in.

CUTLER-HAMMER
Rotary Snap Switches

Cat. No. 6688 | Cat. No. 6666

Single Circuit with ⅜ in. shaft and 12 in. leads | Two-Circuit for Radio-phonographs with ⅜ in. shaft

45c ea.; $4.80 doz.

SELECTION SWITCHES
With Knobs and Plates

Single Pole
Double Pole

Switches are so constructed that switch cannot be loosened in panel by turning knob. Definite stops are provided so that undue force cannot be applied to contacting members. Knobs are keyed to shafts to prevent their slipping. All contact members are of spring phosphor bronze and all insulation of bakelized material. Shaft is entirely insulated from electrical circuits, thus eliminating danger of shock.

Furnished complete with metal etched plate with walnut background and old bronze figures corresponding to the number of contacts. Walnut bakelite knob with key slot to prevent backlash, and hexagon nut also furnished.

SINGLE POLE DOUBLE POLE

Cat. No. Contacts Price Cat. No. Contacts Price
4183 4 $0.95 4188 4 $1.25
4186 7 $0.98 4190 7 $1.45
4187 9 $1.08 4190 9 $1.60

Toggel Switch
With Long Flexible Leads
5 amperes, 120 volt. Approved by Underwriters’ Lab.
8/16 in. shank.
Cat. No. 4112

17c

S.P.D.T. Toggel Switch
SHORT SHANK
Cat. No. 4185
LONG SHANK
Cat. No. 4104

23c

Double Pole, Double Throw Toggel Switch
Cat. No. 4115

45c ea.

Toggle Switch
With Long Neck (1¼ in.)

For wooden panels and cabinet work.
3 amperes, 225 volts.
Cat. No. 4110

Price 17c

Circuit-Closing
Double-Throw Switch

For Phone-Radio and Public Address Systems

Used in cathode circuit of radio for shorting to ground or closing phone pick-up circuit.
Cat. No. 5283

38c ea.

GENERAL ELECTRIC
Three-Circuit Toggle Switch

Same appearance as above, but makes and breaks three times at one time. Has many uses in radio-phonograph, set analyzer and public address work.

25c each
Cat. No. 6566

ACRATTEST
Single Pole Double Throw Switch

125 V. 5 A.
Approved by Underwriters’ Lab.
Cat. No. 5286

49c

GENERAL ELECTRIC
Filament Switch

3 amperes at 110 volt. 1 amperes at 250 volt. All bakelite housing. One hole mount will fit any set. 8 in. leads. Approved by the Underwriters.
Cat. No. 4121

Our Price 20c

Yaxley Filament Switch

Very fast make and break. Compact, sturdy and easy to mount, one hole.
Cat. No. 4108

Our Price 20c

MAIL ORDERS TO
See Terms on Page 3
Federated Purchaser Inc.
25 PARK PLACE, N. Y. C.
or to our nearest branch
Push-Button Switch

A new Carter development—a perfected push-button type switch that is both adaptable and reliable in operation. Same rugged construction as Carter short jack switches. Uniformly tempered steel, cadmium plated springs that retain their tension permanently, positive contacts, non-corrosive. Bakelite knobs. Fully insulated.

**Contact is made when pressure on knob is released.**

Cat. No. 6712 **40c Ea.**

Automatic Electric Turntable Switch

This device, when installed on any electric turntable, will shut the current off when the pick-up touches the end of the record and the arm comes in contact with the switch. Used on all RCA and Victor Radio-phonograph combinations.

Cat. No. 4222 **25c ea.**

Yaxley Phonograph-Radio Switch

Used in Temple sets. Has neutral position. For panel mounting and knob control.

Cat. No. 4119 **Our Price 15c ea.**

Carter Switch Jacks

Double Pole, Double Throw. Complete with Knob.

Cat. No. 6548—List Price $1.00 **Our Price 40c**

Rotary Snap Switch For Fada and AC Dayton Sets

1½ in. Shaft

Cat. No. 5284 **10c**

Carter "IMP" Jack

Single circuit, open.

Cat. No. 5491 **10c**

Rotary Snap Switch

3 amp. 225 volts, with 15 in. pigtail.

Cat. No. 4122 **Our Price 14c**

Stewart Warner Rotary Snap Switch with Knob

Cat. No. 4114 **25c each**

Carling Toggle Switch

For Volume Control. Switch Combinations on all A.C. sets. 125 V. 3 Amp.

Cat. No. 4118 **25c ea.**

CARTER CHANNEL Selector Switch

With Knob and Plate

Gives instant selection up to 5 channels with constant impedance of 5,000 ohms. A switch of advanced design for use in centralized radio installations, enabling the listener to switch to any of 5 programs with constant impedance maintained throughout the line. Constructed to fit into a standard electric outlet box. The Impedance coils are securely riveted to the frame and all wiring concealed. Depth of switch 1⅛ in. Screw connections provided to all leads.

Equipped with attractive brown bakelite knob, arrow pointer and escutcheon plate.

Cat. No. 5488 **List Price $5.00**

I.C.A. CONVENIENCE Radio Outlet Plates Will Fit Standard Electric Outlet Box

A.C. Set Outlet Plate


Cat. No. 3501 List Price, $1.15 **Our Price 75c ea.**

Speaker Outlet Plates

Equipped with Phone Tip Jacks and 3 Phone Tips.

Cat. No. Material List Net

5482 Bakelite $ .65 $ .35

5499 Brass .60 .35

Antenna and Ground Outlet Plate

Cat. No. 5500 Material—Bakelite

**Our Price 50c**

BRASS Radio Wall Plates

Made of 040 gauge brass with a brushed finish, they mount on a standard switch box and are electrically and mechanically perfect.

Cat. No. Style

6595 "Antenna-Ground" ... 4141 "Speakers" ... 5481 With Single Circuit Jack ... **25c ea.**

MAIL ORDERS TO *Federated Purchaser Inc.* 25 PARK PLACE, N. Y. C.

See Terms on Page 5 or to our nearest branch.
ACRATEST SR.
High Precision Condensers

Features:
1. Steel frame cadmium plated.
2. Shaft hardened steel.
3. Condenser frame provided with three point chassis mounting.
4. Rotor fitted with individual resistor contact springs.
5. Shaft mounted on ball bearing mechanism, mounted on both ends, permitting free turning motion with perfect alignment.
6. Frame highly reinforced by means of inter-stage shields.
7. Perfect electrical isolation between stages.
8. Extremely low dielectric losses.
9. Proper rotor capacity distribution.
10. Perfectly electrically matched between successive units.
11. Stator section provided with individual trimmers.
12. High insulation resistance.
13. Rotor provided with slots for permitting adjustment to take care of distribution of capacity in set circuit.

These superheterodyne rang condensers will match any of the latest coils such as the ones featured on this page. The oscillator section is treated and does not require any additional condensers. Because of this feature the oscillator section is easily adjusted to turn with the others, making single control possible. The accuracy in gauging these condensers assures marvellous selectivity and sensitivity.

The TRP condensers are accurately gauged and will lend a high degree of selectivity and sensitivity to any receiver. Complete shielding and low loss aid in ending leaks and assuring easy tuning. Small in size, enabling mounting in small spaces. With any of the page it will cover from 200 to 500 meters. Designed so that the band is spread and no interference will result.

ACRATEST SHORT-WAVE Tuning Condensers

These condensers are of the half shield type insuring isolation between stages. They are all gauged in heavy aluminum frames and tapered for remarkable wave spread. Easily mounted and precision in operation.

ACRATEST Wafer Sockets

Special construction makes short circuits or flashovers impossible.

Bakelite Wafer Sockets

Genuine Eby Sockets

REGULAR

Base Mounting Sockets

Phosphor bronze springs and knurled posts.

Sub-Base Mounting Sockets

Our Price 12c ea.

25 PARK PLACE, N. Y. C.
or to our nearest branch
Two Sensational Achievements in Sound Reproduction

At no time in its development was any particular heed paid to the cost of material and only the very best equipment goes into the manufacture of these amplifiers. The result that tremendous production was started at once on these amplifiers was the first indication that their cost would be extremely low as material could be purchased in large quantities.

Super-Power 3 Stage
Semi-Class B 250 Power
Amplifier
Amplifier
Cat. No. 107.
$18.50 Less Tubes
Cat. No. 101
$24.50 Less Tubes

Cadmium Plated Chassis

Power Output—10.8 watts.
Power Consumption—55 watts.
Power Supply—110-125 volts 60 cycles A.C.
Size—11½ in. long, 6¼ in. wide, 7 in. high.
Employs 2-257, 2-245 and 1-280 Tubes.
Set of Universal Tubes ............. $2.60
Set of Artcurus Tubes ............. $3.39

Amplifier development has taken rapid steps in the last few months. Small output tubes can be made to develop tremendous power in new circuit. Where ordinary push-pull 245 amplifier would develop a maximum of 4 watts, the special circuit of this amplifier enables an undistorted output of 10.3 watts, and still maintain exceptional quality.

Circuit of No. 107
This amplifier is operated as a standard class A audio amplifier until its output reaches 4 watts; then a change takes place and the 245 tubes turn into a Class B circuit. The result is tremendous output. This change is taken care of by the special attenuator control and there is no sudden change, but a smooth, gradual gain.

The first stage in this amplifier uses two of the new type 11 tubes in push-pull. This stage is bridge-coupled to the special output stage.

Power
The maximum power output of this amplifier is actually 10.3 watts. At this output the quality is as excellent as at lower levels. The gain of this amplifier in decibels is 80.

Quality and Performance
The reproduction of this amplifier is particularly recommended for recording, medium sized public address systems and small cars. The response from this amplifier is good from 30 to 10,000 cycles. This amplifier will fill an auditorium or theatre seating up to 3,000 people; will operate 3 auditorium dynamic speakers at maximum and can have 45 people in the audience when operated at maximum power.

Universal Input and Output Connections
The input transformer of this amplifier is wound for a standard single or double button microphone and for a low impedance phonograph pickup. The output transformer is wound to match standard voice coils and high impedance dynamics or magnetics.

Gain Control
The gain control on this amplifier is no ordinary volume control but a specially constructed dual potentiometer giving excellent regulation over the entire output range. This control is equipped with a graduated plate for scaling volume levels.

Circuit of No. 101
This amplifier consists of three stages. The first stage uses a 58 as a high gain voltage amplifier. This stage acts as a push-pull amplification net, which has considerable power to microphone or phonograph input. This stage is coupled by a balanced bridge of resistors to 86 intermediate amplifiers which is transformer-coupled to a pair of 250 tubes. The secondary of this transformer is equalized to keep the amplifier from reaching distortion and still maintain pure tonal quality under all conditions. The input transformer provides for phonograph, radio and microphone coupling. The output transformer is tagged to the foregoing tubes at 8, 15, 500, and 4000 ohms. The 8 ohm winding is for coupling to Wright DeCosts and similar speakers. The 10 ohm coil is for recorders, dynamic units and RCA Phonograph speakers. The 500 ohm winding is for speakers and mixers; and while the 4000 ohm secondary is recommended for magnetic monitor speakers and dynamics that already contain output transformers.

Quality
A true straight line curve from 30 to 10000 cycles has proven that the Acratone Laboratory has really attained perfection in this outfit. The audio transformers used are all of the large upright type and use the finest grade of pure silicon steel cores. This enables the fine frequency response which makes this amplifier outstanding.

Performance
This amplifier will fill a hall, theatre, stadium or an auditorium seating up to 4,500 people. It is capable of filling to maximum 4 auditorium type speakers but will handle 8 such speakers with ample gain. Special output is provided for use with exponential horns, equipped with dynamic units.

An attenuator control is provided on the front panel for easy access. This gain control moves in a logarithmic curve from complete silence to a deafening roar with volume graduations in smooth steps of attenuation. It gives complete control over both the input and output. A graduated scale is provided for marking various output levels. At all volume levels the same pure tone quality is maintained. Instructions on output levels for recording and various sized auditoriums are discussed in the instruction manual.

Power
Generally amplifiers of this type are rated as having an output of from 12 to 18 watts. When measured on actual Eastern Electric standards the true maximum output of 2, 250's in push-pull was obtained for 18 watts p.e.m. The gain of this amplifier measured by the same standards was found to be 87 D.B.

Additional Amplifiers on Pages 53 and 54

The public address field has constantly been plagued with expensive equipment which did not prove its worth, nor operate in the manner in which it was advertised. Do not buy under any circumstances!!! Compare Acratone amplifier to low powered and exaggerated output amplifiers sold at competitive prices. These amplifiers are made of only the finest parts available.
LOFTIN-WHITE AMPLIFIERS

LOFTIN-WHITE “245” Amplifier
(Licensed)
For Use in Home Phonograph Reproduction and Small Public Address Systems

Employ 1-1/2, 1-1/2, 1-1/60 Tubes
Completely Assembled and Tested (less tubes)

This job is ideal for home use as a recording amplifier on phonograph amplifiers. For commercial purposes this unit is recommended for use as a line booster or speech amplifier.

TECHNICAL INFORMATION
When used with a microphone, no additional amplification is necessary. This is due to the inherent characteristics of these amplifiers. The high impedance secondary of the “Mike” transformer automatically increases the gain of this system and compensates for the low input voltage of the microphone.

The output of the “245” Amplifier is conservatively rated at 3 watts.

“245” AMPLIFIER—Completely Wired and Tested (less tubes)
Cat. No. 76
Our Price $13.50

Loftin-White Single Pentode Amplifier
The single 247 (Pentode) amplifier: Uses 1-224, 1-247 and 1-230. The output of this unit is about 4 watts. For high gain this unit is recommended for use in the same purposes as the 245 amplifier.
Cat. No. 82
Our Price $14.95

The Loftin-White ‘250’
(Licensed)
For Theatres, Public Address and Microphone Amplification

Employ 1-250, 1-254, 1-1/81 Tubes

The “250” Amplifier will successfully do the work that many high-priced amplifiers have been doing in the past. For phonograph reproduction this model can be relied upon to deliver sufficient volume to fill a hall containing up to 1,500 people.

The undistorted output of this unit is 6 watts. For small public address systems this job is ideal for use. The amplifier is adaptable for phonograph, microphone and radio purposes.

The output of the “250” is from 6 to 8 watts, undistorted.

“250” AMPLIFIER—Wired and Tested (less tubes)
Cat. No. 78
Our Price $19.95

The Midget 250 Push-Pull Amplifier

This unit is the most recent development in sound systems since the introduction of the 250 amplifier. Up to this time to procure great volume, amplifiers were necessary large and expensive, which involved critical layout, large transformers, chokes, etc., as well as heavy filter systems to eliminate hum and distortion, by the use of a new method of direct coupling, it eliminates transformers, chokes, etc., and the other commonly known evils of the old type of amplifier. The 245/250 tubes are a push pull feed, 2-250’s in push pull, 2-381’s rectifiers. The output is rated at 12 watts its gain is 90 DB’s at 400 cycles. The curve on the amplifier is comparatively small, showing only a DB drop at 10 KC. Power consumption is only 15 watts at 110 volts 60 cycle supply. At the low prices, we have brought out an amplifier which exceeds in performance the majority of other units selling at much higher prices.

250 Push-Pull De Luxe Amplifier

The output is rated at 15 watts and has a tapped output of 9, 15, 500 and 4000 ohms. The input is adaptable to Microphone, Radio and Phonograph which are built into the amplifier. This is the last word in Loftin-White amplification, and uses 2-224’s in push pull feeding 2-250’s in push pull with 2-281’s as rectifiers. At 400 cycles, the gain is 120 DB. It is ideal for large installations where several speakers are used. The unusually high gain eliminates the necessity of a pre-amplifier for microphone. Due to the new method of direct coupling used in the unit a degree of tone quality and volume is attained which has never before been offered.

At full volume, the percentage of distortion is about 1/2% and the amplifier ranges from 30 to 9000 cycles. Mounted in a strong steel crystal (black) finished chassis the unit is the last word in amplifiers from every angle. A tapped output with engraved symbols makes for ease of operation. The input is also tapped for microphone, radio and phonograph inputs. The gain control is built in.

224-247 Double Push-Pull Automobile Amplifier

This unit is the outcome of experimenting for a high gain amplifier at low cost and low power consumption. It has an output of 1.5 watts.

The job will operate from any 60 watt generator of the conventional type or other new micro and used 110 volt generator designed to work from a 6 volt storage battery. This last unit is no larger than a "B" battery. Previous to this a large and expensive amplifier was necessary to procure the same amount of volume and combined with this a power supply consisting of several storage batteries and a large generator, or a gasoline driven motor was needed. All this has been eliminated by the use of the above described amplifier.

224-247 Double Push-Pull Automobile Amplifier

The output is equal to the output of the average 250 amplifier. A tone control is supplied to vary the tone to any desired degree. The circuit is a high gain two stage unit taking advantage of the new D. C. pentodes and giving more tone quality and freedom from background noise. Mounted on heavy metal base designed for automobile= use. A tone control is also provided which is switchable to either 60 cycle or 120 cycle.
TRANSMITTING
EQUIPMENT

Designed by

10 Watt Transmitter

The low power universal transmitter described in this article represents the most advanced design for this class of equipment. The circuit employs a 74 speech amplifier, resistance coupled to a pentode modulator which feeds into a pentode oscillator. The rectifier is a full-wave Tesla tube. The output of the transmitter is rated at 10 watts. The power equipment specified has a 75 per cent overload safety factor. The antenna system is of the absorption type. The oscillator is of the well-known Hartley design, with slight modifications, readily noted from the schematic diagram. The Helix or plate modulation system is used. An important feature of the design is the fact that one power supply and a single source of bias are used throughout. A convenient switch on the front panel permits rapid change from C.W. to phone. The switch, when on “phone,” short-circuits the key and cuts in the modulator. When on “W.” position, it turns out the modulator and speech amplifier, so that only the oscillator is used, with keying obtained through a push-pull or a wave-meter should be used to check the wave-length accords with the broadcast. The universal 10-watt transmitter is built on a rugged aluminum frame, 10 inches wide by 14 inches high by 8 inches deep. The microphone and the key are connected to binding posts at the back of the transmitter. The frame is grounded, while the antenna is connected to a binding post located alongside of a condenser (31). The switch for changing over from phone to C.W. is conveniently located on the front panel. This panel also carries the milliammeter, the microphone gain control, the tuning dial, variable condensers (27 and 31), and the microphone and line switch.

The Universal Transmitter designed by Messrs. Werner and Blair consists of a compact, efficient, and comparatively inexpensive. The following are a few of the stations worked during the first week the transmitter was on the air: EAR116 (Spain), 46-meter C.W.; W4TI (North Carolina), 160-meter phone; W8ACI (Pennsylvania), 160-meter phone; WILE (Oregon), 40-meter C.W.; WZZAT, Expedition in Tennessee, key schedule on 80-meter C.W. Although the output of this transmitter is only 10 watts, it is capable of reaching out to very great distances, not only on C.W. but also on phone. Incidentally, this job is light, compact, and comparatively inexpensive. (This transmitter is fully described in an article by Mr. Werner in the August 1932 issue of "Short Wave Craft.")

Federated Purchaser has been hesitant about entering the Transmitter field because it felt that it is a highly specialized branch of the radio industry in itself. We felt that when we did decide to offer transmitting apparatus, it would not be of the ordinary run, but extraordinary equipment designed and constructed by experts in the field. We have been fortunate in securing the services of two pioneers of the key and phone, G. Leonard Werner and Haskri Blair, who have designed and built transmitting apparatus for many years and who are up to the minute on the subject. The equipment described in this page was designed and built under their personal supervision, and incorporate the last word in transmitter design. In inaugurating this department, we have featured only such items for which there is a general demand, of simple construction and easy to operate, yet extremely efficient. If you are interested in building or having us build for you any type of transmitting apparatus, or wish to ask any questions on the subject, you are glad to have you write to Messrs. Werner and Blair, who will give your letters their personal attention. You know of any other items which should be featured in this department, tell us.

50 Watt Hartley Oscillator

This oscillator is one of the most efficient circuits in radio today, and we offer this efficiently made job to the experimenter, commercial and amateur operator. This job is completely wired and is supplied with 20, 40 and 80 meter coils. The latest and foremost equipment is used in its construction, and it is so designed as to be adaptable for phone work. The filament is centered tapped where the keying is done. It uses one 50 watt tube as oscillator.

Listening Monitor

We are offering at this time a new development, constructed entirely and wired employing the long sought for band spread on the 20, 40, and 60 meter channels. On each of these bands, we have almost a 100 degree spread. It employs the new type 80 tube and the entire unit including A and B batteries in a neatly cradled metal cabinet. The unit No. SXXX A. Burgess 2 volt battery and a small 2½ volt battery with a 250 tube will be supplied for $2.00 extra.

50 Watt Transmitter

This consists of 210 crystal systems for lectures and small auditoriums. Produces speech and music with marvelous fidelity of tone.

50 watt phone and C.W. crystal control transmitter, complete with power supply.

Cat. No. 127

$350.00

Less Tubes

50 Watt Transmitter

Consists of 210 crystal systems for lectures and small auditoriums. Produces speech and music with marvelous fidelity of tone.

KOLSTER

Push-Pull 245

Power Amplifier and Matched Dynamic Speaker

For radio, phonograph, public address systems for lecture halls and small auditoriums. Reproduces speech and music with marvelous fidelity of tone.

Our Price $16.95

(Lees Tubes)

Screen Grid R. F. Tuner

This unit consists of complete R. F. section to be coupled to any audio unit. Uses 4 space 234 tubes and will operate on either A. G. or D. C. current. The condenser gang is completely shielded as are the R. F. coils. A fine adjustment of the volume may be obtained from the volume control which is included in the unit.

Cat. No. 131

$9.00

Less Tubes and Batteries

Cat. No. 132

$13.50

Less Tubes

WorldRadioHistory
Great News for Battery Set Buyers!

**RADIOLA 28**
8 Tube Super

Complete With Eight Radiotrons

**Cat. No. 28**
List Price: $200

**Our Price**
$13.75
Including 8 R.C.A. Radiotrons

Radiola 28 Second Harmonic Superheterodyne in distinguished and graceful two tone mahogany cabinet. Ample compartment for all tubes directly under cabinet easily accessible by raising hinged upper section of receiver. Tubes used and furnished with receiver are UX-199 Radiotrons and 1 UX-120 Radiotron. Same tubes used whether receiver is operated by batteries or eliminators. Just the set for the home without electricity, for sailors, tourist camps, houses on wheels, etc. Will work anywhere without external connections. Fully self-contained.

This set is very sensitive and powerful and yet uses dry cells throughout. Employ twelve 1-1/2 V. No. 6 Dry Cells.—Cat. No. 6656
Three 2-1/2 V. B. Batteries—Cat. No. 6655—and two 4 V. B. Batteries.

**RCA-Victor End Table Electrola**

**Size:** 19x33/4 x 57/8. **Weight:** 16 lbs. **List:** $284.00. (Less tubes.)

You can now convert at very little cost Radiola 28’s and 25’s to modern Power Amplified all-electric receivers by using this Powerizer Power Pack.

This Pack is a double action Unit when used with these receivers. It does away with all batteries, supplying complete A, B and C current for all the 199 tubes in the set. In addition to supplying a stage of 210 Power Amplification in place of the 120 tube, gives additional volume and tremendous volume. It is a revelation.

This Powerizer approved by RCA. Very simple to connect. Installs the UX-210 and 260 tubes. Operates on 110-120 Volts, 50-60 Cycle A.C. current.

**R-25—Cat. No. 4481 For Radiola 25**

**R-28—Cat. No. 4482 For Radiola 28**

**Our Price** $18.75

**To Meet the Great Demand**

We Have Secured a New Shipment of COLUMBIA AUTOMATIC PHONOGRAPHS AND AMPLIFIERS

This Deluxe Columbia Automatic Record Changer and electrically operated Phonograph is the greatest buy we have ever offered to the public. The size of the re-orders from customers who originally purchased a single sample, is definite proof to us that it is satisfactory universally. Built into a handsome selected walnut cabinet, it consists of a Columbia Electric Pick-up; a powerful Ecotour Amplifier, using 1-237, 2-245s and 1-280 tube, giving tremendous volume without distortion; a Rola 12” Auditorium Dynamic Speaker; and in addition to all this, an automatic record-changing device which records consecutively.

Just think what you get for only $35.00. Why, the record-changing device alone is worth more, to say nothing of the Amplifier and Dynamic Speaker and Pick-up and the gorgeous walnut console cabinet in which this outfit is housed.

This unit has many uses. A serviceman or a dealer could find excellent use for it in his own place for demonstrating records and for making records of your customers’ voices for home talking amplifiers.

Any number of organisations in your home town or neighborhood can use this equipment; dance halls, clubs, restaurants, and innumerable others. Another good suggestion which has been put into use by several of our customers has been the addition of a tuner to this phonograph. All the voltages can be obtained from the power amplifier already installed. There is sufficient space to the right of the amplifier on the bottom of the cabinet so that a tuner could be built into it, and with a remote control device such as is used in automobiles, the tuning dial could be placed underneath the lid right alongside of the record-changing device. It has proved very satisfactory and in one particular case a customer of ours has used several of these machines for that purpose.

**POWERIZERS**

**R-25 and R-28**

ABC Eliminators and Power Amplifiers for Radio Models 25 and 28

**RCA-Victor End Table Electrola**

**Dimensions:** 24” in.
24-1/2” wide.

**List Price: $295.00**

Special

**Our Price** $29.50


We Carry the Largest Assortment of Wire in the Mail Order Business. Our Prices Are Below Market. See Pages 76, 77 and 78.
Universal Model "Q R Q"

An exceptionally efficient, small low cost microphone for amateurs, experimenters, and for any installation requiring a single simple carbon microphone. Q R Q is an exact replica of the Standard Broadcast Model in every respect. It is 3¼ in. high and is finished in beautifully polished chrome.

Model Q R Q is a single-button, 200 ohm carbon microphone with high sensitivity and clear, natural reproduction. The button is solid 24-karat Gold faced, giving it extremely long life.

Our Price $2.94

Universal Model "BABY MIKE"

Cat. No. 206
List Price $7.50

Baby Mike is a genuine single-button carbon microphone of 200 ohms resistance. It is mounted in a die-cast mounting. 3½ inches high—a replica of the regular Broadcast model. It may be connected to amplifiers or used in almost any radio set in the market.

Baby Mike is a beautiful miniature microphone, finished in attractive polished chrome.

Our Price $3.95

Universal Model "LL"

An extra rugged, heavy type, two-button broadcast microphone. Complete assembly is of high carbon steel, ground to within .001 of an inch accuracy. The diaphragm is alloy of exactly the proper hardness and strength to secure the best results. Pure gold contacts are placed on each side. The manufacturer used and the precision of manufacture combine to make this model stand out as the superior microphone reproducing a range of from 30 to 7,000 cycles.

Model "LL" is 3¼ inches in diameter by 1¼ inches thick and is standed 200 ohms per button. Polished chrome finish.

Our Price $4.10

Universal Model "A"

America's Most Highly Developed Single-Button Microphone

New Heavy Duty Design

The new design of the heavy duty Model "A" microphone incorporates improvements that lift the performance of this simple button microphone to a new high. These include a new type of perforated protective facing more than doubles the effective area of the diaphragm.

Model "A" is constructed with Solid Gold, chrome plated button and highest grade carbon granules which produce hiss to a minimum. Equipment is light, an extremely thin, light weight diaphragm which is ideally suited for pumping. The scientific damping permits Model "A" to handle frequencies from 100 to 4,000 cycles.

The single button is 200 ohm resistance. Model "A" is 3 in. in diameter by 1¼ in. thick. It is beautifully polished in plated chrome and can be mounted in a variety of ways. Model "A" Desk stand or ½ in. suspension ring recommended.

Net weight 1 lb.
Packed weight 1½ lbs.
List Price $15.90

Our Price $8.82

Universal Model "BB"

1933 Value—New Super-Design

The super-microphone in every sense of the word. Model "BB" is a two-button microphone and is provided with such a high resistance for voice-pickup, publ- list Price $25.00

Our Price $14.70

Universal Model "KK"

A Top-Notch Double-Button Broadcast Microphone

Only supreme performance and years of after sale service can explain the fact that the improved Model "KK" continues to be the most popular and fastest selling $50.00 microphones on the market.

A substantial, solid, two-button broadcast microphone, with a very minimum of hiss. Model "KK" is carefully constructed of the finest materials with a 24-Kt. pure gold spot center. The diaphragm has a thickness of only .008 lbs. The frequency range of Model "KK" is all that can be desired in a carbon microphone, namely from 90 to well over 6,000 cycles. The buttons are of 24-Kt. pure gold and both diaphragms are 24-Kt., polished gold. It is 2½ in. in diameter and 1¼ in. thick. Entire unit is carefully laboratory tested before shipment.

Our Price $29.40

Universal Model X Two Button Microphone

A Sensational Microphone at a Sensational Price

A two-button microphone listing at only $16.00. Model "X" sets a new high standard for quality at a price that defies competition.

Model "X" confirms the reputation for quality and performance that characterizes all Universal Products. Every essential feature necessary to make superior performance and long, care-free operation has been incorporated in the design and construction of Model "X". Only the non-essential trimmings have been eliminated to enable us to offer this remarkable microphone at this popular price.

Faithful, truly natural tone. Pure Gold Contact. Duralumin non-breakeable dia- phragm, 200 ohms per button. Very low hiss level. Scientifically Damped, frequency range from 1,000 to 4,000 cycles. Model "X" is ruggedly built and finished in non-corrosive, polished nickel plate. Can be mounted in any Universal mounting. Diameter, 2½ in. Overall thickness, 1 in.

Such a microphone can be purchased at anywhere near this astonishingly low price.

Net weight, 1¼ lbs.
Packed weight, 2 lbs.
Cat. No. 210
List Price $50.00

Our Price $16.00

FEDERATED PURCHASER is the premier radio replacement parts house in the U. S. A. 3,000 items carried in stock.
Universal Condenser Microphones

The model herewith illustrated is the result of exhaustive experiments to produce a microphone for film and disc recording, in which field 90% of the production of this model is used. Universal Condenser Microphones are in use in nearly all parts of the civilized world, in recording and in broadcast studios.

Universal Condenser Microphones, Model 1440 and 2440, are made in two —the first having a single stage of amplification and in the second, a 2 stage amplifier is used. They are otherwise the same in size and appearance. Following are detail descriptions:

A single stage microphone using a 440 tube with an output of approximately 1.5–1.8. The output is designed to feed into a 200 ohm load, or the input terminals of an amplifier, where a condenser microphone has previously been used. The current consumption on the 200 volt tap is only 0.2 milliamperc with filament current of 25 amp. Six: 6 inches by 3 inches. Net weight: 11 lbs. Packed weight: 17 lbs. Complete with 25 feet Rubber Covered Shielded Cable.

Cat. No. 242
List Price $300

Our Price $176.40

Universal Desk Type Mountings

Model "K" Desk Mount Without Covers

Mode "K" is 6 inches in diameter and is used for mounting Model "K", or "KX" microphones on 4 points of suspension, using 8 springs—the ideal way to suspend a microphone. It may be used for the new "BB" but is not recommended for this new larger unit.

The base is set in matted rubber ring forming a cushion against vibration and preventing damage to polished surfaces. The entire unit is beautifully finished in chrome plate. Provided with a finger ring for carrying! Cable passes through the hollow base.


8 Suspension Springs Included

List Price $3.00

Cat. No. 238

Our Price $2.94

Adjustable Floor Stand

An extra heavy floor stand, with extra heavy base weighing 18 pounds, so that the possibility of tipping is eliminated. The top ring is 6½ inches in diameter, four point suspension to accommodate all large microphones now in use. Total extended height, 6 feet. It is smoothly operated with very positive clamp lock, preventing falling of stand while extended. Finished in Statusary Bronze, making a fine studio appearance.

Cat. No. 333

Our Price $8.50

Universal Desk Type Mountings

Model "K" Desk Mount with Covers and Letter Shield

Polished Chrome Finish

Desirable protection from the curious is secured by the beautifully turned and screened covers of the covers of the Model "K". The covers are sprung into position, eliminating tricky mechanisms which are liable to rattle. Makes a substantial and business-like appearance. Same stand and frame as on Model "K" without covers.

Cat. No. 250
8 Suspension Springs Included. List $0.00

Our Price $5.29

Model "L" Desk Mount with Covers and Letter Shield

The same type of covers as described for Model "K" are fitted to the 6½ inch diameter of the Model "L" mounting. Extra room is provided inside the ring and screened covers to allow freedom of movement without danger of jar or shorting of wires. Polished chrome finish, it is most attractive and business-like in appearance. Full instructions for lengthening. Call letters furnished. Any letter can be mounted at no extra cost.

Net weight 3½ lbs.; Packed weight 4½ lbs.

Cat. No. 232
8 Suspension Springs Included
List Price $16.00

Our Price $9.51

MODEL "L" DESK MOUNT WITHOUT COVERS

Model "L" is 6½ inches in diameter and is used for mounting Model "LL", "LL" W, or New Type "LL" Condenser Microphone. An extremely well-built and attractively finished suspension fixture following the lines of Universal's general designs. Provides a highly professional appearance.

Entire assembly 10¾ inches high.

Cat. No. 239

Net weight, 3 lbs. Packed weight, 4½ lbs.
8 Suspension Springs Included. List $18.00
Our Price $5.88

Banquet Stand

A beautifully finished stand of Statusary Bronze, adjustable from 12 inches to 24 inches. The top ring is 6½ inches in diameter. Four point suspension, built to accommodate any large microphone on the market. Can also furnish top ring of 6 inches in diameter, three point suspension to accommodate smaller microphones now in use. Weight of base, 6 pounds, so that there is no possibility of damage being caused by tipping.

Cat. No. 332

Our Price $5.50

Universal Condenser Microphones

The model herewith illustrated is the result of exhaustive experiments to produce a microphone for film and disc recording, in which field 90% of the production of this model is used. Universal Condenser Microphones are in use in nearly all parts of the civilized world, in recording and in broadcast studios.

Universal Condenser Microphones, Model 1440 and 2440, are made in two —the first having a single stage of amplification and in the second, a 2 stage amplifier is used. They are otherwise the same in size and appearance. Following are detail descriptions:

A single stage microphone using a 440 tube with an output of approximately 1.5–1.8. The output is designed to feed into a 200 ohm load, or the input terminals of an amplifier, where a condenser microphone has previously been used. The current consumption on the 200 volt tap is only 0.2 milliamperc with filament current of 25 amp. Six: 6 inches by 3 inches. Net weight: 11 lbs. Packed weight: 17 lbs. Complete with 25 feet Rubber Covered Shielded Cable.

Cat. No. 242
List Price $300

Our Price $176.40

Universal Desk Type Mountings

Model "K" Desk Mount Without Covers

Mode "K" is 6 inches in diameter and is used for mounting Model "K", or "KX" microphones on 4 points of suspension, using 8 springs—the ideal way to suspend a microphone. It may be used for the new "BB" but is not recommended for this new larger unit.

The base is set in matted rubber ring forming a cushion against vibration and preventing damage to polished surfaces. The entire unit is beautifully finished in chrome plate. Provided with a finger ring for carrying! Cable passes through the hollow base.


8 Suspension Springs Included

List Price $3.00

Cat. No. 238

Our Price $2.94

Adjustable Floor Stand

An extra heavy floor stand, with extra heavy base weighing 18 pounds, so that the possibility of tipping is eliminated. The top ring is 6½ inches in diameter, four point suspension to accommodate all large microphones now in use. Total extended height, 6 feet. It is smoothly operated with very positive clamp lock, preventing falling of stand while extended. Finished in Statusary Bronze, making a fine studio appearance.

Cat. No. 333

Our Price $8.50

Extra Heavy Condenser Microphone Floor Stand

Built especially for condenser microphones. An idea of its ruggedness can be attained by taking the tube which is 2 inches in diameter. The entire assembly is stationary bronze plated and presents a fine studio appearance. A flange at top allows for easy mounting. The adjustment lock is positive, and locks, or releases by the slightest thumb pressure. Net weight, 2½ lbs. Packed weight, 28 lbs.

Cat. No. 244
List Price $40.00

Our Price $22.80

Universal Desk Type Mountings

Model "K" Desk Mount with Covers and Letter Shield

Polished Chrome Finish

Desirable protection from the curious is secured by the beautifully turned and screened covers of the covers of the Model "K". The covers are sprung into position, eliminating tricky mechanisms which are liable to rattle. Makes a substantial and business-like appearance. Same stand and frame as on Model "K" without covers.

Cat. No. 250
8 Suspension Springs Included. List $0.00

Our Price $5.29

Model "L" Desk Mount with Covers and Letter Shield

The same type of covers as described for Model "K" are fitted to the 6½ inch diameter of the Model "L" mounting. Extra room is provided inside the ring and screened covers to allow freedom of movement without danger of jar or shorting of wires. Polished chrome finish, it is most attractive and business-like in appearance. Full instructions for lengthening. Call letters furnished. Any letter can be mounted at no extra cost.

Net weight 3½ lbs.; Packed weight 4½ lbs.

Cat. No. 232
8 Suspension Springs Included
List Price $16.00

Our Price $9.51

MODEL "L" DESK MOUNT WITHOUT COVERS

Model "L" is 6½ inches in diameter and is used for mounting Model "LL", "LL" W, or New Type "LL" Condenser Microphone. An extremely well-built and attractively finished suspension fixture following the lines of Universal's general designs. Provides a highly professional appearance.

Entire assembly 10¾ inches high.

Cat. No. 239

Net weight, 3 lbs. Packed weight, 4½ lbs.
8 Suspension Springs Included. List $18.00
Our Price $5.88

Banquet Stand

A beautifully finished stand of Statusary Bronze, adjustable from 12 inches to 24 inches. The top ring is 6½ inches in diameter. Four point suspension, built to accommodate any large microphone on the market. Can also furnish top ring of 6 inches in diameter, three point suspension to accommodate smaller microphones now in use. Weight of base, 6 pounds, so that there is no possibility of damage being caused by tipping.

Cat. No. 332

Our Price $5.50
Universal Torpedo Type Microphones

This new type of Universal Microphone is supplied to meet the steadily growing demand for torpedos. The microphones which in themselves are fully protected, are more compact, and can be quickly demounted. Torpedo Type Microphones of this type are designed and illustrated as supreme in this field. They combine in one instrument the recognized outstanding quality of tested Universal microphone performance with the special features demanded.

Connection is made to three spring jacks into which telephone pin terminals are plugged. Not supplied with cord. The polished chrome plated perforated and screened cup housings are of heavy brass and are firmly fastened. Can not be removed accidentally. Supplied in standard models "BR," "KK" and "LL."
Microphone Shielded
Input Transformer

This unit is the result of many months of designing and testing. The frequency is exceptionally flat, from 80 to over 7000 cycles. Primary is split 100 ohms each side of the secondary impedance of the order of 400,000 ohms. A larger unit than others listing for the same price. The size is 3¼ x 3½ x ¾ inches. Matches impedance of all standard type carbon 2-button microphones.

Cat. No. 2625 $2.50

Two Button, Unshielded Microphone Transformer

Same Characteristics as our No. 2623

Cat. No. 5596 $1.25

Two button unshielded microphone transformer with 5000 ohm winding for standard pickup and a center tapped secondary so that it may be used with push-pull tubes.

Cat. No. 7145 $1.95

RCA-VICTOR

Low Impedance Electric
Pick-Up Head

An exceptionally fine pick-up head with a constant steel permanent magnet housed in bronze finished brass case. Made by R. C. A. and used on R. C. A. Victor, Brunswick, O. E., Westinghouse and other makes of radio-phonograph combinations.

200 OHMS

Cat. No. 3670 $1.75

RCA-VICTOR

Low Impedance Pick-up Head With Straight Neck

For RCA, Victor, Brunswick, O. E. and Westinghouse Radio-Phonograph Combinations 31, 32, 42. Equipped with Special Victor Plug.

Cat. No. 7201 $2.25

Brunswick Low Impedance Pick-up Head

Same Neck as No. 7201 Above

Cat. No. 7200 $2.25

A New Super Hydro Double Action Pick-up

Can be used in combination Radio and Phonograph Broadcasting Stations, Public Address Systems, Laboratory and Experimental Work.

This unit is very efficient with much greater output and we recommend it as a competitive unit, not that any make, regardless of price, size or output. A positive working principle and of the in-destructible type.

New—Simple—Compact Construction

All workmanship Precision Built, with the finest grade of material obtainable, unconditionally guaranteed. Beautiful statuory brouse finish.

The Free Movement of armature while in riding position will prolong the life of the record materially and allow for any warp in the record. The needle will raise sufficiently with the stylus to overcome this and not get the groove at the warp. Rubber insulated needle screw top will stop any resistance points where screw may come in contact with the case. The rubber bumper and rubber piece mounted in back plate holds armature in position in case of drop or sudden pressure on needle point.

The magnetic flux is equal on all sides of the Pole Pieces, giving a positive magnetic center and air gap at both ends of the armature.

The New Super Hydro brings out the fundamentals lost in "foot pickups" and with less scratch and a full round tone.

STANDARD PHONOGRAPh PICKUP WITH VOLUME CONTROL

10" overall length, 7¼" from center pin to needle point.

Cat. No. 5997

Type

5997

Regular High Impedance

6808

200 Ohm Impedance

Our Price $4.75

"Can be used on Victor and similar receivers. Can be connected directly to microphone input transformer.

Standard Theatre Balanced Pickup

18½" overall length. Arm is balanced for reproducing-

Cat. No. 5996 $5.25

THE NEW

"Upco" Chromatic Professional Pick-up With Built-In Volume Control

As Used in Theatres and Public Address Systems

Cat. No. 4414

UPCO'S engineers, backed by limitless skill and experience, have evolved this truly scientific, sensitive instrument, capable of reproducing all of the world's finest music with full justice to the sum manifold art of its creators.

Our Price $6.95

Acraphone Microphone
Input Stages

These units each contain the well known Acrastone Microphone Input Transformers, microphone button current control and cut-out switch to preserve the life of the microphone. Frequency range 30 to 7000 cycles. Standard microphones input, 400,000 ohms. Completely shielded to avoid feed-back.

The unit is housed in a handsome finished black crackle steel box. A volume control with an "on-off" switch for turning current off the microphone is included. The volume control has a very fine adjustment not ordinarily found in other input stages. Battery compartment for 1½ to 8 volts.

Cat. No. 6528

For Single Button Mikes

Our Price $3.85

Cat. No. 6529

For Double Button Mikes

Our Price $5.50

Utah Electric Pick-Up

Cat. No. 4751

Our Price $3.85

The tone arm is scientifically designed to give the correct support to the pick-up unit. The weight of the tone arm is carefully calculated to insure the right amount of inertia for best reproduction. The pick-up is mounted in a manner to counter-balance part of its weight, thus materially reducing wear, on records. Standard Impedance 7500 ohms at 1500 cycles. Supplied with 9-foot cord with phone tips. Artistic brown finish. Individually boxed. We recommend our Cat. No. 5616 Acrastone Volume Control at 90C.

Universal Tone Control

A new accessory that means much added value. The tone control is used across the buttons of any microphone to change the tone to fill adverse conditions. Shril, high pitched voices may be toned down to normal, and gruff, deep voices may be tuned to more pleasing positions in the voice frequencies.

The tone control also permits an adjustment in the public address and loud speaker installations which eliminates the "feed back," resonance of ringing and e. g. o. following pronunciation of certain words. It provides a simple, adjustable element against these drawbacks when working in a building having bad acoustics.

Our Price $4.70
**Instrument Littlefuses**

*(Low Voltage)*

This line is designed especially for the protection of such delicate equipment as galvanometers, microammeters and 6 milliammeters, radio tubes, testers, Pats. issued and pending, radio "B" circuits, small radio and rectifier tubes, etc. See also "Where to use-A Littlefuse".

**ELKON**

**"B" Eliminator**

Makes ANY Auto Radio ALL-ELECTRIC

Universal application—suitable for all popular brands of standard automobile radio sets. Dependable, uniform reception. Easily installed. Safe and compact, tested and proven. List price, $19.05 complete.

Delivers 180 volts at 30 mils and 135 volts at 40 mils. Requires but 2.1 Amps. at 6 volt input.

Size 10x7x3 3/4 in.

*Cat. No. 273*

**Our Price $14.95**

**MUSIC on the Highways with no "B" Battery Worries**

Janette Auto-B-Power

Perfect Auto Radio Reception

Free From—Battery Replacements, Battery Expense, Battery Voltage Drops.

**THE JANETTE "Auto-B-Power"** consists of a small JANETTE dynamo and filtering device mounted in a strong, attractively finished steel box. It transforms the 6 or 12-volt current of an automobile or airplane storage battery into the higher voltage "B" current required by your auto-radio set. Whatever the voltage requirements of your automobile radio set may be a JANETTE "Auto-B-Power" can be furnished for the correct voltage. (See table on reverse side of this page.)

**Quiet—Compact Vibrationless**

The JANETTE "Auto-B-Power" has a dynamically balanced armature; thus it runs with a minimum of vibration. Virtually inaudible when placed under the hood, floor boards or seats. Requires but little room—measures only 12 x 8 x 5. In. weighs 20 lbs.

(Continued in Next Column)

**JANETTE**

**Rotary Converters**

**Transforms D.C. to A.C.**

Janette Rotary Converters are compact, dynamically balanced units which change direct current to 110 volt, 60 cycle alternating current for the operation of A.C. radio sets on D.C. circuits.

**Creates Big Market for A.C. Sets**

The Janette Rotary Converter, and especially the new CA-26-F, opens up a fertile field for A.C. radio sales. Over 600,000 farmers own 32 or 110 volt D.C. lighting plants. Every one of them is a prospect for a double-profit sale consisting of an A.C. radio set and a Janette Rotary Converter. Alert radio dealers and jobbers everywhere are seizing this opportunity to build new volume.

And on top of it all there is the great market in the D.C. districts of large cities—plus the marine field.

**Perfect Radio Reception**

Janette Rotary Converters are equipped with the Janette Filter which prevents converter interference from reaching the radio. Janette Converters are guaranteed not to interfere with radio reception.

Out Input

<table>
<thead>
<tr>
<th>Cat.</th>
<th>D.C. List</th>
<th>Our</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA-20-F</td>
<td>80</td>
<td>32 $40.00</td>
</tr>
<tr>
<td>CA-20-F</td>
<td>110</td>
<td>32 $49.50</td>
</tr>
<tr>
<td>CA-18-F</td>
<td>150</td>
<td>32 $54.50</td>
</tr>
<tr>
<td>CA-15-F</td>
<td>200</td>
<td>32 $70.00</td>
</tr>
<tr>
<td>CA-20-F</td>
<td>80 115</td>
<td>40.00</td>
</tr>
<tr>
<td>CA-20-F</td>
<td>110 115</td>
<td>49.50</td>
</tr>
<tr>
<td>CA-18-F</td>
<td>150 115</td>
<td>54.50</td>
</tr>
<tr>
<td>CA-13-F</td>
<td>300 115</td>
<td>75.00</td>
</tr>
<tr>
<td>CB-12-F</td>
<td>500 115</td>
<td>95.00</td>
</tr>
</tbody>
</table>

The following converters are shipped from Chicago, one week: 54.00

<table>
<thead>
<tr>
<th>Cat.</th>
<th>D.C. List</th>
<th>Our</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA-20-F</td>
<td>20</td>
<td>6 $54.00</td>
</tr>
<tr>
<td>CA-18-F</td>
<td>20</td>
<td>6 $59.00</td>
</tr>
<tr>
<td>CA-20-F</td>
<td>80</td>
<td>12 $54.00</td>
</tr>
<tr>
<td>CA-18-F</td>
<td>120</td>
<td>12 $59.00</td>
</tr>
<tr>
<td>CA-13-F</td>
<td>160</td>
<td>12</td>
</tr>
<tr>
<td>CA-20-F</td>
<td>280</td>
<td>40.00</td>
</tr>
<tr>
<td>CA-20-F</td>
<td>160</td>
<td>40.00</td>
</tr>
<tr>
<td>CA-18-F</td>
<td>150</td>
<td>55.50</td>
</tr>
</tbody>
</table>

(Continued from preceding column)

**Data and Prices**

**BATTERY DRIVE**

*Input Output At*

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Volts</th>
<th>Volts</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTEX</td>
<td>6</td>
<td>135</td>
</tr>
<tr>
<td>AUTAK</td>
<td>12</td>
<td>135</td>
</tr>
<tr>
<td>AUTAK</td>
<td>12</td>
<td>135</td>
</tr>
<tr>
<td>AUTIL</td>
<td>180</td>
<td>1.3</td>
</tr>
<tr>
<td><strong>Codewords</strong></td>
<td><strong>Input Extra Tap</strong></td>
<td></td>
</tr>
<tr>
<td>AUTEX</td>
<td>AUTAK</td>
<td>AUTIL</td>
</tr>
</tbody>
</table>

These current values are maximum. In most cases, radio correct taps will be much less than those indicated in this table. List Price Complete with Voltage Divider and Extra Taps...$22.00

**Our Price $18.82**
The Acratetest
AUTO CONVERTER

Furnishes 110V. 60 Cycle A.C. Current From A Storage Battery NOT A "B" ELIMINATOR

Operates—
A.C. Midget Sets
A.C. Fans
A.C. Amplifier and Turntable
And any A.C. appliance consuming up to 65 watts

Cat. No. 271

Our Price $24.50
Complete with Cable and Control Box

This device furnishes 110 Volt 60 Cycle Alternating Currents from a Standard Six Volt Storage Battery With this device you can use your Standard 110 Volt Alternating Current Midget Home Radio Set in any Automobile, Boat or Aeroplane. Use your Radio in your automobile while traveling, and then merely pull the plug and take your set into your Home, Cottage, Bungalow, or Hotel Room to use there.

This device also lends itself to small Public Address Systems, drawing from 40 to 65 Watts. Eliminates the necessity of gasoline or other expensive types of Generators. This enables you to use your Public Address on your Automobile for Advertising Purposes, Outdoor Meetings, Picnics, etc.

Small Electrical Appliances, drawing from 40 to 65 Watts may also be used with this Converter. Such Appliances as Fans, Heating Pads, Baby Bottle Warmers, Curling Irons, Juice Extractors, Drink Mixers, Trouble Lamps and many others come in this classification.

The Battery Drain is very small. Due to the fact that the current is taken from the Battery intermittently, the Ammeter does not accurately record the Drain, but registers only the peak load. However, the actual Drain is about two-thirds of the Ammeter reading. A 60 Watt Radio Set draws between six and seven Amperes by actual Battery Test.

Victor 2-Stage 245 Amplifier

For Victor Receivers
RE-75, 32, 42 and 45

Uses one 236, two 245's (push-pull) and one 815. Push-pull output transformer in amplifier matched for 15 ohm voice coil and 2,500 ohm field resistance. Supplies dynamic speaker field of 110-volt D.C. at 50 mils. Undistorted output at 8 watts. Fine for use with phonograph pick-up or radio set. Operates on 110-120 volts. 50-60 cycle A.C. current.

Cat. No. 62 $8.25

Victor 2-Stage Power Amplifier R. C. A. Model AP-736

(S. P. U. 24)

Uses one 226, one 260, and two 815's. Used with Victor Electric Orthophonic Phonograph No. 12-16 Electrola and the Phonograph No. 100 Electrola. Synchronous Output transformer in amplifier matched for 11 ohm voice coil impedance with 1,000 ohm field resistance Supplies dynamic speaker field of 110 volt D.C. at 110 mils. Undistorted output at 8 watts which is enough to handle at least three dynamic speakers. Amplifier operates on 110-120 50-60 cycle A.C. current. Excellent power amplifier for use with phonograph pick-up or radio sets.

Cat. No. 81 $14.25

With FREE Supplements
Flexible, Loose-Leaf Leatherette Cover

The OFFICIAL RADIO SERVICE MANUAL brings to the trade practically every radio diagram conceivable of which there is a copy record, including latest diagrams of testing equipment and mid- get radios. Not a single diagram which appeared in Volume I has been reprinted.

There are blank pages included throughout the book so that notes and sketches can be made if desired. A coupon page entitles the owner to have his questions answered free by a staff of radio engineers.

The Manual contains over 1,000 pages, with six supplements of 64 pages or more, mailed free every 60 days to owners for one year.

Cat. No. 356
$4.00

The Rotrola Electric Turntable and Pick-up

Rotrola Electric Portable Phonograph using the famous Webster Pickup with a built in volume control Genuine G. E. Synchronous motor with the turntable locked in so that it will not spill when being moved. Special container for records is another added feature of this unit. The hinge on this portable phonograph is of the piano type, stretching clear across the back. The case is constructed of the designed brown leatherette with a reinforced padded top to stand abuse. The handles and lock are of the heavy reinforced type. "On" and "Off" switch also provided. For 110V. 60 Cycle A.C. current.

Cat. No. 124 $9.50

This converter will supply sufficient current to operate our push-pull 245 amplifier No. 107 described on page 50
Popularly Priced!

The Federated Purchaser's engineers, in conjunction with the Acrapest engineers, have cooperated in developing a complete line of inter-communicating and public address systems. The units incorporated in these systems are the highest quality and have been selected by Acrapest Laboratories only after long tests under practical operating conditions. These units are the result of careful planning and thorough testing; are carefully matched and so designed as to give the highest efficient operation.

Carefully Planned!

having been sold to many large technical and sound laboratories, where they have met with the highest praise.

Acrapest Laboratories does not claim straight line characteristics for its Amplifiers, as this is impossible if the auxiliary apparatus used is not of matched characteristics.

However, we do guarantee the best possible response characteristics for commercial units where input and output impedances are properly matched.

**Acraiphone Inter-communicator System No. 1**

This system is recommended for inter-communication in factories, large offices, etc., where there is a noise level greater than what the human voice can overcome. The volume of this outfit is about 50% greater than No. 1. The same specifications can be used here as for the No. 1. This unit can also be used for small public address systems, recording, and broadcast work.

For each additional point of communication is necessary to add one No. 2-A unit, consisting of a two-button microphone and Dynamic Speaker on a single pole double throw switch. It is necessary to use a 2-A for every point to and from which it is desired to communicate.

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Description</th>
<th>List Price</th>
<th>Our Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>26</td>
<td>Loftlin-White 2 4 8</td>
<td>$35.00</td>
<td>$21.95</td>
</tr>
<tr>
<td>106</td>
<td>Utah and Dynamic Speaker</td>
<td>$32.00</td>
<td>$7.95</td>
</tr>
<tr>
<td>209</td>
<td>Universal &quot;B&quot; Microphone</td>
<td>$35.00</td>
<td>14.70</td>
</tr>
<tr>
<td>6529</td>
<td>Acraiphone Sr. Input Stage</td>
<td>$18.00</td>
<td>8.00</td>
</tr>
<tr>
<td>348</td>
<td>Universal &quot;K&quot; Dept. Mount</td>
<td>$8.00</td>
<td>9.94</td>
</tr>
<tr>
<td>3622</td>
<td>Mike Extension Cord</td>
<td>$7.85</td>
<td>36.85</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$105.75</strong></td>
<td><strong>$49.89</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Our Price Complete $43.00**

Suggested Auxiliary Two Way Equipment for System No. 2

<table>
<thead>
<tr>
<th>Universal Model &quot;BB&quot; Mike, No. 209</th>
<th>14.70</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Switch, No. 417</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ACRAPHONE Giant Auditorium Speech Amplifying System No. 2**

System No. 3 is ideal for operation at small dance halls, funeral parlors and portable public address work for installation on trucks. It will give about 75% watts undistorted output and cover an average city block in length. It has sufficient power to operate two or three dynamic speakers with very slight output drop, approximately 5 per cent.

It can also be used for inter-communication purposes, but is easily too great in volume. It is ideal for phonograph reproduction and microphone work, and will easily cover rooms and auditoriums 100 ft. x 100 ft., or an auditorium seating 1,000 to 1,000 people.

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Description</th>
<th>List Price</th>
<th>Our Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>106</td>
<td>Acraiphone A Stage</td>
<td>$75.00</td>
<td>$24.50</td>
</tr>
<tr>
<td>520</td>
<td>Universal Model &quot;BB&quot; Microphone</td>
<td>$25.00</td>
<td>14.70</td>
</tr>
<tr>
<td>6529</td>
<td>Acrapest Sr. Output Stage</td>
<td>$15.00</td>
<td>8.50</td>
</tr>
<tr>
<td>3646</td>
<td>&quot;Acrapest Floor Stand&quot;</td>
<td>$20.00</td>
<td>9.50</td>
</tr>
<tr>
<td>106</td>
<td>Utah Stadium AG Dynamic Speaker</td>
<td>$30.00</td>
<td>7.95</td>
</tr>
<tr>
<td>3625</td>
<td>Colcetx Ballboard</td>
<td>$4.00</td>
<td>1.60</td>
</tr>
<tr>
<td>3622</td>
<td>Mike extension cord</td>
<td>$1.75</td>
<td>.75</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$170.75</strong></td>
<td><strong>$60.70</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Our Price for the Complete Outfit $60.00**

Suggested Auxiliary Equipment for System No. 3

| Utah A.G. Dynamic Speaker | $7.95 | |
| --- | --- | |
| Universal Model "BB" Mike, No. 209 | 14.70 | |
| Single Pole Double Throw Knife Switch | | 12 |

**ACRAPHONE Auditorium, Theatre and Outdoor Model Sound System No. 3**

The Acrapest 3 Stage Push-Pull 250 Amplifier still is the most efficient and most economical Power Output system available on the present market. This amplifier far surpasses anything in its price field. It is capable of reproducing from below 30 cycles to above 8500. There is a proportionate drop above 8000 cycles.

Acrapest engineers are confident that for audiences of 5000 people indoors or 3000 people outdoors a finer instrument cannot be obtained by any type. It is an all-round amplifier and will reproduce ideally phonograph, radio or microphone. It is capable of an unclipped output of 11.3 watts. It will supply up to six dynamic speakers or 28 magnetic speakers.

In using a single 127 for Microphone pre-amplification this amplifier is capable of putting out up to plus 35 D.B. with an absolute fidelity of tone, making it ideal for recording purposes, working into a 5000 rms record cutting head. Can be used in conjunction with talky films in theatres seating 3,000 people or more.

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Description</th>
<th>List Price</th>
<th>Our Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>101</td>
<td>Acrapest 3 Stage</td>
<td>$125.00</td>
<td>$24.50</td>
</tr>
<tr>
<td>520</td>
<td>Universal Model &quot;BB&quot; Mike Microphone</td>
<td>50</td>
<td>24.50</td>
</tr>
<tr>
<td>6529</td>
<td>Acrapest Sr. Output Stage</td>
<td>15.00</td>
<td>8.00</td>
</tr>
<tr>
<td>110</td>
<td>7-R. C. A. Photo- phone A.C. Dynamic Speakers</td>
<td>50.00</td>
<td>25.00</td>
</tr>
<tr>
<td>333</td>
<td>Adjustable Floor Stand</td>
<td>20.00</td>
<td>8.00</td>
</tr>
<tr>
<td>3622</td>
<td>Mike Extension Cord</td>
<td>1.75</td>
<td>.75</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$261.75</strong></td>
<td><strong>$93.65</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Our Price for the Complete Outfit $90.00**

MAIL ORDERS TO See Terms on Page 5

25 PARK PLACE, N. Y. C. or to our nearest branch

Federated Purchaser Inc.
Microphone and Public Address Connectors

Composition, steel-covered cadmium plated. The adjustable clamp grips the cord tightly, thus relieving the strain from the binding posts, and also prevents the outer cover of cord from unraveling.

Armored Bakelite Cable Connectors

Three prong cable connectors insuring perfect contacts and 100% insulation. The steel armor protects the plug and extends over mauling the cable clamp as shown. No better plug on the market for carbon microphones. The prong arrangement permits assembly in one position only, 1/4 inches in diameter.

Base Receptacle and 4 in. Cover

Flush, with 4-in. Round Steel Box Covers Attached for Trucks, etc. Cadmium finish, outlet box covers are standard.

Three Wire 10 ft. Microphone Cable

For microphone coupling and other uses.

Cat. No. 3626

Our Price 25c ea.

3 Conductor Microphone Cable

A tough rubber jacketed yet extremely flexible cable which will stand all sorts of abuse without shorting. Water, oil and acid resisting. Each conductor insulated and cotton braided. The ideal microphone cable.

Cat. No. Length Our Price
4425 12 ft. $0.65
4441 25 ft. 1.25
4442 50 ft. 2.25
4443 100 ft. 3.75

Armored 3 Conductor Microphone Cable

A conductor heavily insulated cable enclosed in a steel flexible armor which acts as a shield (when grounded). Will resist all weather and the hardest wear. You can run a 10-ton truck over it without injuring it. Ideal for all outdoor public address work.

Cat. No. 4446

4c per ft., $3 per C.

Universal Microphone Cords

Made Up Cables With Armoured Connectors

Cat. No. Length List Net
4430 6 ft. $2.75 $1.60
4437 12 ft. $4.80 $2.70
4438 25 ft. $7.50 $4.50
4439 50 ft. $12.00 $6.25
4440 100 ft. $19.00 $11.40

For outdoor use, over gravel, pavement, platforms, in water, or where crowds are walking, a rubber covered, shielded cable is an absolute necessity. Fitted with genuine G. E. Bakelite connections. Supplied in 3-conductor shielded only, the shield being soldered to the center conductor of the plug and socket. These assemblies made up complete as shown cannot be duplicated anywhere for the price.

Microphone Suspension Springs

For suspension of microphones in rings, desk mounts, floor stands, etc. A much needed small part handy to have and sometimes hard to obtain. Special heads with one long loop, beautifully finished of highest grade spring steel, allowing maximum flexibility without stretch. Eight are generally used per set.

Cat. No. 3631 8 for 35c

CARBON GRANULES

For Microphones

Care must be exercised in handling granules, and careful measurement must be made in reding old buttons. They must be kept sealed before use and must not be handled by fingers. The very best grade of trans- mittor carbon granules, each box contains sufficient to re-carbon one ordinary two-button microphone. No. 100 size.

Cat. No. 6974

List, per Vial . . . . $1.00

Our Price 59c

Shielded Microphone Cable

Polarized 3-Wire Caps—No. 4410

For 3-Wire microphone, 125 Volts, 20 or more Amps, or 125 Volts, 25 or more Volts. Each box contains a sufficient number of caps to fit 125 Volts, 20 or more Amps, or 125 Volts, 25 or more Volts.

Cat. No. 6940

Diameter 1/4" Hole 9/16"

10c ea.

This plate will be found excellent for public address amplifiers, faders, phonograph pick-ups, etc. It is graduated in 20 equal divisions and 10 numbered places. Etched aluminum with silver numerals.

A Gain Control Plate

Cat. No. 6940

Diameter 1/4" Hole 9/16"

10c ea.

This plate will be found excellent for public address amplifiers, faders, phonograph pick-ups, etc. It is graduated in 20 equal divisions and 10 numbered places. Etched aluminum with silver numerals.

MAIL ORDERS TO
See Terms on Page 5

Federated Purchaser Inc.

25 PARK PLACE, N. Y. C.
or to our nearest branch
GENERAL ELECTRIC
Synchronous Motor
With 10-inch Turntable
Aluminum frame—advanced
design. Silent operation. Only
4 in. deep,
Cat. No. 215 $3.95

G. E. PHONOGRAPH
Induction Motor
With 12-inch Turntable
A compact, powerful, heavy
duty induction type phono
graph motor. Being free of
collected a-tors, brushes or
or cutout switches, it cannot set up
any disturbances. Large bearing surfaces
provide adequate support and insure long
life.
Quick Starting Torque
Exceptionally quick starting torque. Full
speed is attained instantly without man-
ual assistance. Equipped with 12-inch turntable, cord and 2-piece plug.
Cat. No. 135 $7.95

Special Acratone
Carbon Steel Recording Needles
This needle has been developed espe-
cially for recording. It may be used on
either pre-grooved or blank discs of
either aluminum or composition.
This recording needle is made of ex-
tremely hard carbon steel which is nickel
plated and highly polished. Background
noise is reduced 50% with this new type
of needle. The tip of this needle is
bent and tapers acutely to a point. This
cuts a U shaped groove which is more
satisfactory than the V shaped groove of
ordinary cutting needles.
Cat. No. 6975

15 Needles for 25c

Fibre Playback Needles for
Aluminum Records
Cat. No. 6929
25c pkg.
of 50 Needles
First—Perfect Reproduction. Second—Plays many records without

The New Two-Speed
Green Flyer
Model D
Motor, 78 & 33 1/3 R.P.M.
One demonstration and they want it.
Put on a new Long Playing Phonograph
Record. Explain the merits. Show the
slow 33 1/3 r.p.m. turntable speed. Then
change to a Regular Phonograph Record,
with turntable speed shifted easily to 78
r.p.m. by pushing the speed-change lever.
They want the Two-speed Green Flyer Motor. They want new Long Playing Rec-
ords. You're making a $15 to $20 or $25
sale, that will bring the same customer
back for more records. That will bring
you other customers for motors and
records.

Robbins & Myers
21 V. A. C. Motor
3300 RPM
gear d down to
sets. This
is 100 RPM.
Used on
remote
control
mechan-
ism of
Kolster
very fine
rugged
motor has
many uses
such as
radios, fans, etc. Can
be in a
box with
a	
turn-table and makes an excellent
window display on account of its slow
revolution.
Cat. No. 5339
6 in long, diameter 4 in. Weight 5 lbs.
$3.95 ea.

Wall-Kane 10 Record
Needles
The original fa-
nomen Wall-Kane
10-Record Needle. No better needle
made. 50 to a
box. 60 boxes, na-
rroted loud, med-
ium and soft, in
2-color metal
display stand.
Cat. No. 4371
6c pkg.
$3.70 Display Stand

"Echo" Pre-grooved
Aluminum Record Blank
Can be used on any phonograph or
electric turntable. Just sing or talk into
blank or mill for record. One
Cat. No. 2363—Diameter 6 in.
$1.80 dozen
Including 3 Recording Needles

Genuine Sapphire
Reproducing and
Cutting Needles
GENUINE WHITE ORIEN-
TAIL SAPPHIRE USED EX-
CLUSIVELY. This sapphire is
rated, according to scien-
tists' tables, hardness of
which is 85% as that of the
diamond. Consequently, it is
ever durable. To in-
sure its life, care must be
taken that it is not dropped on a hard surface or used on rough surfaces.
SAPPHIRE (grooving and recording) of ALUMINUM. It will work on
practically all commercial and home
made recorders. Its radius and angle is
specialy made to cut a fine groove.
Same needle when used with a powerful
motor, will also cut on EIREDDO.
Cat. No. 250
$2.50

Type BW, for recording and playback on
Victor type black composition pre-
grooved home recording blanks, also pre-
grooved aluminum or celluloid with
a minimum of surface scratch.
Cat. No. 249
$2.50

Type GW, for playback on regular com-
mercial records such as Victor, Columbia, Brunswick, etc., also electrical transcrip-
tions where all attention is placed
by the rate of 78 revolutions per min-
ute.
Cat. No. 289
$2.00

Type DW, for cutting (grooving and
recording on CELULOID). This needle
does not push away the material but
cuts out a fine thread of celluloid while
recording.
Cat. No. 290
$4.00

Special DIAMOND NEEDLE for
CELULOID, used for professional
recording.
Cat. No. 291
$16.50 ea.
All above needles are tested and in-
spected before shipment and are guar-
anteed against defective materials and
workmanship. They are used extensively-
ly by recording studios, laboratories, un-
iversities, language schools, etc.

Remsen Aluminum
Record for Home
Recording
Cat. No. Dia. Price
5070 6 in. 13c
5071 7 1/2 in. 20c
5072 10 in. 33c
5073 12 in. 59c
Especially designed for recording de-
vice utilizing blank records, like the
Presto Home Re-
corder. Can be used on
both sides.

Universal Pre-grooved
Records
7176 6 in. 18c
7177 8 in. 25c
7178 10 in. 44c
7179 12 in. 59c

August-September, 1932

Page 62
### SIGNAL

**Wireless Practice Set**

Just the instrument for those who want to learn the code. The code is printed on a little brass plate fastened to a base. Equipped with Type R-60 High Frequency Buzzers.

**Cat. No. 3554**

**List Price.** $3.40

**Our Price $1.98**

<table>
<thead>
<tr>
<th>I.C.A. 50 Watt Transmitting Socket with Isolatite Base</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cat. No. 3653</strong></td>
</tr>
</tbody>
</table>
| **$1.50**

An excellent power tube socket. Fits all standard 50 watt tube bases. Maximum insulation is obtained by the use of high glazed isolatite base. All metal parts are nickel plated and the contacts are so arranged that connections are made either to the terminal screws or can be soldered on to the extended portion of the contact springs. All connections are plainly marked.

Diameter of socket 3\%.

Two mounting holes.

**Quartz Crystal Holder**

This plug-in dust proof quartz crystal holder is ideally suited for the amateur and broadcast transmitters.

It will accommodate the average one inch crystal. Contact with the crystal is made through brass plate ground perfectly flat. The bottom brass plate is nickel plated on its outer side and the top bakelite cover is held in place by four screws.

Perfect electrical contact is maintained by means of a pigtail which rests lightly on the crystal, allowing it to oscillate freely. The inner dimension is 1\% to 2\% square.

**Cat. No. 6627**

**$2.25**

<table>
<thead>
<tr>
<th>I.C.A. 250 Watt Tube Socket</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cat. No. 6931</strong></td>
</tr>
</tbody>
</table>
| **$2.85**

This socket will fit all double ended tubes such as types 64A, 49, 51, 61, 69, etc. Heavy glazed isolatite material is used for the mounting of the contacts and provides perfect insulation for high frequency work. All metal parts nickel plated.

<table>
<thead>
<tr>
<th>Headband for Earphones Indispensable to Short-Wave Fans and &quot;Hams&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cat. No. 3623</strong></td>
</tr>
</tbody>
</table>
| **15c each**

**Na-Ald Code Practice Set**

Cat. No. 6986

**45c ea**

Less Battery


**ACRAPHONE, JR. Wireless Key**

Cat. No. 6819

**Our Price $1.10 ea.**

This is a really fine little instrument for the amateur, ham or for practicing. Used for crystalled or plated oscillators. Type R-60. For light duty work. Nickel plated and brass fittings. Can be charged with a 4 volt flashlight cell. Mahogany finished wood base with rubber feet.

**High Frequency Buzzer**

Is adjustable. Can be adjusted to standard frequency of 1000 cycles. Can be used in modulated audio oscillators as a standard frequency control. Has standard resistance of 8 ohms. Can be operated on a 6 volt circuit. Can be furnished in special resistors on quantity orders. Black criss-cross lacquer finish.

**Signal Wireless Key**

Cat. No. 3559

**75c**


**List Our Price Price**

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Contacts</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>3558</td>
<td>R-62 3/16 in.</td>
<td>$3.50 $1.00</td>
</tr>
<tr>
<td>3557</td>
<td>R-63 7/16 in.</td>
<td>3.70 2.21</td>
</tr>
<tr>
<td>3558</td>
<td>R-64 5/16 in.</td>
<td>3.90 2.30</td>
</tr>
</tbody>
</table>

**Headband for Earphones Indispensable to Short-Wave Fans and "Hams"**

Cat. No. 3623

**15c each**

### The New Connecticut Duplex Telephone Set

WILL Operate Efficiently Up to 1,000 Feet

Cat. No. 6555

**Price $5.63 per set**

Connecticut Duplex Telephones are the result of 87 years experience in telephone manufacturing and have been produced efficiently up to 1000 feet. Affords the easiest, simplest and least expensive method of communication between two neighboring points. Simple to install. Requires 8 ordinary dry cells at each end. Cases are of heavy gauge steel, finished light green. Packed in attractive display carton with 1000 ft. of wire, staples and instruction book.

Use for the Connecticut Duplex Convenience Telephone

IN THE HOME

Bedroom to kitchen—Bedroom to maid's quarters—Upstairs and downstairs—House to garage—House to workshop—Neighbor to neighbor.

ON THE FARM

One farmhouse to another—House to barn—House to dairy—Home of radio fan to that of another.

IN FACTORIES

Manager's office to factory—One factory department to another.

### The Connecticut Duplex Telegraph Set

Every boy will want this real telephone set, 50.初次 practice on and learn the code. Continental code on etched plate in large, easily read figures mounted beside key. Instruments may be used separately for practice. Just the set for Boy Scout—can be carried on hikes and set up in camp in a few minutes. Manufactured and designed by engineers who have been building telegraph instruments for 87 years. Each instrument has its own battery. Will operate 1000 feet. Mahogany finish with black enamel parts an attractive, compact box. Packed in attractive display box with 50 feet of wire and complete instruction booklet.

**Weight complete, 4 lbs.**

**Cat. No. 6579**

**$3.75 complete**

**Signal Junior Key**


**Cat. No. 3555**

**118-X Key**

List Price. $2.25

**Our Price $1.35**

### MAIL ORDERS TO

See Terms on Page 5

Federated Purchaser, Inc.

25 PARK PLACE, N. Y. C.
or in your nearest branch
Speaker and Headset Adapters

These adapters are of the same appearance as the above and are used to connect one or more additional magnetic or dynamic or recording pickup to any set using a single or push-pull pentode output or 4-prong output. Simply remove the power tube from the socket, insert the adapter and replace the power tube or tubes. Can be used in the ACRA- TONE and other midget sets.

Cat. No. 5200

ACRATETEST Pentode Adapter

Enables the use of the Pentode Tube in 245 Sockets

Simply remove the 245 tube, insert the Acratetest Pentode Adapter into the top of the adapter. Insert new tube.

Cat. No. 5200

Analyzer Plug

This plug has a 5 prong UV base and the handle has a screen grid cap. The latch is not alive and the center post in the adapter No. 5886 is simply a locking stud over which the latch slips, engaging a ring in the set. Thus the adapter will not come off unless the latch is pressed. Used in the latest Jewell No. 444 Analyzers. Can be used to adapt any analyser for pentode and screen grid.

Cat. No. 5887—Analyzer Plug

Our Price $1.80 ea.

Cat. No. 5888—4 to 5 Adapter
Cat. No. 7146—5 to 6 Adapter

Our Price 72c ea.

Earphone, Speaker and Testing Adapter

(4 Prong)

Has many uses, such as allowing the use of head-phones on any set, connecting an extra speaker or in another socket, and the adapter can be removed when not in use instead of having to remove it from the socket.

Cat. No. 5250

29c

PLUG IN ADAPTER

For Test Kits and Short Wave Sets

Also used to connect dynamic speaker or chasis. A very handy accessory in the shop.

Cat. No. 3526

5-Prong

Cat. No. 6990

6-Prong

Our Price 29c ea.

I. C. A. PENTODE Speaker Adapter

This adapter is for connecting additional speakers to radio sets using one or more Pentode tubes in the output individually boxed.

Cat. No. 6436

Our Price 60c pr.

Adapter and Trouble Finder for Servicemen

Especially adapted to trouble finding and making all circuit connections to a 5 prong tube base where no wires are exposed. Plate, grid, cathode, or heater circuits can be opened readily for connection of meters or test equipment. May be used for connecting phonograph pickups or meters to radio sets or amplifiers.

Cat. No. 4257 Universal 5 Prong Socket
Adapted .................................. 95c

4238 Universal 4 Prong Socket
Adapted .................................. 95c

6993 Universal 6 Prong Adapter .......................... 95c

Speaker and Analyzer Plugs

These handy plugs are extremely useful around any service shop. Easily attached to any four or five wire cable. Made of genuine bakelite.

Cat. No. 3868 4-prong short cap ................................ 20c

3869 5-prong short cap .................................. 20c

5870 4-prong long analyzer plug .......................... 25c

5871 5-prong long analyzer cap ......................... 25c

6991—6-prong shot cap .................................. 25c

6992 6-prong long analyzer cap ........................ 25c

WorldRadioHistory

August-September, 1932
I. C. A. Test Adapter for 280 Tube

Naald Socket Saving Adapters

Replacement Jars For Philco, Willard and Exide "A" and "B" Eliminators

Cat. No. 6963

Our Price 90c

Our Price 60c ea.

The Famous M16 Elkon Replacement Rectifier NEW TYPE "XB16"

Our Price 60c ea.

For A.C. (4 prong)

BENWOOD-LENZ B12 Rectifier

For replacement in Kodel

For use on the following popular trickle chargers:

Cat. No. 4155

Our Price $2.50

Type A-110.

Cat. No. 4152

List Price $7.00

KODEL DRY DISC

Cat. No. 3663

Cat. No. 3664

Cat. No. 3668

PRICE "A"

TYPE "B" for B eliminators

$1.39 Each

$1.79 Each

REPLENIO Rectifier cells are guaranteed to give satisfactory service and full charging rates in Power Units properly designed for their use.

KUPROX RECTIFIER Replacement Unit

Type A-110.

For use on the following popular trickle chargers:

Bakelite Type "C" (.4-.5 Amp.); Sil-lite (6 Amp.); Vesta (5 Amp.);

List Price $5.00

Cat. No. 5832

Our Price 85c ea.

KODEL DRY DISC

Rectifier With Brackets

For replacement in Kodel Kuprox power units and Dynamic speakers, etc.

Single Unit, Cat. No. 4153

Our Price $1.10

RCA No. 106 Dynamic Speaker Rectifier Stacks

Also Used on Radiola 62 Speaker

Delivers 100 Volts 100 Mills D. C. with Load

Will supply sufficient B voltage on any Dynamic Speaker having 600 ohms Res.

RCA Part No. 6888 Cat. No. 5734

Our Price $2.50 ea.

$4.50 per Pair

I. C. A. Neutralizing Adapter

For use in balancing neutralizing condensers in superheterodyne or triode sets. One filament is dead, enabling the use of an ordinary tube for balancing. Supplied for 4- or 5-prong sockets.

Cat. No. 6964-4-prong
Cat. No. 6965-5-prong

Our Price 75c ea.

I. C. A. Oscillation Control Adapters

These adapters break grid connection with tip jacks. They may be used for controlling oscillation by attaching resistors in series with grid circuit, and can also be used for general testing of grid circuits.

Cat. No. 6049-4-prong
Cat. No. 6985-5-prong

Our Price 75c ea.

I. C. A. Phono-Radio Switch and Adapter

For A.C. (5 prong)

Cat. No. 6933
List Price $2.75
For D.C. (4 prong)

Cat. No. 6954 $1.65 ea.

The simplest method of connecting a phonograph pickup to the audio system of the radio. Adapter plugs into the detector socket, tube plugs into the adapter and the switch, which may be mounted on radio panel, changes from radio to phonograph instantly, Supplied for A.C. or D.C. sets.

B.M.S. Fixed Detector

B.M.S. Fixed Detector will give renewed action to reflex or crystal sets. The sensitivity of the mineral is determined by laboratory methods and fixed permanently. Made to withstand high voltage. Small and enclosed in Bakelite. It has proven to be an engineering achievement.

Cat. No. 7124 60c

Our Price 20c ea.

4451-4255 20 Ft. Speaker Cord With Connector 23c
I.C.A. Exploring Coil
Cat. No. 6945 $2.10

Handy Service Tool
Designed for the serviceman to use in locating R.F. trouble. Can be used in conjunction with a signal supplied by an oscillator which is induced into the grid of the tube when the exploring coil is placed around the tube. A big time saver. Excellent for heterodyne circuits for peaking interchanges. Can be used in conjunction with an output meter, the amount of gain may be determined by bringing into resonance the parts of R.F. circuits.

GOODELL-PRATT
Coil Winders
An inexpensive machine that will be found ideal for winding and transformer coils for use in T.R.P. and Superheterodyne circuits on cylinders of bakelite, fibre, etc., up to 4½ in. in diameter and 7 in. long. The base is substantial and finished in black enamel, and can be fastened to any table or bench. The discs are finished in red enamel and natural aluminum. All exposed steel parts nicely polished.

Our Price $3.50

Heavy Duty Laboratory Type Test Prods With Needle Point Tips
Tips Can Also Be Inserted Into Phone Jacks
The body of the needle tips act as a phone tip when inserted into standard phone tip jacks. Equipped with fine heavy flexible wire with black and red fibre handles 6 in. long and ¼ in. dia. The needle point phone tip is made of the highest grade hard bronze.
Cat. No. 6913 with Test Clips 60c per pair
Cat. No. 6914—With Spade Terminals 50c per pair

16 Wire, 50 Foot Cable For Remote Control and Public Address Work
Also suitable for anamorphic work.
Cat. No. 5537 $2.00

Test Leads With Chuck for Phonograph Needle Tips
These test prods are a great improvement over the ordinary prods, being equipped with two chucks in which are inserted any standard phonograph needles for tips. The tips will make contact through insulation and pitch, and get into tight places which cannot be reached with the ordinary test tips. Made with best grade fibre unbreakable prods and lacquered wire. Equipped with phone tips or spade tips.
Cat. No. 6532—With Phone Tips Cat. No. 6533—With Spade Tips 49c per pair

Servicemen’s Test Leads
Cat. No. 4331—With Spade Tips Cat. No. 6676—With Phone Tips 25c per pair

The Test Leads are a convenience to the set owner and a necessity for the Radio Service Man and Radio Dealer. They are unsurpassed for testing sets and tracing trouble in sets where shorts, open and other defects common to radio sets are encountered.
They can quickly be attached to any meter for testing batteries or any electrical apparatus.
They are supplied with red and black wire for positive and negative identifications.

I. C. A. Test Leads with Phone Plug
Cat. No. 6958
List $1.50

Our Price 90c

The test leads have phonograph needle prods and the rudes are attached to a phone plug which makes it handy for testing in the laboratory and shop.

Utility Test Leads
Consists of one No. 6808 test prod, 24 inches of finest grade lacquered wire and a No. 8019 crocodile clip. A very handy accessory for the serviceman.
Cat. No. 6985 30c ea.

Multiple Conductor Cables

Cat. No. Make Wires Length Our Price
7184 4 2 ft. $0.15
6763 General Electric 6 6 ft. .20
6567 General Electric 9 6 ft. .25
4471 Belden 10 8 ft. .16
6764 General Electric 10 6 ft. .30
6765 General Electric 12 8 ft. .45

EXTENSION Speaker Cords

Cat. No. Length Each
4451 20 ft. $0.16
4452 30 ft. .24
4453 50 ft. .35

Headphone Cords (Double) 6 ft. long, with loop eyes on one end and pin tips on other.
Cat. No. 4454 10c ea. $1.00 dozen

SPECIAL SPEAKER CORD 8 FT. LONG WITH LUGS ON ONE END AND PINS ON OTHER
Cat. No. 4455 10c ea. $1.00 dozen

5 FT. SPEAKER CORD WITH LUGS AND TIPS
Cat. No. 4456 10c ea. $1.00 dozen

Jacks MULTIPLEX THE STANDARD CONNECTOR
10 Conductor—5 Feet Long
Complete with female receptacle for wall plate.
List Price $5.75
Cat. No. 4236 45c ea.

Every Acratest Power Transformer is brand new and packed in factory sealed boxes

MAIL ORDERS TO
See Terms on Page 5
Federated Purchaser Inc.
25 PARK PLACE, N. Y. C., or to our nearest branch

WorldRadioHistory
I.C.A. 5 in 1 Neutralizing Compensating Tools

This tool set is a combination of a ¼” nut wrench, a 5/16” nut wrench, a neutralizing screw driver with ¼” blade and a full size screw driver. So constructed that all the parts telescope so that the entire outfit when closed is no larger than a fountain pen. Pocket clip attached.

Cat. No. 6946

Our Price 90c Set

Extra Neutralizing Attachments for above Set

For Majestic Sets—
Cat. No. 6947 15c ea.
For Crosley Sets—
Cat. No. 6948 15c ea.

I. C. A. Neutralizing Tools With Metal Nibs

The I.C.A. Neutralizing Tools make it easier, quicker and more accurate to work with, are constructed of the finest quality insulating materials and are finished with highly nickel plated brass nibs. Compact ly constructed, the screw driver fits into the driers wrench making it a four-in-one set. The other end of the screw driver is a special magnetic steel for picking up and placing of screws, bolts, nuts, washers, etc. The I.C.A. Neutralizing Tools work on all standard make radio receivers.

Cat. No. 6437

Our Price 88c

Neutralizing Wrench and Screw Driver

A Very Handy Tool for the Service Man

The wrench and screwdriver is made of case hardened steel. The handle is made of bakelite—prevents body capacity. Especially suited for Radiola sets.

Cat. No. 4207

Our Price 45c ea.

Utilco Tool Chests

411 Utility Chest with Loose Tray
Size 1x5 1/4 x 6 in.
Tray has disappearing handle and movable partitions. Matched hardware. Permanent embossed rule on cover.

Cat. No. 411

Our Price 85c ea.
$9.60 dozen

The 414 Utility Chest With Automatic Cantilever Tray
Size 1x5 1/4 x 6 in.
Movable tray partitions. Matched hardware. Permanent embossed rule on cover.

Cat. No. 414

Our Price $1.00 ea.
$11.50 dozen

The 411 Utility Chest, truly the chest of a thousand uses, originally developed by UNION, refined and further improved with automatic tray as shown in the 414, has proved a merchandising sensation. Usable as a mechanic’s tool chest, fishing tackle box, for household tools, bathing suits, lunch and cutting box, valuable papers and other uses too numerous to mention, hundreds of thousands of these boxes have been sold, until there are now more than a million in use.

ELECTRICIANS’ SCREWDRIVER

Cat. No. 5566

98c

A new slim-bladed ratchet screw-driver with knurled socket which can be rapidly rotated between the thumb and forefinger and is a great convenience for running small screws in and out. It is particularly useful for work on electrical and other apparatus where small machine screws are used.

The same dependable ratchet mechanism is used as in our 5076, which has proved its dependability over a great many years. Right or left ratchet or rigid action is controlled by turning the knurled sleeve.

The blades are made of tool steel, hammer forged and finely honed and tempered. All exposed metal parts are nicely polished or nickel-plated.

INSULATED HANDLE Pocket Screw Drivers

Cat. No. 3263

Our Price 75c per card of 12

DETECTO-LITE Tells All at a Glance!

Indispensable to Any Service Man

1. Will test any current from 110 volts to 650 volts and will indicate voltage.
2. Will tell instantly whether A.C. or D.C. current.
3. Will show new cycles.
4. Will detect the live and ground wires.
5. Will act as pilot on any electrical apparatus.

Cat. No. 3235

Our Price 88c

I.C.A. “Short-O-Tester”

Every Serviceman Should have one

With 2½ V. Lamp

Cat. No. 6936

$1.50

The I. C. A. “Short-O-Tester” is an ingenious new circuit tester containing a 3½ volt lamp and a small tubular flashlight battery so connected that when the flexible wire lead with its spade tip is attached to one turn of the electrical circuit tested and contact made through the pin terminal on one end of the tester, it will indicate whether said circuit is open or closed. It is an excellent continuity tester for radio and electrical work and should prove a very useful tool to the serviceman. It can also be used as a flashlight in an emergency by attaching the spade tip to the metal test prod, thus shorting the circuit. It is also furnished with a neon lamp so that circuits having any voltage or frequency may be tested for continuity and approximate indication of the relative strength of same, and whether it is A.C. or D.C.
Special Screw and Nut Assortment

Contains a generous supply of screws, nuts, washers, lugs, etc., which are indispensable to the servicer. Should be in every repair man’s kit. Can also be sold across the counter to set builders.

Cat. No. 3662

19c ea.

Professional Hardware Assortment, 5 Pounds

For the dealer and a d. c. servicer’s shop. Contains an extra large assortment of every size of screws, nuts, washers and lugs for every radio purpose. This assortment is indispensable to the man who does repairing and building and will pay for itself over and over.

Cat. No. 3816

75c

$3.60 per doz.

The Handy Scratch Remover

Mars and Scratches Vanish Instantly

Cat. No. 3379

RUBBER

Rubber Howl Arrester

Pits over the tube and prevents oscillation and microphonics.

Cat. No. 6669

10c ea.

$1.00 dozen

Melomite Cat-Whiskers For Crystal Sets

Three in a celluloid envelope, mounted on attractive display card. Retail at 50c per card.

Cat. No. 4067

Retail at 35c per card

$1.00 per dos. cards

Live Rubber Casters For Radio Cabinets and Furniture

Prevents vibrations, cuts down tube noises and saves floors and rugs. Placed under legs of cabinet.

Retail at 40c for the set of 4

12 Casters mounted on attractive counter display.

Cat. No. 6470 Size 3½ in. 75c doz.

Cat. No. 4427 Size 2½ in. 60c doz.

Cat. No. 6471 Size 2 in. 40c doz.

Supersensitive Crystals

Individually boxed.

A real mineral product.

Cat. No. 4054

$1.25 per doz.

STOPPANI Jeweled Compass

Stoppani Compass is a real SURVEYOR’S instrument with elevated sights. It is made of Solid Bronze, Parkerized, non-rusting, graduated in 1/10. Rubby jewelled, 4 Caster compass in square. Fitted case with set screw in corner to hold needle rigid when not in use. It is said that the U. S. Government paid more than $30.00 for this precision instrument. Being a precision instrument, the Stoppani Compass lends itself admirably for use in the Radio Experimenters’ test laboratory. It affords an ideal means of determining the popularity of magnets, electro-magnets and solenoids carrying current.

MAY BE USED AS A GALVANOMETER Because of its uniform magnetic properties, high sensitivity, and delicate frictionless bearing, the Stoppani Compass may be utilized to advantage as a highly precise galvanometer for detecting electric currents in experimental or conventional radio circuits. The Compass is easily and readily converted into such a galvanometer by merely winding several turns of ordinary wire completely around the face and lower case of the compass, leaving small spaces between turns to observe the movements of the needle. The ends of the wire are brought out as test leads to be inserted in series in circuits under test. A deflection of the compass needle in either direction indicates the presence of an electric current. Incidentally the intensity of the current may be closely approximated since the force with which the needle gyrates is proportional to the intensity of the currents flowing through the wire.

Our Price $4.50

MAIL ORDERS TO

See Terms on Page 5

Federated Purchaser Inc.

25 PARK PLACE, N. Y. C.
or to our nearest branch
GEM LINE
Interference Eliminator
A great many noises interfering with your reception are caused by motors, such as electric refrigerators, vacuum cleaners and elevators. The Gem Line Interference Eliminator will help prevent any A.C. or D.C. line interference from entering into your radio.
Due to the fact that the Gem Line Interference Eliminator is plugged into your wall socket, the power coming to your radio is filtered through, and the results obtained will please every set owner. Installation instructions are very simple, and can be easily followed by anyone.
Cat. No. 5121 $1.65

I.C.A. Wonder Aerial
Cat. No. 6955

Net 59c

A marvelous device which eliminates the outdoor aerial and yet is equal to it. It is scientifically designed and will work on all types of sets.

F. & H CAPACITY
Aerial Eliminator
Attractively Colored Counter Display Furnished with 6 Capacitors
Cat. No. 4264

75c

The F. & H. Capacity Aerial Eliminator has the capacity of the average 75-foot aerial, is attached directly to radio set and complete with an attached wire for a ground connection.
The F. & H. Aerial Eliminator has many advantages: Increases selectivity, easier and cheaper to install, elimination of lightning hazards, unobtrusive poles, guy-wires, mutilation of woodwork for lead-in wires, lightning arresters, and certain types of man-made static. Being portable and easy to install, it also enables you to move radio set from room to room, should occasion demand.

I.C.A. INSULTENNA
Aerial Eliminator
A startling invention to replace outdoor and indoor antennas.
The Insultenna is remarkably compact, measuring only 82½ x 1 in. May be installed anywhere. It can be conveniently placed in the console or cabinet. It contains a number of feet of a new type filtered aerial wire and condensers which give it the capacity of the finest of ordinary antennas.
Cat. No. 6452
Price $1.47

Filtertvor, Jr.
Light Duty Line Noise Eliminator
Filtertvor, Jr., is the popular size line noise eliminator, suitable for eliminating all line noises caused by vacuum cleaners, switching on and off lights, electric heating pads, electric toasters and all electrical appliances with make and break contacts or small motors.
Like the Filtertvor Sr., the Filtertvor Jr., is installed either at the radio set or as a source of interference. It is quickly and easily attached without the use of tools and is an extremely small and compact unit. The housing is made of black enamel metal with nickel plated end rings.
Cat. No. 3406 $1.70

Storm King
Lightning Arrester
The "arrester with the PREM $100 fire insurance policy."
It is a molded bakelite, No air gap. Nationally advertised, used at $1.00.
Cat. No. 6581
Special 35c ea.

Line Voltage Regulator
Differential Resistance automatically adapts itself to any set.
Air cooled by draft holes. Steel clad perfectly fireproof. Standard outlet will take any set.
Cat. No. 3277
35c ea.

An air cooled, dependable voltage regulator, will deliver correct voltage of any set. Less than the cost of an ordinary tube. Fits any standard set socket or outlet. Protects set from current surges, saves tubes.

I. C. A. Wizard Aerial
For Midget Receivers
Cat. No. 6941
List Price $1.25
Our Price 75c

A clever new aerial for quick installation into midgets, as shown in the cut. Can also be used in consoles, portables and automobile radios. Self-contained. No ground connection needed on most of the midgets on the market today. In cases where a ground is necessary, the Wizard aerial has a provision for it.

Line Voltage Ballasts
Used in Majestic and other new sets. The Real Line Voltage Regulator
Electrically and mechanically, as well as merchandising and servicing standpoint, the Line Ballasts represent the ultimate solution of the line voltage problem. The device, when properly matched to a given power transformer and load, is designed to maintain a practical constant voltage, or within the 5% plus or minus specified by tube manufacturers, on the primary side of the line voltage may fluctuate as much as 30%. It is usually designed to function between the limits of 95 and 135 volts.
Set Cat. No. Set Cat. No.
Bremer Tully 4023 Majestic 70 4010
Brunswick 4079 Majestic 72 4004
Hi-G 30 4025 Majestic 73 4011
Hi-Q 30 4028 Majestic 77 4057
Kennedy 4086 Feerle Jr. 4023
Kyletron 4083 Sonora 4019
$1.47 ea.

SWAN-HAVERSTICK
Light Socket Aerial
Cat. No. 6580

43c

The modern sets and especially the supers require a short aerial, and this device is ideal for this purpose. Eliminates all unobtrusive wires. Does not use current. Printed instruction sheet with each one, packed in attractive display box.

STICKTAPE AERIAL
Cat. No. 4256

59c ea.
$6.40 doz.
Packed in Display Carton of 10

Sticktape is made of a new metallic alloy of great capacity, the back of which is coated with an adhesive rubber that will stick to any surface. It can be easily concealed behind picture moulding, or on baseboard or under rugs on floor or behind drapes, etc. It is the most amazing aerial of modern times and will increase the receiving range of any radio receiver.

GOLD TEST AERIAL
Cat. No. 4268

$1.60

The Welston Gold Test Aerial is the world's smallest midget aerial and yet it is as efficient as a 75-ft. outdoor aerial. Gets distance and reduces static. It is exceptionally well with superhetodyne receivers. Can be installed inside radio cabinet or on baseboard.
**Eveready Rosin Core Solder**

A very high-grade solder for wiring and general house work use.

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Size</th>
<th>Our Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>4156</td>
<td>3 oz.</td>
<td>$1.25 per display carton of 10</td>
</tr>
<tr>
<td>4175</td>
<td>½ oz.</td>
<td>.20 each</td>
</tr>
<tr>
<td>4176</td>
<td>1 lb.</td>
<td>.40 each</td>
</tr>
</tbody>
</table>

**Kester Radio Solder Rosin-Core**

The small package of Kester Rosin-Core Solder, being of the flat or ribbon type. Recommended by leading radio engineers for its absolutely non-corrosive and non-conductive. Designed for the amateur set builder and for radio maintenance work. A liberal roll of solder is packed in a lithographed tin can; ten cans are put up in a handsome counter display carton.

**Special Servicemen’s Adhesive Tape**

3-oz. rolls, approximately 100 yds.

Width, ½ in.

Here is a handy item for the man who repairs and installs radio sets and does wiring. A narrow strip of black fabric coated on one side only with a very adhesive compound which will stick. Makes a very neat job and saves time and work.

**Our Price 5c ea. 50c per Dozen Rolls**

A Wonderful Time and Labor Saver for the Radio Service Man and Electrician

**“TWIN-TAPE”**

Rubber and Friction Combined in One. One roll instead of Two:

1—Mylar covering.
2—Rubber tape.
3—Friction tape.

Twin-Tape represents the highest grade of insulation tape. The best quality of materials obtainable is used in its manufacture, which insures uniformity and long life. One roll instead of two means saving in inventory and convenience to the workman.

8 Ounce Rolls—Cat. No. 5565

9c each

**Friciton Tape**

Cat. No. 4226

1-Ounce Rolls, marked “5c Each.”

70c Per box of 32 Rolls

Cat. No. 4219

2-ounce Rolls, marked “10c Each.”

70c Per box of 16 Rolls

Cat. No. 4215

4-ounce Rolls—8c each

Cat. No. 4223

8-ounce Rolls—15c each

Packed in individual cartons and attractive display containers which makes sales easier.
LENK NO. 7 HANDY BLOTORCH
Handy for any soldering purpose. Made of brass heavily nickel plated, 1200 degrees needle-point flame.
Size: 5 in x ½ in. Packed six on a counter display card. Shipping weight per dozen, two pounds.
Cat. No. 6694 30c ea. $1.75 Display Card of 6

LENK NO. 108 New Model
Five Improved Features:
1. Extension base. Improved stance.
2. Screw-top makes it easier to load.
3. Nozzle-cap prevents evaporation.
4. Copper heat conductor generates quickly.
5. Bigger barrel holds more fuel.
Cat. No. 6693 60c ea. Size: 5½x2½x1 in. Packed 6 to a carton. $3.50 Display Card of 6

LENK No. 66 Improved

FIVE IMPROVED FEATURES:
1. Extension base improves stance.
2. Screw-top makes it easier to load.
3. Nozzle-cap prevents evaporation.
4. Copper heat conductor generates quickly.
5. Bigger barrel holds more fuel.
Cat. No. 5435

Our Price 88c
Carton of 6 $5.25

Special Toaster Value!

Richly designed, O U A R T A N T E D e l e m e n t. I n a u l a t e d f i b r e h a n d l e s. T e k e s l a r g e s i l i c e s o f b r e a d . T o a s s t i n g q u i c k l y and evenly. Large base prevents Toasting from tipping. Made sturdy of heavy metal, not tin. Genuine nichrome wire imbedded in genuine refractory bricks. Equipped with electric cord and plug. Each packed in individual carton. Height—7 in. Base—7¼x¾ in. Weight—2½ lbs.
Cat. No. 393 89c

Lenk No. 30 Champion Blotorch
For the Mechanic Who Knows Value
Size 7x4½x3 inches. Packed one in a carton—six to a shipping container.
Cat. No. 5433 $1.80

Lenk No. 50 Master Blotorch
A Combination Alcohol Torch
Powerful 2900° blast with attached burner. One turn of thumb-screw releases burner, preventing 1700° needle-point flame.
1. Double b u r n e r—one for a needle-point flame—adds the attachment for a heavy intense flame.
2. The pressure release valve—no spattering, no blowing over, no evaporation, no leaks.
3. A cleaning pin always handy when you want it—securely in the handle.
4. A full grip handle, always cool.
5. Substantially built—to last a lifetime.
6. Pool-proof construction—no adjustment necessary.
7. Filter screen in jet prevents plugging of orifice.

Our Price $2.95

Special Therapeutic Electric Lamp
Relieves Pain With Heat
A quality product of heavy aluminum, highly polished. One-half of inside silver etched; scientifically correct in size, shape, etc., with 260 watt standard first quality carbon lamp. All made with 6 ft. of cord, 2-pc. attachment plug, k n o b o r p u s h through socket. Will stand up under high heat.
Either A.C. or D.C. current. Recommended by physicians everywhere.
Each $1.65
Complete with 260 Watt Bulb
260 Watt Bulbs Sold Separately
Cat. No. 5434

Cat. No. 388

Cat. No. 5433

Cat. No. 5435

Electric Soldering Irons

A handy soldering iron for the radio fan. Equipped with removable copper tip, hester cord and a two-piece attachment plug. Alloy element to give even heat.
FULLY GUARANTEED
Cat. No. 2720 59c
75 Watt High Heat Soldering Iron with removable brown handle, approved hester cord.

Cat. No. 5113 $1.15 ea.
100 Watt Extra Heavy High Heat Iron with brown removable handle, approved hester cord.
Cat. No. 3305 $2.00 ea.
7½ Watt, 220 V.
Cat. No. 6707 $1.50 ea.

Mueller Battery Light

Cat. No. 5868
A Handy and Inexpensive New Battery Shop Tool

Our Price 38c ea.
Six for $2.10

The MUELLER BATTERY LIGHT uses the storage battery itself as the logical source of power for lighting up the work when cells are being replenished with water. Ideal as a Temporary Voltmeter. The MUELLER BATTERY LIGHT provides a simple and sure means of showing up a bad cell without the necessity of removing the battery from the car. Packed in Individual Boxes.

Electric Waffle Iron

In “Super” Chromium Plate
With Heat Indicator

Here's a "Super" Chromium plated waffle iron, in popular "pedestal" style, attractively etched, ready to take its place as the u n q u e s t i o n e d popular-priced VALUE-LEADER in any department! With unheard of selling features in its price class—such as the new patented Guaranteed Embossed Element, with nichrome wire and double strength terminal connection; non-trespassable heat indicator, conveniently placed, as shown; full 7½ in. cast aluminum grainless grids; ebonized wood handles; and matching roll cord set with pull-type bakelite dual plug. Fibre feet. Operates on 115 volts, 600 watts.
Packed One to a Shipping Carton. Shipping Weight, 8 lbs.
Cat. No. 965 $3.95
Bakelite and Aluminum Panels

Special sizes of bakelite and aluminum panels can be furnished at short notice. Prices on request.

<table>
<thead>
<tr>
<th>Size</th>
<th>No.</th>
<th>Price</th>
<th>No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 Gauge Aluminum</td>
<td>5/16 in. Bakelite</td>
<td>Cat.</td>
<td>Our</td>
<td>Cat.</td>
</tr>
<tr>
<td>1x1</td>
<td>5178</td>
<td>$0.50</td>
<td>5169</td>
<td>$1.00</td>
</tr>
<tr>
<td>1x2</td>
<td>5177</td>
<td>0.30</td>
<td>5159</td>
<td>1.55</td>
</tr>
<tr>
<td>1x4</td>
<td>5175</td>
<td>0.30</td>
<td>5171</td>
<td>1.50</td>
</tr>
<tr>
<td>1x8</td>
<td>5179</td>
<td>0.35</td>
<td>5172</td>
<td>1.90</td>
</tr>
<tr>
<td>1x16</td>
<td>5180</td>
<td>0.35</td>
<td>5173</td>
<td>2.30</td>
</tr>
<tr>
<td>2x1</td>
<td>5181</td>
<td>1.10</td>
<td>5174</td>
<td>2.90</td>
</tr>
<tr>
<td>2x2</td>
<td>5182</td>
<td>1.30</td>
<td>5175</td>
<td>2.75</td>
</tr>
</tbody>
</table>

Aluminum shielding can, 5 in. by 6 in. by 9 in. with 4 corner posts.

Cat. No. 5184

Our Price $1.95

Aluminum Corner Posts for making aluminum boxes, 6 in. long with holes drilled and tapped at each end.

Cat. No. 5183

Our Price 20c ea.

Bakelite Tubing

(Coil Forms)

Cat. No. 4085

1/16 in. dia., 3 in. long

Cat. No. 3812

1/16 in. dia., 3 in. long

Our Price 10 ea.

Polished Bakelite Strips

Black

App. 15 in. x 1 1/4 in. - 1/16 in. thick.

15c ea.

Cat. No. 4384

Our Price 5c ea.

Round Head Machine Screws

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Size</th>
<th>Description</th>
<th>Size</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5666</td>
<td>3/8 x 1/2</td>
<td>Round Head N. P.</td>
<td>5667</td>
<td>5/8 x 1/2</td>
</tr>
<tr>
<td>5668</td>
<td>5/8 x 1/2</td>
<td>Round Head N. P.</td>
<td>5669</td>
<td>3/8 x 1/2</td>
</tr>
<tr>
<td>5670</td>
<td>1/2 x 1/2</td>
<td>Round Head N. P.</td>
<td>5671</td>
<td>7/8 x 1/2</td>
</tr>
</tbody>
</table>

These machine screws are packed 10 to an envelope. Each envelope has an illustration and the quantity of the product on the front.

Our Price 5c Per Envelope

Wood Screws in Envelopes

The wood screws are packed 10 to an envelope, each envelope illustrates the type of the wood screw head and always states the quantity.

4716 | 1/8 x No. 5, 10 Round Wood Screws to an envelope.
4746 | 1/4 x No. 6, 10 Round Wood Screws to an envelope.
6476 | 1/4 x 6, 10 Round Wood Screws to an envelope.
6478 | 1 x No. 6, 10 Round Wood Screws to an envelope.
6477 | 1 1/4 x No. 6, 10 Round Wood Screws to an envelope.

Our Price 5c per envelope

Machine Screws, Nuts, and Washers

Cat. No. 3630 | 1/16 x 1/2 | Oval Head Machine Screws, Nuts and Washers.
3631 | 3/32 x 1/2 | Oval Head Machine Screws, Nuts and Washers.
3632 | 1/8 x 1/2 | Oval Head Machine Screws, Nuts and Washers.

The above mentioned merchandise is packed 12 of each in an envelope as follows: 12 machine screws, 12 nuts, 12 washers. The envelopes are printed in three colors and have an illustration of the product. Merchandise is brass nickel plated and packed 50 envelopes to a standard package.

Our Price 10c per envelope of 36 pieces

Soldering Lugs

Tinned Brass

Cat. No. 4260

1/2 Actual Size

25c per hundred

Hexagon Nuts, Knurled Nuts, and Washers in Envelopes

Cat. No. 5959 | 6/32 x 1/4", 20 nuts packed | Envelopes.
5960 | 8/32 x 1/4", 50 nuts packed | Envelopes.
5961 | 6/32 x 5/16", 10 nuts packed | to an envelope.
5962 | 8/32 x 5/16", 15 nuts packed | to an envelope.
5963 | 8/32 x 5/16", 6 nuts packed | to an envelope.
5964 | 6 No. Washers, 25 screws packed | to an envelope.
5965 | No. 8 Washers, 25 washers packed | to an envelope.

All of this merchandise packed to an envelope with an illustration of the product on the front side, also the quality.

5c per Envelope

Brass and Copper Tinned Terminal Lugs

The No. 1 and 2 lugs are commonly used on battery cables. The No. 3 lug is a solderless lug for round or square bus bars. The No. 4 lug is a flat lug for bus-bar connections.

The No. 5 lug is also flat but is 1/8 in. in length. This type of terminal is easily bent to any desired angle or shape.

The No. 11 lug, Tite-Lock, 1 1/4 in. in length.

All terminal lugs are packed 20 to an envelope, 50 envelopes to a box.

Style | Cat. No. | Style | Cat. No. | Style | Cat. No. | Style | Cat. No. |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5972</td>
<td>4</td>
<td>5975</td>
<td>2</td>
<td>5973</td>
<td>5</td>
<td>5976</td>
</tr>
<tr>
<td>3</td>
<td>5974</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Our Price 5c per envelope of 20 $2.25 box of 50 assorted envelopes

SCREEN GRID Tube Caps with Leads

These Screen Grid Tube Caps have a lead soldered directly to the cap. The cap itself is manufactured of a spring brass and is cadmium plated.

Cat. No. 3892

Our Price 20c doz.

Cat. No. 4175—Without Leads 15c Dozen

FUSE CLIPS

Spring Phosphor Bronze fuse clips that have been carefully designed and accurately made to insure perfect electrical efficiency and durability.

Cat. No. 3893

15c per doz.
Machine and Wood Screw Assortments

4142 Round Head 6-32 Machine Screws, 85 per box.
4268 Oval Head 6-32 N.P. Machine Screws, 85 per box.
4714 Round Head 8-32 N.P. Machine Screws and Nuts, 75 per box.
4740 Assorted Fibre Washers and Grommets, 100 per box.
4744 Round, Flat and Oval Head Assorted Size Wood Screws, 85 per box.
4748 Round Head 8-32 Screws, nuts and Washers, 100 per box.

Our Price 25c per box

Angle and Bracket Assortment

All Nickel Plated Brass.
38 pieces in a box.
Very handy for the service man.

Cat. No. 3608

Our Price 25c box

Transformer Brackets

Brass, Nickel Plated—3/4 in. wide.

Cat. No. Length Center Set of 4
5307 3/4 in. 2 1/2 in. $0.20
5388 4 1/2 in. 3 1/2 in. $0.30
5389 5 1/4 in. 4 1/2 in. .40

EASY SOLDERING Phone Tips

These new Phone Tips are very easily soldered as may be noted by the illustration, merely insert wire and drop solder in the side holes.

Cat. No. 6531 9c per env.
10 to an envelope
50 envelopes to a box

Yaxley Solderless Phone Tips

Simply insert wire and tighten up on screw and have a good solderless connection.

Cat. No. 7185 35c doz.

“Clamp-On” Type Pilot Light Socket

Can be attached to any dial not already equipped with pilot light.

Cat. No. 6524

Our Price 6c ea.
60c doz.

Condenser Shaft Reducer

Adapts a 3/16 condenser shaft for a 1/4" dial or knob. Nickel plated brass.

Cat. No. 6104

Our Price 15c Ea.

Rodale Soft Rubber Handle Screw Driver

2 Blanks. Packed 5 of each size on a card.

Cat. No. 6490

85c for card of 12

Flush Type Pin Jacks

Nickle-Plated Complete with solder lug.

Cat. No. 5629

45c per dozen
$3.50 per 100

Pilot Light Sockets With Mounting Bracket

Can be used in any set 80th contacts insulated from mounting.

Cat. No. 4076
$1.50 per dozen
Cat. No. 4077—Without Bracket
Our Price $1.00 dozen

Copper Sleeving for Shielding

This shielding is used on amplifiers, speakers, public address conduits, automobile radios and wherever it is desirable to eliminate electrical interference. The conductors are run through the sleeving and the shielding is grounded. The wire is very flexible and can be stretched to double its original length.

DE JUR PIN JACKS

Direct connection to the loud speaker or ear-phones without the use of a phone-plug is facilitated by the use of the DE JUR Pin Jack. This useful little terminal device finds adequate application in modern receivers where reception over a wide band of wave-lengths is accomplished with the use of plug-in coils. Their use on terminal strips is also a great convenience.

Cat. No. 4129

50c dozen
Package of 100 $3.50
Solderless Phone Tips, Cat. No. 5372, 500 Dozen.

HACKSAW

Cat. No. 5076
Price 85¢

They are adjustable from 9 to 12 inches, with back, arms and clips made of a very hard grade of steel. The nicely-shaped pistol grip handle is made of steel stampings, corrugated to give a good grip. The handle is riveted to the frame. All other joints are everlastingly welded together.
DRAKE'S
Radio Cyclopedia

Answers in plain English every practical question on the servicing, adjustment, repair, remodeling and designing of radio receiving equipment. Each of the five hundred leading articles is complete in itself, and in addition there are hundreds of concise definitions. The entire volume is alphabetically arranged and self-indexed to make every fact instantly accessible.

Cat. No. 366 $4.80

Radio and Electronic Dictionary

The Radiotechnical Laboratory
3,800 Words and Terms
550 Illustrations

Cat. No. 367

List Price $2.19

The Radio Amateur's Handbook

By the Headquarters Staff of the American Radio Relay League
For Those Who Don't Know It!

The Handbook is a practical manual of amateur radio in all its phases, published by the American Radio Relay League, the amateur's own organization. It starts at the beginning and tells the whole story: What amateur radio is; How to be a radio amateur; How to obtain your licenses; How to build the simple apparatus of a simple station; How to build the best known apparatus for the most modern station; How to operate the station—enough information to keep you busy and interested for five years.

For years the Handbook has been the practical working guide of communicators-amateurs the world over. It has just been given a most complete and thorough revision by members of the technical, editorial and communications departments of A. R. R. L. Headquarters.

244 Pages 8½ x 11¼ 227 Illustrations

Cat. No. 375 $1.00

Servicing Receivers by Means of Resistance Measurements

A book that should be in the possession of every Bound and Recording Engineer and Radio Serviceman engaged in Public Address Work.

Written by the Engineering Staff of RCA Photophone, Inc.

Subjects Covered:
Nature of Bound Resistances, Series and Parallel, Electricity Motors and Converting Equipment Storage Batteries Battery Chargers Recording Telephones Sound Heads Special Condensers Vacuum Tubes and Vacuum Tube Measuring Instruments of Amplifiers Loudspeaker Equipment of Amplifiers Theatre Acoustics Dinner Telephones Equipment Trouble Shooting Type PDU Portable Equipment

Cat. No. 369

Net
$1.50

Handbook for Projectionists

214 pages 8½ x 11¼ Profusely Illustrated

Cat. No. 355

95c

See Our Complete Power Transformer Listing On Page 92

MAIL ORDERS TO

See Terms on Page 5

25 PARK PLACE, N. Y. C., or to our nearest branch

WorldRadioHistory
August-September, 1932

USALITE

FLASHLIGHTS

Two Best Sellers

3-Cell Large Size Focusing Spotlight
Will throw a beam of light over 400 feet.
Size 1¾" x 6¾".
Cat. No. 6679 $85c Complete

3-Cell Large Size Focusing Searchlight,
with Extra Large Head
Will throw a beam of light over 1000 feet.
Size 1¾" in. by 9¾" in.
Head ¾" in. Diameter
Cat. No. 6684 $1.35 Complete
1—Heavy gauge solid brass cases.
2—Body finished in black.
3—Pulled Nickleed.
4—Pool-proof safety switch that locks on
and off in addition to intermittent flashes
for signalling (popular with Boy Scouts.)
5—Hinged ring on bottom cap for hanging.
6—Head is Octagon-shaped to prevent
rolling.
7—Shock absorber at base of bulb.
8—All parts are ribbed for sturdy usage.
9—Each Flashlight is complete with Bulb,
and Batteries.
10—Each Flashlight is packed in an
individual attractive box.

New "Photoflash" Lamp and Holder
Photoflash Holder
with 7-in. Reflector
and Batteries
Cat. No. 3377 65c
Makes picture taking easy under any
condition, indoor or outdoor, day or
night. No fire hazard, noisless, safe and
economical. Any child can operate it.
Simply screw the new photoflash lamp
into socket of this special holder, press
button, and the picture is made. A boon
to the amateur photographer—a necessity
for the professional.

Photoflash Lamps Only
Cat. No. 3378 18c ea.

4½ Volt "C" Battery
4 in. long x 3 in. high x ½ in. deep.
Packed 10 in a shipping carton weighing
10 pounds.
Cat. No. 6655

Our Price 20c ea.
$1.90 Standard Carton of 10

MAIL ORDERS TO
See Terms on Page 5

Federated Purchaser Inc.

For VICTOR and
COLONIAL Sets
Intermediary Base, Frosted
Cat. No. 4224

$1.50 Carton of 10

NATIONAL

Mazda Pilot Lights

FOR RADIO SETS

Cat. No. Volts Carton Price
3665 2½ 5 85c
3675 5 45c
No Less Than 10 Sold

Independent Pilot Lights

Cat. No. Volts Carton Price
3676 2½ 5 85c
3677 5 45c
No Less Than 10 Sold

Pilot Lamps

110 V. Candelabra Base

For Pilot Receptacles and
General Use.
Cat. No. Color
5601 Clear
5601A Amber
PACKED
25 to the box

Our Price 9c ea.
$2.00 Box of 25

Round Decorative Lamps

Regular base, G18½ and A19
Packed 10 to the box.
Cat. No. Color No. Color
5698 White 8699 Blue
5697 Amber 5698 Red

90c Box of 10

45 VOLT
‘B’ Batteries
Cat. No. 6905

88c ea.
Carton of 5 $4.00

or to our nearest branch
25 PARK PLACE, N. Y. C.

No. 6—1½ Volt Dry Cell
This is a Dry Cell of the
highest quality and will
give satisfaction in any
service for which this type
of cell is adapted. It is
especially qualified for all
kinds of ignition work,
doorbells, buzzers, Radio
'A' Battery, and for other
general uses of the Drycell,
2½" diameter x 6¾" high
Cat. No. 6656

20c ea.
$5.00 per Carton of 25
Packed 5 in a shipping carton
weighing 60 lbs.

22½ Volt "B" & "C"
Battery
4½ long x 3½ high x 2½" deep.
Packed 5 in a shipping carton
weighing 9 lbs.
Cat. No. 6685

Our Price 58c ea.
$2.90 Standard Carton of 5

Merit Flashlight
Cells

LARGE SIZE
Fit Both Flashlights Shown Above.
Size ½ inch deep x 1½ inches.
Cat. No. 6682—Regular Size
Cat. No. 6683—Baby Size

Our Price 4c ea.
$1.85 per Carton of 50

Flashlight Lamps
Miniature Base—Imported
Cat. No. Volts Style
5692 2½ Clear
5693 3½ Opal
5694 3½ Clear
5695 3¼ Opal
Packed 10 to the box, 100 to carton

Our Price 30c Box
$2.50 per Carton

NEON

Pilot and Night Lamps
Uses Very Little Current.
Burns 24 Hours Per Day
For 5 Cents Per Month.
Can be Used Anywhere—
No. 3673—1 Watt....50c
No. 3674—2 Watt....65c
Standard Package, 10
Acts as Pilot Light, Night Light, Indicator
on Electrical Apparatus, etc.
Uses Edison Medium Base
Works on Both A.C. or D.C., 110-120 Volts

45 VOLT

Cat. No. 6903

88c ea.
Carton of 5 $4.00

WorldRadioHistory
AERIAL WIRE

Cat. No. 4401
Seven-Strand No. 26 Copper per 90-ft. Coils

Lots of 25 coils ... 15c ea.
Lots of 50 coils ... 13c ea.
Lots of 100 coils ... 12c ea.

No. 7-22 Heavy Gauge Cat. No. 4402 90-ft. Coils

Lots of 25 coils ... 22c ea.
Lots of 50 coils ... 20c ea.
Lots of 100 coils ... 18c ea.

Cat. No. 4402 1000 ft. Spool............$1.75

724 Stranded Enamel Wire Cat. No. 4421—100 ft. coils

Our Price 35c per coil

No. 14 Solid Enamelled Wire Cat. No. 4418 100 ft. coils

Our Price 30c per coil

Cat. No. 4475 1000 ft. roll

$2.75

Gold Plated Aerial Wire

Used on all U. S. Battleships.

Cat. No. 4213

Our Net Price

55c ea.

$5.50 dozen

Indoor Aerial Tape

Cat. No. 4311

OUR PRICE

30c ea.

$3.35 dozen

Tape is a flexible metallic ribbon antenna especially manufactured for indoor reception. Gives reception far superior to any other type of indoor aerial or loop. Can be easily placed about the room in convenient places. Placed around the moulding.

MAIL ORDERS TO

See Terms on Page 1

Federated Purchaser Inc.

25 PARK PLACE, N. Y. C.
or to our nearest branch

AERIAL—LEAD-IN—
 Magnet and Hook-up
 Wire

LEAD-IN WIRE

Solid Copper, Rubber Covered

50-ft. Rolls

Cat. No. 4403

15c ea.

25 coils for $3.15

100-ft. Rolls

Cat. No. 4404

28c ea.

25 coils for $6.50

SPECIAL SHIELDED Lead-in Wire

Shielded Lead-in Wire consists of stranded cable with Easy-Strip Rubber Insulation enclosed in a braided shield of tinned copper wire. In service the shielding is grounded. Shielded Lead-in Wire is solving the problem of troublesome interference and thus protects the signal energy from interference caused by high tension lines, motors and similar disturbances.

Cat. No. | Length | Price
----------|--------|--------
4460 | 50 ft. Coil | $ .30
4461 | 100 ft. Coil | .35
4464 | 500 ft. Coil | 4.50
4465 | 1000 ft. Coil | 8.50

SOMETHING NEW! Continuous Aerial and Lead-in Wire

SPECIAL OFFER! Rubber Covered Tinned Copper Lead-in Wire

Underwriters' Label

On Each Coil

500 Ft. Coils

With this wire it is not necessary to use insulators or make any splices. You simply tie one end on some high object on the roof and bring the other end down over the side of the roof and into the window. For a quick and secure installation, there is nothing better than this fine insulated copper wire.

Cat. No. | Gauge Type | Price
----------|-----------|--------
4420 | 16 Solid | $2.65
4430 | 18 Stranded | 1.75

The solid wire has a 3/4 rubber cover and is cotton braided and weather-proofed. The stranded wire has a lacquered cotton braid over the rubber insulation.

Serviceman's Handy Wire Spool Assortment

Now! Every Serviceman can have a complete assortment of Wire in stock without a large investment

Our Price 95c

For Any Spool Listed Below

Knowing that it is essential that every service shop has a complete assortment of electrical and radio wire in stock for every job, but very few servicemen can afford to invest too much money in wire, we have arranged with a very large wire mill to furnish us with every popular type of wire, put up in handy spools, so that a complete assortment is in the reach of everyone. For a small investment of $6.50 you can have a good supply of every popular type of wire in stock.

Cat. No. | Description
---------|-------------
4402 | 100 ft. No. 18, 1/64 Cotton Covered twisted green and yellow.
4403 | 100 ft. No. 18, 1/32 Silk Parallel, assorted colors.
4404 | 100 ft. No. 18, 1/64 Silk Parallel, assorted colors.
4405 | 50 ft. No. 14 Cotton Covered Twisted for heavy filament circuits carrying excessive wire current.
4406 | 200 ft. No. 18, 1/84 Single conductor Cotton Covered, for aerial and ground wire, lead-in wire, filament leads and general repair work.
4407 | 100 ft. No. 14, 1/32 Single conductor Cotton Covered, for heavy filament work and general use.
4408 | 100 ft. No. 18, 1/64 Silk Covered, twisted for filament leads and extensions, assorted colors.
4409 | 100 ft. No. 22, 1/84 Single conductor for hook-up wire, assorted colors.

No. 18 Bell (Annunciator) Wire

A real quality No. 18 single wire. Made by one of the largest wire companies and priced right.

Cat. No. 4409

All Colors in Boxes

1/2-lb. Coils,

15c ea.—$1.50 doz.

35-ft. coils, white, for inside work, 25 coils to a box.

Cat. No. 6302

Our Price $1.25

Per Box of 25 Coils
Stranded Push-Back Wire
For filament leads and wherever flexibility is needed. Tinned for quick connecting.
Cat. No. 4463
100 ft. coll. $0.40
500 ft. coll. $1.85
1000 ft. coll. $3.50

SPAGHETTI TUBING
Cat. No. 5630
36 in.—Black
35c dozen
$2.50 per 100 lengths

Green Silk Covered Litz Wire
Litz wire is used for winding precision induction coils and for making loop antennas. It is the most sensitive wire known and is excellent for indoor antennas. 1/4 lb. spools.
Cat. No. 4243 20c

Colored Rubber Covered Stranded Hook-Up Wire
- Very flexible tinned wire covered with blue, yellow, green or red rubber. Ideal for wiring or hooking up sets.
- Contains 150 ft. of Wire

Cat. No. 4415

Radio Set Hook-Up Wire
So many of our customers have asked us to supply them with the same type of hook-up wire that is used by the large radio manufacturers of radio sets. This type of wire is unobtainable in the usual channels of trade and is made up only on order, which orders must be sufficiently large to make the wire on a production basis. We have arranged to stock this wire for the dealer and serviceman trade at extremely low prices.

Specifications:
- Stranded copper wire.
- Tinned: 1/4 lb. rubber-covered cotton braid. The braid is then lacquered, making it absolutely moisture proof. The lacquer also causes the braid to adhere permanently to the rubber.

- VERY EASY STRIPPING
- ALL COLORS

Cat. No. 4430
1 Spool, 1 Color—250 ft.—95c
2 Spools, 2 Colors—500 ft.—$1.75
4 Spools, 4 Colors—1,000 ft.—$3.25

This is the same wire that is used by Atwater-Kent, Stewart-Warner, Majestic, Philco, RCA-Victor and all the large set manufacturers.

MAIL ORDERS TO
See Terms on Page 5

FederatedPurchaser Inc.
25 PARK PLACE, N. Y. C.
or to our nearest branch

WorldRadioHistory
No. 18 Twisted Lamp Cord
A closely woven double braided and heavy rubber insulated stranded copper wire for all general uses. Green and yellow, white or brown, cotton covered. Cat. No. 4418
$2.15 per 250 ft. coil
$3.75 per 500 ft.

No. 18 Type "PS" 1/64 Reinforced Cord
Used for all portable applications like vacuum cleaners, etc. Ruggedly built, substantial and will give real service and long wear. Cat. No. 4411
Length Our Price
4411 100 ft. $1.75
4412 500 ft. 5.55
4413 1000 ft. 9.80

Flat Cotton Parallel Wire
Will stand a lot of abuse. Approved. No. 18, 1/25 to All Colors
Cat. No. 4447
Length Price
4447 260 ft. $2.25
4448 500 ft. 4.80
4449 1000 ft. 10.50

No. 16 Double Lighting Wire
Leaquered Braided Per. Auto. Ignition Work Oil Proof
Cat. No. 4470
Length Our Price
4470 100 ft. $1.25
4487 500 ft. 8.50
4488 1000 ft. 16.50

HEAVY DUTY "SJ" 2 Cond. Garage Wire
Run a 10-ton truck over it; leave it out in sleet and snow; will stand almost any abuse. Very popular for trouble lamps, motor leads, temporary outside lines and it will make a vacuum cleaner cord de luxe. An extra heavy duty flexible rubber covered cord, positively water and oil proof. Suitable for garages, shops, etc. A full 80% Para rubber cord priced about 50% below market prices. $2.25 per 100 ft. spool

Battery Charging Cable (Single)
Heavy, extremely flexible battery cable. Weatherproof, acid proof and fuse proof, heavy rubber covered. Due to the heavy flexible conductor resistance is cut to a minimum, and breakage of wire is almost unknown due to the many strands used. 100 ft. spools only.
95c per 100 ft.

Extra Special Value Silk-Covered Parallel Wire
For Electrical, Radio and General Use
No. 18, 1/32 B. C. Parallels 61/16
Wires for wiring homes with baseboard convenience outlets, lamps, extensions and a hundred other uses. This is the fastest moving wire, and every dealer and service man should have a spool on hand. Cat. No. 4449
Size Price per 1,000 ft.
4449 16-1/64 $5.85
4450 20-1/64 4.95

Single Conductor Cotton Covered Fixture Wire

1000 FT. SPOOLS
Cat. No. Gauge Color Price
4484 18 Brown $3.20
4485 18 White

Our Price $3.20
Cat. No. Gauge Color Price
4486 20 Brown $3.00
4489 20 White

Our Price $3.00

Asbestos Heater Cord
A closely woven heavy duty wire used for all appliances. Cat. No. 4423
Cotton Braided Overall Per 500 ft. Per 250 ft.
Price
$5.50 $3.00

Battery Charging Cable (Single)
The finest battery cable it is possible to manufacture. 100 ft. spools.
25 PARK PLACE, N. Y. C.
25 PARK PLACE, N. Y. C.
25 PARK PLACE, N. Y. C.
25 PARK PLACE, N. Y. C.
Cord Sets
For All Electrical Appliances

Best grade asbestos heater cord, 2 pc. bakelite cap only.

<table>
<thead>
<tr>
<th>No.</th>
<th>Type</th>
<th>Each Dzn.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3318</td>
<td>With cold mold plug, no switch</td>
<td>$0.17</td>
</tr>
<tr>
<td>3315</td>
<td>Same as above, plug and silk cord</td>
<td>.40</td>
</tr>
<tr>
<td>3323</td>
<td>With Bakelite switch plug</td>
<td>.35</td>
</tr>
</tbody>
</table>

BAKELITE Quadruple Table Tap
Compact, light and neat. Equipped with 6 ft. brown silk cord and bakelite handle c.a.p. Makes four electrical outlets out of one.

Cat. No. 6584
Our Price 45c ea.
$2.00 per box of 5

Triple Outlet Cube Tap

Cord is of 2 1/8 size parallel with main, approved by underwriters. General Electric attachment plug. Cap only. Monowatt cube tap. Very handy for connecting one or more lamps, radio sets, etc., from the outlet.

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Length</th>
<th>Each</th>
<th>Dzen.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3380</td>
<td>5 ft.</td>
<td>$1.10</td>
<td>$2.00</td>
</tr>
<tr>
<td>3382</td>
<td>10 ft.</td>
<td>.75</td>
<td>2.00</td>
</tr>
<tr>
<td>3383</td>
<td>15 ft.</td>
<td>.80</td>
<td>2.10</td>
</tr>
<tr>
<td>3386</td>
<td>20 ft.</td>
<td>.90</td>
<td>2.60</td>
</tr>
</tbody>
</table>

Handy Extension Cord Sets
Heavy Silk Cord with inner frad, Beautiful Assorted Colors.

Approved Socket
Approved Cord G. E. Bakelite Cap Only

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Length</th>
<th>Each</th>
<th>Dzen.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3390</td>
<td>5 ft.</td>
<td>.23</td>
<td>3.00</td>
</tr>
<tr>
<td>3392</td>
<td>9 ft.</td>
<td>.28</td>
<td>3.55</td>
</tr>
<tr>
<td>3395</td>
<td>12 ft.</td>
<td>.32</td>
<td>4.15</td>
</tr>
<tr>
<td>3396</td>
<td>15 ft.</td>
<td>.35</td>
<td>4.00</td>
</tr>
<tr>
<td>3398</td>
<td>20 ft.</td>
<td>.40</td>
<td>4.65</td>
</tr>
</tbody>
</table>

Two-Burner Enamelled Electric Stove

SINGLE HEAT

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Finish</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>881</td>
<td>Green</td>
<td>$2.60</td>
</tr>
<tr>
<td>883</td>
<td>Blue</td>
<td>$2.95</td>
</tr>
</tbody>
</table>

THREE HEAT

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Finish</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>884</td>
<td>Nickel</td>
<td>$3.35</td>
</tr>
</tbody>
</table>

A sturdy and useful Hotplate which will perform many of the everyday cooking operations in the home. It has an open coil unit 6 in. in diameter, which fits 60% of all utensils. It heats quickly and provides a clean, soilless heat. Pressed steel construction. Polished nickel finish. Two open coil units, each unit 600 watts. Single-heated, reversible switches. Complete with cord and plug. For 110-120 volts. Connections concealed and protected—equipped with 6 ft. electric cord and a two-piece attachment plug.

Single Stove Without Switch

Colors:
No. 402—Blue $7.20 dozen
No. 403—Green

Commands Attention to Your Displays

Cat. No. 379
$2.75

Complete with 5 Assorted Color Films

SPOT LIGHTING is effectively employed to focus attention on a section or portion of a display so cring same out prominently.

Varied beautiful lighting effects may be procured by using spotlights with the colored gelatine screens of five assorted colors furnished with this outfit. Finds ready sale in all retail stores, automobile show rooms, drug stores and should be used in every show window where you wish to have some article stand out. Built of heavy gauge aluminum with universal bracket and porcelain socket. Furnished complete with adjustable brackets and five assorted colored films. Spotlights will help eliminate daylight reflections in plate glass windows which are so annoying to merchants eager to compel attention to their window displays during the daytime as well as at night.

We carry Voltage Dividers for over 200 standard receivers. See page 95 for complete list.

6 L.B. DE LUXE HOUSEHOLD IRON

6 pound iron beautifully designed and heavily nickel plated with bevel-edge sole plate. I.p-1 p-1 p heel rest, black handle, complete with cord set. Half attachment plug. Imbedded type nichrome wire element, double strength terminal connections. 110 volts, 660 watts. One year guarantee.

Cat. No. 425
$1.15
$5.50 per Carton of 6

TOURIST IRON

24c pounds. Nickel plated, bevel-edge sole plate and black rubberized handle, with cord set and half-plated, porcelain element. Snap-up heel rest. 110 volts, 875 watts.

Individual Carton, 12 to a Shipping Carton. Shipping Weight, 38 lbs.

Cat. No. 502
95c ea.
$10.50 per Carton of 12

GOLD SEAL Automatic Water Heater

When Faucet is Turned On, Heating Element is Connected
When Turned Off, Current is Off, Also.

No switches to bother With—Completely Automatic

Made of the finest Materials

1 1/8 ft. Rubber Electric Cord Non-Breakable Aluminum Case—Highly Polished

GUARANTEED

Just slip over faucet and plug into near-by outlet. Permanent installation in less than two minutes. Operates on 110-130 Volt A.C. Also made in 220 Volt at slight additional cost.

Cat. No. 6570
$2.25

A GUARANTEED Enamelled Hot Plate
For 110 Volts

Sizes

<table>
<thead>
<tr>
<th>Size of Stove</th>
<th>In Colors</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 1/2 inch in diameter, 4 in. high</td>
<td>Enamel in four different colors—black, blue, green and grey.</td>
</tr>
<tr>
<td>Each stove in an individual carton. 24 stoves to a standard shipping box. Made of heavy steel—&quot;Genuine Nichrome Wire&quot; elements imbedded in high grade porcelain bricks.</td>
<td></td>
</tr>
<tr>
<td>No. 587—Black</td>
<td>No. 404—Blue</td>
</tr>
<tr>
<td>No. 497—Green</td>
<td>No. 498—Grey</td>
</tr>
</tbody>
</table>

Our Price 79c ea.

MAIL ORDERS TO "FEDERATED PURCHASER INC."
See Terms on Page 5

25 PARK PLACE, N. Y. C.
or to our nearest branch
COMPLETE AERIAL KITS

(We can supply Aerial Kits in quantities to your own specification.)

Kit No. 4216
90 ft. 7/27 Stranded Copper Wire
90 ft. Rubber Covered Lead-In Wire
25 ft. Ground Wire
1 Approved Lightning Arrester
1 Copper Ground Clamp
2 Lead-In Strips
2 Glass Insulators
2 Nail Knots

65c ea.; 10 for $6.25

Kit No. 4217
90 ft. No. 7/25 Stranded Copper Aerial Wire
90 ft. B.C. Lead-In Wire
25 ft. Hook-up Wire
1 Copper Ground Clamp
1 Lead-In Strip
1 Ground Clamp
2 Glass Insulators
2 Nail Knots

42c ea.; 10 for $4.00

Kit No. 4220
Assembled to meet the demand for a real low priced kit, yet sufficient for the modern midget receiver.

Contents:
90 ft. 7/27 Stranded Copper Aerial Wire
90 ft. B.C. Lead-In Wire
25 ft. Hook-up Wire
1 Copper Ground Clamp
1 Lead-In Strip
1 Ground Clamp
2 Glass Insulators
2 Nail Knots

35c ea.; 10 for $3.25

NEW GRIP-TITE GROUND CLAMP

Makes a real good connection on pipes up to 1 in. diameter.

Cat. No. 6046
Our Price $1.55
Box of 50

GLASS INSULATORS
3½ in. length. Packed 100 to a box.
Cat. No. 2769
$3.00 per 100

Smaller Quantities—4c Each

Storage Battery Clamps
Non-Corroding Heavy Duty
In Boxes of Ten

Medium size, No. 64B
Cat. No. 4261
Per Box 60c

Large size, No. 64
Cat. No. 4278
Per Box 85c

GROUND CLAMPS

Cat. No. 4251
25 for 75c
50 for $1.16

GIANT Lightning Arrester
Cat. No. 4210 15c

$1.30 doz.

Tested and Approved Radio Lightning Arrester, large type. Made from high tension, thoroughly vitrified porcelain, brown glazed. Expansion and contraction has no effect on the air gap of this arrester. Our arrester are so constructed, that they may be installed indoors and out of doors.

White Wiring Nails
Packed 100 to a box
Cat. No. 6658
15c per 100

$1.35 per 1000

Wiring nails are ideal for fastening wire to baseboard when making extra electric outlets for the radio, lamps, etc. They are white colored to harmonize with the woodwork.

Resistor Type Lightning Arrester

Transparent glass--all parts visible. Positive calibrated resistor.
3¾ in. x 1¾ in. x 1¼ in.
Packed in individual cartons with screws.
$1.00. Guarantee card with each arrester.

Cat. No. 5298 42c ea.
$3.75 dozen

INSULATED STAPLES
NATURAL FIBRE

500 Staples
50c

1000 Staples
95c

INSULATED STAPLES
50c per 1000

Jiffy Baseboard Wire Clips

Jiffy Wire Clips replace the old-fashioned double end tack for staple, or fastening insulated wires; and do not require nailing.

Your Radio Lead-in, inside Aerial, Telephone, and Lamp Wires are held by this device between trim and wall and cannot mar or damage your woodwork.

Cat. No. 3264

50c per 100

INSULATED Window Lead-In

Cat. No. 4208
Entirely insulated and equipped with Fibre Cables. Packed 50 to a carton.

$1.45 per box of 50

Lightning Arresters
Approved by wire Underwriters

Cat. No. 4209
25 for $1.50

PORCELAIN

Lead-In Anchor

Nickel plated fittings. Diameter 2 in. Ht, 3¼ in

Cat. No. 5299

Our Price 9c ea.
25 for $1.90
CORD CONNECTORS
Cat. No. 4255
6c ea.
10 for 55c

HYDROMETER
LARGE SIZE
3 IN. RUBBER BULB CLEAR READINGS ON FLOAT
Packed in Neat Display Boxes
One piece rubber bulb clear reading on float.
Cat. No. 4200 25c ea.
Extra Beaded Floats 10c ea.
Cat. No. 4203

PORCELAIN
Nailit Knobs
Two-Piece
Cat. No. 2767
$1.00 per 100

3-In. Screw Eye Insulators
Galvanized Screw
Cat. No. 2768
$2.00 per 100

SPRING AERIALS
For Indoor and Outdoor Use
Solid Brass, 75 ft.
Cat. No. 3657
30c ea., $3.50 doz.
Copper-Plated, 75 ft.
Cat. No. 3658
10c ea., 25 for $2.25

SILK GRILL CLOTH
Green and Gold
Diameter, 11 in.
For replacement in speakers and consoles
Cat. No. 6686
Our Price 10c ea.

CORD CONNECTORS
Base Knife Switches
Insulated handle Copper blades and contacts.
Midget Size.
Cat. No. 4159
S. P. S. T. 95e Box of 10

PORCELAIN
S. P. S. T. 95e Box of 10

CATALOGUE
4204

UNIVERSAL
Battery and Radio Clips
Screw connections—no solder required. Channel construction throughout. Polarity indications. For positive, for negative.
Cat. No. 6483
No. 45—Per Wre Cadmium Plateed, 1½ in. long.
30c per box of 10
Cat. No. 6486
No. 48B—Cadmium Plated, 1¼ in. long.
35c per box of 10
Cat. No. 6487
No. 214—Lead Coated*, ½ in. long.
60c per box of 10
Cat. No. 6488
$1.20 per box of 10
*Lead finish protects the clip against acid.

Grip-Tite Ground Clamp
Cat. No. 4212
Our Price
$1.75 for 50
4c each

PORCELAIN
Screw Insulator
Better than the ordinary aerial insulator because it can readily be attached to a pole, wall, roof, etc. Brown glazed porcelain, 3/4 in. overall, with a galvanized screw.
Cat. No. 6114
7c ea., $6.50 per 100

I. C. A.
Double Phone Plug
Moulded of brown bakelite and hardware is nickel plated brass. Takes two sets of phone cord which are held firmly in place by set screws. Individually boxed.
Cat. No. 6937 30c

Modern Vacuum Tubes
And How They Work
With Complete Technical Data on All Standard and Many Special Tubes
by ROBERT HERTZBERG
Modern Vacuum Tubes describes the fundamental electron theory which is the basis of all vacuum tube operation, and goes progressively from the simplest two-element tubes right up to the latest pentodes and thyratrons. It is written in clear, simple language and is devoid of the mathematics which is usually so confusing.
Cat. No. 352 50c

MAIL ORDERS TO
See Terms on Page 5
Federated Purchaser Inc.
25 PARK PLACE, N. Y. C.
or to our nearest branch
Two Piece Attachment Plugs
Bakelite Plug Complete
Cat. No. 3262
Package of 25
$1.00
Cap for Above
Cat. No. 3266
Package of 25
55c
Armored Cap Cat. No. 3268
5c each
Bakelite Handle Cap
Cat. No. 3260
Our Price
25 for $1.00
Live Rubber, Cap, same as above, Cat. No. 3276
10 for 50c
Round-Cord Connector
Connector only, no cap.
Cat. No. 3338
10 for 75c
Attachment Plugs for Same.
Cat. No. 3266
10 for 25c
Bakelite Midget Cord Connector
Smallest connector made, for small motors, nailed milk machines, etc.
Cat. No. 3345
$1.60 box of 10
SPECIAL TWINLIGHT
Cat. No. 3303
Box of 25
$1.75
7½c ea.
Here we offer what we consider the finest plug of its kind. Well made of the finest cold mold material used for this purpose. Absolutely guaranteed. Just figure the profit our low price gives you.

Baseboard Outlets
Unit Carton, 20

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Type</th>
<th>Carton Per of 20</th>
</tr>
</thead>
<tbody>
<tr>
<td>3311</td>
<td>Composition</td>
<td>$1.60</td>
</tr>
<tr>
<td>3312</td>
<td>Porcelain</td>
<td>$1.00</td>
</tr>
<tr>
<td>3313</td>
<td>Bakelite</td>
<td>$1.70</td>
</tr>
<tr>
<td>3314</td>
<td>Double Porcelain</td>
<td>$1.95</td>
</tr>
</tbody>
</table>

GENERAL ELECTRIC Flush Receptacle
Provides an A.C. connection on any electrical appliance for standard attachment cap.
Cat. No. 6668

10c ea.

3-WAY CUBE TAP
A small, neat and compact 3-way plug with blades as shown to fit pln type receptacle. A very useful item for which there is always a big demand. It makes three outlets where there was one before.
Cat. No. 3329
BAKELITE
Box of 25
$1.75

Bakelite Side Outlet Pull Chain Socket
Pull chain mechanism controls bottom light only. Slide outlet for iron or other appliance remains alive. A very handy kitchen accessory.
Cat. No. 3376
Our Price 27c ea.
$2.30 per Display Box of 10

BAKELITE Twin Light Socket
*One-piece construction
Cat. No. 3335
Our Price $1.05
Carton of 10

Bakelite Heater Plug
Small and of exceedingly attractive appearance.
Cat. No. 3349
Unit Carton, 10
Our Price 65c
Box of 10
SPECIAL
Bakelite Heater Plug with "On—Off" Switch
Cat. No. 3320
$1.95 Box of 10

Armored Heater Plug
Cat. No. 3304
Unit Carton
10 for 80c

BAKELITE Feed Thru Switch
Used as a make and break switch on any electrical appliance carrying up to 750 watt load. Unbreakable molded case. Can also be used on electrical figures or as a pendant switch.
Cat. No. 3327
15c ea., $1.44 doz.

Twin Flasher
Wonderful for Christmas Tree Lighting.
Cat. No. 3319
Made of genuine Bakelite. Has blades which can be inserted directly in receptacles. Has two outlets, both of which have a flashing mechanism.
Our Price 19c ea.

Bakelite Current Tap
One-piece construction with Uno Thread
Unit carton, 10
Cat. No. 3334
Our Price $1.05
Box of 10

MAIL ORDERS TO
See Terms on Page 5
Federated Purchaser, Inc.
25 PARK PLACE, N. Y. C. or to our nearest branch.

WorldRadioHistory
Superior Electric Bell
2½ Inch
Works on dry cells or bell-ringing transformer.
Very sturdy construction and guaranteed.
Cat. No. 3257
22c ea.

SUPERIOR Electric Buzzer
Works on dry cells or bell-ringing transformer. Same construction as the bell.
Cat. No. 3256
21c ea.

BELL-RINGING Transformer
105-125V on Primary 6-8 Volt Secondary
Cat. No. 3331
Our Price $55 ea.

I.C.A. STATIC FILTER
The I. C. A. Static Filter is an accurate static filter and station eliminator. It cuts out all interfering stations and minimizes all static coming over the aerial. Easily attached, individually boxed.
Cat. No. 6454
Our Price 90c

General Electric Step-Down Auto Transformer
220-110 A.C., 275 Watt
Will deliver sufficient current for any large set, including radios, phonograph combinations. Also suitable for washing machines, refrigerators, all appliances drawing heavy current.
Cat. No. 6014
$2.75

NICHROME WIRE
On Card
Requires no further cutting, for repairing all electrical appliances.
One to the card. 10 to the box.
Cat. No. 3337
Our Price 14c ea.
Carton of 10, $1.15

UNIVERSAL Flatiron Element
For replacement in all 8-lb. irons.
Cat. No. 3332
Our Price 23c
$2.10 Carton of 10

GLOWCOIL Heating Elements
Cone Straight
No. 3261 No. 3275
20c each
Box of 10 $1.80
Fit all screw type heaters. Best grade of coiled “Nichrome” wire used. 110-120 volts, 600 to 660 watts.

Immersion Heater
This practical little appliance will heat water quickly, safely and economically in the home, office, barber shop, beauty parlor, dentist and doctors office, etc. Simply plug into light socket and place the heater into the water. Instructions with each heater. Attractively packed.
Cat. No. 6489
90c

CIGAR LIGHTER
UNIT ONLY
For replacing units that have burned out. This is the unit without the socket. Mounted on attractive display card.
Cat. No. 3336
Our Price 12c ea.
$1.20 Carton of 10

ELECTRIC FUSES
10, 15, 20, 25 30 Amps.
Clear Vision Top
Cat. No. 3307
Our Price $1.10
Assortment of 50

Portable Trouble Light
Equipped with heavy duty super-service cord. Full 60% rubber. Impervious to gasoline, oil and weather. Will last indefinitely.

ALL-RUBBER Trouble Light

Our Price 25c Ea.

MAIL ORDERS TO
See Terms on Page 5
Federated Purchaser Inc.
25 PARK PLACE, N. Y. C.
or to our nearest branch
GOODELL-PRATT TOOLS

Ratchet Screwdriver Set

Cat. No. 5078

These tools can be used as automatic screwdrivers for driving screws, or the spirals can be locked for use as plain screwdrivers for either driving or drawing screws. They are simple in construction, but are strong and durable and will not get out of order.

Our Price 95c
Hand Drill

This tool represents an unusual value in a drill of 1/4-inch capacity. The frame is a little lighter than the preceding drills and no side handle is provided, and economies in finish have been made. Its performance is excellent.

Cat. No. 5077
Our Price $1.24
Steel Rule

Cat. No. 5082 30c
A very handy rule provided with a hole in one end for hanging up when not in use. It is made of tempered crucible steel nicely polished and graduated on one side in 8ths and 32nd inches. Plain, deeply-etched graduation and large, clear figures.

BENCH VISE

These bench vices are different in design and general appearance from any other small tools of this character. They are constructed to meet the demand for a small vise of better construction than those which have previously been made.

Cat. No. 5080 $2.05

Screwdriver

Cabinet screwdriver, carefully manufactured from the best materials obtainable for the purpose and finished in keeping. This screwdriver is particularly useful in servicing Atwater-Kent, 8-1/2-inch blade.

Cat. No. 5083 40c
Scriber

This scriber is made of a fine grade ground steel with a beautiful tapered point that is carefully tempered and polished. The body is finely knurled and 1/8-inch in diameter.

Cat. No. 5084 21c
Automatic Drill

Cat. No. 5081

This new tool is built for the home to provide a highly efficient drill at a very reasonable price. It drills eight different size holes quickly and with surprising ease in hard and soft wood, soft metals, wall board, plaster, etc. The eight drill points are contained in the numbered compartments in the magazine handle made of shiny jet black, molded bakelite. They are safely locked in until wanted.

The exposed metal parts are beautifully polished and nickel plated. The spiral driving mechanism is very well made and is practically indestructible with proper lubrication. Eight fluted shank drill points, 1-1/16-inch to 1-1/2-inch in diameter, are furnished with each drill.

Length 9-1/2 inches. Weight 6 ounces.

Our Price $1.25
Radio Socket Wrench Set

A finely-manufactured and finished set for tightening and loosening the small hexagon nuts and thumb screws encountered in radio construction and repair.

Four sockets are furnished: One each for hexagon nuts measuring 1/16, 5/32, 3/16 and 7/32-inch between flats, and a four-jawed socket for handling knurled thumb screws such as are found in radio cells, etc. The sockets are deeply drilled to accommodate screws and the hexagon portion accurately broached to a size. The sockets are steel, well case-hardened.

Cat. No. 5079 85c

Terminal Strips for Mixing Panels and Amplifiers

Bakelite strips with specially designed nickel plated phosphor bronze screw terminals with "can't slip" collars. Find many applications in radio and home electrical work.

Strip A—6 post input strip for telephone, microphone and phonograph pickup and ground. Marked O, M, Me, P, F.
Cat. No. 7148 $50c
Strip B—6 post output strip for voice coil, 600 ohm line and 400 ohms. Marked 1, 14, H, 5C, 4M.
Cat. No. 7149 $50c
Strip C—4 post output strip for voice coil and high impedance. Marked VC, Hi.
Cat. No. 7150 $35c
Strip D—3 post input strip marked input.
Cat. No. 7151 $25c
Strip E—(Not illustrated)—2 post output strip (same size as strip D) marked output.
Cat. No. 7152 $25c

Right Angle Ratchet Screwdriver

Cat. No. 6480

Our Price $0.65

There are innumerable places around automobiles, electrical and radio equipment where this little unique screw driver will perform quickly and easily when an ordinary screw driver cannot be used. The ratchet mechanism is entirely enclosed in the head, thru which runs a square socket to hold the bit. The bit is 1/4-inch wide, 1/8-inch long, and has a square shank with a spring returner to hold it firmly in the square ratchet socket. Tool is 4 inches long overall. The handle and head are finished in red and black enamel and the exposed parts are nicely polished. Packed one in box, 12 to a display carton.

Screw-Holding Screw Driver

Cat. No. 4166, 8 in. $0.85 each
WESTON RADIO INSTRUMENTS

3 1/4 Inch Panel Instruments

Model
301
Universal
A.C.-D.C.
Meter
Cat. No.
321

Our Net Price
$13.97

Designed for the serviceman who desires to build a multi-range instrument to fill his particular testing requirements. It is for use with external shunts and external resistances for measuring D.C. voltages and currents and A.C. voltages.

The instrument is of the permanent magnet moving coil type with a self-contained copper oxide rectifier for the A.C. measurements. It is self-contained for 5 volts and 1 milliamperes A.C. and 0-100 millivolts and 1 milliamperes D.C. It has a double scale— one for the shunts and the other for D.C. each calibrated 0-5 volts.

A connection diagram giving suggested ranges is shown below, however the instrument, shunts and resistances may be purchased separately and the meter built up for the range desired.

This high grade matched line of meters offers an exceptionally wide range selection in D.C., A.C. and Thermo-Couple instruments. Because of their insinuate Weston design and workmanship they are extensively used throughout the entire world on radio panels and in the allied electrical industries. Ordinarily they are supplied in flush type but can also be furnished in surface type, if desired. These meters may be specified with Baked-Electrode cases at no additional charge.

D.C. INSTRUMENTS—MODEL 301—Permanent magnet moving coil type. Accuracy within 2%. They are supplied as Voltmeters, Volt-Ohmmeters, Ammeters, Milliammeters and Microammeters. Weight approximately 8 ounces. Price

<table>
<thead>
<tr>
<th>Model 301 D.C. Voltmeters</th>
<th>Range 1, 1 1/2, 2, 2 1/2, 3, 3 1/2, 5, 10, 15, 25, 50 and 100 Volts</th>
<th>Net Price</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>150</td>
<td>$5.88</td>
</tr>
<tr>
<td></td>
<td>250</td>
<td>5.55</td>
</tr>
<tr>
<td></td>
<td>500</td>
<td>7.76</td>
</tr>
</tbody>
</table>

Model 301 Volt-Ohmmeter

Resistance Net Price
Volts Ohm Scale Ohm per volt Price
4.5 0-100,000 1000 8.82
15 0-500,000 1000 8.82

Model D.C. Ammeters

Net Price
Model 31 D.C. Voltmeters

Resistance 1000 Ohms per Volt
Range 1, 1 1/2, 2, 2 1/2, 3, 3 1/2, 5, 10, 15, 25, 50 and 100 Volts (have a drop of + 2%) Net Price
150 $5.88
250 5.55
500 7.76
1000 10.20

Model 301 D.C. Milliammeters

Net Price
Range 1 1/2, 2, 2 1/2, 3, 3 1/2, 5, 10, 15, 25, 50, 100, 150, 200, 300, 500, 1000

Rectifier Type—Model 301 Voltmeters

1000 Ohms per Volt

Range 15, 15 0.92
50, 100, 150 1.05
200 1.49

2000 Ohms per Volt

Range 1, 1 1/2, 2, 2 1/2, 3, 3 1/2, 5, 10, 15, 25, 50, 100, 150, 200, 300, 500, 1000

Rectifier Type—Model 301 Milliammeters

Net Price
Range 1 1/2, 2, 2 1/2, 3, 3 1/2, 5, 10, 15, 25, 50, 100, 150, 200, 300, 500, 1000

Note:—We are authorized distributors for and carry a complete line of Weston and Jewell instruments. Only a few popular numbers are listed here. A complete catalog will be sent free on request.

MAIL ORDERS TO See Terms on Page 5
Federated Purchaser Inc. 25 PARK PLACE, N. Y. C. or to our nearest branch
THE FAMOUS JEWELL
Trio Panel Mounting Instrumentas

The Jewel Trio of radio instruments is popular for building special test panels and service instruments for use on experimental laboratory apparatus, and in amateur transmitting. Patterns 88, 63 and 76 comprise a new series of instruments available in flush type bakelite cases that duplicate the old Patterns 64, 68 and 74 in metal cases. Patterns 68, 69 and 78 are furnished for mounting in cases of molded bakelite. Flange diameter, 3½ in. Case diameter, 3½ in. Approximate shipping weight 3 lbs.

When ordering Jewel meters, please note that types Nos. 54, 64 and 74 have metal cases. Specify which type you desire. Externally adjustable, the pointer or needle can be exactly placed in the zero position which may vary slightly owing to normal changes in temperature.

PATTERN 88 (Bakelite) D.C. INSTRUMENTS

High range instruments are supplied with external resistors, having molded bakelite heads which are amply large to take care of various requirements. These instruments are not recommended for testing the voltage of B power supply.

Cat. No. | List Our Price Our Price
---|---|---|---
514 | 0-8, 10, 15, 30, 50 volts.. | 8.25 | 5.95
515 | 0-150 volts | 5.50 | 4.98
516 | 0-300 volts | 12.50 | 9.83
544 | 0-500 volts | 15.50 | 11.38
545 | 0-500 volts | 18.00 | 13.92
518 | 0-1000 volts | 22.50 | 16.54
547 | 0-1500 volts | 28.50 | 19.96
548 | 0-2000 volts | 34.50 | 25.55
549 | 0-3, 5, 10, 15, 30, 50, 100, 150, 200, 300, 500 milliamperes | 7.50 | 6.31
550 | 0-1, 2, 5, 10 milliamperes | 6.00 | 6.61
551 | 0-200, 300, 500 micro-amperes | 8.75 | 8.16
546 | 0-1, 5, 10, 15, 30, 50 amperes | 2.50 | 2.14
668 | 0-50-500 galvanometer | 9.00 | 7.61

The above meters can also be furnished in metal cases 3½ in. Flange, 3 in. case at same prices. Specify Type 54 for metal.

JEWELL PATENT 89 OHMMETER—PATTERN 89 VOLTMETER

For the radio serv-

The meter and the Pat-

JEWELL Pattern 444 Analyzer

Complete with accessories; data book and pad of tube charts

Cat. No. 315

Our Price $82.32

Jewell's newest Set Tester and Analyzer, tests all types of types including resistance, penitoids and tubes, and both plates of a 230 rectifier tube without the use of adapter. This new Jewell Analyzer is the most complete radio service instrument ever built. It's compact, rugged construction makes it easy to carry and enables it to stand up under the hardships of service work, and its professional appearance gives prestige to the radio service man. This new Jewell Set Analyzer and Tube Tester marks a big step forward in Radio Testing Equipment. With it practically every test can be made with a degree of accuracy never before attained. It incorporates features not found on any other type of radio set tester.

The Pattern No. 444 tests every circuit in any receiver, regardless of the type of tubes used. Full wave rectifier, variable-mu, output nodesto, and pentodes having a direct connected fifth element, may be accurately tested under actual operating conditions. A.C. and D.C. circuit tests are controlled by separate rotary selector switches making it necessary to set only one switch to obtain any desired test. The following measuring ranges are provided:


Pattern 209 Checker

Tests Screen-Grid Tubes

For radio dealers who require an ac- curate and effective tube checker at a moderate price. Operates on a 50-60 cycle, 110-120 volt A.C. Needs no batteries. Has a D.C. tester with six tube sockets in a case of molded bakelite. The sockets provide filament voltages of 1.5, 2.5, 3.5, 5 and 7.5 to 4-prong sockets, and 2.5 to a 5-prong socket. Terminals are provided for tubes with terminals at the top. Makes all tests. Correct values of readings are given in an engraved chart on the face of the tube checker.

Cat. No. 314 $22.05

MAIL ORDERS TO
FRANCEDPURCHASER INC.
25 PARK PLACE, N. Y. C.
or to our nearest branch

See Terms on Page 5

WorldRadioHistory
WESTON
Model 565 Type 5
Radio Set Tester

A 3-Meter test set having an oscil- lator, a checker for A.C.-D.C. tubes and complete radio set test for all types of A.C.-D.C. sets. Checks peni- dules without adaptors.

SEVICING SCOPE OF WESTON
MODEL 565
Tests With Tester Plug Inserted in Radio Set
All Filament Voltages
All Heater Voltages...
Cathode Voltages...
Four Bias Voltages...
Two Control Grid Voltages...
Three Plate Current Ranges...
Bias Voltages on D.C. Sets with Reversed Plates...
Convenient Readings of both Plates of Rectifier Tubes...
Two Screen Current Ranges to Span Charge Grid Voltages on 250-volt range...
Charge Grid Current on 25 M.A. range.

External Tests that can be made with Model 565
Measurement of Power Transformer up to 1,000 Volts A.C.
Line Voltage Measurements on the A.C. Meter.
Heater Voltage at Power Pack—Three Ranges on D.C. Milliammeter.
Plate Current at "B" Supply Tape—Three Ranges on D.C. Milliammeter.
"B" Supply at Power Pack—Four Ranges on D.C. Voltmeter.
Continuity Tests—Using Self-contained 4½ Volt Battery and the D.C. Voltmeter with a resistance of either 1000 Ohms, or 150 to 200 Ohms.
Resistance Measurements—The D.C. Voltmeter also serves as a Direct Reading Ohmmeter with ranges of 0-10,000 or 0-100,000 Ohms.
Condenser Measurements can be made from ¼ to 6 Microfarads—from 110 Volts A.C. line without resistors or adapters.
Tube Checker—For all Filament and Heater Type Tubes—Checker operates directly from any 80 to 120 Volt A.C. Line.
Input to Radio Set—On 4 or 8 Ampere A.C. Range and Small A.C. Measurements as Currents of Speaker coils, etc., using the A.C. 100 Volt Milliammeter.
Filtering or Heater Current of A.C. Tubes on 4 Ampere A.C. Ammeter.
R. F. Oscillator—Three Frequencies—For Neutralizing and Synchronizing and Testing Radio Sets where no broadcast signal is available (Grid Dip Meter).

SERVICE MANUAL
A complete Service Manual covering all types Model 565—Type 5 is available.

JEWELL
Pattern 540 Portable Tube Seller

Dealers are using tube testing in homes to increase tube sales and to locate new set prospects. The Jewell Pattern 540 Portable Tube-Seller is ideal for this service, because a three color scale similar to the scale of the famous Pattern 588 is provided. This scale reads tube condition directly in terms of Satisfactory, Doubtful, and Unsatisfactory.

The salesman who shows the definite method in which the Pattern 540 reads tube condition secures admission into the most skeptical homes, because radio set owners really do want to know the condition of their tubes.

Give direct reading for all types of tubes, including variable-mu and standard type screen grid, full-wave rectifiers, and output peni الدولة tubes with special adapter.

Operation is for 110 volt A.C. line, making tube tests entirely independent of the receiver. The true condition of the tube is read directly from a single meter; the reading of two values and the subtraction of one from the other is eliminated.

Line indicator meter and adjustment compensates for fluctuations of line voltage from 105 to 125 volts. Lights in series with the short-check sockets indicate which element of the tube is shorted.

List Price $75.00**
Cat. No. 322

Our Price $54.15

Copper Oxide Rectifier
For D. C. Meter Conversion

Make a Rectifier Type Meter from your present 0-1 D.C. milliammeter by using this copper oxide rectifier. This will make an A.C. voltmeter up to 1,000 volts by the use of multipliers, which can be obtained from us. Rectifier is small enough to be inserted in meter, if desired. Curve and diagram furnished.

Cat. No. 320

Our Net Price $137.82

READRITE
Portable Type Voltmeters

readrite portable meters are offered in various ranges for particular purposes. The A.C. Voltmeters are of the polarized type and can be used with equal accuracy for either A.C. or D.C. testing. This type should not be confused with the ordinary type instrument with its restricted applications. Readrite A.C. Voltmeters are accurately calibrated and have very uniform divisions throughout the scale lengths. The higher reading voltmeters contain over 100 ohms per volt resistance. The D.C. Voltmeters are of the polarized type, Standard package portable meters 25, Average weight 20 lbs.

D.C. VOLTMETERS
Description
With 3 In. Case
List Our
Price

$381 Type 346, for testing "B" Eliminators—0-300 V. $4.90 $4.50

$382 Type 347, for testing "X" Eliminators—0-500 V. $8.00 $8.00

With 5½ In. Base

$383 Type 346—0-300 Volts... 3.00 3.00

$384 Type 346P—0-300 Volts. 92,660 Ohms $8.00 8.00

A.C.-D.C. VOLTMETERS

Cat. No. Price

$385 For testing A.C. Current
Supply Line—0-150 Volts
— Type 344 $4.00 $3.80

$507 Type 355P—0-10—110 Volts $2.00 2.00

$508 Type 355P—0-10—110 Volts A.C.-D.C. 6.00 6.00

$537 0-150 Volts A.C.-D.C. 8.00 8.00

$538 0-150-750 Volts 8.00 8.00

$539 0-300 Volts (300 Ohms
3.00 3.00

$530 Type 249—0-150 V. A.C. Panel Meter $7.00 7.00

$532 0-300 D.C. Milliammeter (.3 Ohms), Panel Meter $3.00 3.00

$533 0-50 V. UX Socket Testing 54.00 54.00

$534 0-10 V. UX Socket Testing 3.00 3.00

$535 0-10 UX Socket Meter for UX Sockets (100 Ohms) Type 152 2.50 2.50

READRITE Pocket
Meters

Cat. No. Type Each Box of 10

3560 0-50 V. $0.40 $3.60

3575 0-50 V. $0.40 $3.60

3579 0-10 V. $0.40 $3.60

"All set analysers are shipped in original factory sealed cartons. Repairs and adjustments must be taken up with factory.
Readrite Customer Tube Tester No. 430

$23.52

NET TO DEALER

- Complete

with No. 407 Tube and Short Tester

$41.36

NET TO DEALER

The No. 430 Display Case is designed for use in connection with No. 408 or No. 407 Counter Tube Testers. The metal Display Case contains a color chart precision meter for direct reading of tubes and batteries. An A. C. Voltmeter with rheostat controls the line voltage. An Ohm and OFF switch, tip jacks, and outlet receptacle complete the equipment of the No. 430 Display Case.

The No. 407 Tube and Short Tester is plugged into the receptacle and the tip jacks. The meter on this tester is then used for short testing of all tubes under operating conditions. The tester can be lifted out of the Display Case and used for portable testing as a separate instrument. The Display Case contains a convenient meter which the customer can observe and readily understand. It is beautifully finished in baked enamel. It is 10" high, and the base is 15 x 11".

This Customer Display Tester will not only increase your tube sales, but will also help customer satisfaction every dealer strives to obtain and hold. At the low price, no dealer can afford to be without this complete visible customer tube tester, which will add as much prestige to his tube testing equipment as the more elaborate testers at much higher cost.

The No. 407 is designed to take care of all the tubes, including the new six-prong type, testing them without the use of adapters. It is the only tester on the market which tests rectifier tubes by the plate current change method.

HOUSEHOLD UTILITY TESTER

The Modern Set Analyser. Contains Ohmmeter 0-6,000,000 ohms, and Capacity Meter, .008 to 10 mfd., both direct reading. A unique and exclusive circuit is employed, providing a new method of set analyzing, testing resistance and capacity.

No. 1000 Tester combines the very latest methods into one instrument for testing resistances, continuity and capacity of radio receiving sets. The 3½" D. C. precision meter has full scale deflection of 0 to 15,000 ohms. The low resistance scale is divided into Kilohms, .003 to 3. This scale arrangement makes easy reading, and resistance tests are quickly made with extreme accuracy. Provision is made for increasing each scale reading by a multiple of two, and also for dividing the lower scale by 10, thereby giving good scale divisions of resistance measurements from 6 to 6 million ohms. The A. C. meter is calibrated for reading directly in microfarads. The lower scale reading is .008 to .25. The upper scale reading is .1 to 10 mfd.

No. 850 Capacity Tester contains one D.C. and one A.C. meter to indicate directly the capacity of condensers. The A. C. meter connects to A. C. supply line and adjusts to 100 volts. Tests paper type condensers .008 to 10 mfd. The D. C. voltmeter connects to 100 volt line and adjusts to 300 volts. Selector switch provides for measuring voltage forming and testing milliamperes capacity of electrolytic condensers. The maximum reading for a good electrolytic condenser is 2 m.a. per mfd. In a seamless metal case, without cover. Very practical and convenient instrument.

No. 850 Capacity Tester contains one D.C. and one A.C. meter to indicate directly the capacity of condensers. The A. C. meter connects to A. C. supply line and adjusts to 100 volts. Tests paper type condensers .008 to 10 mfd. The D. C. voltmeter connects to 100 volt line and adjusts to 300 volts. Selector switch provides for measuring voltage forming and testing milliamperes capacity of electrolytic condensers. The maximum reading for a good electrolytic condenser is 2 m.a. per mfd. In a seamless metal case, without cover. Very practical and convenient instrument.

Cat. No. 850

$8.82

Sonic as above for testing paper type condensers only. In a seamless metal case, ¾" in. dia., baked enamel finish.

Cat. No. 800

$5.49

READRITE

Continuity and Capacity Tester No. 1000

For Set Analyzing, Testing Resistance and Capacity
NEW! Readrite Oscillator

A necessary servicing oscillator for adjusting r.f. and l.f. circuits.

Used to align r.f. gang condensers, locate defective r.f. transformers, adjust l.f. transformers, check oscillator stage and determine sensitivity of a receiver.

A modulated instrument which covers the broadcast bands 550-15,000 k.c. and the intermediate circuit made with trimmer condenser through panel.

Purified with 22½ v. and 3 v. batteries. One 30 tube is used. Case is carried in the removable cover. Full operating instructions and wiring diagram included.

Built to a high standard. All parts are sturdy and strongly built to remain permanently accurate. A modern instrument for all old and new sets.

In leatherette case, 6½ x 12½ in. Weight, 8 lbs.

Complete Less Output Meter
List Price, $30.00
Cat. No. 550

Our Price $17.64

Complete With Output Meter
List Price, $35.00
Cat. No. 551

Our Price $20.58

READRITE Resistance Meter

No. 501 Resistance meter is used in above Johnmeter. Furnished either with wide flange as shown or narrow rim for rear clamping. A thoroughly reliable instrument of a popular price. Requires three small flashlight cells, which with resistance to be measured, are connected in series with meter. Used for testing resistances in small receiving sets, and circuits generally. Fine for continuity tests.

Cat. No. 5389
List Price, $2.50

Our Price $1.47

PENTODE

Set Testing Reduced to Simplicity

Equipped with 6 Prong Tube Adapter

List Price $25.00
Cat. No. 710

Our Price $14.70

Those three meter analyzers are equipped with a practical selector switch for checking all parts of the tube circuits by connecting to the set sockets. Selection for testing voltage of plate, grid, cathode and screen-grid is done quickly and accurately. Plate current, filament volts, also line and power supply volts are measured. The grid swing test for tubes is used. Just push one button for screen-grid and another for other tubes. Makes testing of all type tubes simple and thorough. A 4½ v. grid battery is furnished. The battery is used for the grid test and also continuity testing of transformers, chokes, etc. Capacity and resistance charts are furnished showing use of instruments for testing condensers, also measuring resistances up to 100,000 ohms. The eight scale readings of the meters may be used separately with the jack terminals provided. The scale readings are 0-90-900-9000 D. C. volts, 0-10-140-700 A. C. volts and 0-20-100 milliamperes. Both A. C. and D. C. filament voltages are accurately measured on the one meter.

Housed in a durable case and leatherette covering. Attractive. Compact. Complete. Puts every need for the expert service man or the handy for radio set analyzing. Size 10½ x 5½ x 8½.

The No. 600 contains the same equipment as No. 700. The carrying case is largest with leatherette covering and equipped with lock. Rooms is provided for carrying tubes, tools and supplies. The test equipment and panel is in a removable tray in the top of the case. The tray equipment may be used separately as a complete test panel for shop purposes. Size: 14½ x 7 x 13½.

Cat. No. 610
List Price, $30.00

Our Price $17.64

We carry a complete line of "Readrite" Analyzers, Tube Testers and Meters. Our discount is 40-50% from list prices.

READRITE Counter Tube Testers
Models 406-407

Test all Tubes Without Adapters
Connect to A. C. Supply Line Illuminated Dial

List Price $25.00
Cat. No. 406

Our Price $14.70

Dealers and servicemen use the No. 406 Tester for checking all new and old tubes used in receiving sets. Test card attached to panel gives simple instructions. Anyone can operate. A single push button provides two simple current readings for determining the conductance and worth of the tube. A new and outstanding feature applies the same test to rectifiers as all other types of tubes. A separate push button provides for testing both plates of '80 type tubes.

The simplified single scale meter is made possible by the wide change in readings. The meter is connected in tip jacks. Attached to the meter is a small protective back. A pilot light is also directly beneath the meter for illuminating the dial. Both the lamp and fuse are easily renewed by detaching the meter. These features which will appeal to every user. Selection and acceptance of tubes tested in the No. 406 will be equally as satisfactory as with testers costing many times more.

Tube and Short Tester Combined
Model 407

The No. 407 tester combines with the No. 406 described above, a complete short test of the tube. All shorts, gas and leakage tests are made with the tube heated under operating conditions. Tube is tested for its worth in the same socket used for short testing. The pilot light for illuminating the dial is also used to indicate the shorts, gas and leakage condition.

Cat. No. 407
List Price, $30.00

Our Price $17.64

The cases for above testers are strongly built, with re-inforced corners and have rubber feet. The "Readrite" covering and trim makes up a very attractive instrument. The cover is removable and the leather handle is provided for portable use. Shipping weight ten pounds each. One extra ¾ amp. small fuse is supplied.

The new Weston Model 590 Oscillator is a very complete, compact and not at all expensive instrument. It has an intermediate frequency range of 1000 kilocycles and a broadcast range of 550-1500 kilocycles. Frequencies between 200 and 450, and above 1500 kilocycles may be obtained by means of harmonics.

The oscillator is equipped with an instrument which is mounted on the panel and which serves as a Grid Dip Milliammeter, Filament Voltmeter and Plate Voltmeter. This instrument remains in the grid circuit at all times unless connected across the Plate or Filament circuits by means of push button switches.

Two type '30 tubes are used in the oscillator, one for the R.F. and the other to modulate the R.F. to produce an audible note of 400 cycles with 50% modulation. The output of the oscillator is controlled by a skillfully designed attenuator.

The batteries for operating the oscillator are in a shielded compartment in one end of the case. They consist of an ordinary 21/2 volt "B" battery and four 1 1/2 volt cells commonly used in flashlights, which are connected automatically when inserted in their compartment and which will give 20 hours of continuous operation.

An output meter is a necessary accessory for this instrument and a compartment has been provided in the case for the Weston Model 571 which can be purchased with the oscillator as an extra for $22.50 additional.

Dimensions: 6x5/8x5/8 inches—approximate weight, 18 pounds.

The Grid Dip Milliammeter is particularly important as it assures the service man that the oscillator is definitely operating and that with no output obtained from the radio receiver it is the latter which is at fault. It also makes it possible to test each stage of the R.F. amplifier individually.

The Filament Voltmeter can be used to keep the filament voltage constant at two volts which is necessary to maintain accurate calibration of the oscillator and obtain maximum battery and tube life.

The attenuator is adjustable from practically zero up to its maximum range by smooth, graduated dial. This makes it possible to obtain any degree of modulation desired.

Because it produces signals above 1500 K.C., it can be used in testing short wave adaptors and new and old tubes used in receiving sets. Test card attached to panel gives simple instructions. Anyone can operate. A single push button provides two plate current readings for determining the conductance and worth of a tube. A new and outstanding feature applies the same test to rectifier as all other types of tubes. A second push button provides for testing both plates of '58 type tubes if the simplified single scale meter is made possible by a wide change in readings. The meter is connected in tip jacks and the meter is a small, protecting fuse. A pilot light is also included on the meter for illuminating the dial.

Cat. No. 406 $1470

TUBE AND SHORT TESTER COMBINED

The No. 407 tube tester combines with the No. 406 described above, a complete short test of the tube. All shorts, gas and leakage tests are made with the tube heated under operating conditions. Tube is tested for its worth in the same pocket used for short testing. The pilot light for illuminating the dial is used to check for the shorts, gas and leakage condition.

Cat. No. 407 $17.64

No. 405 Tube Tester is similar to No. 406, but has a scale meter and 4 1/2 volt grid battery.

Cat. No. 405 $14.70

READRITE Direct Reading Ohmmeters Models 500-502

These ohmmeters are complete with a small 3-cell flashlight dain in negligible battery; cur- rent resistance up to 10,000 ohms. Model 500 tests resistance directly up to 100 ohms. Model 503 has a direct current scale for measuring resistances up to 40 ohms, in addition to the higher resistance range of 10,000 ohms. Voice coils of dynamic speakers and the typical ohms of f. transformers are tested best on the low range 0-40 ohms. Rheostat knob adjusts the needle to full scale. Wire leads are furnished for continuity tests. A high grade instrument. Case is beautiful baked enamel finish, seamless steel, 4 inch diameter. Weighs but one pound. Indispensable for service work.

Cat. No. 500 Range 0-10,000 Price $6.00

6960 0-10,000 & 0-40 7.00 4,12

MAIL ORDERS TO
See Terms on Page 5

25 PARK PLACE, N. Y. C. or to our nearest branch

WESTON
Model 590 I.F. and R.F. Oscillators

Dealers and servicemen use hit No. 406 to obtain smooth, automatic operation. Tests every type of Broadcast Receiver and Checks all type Tunes in the Set.

Cat. No. 590 Our Net Price $79.38

A complete Service Manual comes with every Model 566—Type 3. It tells the service man exactly how and when to locate them and what to do to fix them. It will be found a practical service manual. This service manual is made in loose-leaf form, and additional information is forwarded from time to time to keep it up-to-date.

Cat. No. 318 Our Net Price $84.53

SERVICING SCOPE OF WESTON MODEL 566—TYPE 3

TESTS WITH TESTER PLUG INSERTED IN RADIO SET

All Filament Voltages... All Resistances... Two Cathode Voltages... Three Bina Voltages... Two Condensers... Grid Voltages... Two Plate Voltages... Screen Currents... Bias Voltages... Voltages on D.C. Series with Reversed Filaments... Space Charge Grid Voltages (on 250 volt range)... Charge Grid Currents (on 10,000 A.C. range)... Readings of Both Plates and Rectifiers... Three Plate Current Ranges.

EXTERNAL TESTS THAT CAN BE MADE WITH MODEL 566

Measurement of Power Transformer up to 1,000 Volts A.C.

Line Voltage Measurements on the A.C. Meter.

Heater Voltage at Power Pack—Three Ranges on D.C. Meter.

"B" Supply Taps—Three Ranges on D.C. Meter.

"B" Supply at Power Pac—Three Ranges on D.C. Voltmeter.


Continuity Tests—Using Self-contained 4 1/2 Volt Battery and the D.C. Voltmeter with a resistance of either 1,000 or 100 ohms per volt as desired.

Resistance Measurements—The D.C. Voltmeter also serves as a Direct Reading Ohmmeter with Ranges of 0-10,000 or 0-10,000 Ohms.

Condenser Measurements can be made from 0.01 (10 pf) to 2 Microfarads—from 110 Volts A.C. line shorting the battery to resistors or adaptors.

Tube Checker for all Filaments and Heater Types under the name condition as exists when in the receiver. This volume is from the Inlet to Radio Set—On 4 Ampere A.C. Range and Small A.C. Measurements such as Currents in Volt coil or Sensitive Tester, etc., using the A.C. 100 or 20 MA. Range.

Rectifier Type Output Meter—Range 100-5 Volts.

Alpha, Omega, Inc., 100 West 31st Street, New York.
By special arrangement with a prominent, long established manufacturer with over a quarter century of successful electric refrigerator experience back of his product, we are able to offer our customers the Federated Electric Refrigerator.

Behind each Federated Refrigerator stands a time tested reputation for unexcelled quality and performance dating back to the pioneer days of the industry. Everything that long years of knowing how to give to a product is built into every Federated Refrigerator—sturdy ruggedness, capacity for long, enduring service, simplicity and economy of operation, years of satisfaction. All Federated Refrigerator cabinets are known the world over for their distinguished beauty, quality and durability.

THE CABINET
Built and insulated so as to properly maintain an even temperature at all times. Exterior, Fronts and Interior Walls 18 gauge steel. Improved type of insulation between walls. All r and rubber cushion gasket seal for doors. Spacious storing arrangement. Convenient height shelves. Porcelain chill tray. Positive action snap latch on door. Exclusively designed. Bright Chromium finished hardware of solid brass including hinges on door. Doors rigidly supported. Automatic electric light illuminates interior when door is opened on Model 404. Removable rustless shelves firmly mounted on rubber covered hooks. Models 402, 403 and 404 are raised above floor thus assuring maximum ventilation and sanitation. All these features mark the Federated Refrigerators as competing in quality and amazing in value. They will compare favorably with any refrigerator on the market, no matter how expensive.

3 Year Guarantee
Every purchaser of a Federated Refrigerator is protected by a double three year warrant on the Federated Purchaser and also of the factory guaranteeing every refrigerator against inherent fault, improper assembly, or defective material. The Federated Refrigerator incorporates every worth while and latest improvement in domestic refrigeration. Built to the highest standards, yet it costs you as little as many refrigerators of inferior grade and small capacity. Buy a Federated for moderate first cost and continuous care-free service—constant, clean, dry cold with maximum economy.

Cat. No. 401
$98.00
MODEL 401
Finish—Lacquer exterior; porcelain interior. Gross capacity, 6 cu. ft.; height, 54 in.; depth, 30 in.; width, 24 in.; depth with door open, 40 in.; shelf area including bottom, 8.12 sq. ft.; number of cube trays, 2—total of 56 cubes; Insulation, 3 in. Shipping weight, 352 lbs.

Cat. No. 402
$110.00
MODEL 402

Cat. No. 403
$118.00
MODEL 403
Finish—Lacquer exterior, porcelain interior. Gross capacity, 6 cu. ft.; height, 58 in.; depth, 21 1/4 in.; width, 26 1/4 in.; height of legs, 4 in.; number of ice trays, 3—total of 94 cubes; Insulation, 3 1/2 in. Shipping weight, 380 lbs.

Cat. No. 404
$139.00
MODEL 404
Finish—Porcelain interior. Lacquer exterior. Gross capacity, 7 cu. ft.; height, 57 1/4 in.; depth, 22 3/4 in.; width, 36 1/2 in.; height of legs, 4 in.; depth with door open, 43 1/4 in.; shelf area including bottom, 10.31 sq. ft.; number of cube trays, 3—total of 96 cubes; Insulation, 2 1/2 in. Automatic electric light when door opens. Shipping weight, 388 lbs.
Replacement Power Transformers for All Standard Sets

These Power Transformers in most cases are the originals and where they are not, they are the physical and electrical duplicates of the originals. This list is constantly being enlarged with transformers which have passed the approval of our engineers.

Where the original transformer has been duplicated, it is a reliable product. In many of the receivers listed here the original manufacturers' transformers were unsuitable for continuous service, and we have made changes in the safety factor to bring it high enough above normal operating conditions so as to even compensate for shorts and breakdowns in the receiver. Wherever a transformer is concerned in both the finish and physical characteristics are identical to the original.

<table>
<thead>
<tr>
<th>Set</th>
<th>Model</th>
<th>Cat. No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>A.C. DAYTON (O), Navigator 2560</td>
<td>$2.95</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ALL AMERICAN (LYRIC) (D), 90, 93, 94, 95 6922</td>
<td>3.75</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ALL-AMERICAN (LYRIC) (D), Model D 7219</td>
<td>3.85</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AMRAD (O), Bel Canto Series 81 2566</td>
<td>3.40</td>
<td></td>
</tr>
<tr>
<td></td>
<td>APEX (D), 36, 37 6995</td>
<td>4.50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>APEX (D), 10 Series Super 7005</td>
<td>3.75</td>
<td></td>
</tr>
<tr>
<td></td>
<td>APEX (D), 20 Series Super 7006</td>
<td>3.40</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ATWATER KENT, 66 Plate Transformer 7221</td>
<td>5.95</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ATWATER KENT, 66 Filament Trans. 7220</td>
<td>3.75</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ATWATER KENT (D), 37, 38 2642</td>
<td>2.50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ATWATER KENT (D), 55, 56C 6013</td>
<td>4.25</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ATWATER KENT (D), 60, 60C 7007</td>
<td>4.75</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ATWATER KENT (D), H1, H2, L1, L2 7008</td>
<td>3.50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ATWATER KENT (D), 82, 83 7009</td>
<td>3.95</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ATWATER KENT (B), 82F, 84F 7010</td>
<td>4.50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ATWATER KENT (D), 84 (Early and Late) 7011</td>
<td>3.50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ATWATER KENT (D), 84F (Early and Late) 7012</td>
<td>4.50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ATWATER KENT (B), 85F, 86F, 8SF 7013</td>
<td>3.50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ATWATER KENT (B), 85 (Early and Late) 7014</td>
<td>4.85</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ATWATER KENT (D), 87, 89, 89F 7015</td>
<td>4.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ATWATER KENT (D), 89F 7016</td>
<td>4.95</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>BRANDES (O), B10, B11 5421</td>
<td>1.85</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BRANDES (O), B15, B16 5504</td>
<td>4.70</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BOSCH (D), 60 6552</td>
<td>3.60</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BOSCH (D), 29, 825 6998</td>
<td>4.50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BOSCH, 38 6557</td>
<td>6.50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BOSCH, 48 3746</td>
<td>4.52</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BOSCH, 58 6561</td>
<td>3.95</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BOSCH, 39 6996</td>
<td>5.85</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BREMER-TULLY, S-14, S-21, S-81, S-82 7235</td>
<td>3.55</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BREMER-TULLY, S-14, S-21, S-81, S-82 7235</td>
<td>3.55</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BRUNSWICK (O), 31, 32, Part No. 7202</td>
<td>3.50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BRUNSWICK, 15 7222</td>
<td>3.85</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BRUNSWICK, 21, 31 7222</td>
<td>2.55</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BRUNSWICK (D), S14, S21, S31, S62 7017</td>
<td>3.75</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BRUNSWICK (D), S14, S21, S31, S62, 25 cycle 7018</td>
<td>4.75</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BRUNSWICK (D), 15-32, 2-245, 1-280 without case 3739</td>
<td>2.65</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>COLONIAL (D), 31 2632</td>
<td>5.50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COLONIAL (O), 32 AC 5045</td>
<td>3.75</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COLONIAL (O), 33 5046</td>
<td>4.50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COLONIAL (O), 60B 7138</td>
<td>2.50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COLUMBIA (O), SC8 6997</td>
<td>4.95</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COLUMBIA (O), 632 5508</td>
<td>3.55</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COLUMBIA (O), 940 5504</td>
<td>4.55</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COLUMBIA (O), G10 3589</td>
<td>3.95</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COLUMBIA (O), 930, 931 5512</td>
<td>6.85</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COLUMBIA (O), 300 5510</td>
<td>5.55</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COLUMBIA (O), 200, 25 Cycle 5511</td>
<td>6.85</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COLUMBIA (O), 100 2656</td>
<td>4.65</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COLUMBIA (O), C1, 2, 3, 4, 5 Cycle 5718</td>
<td>6.85</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COLUMBIA (SCREEN GRID), 8 6997</td>
<td>3.95</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COLUMBIA (D), 31S, 41S, 242S 7013</td>
<td>4.55</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CROSLEY (A), 41A, 12C 5846</td>
<td>1.25</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CROSLEY (A), 706 5846</td>
<td>1.25</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CROSLEY (O), 606 5075</td>
<td>3.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CROSLEY, A, Part No. 2249 7213</td>
<td>1.25</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CROSLEY, 59, Part No. 22413 7214</td>
<td>1.50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CROSLEY, 120, Part No. 20150 7215</td>
<td>2.50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CROSLEY, 34, 54, 57, 58, Part No. 20553 7216</td>
<td>1.50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CROSLEY, 122, Part No. 22352 7218</td>
<td>2.50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CROSLEY, 3OS, Part No. 6082 7218</td>
<td>2.50</td>
<td></td>
</tr>
</tbody>
</table>

| E   | EARL (O), 21, 22-25 cycle 2685 | 2.75 |

Mail Orders To
See Terms on Page 5

Federated Purchaser Inc.
25 Park Place, N. Y. C.
Filter Condenser Blocks for Standard Sets

The condensers used are all of the highest quality, and in every case having higher safety factor than the original. The physical specifications and electrical specifications of the original condenser block have been duplicated in every respect.

There are no obsolete or cheap parts used in the making up of these blocks and all of them are guaranteed to perform as well as the originals.

<table>
<thead>
<tr>
<th>Make</th>
<th>Models</th>
<th>Part No.</th>
<th>Cat. No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atwater Kent, 66...</td>
<td>A</td>
<td>7055</td>
<td>3.95</td>
<td></td>
</tr>
<tr>
<td>Atwater Kent, 37...</td>
<td></td>
<td>5001</td>
<td>2.25</td>
<td></td>
</tr>
<tr>
<td>Atwater Kent, 40...</td>
<td></td>
<td>5395</td>
<td>1.35</td>
<td></td>
</tr>
<tr>
<td>Atwater Kent, 4...</td>
<td></td>
<td>7170</td>
<td>1.70</td>
<td></td>
</tr>
<tr>
<td>Atwater Kent, 4...</td>
<td></td>
<td>5396</td>
<td>2.75</td>
<td></td>
</tr>
<tr>
<td>Atwater Kent, 65, 55C, 55F...</td>
<td></td>
<td>6513</td>
<td>4.25</td>
<td></td>
</tr>
<tr>
<td>Atwater Kent, 44...</td>
<td></td>
<td>7054</td>
<td>5.50</td>
<td></td>
</tr>
<tr>
<td>Atwater Kent, 66...</td>
<td></td>
<td>7055</td>
<td>7.00</td>
<td></td>
</tr>
<tr>
<td>Atwater Kent, 70...</td>
<td></td>
<td>7056</td>
<td>5.00</td>
<td></td>
</tr>
<tr>
<td>Apex, 46, 46A...</td>
<td></td>
<td>6834</td>
<td>1.85</td>
<td></td>
</tr>
<tr>
<td>Apex, 47, 47A...</td>
<td></td>
<td>6835</td>
<td>2.25</td>
<td></td>
</tr>
<tr>
<td>Apex, 48, 48A...</td>
<td></td>
<td>6837</td>
<td>2.25</td>
<td></td>
</tr>
<tr>
<td>Apex, 28A, 28AX...</td>
<td></td>
<td>7249</td>
<td>2.95</td>
<td></td>
</tr>
<tr>
<td>Bosch, 501-2...</td>
<td></td>
<td>7169</td>
<td>2.75</td>
<td></td>
</tr>
<tr>
<td>Bosch, 28, 28...</td>
<td></td>
<td>6772</td>
<td>2.75</td>
<td></td>
</tr>
<tr>
<td>Bosch, 50 Series...</td>
<td></td>
<td>2988</td>
<td>3.25</td>
<td></td>
</tr>
<tr>
<td>Bosch, 48...</td>
<td></td>
<td>2803</td>
<td>5.25</td>
<td></td>
</tr>
<tr>
<td>Bosch, 73...</td>
<td></td>
<td>7249</td>
<td>2.95</td>
<td></td>
</tr>
<tr>
<td>Bosch, 5...</td>
<td></td>
<td>7250</td>
<td>2.45</td>
<td></td>
</tr>
<tr>
<td>Brandes, B10, 37 Mfd...</td>
<td></td>
<td>5613</td>
<td>3.25</td>
<td></td>
</tr>
<tr>
<td>Brandes, B10, 40 Mfd...</td>
<td></td>
<td>4049</td>
<td>4.75</td>
<td></td>
</tr>
<tr>
<td>Brandes, B15...</td>
<td></td>
<td>5619</td>
<td>1.95</td>
<td></td>
</tr>
<tr>
<td>Bremer Tulley, 6-4...</td>
<td></td>
<td>6295</td>
<td>3.50</td>
<td></td>
</tr>
<tr>
<td>Bremer-Tully...</td>
<td></td>
<td>7231</td>
<td>2.30</td>
<td></td>
</tr>
<tr>
<td>Brunswick, 14, 22...</td>
<td></td>
<td>6249</td>
<td>2.99</td>
<td></td>
</tr>
<tr>
<td>Brunswick, 15, 22...</td>
<td></td>
<td>7203</td>
<td>1.05</td>
<td></td>
</tr>
<tr>
<td>Colonial, 39...</td>
<td></td>
<td>7197</td>
<td>1.25</td>
<td></td>
</tr>
<tr>
<td>Columbus, 950...</td>
<td></td>
<td>5811</td>
<td>2.20</td>
<td></td>
</tr>
<tr>
<td>Columbus, Screen Grid, 8...</td>
<td></td>
<td>5003</td>
<td>2.75</td>
<td></td>
</tr>
<tr>
<td>Earl, 41...</td>
<td></td>
<td>5007</td>
<td>2.95</td>
<td></td>
</tr>
<tr>
<td>Earl, 31 and 32...</td>
<td></td>
<td>5405</td>
<td>2.75</td>
<td></td>
</tr>
<tr>
<td>Earl, 21 and 22...</td>
<td></td>
<td>5406</td>
<td>2.75</td>
<td></td>
</tr>
<tr>
<td>Edison, R6, R7...</td>
<td></td>
<td>6840</td>
<td>3.50</td>
<td></td>
</tr>
<tr>
<td>Edison, R4, C4, R5...</td>
<td></td>
<td>7252</td>
<td>2.95</td>
<td></td>
</tr>
<tr>
<td>Elkon, &quot;A&quot; Condenser...</td>
<td></td>
<td>5099</td>
<td>1.35</td>
<td></td>
</tr>
<tr>
<td>Emerson, 4549...</td>
<td></td>
<td>5624</td>
<td>2.50</td>
<td></td>
</tr>
<tr>
<td>Eria, A2...</td>
<td></td>
<td>5006</td>
<td>4.00</td>
<td></td>
</tr>
<tr>
<td>Eveready, 50 Series...</td>
<td></td>
<td>2985</td>
<td>2.95</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Make</th>
<th>Models</th>
<th>Part No.</th>
<th>Cat. No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philips, 18...</td>
<td>2-1252MS...</td>
<td>3010</td>
<td>3.95</td>
<td></td>
</tr>
<tr>
<td>Philips, 10, 11...</td>
<td>35, 352, 40...</td>
<td>7172</td>
<td>3.25</td>
<td></td>
</tr>
<tr>
<td>Philips, 41, 44...</td>
<td>45, 47...</td>
<td>3740</td>
<td>3.25</td>
<td></td>
</tr>
<tr>
<td>Philips, 70...</td>
<td>7650...</td>
<td>7259</td>
<td>3.25</td>
<td></td>
</tr>
<tr>
<td>Philips, A Eliminator...</td>
<td></td>
<td>6704</td>
<td>4.00</td>
<td></td>
</tr>
<tr>
<td>Philips, E420 for 50-70-T1 and T2...</td>
<td></td>
<td>5009</td>
<td>1.35</td>
<td></td>
</tr>
<tr>
<td>Philips, 18, 20...</td>
<td>1700X...</td>
<td>5410</td>
<td>3.25</td>
<td></td>
</tr>
<tr>
<td>Philips, 25, Part 1780 I 8 leads...</td>
<td></td>
<td>3025</td>
<td>3.25</td>
<td></td>
</tr>
<tr>
<td>Philips, 25, Part 1801 X 1 leads...</td>
<td></td>
<td>6542</td>
<td>3.25</td>
<td></td>
</tr>
<tr>
<td>Philips, 25, Part 1801 X 1 leads...</td>
<td></td>
<td>5416</td>
<td>2.75</td>
<td></td>
</tr>
<tr>
<td>Philips, 25, Part 1801 X 1 leads...</td>
<td></td>
<td>2443</td>
<td>2.75</td>
<td></td>
</tr>
<tr>
<td>Philips, 25, Part 1801 X 1 leads...</td>
<td></td>
<td>5010</td>
<td>3.70</td>
<td></td>
</tr>
<tr>
<td>Philips, 25, Part 1801 X 1 leads...</td>
<td></td>
<td>5057</td>
<td>4.70</td>
<td></td>
</tr>
<tr>
<td>Philips, 25, Part 1801 X 1 leads...</td>
<td></td>
<td>2428</td>
<td>3.25</td>
<td></td>
</tr>
<tr>
<td>Philips, 25, Part 1801 X 1 leads...</td>
<td></td>
<td>2429</td>
<td>3.75</td>
<td></td>
</tr>
<tr>
<td>Philips, 25, Part 1801 X 1 leads...</td>
<td></td>
<td>2430</td>
<td>1.50</td>
<td></td>
</tr>
<tr>
<td>Philips, 25, Part 1801 X 1 leads...</td>
<td></td>
<td>2431</td>
<td>3.10</td>
<td></td>
</tr>
<tr>
<td>Philips, 25, Part 1801 X 1 leads...</td>
<td></td>
<td>5420</td>
<td>3.30</td>
<td></td>
</tr>
<tr>
<td>Philips, 25, Part 1801 X 1 leads...</td>
<td></td>
<td>5415</td>
<td>4.50</td>
<td></td>
</tr>
<tr>
<td>Philips, 25, Part 1801 X 1 leads...</td>
<td></td>
<td>5419</td>
<td>4.80</td>
<td></td>
</tr>
<tr>
<td>Philips, 25, Part 1801 X 1 leads...</td>
<td></td>
<td>3214</td>
<td>3.00</td>
<td></td>
</tr>
<tr>
<td>Philips, 25, Part 1801 X 1 leads...</td>
<td></td>
<td>6773</td>
<td>2.50</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Make</th>
<th>Models</th>
<th>Part No.</th>
<th>Cat. No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Majestic, &quot;A&quot; Elim...</td>
<td></td>
<td>5022...</td>
<td>1.95</td>
<td></td>
</tr>
<tr>
<td>Majestic, &quot;A&quot; Elim...</td>
<td></td>
<td>5023...</td>
<td>2.50</td>
<td></td>
</tr>
<tr>
<td>Majestic, &quot;B&quot;...</td>
<td></td>
<td>5024...</td>
<td>2.95</td>
<td></td>
</tr>
<tr>
<td>Majestic, &quot;C&quot;...</td>
<td></td>
<td>5025...</td>
<td>3.25</td>
<td></td>
</tr>
<tr>
<td>Majestic, &quot;D&quot;...</td>
<td></td>
<td>5026...</td>
<td>3.50</td>
<td></td>
</tr>
<tr>
<td>Majestic, &quot;E&quot;...</td>
<td></td>
<td>5027...</td>
<td>3.85</td>
<td></td>
</tr>
<tr>
<td>Majestic, &quot;F&quot;...</td>
<td></td>
<td>5028...</td>
<td>4.15</td>
<td></td>
</tr>
<tr>
<td>Majestic, &quot;G&quot;...</td>
<td></td>
<td>5029...</td>
<td>4.45</td>
<td></td>
</tr>
<tr>
<td>Majestic, &quot;H&quot;...</td>
<td></td>
<td>5030...</td>
<td>4.75</td>
<td></td>
</tr>
<tr>
<td>Majestic, &quot;I&quot;...</td>
<td></td>
<td>5031...</td>
<td>5.05</td>
<td></td>
</tr>
<tr>
<td>Majestic, &quot;J&quot;...</td>
<td></td>
<td>5032...</td>
<td>5.35</td>
<td></td>
</tr>
<tr>
<td>Majestic, &quot;K&quot;...</td>
<td></td>
<td>5033...</td>
<td>5.65</td>
<td></td>
</tr>
<tr>
<td>Majestic, &quot;L&quot;...</td>
<td></td>
<td>5034...</td>
<td>5.95</td>
<td></td>
</tr>
<tr>
<td>Majestic, &quot;M&quot;...</td>
<td></td>
<td>5035...</td>
<td>6.25</td>
<td></td>
</tr>
<tr>
<td>Majestic, &quot;N&quot;...</td>
<td></td>
<td>5036...</td>
<td>6.55</td>
<td></td>
</tr>
<tr>
<td>Majestic, &quot;O&quot;...</td>
<td></td>
<td>5037...</td>
<td>6.85</td>
<td></td>
</tr>
<tr>
<td>Majestic, &quot;P&quot;...</td>
<td></td>
<td>5038...</td>
<td>7.15</td>
<td></td>
</tr>
<tr>
<td>Majestic, &quot;Q&quot;...</td>
<td></td>
<td>5039...</td>
<td>7.45</td>
<td></td>
</tr>
<tr>
<td>Majestic, &quot;R&quot;...</td>
<td></td>
<td>5040...</td>
<td>7.75</td>
<td></td>
</tr>
<tr>
<td>Majestic, &quot;S&quot;...</td>
<td></td>
<td>5041...</td>
<td>8.05</td>
<td></td>
</tr>
<tr>
<td>Majestic, &quot;T&quot;...</td>
<td></td>
<td>5042...</td>
<td>8.35</td>
<td></td>
</tr>
<tr>
<td>Majestic, &quot;U&quot;...</td>
<td></td>
<td>5043...</td>
<td>8.65</td>
<td></td>
</tr>
<tr>
<td>Majestic, &quot;V&quot;...</td>
<td></td>
<td>5044...</td>
<td>8.95</td>
<td></td>
</tr>
<tr>
<td>Majestic, &quot;W&quot;...</td>
<td></td>
<td>5045...</td>
<td>9.25</td>
<td></td>
</tr>
<tr>
<td>Majestic, &quot;X&quot;...</td>
<td></td>
<td>5046...</td>
<td>9.55</td>
<td></td>
</tr>
<tr>
<td>Majestic, &quot;Y&quot;...</td>
<td></td>
<td>5047...</td>
<td>9.85</td>
<td></td>
</tr>
<tr>
<td>Majestic, &quot;Z&quot;...</td>
<td></td>
<td>5048...</td>
<td>10.15</td>
<td></td>
</tr>
</tbody>
</table>

(Continued on page 98)
## Volume Control Guide

This list of replacement volume controls is not a haphazard collection of make-shift substitutes, but the result of four years of experience in merchandising replacement parts.

The majority of these volume controls are the exact replicas of the manufacturers' originals and the others best replacements obtainable. The physical dimensions and electronic specifications in each case are exact duplicates of the original controls.

These controls are the products of Frost, Centralab, Electrad, Clarostat and Yaxley.

<table>
<thead>
<tr>
<th>Receiver</th>
<th>Models</th>
<th>Cat. No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acrostone, 2, 3, 4, Midgets</td>
<td>6148</td>
<td>$0.70</td>
<td></td>
</tr>
<tr>
<td>All-American Lyric, K</td>
<td>6190</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>All-American Mohawk, 90 series, C6, J</td>
<td>6142</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>All-American Mohawk, D</td>
<td>7093</td>
<td>.40</td>
<td></td>
</tr>
<tr>
<td>All-American Mohawk, 800</td>
<td>7094</td>
<td>.70</td>
<td></td>
</tr>
<tr>
<td>Amrad, 81, Bel Canto series</td>
<td>6186</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Amrad, 71, 7100, 70</td>
<td>6140</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Apex, 30 series</td>
<td>6142</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Apex, 40 series</td>
<td>6138</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Apex, 30 series</td>
<td>6142</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Acraton, 5 and 6</td>
<td>6142</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Atwater-Kent, 1928-29 Models</td>
<td>5241</td>
<td>.60</td>
<td></td>
</tr>
<tr>
<td>Atwater-Kent, '30 Models</td>
<td>5605</td>
<td>1.75</td>
<td></td>
</tr>
<tr>
<td>Atwater-Kent, 37, 38, 36, 44, 42, 52</td>
<td>3713</td>
<td>.45</td>
<td></td>
</tr>
<tr>
<td>Atwater-Kent, H2, H1</td>
<td>6186</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Audion Jr.</td>
<td>6142</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Audion, 303B and 7330</td>
<td>6182</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Audion, 8430</td>
<td>6187</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Audion, 689</td>
<td>6182</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Audion, 31</td>
<td>6142</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balkett, A3, A5, A7</td>
<td>6190</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Balkett, B7, B9</td>
<td>6142</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Balkett, E</td>
<td>6142</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Balkett, C</td>
<td>6142</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Bosch, 73, 74, 20</td>
<td>6142</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Bosch, 49</td>
<td>6142</td>
<td>.60</td>
<td></td>
</tr>
<tr>
<td>Bosch, 60, 62</td>
<td>6190</td>
<td>.60</td>
<td></td>
</tr>
<tr>
<td>Bosch, 54, 56, 61, 66</td>
<td>5849</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Bosch, 58</td>
<td>6115</td>
<td>.69</td>
<td></td>
</tr>
<tr>
<td>Bosch, 28, 29</td>
<td>5802</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Bosch, 57, 61, 62, 64, 65, 66, 67, 68</td>
<td>7078</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Bremer-Tullay, 646, 641</td>
<td>7100</td>
<td>.70</td>
<td></td>
</tr>
<tr>
<td>Bremer-Tullay, 7, 70, 7-71</td>
<td>6142</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Bremer-Tullay, 8-3, 8-21</td>
<td>6173</td>
<td>.69</td>
<td></td>
</tr>
<tr>
<td>Bremer-Tullay, Counterphase 8</td>
<td>6163</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Bremer-Tullay, 81-82</td>
<td>6170</td>
<td>.63</td>
<td></td>
</tr>
<tr>
<td>Bremer-Tullay, S-81, 82</td>
<td>6538</td>
<td>.59</td>
<td></td>
</tr>
<tr>
<td>Browning-Drake, 34, 36, 38</td>
<td>6180</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Browning-Drake, 60</td>
<td>6142</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Browning-Drake, 70-71</td>
<td>6189</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Brunswick, 10</td>
<td>7101</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Brunswick, 18</td>
<td>7102</td>
<td>.60</td>
<td></td>
</tr>
<tr>
<td>Brunswick, 5KR8, 3KR0, 5KR6</td>
<td>4165</td>
<td>.45</td>
<td></td>
</tr>
<tr>
<td>Brunswick, 5KR, 5KRO, 2KRO, 5KR6</td>
<td>4165</td>
<td>.45</td>
<td></td>
</tr>
<tr>
<td>Brunswick, 5NC8, 5NO, 5NC8</td>
<td>4170</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Brunswick, P17-8, R-1, K1104</td>
<td>6223</td>
<td>.45</td>
<td></td>
</tr>
<tr>
<td>Brunswick, 14, 21 and 31</td>
<td>6185</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Brunswick, 5S1, 321, 331, 382</td>
<td>6589</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Brunswick, 1939 Models</td>
<td>6223</td>
<td>.75</td>
<td></td>
</tr>
<tr>
<td>Buschesem, 80</td>
<td>6181</td>
<td>.45</td>
<td></td>
</tr>
<tr>
<td>Bulova, M501</td>
<td>7103</td>
<td>.90</td>
<td></td>
</tr>
<tr>
<td>Bulova, M701</td>
<td>7104</td>
<td>.65</td>
<td></td>
</tr>
<tr>
<td>Bulova, C751</td>
<td>7104</td>
<td>.85</td>
<td></td>
</tr>
<tr>
<td>Bush &amp; Lane, 10, 12</td>
<td>3203</td>
<td>.65</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Case, 80</td>
<td>6142</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Clarion, Jr., 60</td>
<td>6148</td>
<td>.70</td>
<td></td>
</tr>
<tr>
<td>Clarion, 51, 53, 55</td>
<td>6148</td>
<td>.70</td>
<td></td>
</tr>
<tr>
<td>Clarion, 40, 45</td>
<td>7106</td>
<td>.90</td>
<td></td>
</tr>
</tbody>
</table>

The resistance taper, value, size of shaft, size of case and switch specifications have been closely adhered to, and in no case is a control specified without our having studied the requirements of the particular receiver.

Any controls not listed here can be possibly furnished by us from stock and we invite your inquiries for special controls.

Any controls not listed here can be possibly furnished by us from stock and we invite your inquiries for special controls.

<table>
<thead>
<tr>
<th>Receiver</th>
<th>Models</th>
<th>Cat. No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daycin, Navigator</td>
<td>6142</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Dayton, 8AC, A5003, 5001</td>
<td>6142</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Dayton, 5068</td>
<td>6185</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Dayton, 5057</td>
<td>6185</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Dayton, 5051</td>
<td>6185</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Dayton, 5 AC</td>
<td>6138</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>De Wald, 632</td>
<td>6148</td>
<td>.70</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Edison, C1, C2, R1, R2</td>
<td>5378</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Edison, R6 and R7</td>
<td>5378</td>
<td>.85</td>
<td></td>
</tr>
<tr>
<td>Erie, 1A, 5A, 9A, 10A</td>
<td>6142</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Erie, 24 AC</td>
<td>6141</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Erie, 245</td>
<td>6116</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Erie, SQ Radio</td>
<td>6117</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Erie, 110 Combination</td>
<td>6118</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Earl, 21, 22, 24</td>
<td>3230</td>
<td>.25</td>
<td></td>
</tr>
<tr>
<td>Earl, 31, 42, 43</td>
<td>6186</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>Earl, 31S, 32S, 33S</td>
<td>6138</td>
<td>.40</td>
<td></td>
</tr>
<tr>
<td>Everyday, 1, 2, 3</td>
<td>6502</td>
<td>.90</td>
<td></td>
</tr>
<tr>
<td>Everyday, 50 Series</td>
<td>5840</td>
<td>1.75</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fada, 48, 49</td>
<td>7005</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Fada, 48, 50</td>
<td>7098</td>
<td>.55</td>
<td></td>
</tr>
<tr>
<td>Fada, 45, 53, 57</td>
<td>7097</td>
<td>.65</td>
<td></td>
</tr>
<tr>
<td>Fada, 51</td>
<td>7098</td>
<td>.60</td>
<td></td>
</tr>
<tr>
<td>Fada, 55D</td>
<td>7099</td>
<td>1.40</td>
<td></td>
</tr>
<tr>
<td>Fada, 1935, 1936, 1937, 1938, 1939</td>
<td>5853</td>
<td>.65</td>
<td></td>
</tr>
<tr>
<td>Fada, 7AC, 4750A, 4750B, 4750C</td>
<td>5841</td>
<td>.65</td>
<td></td>
</tr>
<tr>
<td>Fada, 10, 11, 30, 31, 102, 10Z, 302, 312, 50, 70, 71, 72</td>
<td>5842</td>
<td>.65</td>
<td></td>
</tr>
<tr>
<td>Federal, D, E, F</td>
<td>6126</td>
<td>.60</td>
<td></td>
</tr>
<tr>
<td>Federal, O, H, K, M</td>
<td>6126</td>
<td>.60</td>
<td></td>
</tr>
</tbody>
</table>

(Continued on next page)
### Volume Control Guide

<table>
<thead>
<tr>
<th>Receiver Models</th>
<th>Cat. No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norden-Hauck, Super DZ-5A</td>
<td>7188</td>
<td>.50</td>
</tr>
<tr>
<td>Peerless, 65</td>
<td>7190</td>
<td>.50</td>
</tr>
<tr>
<td>Peerless, K71, 72</td>
<td>7192</td>
<td>.50</td>
</tr>
<tr>
<td>Peerless, K70</td>
<td>7193</td>
<td>.50</td>
</tr>
<tr>
<td>Philco, 511, 512, 513</td>
<td>7194</td>
<td>.50</td>
</tr>
<tr>
<td>Philco, 65</td>
<td>7195</td>
<td>.50</td>
</tr>
<tr>
<td>Philco, 95, 96, 96A, 296, 298A, 211, 211A, 30</td>
<td>7196</td>
<td>.50</td>
</tr>
<tr>
<td>Philips, 377, 777, 20A, 41DC, 42DC, 220A, 720A</td>
<td>7197</td>
<td>.50</td>
</tr>
<tr>
<td>Pilot, All-elec. Air Scout, SG105, K107</td>
<td>7198</td>
<td>.50</td>
</tr>
<tr>
<td>Pilot, Midget, 108</td>
<td>7199</td>
<td>.50</td>
</tr>
<tr>
<td>Pilot, Auto 180</td>
<td>7200</td>
<td>.50</td>
</tr>
<tr>
<td>Pilot, K108, K117</td>
<td>7201</td>
<td>.50</td>
</tr>
<tr>
<td>Radiola, 33, 33 D.C.</td>
<td>7202</td>
<td>.50</td>
</tr>
<tr>
<td>Radiola, All combinations</td>
<td>7203</td>
<td>.50</td>
</tr>
<tr>
<td>Radiola, 17, 41, 41DC</td>
<td>7204</td>
<td>.50</td>
</tr>
<tr>
<td>Radiola, 48, 49</td>
<td>7205</td>
<td>.50</td>
</tr>
<tr>
<td>Radiola, 60, 62, 66</td>
<td>7206</td>
<td>.50</td>
</tr>
<tr>
<td>Radiola, 64, 67</td>
<td>7207</td>
<td>.50</td>
</tr>
<tr>
<td>Radiola, 80, 82, 86</td>
<td>7208</td>
<td>.50</td>
</tr>
<tr>
<td>Radiola, 44, 46, 47</td>
<td>7209</td>
<td>.50</td>
</tr>
<tr>
<td>Radiola, 21, 22, 46DC</td>
<td>7210</td>
<td>.50</td>
</tr>
<tr>
<td>Radiola, 18, 50, 51, 18DC</td>
<td>7211</td>
<td>.50</td>
</tr>
<tr>
<td>Radiola, R10, R11, RAE26, RAE39, RAE53</td>
<td>7212</td>
<td>.50</td>
</tr>
<tr>
<td>Radiola, R5, RSX</td>
<td>7213</td>
<td>.50</td>
</tr>
<tr>
<td>Radiola, F14</td>
<td>7214</td>
<td>.50</td>
</tr>
<tr>
<td>Sentinel, 11, 12, 15, 16, 104, 105, 106, 440, 444</td>
<td>7215</td>
<td>.50</td>
</tr>
<tr>
<td>Sentinel, 108A, 109, 110, 111</td>
<td>7216</td>
<td>.50</td>
</tr>
<tr>
<td>Sentinel, 118, 120</td>
<td>7217</td>
<td>.50</td>
</tr>
<tr>
<td>Silver, 710, 720, 724, 740, 35A, 34A, 40A</td>
<td>7218</td>
<td>.50</td>
</tr>
<tr>
<td>Silver, 25, 790</td>
<td>7219</td>
<td>.50</td>
</tr>
<tr>
<td>Silver, 712, 714, 722, 30, 30B, 60B, 75B, 90B</td>
<td>7220</td>
<td>.50</td>
</tr>
<tr>
<td>Sonora, RZP25, 3R, 4R, 5R, 8R, 10, B31, A36, A46, A49, 44</td>
<td>7221</td>
<td>.50</td>
</tr>
<tr>
<td>Sparta, 110, 931, 101, 103, 109, 301, 591, 593, 930</td>
<td>7222</td>
<td>.50</td>
</tr>
<tr>
<td>Sparta, 600, 610, 620, 737, 740, 105A, 107</td>
<td>7223</td>
<td>.50</td>
</tr>
<tr>
<td>Sparta, 79, 89, 60, 103, 301</td>
<td>7224</td>
<td>.50</td>
</tr>
<tr>
<td>Sparta, 111, 564, 570, 674, 685, 690</td>
<td>7225</td>
<td>.50</td>
</tr>
<tr>
<td>Sparta, 410, 420, 9A, 606A, 610A, 620A</td>
<td>7226</td>
<td>.50</td>
</tr>
<tr>
<td>Sterling, 1950 Models inclusive</td>
<td>7227</td>
<td>.50</td>
</tr>
<tr>
<td>Stewart-Warner, 50, 40, 102, 40C, 60C, 70, 80, 95, 991, 992, 993</td>
<td>7228</td>
<td>.50</td>
</tr>
<tr>
<td>Stewart-Warner, 900 Series</td>
<td>7229</td>
<td>.50</td>
</tr>
<tr>
<td>Stewart-Warner, 950 and R100 Series</td>
<td>7230</td>
<td>.50</td>
</tr>
<tr>
<td>Stewart-Warner, 715, 720</td>
<td>7231</td>
<td>.50</td>
</tr>
<tr>
<td>Stovely &amp; Clark, 36, 43, 51</td>
<td>7232</td>
<td>.50</td>
</tr>
<tr>
<td>Stromberg-Carlsion, 484, 484 Front</td>
<td>7233</td>
<td>.50</td>
</tr>
<tr>
<td>Stromberg-Carlsion, 484, 484 Rear</td>
<td>7234</td>
<td>.50</td>
</tr>
<tr>
<td>Stromberg-Carlsion, 10, 11</td>
<td>7235</td>
<td>.50</td>
</tr>
<tr>
<td>Stromberg-Carlsion, 638 Front</td>
<td>7236</td>
<td>.50</td>
</tr>
<tr>
<td>Stromberg-Carlsion, 638 Rear</td>
<td>7237</td>
<td>.50</td>
</tr>
<tr>
<td>Stromberg-Carlsion, 635, 636</td>
<td>7238</td>
<td>.50</td>
</tr>
<tr>
<td>Stromberg-Carlsion, 641, 642, 652, 654</td>
<td>7239</td>
<td>.50</td>
</tr>
<tr>
<td>Stehler, 36, 43, 51</td>
<td>7240</td>
<td>.50</td>
</tr>
<tr>
<td>Temple, 8-80, 8-80</td>
<td>7241</td>
<td>.50</td>
</tr>
<tr>
<td>Temple, 861, 881, 891</td>
<td>7242</td>
<td>.50</td>
</tr>
<tr>
<td>Victor, R32, R845, R852, R875</td>
<td>7243</td>
<td>.50</td>
</tr>
<tr>
<td>Victor, R34, R35, R369, R577</td>
<td>7244</td>
<td>.50</td>
</tr>
</tbody>
</table>

(Continued on page 97)
### Voltage Dividers

**For All Standard Receivers**

The Voltage Dividers listed herein are duplicates of the original voltage dividers used in the various sets. All values and physical dimensions conform to the original and in many cases the safety factor has been brought up above normal load.

<table>
<thead>
<tr>
<th>Make</th>
<th>Models and Values</th>
<th>No.</th>
<th>Part</th>
<th>Cat.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>B</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>C</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>D</strong></td>
<td>Dayton Navigator—8,350 ohm</td>
<td>5760</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>E</strong></td>
<td>Edison, R-1, R-2, C-2—1,500 ohm</td>
<td>5761</td>
<td>.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>F</strong></td>
<td>Federal, 73-060—2,685 ohm</td>
<td>3843</td>
<td>.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>G</strong></td>
<td>General Electric, F41</td>
<td>6393</td>
<td>1.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>H</strong></td>
<td>General Motors, 1600—9,372 ohm</td>
<td>6388</td>
<td>1.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>K</strong></td>
<td>King, 82—1,480 ohm</td>
<td>3839</td>
<td>.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>L</strong></td>
<td>Lyric (Rudolph Wurlitzer), 6,200 tapped</td>
<td>3482</td>
<td>.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>M</strong></td>
<td>Majestic, 9P—3,000 ohm Resistor</td>
<td>5466</td>
<td>.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Majestic, 9P—2,170 ohm Resistor</td>
<td>5467</td>
<td>.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Majestic, 30—10,471 ohm</td>
<td>6875</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Continued on next page)
### VOLTAGE DIVIDERS

<table>
<thead>
<tr>
<th>Make</th>
<th>Models and Values</th>
<th>No.</th>
<th>Part</th>
<th>No. Cat</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phile, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500</td>
<td>3865</td>
<td>3987</td>
<td>.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phile, 511, 512, 751, 752</td>
<td>3088W</td>
<td>5568</td>
<td>.95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phile, 20, 20A, 220, 220A—5,102 ohms</td>
<td>4230</td>
<td>3850</td>
<td>.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phile, 87</td>
<td>5774</td>
<td>739</td>
<td>.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polydey—Using 250 Tube</td>
<td>3963</td>
<td>.65</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polydey—Using 171 Tube</td>
<td>3966</td>
<td>.65</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RCA, 45 D.C.—584 ohm tapped at 80.</td>
<td>2571</td>
<td>3871</td>
<td>.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RCA, 18, 33, 51—3,940 ohms</td>
<td>2242</td>
<td>3722</td>
<td>.30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RCA, 46, 466, 8,000 Series Resist</td>
<td>603</td>
<td>6395</td>
<td>.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RCA, 64—3,040 ohms tapped at 1500, 1000, 255, 126, 165</td>
<td>2343</td>
<td>6394</td>
<td>1.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RCA, 44, 47—4,250 tapped at 2750, 900, 3500, 1100</td>
<td>2534</td>
<td>6396</td>
<td>1.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RCA, 33 D.C. 46 D.C.—48 ohms tapped at 16</td>
<td>2582</td>
<td>.75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RCA, 46 D.C. ohms tapped at 196</td>
<td>6544</td>
<td>.75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RCA, 105 Speaker—3,825 ohms, tapped at 1000</td>
<td>6554</td>
<td>1.45</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RCA, 14, Receptor Pack—2,530 ohms</td>
<td>5807</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RCA, 64—6,778 ohms</td>
<td>5784</td>
<td>1.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RCA, 30A—6,700 ohms</td>
<td>5785</td>
<td>1.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RCA, 64—6,747 ohms</td>
<td>6397</td>
<td>.95</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RCA Electrola, AP952, 997, 860—400 ohms</td>
<td>6398</td>
<td>1.20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RCA, 44—6,130 ohms</td>
<td>6876</td>
<td>.75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RCA, 60—1,340 ohms</td>
<td>6875</td>
<td>.75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RCA, 67—4,030 ohms</td>
<td>6878</td>
<td>.75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RCA, 67—7,335 ohms</td>
<td>6879</td>
<td>.75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RCA, 42, 49</td>
<td>6398</td>
<td>1.20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silver—Marshall, 655—11,350 ohms</td>
<td>3164</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silver—Marshall, 655—10,300 ohms</td>
<td>3165</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silver—Marshall, 651—7,200 ohms tapped at 6,200 (large)</td>
<td>3166</td>
<td>1.85</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silver—Marshall, 651—9,720 ohms (small)</td>
<td>3167</td>
<td>1.10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silver—Marshall, 672—5,500 ohms</td>
<td>3168</td>
<td>.75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sonora, A33</td>
<td>5773</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spurton, 110—7,000 ohms tapped at 2,000</td>
<td>4268</td>
<td>3976</td>
<td>.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spurton, Regal, Luxe—1,000 ohms</td>
<td>A2355</td>
<td>3977</td>
<td>.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spurton, 110 A.C.—10,000</td>
<td>A2043</td>
<td>9798</td>
<td>.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spurton, 901, 911—110 ohms</td>
<td>5857</td>
<td>.20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spurton, 110—29,000 ohms</td>
<td>6880</td>
<td>.20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Splitdorf, 152C</td>
<td>5774</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stewart—Warner—8,000 ohms tapped at 3,500, 3,500, 2,800</td>
<td>3873</td>
<td>.40</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stewart—Warner—15,000 tapped</td>
<td>6166</td>
<td>3990</td>
<td>.95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stewart—Warner—600 ohms C.T.</td>
<td>62163</td>
<td>3899</td>
<td>.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steinite, 991—2,500 ohms</td>
<td>6691</td>
<td>.75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steinite, 55—25,877 ohms</td>
<td>6682</td>
<td>.75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steinite, 40—20,200 ohms</td>
<td>6399</td>
<td>1.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steinite, 70, 80, 95, 22, 440 ohms</td>
<td>6400</td>
<td>.75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stromberg-Carls, 19, 20—3,285 ohms</td>
<td>6832</td>
<td>.75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stromberg-Carls, 636—5,000 ohms</td>
<td>6884</td>
<td>.75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stromberg-Carls, 10—3,880 ohms</td>
<td>5775</td>
<td>1.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stromberg-Carls, 12, 14—6,750 ohms</td>
<td>5776</td>
<td>1.38</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stromberg-Carls, 11, 9—8,650 ohms</td>
<td>5777</td>
<td>1.38</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stromberg-Carls, 401</td>
<td>5778</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stromberg-Carls, 403—5,500 ohms</td>
<td>5779</td>
<td>1.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stromberg-Carls, 403—3,770 ohms</td>
<td>5780</td>
<td>.95</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stromberg-Carls, 635, 636—8,270 ohms</td>
<td>5586</td>
<td>.95</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stromberg-Carls, 12, 14—11,005 ohms</td>
<td>5781</td>
<td>1.38</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stromberg-Carls, 446, 448</td>
<td>5782</td>
<td>1.13</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stromberg-Carls, 446, 448—9,300 ohms</td>
<td>5873</td>
<td>1.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stromberg-Carls, 435, 436</td>
<td>5847</td>
<td>.75</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### VOLUME CONTROL GUIDE

(Continued from page 95)

<table>
<thead>
<tr>
<th>Receiver</th>
<th>Models</th>
<th>Cat. No. Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>V</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Victor, R14, R15, R17</td>
<td>5158</td>
<td>1.45</td>
</tr>
<tr>
<td>Victor, 7-25</td>
<td>7090</td>
<td>.55</td>
</tr>
<tr>
<td>Victor, 7-11</td>
<td>7081</td>
<td>.55</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>W</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ware, SB45</td>
<td>7082</td>
<td>.90</td>
</tr>
<tr>
<td>Ware, X5</td>
<td>7084</td>
<td>.90</td>
</tr>
<tr>
<td>Ware, SBA</td>
<td>7085</td>
<td>.95</td>
</tr>
<tr>
<td>Ware, S-1</td>
<td>7086</td>
<td>.89</td>
</tr>
<tr>
<td>Ware, B-1-2</td>
<td>6149</td>
<td>.90</td>
</tr>
<tr>
<td>Wells-Gardner, C, CG, 82, 432</td>
<td>7098</td>
<td>.75</td>
</tr>
<tr>
<td>Wells-Gardner, 13</td>
<td>7099</td>
<td>1.00</td>
</tr>
<tr>
<td>Wells-Gardner, 13-10 Tone Control</td>
<td>7098</td>
<td>.75</td>
</tr>
<tr>
<td>Westinghouse, W53, W56, W57</td>
<td>6141</td>
<td>.90</td>
</tr>
<tr>
<td>Westinghouse, W54</td>
<td>5138</td>
<td>1.45</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Z</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Zaney Gill, 54</td>
<td>7090</td>
<td>.85</td>
</tr>
<tr>
<td>Zaney Gill, 64 Tone Control</td>
<td>7091</td>
<td>.85</td>
</tr>
<tr>
<td>Zenith, AH, CH, RH, 2012</td>
<td>7092</td>
<td>.89</td>
</tr>
<tr>
<td>Zenith, 33, 34, 35, 35A, 35A2, 35A2, 35A2, 35A2, 35A2</td>
<td>6120</td>
<td>.80</td>
</tr>
<tr>
<td>Zenith, 382X, 34P, 342P, 41, 42, 422</td>
<td>6121</td>
<td>.90</td>
</tr>
<tr>
<td>Zenith, 39, 39A, 40A, 382, 392, 35A2, 35A2, 35A2, 35A2</td>
<td>6122</td>
<td>1.25</td>
</tr>
<tr>
<td>Zenith, 32, 52, 522, 522, 54, 542, 55, 57, 57, 57, 62</td>
<td>6123</td>
<td>1.25</td>
</tr>
<tr>
<td>Zenith, 64, 67, 60, 61, 62, 63, 622, 642, 672, 672</td>
<td>6141</td>
<td>.90</td>
</tr>
<tr>
<td>Zenith, 73, 72, 73, 72, 722, 722, 772</td>
<td>6120</td>
<td>1.25</td>
</tr>
</tbody>
</table>

**MAIL ORDERS TO**

See Terms on Page 5

**Federated Purchaser Inc.**

25 PARK PLACE, N.Y.C.
or to our nearest branch
### By-Pass Condensers for Standard Sets

<table>
<thead>
<tr>
<th>Sets and Models</th>
<th>Capacity</th>
<th>Cat. No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Atwater Kent</strong></td>
<td>2-25 mfd.</td>
<td>2985</td>
<td>$0.65</td>
</tr>
<tr>
<td></td>
<td>1-5 mfd.</td>
<td>2894</td>
<td>.75</td>
</tr>
<tr>
<td><strong>Speaker Condenser</strong></td>
<td></td>
<td>7211</td>
<td>.48</td>
</tr>
<tr>
<td><strong>Bosch</strong></td>
<td>2-25 mfd.</td>
<td>2983</td>
<td>.65</td>
</tr>
<tr>
<td><strong>1928-1932 models</strong></td>
<td>1-30 mfd.</td>
<td>2982</td>
<td>.65</td>
</tr>
<tr>
<td><strong>Brandes</strong></td>
<td>.6-C-6 mfd.</td>
<td>5618</td>
<td>.30</td>
</tr>
<tr>
<td><strong>R-10</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Colonial</strong></td>
<td>2-25 mfd.</td>
<td>3211</td>
<td>.65</td>
</tr>
<tr>
<td></td>
<td>2-10 mfd.</td>
<td>3210</td>
<td>.65</td>
</tr>
<tr>
<td></td>
<td>1.5 mfd.</td>
<td>5807</td>
<td>.50</td>
</tr>
<tr>
<td><strong>Crosley</strong></td>
<td>W8471</td>
<td>2780</td>
<td>.21</td>
</tr>
<tr>
<td>60S, 61S, 62S, 63S, 65S</td>
<td>W7944</td>
<td>3211</td>
<td>.30</td>
</tr>
<tr>
<td></td>
<td>W40130</td>
<td>2980</td>
<td>.30</td>
</tr>
<tr>
<td></td>
<td>.5 mfd.</td>
<td>2781</td>
<td>.25</td>
</tr>
<tr>
<td></td>
<td>W20499</td>
<td>3209</td>
<td>.40</td>
</tr>
<tr>
<td></td>
<td>W22412</td>
<td>3210</td>
<td>.40</td>
</tr>
<tr>
<td></td>
<td>W20446</td>
<td>3211</td>
<td>.55</td>
</tr>
<tr>
<td></td>
<td>W7753B</td>
<td>3212</td>
<td>.55</td>
</tr>
<tr>
<td></td>
<td>W20186</td>
<td>3213</td>
<td>.65</td>
</tr>
<tr>
<td></td>
<td>W5943</td>
<td>5402</td>
<td>.25</td>
</tr>
<tr>
<td></td>
<td>W6428</td>
<td>5403</td>
<td>.45</td>
</tr>
<tr>
<td></td>
<td>W20187</td>
<td>5404</td>
<td>.22</td>
</tr>
<tr>
<td></td>
<td>W25426</td>
<td>5398</td>
<td>.38</td>
</tr>
<tr>
<td></td>
<td>W40185</td>
<td>5467</td>
<td>.36</td>
</tr>
<tr>
<td></td>
<td>W7753</td>
<td>5468</td>
<td>.45</td>
</tr>
<tr>
<td></td>
<td>W4068</td>
<td>5409</td>
<td>.26</td>
</tr>
<tr>
<td></td>
<td>W4313A</td>
<td>5411</td>
<td>.27</td>
</tr>
<tr>
<td></td>
<td>W25373</td>
<td>5412</td>
<td>.70</td>
</tr>
<tr>
<td></td>
<td>W20448</td>
<td>5427</td>
<td>.35</td>
</tr>
<tr>
<td><strong>Dayfan</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>All</strong></td>
<td>2-1 mfd.</td>
<td>2761</td>
<td>.10</td>
</tr>
<tr>
<td><strong>Earl</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.5 mfd.</td>
<td>2872</td>
<td>.15</td>
</tr>
<tr>
<td><strong>Everal</strong></td>
<td>2-25 mfd.</td>
<td>2983</td>
<td>.65</td>
</tr>
<tr>
<td>1928-1929</td>
<td>1-30 mfd.</td>
<td>2982</td>
<td>.35</td>
</tr>
<tr>
<td><strong>Fada</strong></td>
<td>1. mfd.</td>
<td>2902</td>
<td>.35</td>
</tr>
<tr>
<td><strong>All</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Federal</strong></td>
<td>3-25 mfd.</td>
<td>2939</td>
<td>.40</td>
</tr>
<tr>
<td></td>
<td>.601 mfd.</td>
<td>2963</td>
<td>.65</td>
</tr>
<tr>
<td></td>
<td>4 mfd.</td>
<td>5604</td>
<td>1.75</td>
</tr>
<tr>
<td><strong>Freed</strong></td>
<td>4.5 mfd.</td>
<td>2872</td>
<td>.15</td>
</tr>
<tr>
<td><strong>All</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>General Motors</strong></td>
<td>3-1 mfd.</td>
<td>5214</td>
<td>.40</td>
</tr>
<tr>
<td>1930 Series A</td>
<td>1,202,685</td>
<td>5215</td>
<td>.55</td>
</tr>
<tr>
<td></td>
<td>1,202,273</td>
<td>5216</td>
<td>.45</td>
</tr>
<tr>
<td></td>
<td>1,202,251</td>
<td>5217</td>
<td>.50</td>
</tr>
<tr>
<td></td>
<td>1,202,237</td>
<td>5218</td>
<td>.50</td>
</tr>
<tr>
<td></td>
<td>1,203,680</td>
<td>5408</td>
<td>1.50</td>
</tr>
<tr>
<td><strong>Kellogg</strong></td>
<td>1,202,685</td>
<td>5215</td>
<td>.55</td>
</tr>
<tr>
<td><strong>All</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Kolster</strong></td>
<td>3-5 mfd.</td>
<td>5617</td>
<td>.50</td>
</tr>
<tr>
<td>44, 45</td>
<td>.6-C- mfd.</td>
<td>5618</td>
<td>.30</td>
</tr>
<tr>
<td>44, 45</td>
<td>1 mfd.</td>
<td>5627</td>
<td>.35</td>
</tr>
<tr>
<td></td>
<td>430, 32 D.C.</td>
<td>5628</td>
<td>.30</td>
</tr>
<tr>
<td>44, 45</td>
<td>.5 mfd.</td>
<td>5608</td>
<td>.30</td>
</tr>
<tr>
<td>6L, 6F, 6M, 7S</td>
<td>4, 6, 8, 10, 12, 14, 16, 20, 25, 30, 40, 60, 80</td>
<td>5603</td>
<td>.35</td>
</tr>
<tr>
<td>6J</td>
<td>5681</td>
<td>.35</td>
<td></td>
</tr>
<tr>
<td><strong>Majestic</strong></td>
<td>70, 90, 180</td>
<td>5448</td>
<td>.30</td>
</tr>
<tr>
<td></td>
<td>2-5 mfd.</td>
<td>5446</td>
<td>.30</td>
</tr>
<tr>
<td></td>
<td>3-5 mfd.</td>
<td>5447</td>
<td>.30</td>
</tr>
<tr>
<td><strong>Peerless</strong></td>
<td>.5 mfd.</td>
<td>2983</td>
<td>.30</td>
</tr>
<tr>
<td>All Klyatron</td>
<td>7-1 mfd.</td>
<td>2984</td>
<td>.30</td>
</tr>
<tr>
<td></td>
<td>1-5 mfd.</td>
<td>2994</td>
<td>.29</td>
</tr>
<tr>
<td><strong>Courier</strong></td>
<td>3-1 mfd.</td>
<td>7195</td>
<td>.45</td>
</tr>
<tr>
<td>65</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Kennedy</strong></td>
<td>Multiple By-pass</td>
<td>7183</td>
<td>.48</td>
</tr>
<tr>
<td><strong>Radiola</strong></td>
<td>64, 67</td>
<td>4188</td>
<td>1.75</td>
</tr>
</tbody>
</table>

### FILTER CONDENSER BLOCKS

(Continued from page 93)

<table>
<thead>
<tr>
<th>Make</th>
<th>Models</th>
<th>Part No.</th>
<th>Cat. No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Senora</strong>, Using 245 tubes</td>
<td></td>
<td>2914</td>
<td>.93</td>
<td></td>
</tr>
<tr>
<td><strong>Sparton</strong>, 930</td>
<td></td>
<td>5039</td>
<td>3.50</td>
<td></td>
</tr>
<tr>
<td><strong>Sparton</strong>, AC 5</td>
<td></td>
<td>3150</td>
<td>3.50</td>
<td></td>
</tr>
<tr>
<td><strong>Sparton</strong>, ACT, 601, 62, 63</td>
<td></td>
<td>5040</td>
<td>3.64</td>
<td></td>
</tr>
<tr>
<td><strong>Sparton</strong>, 80</td>
<td></td>
<td>6578</td>
<td>2.35</td>
<td></td>
</tr>
<tr>
<td><strong>Sparton</strong>, 109</td>
<td></td>
<td>7282</td>
<td>2.92</td>
<td></td>
</tr>
<tr>
<td><strong>Sparton</strong>, 910</td>
<td></td>
<td>7289</td>
<td>2.92</td>
<td></td>
</tr>
<tr>
<td><strong>Steinlne</strong>, 45, 70A</td>
<td></td>
<td>5037</td>
<td>3.59</td>
<td></td>
</tr>
<tr>
<td><strong>Steinlne</strong>, 40A</td>
<td></td>
<td>5038</td>
<td>3.50</td>
<td></td>
</tr>
<tr>
<td><strong>Stewart Warner</strong>, 950, 100A</td>
<td></td>
<td>6575</td>
<td>2.15</td>
<td></td>
</tr>
<tr>
<td><strong>Stromberg-Carlsion</strong>, 636, 638, 639, 650</td>
<td></td>
<td>2722</td>
<td>4.80</td>
<td></td>
</tr>
<tr>
<td><strong>Stromberg-Carlsion</strong>, 641, 642, 652, 654</td>
<td></td>
<td>6514</td>
<td>4.95</td>
<td></td>
</tr>
<tr>
<td><strong>Temple</strong>, 8-80, 8-80, 8-90</td>
<td></td>
<td>2754</td>
<td>.96</td>
<td></td>
</tr>
<tr>
<td><strong>Temple</strong>, Same as above for 28 cycles</td>
<td></td>
<td>2758</td>
<td>.96</td>
<td></td>
</tr>
<tr>
<td><strong>Temple</strong>, 7-80, 7-80</td>
<td></td>
<td>2753</td>
<td>.96</td>
<td></td>
</tr>
<tr>
<td><strong>U. S. Radio &amp; Television</strong>, 46, 46A</td>
<td></td>
<td>6777</td>
<td>1.75</td>
<td></td>
</tr>
<tr>
<td><strong>U. S. Radio &amp; Television</strong>, 47, 47A</td>
<td></td>
<td>6778</td>
<td>1.75</td>
<td></td>
</tr>
<tr>
<td><strong>U. S. Radio &amp; Television</strong>, 41</td>
<td></td>
<td>6779</td>
<td>1.75</td>
<td></td>
</tr>
<tr>
<td><strong>U. S. Radio &amp; Television</strong>, 48, 48A</td>
<td></td>
<td>6780</td>
<td>1.75</td>
<td></td>
</tr>
<tr>
<td><strong>V</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>V</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Victor</strong>, Electrolyt, Hyperion and Bogota</td>
<td></td>
<td>2709</td>
<td>.85</td>
<td></td>
</tr>
<tr>
<td><strong>Willard</strong>, B EImon Condenser</td>
<td></td>
<td>5041</td>
<td>3.25</td>
<td></td>
</tr>
<tr>
<td><strong>Zenith</strong>, 51E11, 12, 14, 18</td>
<td></td>
<td>2801</td>
<td>1.35</td>
<td></td>
</tr>
<tr>
<td><strong>Zenith</strong>, 51E18, 25PX, 35APX and 37A</td>
<td></td>
<td>2701</td>
<td>4.50</td>
<td></td>
</tr>
<tr>
<td><strong>Zenith</strong>, 333X and 333AX</td>
<td></td>
<td>2700</td>
<td>1.50</td>
<td></td>
</tr>
<tr>
<td><strong>Zenith</strong>, 3610</td>
<td></td>
<td>3160</td>
<td>3.00</td>
<td></td>
</tr>
<tr>
<td><strong>Zenith</strong>, 3611</td>
<td></td>
<td>3161</td>
<td>4.00</td>
<td></td>
</tr>
<tr>
<td><strong>Zenith</strong>, 3612</td>
<td></td>
<td>3171</td>
<td>5.00</td>
<td></td>
</tr>
<tr>
<td><strong>Zenith</strong>, 3613</td>
<td></td>
<td>3171</td>
<td>3.75</td>
<td></td>
</tr>
<tr>
<td><strong>Zenith</strong>, 3616</td>
<td></td>
<td>5043</td>
<td>2.50</td>
<td></td>
</tr>
<tr>
<td><strong>Zenith</strong>, 5E9, Pack</td>
<td></td>
<td>5043</td>
<td>2.95</td>
<td></td>
</tr>
</tbody>
</table>
AFTER months of experimenting, ACRA TEST engineers have perfected a really marvelous automobile radio, utilizing the new type auto screen grid tubes throughout, giving uniformly good reception in all locations and the most simple of sets to install.

Now everybody can afford a radio in their car! You can sell the ACRRATONE Auto Radio for less than $50 completely installed, and still net a handsome profit. Despite the extremely low price the ACRA TONE has the following features:

2. Equipped with Magnavox Special Auto Dynamic Speaker.
3. Installed on steering post or dashboard—only 4 holes to drill.
4. Low battery drain—only 20 M. A.
5. Sold complete—nothing else to buy.

The Receiver
The ACRA TONE Automobile Radio is a super-sensitive 5 tube improved radio frequency receiver employing new type auto radio tubes of low current consumption:

Three tuned circuits, followed by a stage of 41 power pentode, provides the utmost selectivity, sensitivity and fidelity of reproduction. The compact chassis is cadmium plated and is housed in a metal case. Only 2 screws to loosen in order to remove the chassis.

Complete—Nothing Else to Buy

Here is what you get for $29.50!

1. ACRATONE 1933 Auto Radio.
4. 12V. Large B Batteries.
5. Complete Suppressor Kit.
7. Steel Battery Box.
8. Shielded Cables.

A complete suppressor kit, consisting of 5 spark plug suppressors, 1 generator silencer and 1 distributor suppressor is furnished with the set. A Ward Royal Auto Antenna, which is attached underneath the running board, is also furnished, as is a steel battery box, 5 Sylvania tubes, and 3 large 12 volt B batteries, which furnish all the necessary B and C current for the set. The car storage battery is utilized to furnish the current to light the filaments of the tubes.

Can Be Installed in—

AUTOMOBILES
MOTOR BOATS
AEROPLANES
MOTOR BUSES
TAXICABS

The STERLING Auto Radio is the most compact on the market. It measures only 5% in. wide, 7% in. long and 6% in. high, and weighs 7 lbs. The Magnavox Dynamic Speaker is 7% in. in diameter and housed in a metal case, with mounting brackets and has a center bolt so that it may be easily mounted on the cowl, on the ceiling, on back of the driver's seat or on the dash. Both set and speaker are finished in handsome black crackle to harmonize with the inside fittings of the car.

STERLING
Automobile Radio

The set of simple installation, marvelous operation

Utilizes All Heater Type Tubes—2-236, 2-237, 2-238

Illuminated Dial . . . Lock Switch . . . Magnavox Dynamic Speaker. Made to sell for around $45.00 to the dealer and now offered to you for less than half!

For Outfit consisting of a 6-Tube Chassis housed in a heavy steel case, Magnavox dynamic speaker, shielded cable, shielded battery cable, steering column clamp and mounting brackets.

Our Net Price — $19.85
Set of Universal Tubes — $4.35
FEATURING 5 MODELS
With Latest Improvements

Including—

**TONE CONTROL**
**FULL VISION DIALS**
VARIO-MU AND PENTODE TUBES
FULL DYNAMIC SPEAKERS

Outstanding in value without sacrifice of quality, these splendid receivers incorporate features usually found only in high priced receivers. The reception is remarkably faithful, selectivity minute and volume ample for all requirements.

**Model 54**

For people living in districts using Direct Current, this efficient receiver will be a revelation in performance. The use of heater type tubes makes the set very efficient and insures the absence of hum. The set also boasts of Tone Control and 2 of the new direct current Pentode Power Tubes are used in push-pull, giving great volume if desired. The very artistic walnut cabinet with fluted sides and Gothic grille houses this receiver. Illuminated single dial control. Cabinet 19½ in. high, 15½ wide, 9½ deep.

Uses 5-236 Screen Grid and 2-233 Pentode Tubes.

Set of Universal Tubes $3.85
Set of Arcturus Tubes 7.25

**Model 77**

Incorporating the most recent developments in superhetodyne design, this 7-tube model is the last word in radio efficiency. Its ability to receive stations at great distances with ample volume is almost uncanny. In this receiver selectivity attains perfection and fidelity of reproduction is second to none. Volume from a mere whisper to auditorium-filling crescendo can be attained. Tone control enables you to bring out any desired shading of tone color. The cabinet is beautifully designed with a suggestion of the Orient and lends itself to any surroundings. The illuminated tuning dial is enhanced with a handsome bronze escutcheon plate.

Cabinet 19½ in. high, 15½ wide, 9½ in. deep.

Tubes used: 2-551 or 235 Vario Mu, 2-224 Screen Grid, 1-227 Detector, 1-247 Pentode and 1-280 Full Wave Rectifier.

Set of Universal Tubes $3.45
Set of Arcturus Tubes 5.50

**Model 74**

The set is the product of the Publix Laboratory and is well constructed with materials throughout. Operates on a 25-ft. aerial and brings in stations in a radius of 500 miles and more. Pull vision dial. Handsome mahogany two tone cabinet.

The set is ideal for the bungalow, camp, sun-parlor, bedroom where a small individual set is required. You can sell this set at $19.50 complete with tubes to thousands of prospects right in your town. Order your sample today and get started making sales to people who have no radio sets in your city. Nobody can afford to wait for them any longer.

11½ in. long, 8½ in. wide, 14½ in. tall.

Uses 1-235 or 551, 1-224, 1-247 and 1-280 Tubes.

Set of Universal Tubes $2.00
Set of Arcturus Tubes 3.00

**Model 93**

A receiver extremely low in price, yet embracing the latest improvements in design, including the new type tubes. Tone control enables you to emphasize high or low notes and bring out the proper shading. Vario Mu tubes eliminate cross-talk and make for sharp tuning. The Pentode Tube gives ample volume for every requirement. Cabinet 15½ high, 13½ wide and 9½ deep.

Uses 2-58, 1-57, 1-247 and 1-280 tubes.

Set of Universal Tubes $3.95
Set of Arcturus Tubes 5.85

**Model 70**

This 7 Tube Tuned Radio Frequency Model is designed primarily for people with whom great distance reception is secondary but who desire the utmost in quality of reproduction. The receiver uses three of the new Vario Mu tubes for utmost selectivity, one Screen Grid Detector and two of the powerful Pentode Tubes in push-pull. This combination makes for remarkable fidelity of tone with great volume where the occasion requires. The Cabinet is of a very popular Gothic design and of beautifully matched walnut overlays. Illuminated dial with bronze escutcheon.

Tone Control gives you just the right emphasis of instruments.

Cabinet 19½ in. high, 15½ in. wide, 9½ in. deep.

Tubes used: 3-551 or 235 Vario Mu, 1-224 Screen Grid, 2-247 Pentode and 1-280 Full Wave Rectifier.

Set of Universal Tubes $3.45
Set of Arcturus Tubes 5.50

**Models**

- **Model 74** 4-TUBE 110V. A.C. $10.00
- **Model 93** 5-TUBE 110V. A.C. $13.00
- **Model 54** 5-TUBE 110V. D.C. $14.00
- **Model 70** 7-TUBE TRF $13.00
- **Model 77** 7-Tube Superhetodyne $19.00

Both for 110 V. A. C.
For Cutting and Recording on Aluminum Record Blanks

Acratone Recorder

For Complete Cutting Outfit Consisting of:
- CENTER SPINDLE
- CUTTING HEAD
- HARDWARE
- SWIVEL ARM

DIAMOND RECORDING NEEDLE
Cat. No. 276
Price $6.00

FIBRE REPRODUCING NEEDLE
Cat. No. 5929
25c Package of 50

Simple to Operate

In recording a great deal of volume is unnecessary. An ordinary magic recorder at normal volume is sufficient. For microphone announcements the volume should be turned slightly higher. A special cutting needle is suggested for best recordings. Fibre needles are used for reproduction except where the records are processed. This process enables the use of steel needles. Processing is done after the recording has been made. This processing described below, hardens the surface of the record and makes it last thousands of reproductions.

For Campaign Speeches

This recorder can be put to use to great advantage by political organizations and individual office speakers. Speeches may be recorded on blanks and distributed to theatres, clubrooms, and other public places for reproduction. With a portable public address system, such speeches can be reproduced to great numbers of voters. This angle offers a real opportunity to radio dealers and servicemen.

Radio servicemen and dealers will find a new field of endeavor with this recorder as it lends itself to many applications.

Price $1.25 each
ONE WEEK DELIVERY

A Great Success!

Acratone RECORDER

Easily installed on phonograph turntable. Only one hole to drill.

Three Machines
- 2501 Amplifier for recordings using 1-58, 2-50 and 2-251 Index

Special Recording Inserts: Two pr. c.d. . 7, 8, 9, 10, 11, 12, 13, 14, 15

Amplifier to Match

Acratone has developed an amplifier suitable for recording and public address use. This amplifier uses three stages and gives excellent quality for microphone, radio and phonograph recordings. This amplifier has special settings of its volume control for recording purposes. Fully described elsewhere in this catalog.

Price $24.50

Recording Motor

We have found that ordinary phonograph motors are hardly suitable for recording as they are not powerful enough for such purposes.

This Motor is specially fitted for recording purposes. It is extremely powerful and can be switched from 7.8 r.p.m. to 33 1/3 r.p.m. by just a throw of the switching lever.

Price $12.50

Processing

We have arranged for a service to press these records. All records are shipped to 25 Park Place to attention of Recording Department.

Price $1.25 each
ONE WEEK DELIVERY

Radio servicemen and dealers will find a new field of endeavor with this recorder as it lends itself to many applications.
7 Links in our service chain!

1. NEW YORK, N. Y.
   169 Washington St.
   Barclay 7-7545
   M. Raynow, Manager

2. JAMAICA, L. I.
   92-26 Merrick Rd.
   REPUBLIC 9-8187
   Nat Love, Manager

3. MT. VERNON, N. Y.
   51 East 3rd St.
   Hillcrest 2283
   H. H. Moore, Manager

4. NEWARK, N. J.
   273 Central Ave.
   Market 2-5580
   Walter Fisher, Manager

5. PHILADELPHIA, PA.
   2909 Broad St.
   Baldwin 2888
   Mark Freas, Manager

6. ATLANTA, GA.
   631 Spring St. N.W.
   Hemlock 4613
   John R. Dye, Manager

7. MAIN OFFICE
    AND WAREHOUSE
    25 Park Place
    New York, N. Y.

SAMUEL ROTH
President