

# RADIO BARGAIN NEWS

Dealers's servicemen's Buying Guide

Issued by

Federated Purchaser Inc.

25 PARK PLACE

NEW YORK, N. Y.



A Portable Laboratory .... see page 58

**World Radio History** 



AC Models employ 1.57, 2.58, 1.247 and 1.280 tubes.

DC Models employ 3-236, 1-237 and 2-238 tubes.

A.C. D.C.

Set of Universal Tubes. \$2.95 \$4.50 Set of Arcturus Tubes. 3.85 8.25

#### Features:

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

\* What Is Ghost Tuning?

Heretofore, every set, no matter what it sold for, picked up all man-made static, had a sizzling, swishing noise between stations, with frequent crackling and regenerative squeals. 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 Engineers have also developed the lowest priced and most compact radio-phono-

graph combination. Housed in a beautiful twotone walnut cablnet, 20" high, 18" wide and 15" deep, with hinged top. Furnished with either 200-600 meter chassis. Equipped with silent induction motor of 78 r.p.m., Acratone Hydro-Electric Pickup, radiophonograph switch, separate volume control for



phonograph, needle cup and arm rest.

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. 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.

## Duo-Wave Models

200 to 2000 Meters

This Duo-Wave Acratone was designed primarily for foreign countries where most stations broadcast on wave lengths above 600 and below 2000 meters. Of course it is also a splendid receiver for American stations sending on 200 and 600 meters. It is two receivers in one, but unlike so-called "short and long wave sets" the Acratone is not an ordinary receiver with a short-wave converter, but a real dual-wave receiver.

110V., 60 cycle A. C. Model, Cat. No. 42, less tubes .

#### Short and Medium Wave Models

75 to 600 Meters

For those buyers who are interested in short wave reception down to 75 meters, we have designed the ACRATONE 75 to 600 meter set on which one can hear police calls, and short wave broadcast stations. By turning a knob, the set is ready to receive either 75 to 200 or 200 to 600 meter signals. No complicated changes necessary.

110V., 60 cycle Model, Cat. No. 91, less tubes . . . .

42, less tubes less tubes					
Cat. No.	Receiving Range	Voltage	Cycles	Current	Price
38		110-120	50-60	A.C.	814.75
39	BROADCAST	110-120	25	A.C.	16.25
41	200 to 600	220-250	50-60	A.C.	15.75
23	METERS	110-120		D.C.	14.75
24		220-240		D.C.	16.25
42		110-120	50-60	A.C.	18.50
43	DUO-WAVE 200 to 2000	110-120	25	A.C.	21.50
46		220-250	50-60	A.C.	19.50
6	METERS	110-120	EL CALLED	D.C.	18.50
32		220-240		D.C.	19.50
91	75 to 600 Short	110-120	50-60	A.C.	15.25
92	and Long Wave	110-120	25	A.C.	16.75
	RADIO—PHO	NOGRAF	PH CON	BINAT	IONS
47	2004-000	110-120	50-60	A.C.	33.50
48	200 to 600	110-120	25	A.C.	37.50
49	METERS	220-250	50-60	A.C.	41.00
27		110-120	50-60	A.C.	39.50
33	200 to 2000	110-120	25	A.C.	41.50
30	DUO-WAVE	220-250	50-60	A.C.	42.50

#### 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.

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 RETURNING GOODS-A "Return Merchandise 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 from FOREIGN COUNTRIES must be accompanied by Cash in Full—plus Transportation, Consular, and Insurance charges. Or, they must be accompanied by an Irrevocable Letter of Credit on some bank in New York with instructions to that bank to pay us on presentation of shipping docu-

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 considerable, we reserve the right to add an amount sufficient to cover this difference to merchandise shipped.

was compensate of the second

## The Observance of These Simple Rules Will Greatly Assist Us to Expedite Your Orders

- 1. Use our order blank whenever possible. (A supply will be sent on request.)
- 2. If you write your order on your business stationery, use one side of the sheet only and tabulate the items, one item on a line.
- 3. Order by catalog number and always fill in prices.
- 4. Do not list any items on your order which are not shown in our catalog. Write such items on a separate sheet of paper.
- 5. Do not write anything on the order blank which does not pertain to the order itself,
- 6. When you deduct a credit memo from an order, be sure to attach that credit memo to the order.
- 7. Please avoid sending us orders for less than \$3.00. Besides incurring a loss on such orders, this rule is for your protection. It discourages orders from individuals who are not entitled to wholesale prices.

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:

MARINE MIDLAND BANK, NEW YORK CORN EXCHANGE BANK, NEW YORK

We Maintain the Following Branches for Your Convenience 169 Washington St., New York, N. Y. 92-26 Merrick Road, Jamaica, L. I. 51 East 3rd St., Mount Vernon, N. Y. 2909 No. Broad St., Philadelphia, Pa.

Main Office and Warehouse Telephones: Barclay 7-7582-7583-7584-7545

631 Spring St., N. W., Atlanta, Ga.
Warehouse 25 PARK PLACE, NEW YORK, N. Y. Cable Address: FEDERPURCH

#### When We Economize, You Profit

The circulation of RADIO BARGAIN NEWS has grown tremendously since it was first published in March, 1931. It is to-day the recognized "dealers' and servicemen's buying guide" and the demand for it is world-wide and requests for it from new readers never cease. To meet this large circulation has meant an enormous expense on our part. We have never shirked from this expense, but have, on the contrary, constantly improved and enlarged the book in order to justify its reputation and its universal patronage.

However, we are desirous of having our catalog go to only those dealers and servicemen who make good use of it. The only way we can ascertain that you want the book is by receiving an occasional order from you.

Therefore, henceforth the mailing of our catalog will be restricted to those who have been sending us orders. The others will be removed from our mailing list and our circulation reduced as a measure of economy. This saving will be reflected in our low prices and thus be passed on to you, Your co-operation will be of mutual benefit. The circulation of RADIO BARGAIN NEWS has grown tremendously since it was first



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

ederated Purchaser Inc. 25 PARK PLACE, New York City

#### Utah Remote Tuning and Volume Control

Efficient and Eagliv Installed Illuminated Dial



This small (4½x2½ in.), but sturdy device will tune and control Midget or auto Receivers from a distance. They are equipped with a long 10 ft. fiexible shaft which may be concealed in the wall or along the baseboard.

Standard length of flexible shaft is 10 ft. but longer shafts may be had on special order at 25c per foot.

Cat. No. 6847 \$650 Our Price ......

#### New Auto-Radio Steering Column Control

Feature Specifications:

Pressed steel construction—all metal perts rust proof cadmium and black finish—amail size 3% ins. x 4% ins. x 1 in. thick—light weight—key lookswitch—micrometer volume control 190,600 Ohm tother resistances special)—Illuminated celluloid dial, Furnished with Steering Column mounting brackets and condenier sear plate for % in. shaft. 30 in. Fierible shaft and casing standard. Special lengths to order.

POSITIVE DRIVE-NO SPRINGS NO BACK LASH-STAYS PUT

Cat. No. 5164 Our Price



#### Complete With 30 in. Flexible Shaft and One Coupling

With each control is included 30 inches of flexible shaft and casing, which gives a flexible lead from point at which control is clamped on steering column to a point under the instrument board. Any additional length required may be secured by coupling on additional length of flexible shaft, or solid rod with universal joints.

#### Prices Additional Flexible Shaftings and Joints

Cat. No.			Our Price
61.63	Plexible shaft,	1 or 2	foot

.15 ea.

.30 en.

If you are not receiving "Radio Bargain News" regularly, send in your name and address.

#### Silencer Kits

For all makes of automobile radios except Buick, stc,, with overhead valves. These use Cat. No. 6534 suppressors.



Consists of 4, 6 or 3 spark plug sup-pressors, 1 distributor silencer, and a 1, Mfd, generator silencer, Most kits on the market use a 15 Mfd, condenser while we include a 1, Mfd.

Cylinders	Cat. No.	Price
*	4237	81.50
6	4238	2.00
8	4230	2,35

Willys-Overland and

Cylinders	Cat. No.	Price
1	7022 7023	\$1.50
8	7024	2.85

#### ACRATEST Spark Plug Suppressor



MODEL 1

whore eircuit or loosen. Con-nects from spark plug wire to spark plug.

List Price, 50c-Cat. No. 6450

Price 20c ea.

#### ACRATEST Spark Plug Suppressor

For all Bulek, Willys-Knight and other overhead valve" cars.



Cat. No. 6534 Price 20e ea.

#### ACRATEST Distributor Suppressor



Used in cen-ter of dis-tributor cap or coil. Re-move center wire, insert split end, in-

sert wire in other end.

List Price, 50c-Cat. No. 6451

Price 20c ea.

#### Faradon 4 Mfd. 600 V. Condenser



SMERKEN IN. Suitable for A.C. Idne Filters.

Cat. No. 5604 S 75

#### Distributor Silencer for Automobile Radios

The distribution of an automobile this condenser and chocke coll, when connected in series with the low tension line and the can grounded to the chasse, will eliminate all distributor noises. Used and approved by some of the largest auto radio manufacturers.

#### Generator Silencers



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

Cat. No. 6448 Cat. No. 6449

.5 mfd..... 38c 1. mfd..... 65c

#### De Luxe Car Antenna



#### FEATURES.

More sensitive, in Most cases Excels Roof Reception. Triple Action Spring Suspension. Impossible to Short or Ground. Universally Adaptable to Every Auto-mobile. All Parts Rustproof and Sturdily B.

6. High Tension Non-Shorting Lead Wire, 7. Ward Rubber Spiash-Guard Furnished with each Antenna, 8. Permanent, Efficient and Easy to In-

cannot Break or Crush. Proven performance on Phileo, Motor-ola, Majestic, General Motors, Spatton, Crosley and all other makes of Auto Radio. Shipping weight, 5 lbs.

8925 Our Price .....

#### Flexible Car Antenna



Length 86 in. 54 in. 54 in. 54 in. Cat. No. 7136 7138 7438 7439 Price 80.85 Width.

Easy to

Made of closely woven electrolytic copper mesh, and covered with a black meritas synthetic leather. It is 52 in long and is mounted underneath the out, tied to springs or axles, as shown, by means of the four sturdy canvas straps. Extremely sensitive, and efficient.

#### Special Automobile Antenna

Same in appearance and construction as the No. 349 Deficies ANTENNA, except that the Irikis have been omitted in order to bring it down to a popular price.

Cat. No. 316 \*198

#### RID POLICE THRILLER

SHORT WAVE CONVERTERS

What a Thrill to Get Police Calls and Reports or Pick up Some Other Event Which Never Appears in Print!



Socket Type Tube Cat. No. 227 6047 224 6048 List, \$2.50

BUD POLICE THRILLER fills a long wanted need for a simple device that can easily be attached to the radio cet without the necessity of changing any wiring in the set of incurring any expense other than the price paid for BUD POLICE THRILLER.

the price paid for BUD POLICE THRILLER.

BUD POLICE THRILLERS are made in two types. One type is to be used where there is ample space for the adapter and tube to fit into the socket. The other type is to be used where the cabinet of the radio set is so constructed that the Police Thriller would not fit in because of insufficient space in cabinet. Because of this we have one which has a plug attached to the Police Thriller. This plug is to be placed into Detector Tube Socket.

BUD POLICE THRILLER when connected to broadcast receiver changes the tuning from 80 to 200 meters on the broadcast receiver. This will enable you to bring in amateur broadcasts in addition to Police Cells. Instructions for operation of BUD POLICE THRILLER in broadcast receiver is printed on each box in which BUD POLICE THRILLER, is packed.

No. 6050 for sets using screen grid de-

Our Price \$2.10

No. 6049 for tels using 227 or 2.38 detector tubes.

External Type

The Type UX
A dapter, list
price \$15.00, fits
any set using
UX-201A,
UV-201A
UX-198, WD-11
or AC-226 Cat. No.

Cat. No. 73 List, \$3.50

type tubes.
The Type UY
Adapter, list
price \$15.00, fits
only those sets
using UY-227 only those sets using UY-227.
A. C. tubes, either as first radio frequency amplifier or as detector in the detector socket.



Price \$4.95 For Either Type

No. 6048 for sets using screen grid de-tector tubes. No. 6047 for sets using 227 or 327 detector tubes.

Our Price \$1.50

#### SHORT WAVE Superheterodyne Coil Assembly



Short Wave Super-heterodyne Coil Assembly for 10-200 Meters Cat. No. 6572

Our Price \$3.75

An assembly of short-wave cois and a low capacity switch eliminating the inconvenience of plug-in coils. Just a turn of the switch enables the choice of the 10-20, 20-40, 40-50 or 30-200 meter coils. Coils may be readily wired into a short-wave converter circuit for use with TRF. or superheteroryne broadcast receiver. Circuit is so arranged that all power for the converter is furnished by the broadcast set. Complete wiring diagram and instructions for building short-wave converter furnished with each assembly. Each assembly equipped with knob and ecuicheon plate asserted with wave length. Overall dimensions of entire coil and switch assembly, 47s in, wide by 4% in, high by 6% in ions.

#### Midget Set Table

This radio table of This radio table of simple construction, yet handsome design, finds its place in the home where space is a factor. Constructed of scienced gumwood for strength and handsomely high high 12 in. wide, 17% in. long.



\$2.50 Cat. No. 507

#### Naald Bakelite Short Wave Plug-In Coils

16 to 200 Meters

The onest grade Lits wire wound on bakente ferms. Will fit standard UX



Per Set of 4.....

\$150

## I. C. A. Short Wave Plug In Coils

Groove Wound



Cat. No. 6980 Our Price \$2.95

Per Set of 4

The finest quality short wave cours. Wound on ICA low-loss bakelite forms. Carefully and accurately designed to fit U.K. sockets. Four coils covering band of 16 to 225 meters.

#### Air King Short Wave Plug-in Coils

THE A-C DAYTON

Fleweling Short Wave

Adapter

Wave length range 18-18 meters; has 3 plus-in cods for 3 wave length ranges—17-29, 27-48 and 47 to 84 meters, which are the only active broadcast bends. No additional tubes or batteries recuired. Adapter comes complete with nothing else



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

\$1.50 Ca. No. 4300

#### Naald Coil Forms

Color Coded Plug-In Coil Forms

Genuine Makalot—brilliantly colored code rings of red,
green, relow and blue. Diameter 14". Winding space
2". Overall 2 11/16". Provided with flange for easy removing. Natural easy grip
that removes coll without
touching or distorting winding.
Center opening to put wire
through when winding and before soldering. Tapered holes to prongs
for easy insertion of leads.



Cat. No. 6605 -4 Prong-15e 6696 -5 Prong-15e 7858 -6 Prong-18c

MAIL ORDERS TO ATT See Terms on Page 3 Federated Purchaser Inc.

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

## ROLA DYNAMIC SPEAKERS



Series 66K 22

These are the new 1932 Rela Model K Series with prestly. troproved reproduction. Where previ-

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 mag-netic strength as well as finer tone reproduction. Greater undistorted output can now be handled without overload.

Single				P. P. Output
Cat.			Our	Cat.
No.	Model	Size	Price	No.
141	K-5	6%x5%"	\$4.50	178
142	K-6	8%x5%"	4.95	179
143	K-7	9%x5%"	5.25	184
144	K-9	11 x5%"	5.95	183
Maria San		the same of the sa		

Pull transformer. Standard field coll resistance, 2500 ohms for excitation by 40 to 80 milliamperes of direct current at 75 to 150 volts.

#### Utah Balanced D.C. Chassis

2500 Ohm with Input Transformer

Utah Balanced Shielded Dynamic Chassis is the highest development in sound reproductions. This speaker is built for those who desire to handle volume quality of tone over the full range of musical instruments. Balanced



#### Dynamic Speaker Field Coils



		200
Cat.	Speaker	Our
6549	Colonial 33	1.50
7191	Freed Eiseman 80, 85	1.45
7192	Jensen 1,000 Ohms	T.45
7267	Peerless 7,000 Ohms	1.25
5819	Radiola 104	
5162	Radiola 80, 82, Westingho	ouse
	WR5, 6, 7	2.00
7142	RCA Photopnone 2,000 Ohm	2.50
7143	RCA Photophone 6 Ohms	5.50
7314	Silvertone 1000 Ohms	
6522	Victor R32, 52, RE45, 75	

#### Series 64 8792

These new Rola speakers are designed for use with midget radio sets and small electric phonographs. They are highly suited for



Cat. No. 186 \$3.75

Model F-P, for one 47 Pentode Tube.

Cat. No. 187 83.75

Model F-M-Unit less input transformer. Cat. No. 188 83.25

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

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.

Require only 40 mile

Type Cat. No. 



## RADIOLA

Model 106 Speaker D. C. Chassis

This speaker has a field re-sistance of 1000 ohms and is de-signed for 110 voit D. C. opera-tion. It can, how-ever, he used as a choke in A. C. Sets or a Setd exciter unt Built to furnish the necessary excita-

to furnish the necessary excitation. Comes acquipped with output transformer designed to mate up to the UX-250. Vois to 15 ohms, 10½ in. to match any single tube 50. Voice Coil impedance 10% in. over-all cone dis.

Cat. No. 114

\$4.95

## Utah 12-Inch Stadium A. C. Dynamic Chassis

110 Vols A.C. SPECIAL MODEL 25 or 60 Cycle

A superior heavy duty unit for bone, thea-tre, large half or outdoor use. Cap-able of handling extrans volume

extrans volume without distertion. Empiovs
Westinghouse Dry
Disc Rectiner
and extra heavy
transformer saltable for 110 volt
25 and 60 cycle A.C. current light-socket
supply for field excitation.

Individually packed. Shipping weight, 24 lbs. List \$20.60

Cat. No. 166 \$3.50

#### Genuine Victor D.C. Dynamic Speaker Chassis



Complete with Plug for connection to the Victor Amplifier.

Used in Victor Receivers Nos. RE-75, RE-45, R-32, and R-52, in conjunction with Victor 245 Push-Puls Amplifiers.

Operates from 110-voit D.C. Voice coldinapedance 15 ohms, D.C. field resistance, 2.566 ohms. Balile opening 9 in. Displayment 7 in. A veproducer of unexcelled tone quality and great power. Suitable for use with any type receiver requiring above resistances. 24 in. cable.

Cat. No. 149

85.95

## Majestic Dynamic Speaker

As Used in Majestic 70, 80 and 90 Receivers



2730 Ohms, D.C. without Output Transformer.

Transformer,
Diameter of
Cone, 9 in.
Complete with
connecting cable
and trainal
strip. Very ragged
construction and
suitable for
replacement in
other sets and
for public address
installations.

Cat. No. 157

\$5.95

4 order blanks have been included in the center of this catalog for your convenience. Use them.

MAIL ORDERS TO RES

Federated Purchaser Inc.

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

#### R. C. A. PHOTOPHONE **Dynamic Speakers**



Cat. No. 161 Less Baiffle

1000 Ohm

These genuine RCA Photophone Dynamic Speakers were designed for use in large theatres, dance halls, auditoriums, etc., where large assemblages are addressed. They will take great output without distortion. There are very few of these speakers left and when they are gone, you will not be able to secure them for many times their present prices. Ruy now for future use.

Cat. No. 161 — RCA Photophone, 1000 Onm D.C. field, with convenient \$750 mounting holes on frame.....

#### Sound Truck Photophone

Cat. No. 152-RCA Photophone with 6 V. D.C. field coil for use with 6 or 12 volt storage battery for auto 1500 trucks, portable systems, etc. trucks, portable systems, etc.

#### **Matching Transformers** for RCA Photophones



Shielded output trans-former for 245, 250, 171A and 230 tubes in push-

Cat No. 2874 \$7 45 Un hielded output transformer, same as above. Cat. No. 2571 Our Price

#### 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 dynam-ic is very sensitive and will carry ample volume. Housed in an attractive black crystaline metal case 9" in diameter, with 3 mounting brackets.

Federated is headquarters for all public address equipment. See pages 50 to 62.

#### "Reflex Field" Speaker Chassis

Overall Diameter, 9 in.

The unique construction of the Operadio



struction of the Operadio Dynamic Speaker places it in a class by Itself. The field coil not is located in front of the charge in front of the charge in the rear and is supported by extra heavy rigid cast from frame, making the speaker rattleproof and ultra sensitive. Sappled in standard field changes and for all power tubes, y low price.

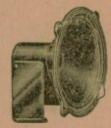
at a sensationally low price.

#### SINGLE OUTPUT

Dat. No.	Tubes	Field Olams
190	171A, 245	2500
191	247	2500
198	171A, 245	1800, tapped at 300
104	247	1800, tapped at 300
	P. P. O	UTPUT

171A, 245 247 

Jensen "Concert" D.C.



Model D 7 D.C. 2500 ohm Field 10 in. Diameter 5 ohm Voice Cell

These units contain suitable push-pull trans-formers and are absolutely humformers and are absolutely hum-free. Connect di-free. Connect di-rectly to the set —ne outside

As most standard manufactured A.C. sets are engineered for D.C. speakers of this ohmage, the possibilities for replacement 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 svallable quantity at this price is limited.

List \$27.50

Cat. No. 121

**CARTON OF 2, \$11.00** Original factory packing of 2 in a carton

#### Utah Dynamic Auto Speaker



5 in. FULL DYNAMIC SPEAKERS of Utah's high standard. 6 volt field. Speakers sup-plied with 12 in. leads.

List Price. \$10.00

At liable for use with 112A, 171A, 235 or : 3 tubes in SINGLE or PUSH-PULL OUT 'UT, housed in an attractive metal case with movable side-brackets which fact rate mounting at any desirable angle.

Cat. (o. Type 1( Single 171, 233, 236, 236, 236 1( P.P. 236, 228

#### Wright-DeCoster Dynamic Reproducers

A popularly priced line of the famous Wright - DeCoster speakers with no sacrifice in quality. Will handle up to 6 watts without dis-tortion. Overall dia-meter, S in. Equipmeter, 8 in, Equip-ped with output transformer. The fol-lowing models all have a 2500 Ohm



Car. No.

336 For Single 171A, 245 and 250 Tubes 341 For P. P. 171A, 245 and 250 Tubes

Tubes
For Single 247 Tubes
For Push-Pull 247 Tubes
For Push-Pull 46 Cisss B
For Single 247 With 1800 Ohm
field tapped at 300 ohms

All One Price \$450

#### Wright-DeCoster Super De Luxe Speakers

Overall Dinmeter, 1 2 in.

For Push-Pull 245 and 250 with 1900 Ohm Field.

Cat. No. 347 8995 Our Price ...



#### Wright-DeCoster 6 in. Dynamic Speaker

The size of this little unit greatly belies its accomplishments. You will really
have to hear the No. 255 before you
can believe a speaker so small is capable
of reproducing with such splendid fidelity.
We are enxious to have everyone looking
for real quality in a small speaker hear
this Model No. 255.

The good looking felt lined metal cabinet with its rich black Crackle finish
nettirely shields and dust-proofs the unit.
Complete shielding of the Chassis greatly
decreases the chances of the speaker picking up ignition noises.

ing up ignition noises.

Cone 4½ in. Outside diameter of cone bracket, 6% in. Depth 3% in. Depth Diameter of Cabinet 7½ in. Depth

4 in.
Overall Diameter 6 in.
Cat. No.
Type
342 For Single 45,
2500 Ohm Field
343 For Single 47,
2500 Ohm Field
344 For Single 47,
with 1800 Ohm
Field tapped at
300 ohms

Each .

300 ohms Our Price

\$995

#### Wright-DeCoster Automobile Dynamic Speaker

Overall size 7 in.
An inexpensive Auto Speaker with Wright-Decoster quality. Same chassis as described above.
Cat. No. Type

For Single 171A, 233, 236 and 238

346

For Push-Pull 236 and 238 Our Price



#### The Genuine BBL Magnetic Speaker Chassis

Employs the well-known B. B. L. Magnetle unit. Sturdy metal framework, 9 in. burtex diaphragm. Very compact. 5 fl. cord included. Shipping weight 6 lbs.



Shipping weight 6

Ibs.

For many years
B, B. L. has been
the standard of comparison in speakers. A short time ago this speaker chassis was used by such well known manufacturers as Amplion. 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. B. B. Le's special cobalt steel magnet and eversize code makes for fathful reproduction, will handle 450 volts without burning cut.

Cat. No. 303—List Price 38

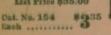
Cat. No. 303-List Price \$8 Our Price ......

#### Kolster K-6 Speaker

Bise:

124 in, high, 12 in. wide. Tip. deep.







Equipped with a highly sensitive over-size magnet and a driving unit that is one of the finest, the Kolster responds instantly to the faintest impulse. It faith-fully reproduces both voice and orchard-from the faintest whisper to the fullest voiume of a brass bond. Yet, due to its special construction, the Kolster cambit rattle or blast at any frequencies, and it always brings out the lower notes in their full musical value.

#### FROST FONES

#### The Standard of Quality 2,000 Ohm

Prost 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 Prost Pones ratisfy the exacting demands of those wishing to obtain extremely sensitive instruments. Light in weight, comfortable to wear and easily adjusted.

All materiais used are of the very highest quality, and these phones are made in a plant which for ever thirty-five years has manufactured high grade telephone equipment.



years has manuractured high grade tele-phone equipment.

For testing radio parts or complete sets

for lining up condensers—for peaking
intermediate transformers or any similar
uses these chooses may be depended upon
to give perfect satisfaction.

Cat. No. 6200 \$1.65

Eismann Magneto Phones \$1.45 Cat. No. 5723

Genuine Baldwin Type C Phones Cal. No. 7123 \$3.95 pr.

#### Victor Cone and Voice Coil For Victor Models R32, R52,

RE45 and RE75

These are the famous Stevens Burtex cones edged with soft velour. Voice coil and leads for quick installation and precisely fitted.

Cat. No. 6519



#### Our Price S1.35

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

Make of Courts of the	But Mr.	Our
Make of Speaker Size	Cat. No.	Price
Atwater Kent 11"	552	\$2.75
Colonial 33 12%"	553	2.25
Decatur 94"	554	1.90
Eugrandu 10"	555	1.90
Everandy 191/	556	2.25
Farrand 7"	557	2.25
	991	2120
Farrand Ind.		
	558	1.35
First National 164"	559	1.90
Freed-Eisemann		
NRS0, NRS7 10"	560	2.70
Jensen DC7		
Concert 114"	561	2.25
Kolster 11"	4269	.15
Triataines T	582	0.05
Magnayor 7"		2.25
Majestie 70, 90	563	1.80
Newcomb-Hawley 7	nna	8.25
Oxford 9"	BOB	1.95
Oxford 8%"	RRA	然。根据
Ponetro	BRR	1.50
Starling 7"	569	2.25
Streenberg		
Carlson 11"	570	9.25
A THE RESIDENCE OF THE PARTY OF	571	1,90
Symington 124"	572	2.25
Peerloss copper	MAR .	W ===
coll 814"	573	1.60
Peerless copper		
coil 104"	574	1.95
Peerlas copper	200	-
eoil 12"	575	2.10
	010	2.10
Peerlas copper		WHA
coll 1414"	576	2.50
Peerless wire		
wound coil 8%"	577	1.45
Peerless wire		
wound coil 10%"	578	1.65
Peerless wire	1000	1
wound coil 14 14"	879	0.75
	580	2.75
Temple 7		
Temple 11"	581	2,75
Temple		
Auditorium 14"	五角兒	2.75
Utah 9"	583	1,90
RCA 106	584	2,00
RCA 166 RCA 164	585	2,00
PCA 105	586	2.00
VICTOR	000	20.00
	MESE	1.35
RE32, etc. ·	6519	1.35
Wright		
DeCoster 8"	588	2.25
Wright		
DeCoster 10"	KAN	2.75
Zenith 11"	591	2.25
RCA	-	-
Photophone	592	2.95
	593	2.25
Bosch 10"	594	1.90
Brunswick D 9%"	595	2.25
Brunswick B 1436"	596	2.75
Brunswick E 1446"	597	2.75
Earl Inductor 10"	598	.95
(Continued in )		
tonnimued in i	seas consistin	

#### Acratone Magnetic Speakers



There are many people who still prefer the magnetic speaker to the dynamic and this speaker meets the demand for a perfect magnetic reproducer and embodies the latest acoustic principles.

Can be used as an auto radio speaker and with any battery or electric receiver utilizing a magnetic speaker. For auto use this speaker sounds better than the

Attractive black crystaline case, per-forated metal grill and 6-foot silk cord. Chassis also sold separately. average low price dynamic and can be mounted anywhere.

mounted anywhere,

SPEARERS
Dia, Cat. No. Price
S" 290 \$4.25
G" 297 3.95
G" 299 2.50

#### Phonotex Diaphragm

For Kolster Magnetic and Dynamic Speakers

111/2 in. Diaphragm Cat. No. 4269



Can be used for re-placement on other magnetic speakers.

Cat. No. 4269A-Voice Coil for Above, 35e



Premier Magnetie Speaker

Cat. No. 5366 \$1.50

FEATURE SPECIFICATIONS

UNIT-A new development-simple in construction and extremely efficient-mag-net of "Chrome" steel,

Marie Contract of the last	THE RESERVE OF THE PERSON NAMED IN	-	Street, or other Designation of the last o
Majestie G1 Majestie G2	97	599	1.80
Majestie G3	11"	609	1.80
Majestie G5	14"	610	2.75
Jensen	7000	2000	1000000
D9, D15	834"	632	1.50
Jensen D4	935"	633	2.25
Jensen	-		10000
Auditor	13"	634	4.50
Magnavox	55"	635	2.25
Newcomb-Hay	wlev 5"	636	2.25
Phileo 65-90	11"	567	1.50
Phileo 20	770	637	1.50
Sterling	9"	641	2.25
Stromberg			
Carlton	1214"	642	2.75
Stromberg		-	
Carlton	9"	643	2.25
Sparton No. 7	37 9"	644	2.25
Steinite	10"	645	1.90
Utah Stadium	10"	647	2.75
Wright			
DeCoster	12"	648	2.75
Zenith 52	1244"	649	2.25

Great News for Battery



Set Buyers! RADIOLA 28

8 Tube Super

Complete With Eight Radiotrons



raising hinged upper section of receiver.

Tubes used and furnished with receiver are 7 UX-199 Radiotron, 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 sailboats, 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. Employs twelve 1½ V. No. 6 Dry Cells.—Cat. No. 6656

Three 22½ V. B. Batteries—Cat. No. 6685—and two 45 V. B. Batteries. Cat. No. 6905.

Cat. No. 6905.

Complete With All Batteries, Tubes and Speaker Ready to Piny

Cat. No. 128 \$22,25

#### GENERAL ELECTRIC End Table Electrola



24% in. high 16 in. deep, 26 in. wide, MODEL TO Has sliding top. A Midget placed on top Radio can be and does not have to be removed when phonograph is

Our Price ....

\*1650

#### To Meet the Great Demand

We Have Secured a New Shipment of

#### COLUMBIA AUTOMATIC PHONOGRAPHS AND AMPLIFIERS

This Deluze 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 dustomers 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 Koliter Amplifier, using 1—227, 2—2455 and 1—280 tube, giving tremendous volume without distortion; a Rois 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 \$29.50. Why, the record-changing device alone is worth more, to say nothing of the Ampiliar and Dynamic Speaker and Pick-up and the gorgeous walnut console cabinet in which this outfit is housed.

This wint 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.

for home talking amplifiers.

Any number of organizations 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 alongished 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.



Cat. No. 200

List Price, \$295.00

\$29.50 Special

Employs: 1-227, 2-245 and 1-280 Tube SET OF UNIVERSAL TUBES \$2.50

#### Victor 2-Stage Power Amplifier R. C. A. Model AP-736





Uses the 226, one 250, and two 81%. Used with Victor Electric Orthophonic Phonograph No. 12-15 Electrola and the R. C. A. No. 105 Speaker Output transformer in amplifier matched for 11 obm voice coil impedance with 1,000 ohm field resistance. Supplies dynamic speaker field of 110 voit D.C. at 110 mills. Undistorted output at 5 watts which is enough to handle at least three dynamic speakers. Amplifier operates on 110-120 50-50 cycle A.C. current. Excellent power amplifier for use with phonograph pick-up or radio sets.

\$11.49 Cat. No. 81

4 order blanks have been included in the center of this catalog for your convenience. Use them.

#### STEWART WARNER Magnetic Speaker



Chassis It is the only magnetic speaker having laminated pole pieces increasing the magnetic flux. Coll impeding 171A, 245, 269, or 231 tupes.

Cat. No. 150

ance 4500 ohms, match-

#### Our Price \$1.95

For many years this has been the standard of comparison in apeakers. A short time age this spesker chanais was used by such well known manufacturers as Amplion. Newcombe-Hawley, Marco, Stewart-Warner, etc. This speaker reproduces the full musical scale with as much fidslity 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 cobali steel inagnet and oversize coils make for faithful reproduction. Will handle 450 volts without burning out. out burning out.

#### Superior Shielded Audio Transformer



A real quality job for pure tone and volume.

Ratio 316 to 1.

Our Price games 69e Cat. No. 2513



#### ARCTURUS TUBES

Arcturus Radio Tubes have earned a reputation for absolute depend-ability. 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 pe-

ried of six months from date of sale.

Till:	y S	
63	BES	
Tubes All Th	Give You LIFELIKET cantages	

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 num 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 Arc-turus tube.

List Price, \$1.65

87c

#### 127-Detector

The star of the Arcturus line. Acts in 7 seconds. Specially constructed to diminish hum.

List Price, \$1.05

56c

132-2-Volt Screen Grid

List Price, \$2.35

\$1.25

	No.	Туре	List	Net
		Amplifier	\$ .85	\$ .45
	145 Power Amplifier		1.10	.59
	181	Half Wave Rectifier	5.20	2.75
	150	Power Amplifier	6.20	3.28
	130	2V. Automobile Tube	1.65	.87
U	K099	Detector-Amplifier	2.55	1.35
U	V#99	Detector-Amplifier	. 1.75	1.45
	101A	Detector-Amplifier	.80	.42
	012A	Detector-Amplifier	1.55	.82
	122	Screen Grid Amplifier	3.15	1.66
	071A	Power Amplifier	.95	.51
	131	2 Volt Amplifier	1.65	.87
	180	Full Wave Rectifier	1.05	.55
		New Arcturus Tube	es	44
5	6 De	tector-Amplifier	\$1.30	\$ .66
5		Triple Grid Amplifier-Detector		.87
5	8 Tr			.87
82		aplifier	1.30	-68

Class B Amplifier ..... 1.55 46 .82 134 Super-Control R.F. Pentode .... 1.48 6.3 V. Var. Mu R.F. Pentode....
6.3 V. Var. Mu R.F. Pentode.... 139 1.48 44 2.85 1.51 2.5 V. Duplex Diode Triode.... 55 1.60 .85 Var. Mu R.F. Pentode..... 1.65 .88 Gen. Purpose Power Amp. .... 59 1.17 83 5 V. Mercury Vapor Rectifier ... 1.55 .82 85 6.3 V. Duplex Diode Triode..... .85 6.3 V. Gen. Purpose Amplifier. 1.80 96 5.0 V. Power Pentode..... GA 1.45 Wunderlich "A" 2.5 V. Detector-Wunderlich "A" 2.5 V. Detector— 5 Pin Base, 6 Pin Base ...... Wunderlich "B" 2.5 V. Detector. Auxiliary Anode used as a Diode Rectifier; connected to top cap... Wunderlich "A" Automotive 6.3 V. 3.00 1.95 3.00 1.95 6 Pin Base Detector. 3.00 1.95

133-2-Volt Pentode

List Price, \$2.80

\$1.48

137-6-Volt General Purpose List Price \$1.80

95c

Type "PZ" (247)Pentode

Arcturus developed and established the standards on the "PZ" Pentode tube.

List Price, \$1.60 85c

136-6-Volt Screen

> Grid List Price, \$2.80

> > \$1.43

138-Auto Pentode

List Price, \$2.80

\$1.48

## 551 Variable Mu

This is the new "Variable Mu" tub. Its use will eliminate cress talk, distortion, hum and receiver hiss.

List Price, \$1.65

87c

Wunderlich "B" Automotive 6.3 V Detector. Auxiliary Anode used as a Diode Rectifier: connected to top cap. 6 Pin Base .....

1,95

MAIL ORDERS TO ASSESSED Terms on Page 3

Federated Purchaser Inc.

25 PARK PLACE, N. Y. C. or to our neurest branch



## 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

OCH PERSONAL PROPERTY AND ADDRESS OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COL	-	BEILING HIGH ST	A STATE OF THE PARTY OF THE PAR	
	List	Our	List	Our
Type	Price	Price	Type Price	Price
		100000000000000000000000000000000000000	232 2-Volt Screen Grid. 2.35	.72
WD11 DetAmp	\$3.00	3 .72	233 2-Volt Pentode 2.80	.79
WD12 " "	3.00	.72	234 D.C. Vario-Mu Pen-	
55 Duo Diode Detector	1.60	.70	tode 2.30	.87
56 A.C. Gen'l Purpose.	1.30	.58	235 Multi Mu 1.65	.53
57 A.C. R.F. Pentode	1.65	.70	236 Auto Screen Grid. 2.80	.79
58 A.C. Vari-Mu R.F.		-	237 Auto Gen'l Purpose. 1.80	.65
Pentode	1.65	.70	238 Auto Pentode 2.80	.79
59 Power Amplifier	2.80	.70	239 R.F. Pentode 2.8	30 .79
85 Duplex Diode Triode	1.60	.70	240 Hi-Mu 3.00	.87
89 Power Amplifier	1.80	.70	245 Power Tube 1.10	40
112A " "	1.55	53	246 A.C. Pentode 1.55	.65
120 3-v. Amplifier	3.00	.72	247 Pentode1.60	.53
171A W-Amp. Amplifier	.95	.38	250 Power Tube 8.20	1.38
132 Sparton	2,50	.87	280 Full Wave Rect 1.05	.40
183 Sparton	2.20	.87	281 Half Wave Rect 5.20	1.45
199 U.V. Det. Amp	2.75	65	282 Full Wave Mercury	
199 U.X. Det. Amp	2.55	.65	Rect 1.30	.58
200A -Amp. Detector.	4.00	.70	283 Rectifier 1.55	.70
201A 4-Amp. Detector.	.80	.32	401 Kellogg Type 4.00	1.74
210 Power Tube	7.25	1.52	403 Kellogg Output 4.50	2.02
216B Rectifier	7.25	87	484 Sparton 2.00	.87
222 D. C. Screen Grid.	3.15	1.08	551 Multi Mu 1.65	.53
224 Quick Hester	1.65	.53	585 Sparton 6.00	2.19
226 Det. Amp	.65	.35	588M Mercury 2.50	1.75
227 Det. Amp	1.05	.38	686 Sparton 4.00	.87
220 2 Volts Det	1.65	.65	866 Half Wave Rect 7.50	1.75
231 2-Volt Amplifier	1.65	.65	BH125 Full Wave Rect. 4.50	1.08
	100	200		

#### TAYLOR TIBES Amplifiers

Max. plate volts

1000

Type 210	Fit.	Fil. amp.	Mu 10	Max. DC volts modulated	Max. DC volts non. mod	
5208 845 211	7.5 7.5 10	1.25 1.5 2.5 2.5	3. 4. 5 12		25 25 75	

12

Mn

mp.

Type	Purpose	Fil.	Fil.
281 866	HW Mer.	7.5	5

2.5

Type 210

211

10

Rectifiers Plate Voltage and Plate Current Max. volts per anode 750 RMS Max. r Max. pk. inv, volts 7500 Pk. ma. 600

outp

Plate milli. umps. 75

55555

# Qunningham.

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
11	Detector Amplifier	\$3.00	81.76
12	Detector Amplifier	3.00	1.76
46	Class B Amplifier	1.55	.91
55	Duo Diode Detector	1.65	.94
56	General Purpose Triode.	1.30	.77
57	Triple Grid Amp,-Det.	1.65	.94
58	Triple Grid Super Con-		
	trol	1.85	.94
112A	Amplifier	1.55	.54.
120	Amplifier	3.00	1.76
171A	Amplifier	.95	.61
199UV	Amplifier Detector Amplifier Detector Amplifier	2.75	1.01
MUSTINE	Detector Amplifier	2.55	1.50
200A	Super Detector	4.00	2.33
201A	Detector Amplifier	.80	.44
210	Power Amplifier		4.12
224	Screen Grid	1.05	50.
224A	Quick Heater S. G	1.65	.97
226	A. C. Amplifier	.85	.50
227	A. C. Detector	1.05	+62
230	2v. Gen. Purpose Tube	1.65	.97
231	2v. Output Tube	1.65	.97
232	2v. Screen Grid		1.38
233	D. C. Filament Pentode		1.64
235	Super Cont. S. G	1.65	.97
236	8 C. R. F. Amp. D. C.	-	
	Heater	2.80	1.64
237	Dt. Amp. D. C. Heater	1.80	1.06
238	D. C. Henter Persode	2.80	1.64
240	Hi-Mu Amplifier	3.00	1.76
245	Power Amplifler		.64
247	Power Pentode	1.60	.94
250	Power Amplifier	6.20	3.64
380	Full Wave Rectifier	1.05	.62
381	Half Wave Rectifier	5.20	8.06
282	Full Wave Merc. Vapor	0.20	0.00
-			-74
868	Photo Electric Cell	7.50	5.00
874	Voltage Regulator	4.90	2.88
876	Ballast Tube	6.70	8.36
210	********	4.10	8100

The Taylor High Vacuum Tubes are nationally advertised through all sound engineering publications. These Taylor tubes are apt to be confused with standard types of tubes, but are especially centructed for public address and motion picture work.

As an instance, the 250 standard of Taylor is pumped for a period of 250 thours to assure the absence of gas and to remove distortion characteristics. The general run of 250 tubes are pumped for I hour 30 minutes.

Taylor tubes are not sold for resale purposes. These tubes are licensed by Western Electric and the Radio Corporation of America. They are guaranteed for a period of three months from the

		purchase.	nree montus	mont me
is.	plate	Mutual ond. M Mhos	List Price	Our
2	4500	1700	\$ 7.00	\$ 4.20
в	1800	2100	6.00	3.60
Õ	1800	2500	7.50	4.50
	2100	2380	25.00	15.00
	3400	3600	25.00	15.00
	Aver.	Mutual		- Contract of the Contract of
	plate	M. Mhos	List Price	Our
	res. 4500	1700	\$ 7.00	\$ 4.20
	3400	3600	25.00	15.00
		5s)		0ar Frice \$3.00 3.90

Normal plate volts 450

450

450 1000

1000

Max. plate watts

OOL

1250

Grid bias volt 30

84

150 55

> Max. RF ILTROS. 6 7.5

Oscillators



HERE at last is 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 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-TEST 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 only the purest electrolytic copper wire is used for the windings. 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 eightest 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 assortment and convince yourself of their special

## Acralest

#### Standard Replacement Transformer

With Universal Mounting Brackets



For Sets Using Up to 6-221 or 227, 2-245 or 247 and 280 Tubes

Size 4% in. x 315 in, x 456 in.

(No. 5191) Supplies the following 2½ V. at 10½ 5 V. at 2 amps.

Amps. C.T.
2½ V. at 3 amps. 730 V. at 75 C.T.

Cat. No. 5191, 50-60 Cycles \$595

For sets using up to 4-226, 2-227. 2-171A and 1-280 tubes.



Price ...

Size 434" x 314" x 416"

142 V. at 6 maps. 5 V. at 1 mmp.
215 V. at 815 5 V. at 2 amps.
225 V. at 815 5 V. at 2 50 mils.
225 V. at 827 7 V. at 80 7 V. at 80

Cat. No. 6025

For sets using up to 5-227, 2-171A and 1-280 tubes.



300 V. at 70 mils potential.

(6556) Supplies the following: 2½ V. at 8¾ 5 V. at 2 amps. amps. 625 V. at 60 5 V. at 1 amp. Cat. No. 0556 mills C.T.

#### 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; 5 V. at 2 amps. 716 V. at 7 amps. 575 V. at 80 mils. Reciffed: 325 V. at 20 mils.

Size 3% in x 314 in x 316 in. Cadmium Plated Frame. This indiget power transformer although of small dimensions, is very rugged and will furnish satisfies the current for 4 screen grid. 1-245 or Pentide amplifier, and -280 rectifier tubes, without overheating. It will fit 50% of the midget sets on the market, like Clarion Justor, DeWald Audiola, Metorad, Radlette, Crosley, Audiola, 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



(5700) Supplies the following 214 V, at 12 amps, 715 V, at 3 amps, C.T. inlis. C.T. 8475

This transformer is ideal for transmit-ting and public address operation.

It has a 2½ voit winding at 12 am-peres, 2-7½ voit windings at 3 amperes and a 1200 voit center-tapped plate wind-ing at 160 milliamperes. Lug terminal arrangement identical to our Cat. No. 8190.

## Heavy Duty Side Mounting Midget Power Transformer

For Sets Using 4-224 or 227, 2-245 or 247 and 1-280



Size: 274x224 In. Mounting Holes C. to C.

Supplies the following voltages:
215 V. at 7 amps, 650 V. High, at 85
C.T. to shield. mils., C.T.
C.T. at 3 amps.,

C.T.

Features:

1.—Electrostatic 3.—Heavily insulated coil.
2.—Special silicon 4.—Extremely low steel core core loss.
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 lamination hum.

"250" Power Transformer



Supplies Filament and Plate for 6-227 or 224, 2-250 and 2-281

(5190) Supplies the following
2½ V<sub>2</sub> at 10½ 7½ V. at 8 amps.
amps.
7½ V, at 3 amps. 1,000 V. at 110
C.T.
This transformer is excellent for use in
power amplifiers and for replacement in
standard sets. The unique bracket arrangement on this unit makes it extremeity simple to install.

Cat. No. 5190 Our Price

We carry Power Transformers for over 200 standard receivers. See back of book for complete list.

## Acralest

Midget Set Power Transformer

For All Midget Sets Using



### **Price \$2.85**

Supplies the following voltages: 2½ V. at 7 amps. C.T. 5 V. at 2 amps. 2½ V. at 3 amps. C.T. 695 V. at 120 mils. Rectified: 650 V. at 85 mils. C.T. Size only 4 in. x 4 in. x 3% in. Equipped with safety fuse block. For 110-120 v. 50-50 cycles A.C.

# Acralest

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 amps. 5 V. at 2 amps.

600 V. at 70 mils.

Can be used as replacement in such sets as Gloriotone 4-tube, Fansteel Reporter, Traveler 4-tube, Jackson-Bell, Peter Pan, Paramount, Echophone 4-tube, etc.

Wiring Scheme



Scheme included with each Transformer 3½x2½x3" Weight, 2½ lbs,

Cat. No. 6027

Price \$1.35 ea.

## Acralest

Replacement Transformer

With Universal Mounting Brackets For Sets Using Up to 5-226, 1-227, 2-250 and 2-281 Tubes.
Size: 4% x 3½ x 4½ ln.



Supplies the following: 1½ V. at 7½ A. 2½ V. at 3½ A. 7½ V. at 3 Amps. C.T. 7½ V. at 3 A. 1000 V. at 115 mile. C.T. Cat. No.

83.95

## Acralest

Filament and Plate Supply Transformer

For Short Wave Adapters and Oscillators

Supplies 21/2 V. for 4-227 Tubes and 165 V. at 20 Mils.



Cat. No. 3194

\$1.45

This transformer is particularly useful in oscillators, short wave sets, short wave converters, power supplies for tuners, pre-heaters 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 times.

# Acratest

Tube Tester Replacement Transformer

Supplies 11/2, 21/2, 5, 6 and 71/2 Volts at 2 Amps All from a single common



Cat. No. 6024 Size: 31/4 in. x 21/4 in.

\$1.40

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 3½ volt windings as their current is low and on low current the voltage goes higher.

# Acrales

25 Cycle Midget Transformer



For 224, 235 or 551, 245 or 247, and 280 Tubes Upright Mounting wide, 4% in. high Cat. No. 3454

\$2.95

See Our Complete Power Transformer Listing Containing Over 200 Transformers in Back of Book.

## Acralest

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



Caso
Siso: 3% in. x 8¼
in. x 8½ in.
Supplies the following voltages:
2½ V. at 7 amps.
2½ V. at 1% amps.
5 V. at 28 amps.
600 V. at 90 mils.
Rectified 375 V. at
90 mils.

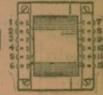
Cat. No. 5187 for 50-60 Cycles

Price \$1.95

Midget Replacement Power Transformer Supplies:

For 4-224s or 227s, 1-247 or 245, 1-280





Our Price ....

1 & 2-5 V. at 2 Amps,
3 & 4-Blank
5 & 6-Frimary
7 & 9-Blyn Voltage at 688 V. at 80
Mile.
10 & 12-354V. at 85 Amps,
11-C. T. of above grounded to frames.
8% in, long, 3% in, wide, Weight 5 lbg. Cat. No. 6250

# Acralest

Power Amplifier Transformer



For 224, 227, 250 and 281 Tubes Supplies: 2½ Volts at 8½ Amps. C.T. C.T.
7% Volts at 2% Amps.
7% Volts at 2% Amps.
C.T.
1200 Volts at 150 Mils.
Cat. No. 6918

Price \$3.85

Crosley Power Transformer

For Model 608 Replacement Part No. 5143

For Sets Using: 8-226 Tubes 1-\$27 Tube 1-\$171A Tube 1-\$80 Tube

For 110, 60 Cycle A.C. Size 4x3 1/2 x2 % in. Cat. No. 5075 950



## Acralest

#### Replacement Power Transformers





Type P

Type F

A transformer for every purpose at prices for every purse. The features of these transformers are:

Rugged construction
Compactness
No lamination hum
Ample safety factor
Fase of lost alla ion
Universal Application.
Model listed below are for 115-V. Co-

## Type F-5 Tubes

3-224, 1-247 and 1-280



Size 43, x31 x31" Chassis opening 2x215 1 & 2-Primary 3 & 4-212 V. at 7.25 A. 5 & 9-625 V. at 60 Mil-6-C. T. of High 10 & 11-5 V. (286)

CAT NO. 8757

Cat. No. 6757

## Our Price \$1.95

#### Type F-8 Tubes 5-224, 2-247 and 1-280

1 6 0 7 (1) 2 3 (12) (13) **(4) (8)** 

14

3 9

Charsis opening 2x27'a" 1 & 10-21. V. at 9 A. 6-C. T. of above 2 & 11-212 V. at 312 A. 7—C. T. of above 3 & 13—5 V. (280) 4 & 12-675 V. at 90 Mils 8-C. T. of High 5 & 14-Primary

Size 4%x31/4x31/4"

Cat. No. 6758

## Our Price \$2.25

#### Type F—12 Tubes

9-224, 2-247 and 1-280 Size 43 x33 x31 " Chastis opening 2x3" 1 6 9

1 & 9-2½ V. at 16 A.
6-C. T. of above
2 & 10-2½ V. at 3½ A.
7-C. T. of above
3 & 11-5 V. (280)
4 & 12-675 V. at 110
Mills
C. T. of high grounded 2 3 10 (3) (11) (12) 1 C. T. of high grounded to frame 6 & 13—Primary 5 5 3

CAL HO. 6759

Cat. No. 6759

#### Our Price \$2.85

(Continued in Next Column)

(Continued from First Column)

#### Type P-9 Tubes

6-224. 2-247 and 1-280 Size 4x314x334

(7) (2) (9) (3) (10) (4) (ii) (12) (5) (13) (6)

Chassis opening 2-11/16x I & &-Primary 2 & 3-730 V. at 75 Mile C. T. of high grounded 9 & 10-5 V. (280) 4 & 11-214 V. at 1014 A. 5 & 12-215 V. at 3 A. 6-C. T. of above

CAT NO 6760

Cat. No. 6760

## Our Price \$1.95

#### Type P—12 Tubes

9-224, 2-247 and 1-280

_		
0		(8)
(2)		(9)
(3)		(10)
(1)		1
(5)		(12)
(6)	•	(13)
CAT	NO CO	

Size 4x314x1" Chassis opining 2-11/16x

1 & 9-21, V. at 16 A. 2-C. T. of above 8-C. T. of above 4 A. 5-5 V. 1280 3 & 10-21, V. at 314 A. 11 & 12-675 V. at 110 Mile of blab exceeded C. T. of high grounded 6 & 13-Primary

Cat. No. 6761

#### Our Price \$2.85

#### TYPE F—9 TUBES

31324, 3-227, 3-247 and 1-280 0 2

Size 334x34x512\* 5-6-212V, at 12A. Yellow-C.T. of above. 7-4-8-215V, at 3 A.C.T. 10-11-5V at 2A. 9-3-12-High, 350V, at 80 mila. 1-2-Primary

3 4 3 0 7 (8) (I) (R) (0)

Cat. No. 6243

#### TYPE F—6 TUBES

2-224, 1-227, 2-171 and 1-280

0 2 3 4 (5) 6 Size 37 x31 x53 ... Size 37 x31 x53 a". 7-9-2; V. at 6A. Yellow Lead—C.T.

7 (8) 10

Yellow Lead—C.T. of above. 6-8-10—2\Lambda V. at 3 A.C.T. 1-3—280 5V. at 2A. 3-4-5—High, 300V. at 75 mils. Primary—Black and Green

Cat. No. 2600

#### Radiart Step-Down Transformer



Primary 220 to 250 Ad-justable secondary 110-125. Cap. 160 Watts.

M. No. 2576

Our Price \$4.25

## Acralest

#### Step Down Transformer

Volt. 50-68.

Voit. 50-68.
Cycle, A. C.
Output—
110-120 Voit
Rated at
150-160 Watt
For use in localities where 220
voit, 60 cycle A.C.
current is suppifed. These
Transformers
adapt current of
that voltage to
A. C. Radio or
of her Electrical
Appliance which
consumes up to



Cat. No. 3157

Appliance which Cat. No. 3157
Appliance which consumes up to 160 watth. Encan'd and easily Shipping wgr. 64 lbs. mounted.

#### Our Price \$2.95

#### Kolster-Earl Power Transformer

For Replacement in Receivers Using 226, 227, 171A and 280 Lubes.



1 & -- Primary 3 & 4-Fil. of 280 (5V, 2A) 5 & T-Plate mila)

6-C. T. of 8 & 9-5V.

10 & 11-2%V. 3<sup>1</sup>/<sub>4</sub> in. long, 3 in. wide, 3<sup>3</sup>/<sub>4</sub> in. tall Weight 3 lbs.

1 & 13-1%V. 75-A (225) 11

A very popular replacement transformer which can be used to many of the early A. C. receivers like Earl, Freed, Kotster, Philharmonic, King, etc. Mounting Brackets.

Cat. No. 2559

\$1.95

#### Philco Replacement Power Transformers

The Most Complete Set-up Ever Offered the Serviceman

> \$2.80 each



	535	939		
Cat. No.	For Mudels	Part No.		
4321	20, 220	4234		
2600	65	3516		
6248	70	5117		
6242	76, 77	3868		
6241	82, 86	3271		
6243	92, 95, 95E,			
	296, 296E	3752		
6244	111, 112,			
	211, 212	4446		
6247	90	4938		
6247	90	5362		
2620	500 Series	3106		

#### RCA-Victor Power Transformers



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

Cat.	Part No.	Set No.	Our Price
2551	8335	17, 18, 33, 51	81.50
2573	8473	14, 16	2.25
3729	GW262	44, 46, 220V. A.C.	3.95
2531	61950	48, 12	1.80
2566	S344	60,62	2.25
2677	GW46	60, 62 25 cycle	2.75
2683	GW147	66	3.95
2676	61144 62401	80-82, 86	1.80
5456	RCA-Victor	84, 85, 39, 87	1.80
2531	RCA-Victor	RE-14, 15	1.80
6670		18, 25 cycle	4.25
6816	8399	41	2.50
3734		17, 18, 33, 51 229V. A.C.	3.95
2675		64, 67	9.45
6009		101 Speaker	4.50
6769	RCA-Victor	RE-35, 39, 57	1.80
8771		Superette	1.95
6919		Theramin	3.95

#### Universal Replacement Filament and Power Transformer

#### Oversized Power Supply

For 227, 224, 245 or Pentide and 286 Tubes Can be used as replacement in 90% of receivers in the market today. All taps mounted on one bakelite panel. Adaptable for 105 to 125 volts, 60 cycle A. C.

Size: 412" long,
31." wide,
53.4" high.
Supplies the
following vols: V. at 1.5 2½V. at 1.5 Amps. 2½V at 3 Amp. 3V. at 2 Amps. 575V. at 100 mils. Rectined: 300V. at 100 nils



Cat. No. 2560

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:

6 227's or 224's or a combination of these Tubes, 2 245's 1 280 Tube.

The Transformer is designed to supply both plate and filament voltages. The Transformer will deliver 100 M. A. at 300 volts when a standard 200 ohm choke is used and with a 2 MFD. Condenser ahead of the first choke.

The primary is tapped at 105, 115 and 125 veits to take care of any voltage conditions.

## Acralesi,

#### 21/2 Volt Filament Transformer

Delivers 21/2 V. at 51/4 amps.

The T-290 Transformer finds its prin-cipal use in short wave sets where it is de-strable to light the filam nts of two or three tubes. Excellent for pre-heater

Primary, 115 volts. Secondery, 2.5 volts at 5.25 amp. Length, 27a". Teight, 23a". Width, 13a". Weight, 11b.



Cat. No. 6022

Our Price 95c 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-heaters, short wave converters, tuners and tube testers.

Cat. No. 6620

#### Our Price \$1.10 ea.

#### 71/2 Volt Filament Transformer

Same appearance and size as above, but delivers 714 volts at 3 amps. For transmitters. amplifiers, etc.

Cat. No. 6023

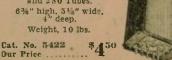
95c

#### 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. 95-96 Employing 227, 245 and 280 Tubes. 638" high, 51'" wide,



#### Used in P.P. ZE 50-60-70

Description: Equipped with tappeo primary and two 21/2 volt A.C. windings. Ideal for all Pentode power packs. Exactly like original in every specification, made only as rigid requirements demand, assuring a replacement unit as satisfactory as may be secured.

#### BRAND NEW VICTOR Replacement Power Transformer



For Models: R-32, R-52, RE-45 and RE-75

Cat. No. 6830



Do not confuse this transformer with surplus and reclaimed transformer 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 quanty products for 13 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 several tests. 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 Volta for 5-226 tubes; 2½ V. for 227; 2½ V. for 2-245 tubes; 5 V. C. T. for 280 rectifier and 800 V. C. T. at 150 mill high. Can is 4½ x5x5½ inches. Weight 8 lbs.

Cat. No. 2554 For 25 Cycles

#### Surplus Victor Power Transformer

These transformers have need removed from discontinues Victor Amplifers, and are guaranteed to be in period working order. They are scratched here and there due to handling, but mechanically perfect. A marvelous buy at \$1.95.

Cat. No. 2558

\$1.45

#### DEALERS and SERVICE MEN!

Utility Power Pack For 5-226, 1-227, 2-171A Tubes



Here is an item which will enable you to convert your trade in bettery sets into up - to - date A.C. receivers at a aminimum cost and with very little work.

This complete power latent for 4-226, 1-227, 1-280 and 2-171A tubes and will convert any Attended to the courtent for 4-226, 1-227, 1-1280 and 2-171A tube and will convert any Attended to the courtent for 4-226, 1-227, 1-280 and 2-171A tube and will convert any Attended to the courtent for 4-226, 1-227, 1-280 and 2-171A tube and will convert any Attended to a modern electric set. The unit includes power transformer, filter condensers, chokes and C bias. All terminals are conveniently brought out on top with acrew terminal for easy connections, 280 tabe tocket attached to outside of out. Equipment with "Hi-Lo" switch. Two leads or ught out for panel switch of set. Designed for conversion of Atwater Kent sets but may be used for any other battery set. Complete instructions furnished with each unit.

3 in. wide, 17% in. long, 5% iz. tail.

in. wide, 17% in. long, 5% in. tall.

Cat. No. 3155 Our Price ....

#### 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. Made according to original specifications and guaranteed. Does not include resistance strip or socket.

Since its introduction by us to the trade this power pack has met with the highest praise and approval. Such acclaim is natural when only the highest grade materials are used in its construction. Do not confuse this fine power supply with makeshift, tin can arrangements. Our pack is housed in a heavy gauge sheet steel can of the exact physical dimensions and dark brown finish of the original pack. The condensers, chokes and transformer are rated far above the standards set by the original manufacturer. Each wire is plainly identified and complete hook-up instructions enclosed with each unit. The cover from the old pack will fit this one and provisions for mounting the resistor and cable strip as well as the tube socket can be attached with the greatest facility.

Cat. No. 2609

Cat. No. 2609

\$6.50

#### Original - Genuine Atwater Kent Power Packs



These are genuine power packs manu-actured by the Atwater Kent Manufac-uring Co. and packed in original scaled actory cartons. Only a few available at his price.

For Models

Power Packs for Other A. K. Models

Sets Cat. No. 46-47-52 6466

\$9.00

Replacement Power Transformer for Atwater Kent Model 37 Sets



Built to highest specifications and with a safety factor.

Cat. No. 2642

82.75

#### POWER PACK

(Consisting of Power Transformer and Choke). Used in the following sets: Silvertone 1928 and 1929 Models, King, Models H and J.



Cat. No. 6504

616×516×3%" Weight, 5 lbs.

Dur Price \$4.50

#### Genuine Earl and Freed Power Transformers



For Model Nos. 21, 22, 55 and 56 Cat. No. 2522

Our Net Price

\$3.00

Complete with bracket and strip.

For Freed Models 78, 788, 79, 798, 90, 95, 65, and Earl 31, 318, 32, 328, 33, 338, 24, 41

Cat. No. 3738

Our Price \$4.25

## Acralest

Universal Replacement Power Transformer With Universal Mounting Brackets

#### ELECTROSTATICALLY SHIELDED

Fer Sets Using 5-227, 2-245 and 1-280 Tubes

Height, 3% in.: Vidth, 4% in.: Thickness, 4% in. Mounting Holes, Iorizonal, 3¼x2-



Cat. No. 5414

A most popular replacement transformer and used in many factory built seven, eight and nine tube radios. Liberally designed and well adapted for all receivers where four or five 227 or 224, two 245 and one 286 tubes are specified.

Primary—115 volts 50-60 cycle. Filament 1—2.3 volts 8.75 smps. Filament 2—2.5 volts 3 amps. ct. Filament 3—5 volts 2 amps. ct. Filament 3—5 volts 2 amps. ct. Plats—350-6-350 volts 100 mils, ct. Primary watts—full load, 90.

Our Price \$2.25

#### Jefferson Power Transformer and Chokes

For Sonora, Zenith, Stromberg-Carlson, Sparton and Other Sets Using the Following Tubes: 4-226's, 2-171A's, 1-227, 1-280

This unit con-tains the proper condenser and

Shoke.
Red Wire—
Start of primary.
Green—110 V.

hap. Black-120 V. finish.

Secondary connections shown on sc-companying

Size: 71/4 in. long, 41/2 in. wide, 31/2 in. high.

Cat. No. 6541 Dur Price .....





#### Earl and Kolster Power Transformer

For 3—226, —227, 2—171A and 1—280

Cat. No. 2575

Dur. Price \$2,25



Cat. No. 2658

For 25 Cycles, \$3.00

#### Kolster Power Packs

5530 6M SR

Supply filament and plate volt-ages for a bove sets. Can be used for other sets and for electrification of battery sets.



Our Price \$9.85 ea.

Atwater Kent 55, 55C Replacement Power Transformer

Cat. No. 6013

Our Price 84.25



#### RADIOLA Power Transformer For Radiola 104 Speaker



Primary operated in series with UV876 Ballast

function of the first state of t

34

108011

100 13

09

\$4.50 Cat. No. 6009

712 in. long; 434 in. wide; 344 in. tall. Weight, 12 lbs.

#### General Replacement Power Transformer

For Sets using: 5-227, 2-171A and 1-280 Tubes. Cat. No. 5421

#### Our Price \$1.95

4 in. Long, 3½ in.
Wide 4 in. High.
Weight, 6 lbs.
1 & 5.-5 V. (280%)
2 & 12-Hi (550 V.
at 80 mile.)
3-155 V. tap of
primary
4 & 13-5 V. (171A)
8-C. T of 4 & 13
10-115 V. tap of
Primary
11-C. T of 2 & 12
A well built runged transformer that
will stand abuse and not overheat in the
worst conditions. Silicon ared laminations are tightly packed and held in
place by fron frames to eliminate vibration. Coil wound with pure electrolytic
copper and all terminals are brought out
to backlite strips and fastened to lugs
for easy connections. Mounting feet make
in easy to marall this transformer.

#### Earl Transformer Coil and Terminal Strip

Ready to be assem-oled with lamina-tions of old power transformer.

For Earl Models 31, 32, 328 and 41. Freed Models 78, 79, 798, 65, 90, 95.

Cat. No. 3172

#### We Also Carry in Stock the Following Power Transformer Coils:

4011	THE COLLE		
Receiver			
Columbia-500			
Columbia-Kolster			3174
Kolster -25-cycle			
quiring 1100,			
and 212 V			3175
Kolster-25-cycle	for sets re-		
quiring 550, 5,	112, 212 V	3558	3176
Kolster K24		3504	3177
Esrl-25-cycle, 2			
52			3178
Freed-25-cycle,			3179
Earl-220 Volts,	21, 22, 55,		
56, 55			3180

Our Price \$2.00 ea.

#### General Electric Step-Down Auto Transformer

220-110 A.C., 275 Watt

Will deliver sur-ficient current for any large set, including radio-phonograph com-binations. Also suitable for wash-ing racebines and other electrical appliances drawing heavy current.

Cat. No. 6014

#### RCA-Victor Power Transformer

For 224, 227, 55, 56, 57, 58, 245, 247 and 280 Tubes



Purplishes the following current:
2'-2 V. at 8 % Amps.
2'-2 V. at 8 % Amps.
5 V. at 2 Amps.
790 Volts at 140 mis c.r.
C.T. Primary for 105 to 125 V. A.C.
Replacement Power transformer for the following receivers:
RCA 42, 48; Victor 14, 15, 17; General Electric T41 and Westinghouse WR4.

Part No. 61050. 334x334x434 in. Weight 742 lbs.

Cat. No. 2531 Our Price

\$ 7 80

#### ZE7 Filament Transformer

Suprlies:

214 Volts at 6 Amp 112 Volts at 7 Amp 712 Voits at 3 Amp. 31 in. long 2 4 in. wide, 3% in. high.



Cat. No. 5736

\$1.25

#### Filament and Plate Supply Transformer



for 280 Tube. For B Eliminators and con-version of D. C. dynamic speakers to A. C.

Supplies: 100V out-put of rectifier at 100 mile 5V at 4

Cat. No. 5858

\$1.85

See Our Complete Power Transformer Guide in Back of Catalog.

#### R.C.A. Victor Audio Transformer

With Pick-Up Coil Winding For Replacement in All Victor Sets

Can be used for any tube of high imped-ance. Has special winding for phono-graph pick-up. Magnetically shielded pre-venting inter-stage feed oack. RATIO



This transformer has two primary windings, one to maich either a high impedance pickup or the plate of a preampliner tube. The other winding is approximately 200 chms for either a single button mike or low impedance pickup. Can be used to couple a mike and high impedance pickup.

Cased in brass : Brown finish case. brass electromagnetic shield.

Cat. No. 2581 Our Price ....

4 for \$1.00

#### R.C.A. Victor Push-Pull **Audio Transformer Pack**

Can be used with 245 and 217 Tubes.

Electro tetically shedded. Impregnated against lamination vibration, assuring amplification on all frequencies.



Output Matches Moving Coil on All Dynamic Speakers

Cat. No. 5744 Per Pack

59c

#### R.C.A.-Victor Choke

30 Henries, 150 Mils. 200 Ohms 3x2"ix4" high Weight 315 lbs.



Cat. No. 5474 Our Price, Each .....

29c

#### 4 for \$1.00

Housed in a heavy brass case and impregnated in compound to prevent vibration and overheating. Can be used in all filter circuits where a sood choke is essential. Can be mounted in any position by soldering brackets to the case. Ideal for transmitters and amplifiers. Invest \$1 for 4 of these fine chokes while the supply lasts. The first job will more than pay for the four.

#### Filament Supply Transformer

For 226, 227, 224 and 171A Tubes



Has following lends: 1½V. (226), 2½V. C.T. (224 or 227) 5V. Q.T. (171A or 112A)

314" x 315" x 314" toll

Cat. No. 3724

This transformer is ideal for tube testing outlits. The secondary can be hooked in cories to supply any desired voltages like 1½, 2½, 3, 4, 5 and 7½, 1½ and 2½, V, windings rated at 2 amps. 5 V, winding rated at 1 amp.

## Audio cralest ransformer:

ACRATEST Audies are already ranked among the finest available. Much care is exercised to see that only the highest quality core and coil ge into their construction. Exacting engineers constantly watch the output of the production belt to see that each transformer is laboratory tested, as a peor product is a dangerous enemy. This precision sounds costly, but geat volume production and minimized returns help combat high price.

Shielded Push-Pull Audio Transformers Permalloy Laminations



No.	Description	Price
2552	Audio Transformer, ratio 4/1, for use in let or 2nd stage.	\$0.95
2004	Push-Pull Input for use with 171A, 245, 250, 247, 231, 233, 238, 210	.80
2653	Push-Pull Output, ratio 80/1, for use with 171A, 245, 250, 231 for connection direct to 10 ohm voice coil of dynamic.	.95
	Choke	
2503	Small heavy duty 30 benry choke, 125 Mils, matches above transformers	.70



# actues,

#### Midget Dynamic Speaker Output Transformer

This type of transformer is standard equipment on such midget dynamic speakers as Rols, Jensen, Oxford, Quare, Magnavox. Utah and others. These transformers are extremely popular because of their efficiency and small size, 13-12 in.

A good many speakers used in midget sets have an early edition of this transformer which proved unsatisfactory and resulted in poor quality and burnt-out. Replace them with the new and improved typs. They are all designed for standard voice coil.

Cat.	Description	Our Price
6222	Single tube output for use with	.70
6233	Single Pentode output for use with 233 and 247	.70
6231	Push-Pull Output for use with 171A and 245	.70
5235	Push-Pull Pentode output for	-70

# T. C. A. Shielded Super Input Transformer



For 171A, 245, 247, 210, 251, 238 u b c . Cadraium plated shield 31," long, 21," wide, 24," tall. Weight Ibs.

Totally shielded and sealed against moisture, Silicon steel laminations. A real bargain.

Cat. No. 7204

## wiles 4

CONCERTONE PUSH-PULL AUDIO TRANSFORMERS





2673-74-57

Their use in audio circuits gives in-creased sensitivity, greater distance, and insures a good volume of clear, pure and undistorted reproduction of programs, with all the vital harmonics and rich evertones so essential to true tonal quality.

Heavily insulated throughout, safe for use with power tubes, assembled and sealed into a beautiful black enameled metal

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

Cat.	No. Description 1	Price
2647	Puth-pull Input, lugs on bottom, for use with 171A, 245, 250, 247, 231, 238, 210	
5839	Push-pull Output, lugs on bottom, ratio 35/1, for use with 171A, 245, 231, for connection to 10 ohm voice coil of dynamic	
2673	Push-pull Input, jugs on side, for use with 171A, 245, 250, 247, 231, 233, 238, 210, recommended for use where the tone quality is wanted, due to the flat response curve of this transformer.	
2074	Push-pull Output, lugs on one side and tip jacks on other, ratio 35/1, for connection direct to dynamic cole coll, for use with 171A 245, 250, 231	
5333	Push-pull Pentode Output, for connection direct to voice coil of dynamic, for one with 247, 233, 236	
3714	30 Henry, 150 Mil Choke, with lugs on bottom like 2647	

#### Acratest Choke

30 Mency, 150 MUs at 100 Ohms Lug 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 case of mounting and wiring of these instruments makes them suitable for almost any set. The highest quality silicon steel and pure drawn copper so into this milendid transformer.

Cat.	Description	Price
5417	3-1 Audio with leads and	
	mounting brackets for 171A,	
	245, 247 or 250	.85
5418	Push-Pull pentode cutput to	
	10 ohm voice coil	.80
2567	4-1 Tapped Input with leads	
	and mounting brackets for	
	171A, 245, 247 or 250 are-	
	pliflers	.85



#### Unshielded Push-Pull Audio Transformers With Permalloy

Laminations

No.

Description

8831 3 to 1 Straight Audio for use in lat or 2nd stage.

1834 Push-Pull Input for use with all standard tubes.

2576 Push-Pull Output for use with 171A, 245, 259, 231, for connection to magnetic speakers or to dynamics having built-in input transformers.

8835 Push-Pull Output for use with above tubes, ratio 50/1 for connection to 10 ohm voice coil of dynamic.

8838 Push-Pull Output for use with the above tubes, ratio 50/1 for connection to high impedance voice coil of dynamic. Description \$1,65 1.20 1.00 1.00 1.00 Push-Pull Output for use with Peniode tubes only (247, 238, 233), for connection di-rect to voice coll for dy-5520 1.00

#### T.C.A. Transformers and Chokes

Cone is of cer-mailoy steel lam-inations bound by convenient mounting bracket which also serves as a shield. Diniensions:



Input for 171, 112A, 243, 210 and 250 tubes Straight 3% to 7 audio 30 Henry 100 Mil 250 ohm

## Amertran Audio Transformer

Volume and Tone Quality Cat. No. 2577

95c each



#### Grebe Audio Transformer



Contains 4% silicon steel laminations. Excel-lent for Public Address Systems. 2% in. long, 23% in. wide, 4 in. tall. Weight: 2 lbs.

Cat. No. 5105

95c ea.

#### Grebe Input Audio Transformer

Same Size and Appearance as the Audio

Cat. No. 6651 \$1.50 ea.

#### Kolster First Audio and Interstage Pack



Cat. No. 5534

\$3.85

Part No. 13385... Used in Models 982 and 980. Housed in steel can and mounted on steel base, with all wire leads. 6" long, 34" wide, 34" all.

#### Kelster Bouble Chake



Part No. A58010 Used in Models 6J, 6K, 6M, 6F, 6F

Cat. No. 5543 \$1.95

#### **Kolster Output Choke**



100 Mills tapped at 50

Same dimensions as Audio Trans-ormer.

Cat. No. 3725

95c

#### KOLSTER Double Audio Pack



Cat. No. 5587

\$1.95

Part No. A59003. Used in Models K20 and K21. Ratio 3% to 1 D. C. Resistance Pri. 1800 ohms each. Sec. 7250 ohms each. Lead in yellow spaghetti to core of both transformers. Transformers mousied at right angle to esch other. 3%" long, 2" wide, 3%" tall.

#### Phileo Audio and Push-Pull Transformers





2647

2651-52, 2502

Cat.		Used in	Part	
No.	Description	Models	No.	Price
5834	Pash-pull	20, 20A, 90.		
	Input	90A 70, 70A	1	
			4232	\$0.9
2651	Push-pull	30, 77, 77A.	200	411.01
	Input	86, 87, 76		
			3872	.80
2503	Filter Choke	65, 87 3518		.70
2647	Pu h-pull	96, 96A, 65,	0112	. 41
	Input	95, 296, 111,		
	anpur	111A	3537	7 40
2652	Push-pull	65. 87, 76, 77,	2021	1.10
*****	Output	77A, 95, 96,		
	Output			
2552	4/1 Str't	296, 40, 41	2878	.9:
ADELS	Audio	511, 512, 521,	0000	
9514	Filter Choke	531	3077	1.3
0414	Filler Choke	111, 112, 111A	,	
		112A, 76, 96	,	
		77 296 40		

#### Thordarson Interstage Double Audio Transformer

This iran former is used for coupling a stage of 227, 226 or 201A in push-pull to a stage of 171A, 215, 247, 210 or 250 in push-pull. Both the primary and secondary of this transformer are centertapped facellent for use in public address amplifiers where fine quality is necessary.



3422 95

Cat. No. 2729

#### Our Price \$2.75

## Thordarson Push-Pull



Transformer From Output of 2-245, 2-171A, 2-231 or 2-250

To Voice Coil of Dy-namic. 6 to 8 Ohms.

Very compact—only

Cat. No. 5620

#### Our Price 75c

## Thordarson Push-Pull **Output Choke**

Same size and appearance. Matched in same tubes.

Cat. No. 5621

Our Price 95c

#### Super Power Audio Transformers



These large transformers are built for heavy duty work on amplifiers, and large receivers. Electrolytic copper wound on a large tileon steel ore. Well insulated and mounted on universal brack-

the ets. These are the low which such high quality have ever been sold. lowest prices transformers

Mounting holes 334" C. to C. Height

Cat. No. 7322, 314 to 1 Audio Our Price .....

Push Pull Input for 171A, 245, 210, 250

Cat. No. 7323

Our Price ..... 75c

#### Sangamo Push-Pull Input Audio Transformer

Model BX



Cat. No. 7323, Puth Pull Input for

171A, 245, 210, 250 

#### Push-Pull Interstage Transformer

For Zenith 50, 60 and 70 Series

For coupling Push-Pull 227 to Push-Pull 171, 245, 250, or 247 Output to 10 ohm Voice Coll.



Made by the original manufacturer to original specifications. May be used in other sets.

Mounting holes, O. to C., 2-5/16x2 in. 81/2 in. tall. Weight, 2 lbs.

Cat. No. 6385 Our Price, Each .....

#### Earl and Freed Audio Transformers



For Model 41 Receiver Also used in Freed Model 95

Cat. No. 3720 \$ 50 Dur Price .....

Push Pull Input Transformers for above models, in same can.

Cat. No. 3726

Our Price .....

5185

#### Universal Replacement Audio Transformer



Cat. No. 2502

75c ea.

a small and compact transformer, ideally adapted to tast places and can be used in any set, A.C. or D.G. using straight, audio amplification. It has two sets of brackets for norizontal or vertical mounting.

Elre, 1% in. igh, 2% in., wide and 2% in. deep.

Weight, 46 ib.

Weight, % lb.

#### Universal Push-Pull Input Transformers



An ideal replacement job because of its compact size, efficiency and low price. Fits under sub-panel of practically every set, including midgets. Universal mounting brackets.

Approximately 2 in. cube. Wt. 1 lb.

Cat. No. 5597 98c ea. Input

Cat. No. 5598-Output

#### New Universal Tapped Output Transformer

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

Engineering installing in the part of the second of the se

Cat. No. 6028 Our Irice .....98c

#### DYNAMIC Output Transformer

for Goupling 171, 245,250 to Voice Coil for single tube output on set



Cat. No. 2637 Our Price 35c ea.

#### RCA Matched Push-Pull Input Transformer and **Output Choke**

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

Terminal 1—Grid Ferminal 2—Plate Terminal 3—"C" Terminal a Grid Similar to RCA Part No. 1353



CHOKE

Terminal 1—Plate and Speaker Terminal 2—"B" Supply Terminal 3—Plate and Speaker

Cat. No. 2556

49c per pair

Output Choke Only, Sold Separately

Cat. No. 2557 10c ea.



#### **Double Audio Transformers**



RATIO 31/2 to 1 Used in

Radiola Models 17, 18, 33, 51

Cat. No. 2512 Our Price .....

## Triple 30 Henry Choke

Triple 30 Henry Ohokes — 10 mils. each, giving total of 120 mils. in series. Can be used in any power supply.

Cat. No. 2518

95c Each



#### **Erla Audio Transformer**



Fully Shielded

Cat. No. 2515

85c Each

#### Earl Double Choke

with Mountime

Brackets Cat. No. 2695 Our Price **等于05** 



## BRUNSWICK Low Impedance Input Transformers



For low impedance phone pickups and u ed in Brunswick Models 32 und 42.

Cat. No. 7204

\$1.35

#### Stromberg Carlsen Filter Chokes



The standard of Quality. Steel, jacketed and hum proof. Best edapted for all filter circuits. Conservatively rared.

Excellent for filter in medium powered transmitters or for replacement on series filament AC or DC receivers.

Single Choke

8 Henries, 300 Mils, 22 ohms resistance, inductance much higher at smaller currents.
6 in. long, 3% in. wide, 6% in. tall, weight 11 lbs. Bakelite terminal strip. Cat. No. 5252
Our Price

#### Stromberg Carlson No. 3-A Audio Transformer



Permalloy Lain-Totalmations. ly shielded.

Retio 21 to 1. 2x234x212" high Weight 1 lb.

Cat. No. 7542 Our Price

95¢

#### 1/4 Amp. D. C. Choke



Used in All Early Models

For Power Supplies and D.C. sets. 4 in long, 2½ in. wide, 5 in. high. Weighs 5 lbs.

Cat. No. 5118

90c

#### **SANGAMO** Quality Transformer

..Type "CX171" Push-Pull Output Transformer. The impedence of this transformer is designed to match UX-171 and CX-371 and UX-250 and CX-350 power

List Price \$6.50



#### Atwater Kent Replacement Transformers

Cat. No. For Models 2606 20, 30, 35, 37 6896 41, 1st audo 6897 41, 2nd audie P.P. Input 7057 40-42-46 Audie 7058 16 Input



#### Acratest De Luxe Phonograph Pickup



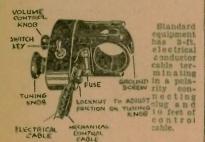
This pickup is especially recommended where perticular stress must be placed en beauty of tone. This pickup far exceeds the performance of pormal public address equipment and is for those radio engineers who desire the fixest electrical reproduction. The pickup is skiffully counterbalanced so that it may be used for 78 or 33-1/3 r.p.m. No colume control supplied due to the fact that generally volume controls decrease the sensitivity and cut down the frequency response of an otherwise excellent pickup. Maximum output, 45 volts, which exceeds by more than .1 volt the output of its nearest competitor.

Overall length 10 in, 7% in from

Overall length 10 in. 7% in. from

Cat. No.	Impedance	1	Our Pric
6976	200 Ohms	L	多世95
6977	500 Onm.	8	43
6978	5000 Ohms	- 2	Each

#### The New Federal Steering Column Control



Cat. No. 7435-List Price \$10 8495 Our Price ....

The Federal Remote Control consists of a control unit, condenser driving unit, flexible drive cable, multiple-wire cable, and electrical connecting plug. It provides positive, simple, manual control of the receiver through a one-eighth inch flexible cable which is thoroughly weatherproof. The operating cable, firmly anchored to both units, and easily adjustable to any length, drives the tuning condenser of the radio receiver by means of a pulley attached to the condenser shaft, and enclosed in the snug-fitting housing of the condenser driving unit. One complete turn of the hand-grip tuning control covers the entire tuning range of the radio receiver. The unit is specially constructed to give precise, accurate tuning.

The illuminated dial uses a standard pilot light early replaceable. The multiple-wire cable for switch, pilot light and volume control consists of five wires, in accordance with the R. M. A. standard

The electrical connecting plus, sturdy in construction and attractive in appearance, protects the connections to batteries and speaker leads and simplifies in-

The control unit is besutifully finished to harmonize with the rest of the equipment in any well-appointed automobile.

All control units are equipped with a lock-switch and key, together with a

#### Brown Flier Twin Recording Motor



May also be used for playback where constant speed is absolutely required.

This mo-tor is the ultimate for recording purposes, it a constant lead of 6

the ability to turn at has the ability to turn at a constant speed even with a recording lead of 6 lbs. This motor is driven by two motors, one situated at each end of the casing. A special clutch control governor enables the maintenance of constant speed at 78 r.p.ra. Furnished with 12 in turniable and special mounting cushions to avert vibrations which is ruineus to good recording. For 110 V., 50-60 cycle operation only.

#### Frost 10,000 Okm Potentiometer

Graphite Element. Only 7,16 in. thick. in. flat shaft with % in, thread and locknut. Will fit ali



A great majority of the receivers on the market today use a 10,000 chim potentiometer as a

potentionneier as a volume control. This potentionneier as a volume control. This potentionneier will fit BD% of these sets shaft. Absolutely noiseless. Positive wiping action. Perfectly insulated for 500 volts. Every serviceman should have a supply of these controls on hand for any emergency. Made to sell for 50c, we are offering them for half the price due to a special purchase.

WHILE THEY LAST

Cat. No. 5634 29c

#### Replacement Jars For Philco, Willard and Exide "A" and "B" Eliminators





Cat. No. Cat. No. 3664

TYPE "A" Small round for 4 volt "A" elimin-ators

3663

\$1.39 Each



TEPE "AA" Large square for 6 Volt ators

\$1.79 Each

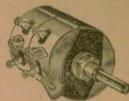
REPLENO Rectifier cells are guaranteed to give satisfactory service and full charging rates in Power Units properly designed for their use.

TYPE "B" for B eliminators

\$1.79

Set of 4

#### Genuine Brand New Frost Victor Twin Potentiometer



Made by For Models RE32 RE35 RE52 RE75 3500-3900

Here is the genuine Victor Volume Con-trol manufactured by Frost—not to be confused with surplus controls—and in-terporating several improvements over the old type. Mounting panel on front of unit makes for ease of installation. Metal strap holds the two units rigidly. Com-pletely shielded and enclosed against dust and moisture. Shaft ½ in. thresded and 1-3/16 in. long.

Cat. No 7450 

#### 4 or 5 Tube Midget Replacement Power Transformer



For sets using up to 3-224, 235, 551, 227, 66, or 57 tubes (or a combination of same), 1-245 or 247 and 1-280 tubes

Size: 3x2½x3" high. Supplies the following voltages: 2½ v. at 8% amps; 5 v. at v. rectified at 60 mils.

v. rectified at 60 mils.

This compact, yet ruggedly built power transformer can be used as a replacement in almost every midget receiver on the market using up to five tubes. It is universal in adaptability, having 4 long 8/32 mounting acrews for horizontal mounting. It has a shielded top. The wire leads are adequately long and are instantaneously identified.

Every service man should have several of these fine transformers on hand for any energency and the first job will more than pay for half a dozen transformers. Buy them new at this extreme low price as you may not have another opportunity like it again.

Cat. No. 5502 

#### Acratest Field Exciter for Dynamic Speaker



for Dynamic Speaker

6 x 1½ x 3½" high. Weight 5 lbs.

Th is unth is
capable of delivering 200 milling amperes at approximately 100 of the new 83 type mercury value of the new 83 type mercury value of the new 83 type mercury value of the 280 type wave rectifiers. Greater efficiency and more current is attained with the 83 twose, due to the lower internal resistance of this tube. The unit is housed in a compact black cracke finished can with mouting holes in the base. Reading from left to right, binding posts 1 and 2 and 3 and 4 are segurate pairs, and may be used to supply fleid current for two individual speakers.

Cat. No. S5

Cat. No. S5 Our Price, Less Tubes.....



## 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 burnt out tubes and paper condensers.

While only rated at 500 volts peak, these units will withstand momentary overvoltages as high as 600 volts without producing any detrimental effects on the condenser. The electrolyte of Dry Farada 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.
- 7. Filtering action is very nearly equal to that of paper condensers of the same capacity.
- 8. Complete recovery from break-down when over-voltage is re-
- 9. Can be mounted in any position.
- 10. Low power factor.
- 11. Minimum chemical action on dielectric film.
- 12. Unaffected by ordinary temperature.

The aluminum can type is furnished in standard size cans for quick replacement.



#### Multiple Anode Upright Units, Type M

Peak Volts 500 Mounted with Rings

434" High

No.	Cap.	Dia.	Amodes	Price
5314	14 Mfd.	215"	8-4-2	1.40
5316	16 Mid.	215"	8-8	1.40
5317	16 Mid.	2557	4-4-8	1.95
5318	18 Mfd.	219"	9-9	1.65
5324	24 Mfd.	3"		1.60
6580	20 Mfd.	23567		1.30
5332	32 Mid.	3"		2.10
5885	Jo Mid.	3"	18-18	2.65
5336	36 Mfd.	3"		2,30
5854	54 Mfd.	315"		3.25
5352	54 Mfd.	3%"		3.25





Diameter 1%" Peak Volts 500



Cat.	Cap.	Length	Our Price
5301	1. Mid. 400	36"	€ .35
5302	2 Mid.	1-7-16"	.47
5304	4. Mfd.	2%"	.54
5308	S. Mid.	4547	.75
6540	4-4 Mfd.	434**	.95
6720	6-6 Mfd.	41/4"	,44



#### C Bias Condensers for Pentode Tubes

Cat.	Cap.	Peak Volts	Anodes	Our Price
5305 5310	5 Mfd. 10 Mfd.	50 50	1	\$ .27

## Matast Tubular Pigtail Electrolytics

These low voltage tubulars embody all the characteristics of the 500 volt Acratest Electrolytics. They are hermetically enclosed in a non-hyperscopic tube scaled at both ends. Connections are made by means of the pirtoils at each end. Folarity 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 Peniode tubes.

Cat.	Cap.	Peak		Our
No.	Mfd.	Volts	Tube Size	Price
6644	7.5	25	% in. O.D.x2% in.	\$ .20
6645	10.	25	% in. O.D.x21/4 in.	.20
6646	25.	25	% in. O.D.x2% in.	.20
6617	2.	50	% in. O.D.x21/6 in.	.25
6648	5.	50	% In. O.D. 121/2 In.	.25
6649	7.5	50	% in. O.D.x2% in.	.25
6650	10.	50	% in. O.D.x2% in.	.25
6660	2.	100	¾ in O.D.x21/4 in.	.30
6661	5.	100	% in. O.D.x216 in.	.30
6662	1.	200	% in. O.D.x2% in.	.30
6663	2.	200	% in. O.D.x218 in.	.30
6664	1,	400	% in. O.D.x21/8 in.	.80
6865	2.	400	1 in. O.D. 12 in.	.27
6724	.8	500	14 in. O.D.x21 in.	,94
6725	1.	500	% in. O.D. 121/2 in.	.29
6726	2.	300	1 in O.D.x216 in.	.33

#### Mounting Brackets for Cardboard Condensers



6496 For 4 Mid. Condensers 6497 For 6 and 8 Mid. Condensers

#### Our Price 5c Each

Acraless Is Standard

#### Cardboard Container Electrolytic Condensers



SINGLE SECTION UNITS WITH WIRE LEADS PEAK VOLTS 500

Servicemen who in the past have been handicapped in making replacements now have available, through the foresight of the Federated Service and engineering departments, a new type of electrolytic condenser. This unit is housed in a cardboard container and is extremely handy as a replacement.

The capacities listed are in standard size container for replacement of any drytype condenser in a card-board container. Furnished with two 6-in. wire leads.

No.	Capacity	Size	Our
6491	1 Mid.	1x1x2	\$ .30
6492	2 Mfd.	1 x 1 x 2	35
6493	4 Mid.	11 x x 4	.36
6494	6 Mfd.	11x1x4	.42
6195	8 Mfd.	11/x 1 x 4	.43

### Acratest "Power" Filter **Electrolytic Condensers**

800 volts working. 1000 volts peak

These newly developed electrolytics make possible the construction of fransmitters 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, 7. Excellent Self-healing Long lifed. Small size.

Cat. No.	Capacity	Size Net	Price
6931	2 mfd.	1	\$ .85
6932	4 mfd.	1 1 x 2 1/4   x 5" High	1.05
6933	S mfd.	x 5 High	1.95

## cralest Filter ndensers

· Acratest has set a high standard of accuracy and efficiency for all paper dielectric condensers. In general all our 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 con-servatively rated to insure long life performance and

maximum results.

• It is our aim to be of utmost service to both dealer and service man and therefore carry the largest and most complete line of condensers available. Every standard type of condenser is carried in stock by us which permits the service man to replace and repair sets in as brief a time as possible

NON-INDUCTIVE Hangup Replacement Sections



Wax sealed paper dielectric sections coated with hard black wax which thoroughly protects sections from moisture. Equipped with two maulated stranded wire leads and very useful for the service man in replicing sections for filter blocks or bytess condenses.

	pas	cond	en ers.	
8076		200	5-16x9-16x13	\$ .11
3077	.25	503	7-1621 3-162134	.13
	3	200	9881 1-16813	.16
8079	1.	200	*aX1 11-16x1%	.02
3088	I.	200	3 x11 x3 1-3-16	0.0
3081	2.	200	9-16x1 11-16x3 3-16	-41
3082	.1	300	5-15×11-16×1-4	.13
3083	25	300	%x15-16x1%	.16
3054	-5	300	9-16x1 9-16x13	.20
3085	5	200	7-16x1 3-16x3 3-16	20
3086	1.	300	%×1 ×3 3-16	.30
3867	1.	300	78x1 4x3 3-6	.80
1088	1.	300	Text 1 ax4 %	.30
8080	2.	300	36x1 13-16x436	.50
8090	.1	400	3 x13-16x13	.16
3091	.25	400	* x11-16x134	.18
3890	,5	403	11-16x1-11-16x1	.24
3058	.5	400	-ax11-x3 3-16	.21
3094	1.	401	*x1 11-16x3 3-16	.36
3095	2.	400	1x2 9-16x3 3-16	.81
3096	1	400	9-16x13 x43	.38
3098	.1	600	*8N1 1-16N1 13-16	.20
3099	.25	600	38X114X314	.32
2100	.5	600	*ax1 i1-16x314	.33
3101	1.	600	15-16-24-2314	.57
3102	2.	600	36x136x446	.65
3103	.5	1000	95×135×436	.50
3104	1,	1000	1 1-16x2%x4%	.70
3109	2.	1000	216×216×416	
3110	.1	1250	76×176×476	.30
3116	.5	1250	76x776x496	.81
RE18	1.	1750	135 vr 175 vr 4 3 5	1 64

#### Official Refrigeration Service Manual



Compared with servicing a radio set or wiring a house for electricity, the servicing

electricity, the servicing of a refrigerator is absurdly simple, once you get the hang of it. In this Refrigeration Manual every part is carefully explained; diagrams are furnished of every anown machine; special care is given to the servicing end. The tools needed are illustrated and explained; there are illustrated and explained; there are tools to be too the constraint of the constrai

Regular List Price 85.00

Our Price \$4,00

NON-INDUCTIVE

#### 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 conditused under proper conditused under proper conditions, non-inductively wound, freedom from leakage and the utmost durability.



Cat. No.	Cap.	D.C.W.V.	Our Price
2001	.1	200	\$6.18
2093	.25	200	09
2905	5	200	00
2096	1.	200	.93
2000	2.	200	-54
3050	.1	300	.22
2051	.25	300	.25
3052	.5	300	.32
3053	1.	300	,45
5428	2.	300	.65
3054	-1	400	.21
8055	.25	400	.27
3056	.5	400	.37
2057	3.	400	.45
3058	.1	600	25
2059	25	600	.87

## Acratest

NON-INDUCTIVE



#### High Voltage Filter Condensers

This series is especia. ? designed for high voltage condensers, a provision made for suitable mounting. Can be used either for replacement or for the amateur in designing transmitters and such other fields where high voltage acctions are required. This series is especial

Cat. No.	Cap.	D.C.W.V.	Our Price
3060	1.	400	\$0.58
2062	4.	400	3.44
3963	6,	400	2,25
2064	1.	500	.63
3065	2.	500	.85
3066	4.	500	1.70
2057	1.	600	.81
3008	2.	600	3.00
3000	4.	600	2.26
3070	5	600	.60
3071	1.	800	.95
8078	2.	800	1.78
3078	.5	1000	.76
3074	1.	1000	1,30
3075	2.	1000	2.35

# Two New Type

Electrolytic Condensers

Multiple Section Inverted Metal Container Electrolytic Condensers

#### 800 VOLTS PEAK



To simplify service work these condensers are equipped with 4-6" wire leads. Two red positive leads and two black negative wire leads or positive leads can be common or any other combination made depending upon the circuit to be repaired. These electropytic con-

Cat. No.	Capacity	Price
73.53	4-4 Mfd.	8 .90
7354	6-6 Mfd.	1.05
7155	8-8 Mfd.	7.20
7156	4-6 Mfd.	.30
7157	4-8 Mfd.	.9%
7158	6-8 Mfd.	1:10

## Acralest

Multiple Section Cardboard Container Electrolytic Condensers

#### 500 VOLTS PEAK



To simplify service work these condensers.

To simplify service work these condensers are equipped with 4-6" wire leads. Two red positive leads and two black negative leads or positive leads can be common or any other combination made & pending upon the circuit to be repaired. These electrolytic condensers have the same general characteristics as the Aeratest Dry Farad Condensers.

Cat. No.	Capacity	Price
7159	4-4 Mfd.	8 .70
7160	6-6 Mfd.	.93
7161	8-3 Mtm.	1.05
7162	4-6 Mid.	.30
7168	4-8 MId.	.90
7163	6-8 Mfd.	T.20

See Our Complete Filter Condenser Listing on Pages 98 and 99.



NON-INDUCTIVE **DUAL BY-PASS** Condensers



Cat. No.	Cap.	D.C.W.V.	Our Price
5563	.11	200	\$0.28
2750	.2525	200	.33
2751	.55	200	.42
2756	.2525	300	.40
2757	.11	400	.31
2778	.2526	400	.44

NON-INDUCTIVE

#### Base Saving Mounted Condensers



These con-densers are used where the base space is a premium. The dealer and

high grade of condenser very practical both for general replacement and the home set builder.

Cat. No.	Cap.	D.C.W.V.	Our Price
2861	.1	200	\$.18
2462	.25	200	.22
2863	. 5	200	.27
2865	3	200	.33
2974	1	300	.20
2875	.25	300	.22
2876	.5	300	.30
2877	.1	400	.20
2878	.25	400	.26
2879	.5	400	.35

NON-INDUCTIVE UNIVERSAL BY-PASS Condensers





This type was designed to permit large capacities and high voltages. The metal terminals are all specially hot timned and the capacities are year sealed.

Cat. No.	Can.	D.C.W.V.	Out Price
2783	.11	200	\$0.30
2771	5	200	.27
2081	.55	200	.42
2080	1	200	.30
2778	2.	200	.54
2784	.11	300	.32
2774	.5	2.30	.30
3819	.151	300	.10
2775	1	308	.45
2785	1-1	400	.38
2775	.25	400	.25
2777	.5	400	.30

## Pigtail Condenser Replacement Kit



Cat. No. 3528

These are the tandard pig-iail carridge type condens-ers compact, highly em-cient, easy to mount and completely in-manated.

**\$2.00 per kit** 

Tr	CUI	Itan	LS AU	Liffran	Va	FULL	age C	U.
	8 -	.01	Mfd.	2	_	.05	Mid.	
	2 -	.02	Mfd.	2		.075	Mfd.	
	2	.025	MITA.	6	-	.1	Mfd.	

NON-INDUCTIVE

#### **Universal By-Pass** Condenser Kit



Contains an assort-ment of sizes common-ly used in all sets. Very handy for the service

Contains 12 A sorted endenser as follows:

200 Volts.
260 Volta.
300 Volta-
300 Volta.
400 Volta.
400 Volta.
200 Volta.
*5

#### 3 x 1/10 Mfd. Sections By-Pass Condenser



Can Negative D.C.W.V. 200 Used in General Motors sets.

Cat. No. 5214 

#### **Tubular Condensers**



These condensers are made of the high-est grade of electrical fibre tubing and those listed are most community used. Units are completely dipped before ceal-ing, thus making the actual unit itself moisture proof and the entire unit is hermetically sealed. Very useful in gen-eral replacement work and employed in most every circuit.

Cat. No.	Cap.	D.C.W.V.	Our Price
2804	.25	200	.19
2606	.5	200	.25
2808	-01	300	.16
2811	.05	-300	.15
2813	.1	300	-18
2814	.2	300	.21

#### PIGTAIL Cartridge Condensers



This condenser is by far the most useful of any condenser 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 pigtal 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.	Cap.	D.C.W.V.	Our Price
5637	.1	200	\$0.10
2835	.25	200	.16
2836	.5	200	.19
2816	.01	300	.13
2817	.02	300	.12
2818	.025	300	.12
2819	.03	300	.12
2820	.04	300	.12
2832	.05	300	.13
2833	.075	300	.12
2834	.1	300	.13
5688	.15	300	-17
5689	.2	300	.18
2837	.25	300	.20
2838	.5	300	.25
8640	.01	400	.13
3641	.03	400	.13
5642	.025	400	.14
5613	.03	400	.24
5644	.04	400	-14
5645	.05	400	.15
5646	.1	400	.16
5647	.15	400	.20
5648	2	400	.23
5649	.25	400 800	.12
5850	.005	600	.12
5651	.006	600	.15
5652		600	.18
5653	.02	900	.10

#### Tubular Condenser Kit

An assortment of the small tub-ular fibre con-densets ready for any repair job. Indispensible to the modern ser-vice man.

Cat. No. 3531

Contains 12 as follows:



2- .25 Mid. - .5 Mld 1- .01 Mfd. 1- .05 Mfd. 1- .1 Mfd. 3- .2 Mid 200 Volts 200 Volts. 300 Volt 300 Volta. ano Volta. 300 Volta.

**\$2.40** per kit

# icamold Fixed Condensers

#### MICAMOLD Trimmer Condensers



A sturdy, accurate neutralizing, balancing or trimmer condenser, for use in balancing multiple tuned circuits, or agle control. Bakelite base, mice dielectic, heavy phosphor bronze spring plates th fine screw adjustment. The plates e tinned to permit casy soldering.

#### For T. R. F. Circuits

Cat. No.		Cap	acity	From	, ,	12e
2881						166
				d		ea.

## For Superheterodyne Circuits

Cat. No.		Ci	spa-ei	ty From	91 -
4884	100	to	150	Mmfd	2le
2885	150	10	200	Mmfd	
2886	200	to	250	Mmfd	ea.
2887				Mmfd	SCHOOL STREET

#### Precision Mica Condenser Standards 1% Tolerance

Acratest, in a coordance with many requests, is now fulfilling a long wanted need for the radio laboratory, amateur set builder and experimenter, stocking a complete coording a complete coordinate coo



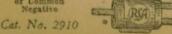
set builder and sperimenter. We are listing and stocking a complete line of mica condenser Standards which can be used in critical circuits in tuned radio frequencies and superheterodyne circuits, and can also be used as standards for checking capacity bridges and microfarad meters.

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 moided in genulae 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 and low power factor. Accuracy is maintained under the most trying conditions.

Cat. No.	Capacity	Our Price
5708	.00005	\$ .28
5709	.0001	.24
5710	.00015	.24
5711	.00025	.24
3712	-9008	.24
5718	.001	.33
8714	.0018	.34
5715	.002	.86

#### R.C.A. Buffer Condenser

.002 on Each Side of Common Negative



\$1.25 Dozen

#### MICAMOLD Molded Mica Pigtail Condenser



Size 44 x 54

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

Cat. No.	Cap. Mid.	Our Price
6629	.00005	\$ .10
6630	.6001	.10
6631	.00015	-10
6632	.00025	.10
6633	.0003	.10
6034	.00035	10
6835	.0005	.10
6636	.00075	-12
6637	.001	.11
6638	.0015	.14
6639	.002	.15
6640	.0025	.18
6641	.003	.23
6642	.0035	.24
6643	.004	.26

#### Gen-Win "5" Tube Super Heterodyne Coil Kit







Set builders, servicemen, experimenters, dealers, all should build this 5 tube Super Heterodyne marvel. This 5 tube super het work in the stations as the second of the superimer and some and 10 tuber, brings in the stations as clear as a bell, with perfect selectivity. No experience required either 20 build it or aperate it. Can be assembled in an hour and about all the essential material required is a 3 gans 10035 Mfd. Condenses, small power transformer and some anall carbon resistances. We highly and sincerely recommend this receiver to our customers.

The Coll Kit is made up into 3 conventional metal coll cases as follows:

Pre Selector Coll and Detector Coll.

Oscillator Coll and Detector Coll.

Oscillator Coll and Lis Intermediate Proquency Transformer—175 K.C.

The first coll and the Intermediate Proquency Transformer—175 K.C.

We are so enthused over the ingeniousness of the design and unique construction of these coll units that we are sure you will be more than pleased when you actually see them. We fully guarantee these coll units to be the faset on the market and will make up when assembled the best Super Heterodyne you ever heard. The Rit of cells come complete with full instruction date and excellent willing diagram. Shipping Weight 3 lbs.

Cat. No. 7455

#### Micamold Molded Bakelite Mica Condensers





Type J

Made by the world's largest manufacturers of mice condensers under crizinal process developed by them. These condensers are moded of genuine bakelite under extremely high hydraulic pressure, which seals the condenser and is an armored casing against all weather conditions, moisture or chemical action. The dielectric is of the finest grade of clear india ruby mice in combination with tinfoil plates.

Type A has insulated mounting holes to allow for screw or cyclet assembly direct to a metal base.

Type J is a small compact unit for general replacement work and set builders.

Restaur vehitere		HE WILLIAM		miders.
	-T	pe J-	-Ty	pe A-
	Cat.	Our	Cat	Our
Capacity	No.	Price	No.	Price
.00003	5428	.10		
.00005	3122	.10	3134	.12
.0001	3123	.00	8135	,10
.00015	. 3124	.00	3136	.10
.00025	3125	,00	3137	,10
.0002	. 5455	.10	-	100
.00035	3126	00	3138	.10
.0005	3127	.00	3139	.10
.00075	3128	.10	3146	.12
.001	3129	.12	2141	14
.0015	3130	.32	3142	14
.002	3131	.14	3143	115
.0025,	3182	.14	3164	15
.003	3133	.15	2145	.18
.0035	5428	.35	6140	920
.004	5429	.18	3146	-71
.005	WHIST .	18.00	3147	
360				-22
.006			3148	.24

#### MICAMOLD Bakelite Condenser Kit



Type A

Contains a complete assortment of the commonly used condensers used with in sulsted mounting holes for screw mounting direct to metal chassis.



Contains 35 Condensers

Cat. No. 3530 Per Kit

\*350

#### MICAMOLD Bakelite Condenser KA

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





Contains 35 Condensers Assorted Capacities \$2.95 per kit

## Non-Inductive Compact Type Filter Condensers

Type GF, Rated at 400 V. D.C. (220 rms. A.C.)

A brand new type of filter condens-er of the manu-facturer's type, at a very attractive price. Soider-lug



price. Solder-lug terminals make connections to these condensers a trifling matter of a few seconds. Excellently in-sulated and built to stand up, they are uncrealed for use in circuits demanding full load duty.

Our C	Dat.			ur Net
No.	Type	Capacity	Size, in.	Price
	GF 10	.10 Mfd.	%x1%x1	\$0.24
5273	GP 25	.25 Mid.	34x134x1	.27
5274	GF 50	.30 Mfd.	34x134x1	,32
5275	GF 100	1 Mid.	%x3 x1%	.43
5276	GF 200	2 Mfd.	11 x2 x17s	.65
5277	GF 400	4 Mfd.	1 13/16x2x13	1.30

#### Non-Inductive Compact **By-Pass Condensers**

Type GB, Rated at 200 V. D.C. (120 rms, A.C.)

Now, a brand new



Now, a brand new type of by-pass condenser of the m an u is controlled the price. Inverted shell construction, small and neat, they are effective to the nth degree. Providing unimpeded radio frequency paths and non-leaking direct current obstacles, type GB should be in your specifications. For continuous operating voltages up to 269 volts D.C. (120 rms. A.C.)

	Simi Aorr	D.C. IL	on time a.c.)	
One (	at-			ar Net
	Type	Capacity	Size, in.	Price
	GB 10	.10 Mid.	34×134×1	\$0.18
5267	GB 25	.25 Mid.	%x1%x1	.21
5268	GB 50	.50 Mfd.	%x1%x1	24
5269	GB 100	1 Mfd.	74x2 x1%	,32
5270	GB 200	2 Mid.	15632 31%	,36
5271	GB 409	4 Mid. 1		.96
12/4/4	CID TUS	S TATIO.	201 103000 10	

#### Non-Inductive Uncased Filter Condensers

For Continuous Operating Voltage up to 600 V. D.C. (400 rms. RAC)

est uncased condenser made, type NU is also electrically perfect. The condenser winding is impregated in a non-hygrocoopic compound and the whole is wrapped in a waxed paper erapper, thus making the condenser absolutely moisture-proof. If you have been looking for a truly dependable uncased condenser to employ in all your repair work, we fully recommend type NU as the finest obtainable. Equipped with rubber covered wire leads that work pull out, it is a real 'ob that you will always use in preference to others.



Our Cat.	Contracts to others.	ur Net
No. Type	Cap'ety Size, in-	Price
5278 NU 10	.10 Mfd. 2x1 1 /1dx 3 /16	\$0.21
5279 NU 25	25 Mfd, 2x1 1/4x 1/4	.21
5280 NU 50	.50 Mfd. 2x1%x 15	.30
5281 NU 100	1 Mfd. 2x1%x %	.46
5282 NU200	2 Mfd, 2x1%x1%	.66
3283 NU 400	4 Mfg. 221 13 /16x3 1/se	1.25

#### Non-Inductive 1000 Volt High Voltage Units Type HSM Rated at 1000 V. D.C. (860 rms. RAC)

Modern, scientific methods of prediction have substantially reduced and have at the same time improved the quality of the finished product. Type HSM represents the highest perfection in the art of making high voltage filter condensers of this class.



Excellent for use with Pentodes. Hence, type HSM has been evolved to fit into the smallest space and to provide complets dependability in all sorts of circuits.

Our Cat.			Our
No. Type	Capacity	Size	Price
5259 HSM5	.05Mfd.	2x1 3 /16x11 /16	80.57
5260 HSM10	.10Mfd.	2x13/16x11/16	.69
5261 HSM25	.20Mfd.	2x13/16x11/16	.65
5262 HSM50	.boxffd.	2x1 3/16x11/16	.70
5263 HSM100	1Mfd.	2x1 3/16x1 5/16	,50
5261 HSM200		4%x2%x3%	1.50
6580 HSMC20	1 2Mfd.	2x11/6x236	1,50
5265 HSM400		45hx25hx13/16	2.80
0681 HSM(40		2x236x236	2.80

#### Non- Inductive Midget Condensers

Beautifully made, of highest electrical endingers of highest electrical endingers are the choice of thousands of radio men who find them reliable for all kinds of work—grid, plate-block-ing, by-pass, series antenna, resistance coupling, compensating, neutralizing and other fragevolume. With a working voltage of 500 colts D.C. these little units can be used wherever a low power-factor high test condenser is needed. Infinitely small radio frequency losses and direct current leakage.



at. No.	Type	Capacity	Our Price
6891	M-A	0001	\$0.20
6092	M-B	.0002	.20
6993	M-C	.00005	.20
6094	M-D	.0005	.20
60%5	M-E	100.	.00
6096	M-F	.002	1919
6097	M-G	004	99
6008	717-74	.005	99
0000	MI-3	006	.35
6100	M-EC	.01	.28
6101	M-L	.02	.30
6102	M-M	.05	.38

#### Non-Inductive High Tension Transmitting Condensers

Because of their small size and light they are excellent for use in portable eutilis, aircraft transmitters, ric. Absolutely the best 1000-volt transmitting condenser on the market and very nitractively priced. Equipped with the neat stand-off in-sulators, the condenser is enclosed in an all-metal container which



container which projects it against heat or damage. Amateurs who are just beginning with their first transmitter will do well to get these dependable units. (Continued in next column)

#### FLECHTHEIM Superior **Fransmitting Condensers**

Type TH: For Continuous Operating Veltage up to 2000 Volts D.C. (1600 rms. RAC)

Porcelain



(1600 rms. RAC)

Forcelain insulators do not make the condenser insulators do not make the condenser are devertised many nondescript brands of condensers "equipped with porcelain insulators." It does not pay to key inferior ones—exaggeraced claims are made for them and a dubtous replacement policy tops these claims. It is beat to get a condenser well known for its dependable construction and reliable manufacture. You can't go wrong in getting Flechiheim's.

Cat.

No. Type Capacity Size, in. Firce Price Gar? TH 100 1 Mfd. 6x3 34.234 57.00 58.25 6232 TH 200 2 Mfd. 6x6 x34. 12.50 6.75 6332 TH 400 4 Mfd. 6x8 x8 2.20 11.90

Type Th is in use by hundreds of broadcasting and amateur stations and is without doubt the best 2000-volt transmitting condenser procurable. Now, in its new form, containing the special cylindrical windings as employed in the higher voltage types of concensers, it is better in every respect. Heavily bushed porcelain insulators provide an ample factor of insulation safety preventing short-circuit to grounded case.

Type T: Continuous Operating Volt-

# Type T: Continuous Operating Voltage up to 1500 Volts D.C. (1000 rms. RAC)

'Imitation is the sincerest form of stattery.' This well known expression is stated here for reason that many manufacturers have time and and asain tried to copy our transmitting condensers. However, in the field of transmitting contransmitting contransmitting conin the her transmitting con-densers Flecht-helm has been pioneer.



densers Flechtheim has been the true pioneer. We have invaluable knowledge which we infuse in the scientific manufacture of our condensers. No one can possibly make a really dependable condenser better or more cheaply. It is needless to pay more, yet more questionable to pay iess. There are cheaper condensers on the market, but you get exactly what you pay for, more probably even less. When you buy a Flechtheim condenser, you can rest assured of horest value.

Cat.

No. Type Capacity Size in Price Price 6331 T 160 1 Mfd. 5-xx44-xx 83.75 \$2.25 6323 T 400 4 Mfd. 5-xx44-xx 6.53 3.50 6323 T 400 4 Mfd. 5-xx44-xx 6.53 3.50 6323 T 400 4 Mfd. 5-xx44-xx 11.60 6.09

For the more advanced amateurs. Type T. familiar to thousands of them, is still the best bet for use with the 50 waiter with 1800 volts of rectified A.C. on the plate. Also improved in its construction, this type condenser is now better than ever.

(Continued from preceding column)

(Continued from preceding column)

Cot.

No. Type Cap'ty Size, in Price Price

CREAT TO 100 1 Mfd. 445x15x114x3.00 81.65

CREAT TO 200 2 Mfd. 445x24x34.50 5.00

Age: TC 200 2 Mfd. 445x24x34.50 5.00

Here is brand-new type of condenser

for low power transmitters. Type TC

is now more compact, other insulated and

of improved design.

Type TC: For Continuous Operating

Voltages up to 1000 Volts D.C.

(750 rms. EAC)

#### Replacement Filter Section for Atwater-Kent Models 37 and 38

This unit it made of the four neces goods con ap of the four necessary, and a second of the order of the old condenser thock elean out old condenser thock elean out old condensers, insert the assembly olde of the old condenser the assembly olde to reconnect the choke and field, and you have a new filter choke assembly with condenser ratings ably misher than the original turer's specifications.



original manufac-

Cat. No. 2087

#### Replacement 3 Section By-Fass Condenser for Atwater-Keet



Cat. No. 2084 Rec

#### Speaker By-Pass Condenser for Atwater-Kent

For Models 37, 38, 40, 42, 44 and io



Cat. No. 2083 Oure Price, Each

65 c

#### Colonial Replacement Ry-Fass Condenser Block

Used in Colonial 32 Culonial Part No 17384



Yellow - % Mfd 250 V Green - 1/10 Mfd 250 V Brown - % Mfd 250 V Red - 1/10 Mfd 250 V Can is negative.

65c

The fading in Colonial sets is coused by a leaky by-pass condenser. This condenser in an improved model of the original one. 3 in, base, 2% in, high 2 in wide

#### Triple By-Pass Condenser



3-1/10 Mfd. Sections

In metal can with mounting screw Very useful for bypassing both blas and high volt-age. Made for Feerless Courier Sets.

136x156x56 in.

Cat. No. 2904

39c eu.

#### Dubilier .6-C-.6 Buffer Condenser

Excellent for Mike Amplifier Filter

PLG29

Cat. No. 5581



#### CROSLEY Replacement By-Pass Condensers



These condensers are electrically and mechanically identical to the manufacturer's originals and are fully ruaranteed.

Cat. No.	Part No.	Price
2760	W6471	112.08
5210	W7044	.30
5589	W4013C	.30
5209	W20449	.40
5310	W22412	.40
5311	W20416	,53
5212	W7759E	.55
5401	W5948	.25
5103	V76128	.45
5401	W20157	.22
5213	W20186	,65
5398	W25426	.38
5399	W4919	.30
5407	W22995	.30
5408	W7753	.42
5409	W4968	.26
5411	W4313A	.27
5412	W29728	.70
5427	W20448	.23

#### Eveready and Bosch REPLACEMENT BY PASS CONDENSER

For Model 52 and All 1928-29 Sets

acau applicable to many other standard

Cat. No. 2983

65c en.

# 25 MFD 36 MFD 25 MFD

## Zenith Quadruple .2 Mfd. By-Pass Condenser

Replacement Part No. 22-65

Used in Models



Pading is one of the characteristics of the above sets. You can stop this mus-ance by replacing the old type leasy con-denser with this cold-dipped acralest bydenser with the

Cat. No. 6478

25c ea.

#### Sparton By-Pass Condensers

Cat. No. Size

3833 W. Mid. 1 Mrd.



#### Our Price 35c ea.

#### Potter By-Pass 5 MED. COMPACE





600 VOLT TEST Cat. No. 2759

30c eu.

#### Potter Midget By-Pass Condensers

Working Voltage 200



Cat No. Capacity 1 mid 25 mid 11657 12c eu.

RCA-Victor Uncased Condensers (600 V. D.C. Working Voltage)



This coming at C A. Victor uncase condenser is composed of the highest grade materials. They are compact and mosture proof, impregnated in special heat featst

THE COL	Theresia Co.		
Cat. No.	Size	Euch	
2928	1 Mfd	35c.	\$3.60 dez
2429	2 Mfd		5.50 doz
2930	4 Mid		9.00 doz

#### NON-INDUCTIVE UNIVERSAL BY PASS Condensers (Midget Type)

A small compact unit developed for space e conomy unit developed for space e conomy without sacrificing any quality, ideal for all bypassing requirements in R.P., and A.P. circuits where single capacities are required at various points and also available in combinations of capacities.



at No	Cap.	D.C.W.V.	Our Pric
2179	.25	200	20.18
2731	.5	200	.25
2780	,I	200	.03
2782	.25	200	.99

MAIL ORDERS TO AND See Terms on Page 3

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 8185

Also farmished for 25 eveles for same price.



This filter assembly for atwater Kent sets is not to be confused or compared with similar but interior imitations being offered for less money. Our block is manufactured in our own plant out of the finest ingredients and under the superfision of Acratest engineers. Only brain 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 are far in excess of the original manufacturer's specifications. Two full size chokes 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 Acratest. Compare the Acratest block with others and you will see why it pays to get the best even if it costs a little more. Once an Acratest block is installed in a set it will outlast the set.

Hook-up for AK-37 Block

#### Hook-up for AK-37 Block

Green wire to 280 socket. Black wire to R P plate. Yellow wire to Power tube plate. White wire to first audio by-pass, white wire to C. T. of 226 resistance. Red wire to detector plate. Wire from can to

#### Genuine Atwater Kent Filter Condensers

For AK36 and AK 'B' Hitchie.

500c



#### Model Y

Condenser and Choke for Model 38 and 3 Unit

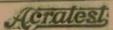
Cat. No. 7053

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

With Leads and Mounting Bracket

Dimensions: 534x234x135 in

Cat. No. 8045



Replacement Condenser

Blocks for Majestic

Sets



Cat. No. 5026 5027 5028 ORTS

5030

Sei 70 Series 80 Series 90 Series BoB and 100B

Majestic B Special Master B

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 Acratest engineers. Only brand new condensers are used and not old leaky accitons which are often used in imitation. Every condenser is thoroughly oil cured and impregnated with wax and pitch for protection against moisture. The working voltage of our condensers is fat in excess of the original manufacturer's specifications. The entire assembly is housed in attractive new can of exact physical dimensions. Compare the Acratest block with others and you will see why it pays to get the best even if it costs a little more. Once an Acratest block is installed in a set it will outlast the set. fered for less money. Our block is man-

#### RCA Filter Block and Output Chcke Assembly

For Radiolas 18, 32 and 51 Cat. No. 2710

Special

39c ea.



R.C.A. Part 8233

FABA

AMG

Contains 2-1 mid. filter condensers, 1-42 mfd. output condenser and a choice 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 carton of six of these genuine replacement condensers in stock.

#### Fada 1 Mfd. Condenser

400 volts, D.C. 2 m. x % ip. x 6 ip. high Cut. No. 2973

35e ea.

## Victor Replacement Condenser Block

GENUINE BRAND NEW

For Replacement in All Victor Sets

Mics. 600 working colage. Size: 534 in. long, 5 in high and 4 in. wide. Housed in metal

Cat. No. 2709



Our Price 95c

#### Radiola Filter Condenser Blocks



Original Condenser Blocks made expressly for these sets.



Westinghouse Part No. No. Set No. THE Cat. No. 2714 2710 2715 2726 2659 6543 6498 7260 6888 5038 1.80 5.85 2,50 5.75

#### RCA 4 Mfd. 800 Volt Filter Condenser



Part No. D.L.2503235 m metal can 415252115 tz

An all around flur condenser for fluor arctits, line filters, transmitters, etc., Will stand 1000 volt fluon test.

Cat. No. 7202 Our Price

600

#### RCA 20 Mfd. Filter Condenser Block



Excellent for A.C. line filters and speaker filters, also on transmitters, 518 in. long, 234 in. widt, 514 in. tall.

Part No. DL2395248 Cat. No. 0445 Our Price ...

25e

#### Polymet 2 Mfd. Auto Condenser



With base mount-ing brackets. Just the thing for using across the car gen-erator on auto radio installetions

Cat. No. 5605

65C



#### Dubilier 1 Mfd. 400 V. Condenser

BE.1305

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

2x34x5 in.

Cat. No. 5607 



#### Dubilier 4 Mfd. Condenser

PE 610 D.C. W.V. 200

2x1 14x5 14 in.

Cat. No. 5603 Our Price .....



#### Dubilier 6.1 Mfd. Condenser Block

D.C. W.V. 400 312x212x5 in. Cat. No. 5606 \$T 85 Our Price .....

#### Multiple 1/4 Mfd. By-**Pass Condenser**



6 in. Wide 1 in

Contains 9-14 Mfd. sections with one common negative for each 3 sections and one 1 Mfd. section, all at 300 W.V. D.C. Enclosed in metal can with 2 mount-

Used in Kennedy 20 Sets.

Our Price

#### Polymet 2 Mfd. Filter Condenser



200 V. D.C.

In metal can 134x136x136" high.

Our Price 35c

#### 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 rate devalue, thus assuring a sturdy, scientifically designed product, far excelling the average Filter Condensers now being used. Encased in a sturdy metal confainer with 8 inch flexible insulated wire leads. Equipped with handy mounting brackets.

Dimensions: 5x23,xx 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



#### $\frac{1}{2}$ Mfd.—1.000 Volts

As used in Peerless Sets 100 Volts, for Kylectron Speakers



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

Cat. No. 2903

30c ea.

#### 6 L.B. DE LUXE HOUSEHOLD IRON

6 pound from
Affur an wa a q
designed and
heavily nickel
plate d with
bevel-edge sole
plate, tip-up
heal rest, bleck
h and le, complete with cord
set Malf attachment plus.
Imbedded type
nichrone wire element, double strength
terminal connections. 110 volts, 660 watts.
One year guarantee.

Cat. No. 425

\$1.15

\$6.50 per Carton of 6

Complete Filter Condenser Guide on Pages 98 and 99

#### Stromberg Carlson 7 MFD Filter Condenser

For RCA 104 Power Speaker 600 Volt Test



Used in Victor Electrola Hyperion Model, Victor Borria Model 2, RCA 104 Speaker, RCA Model 30A Pack, RCA 81951 Pack.

43ax5x136 in.

3.9 Mfds. 1000 V. in same can. Cat. No. 3730 \$1.50

31/2 Mfds. 600 V. unmounted

Cat. No. 3731

#### Sprague 8 Mfd. Upright Mounting Electrolytic Condenser

An excellent condenser for replacement in all sets using 8 nifed, electrolytic condensers or for replacing the old type paper condensers. Its simplicity of mounting makes it universally adaptable. Only one hole necessary. The removable base is fastened to the set chassis and the condenser then screwed into the base. A shell is provided for the top to keep out monsture and dust. Wire lead from condenser comes thrus the hole in the cap. A very compact unit measuring 1 in. in diameter by 4 in. high. Copper container. Puncture proof. Rated at 450 working voltage.

Cat. No. 6809 Our Price, Each

39e

#### RCA-VICTOR Output Transformer



Output to 10 Ohm Voice Coil

For Radiola 46, 47 and 66. Can also be used in No. 108 Speaker with 2 1/10 mfd. condensers.

Cat. No. 5625 24x34x3 in. tall.

#### Our Price 60c

#### RCA Double Filter Chokes

Contains Two 30 Henry 80 Mill Chokes

This neary duty, rugged, double Filter Choke is excellent for all types of filter circuits and experimental work in receiving sets, power amplifiers, eliminations other ruty poses.

Made by General Electric Company for Radio Corporation of America, and is RCA Replacement No. 8336 for the Radiola 33, 18 and 17.



Our Price 48c

#### STEEL CHASSES

#### Cut and Drilled, Ready to Use for Receivers and Amplifiers

These cadmium plated chasses are constructed of a one-piece spot welded steel.



We offer
you an assortment of
alses for
minest any
need. These
a has a is
with the
a c e ption
of the last

one which is blank) are all drilled to accommodate various types of sockets, electrolytic condensers, power transformers, audio transformers, volume controls, switches, etc. You really don't have to drill any other holes.

We offer you these bases at a real low price.

9 TUBE CHASSIS for super heterodyne receiver, with holes for standard water sockets, power transformer, filter condensers, coils and tuning unit. 18% in long, 11 in. wide, 3 in. tall

Cat. No. 7297 \$100

6 TUBE MIDGET CHASSIS for receiver or amplifier. Cut and drilled with standard poles. 14 in. long, 6% in. wide, 2% in. tail.

5 TUBE MIDGET CHASSIS, 13 in. long, 8 in. wide, 2 in. tall. For all standard size midgets.

Cal. No. 7298 \$100

3 TUBE AMPLIFIER BASE for Single 245 or 247 amplifier. 1615 in. long. 9% in. wide, 1% in. tall.

## Steel Base for Power Amplifier or 6 Tube Midget Set



Cas. No. 5478

Price 35c

All ready cut and cuilled for a 6 time inyout Just the thirt that the thirt thirt the thirt th

#### Blank Receiver or Amplifer Chassis



17% in long 9% in wide and 5 in tall

89e Es.

Servicemen and setbuilders who "make their own" will welcome the opportunity of securing this fine automobile steel spot welded chastis. It is large enough to accommodate up to 12 tubes.

#### Headquarters for Genuise

# Majestic

Replacement Parts

## Our Prices as Low as 80% Off Regular List



Cat. No. 5459



Cat. No. 5461



Cat. No. 2684

Cat		For	Part	List	Our
No.	Items	Models	No.	Price	Price
5458		180		\$8.00	\$1.25
5460	Plate Trans.	180	620		1.25
5464	Filament Trans.	70 Series	61	8.00	.90
	Plate Trans.	70 Series	67	8.00	.90
	Filament and				- 1/2
	Plate Trans	90 Series		10.00	
5462	Double Choke		180	5.00	.95
5872	Filament and				10000
	Plate Trans.	90B, 100E	3	12.00	4.75
5465	Filter Choke,				
	100 Mils	70 Series	GG	5.00	.95
5459	Double Filter	10000			
	Choke, 250 Mils	90 Series	281	3.00	1.25
2525					***
	Trans.	es be see	-		1.50
2612	Power Trans.	91, 92 (22		0,	1.00
		280 Tube	(8)	450	4.00
	Power Trans.	130, 131,	132.	233	3.95
	Power Trans.	71, 72 (Pa	CK 7B	Pij	4.00
7020	Power Trans.	130, 131,			
- Supr	Control of the Contro	180A, 18		5	5.25
2619	Power Trans.	180 Cemb			W FO
	1 201-4-	(227-26	0-22	1)	7.50
2684		-1 -0			4.75
	In one can	71, 79 21, 22, 23			3.95
		50			3.95
	Power Trans	60			3.95
7241		00			0.00
5872	Plate Trans.	90B. 1001	R		4.75
	Plate Trans.	110B. 100	В		4.10

#### Majestic 3600 Ohm Resistors



Cat. No. 5466

25c ea.

## Dynamic Speaker Cable

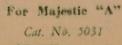
Part No. 119 Cat. No. 4898 Our Price

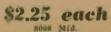
#### 8 Wire Cable

(Chassis to Pack) Pack No. 209, Model 90

Cat. No. 4398 GOC

#### Majestic "A" Replacement Condenser





Exact replicas of the originals and mode of the highest grade materials. Fully guaranteed.

## Majestic By-Pass

Cat. No.	Capacity	Model	Part No
5416	55	70	717
5447	5- 5	90	715
5418	.5	180	714

Our Price 290





#### Push-Pull Transformers

Cat. 0. 5170 5483	Type Output Output	Models 70, 71, 79 70, 71, 82, 180	Part No. 89	Price \$1,25 ,75
6815 6814	Andio Input Phone	70, 71, 72, 90, 90, 71, 72, 90,	1551	.95 1.25
2658 Out	Input Input Price	62	1713	75e

#### MAJESTIC I. F. Superhet Transformer



Cat. No. 6818

95c

Used in Majorite Supers and tunes to 175 K.C. Aluminum housing, with a wire leads. 224 in. long, 124 in. wide, 234 in. tall.

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Every service man is interested in having at hand as much data as possible about the various about the various receivers produced for distribution in the United States. This information is of extreme value during service operations. It represents the operations. It the data required to service that receiver with the greatest case and in the fastest time. Without such information less to know the

the service man is at a loss to know the type of circuit used—the location of the different parts in the receiver—the correct operating conditions—the correct resistance between points so that he may nake his various tests.

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- Schematic Wiring Diagrams.
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See Our Complete Power Transformer Listing On Pages 98 and 99

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Answers in plain English every practical question on the arvicing, adustment, repair, remodeling and designing or radio receiving equipment. Each of the five hundred leading articles is complete in itself, and in addition there are hundreds of the reare hundreds of the reare hundreds of are hundreds



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By JOHN F. RIDER

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Superheterodynes

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use R. F. and I. F.
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describes the fundamental
electron theory which is
the basis of all vacuum
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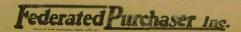
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50c

4 order blanks have been included in the center of this catalog for your convenience. Use them.

MAIL ORDERS TO See Terms on Page 3



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

# A Control for every made by FROST Chicago Telephone Co. Volume Controls

Frost Products are Manufactured by the CHICAGO TELEPHONE COMPANY OVER 3,500,000 FROST CONTROLS WERE MADE FOR SET MANUFACTURERS LAST YEAR. WHY?

Frost Variable High Resistances set a high standard of exceltence 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.

Every 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 success 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 ROCKER-CONTACT

No. 20 Series Wire Wound **Volume Controls** 





No. 28 Series

20 Series with

Bullt-in Switch

In this control, wiping contact is made by a double runner contactor positioned so that each of the contacting runners make line contact and not point contact with the inside of the resistance strip which we are able to make by far the smoothest portion, as there are no irregularities introduced such as are encountered when attempting to a c c u r a t e ly shape, shave or grind the strip edges for the old style edge contact. These line contacts permit the use of a much higher contact pressure than has heretofore been possible and the maintenance of a lower and more uniform unit pressure which reduces the chances of scoring to a negligible degree and accordingly greatly increases the life of the control. Completely enclosing the unit in a tightly covered metal shell prevents the entry of dust and foreign particles which might cause scoring should they reach the raceway, and at the same time this complete metallic enclosure prevents damage to the unit from rough handling.

A further contribution to the exceptionally long life and smooth runsing.

A further contribution to the exceptionally long life and smooth running of these units is the use of a neutral oil on the contacting surfaces to provide continuous lubrication.

Without Cat. No.			Switch Cat No.
6137	200	Variable-Mu Cathode	6143
6138	400	Microphone Button	6144
6139	1.000	Untuned Antenna	6143
6140	2.000	Untuned Antenna	6146
6141	5.000	Antenna Shunt	6147
6142	10 000	Antenna and	
		Cathode Blas	6148
6596	3.000		6598
#SOP	25 1000		<b>2749</b>

Our Price 50c

Without Switch

Our Price 70c With

Switch

#### FROST-RADIO

#### No. 70 Series Composition Element Volume Controls

Supplied with three terminals. May be used either as potentiometers or variable resistors.





No. 76 Series with Built-in Switch

Without Cat. No.	Switch	Controls	Cat. No.
6150	1,000	Untuned Antenna	6165
6151	2,000	Cathode Bias	6166
6152	3,000	R.F. Primary Shun	6167
6153	5,000	Antenna Shunt	6168
6154	10,000	Antenna of R F.	
		Primary Shunt	6169
6155	25,000	Phonograph Pick-1	ip q
		Screen Voltage	6170
6158	50,000	Screen Voltage	6171
6157	75,000	Variable-Mu	
		Cathode Bins	6172
6158	100,000	R.F. Plate Voltage	6178
6159	250,000	Audio Transformet	
		Shunt	6174
6160	500,000	Audio Transforme Shunt Tone Control	6175

Our Price	
45c	
Without	
Switch	

Our Price 65c With Switch

#### FROST 80 SERIES Volume Controls





Contact resistance of these switches is not only lew but uniform as well, which makes the 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

Switch Cam is Cold. Shaft is insulated

Switch Cam is Cold. Shaft is insultated Politioning 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 to that capacity between these members and "live" parts of the control is less than 5 micromikes. The breakdown in excess of 2000 volts.

Like all our nighest grade controls there No. 80 series units have sunicent to his contact to unsure keeping down corror on on the contacting member.

Withe	ut Swite	h With Sv	
Cat.	Ohms	Controls	No
6728	1,000	Untuned Antenna	6739
6720	2.000	Cathode Bias	6340
6730	3.000	R.I Primary Shunt	6741
6731	5.000	Antenna Shunt	6742
6752	10.000	Antenna or R. F.	
		Primary Shunt	6748
6733	25,000	Phonograph Pick-up	
		Screen Voltage	6744
6784	50,000	Screen Voltage	6745
6735	75.000	Variable-Mu Cathode	
		Bias	674
6736	100,000	R.F. Plate Voltage	6747
6737	250 000	Audio Transformer	
		Shunt	874H
6738	500.000	Audio Transformer	
		Clauma Clanteral	A- 54

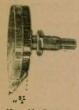
Our Price

Our Price 70e

with switch

We are prepared to quote special prices on all Frost Volume Controls to Manufacturers, Johbers 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 set manufacturers in the country for the past year and a half and in every case have given complete satisfaction. The high maulation 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 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 arc of rotation is obtained by a flexing disc firmly secured and accurately positioned over frosted cone carrying the resistance element.

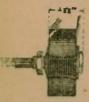
The narrow contacting surface and polishing action, together with the hard resistance element, obtain unusually amooth resistance progressions and to maintain true curve forms regardless of whether near the high or low limits pecified.

Cat. No. Ohms Cat. No. Ohms

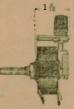
Cat. No.	Ohms	Cat. No.	Ohms
6180	1,000	6185	
6181	2,000	6186	. 50.000
6182	. 3.000	6187	75.000
6183	. 5,000	6188	
6184	. 10,000	6189	
	0100	EOO ONO	

Dur Price 50c en.

#### FROST 40 Series Dual Potentiometers





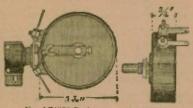


No. 10 Series Tancem with Switch Combination

		Our
at. No.	Size and Description	Price
1160		
5535		
0310	10.000 ohm Antenna Taper- 1,000 ohm Var. Mu Bias, with 1 in. shaft	
1190	10.000 ohm Antenna Taper— 25,000 ohm Screen Grid Taper, with 1 in. shait	
6112	10,000 ohm Antenna Taper— 25,000 ohm Screen Grid Taper, with switch and 1 in. shaft	
6212	10,000-50,000 ohm Fot, with	
6119	switch 10,000-2,000 ohm Pot with switch	1.45

#### FROST-RADIO No. 1880 Series Composition Element Type

(Bakelite Case and Cover— Shaft Not Insulated)



No. AC1880 Series

No. 1880 Series

Entire shell and back cover are of genu-ine 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 im-proved 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 thrombergarious and Zenito, 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 nousings to be within commercial standards of electrical and mechanical accuracy.

Whout Swi	With Swite	
Cat. No.	Ohms	Cat. No.
6104	5,000	6128
6123	10,000	6129
6600	15.000	6604
6125	25,000	6130
6126	50,000	6131
6601	75,000	6605
6127	100,000	6132
6602	250,000	6606
6603	500.000	6607
Our		Our

Price 60a Without

Switch

Price RAC With Switch

#### Panel Mounting Tone Control

Only 1 in. deep. Will Fit in any Set.

Allows six different tone adjust-ments. No noise possible, Extra amooth opera-



Regulates tone from a high treble to the deep bass. Modernize old sets. Bake-lite casing and % in. shaft.

Cat. No. 5251

Our Price 85c ea.

## Genuine Zenith Volume Controls

(MADE BY FROST)

These controls are greatly improved units and we guarantee them to outperform their predecessors.





1.25

Type & Receivers Used in Cat. No. Price ual type with switch—52, 53, 522, 532, 54, 542, 56, 57, 62, 67, 60, 61, 64, 602, 613, 612, 642, 672, 717, 72, 73, 71, 712, 722, 732, 733, 777 3201 Dual \$1.50

2204 Single Unit, with switch—52, 53, 522, 532, 54, 542, 55, 57, 62, 67, 64, 60, 61, Used in early models of 602, 613, 622, 542, 672

4120 Single Unit—33, 34, 35, 35A 542, 352, 352A, 362, 35APX, 11, 12, 14, 15, 16, 17, 31, 32, 333, 353A...

8122 Single Unit with switch—39, 39A, 40A, 392, 392A.....

#### Table Tone Control



Cat. No. 4354 List Price, \$2.35

Our Price Tone Control is the keynots of 1931 Radio. All the better types of sets are provided with tone control. That is the outstanding difference between present sets and those of the last year or two. Table without Tone Control.

Table model beautifully finited in black and gold: felted base, long connecting cord and ots.

handy disc connectors

Panel Mounting Type



Cat. No. 4357 List Price, \$1.80

#### Our Price \$1.05

Acratone Table Mount Tone Control



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

Cat. No. 6961 95c

#### Ad-a-Switch Wire Wound Units and Switch Coverplates







The Clarostat Wire Wound Controls have The Clarostat Wire Wound Controls have been specially designed to fill the dealer's and serviceman'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 on hand. plates on hand.

The plain dust-guard coverplate supplied can be pried off and a Cat. No. 6750 switch type dust-guard coverplate can be snapped in its place to convert the switch-less unit into a switch unit.

When used without the switch, the only difference is that the first 35 degrees rotation of the controls has no effect on volume due to the fact that that portion of the resistance element has zero resistance to allow for the operation of the switch, when the switch is employed.

PASSO	n, wher	d file switch is embioleg.	
Cat.			řet
No.	Ohm	Type and Suggested Use Pi	rice
7026	50	Standard Pot., no taper. \$0	1.17
3701	100	Standard Pot, no taper	.27
7027	200	Standard Pot, no taper.	.17
7028	300	Standard Pot., no taper.	.47
7029	400	Standard Pot., no taper.	.47
8702	500	Standard Pot, no taper.	.47
7030	750	Standard Pot, no taper.	.50
5703	1000	Standard Pot., no taper.	.50
7031	1000	Tapored Pot. for un-	
1000	2000	tuned Ant. Cont.	.60
7032	2000	Standard Potentiometer,	
1.010/0		no taper	.50
7053	2000	Tapered Pot, for un-	
1000	2000	tunad Ant. Cont.	.50
7034	2000	Tapered Pot for "C"	
111111		Bins Control	.55
3704	3000	Standard Potentiometer,	
.,		no taper	.50
7035	3000	Tapered Pat, for com-	
*000		bined Ant. and "C"	
		bins control	.55
7036	3000	Tapered Pt. for "C" bias	
8 (7)(3)(3	0000	control	.55
3705	5000	Standard Potentiometer,	
.,		no taper	.50
7037	5000	Tapered Pot. for com-	
	0000	bined Ant. and "C"	
		bias control	.55
7038	5000	Tapered Pot. for "C"	
		blas control	.55
7039	7500	Standard Potentiometer,	
		no taper	.50
7040	7500	Tapered Pot. for com-	
		bined Aut. and "C"	
		bias control	.55
7041	7500	Tapered Pot. for "C"	
		bias control	.55
3706	10000	Standard Potentiometer,	
		no taper	.50
7042	10000	Tapered Pot, for Ant.	-
		or R F coil control	.59
7043	10000	Tapered Pot. for com-	
		bined Ant. and "C"	NO.
	7 3000	bias control	.59
7044	10000	A STATE OF THE STA	-
	1 1 2 2 2 2	bias control	.59
7045	10000	Tapered Pot. for Screen	-
1000		Gric Voltage confrol	.59
2707	15000	Standard Potentiometer,	No. of
The same	Marie .	no taper	.55
7016	15000	Tapered Pot, for com-	
			200
	10000	bias control	.59
2047	15000	Tupered Pot for Screen	.59
-	-	Grid Voltage control	.00
3708	20000	Standard Potentiomeier,	.59
	- manon	no tpaer Tanered Pot. for "C"	*130
7048	20000	THE PERSON NAMED IN	.85
		bias control	4 421/17

(Continued in next column)

# CLAROSTAT

#### Power Clarostat



Heavy duty variable re-sister for radio power un-its, transmitters, or gen-eral electrical applications. A favorite for line-voltage control. Dissipates heat rapidly and efficiently. Pop-ular as C-bias control in auditorium amplifiers.

	The state of the s	DE STATE MANAGEMENT	
Cat.	Model	Resistance Range	Carryin Capacit
5904 5905	Fil. Control Low Range	14-10 ohms 25-100 ohms	80 watt
5906	Universal 200		80 watt

#### Our Price \$2.06 ea.

#### Clarostat Phonograph Pick-Up Control



List Price \$2.00 Cat. No. 2727

\$1.18

A Clarostat Graph-tic Element Volume Control of the po-tentiometer type for handy connection between the phon-

ograph pick-up unit and the radio re-Supplied with two tip jacks and cord with phone tips. A handsome bakelite case with knob to match.

May also be used for the control of is headphones and magnetic speakers.

# The summer of Line Voltage Regulator



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

Cat. No. 5001-50 Watt
For sets consuming up to 60 watts.
Cat. No. 5902-Type A
For sets consuming 60 to 100 watts.
Cat. No. 5903-Type B
For sets consuming 100 to 150 watts.

#### Our Price 95c ea.

(Continued from preceding column) 3709 25000 Standard Potentiometer, 7049 30000 Standard Potentiometer, 7049 30000 Standard Potentiometer, no taper no taper
3710 40000 Standard Potentiometer, no taper
3711 50000 Standard Potentiometer, no taper
Note: All the above units are rotentiometers and are provided with three terminals. They may be used as rheostats by using the center contact arm terminal and one of the resistance element terminals. Supplied without knobs.

Switch for All Above Controls

Cat. No. 6750 25c Each

#### GRAPHITE ELEMENT VOLUME CONTROLS

Life tests conducted in our laboratories under the severest and most gruelling con-ditions have demonstrated unquestionably that the Clarosial Graphite Element Volume Control will outlast the average re-ceiver or sound equipment and will con-tinue to function silently without any change in overall resistance.





Without Switch

ł	Cat.		Suggested Use Taper for	Cat.
ı	No.	Resistano		-
1	5907	1,000	Untuned Antenna	5933
ļ	5908	1,000	Standard Potentiometer	5984
1	5909	2,000	Antenna Untuned	5935
1	5910	2,000	Standard Potentiometer	5936
ı	5911	3,000	Standard Potentiometer	5937
ł	5912	5,000	Standard Potentiometer	1938
١	5913	10,000	Antenna or R.F. Coil	5939
ł	591	10,000	Antenna & C Bias	=0.00
I		The same	Combined	5940
١	5915	10,000	Standard Potentiomater	5941
J	5916	25 000	Standard Potentiometer	5942
ı	5917	25,000	Phonograph Pick-Up	5943
ı	5918	50,000	Screen Grid Voltage	5944
u	3919	50,000	Standard Potentiometer	5945
1	159/20	75,000	C Bias Rheostat	
1	-		R.F. Stages	5946
ì	5921	75,000	Standard Potentioneter	5947
ı	5922	100,000	Antenna or R.F.	
ı			Primary Shunt	5948
ı	5923	100,000	Tone Con rol	5949
ı	5921	100,000	Sundard Potentiometer	5950
	5925	200,000	Screen Grid Control	5951
	5926		Standard Potentionicter	5952
ı	5927		Pentode Tone Control	5954
ı	5928	250,000	Standard Potentiometer	5955
ł	5029		Standard Potentiometer	5956
ı	5930		Standard Potentiometer	5957
ı	5931		Tuned R.F. Coll Shunt	5958
ı	5953	1 meg	Tone Control	and it.

70c Without Switch

90c With Switch

#### Constant Impedance Controls



uniformly.

These constant impedance controls consist of one fixed load resistor and one variable input resistor with the variable arms or reter connected in commen.

## Dual Type "L" Pad

Cat. No. 2766 2839

25 ohm for voice coil control.
200 ohm for line or microphone control.
500 ohm for line or mixing

2854 transformer control.
2000 ohm for phonograph or high
impedance speaker control

Our Price \$1.75



#### Volume Controls for Stromberg Carlson

		CIGAL EGOVE		
Cat.				Our
No.	Type	Rec	eiver	Price
31205	Long shart	642	Rear	\$0.75
3206	Projecting			7
	shait	642	Front	.50
3308	Projecting			
	*Buft	635	Front	,70
2370	Standard	635	Rear	.65
				The same of the sa

#### Centralah Twin Potentiometer 10.000 to 250,000 Ohms Used in Earl 21, 22

An ideal volume control for all sets Will not burn out. Operate outly and antformly always.





35c ea., \$3.60 doz.

## Replacement Volume Control

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

Part No. 62940



Cat. No. 5158

Our Price 81.45

#### Freshman Models "M" and "N" Volume Control



Cat. No. 3772

(Banas Price \$1.35

## ELECTRAD 66R



25,000

3.800

Accurate, Smooth Operating and Compact. The shafts are extra long to meet any mounting condition. types listed below can be used as replacements in 343 standard models of receivers.

By simply attaching the switch coverplate, any volume control is turned into one with built-in switch.

This obviates the necessity of keeping both types in stock. The switch coverplate is standard and fits on all Electred "R I" controls.



	1000			
	t Switch-	- Value		
Cat. No.	Type	(Ohms)	Uses	Less
5633	RI-273	200	Cathode Bias	
2949	RI-274	400	Cathode Bias, Hum Neutrolizer, Mi-	Switch
			rophone Control	
3038	RI-276	1000	Cathode Bias Control	Our
5378	RI-232	2000	Untuned Ant nna	Price
3039	RI-233	3000	R F Primary Shunt	Frice
3040	RI-234	5000	Antenna Shunt	43.4%
2957	R1-240		Antenna or RF Pri. Shunt	60c
		100	Antenna and Cathode Bias	MARC
8848	RI-201	15,000	Ant. Pot. Center to coil, R. F. Pri-	was to
		,	mary Shunt	Each
2958	RI-280	25,000	Phonograph Pick-up Antenna-	-
			Ground Shunt, Screen voltage	Switch
			control	
2959	RI-205	50,000	Screen Voltage Control F. F. Plate	Cover
			Voltage Control	Cat. No.
3941	RI-202	75.000	Variable Mu Cathode Control Bias	
			Voltage Control	7373
2960	RI-242	100,000	R F Plate Voltage Control, Tone	-
			Control	00000
2901	RI-208	250,000	Audio Trans. Sec Control, R F	25c
-			Coil Shunt	
2962	RI-303	500,000	Audio Trans. Sec. Control	Each
				777.
Cat No.	3	MISCELLA	NEOUS DUAL TYPE POTENTIOMETERS	Our Price
5160	10,000	50.000	Antenna and Screen Grid Control.	
5158	50,000		Antenna and Screen Control, Cathode	\$1.25
22.00			and Screen Control	Dias
3820	10.000	250,000	R F Grid and Plate Shunt	1.45
3254	25.000	6.000	Antenna and Serson Coursel	35

#### Genuine Crosley Volume Controls



No.	Size	Models	Price	
6103	2,200 ohm, short shaft	602, 608, 609, 610	\$0.35	
6105 6108 6104 6479	25,000 ohm 10,000 ohm 25,000 ohm 45,000 ohm	77-1 120 48P, Wigit 30S, 40S, 31S	.50 .50 .50 .35	

#### Genuine Majestic Volume Controls

at. No.	Models	Sine	
5738	180, 181	75,000	Dual
		30,000	Duni
569G	90B, 100B	75 000	Pot.
		645	Pot.
5844	100	75,000	Duel
		75 000	Duni



Our Price 35c ea.

#### Replacement for Radiola 33

2000 Ohm Potentiometer

List Price \$1.95

Por Padiola 23. Insulating strip (easily removed) for metal panels,

R.C.A. Replacement Part No. 5091



Cat. No. 3762

#### Our Price 60c

#### New Adapters for the New Tubes 57-58-82-41-42



1.15

Twin Adapter used in connection with 205 by latch look analyzer plugz. Test 57-58 tubes with the Jewell 444 analyzer.

Cat. No. 7280 Our Price

Same as above but in analyzer plugs without tacch lock. For Jewell 199, Weston 547-505 and 566.

Cat. No. 7281 Our Price

# llaneous Bargain Price

Speaker and Phonograph Fader



This control perate phono raph turntables or speakers, con-trol the vol-time of each and fade them on and on at will. This is a

fourth terminal potentiometer.

2000 ohms-0-200 ohms.

Cat. No. 2837 Our Price ......

8135

## 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. 3619 Our Price .... 90c





#### Frost Rheostats 6 ohm-Cat. No.

26 ohm-Cat. No.

3899

Our Price 18c

#### CLAROSTAT 2000 OHM POTENTIONETERS

New Type Air Cooled

Used in Sonora Sets Cat. No. 3759 15c



#### Replacement Resistance Strip for Atwater Kent Volume Controls

Burnt out or defective strip replaced in a jiffy.

Cat. No. 3713



For AK 36, 37, 38, 40, 42, 41 and 52 Sets

For AK 55, 60, 66 Sets

No. 7303 Our Price, Each.....

#### Hum Control

20 Ohm with Center Tap

Used to eliminate A.C.

Only a few left at this price.

Cat. No. 3754 10c Each ...

YANLEY Panel Mount Hum Control Wire Wound

SCREWDRIVER TYPE

Cat. No. S700 20 Chm



Our Price Pach \$2.75

#### Potentiometers Yaxley For Volume Control, Wire Wound, Air Cooled

Price No. 40 with knob 15c 2755 300 V.C. 35e 3763 7375 15000 with



#### STROMBERG CARLSON RHEOSTATS

switch bracket 25e

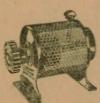
(Made by Amsco)

Cat. No.  $\frac{4071}{4073}$ 

20c



#### Laboratory Model and Speed Control Clarostat



Especially adapted to control of variable peed motor in television and other precise work. May also be used as a neavy-duty variable reason for latoratory work. laboratory work. Provided with neavy metal cas-

screw binding posts, and ton. Carrying capacity hort-circuit butof 80 wat

Cat. No. Model 6545 Laboratory 6546 Laboratory

Resistance Carrying Range Capacity 14-10 chms 80 watts 200 to

100,000 ohms 90 watts 6547 Speed Control 25-500 ohms 80 watts

49c Our Price \$2.94 ea.

#### Centralab Slide Contact Volume Costrols and Potentiometers

Perfect Slide shaft wiping-No Noise Standard 1/4 in

Desc. 25,00 Ohm Potentiometer 1,000 Ohm Volume Control 5,000 Ohm Volume Control 25,000 Ohm Volume Control

Our Price Each

#### CLAROSTAT MIDGET Volume Control

Compact, neat, convenient O-500,000 - ohm range in several turns of knob Micrometric adusting. justment. On c-Convenient screw terminal Many applications in present-day

AROS

Cat. No. 3808 Our Price

34 c

#### Electrad 250,000 Okm Volume Control

Wire Wound bakelite frame.

Cat. No. 3890 25@



#### Electrad 1,000,000 Ohm **Volume Control**

Used as Tone Control by Victor

## RCA No. 106 Dynamic Speaker Rectifier Stacks

Also Used on Radiola 62 Speaker Delivers 100 Volts 100 Mila D. C. with Load

Will supply sufficient B voltage on any Dynamic Speaker having 600



RCA Part No. 6898 Cat. No. 5734

Our Price \$2.50 ea. \$4.50 per Pair

Federated is headquarters for all public address equipment.

# 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 evaluable in all the usual wattage ratings and a wide range of fixed values. Through the use of extra sliding clips intermediate values can readily be obtained. This exclusive Electrad feature is greatly appreciated by service men, since it makes the TRUVOLT All-Wire Resistors ideal for replacement. These resistors should not be used where there is more than 400 Volta D.C. present.

b. c	201	mate fr	an 400 V	reco w.c. p	Present.	ed where	
	3		92	Туре	Resistance in Ohms	Current Willi-	Our Price Each
(E) minimin	mission of challing mis	ACTION VALUE		C-12.5	1,250	250 >	
(Transa	and the second	SALLES DELL'E	Name of the Parket	C-15	1,500	182	
	Au No	3323		C-80	2,000	158	
	Cat. No.			U-22.5	0.950	149	
	Type	Watte		C-23	2.500	141	79c
	2 Inches	Long		C-80	3,000	129	100
		Current	Our	C-85	3,500	119	
74.	Resistance	Milli-	Price	C-16	4.000	232	
Type	In Ohma	amperes	Each	C-45 C-50	4,500 5,000	105	
B02 E08	2 3	3,500		C-88	6.000	91	37
B65	5	2,800		C-70 C-75	7,000	84	.87
B075 B1	7.5	1,000		C-80	8,000	35	81
B15	10	1,500		C-90	9,000	74	87
B25	25	1 250		C-100 C-100	10,000	71 35	.96
B5 B-1	50	700 500		C-150	15,000	58	.96
B-2	200	353		C-200 C-250	20,000 25,000	50 15	1.03
B-3 B-4	300	289		C-369	30,000	41	1.08
B-#	400 200	250 224		C-100 C-200	42,000	35	1.14
B-7.5	750	182		C-000	50.000 60.000	32	1.17
B-8 B-10	800	177	49c	C-800 C-1000	80.000	25	1.31
B-17.5	1.000	158	ZUC	C-1000	100,000	22.5	1.67
B-15 B-90 B-975	1 500 2 000 150 3 300	129 112 165			Cat. No.	5863	
B-25	-						
	8,200	100			Type D-7!	Watis	
B-30	8.000	100			Type D-75		
B-30 B-35 B-40	3,000 3,500 4,000	100 91 84			Type D-78	Long	
8-30 8-35 8-40 8-45	3,000 3,500 4,000 4,500	100 91 84 79			6 Inches	Lung	Our
8-30 8-35 8-40 8-45 8-10	2,000 3 505 4 000 4 500 5,000	100 91 94 79 75 71		Type	Resistance in Ohm	Long	Our Price Each
8-30 8-35 8-40 8-45 8-10	2,000 3 505 4 000 4 500 5,000	100 91 84 78 78 71 65 60		D-1	Resistance in Ohms	Current Mult- amperes	Price
8-30 8-35 8-40 8-45 8-10	2,000 3 505 4 000 4 500 5,000	100 91 84 79 18 71 64 60			Resistance in Ohma	Current Multi- amperes	Price
8-30 8-35 8-40 8-40 8-10 8-10 8-75 8-75 8-80	2,000 3,500 4,000 4,000 5,000 7,500 8,600	100 91 94 78 78 78 78 78 78 78 78 78 78 78 78 78	.52	D-1 D-2 D-3 D-4	Resistance in Ohms 100 200 300 400	Current Multamperes 263 619 500 432	Price
8-30 8-35 8-40 8-45 8-10 8-70 8-70 8-75 8-75 8-90	2,000 3,500 4,000 4,500 5,000 1,000 7,500 8,600 9,000	100 91 94 79 78 71 60 53	.52 .58	D-1 D-1 D-3 D-4 D-5	Resistance in Ohms 100 200 300 400 500	Current Milli- M	Price
8-30 8-35 8-40 8-45 8-10 8-70 8-70 8-70 8-70 8-120 8-120	2.000 3.509 4.000 4.301 5.000 6.000 7.200 7.500 9.000 10.000 12.000	100 91 91 78 78 78 78 78 78 78 78 78 78 78 78 78	.55	D-1 D-1 D-3 D-5 D-7.5 D-8	Resistance in Ohms 109 200 300 400 500 750 200	Current Milli- Amperes 265 619 500 432 387 316	Price
8-30 8-34 8-45 8-45 8-70 8-70 8-70 8-70 8-150 8-150	2.000 3.509 4.009 4.009 5.000 7.500 7.500 8.000 9.000 12.000 15.000	100 91 94 78 75 75 60 52 50 45	.55 .58 .58 .58	D-1 D-1 D-3 D-3 D-7-5 D-10	6 Inches Resistance in Dams 109 200 400 500 750 200 1,000	Current Mill- Amperes 303 619 500 422 387 316 306 374	Price
8-30 8-35 8-40 8-45 8-10 8-70 8-70 8-70 8-70 8-120 8-120	2.000 3.509 4.000 4.000 5.000 7.000 7.500 8.000 9.000 12.000 12.000 15.000 20.000	100 91 77 75 71 64 60 69 38 53 54 54 54 54 54 54 54 54 54 54 54 54 54	.55 .58 .58 .58	D-1 D-1 D-3 D-5 D-7.5 D-8	6 Inches Resistance in Dams 109 200 400 500 750 200 1,000	Current Mill- Amperes 265 619 500 422 387 116 308 314 245	Price Each
8-30 8-35 8-45 8-45 8-40 8-45 8-40 8-75 8-75 6-80 8-190 8-190 8-190 8-290 8-290 8-290	2 000 3 509 4 009 4 503 5 000 6 000 7 000 7 200 7 500 8 000 9 000 10 000 12 000 15 000 25 000 25 000 30 000	100 91 778 78 78 78 78 78 60 59 50 45 41 35 22	.55 .58 .58 .58 .67 .61	D-1 D-2 D-3 D-5 D-7.5 D-10 D-10,5 D-10,5 D-10,5	6 Inches  Resistance in Ohms 100 200 300 400 500 750 200 1.000 1.200 1.500	Current Milli- amperes 253 619 500 482 387 116 306 274 245 224 194	Price
8-30 8-35 8-40 8-45 8-80 8-75 8-75 8-75 8-100 8-120 8-1	2.000 2.509 4.509 4.509 5.000 6.000 7.500 8.600 9.000 10.000 12.000 12.000 12.000 12.000 25.000 25.000 25.000 26.000 26.000 27.000	100 91 77 71 71 60 59 50 41 95 82 22 25	.55 .58 .58 .58 .67 .73	D-1 D-2 D-3 D-5 D-7.5 D-16 D-12.5 D-15 D-15 D-20	6 Inches  Resistance in Ohms 100 200 300 400 500 750 200 1.000 1.200 1.500	Current Milli- Amperes 265   619   500   422   387   316   328   374   245   224   196   182	Price Each
8-30 8-35 8-45 8-45 8-40 8-45 8-40 8-75 8-75 6-80 8-190 8-190 8-190 8-290 8-290 8-290	2 000 3 509 4 009 4 503 5 000 6 000 7 000 7 200 7 500 8 000 9 000 10 000 12 000 15 000 25 000 25 000 30 000	100 91 778 78 78 78 78 78 60 59 50 45 41 35 22	.55 .58 .58 .58 .67 .61	D-1 D-2 D-3 D-4 D-5 D-7.5 D-18 D-18 D-12.5 D-15 D-29 D-22.5 D-21 D-22.5	6 Inches  Resistance in Ohms 109 200 309 400 500 750 200 1,500 2,250 2,500 2,250 2,000	Current Milli- amperes 253 619 500 482 387 116 306 274 245 224 194	Price Each
8-30 8-35 8-40 8-45 8-80 8-70 8-75 8-75 8-100 8-120 8-1	2.000 2.509 4.509 4.509 5.000 6.000 7.500 8.600 9.000 10.000 12.000 12.000 12.000 12.000 25.000 25.000 25.000 26.000 26.000 27.000	100 91 71 71 71 60 58 50 41 85 32 22 22 22 50	.55 .58 .58 .58 .67 .73	D-1 D-2 D-3 D-4 D-5 D-17,5 D-18,5 D-19,5 D-15,5 D-20,0 D-20,0 D-3	8 Inches Resistance in Dhms 100 200 300 400 550 750 800 1,000 1,250 1,500 2,500 2,500 2,500 3,500 3,500	Current Milli- Milli- Amperes 265 619 500 412 287 318 316 316 224 194 192 172 168 140	Price Each
8-30 8-35 8-40 8-45 8-80 8-70 8-75 8-75 8-100 8-120 8-1	2 000 3 509 4 009 4 204 5 000 6 000 7 500 8 600 9 000 10 000 12 000 25 000 25 000 26 000 60 000 60 000	100 91 94 78 71 71 60 58 58 58 41 25 22 25 25 58 62	.55 .58 .58 .58 .67 .73	D-1 D-2 D-3 D-4 D-5 D-7.5 D-18 D-18 D-12.5 D-15 D-29 D-22.5 D-21 D-22.5	6 Inches  Resistance in Ohms 109 209 409 503 759 209 1,090 1,250 1,500 2,500 2,500 2,500 2,500 2,500 3,500 3,003 3,600	Current Milli- M	Price Each
8-30 8-35 8-40 8-45 8-80 8-70 8-75 8-75 8-100 8-120 8-1	2 000 3 509 4 009 4 009 4 009 1 000 1 000 7 500 8 000 9 000 12 000 15 000 20 000 25 000 20 000 20 000 Cat No.	100 91 94 78 78 71 71 60 58 50 41 85 82 29 25 29 25 29 29 29 29 29 29 29 29 29 29 29 29 29	.55 .58 .58 .58 .67 .73	D-1 D-2 D-3 D-4 D-5 D-16 D-16 D-16 D-15 D-26 D-25 D-26 D-25 D-26 D-27 D-26 D-27 D-26 D-27 D-26 D-27 D-26 D-27 D-26 D-27 D-27 D-27 D-27 D-27 D-27 D-27 D-27	8 Inches Resistance in Ohms 100 200 309 400 500 755 500 1,090 1,250 1,250 1,250 2,250 2,250 2,250 3,300 4,000 4,500 5,000	Current Milli- M	Price Each
8-30 8-35 8-40 8-45 8-80 8-70 8-75 8-75 8-100 8-120 8-1	2 000 3 509 4 009 4 204 5 000 6 000 7 500 8 600 9 000 10 000 12 000 25 000 25 000 26 000 60 000 60 000	100 91 94 78 78 71 71 60 58 50 41 85 82 29 25 29 25 29 29 29 29 29 29 29 29 29 29 29 29 29	.55 .58 .58 .58 .67 .73	D-1 D-2 D-3 D-4 D-5 D-7,5 D-10 D-11,5 D-20 D-21 D-21 D-21 D-25 D-25 D-25 D-25 D-25 D-25 D-25 D-25	6 Inches  Resistance in Ohms  109 200 309 400 503 759 200 1,695 1,590 2,259 2,590 2,590 2,590 3,540 4,000 4,590 5,000 6,606	Current Milli- M	Price Each
8-30 8-35 8-40 8-45 8-80 8-70 8-75 8-75 8-100 8-120 8-1	2 000 3 509 4 509 4 509 5 000 5 000 7 500 8 600 9 000 10 000 12 000 12 000 12 000 25 000 30 000 60 000 Cat. No.	100 91 94 78 71 60 58 52 50 45 41 25 22,5 5862 Watts Long	.58 .58 .58 .67 .67 .72 .78 .82	D-1 D-2 D-3 D-3 D-3 D-5 D-7 D-10 D-12 D-13 D-20 D-21 D-20 D-21 D-20 D-21 D-20 D-15 D-20 D-15 D-20 D-15 D-20 D-15 D-20 D-15 D-20 D-10 D-20 D-20 D-20 D-20 D-20 D-20 D-20 D-2	8 Inches Resistance in Ohms 109 200 309 400 503 759 200 1.695 1.250 2.269 2.500 2.269 2.500 2.000 4.000 4.500 5.000 6.000 1.000 7.500	Current Millian Sperce 365 619 500 482 387 516 506 274 245 224 194 194 194 194 197 198 146 147 119 122 177 108	94C
8-30 8-35 8-40 8-40 8-10 8-70 8-70 8-70 8-70 8-70 8-120	2 000 3 509 4 009 4 009 4 009 1 000 7 500 8 000 9 000 10 000 12 000 25 000 20 000 40 000 Cat No.  Type C—50 Inches	100 91 94 78 78 71 64 60 98 58 58 45 41 85 22 25 22,5 Watts Long Current Milli-	0ur Price	D-1 D-2 D-3 D-4 D-5 D-7.5 D-10 D-10 D-12.5 D-20 D-21 D-20 D-21 D-20 D-21 D-20 D-31 D-10 D-10 D-10 D-10 D-10 D-10 D-10 D-1	8 linches Resistance in Ohms 100 200 300 400 750 200 1,000 1,200 2,200 2,500 2,500 3,000 4,000 5,000 6,000 7,500 6,000 7,500 6,000	Current Milli- Amperes 265 619 500 412 287 318 314 245 221 172 168 140 137 129 122 57 103 100 97	94c
8-30 8-35 8-40 8-45 8-15 8-10 8-75 8-75 8-80 8-120 8-120 8-120 8-120 8-120 8-120 8-120 8-120 8-120 8-200 8-30	2 000 3 509 4 009 4 009 4 009 5 000 7 500 7 500 8 696 9 000 10 000 12 000 25 000 25 000 30 000 40 000 Cat. No.  Type C—50 Inches	100 91 94 78 71 71 60 9 38 50 45 45 45 45 25 22,5 29 25 29 21 29 20 20 20 20 20 20 20 20 20 20 20 20 20	.55 .58 .58 .58 .67 .73 .76 .87	D-1 D-2 D-3 D-4 D-4 D-5 D-7.5 D-10 D-10.5 D-20 D-21 D-20 D-21 D-20 D-21 D-21 D-25 D-25 D-25 D-25 D-25 D-25 D-25 D-25	8 Inches Resistance in Ohms 109 208 309 400 503 759 209 1,000 1,200 2,209 2,500 2,259 2,500 3,500 4,000 4,000 4,000 5,000 7,500 5,000 9,000	Current Milli- M	94c
8-50 8-35 8-40 8-15 8-50 8-70 8-70 8-70 8-70 8-70 8-90 8-150 8-150 8-200 8-200 8-300 8-300 8-300 8-300 8-300	2 000 3 509 4 509 4 509 4 509 5 000 6 000 7 500 8 600 9 000 12 000 12 000 12 000 25 000 30 000 60 000  Cat. No.  Type C—50 Inches Retis ance in Ohms 100	100 91 91 78 78 71 71 60 58 58 50 41 85 32 29 25 22,5 Watts Long Current Milli- amperes 700	0ur Price	D-1 D-2 D-3 D-5 D-7 D-10 D-12 D-10 D-12 D-20 D-21 D-21 D-21 D-21 D-21 D-21 D-21 D-21	E Inches  Resistance in Ohms  100 200 200 400 500 750 1,000 1,200 2,500 2,500 2,500 2,500 3,300 4,000 4,500 6,006 6,006 6,006 6,006 7,500 8,000 10,000 10,000 10,000 12,000	Current Milli- M	94c
8-50 8-35 8-40 8-45 8-50 8-70	2 000 3 509 4 509 4 509 4 509 5 000 6 000 7 500 8 600 9 000 10 000 12 000 13 000 25 000 30 000 60 000  Cat. No.  Type C—50 4 Inches  Retistance 10 0hms 100 200	100 91 94 78 78 71 71 60 58 56 41 95 85 82 25 22 25 22 25 22 25 22 25 22 25 20 20 20 20 20 20 20 20 20 20 20 20 20	0ur Price	D-1 D-2 D-3 D-4 D-5 D-7,5 D-10 D-12,5 D-20 D-21 D-20 D-21 D-20 D-21 D-20 D-21 D-21 D-20 D-20 D-21 D-20 D-21 D-20 D-20 D-20 D-20 D-20 D-20 D-20 D-20	8 linches Resistance in Ohms 109 200 200 400 759 400 1,090 1,250 2,500 2,259 2,500 3,500 4,000 5,000 5,000 7,500 8,000 9,000 10,000 12,600 12,600 10,000 11,000 12,600 10,000 11,000 12,600 10,000 12,600 12,600 13,000 14,000 15,000	Current Milli- M	94c
8-30 8-35 8-40 8-45 8-40 8-70	2 000 3 509 4 001 4 201 4 201 5 000 7 500 8 000 7 500 8 000 9 000 10 000 12 000 25 000 30 000 Cat No. Type C—50 Inches Resistance in Ohms 100 300	100 91 94 77 77 71 64 60 99 98 56 45 41 95 22 25 22,5 Watta Long Current Milli- amperes 702 500 406	0ur Price Each	D-1 D-2 D-3 D-3 D-4 D-5 D-7 D-7 D-10 D-12 D-20 D-21 D-20 D-21 D-20 D-31 D-40 D-70 D-100 D-126 D-106 D-106 D-106 D-106 D-106 D-126 D-106 D-106 D-106 D-106 D-106 D-106 D-107 D-	6 Inches  Resistance in Ohms 109 200 309 400 503 759 1,699 1,599 2,590 2,289 2,590 3,500 4,000 4,590 5,000 6,606 1,000 7,590 8,000 12,000 12,000 12,000 25,000	Current Milli- M	94c
8-30 8-35 8-40 8-45 8-40 8-70 8-75 8-70 8-75 8-120 8-120 8-120 8-120 8-120 8-120 8-120 8-200 8-30	2 000 3 509 4 009 4 009 4 009 5 000 7 500 8 696 9 000 12 000 12 000 25 000 25 000 30 000 40 000  Cat No.  Type C—50 Inches  Recistance in Ohms 100 290 300	100 91 94 78 78 71 71 71 60 9 38 50 45 45 45 45 22 25 22 5 24 25 25 25 27 27 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20	0ur Price Each	D-1 D-2 D-3 D-4 D-5 D-75 D-10 D-10 D-125 D-20 D-20 D-21 D-20 D-21 D-20 D-35 D-35 D-15 D-20 D-35 D-16	8 linches Resistance in Ohms 100 200 200 400 500 750 800 1,000 1,250 2,500 2,500 2,500 3,000 5,000 6,006 6,006 7,500 8,000 9,000 10,000 12,600 10,000	Current Milli- M	94c  1.66 1.06 1.03 1.05 1.18 1.18 1.18 1.18 1.18 1.18 1.18 1.1
8-30 8-35 8-40 8-45 8-40 8-70	2 000 3 509 4 509 4 509 4 509 4 509 5 000 5 000 7 500 8 600 9 000 12 000 12 000 12 000 25 000 30 000 60 000  Cat. No.  Type C—50 4 Inches  Refis ance in Ohms 100 200 300 300 300 300 300 300 500 500 500	100 91 91 78 78 71 71 60 99 93 58 53 50 41 85 32 22 22 22 22 22 22 22 23 24 25 22 25 22 25 22 25 22 25 20 20 40 40 40 40 40 40 40 40 40 40 40 40 40	0ur Price	D-1 D-2 D-3 D-4 D-4 D-5 D-7.5 D-7.5 D-10 D-10 D-12.5 D-21 D-20 D-31 D-31 D-31 D-31 D-40 D-10 D-10 D-10 D-10 D-10 D-10 D-10 D-1	8 Inches Resistance in Ohms 109 200 309 400 503 759 209 1.695 1.250 2.269 2.590 2.590 2.590 3.500 4.000 4.590 5.000 6.006 1.000 7.590 8.000 9.000 10.000 10.000 12.600 20.000 30.000 30.000	Current Millian 20 peres 363 619 500 422 387 116 206 274 245 224 194 194 197 198 146 137 119 122 97 103 100 97 103 100 97 103 100 97 104 61 55 50 43	940 1.06 1.06 1.05 1.18 1.18 1.18 1.18 1.42 1.42
8-50 8-35 8-40 8-45 8-50 8-70	2 000 3 509 4 009 4 009 4 009 5 000 7 500 8 696 9 000 12 000 12 000 25 000 25 000 30 000 40 000  Cat No.  Type C—50 Inches  Recistance in Ohms 100 290 300	100 91 94 78 78 71 71 71 60 9 38 50 45 45 45 45 22 25 22 5 24 25 25 25 27 27 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20	0ur Price Each	D-1 D-2 D-3 D-4 D-5 D-7 D-5 D-10 D-12 D-20 D-21 D-20 D-21 D-20 D-21 D-20 D-21 D-20 D-21 D-20 D-21 D-20 D-10 D	8 linches Resistance in Ohms 100 200 200 400 500 750 800 1,000 1,250 2,500 2,500 2,500 3,000 5,000 6,006 6,006 7,500 8,000 9,000 10,000 12,600 10,000	Current Milli- M	94c  1.66 1.06 1.03 1.05 1.18 1.18 1.18 1.18 1.18 1.18 1.18 1.1

NOTE—Above wattage and current ratings apply only when units are suspended in free air, otherwise loads exceeding 50 per cent of their ratings should not be applied. Voltages greater than 400 D.C. should not be applied across the terminate of any one resistance unit. For high voltages it is advisable to use two or more units in series.

EXTRA SLIDERS-CAT. NO. 5832-5c Each

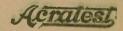
# Acralest

#### Flexible Wire Grid Resistors

While Actalest Wire Grid Resistors are utilized in all high grade radio sets, they are especially adapted for use in small receivers, such as Midget sets, automobie and Aeroplane receivers, etc. They are all-wire, completely covered by impregnated fabric, compact, non-conductive and can be bent 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.

Cat. No.	Resis- tance in Ohm	Can. in Milliam- peres	
\$054 \$656 5657 \$658 \$669 \$669 \$721 \$721 \$721 \$721 \$732 \$732 \$732 \$732 \$732 \$732 \$732 \$732	5 10 15 25 50 75 100 150 259 200 259 200 259 600 600 750 600 750 600 750 600 750 750 750 750 750 750 750 750 750 7	\$36 273 223 223 178 137 122 100 86 73 61 55 50 47 43 38 35 32 32 29 27	Our Price 15c ea.
5662 4713 4730 4735 4735 1653 1653 1686 5667 5668 5668 5670	1100 1200 1300 1400 1500 1500 1500 1802 1900 2500 2000 5000	25 25 21 22 22 21 20 30 19.8 19.8 17.5 16	Our Price 24c ea.

These Units can also be used for other purposes provided the above working current is not exceeded.



Wire Wound Grid Suppressors

-	10		ERITES.
Cat. No.	Ohms	Cat. No.	Ohms
7344	S C.T.	4729	150 C.T.
4700	10 C.T.	4704 4705	208
7345	15 C.T.	1015	550
470± 4724	20 CT.	4701 5780	250
7346	25 C.T.	4719	1400
7345	50 C.T.	5704	1700
7845	es C.T.	4709 5763	2300
7350	75 C.T.		2600
1002	100 C.T.		

Per Der.

.... \$100

MAIL ORDERS TO AFF See Terms on Page 3 Federated Purchaser Inc.

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

A CRATEST curbon resistors are the result of years of experimenting to produce a resistor that will be ab-solutely moisture proof and stay permanent regardless of atmospheric conditions.

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

Another very important feture of these units is the fact that they have no voltage co-efficient. They are conservatively rated and the temperature rise in opera-

tion is unusually low. In wire leads are soldered to tion is unusually low. The wree 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 training agoditions.

curacy under the most trying conditions.

Acratest resistors are guaranteed to be the finest on the market, noiseless, unbreakable, moisture proof and durable.

The 2 watt resistors, 1 watt and 1/2 watt all the same characteristics.



#### ONE-HALF WATT

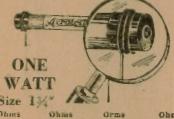
Size: I Inch Long

ALC: NO	00-	Tillian a	(M) min
Ohms	Ohm	Ohais	Ohms
100	3,000	40,000	500,000
150	+.000	40 000	600,000
200	4 400	55,000	750 000
250			
350	5,000	70 000	i mieg.
400	6.000	75.000	2 meg.
500			
700	7.000	90.000	3 meg
750	7,500	100,000	4 meg
575	10.000	125,000	o uies
1,000	12,000	150,500	o meg.
1.250	15,000	130 000	7 meg.
1,500	20,000	200,000	g meg.
	-	250,000	
2.000	25,000	350,000	9 meg
2,500	30,000	100.000	10 meg.
30 Meg.	(Used on	Condenser M	icrophones)
07 4	M Ja	m 17 . 3	T. SOCA
	200 000 000	Cat N	Ja: 5860

31.00 uoz. ASSORTED



Every servicement should have one of these handy little RMA resistor color code in his tool box. Made of ceiluloid. The three repolving wheels are littographed in hime colors. No charts to consult - no complicated calculations. Just taim the wheels to colors corresponding to resistor and the value is given instantly. To secure this valuable code key PREE—all you have to do is to purchase any one of the RESISTOR RITS on this page or TMREE DOZEN ASSORTED RESISTORS.



Ohms	Ohms	Orms	Ohms
			25,000
100	1,250	12,000	150 000
150	1,500	15,000	180,000
200	2,000	20,000	200,000
350	2,500	250000	250,000
400	1,000	30 000	350,000
500	4,000	\$0,000	400,000
600	4 400	-0.000	.00,000
650	5,000	50,000	600,000
700	6,000	70,000	750.000
750	7,000	75,000	1 meg
815	7,500	80,000	I' meg
1,000	10,000	100,000	2 meg.
			3 meg.
	Cai. N	la. 3500	

\$1.00 doz. Asstd.

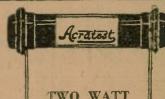
#### Carbon Resistor Kit



Contents: 33 1 Watt Carbon Pigtail Resistors One Each of the Following Assortment:

Ohms	Ohms	Ohms	Ohms
100	1.500	15,000	150,000
150	2.000	20,000	200,000
200	2,500	25,000	250,000
300	1,000		
400	3,500	20,000	500,000
500	4,000	40,000	1 meg
750	0,000	50,000	S mes.
1.000	1,500	75,000	3 meg.
1,250	16,060	100,000	
	0.0	NT. 9 8007	

\$2.75 kit of 33



TWO WATT Size 2"

Ohms	Ohms	Ohm	Ohms
200	1 750	4.000	60,000
300	2.000	10,000	70 000
400	2.500	12.500	20,000
500	3 000	15.000	90,000
600	3.500	20.000	100,000
050		25,000	25,000
700	4.000	30,000	150,000
750	5,000	35,000	200,000
1,000	€ 000	40 000	250,000
1.250	7 000	50,000	
1.500	8 000	100000	
	Cat. N	0. 5185	

\$1.75 doz. Asstd.

#### Carbon Resistor Kit

Contents: 25 2-Watt Carbon Pigtuil Resistors

ONE		EACH OF	THE *OFFO.	AA TEA CT:
	Ohms	Ohms	Ohms	Ohms
	500	2,000	20,000	125,000
	600	5,000	25,000	156,000
	759	6,000	50.000	:00 000
	1,000	7,500	60,000	200,030
	1,500	12,500	70,000	
	1.230	10.000	75,000	
	2.000	15,900	80,000	
			100,000	

Cat. No. 6515 \$3.50 per kit of 25

#### Carbon Resistor Kit

Contents: 36 1 - Watt Carbon Pigtan

0115	FLOW OF	THE FOLLOW	PINC.
ONE	EACH OF		
Ohms	Ohms	Ohms	Ohms
500	5.000	40,000	250,000
750	0.000	50,000	500,000
1.000	1,010	0.0000	600 00"
1.250	10 000	15,000	50 000
1.500	12,500	100,000	1 Mez
2.000	15,040	115 000	I bleg.
2,500	20,000	150,000	2 Meg.
3.000	25,000	180,000	a pres
4.000	30.000	200 000	b barg.
	F .	No 6596	

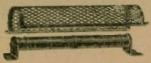
\$2.85 kit of 36

MAIL ORDERS TO ASSET INC.

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

#### D.C. Convertor Resistor

66 Ohm Vitrohm Resistor and Care for D.C. Receivers



Overell length 13%. Heat Dissipation 200 Watis.
This Ward Leonard Vitrohm resistor is 6x closes and is center tapped, for converting A.C. 20ts into D.C. 110 Voll 20ts. It has two mounting brackets on the endand a protective wire cage gots with it. Used in D.C. 20ts, transmitters, etc.

Caf.	No.	7288	8900
Our	Price	*****	 

#### Edison Base Resistors. Wire Wound on Lava Tubes

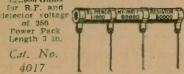


Cat. No.	Ohms	Watts	Length
7352	1.8	6.0	534"
5848	20	6.0	5%"
7853	60	100	712"
7354	7.5	100	735"
7355	9.0	100	734"
Our Price			75c
Fach		**********	

#### Grid Bias Divider

122,000 Ohms 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 a in. diameter and dissipates 10 watts.

Used in Colonial 32, 33, 34

Cat. No. 5727

#### Our Price 75c ea.

#### Radio Socket Wrench



A finely-manufactured and finished set for tightening and loosening the small hexagen nuts and thumb screws encountered in radio construction and repair. Four sockets are funrished: One each for hexagon nuts measuring 3a, 5/16 and 1a-inch between flats, and a four-jawed ocket for handling knurled thumb screws such as found on dry cells, etc. The ockets are deeply drilled to accommodate crew ends and the hexagen portion accurately broached to a size. The sockets are deeply drilled to accommodate crew ends and the hexagen portion accurately broached to a size. The sockets are size, well case-hardened.

Cat. No. 5070

# Acralesh

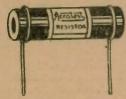
#### 5 Watt Wire Wound Pigtail Resistors

A resistor designed to meet the demand for a reasonably priced and compact high resistance unit. Recommended for us in Midget, Aeroplane, Automobile and other receivers where space and price are lim-ued. Terminals are of No. 18 linual copper wire securely embedded in our 1-coat Baked Insulated Engage!

FEATURES:

t. Special Etastic Insu-lating Enamet. Raken at low

Rated at low temperature of only 400 degrees F. Acid. Oil. Moisture. and Fire Proof. Every unit receives three costs of the costs of th



Cai. No. 5900

Maximum Wattace, b Maximum Dia., 5," Maximum Length, 11," Tolerance, 2, plus or minus rated resistance.

enamel to liminate pol-ibility of lenkage at high voltage 2. All Acratest Resistors are wound with Double Cost Enamel Alloy Wire that has a very low temperature co-efficient.

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

Ohms	Ohms	Ohms	Ohms
50	600	2,050	7,000
100	650	2,500	7.500
150	700	3,000	10,000
200	750	4,000	12,500
350	1,000	4,500	15,000
400	1,250	5,000	15,000
500	1,500	6,000	20,000

#### Our Price 20c ea. \$2.25 Doz.

.... 25c En., \$2.75 Doz. 30,000 Ohmi... .... 30e Ea., \$3.50 Doz.

#### Micamold Bakelite Grid Leaks



	Cal. No.	4036	
Sizes	Sizes	Sizes	Sizen
.01	.04	.1	.5
015	.05	.15	
025	.075	25	

#### Our Net Price 40c Per Box of 10

#### Lynch Leak Proof Mountings



Meet the most exacting demands in design, material and construction. They are specified as

Standard by leading manufacturers of precision apparatus.
Cat. No. 7436—Single Mounting 20c 

#### PRECISION Wire Wound Resistors



on both ends. Tolerance, 1%. Accurate, noiseless dependable.
Used in Television Amplifier, Voltmeter Multiples, Mater Shants, Photo Cell Circuits, Sound Head Amplifiers, Taper Tand H Pads, Attenuators, Decade Boses, Brides Assembly.

ACRATEST PRECISION TYPE RESISTORS are wound with the best grades of allow wire. Every spool of wire is thereusely checked for insulation breakdown, diameter and temperature to efficient before entering preduction. To our knowledge we are the only company using double insulated wire. Every size of wire used in the manufacture of our units receive two BAKED coats of enswel insula-

#### Cat. No. 6500

Registare		Resident	
in Ohm	E I IE	The Committee	-
25 -	3.70	40,000	5 1.05
50	70	45,600	1.05
	75	50,000	I.05
		60,000	1.15
		35,000	1.33
200	75		14 504
500		30,000	
	75	000,000	1,30
		100,000	1.30
			4 454
2.000		125,000	4 500
2,500 -	75	150,000	
		175,000	
	6.44	200,000	1.45
	200	25,000	1,45
4.580 .	90		The second second
5,003 .	90	250,000	
	510	300,000	1.85
	4.44	400,000	1.85
	0.71	450,600	1.85
15,000	00		4.00
20,000 .	00	500,000	
		600,000	2.00
		750,000	2.15
	4 6	1.000,000	3,10
30,000 .	1.05	1,000,000	
35.000	1.05		

#### Wire Wound Voltage Dividers on Lava Tubes



	Cat.	Ohme	Tapped at	Watts	Our
	No.	Ohms		100	\$0.05
	2865	250	200	50	.75
	5751	4,400	1,500, 1,000, 000	210	
	3922	4,650	2,500. 500, 50 and	50	:80
				50	.565
	3786	5,135	4.185, 950	100	,25
	2002	5,400	3,000	50	.70
	3864	6,850	5 200, 900, 750	50	.50
	3787	7,095	20, 695, 6,205		
	4014	7,120	3,000, 3,000, 840,	50	.39
	3905	7.835	3,400, 2,800, 55, 80,		
	0000	*,000	40, 360	50	.60
	3873	8,000	4,500, 1,500, 1,250,	100	,40
			750	100	.30
	3854	8,350	7,500, 750, 180		.50
	3790	9,450	5,580, 2,200, 750	50	
	2919	9,800	3,500, 3,500, 2,800	50	.50
	3967	10,000	4 Sliders		50
	3788	13,300	8,000, 4,300	50	100
	3785	12,900	9,000, 3,300, 500		.40
			50 Watts		325
	3900	17,660	CT	50	.25
	2013	17,900	2,400, 3,000, 6,500		40
	3906	18,100	100, 15,000, 3,000	75 50	.25
	3908	65	50		113
	3911	6,120	5,000	100	88
	3915	25,000	4 Sliders	75	
ON ALL VOLTAGE DIVIDERS THE BIAS IS LOCATED ON THE END WHERE THE					
	IS L	OCATFI	ON THE END W	MENE	1350
			LABEL IS.		

MAIL ORDERS TO AT See Terms on Page 3



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

# Wire Wound Resistors & Voltage Dividers at unheard of prices

#### Wire Wound Fixed Resistance on Baked Lava Tubes



	0		6	
Cat.				Our
No.	Ohms	Size	Watts	Price
3928	. 5	2 in.	10	\$0.25
3956	8	3 in.	50	.25
3974	12	3 in	75	.25
3010	31	2 in.	50	.25
3909	32 0	J. T. 6 in.	100	.40
3902	55	2 in.	50	.30
3916	40	11/4 in.	25	.20
4703	100	135 in.	5	
		100.00		.20
3975	100	2 in.	10	.15
3991	100	2 in. 2 in.	10 25	.20
3993	175	2 in.	25	.35
3934	250	2 in.	5	.25
3935	300	2 in.	5	.25
3923	400	2 in.	5	.25
3969	420 C		25	.25
3936	500	2 in.	10	,25
3921	600	2 in.	10	.25
3894	2100 €		25	.25
3937	700	2 in	10	25
3938	750	2 in.	10	.25
3878	781	1 in	10	.25
3931	800	2 113	25	.25
3971	900	3 in.	50	.30
3942	920	3 in.	50	.30
3851	1000	2 in.	10	.20
3855	1500	115 in.	10	.20
3861	1500	4 in.	50	.30
3859	2000	2 in.	25	.20
3904	2000	2 in.	5	.20
3989	600 C		50	.40
3994	2650	2 in. 1 in.	10	.20
3943	3500	2 in.	25	.25
3944	4000	2 in.	25	.30
3945	4300	2 in.	25	.30
3901	5000	2 in.	10	.35
3908	5000	6 m	100	.55
3947	6000	4 in.	25	.40
3948	7500	2 in.	25	.25
3925	12500	2 in.	25	.30
3852	15000	2 in	10	.25
3917	20000	4 in	25	.35
3940	30000	6 in	75	.35
3970	40000	6 in	75	.55
3946	50000	8 in	75	.55

# Ward-Leonard D. C. Voltage Regulator

50 Ohms-300 Watts

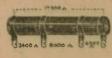
Original resistor as used in Greco SE4 Receiver

For converting A.G. sais to D.G. where screen srid tubes are used.

Cat. No. 4245 \$2.00

# General Utility Voltage Dividers

50 Watts 17,900 Ohms Tapped at 3400 8000 6500. 41 in long in diam. On baked ava



Cat. No. 3913 25c

17,680 OHMS C.T. 75 Watts, 41 in. long.



This voltage divider has many uses and applications in electric sets. B climinators, transmitters and amplifiers. Will stand up with a wide safety factor. Made by a nationally known manufacturer to sell for averal times the price we ask. Get a tew at this low price and be prepared for the next repair job.

Cal. No. 3900 25c ea.

#### Filament Series and Grid Resistors

For Atwater-Kent 61 D.C. Set

Cat. No. 6008

95c

Per Set of 3



#### Other AK Resistors

Cat. No. Ohms 7185 30 C.T. 7166 1000 7167 800 15e Each

# 1,000 Ohm 10 Watt

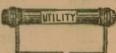
Suitable for bias to: 265 tubes; and used for many other purposes, 10 waits, 112 in long



Cat. No. 3924 10c eu.

#### ATTENTION — SERVICEMEN:







Every radio desler and servicence about have a complete stock of the above resistor in stock. Resistors in radio are like sugar in the greecy because. Ordinarily you would have to pay \$1.00 to \$3.00 PER DOZEN for these resistors, which are all guaranteed to be in perfect condition. We are making up an assortment of 100 popular aires of resistors and officing them to you at 2c EACH, or less than 25% of REGULAR PRICES! Why, the first repair job calling for one of these resistors will pay for the entire 100! A fortunate purchase of 30,000 assorted resistors from a malionally known radio manufacturer permits us to make this repair/able offer. Every resistor meter tested for value and most of them marked. Take advantage of this other 25 the operfunity may never come again.

#### KIT OF 100 RESISTORS CONTAINS THE FOLLOWING:

Watt Carbon	E-Watt 6	Sarbon Figuria	Wire-Wound	Fleathi
Resistors	200 ohms	20000 ohms	Grid	Wire-Wound
10mil ohms	300 "	25566	Suppressor	Resistors
2000	350 **	30000 "	10 Ohms	200 ohm.
20000 "	400 **	46000 14	10 CT	480
22000 "	700 4	68080 **	20	500 "
23550 "	1200 4	70000 **	28 " C.T.	600 #
100000 "	1250 4	75008 W	200 **	3200 "
250000 "	2500 %	80000 #	#00 H	1490 "
	4000 24	125050 *	750 0 0	1508 **
	4700 14	355500 **	7 Watt	* 11.00
15 Watt Carbon	5000 **	180000 "	Durham	10 Walt
	6000 et	356000 "	Metalmer	Mire-Wagnit
100 ounts	7000 **	400000 "	F60 ohms	Resider
1000	T500 #	800000 "	750	Nil a old
1556 **	10000 **	Tagaug "	1000 "	1 Oil Ohnis
25505 4	12060. **	1 Meg.	3000 "	Harawack
50000 **	15000 "	2 Men.	4000 **	18.04) 40000

Just Think! 166 of the above Assorted Resisters for only.......... 2 05 Cat. No. 7458 Sold in Kits of 100 only.

Note: We reserve the right to vary the assortments in accordance with stock on beat

#### 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

6850 Ohms, divided 750, 5200, 900 Olims, Used in Temple Models 8-60, 3-80 and 8-90

35C



Cat. No. 3867

33 Ohms Used as Voltage Regulator in Femple DC Sets. Can be used in place of Voltage Regulator Tube

30c



Cat. No. 3861 500 Ohm Re Litors for Augio Bias.

250



Cat. No. 3865 250 Ohms with 200-50 taps. Temple DC Sets. Dised in

#### Ward Leonard Vitrohm

8359 Ohm Voltage Divider Papped at 5,000, 3,000 and 350 Ohms. 6 in. long.



Cat. No. 3863

Me each

7850 Ohms Tapped 750, 7000, 100 4 in long.

30c euch Cat. No. 3914 \$3.50 dozen

#### HY-WATT CARBON Resistors on Lava Tubes

5 WATT-113/ INCHES LONG



No. Ohms Color 3968 1,000 Green 2325 5,000 7326 15,000 4707 10,060 Black 8952 20,000 D. Green 3953 22,000 Black 4708 25,000 Black

No. Ohms Color 3956 65 000 L Gray 936 65 000 L Gray 3957 85,000 Black 3958 100,000 Red 3959 250,000 Marcon 3969 500,660 Brown 3961 112 Meg. Black 1992 3 Meg. Orthge 3973 100 Black 3995 30,600 Orange

3954 28,000 Orange 3955 50,000 D Gray Our Price 15c ea. \$1.50 Dozen, Assorted

#### Victor Voltage Divider

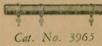


For all 1920 Model Receivers. Total 2,325 Ohms tapped at 209, 1,350, 260 and 775. Cat. No. 3170

Our Price 65c ea.

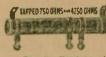
#### Aerovox Croslev Voltage Divider

5.000 Ohms tapped at 2.000, 25 watts. 4 in. long Wire wound on beked chamel.



#### Our Price 50c ea.

#### 5.000 Ohm Resistance. Wire Wound on Lava



Specially De-Freed-Elsemann Model 78, 79 and 95 Sets. Also for Earl, 31, and 41 Sets.

Can Be Used for Any Type Set.

Cat. No. 3907

Our Price 35c ea. \$3.00 doz.

#### Freshman Fixed Resistances

Wire Wound-Baked on Lava Tubes



n Freshman N 18,000 ohms total used i odels. Tapped 1500, 4500. Models. T: 2200 ohms.

Cat. No. 3963

For Freshman (Model G) total 10,950 chms 6 taps. Tapped as follows: 2100 6 tap. Tapped as follows: 2100 4300 ohms, 300 ohms, 3000 ohms 1250 ohms.

. Cat. No. 3966 .

#### Our Price 65c ea.

#### Radiola 28 Voltage Divider



Wire wound on bakelise. Identical to original. This item is usually very difficult to secure and every service man should have a few on hand.

Cat. No. 6756

Price 75c ea.

# Acralest

#### Wire Wound Vitreous **Enameled Resistors**



Acratest vitreous enameled resistors

Acratest vitreous enameled resistors are made of the best grade of electrical refractory tub in gs which have the same co-efficient of expension as the porcelain peavy locals without fear of injury to the resistor. We use the highest grade of resistance wire, wound on refractory fubes. Acratest resistor contact points are securely made by a scientific process, whereby the resistor at the contact point practically becomes an integral part of the soldering or mountain luss, 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.

Cat. Tube

ELOCIS .	10 1111.00 01013	a o cy coo.		
Cat.	Ohma	Tube Size	Wattage	Our
No.	Ohms 100		10	25c
3678	100	2 in.		
3088	200	2 in.	10	256
3679	250	2 in	10	25c
3680	500	2 in.	10	25c
3681	750	2 in.	10	25c
3682	800	2 in.	10	25c
3683	1.000	2 in.	10	25c
3684	1,500	2 in.	10	25c
3685	2.000	2 in.	10	25c
3686	2,500	2 in.	10	25c
2687	3,000	2 in.	10	25c
3688	5,000	2 in.	10	25c
2089	7,500	2 in.	10	25c
3926	8,600	2 in.	10	25c
3520	10,000	3 in.	25	30c
1908	12,500	3 in-	25	30c
2692	15,000	3 in.	25	30c
3693	20,000	3 in.	25	30c
3694	25,000	4 in.	50	45c
3695	30,000	4 in	50	4ñc
3696	40,000	5 in.	75	55c
3697	50,000	5 m	75	55c

#### 3000 Ohm Davohm Resistor

Promotion Wire Vielind on grooved Lava Tube. Accuracy 99%



Cat. No. 5699 Price 25c

#### VARIABLE VOLTAGE DIVIDER



Cat. No. 3967—10,000 Ohms, 4 Sliders, 41½ in. long. Cat. No. 3915—25,000 Ohms, 4 Sliders, 5¼ in. long.

This variable wire wound resistance designed for heavy duty work can be used on any radio circuit such as B eliminators, amplifers, electric sets, etc. When the desired voltage is obtained it can be set and it will not vary due to the positive contact and absence of chemical properties such as used in other types of variable resistance. This unit aside from being electrically perfect, is low in price and will take the place from 2 to6 resistance. List \$1.50.

Especially adapted for Freshman and

Especially adapted for Freshman and

Our Price 80c ea.

MAIL ORDERS TO AF See Terms on Page 3



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

**World Radio History** 

## Radio requency Coils heterodyne super-

ATWATER KENT Model 55 Replacement R. F. Coils

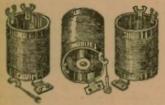


1% in Dismeier. 215 in. high, Primary wound on s e p arate

Cat. No. 3551 81.50

Per Ser of 3 Coils

#### RADIOLA Super Heterodyne Coils



Used in Radiolas 64 and 67 Victor Models 9-18, 9-51 and 9-56. Frameled wire on bakelite formlib in. diameter x % in long. R.F. chokes includes.

Cat. No. 3732

#### \$1.35 per set of 3

RCA Screen Grid RF Coils for Radiolas



Complete with mounting brackets. serem erid condenser.

Cat. No. 4168

#### \$1.35 per set of 3

#### Brunswick T R F Coils in Shields

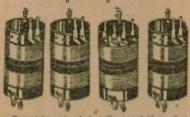


Mor .00035 condensers. With mounting screws

Used in all early Brunswick sets.

.....25c Cal. No. 5751

#### Genuine Victor Radio Frequency Coils



Complete set of 4 coils consisting of 1 antenna coil and 3 RP coils. Diameter 112 is., height 2% in. Por .00025 concenses.

Cat. No. 4169

#### 50c per set of 4

#### Transcontinental Screen Grid R. F. Coils

With Shields for .90035 Condensers

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

Set of 4 Colls—I Antenna, 3 Screen Grid with Shields

Grid with Shields 95c Per Set of 4

#### Band-Pass, Defector and Oscillator Coils



An unu u-slly fine superher can this inique



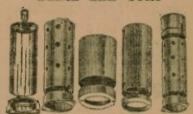
These coils incorporate 10 K.C. bend pass coil com-

detector and oscillator combination. detector and oscillator combination. They will make a stative, schecive super-heterodync which will receive from great distances. A special feature of these colls, the tap on the oscillator coll which removes all semblance of image inquen-cial and harmonics. These colls tune with our 351 4-mag condenser and cover the entire broadcast band. Using these colls with the intermediates, condenser and other equipment listed on this page will aske up a low priced supermet of ad-vanced design. Wiring claram and in-lituations furnished with each act.

Cat. No. 6654

4 order blanks have been included in the center of this crealog for your convenience. Use them.

#### Aluminum Shields for Tubes and Coils



7268 7272

All one piece seamless construction, highly poliched and properly designed for their particular purpose.

3 Piece Shield for Type 66, 57, 55 and 5 Tube. Cat. No. 7173 26c Per Set ...

2 Piece Shield for Type 82 Tubes Cat. No. 7568 Per Set .

2 Piece Shield for Type 35 Tubes Cat. No. 7270

2 Piece Shield for Smill Coil Dis-meter, 2 in height, 1% in Cat. No. 7272 10c Per Set

# Acrales

#### New Design "Conoid" Screen Grid R F Coil

Completely Shielded







Diameter, 2 in.

A completely shelfed coll. All-would ad elf-supporting. Each law is marked with its respective connection. These coils come in matched set especially tracked on accurate straight line frequency condensers. Enclosed in copporting on chassis with two creations with removable bases for each mounting on chassis with two creating facilitates wiring as the colls 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, saleids and condensers to matched. Made for 20033 condensers.

Will operate with the 225, 230 these and with the new automobile callode had been necessary to educe the primary of the coil to prevent oxidiation.

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 Aut. and 3 R.F. Colls

#### Radio super-5 heterodyne frequency

# Acratest

#### Superheterodyne R.F., Detector and Oscillator





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-gang superheterodyne 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 oscillatorials are on one form to assure perfect coupling.

Cat. No. 5197 95c set Complete with Diagram

#### AUTODYNE Super-Het Coils



Cat. No. 6973

Coil Kit \$2.95

This system saves the use of an extra oscillator tube and lowers the cost of constructing the receiver. The stability obtained from the Autodyne circuit assures its adaptation universally.

With this set of high gain coils and IF, 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 coll.

High gain interstage coll.

Au odyne coll and intermediate combined.

1-175 K.C. Intermediate frequency

transformer

With complete diagram of a Modern Super-het using 1—RF, 1—Detector and Oscillator, 1—IF, 1—2nd Detector, 1—Pentode, 1—Rectifier.

#### Radio Frequency Choke



For Short and Long Wave Receivers

35 Mils Fully shielded with 2 solder terminals and mounting screw. Dis. 114". Ht.

Our Price 25c Ea.

# Acralest

#### **High Gain Intermediate** Frequency Transformer

These well-shielded, sharp-tuning intermediates are just the thing for that new super you are plenuing. Close coupling between primary and secondary assures high voltage gain, enabling recaption 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 with a diagram of an all-wave superhet using the new band-switching coils.

- FEATURES:
  1—Condenser adjustment through to, of
- can.
  2—Aluminum shield with holes for wires.
  3—Heavy steel supporting brackets.
  4—Coils properly wound and shielded.
  5—Compensator.

- -Mounting screws.
  -Mounted on porcelain base.



Diameter: 2-3/32 in, Height: 2-11/16 in. Sold in Sets of 2 and 3, Cat. No. 5385 for 175 K.C. Cat. No. 6612 for 465 K.C.

Cat. No. 7313
for,175 K.C.
For center tapped accordary for use with 55 tibe.
Complete with Diagram
Our Price, Each

#### **BAND-PASS** Or Pre-Selector Coil For .00035 MFD Condensers

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

Cat. No. 6910

#### Our Price 70c

R. F. Choke 4 Millihenry



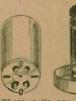
Suitable for short-wave and superhetero-dyne receivers.

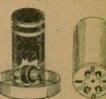
Cat. No. 6755

10c ea.; \$1.00 doz.

We carry Voltage Dividers for over 200 standard receivers. See pages 104 and 105 for complete list.

#### BROADCAST High Gain R F Coils For .00035 Condensers





These coils are especially designed for the discriminating set builder. Their spe-cial features are: 1. Choice acts at high plate im-

ciel features are:

1. Choke acts at high plate impedance.
2. Canactiv coupled primary.
3. Low distributed capacity.
4. Ease of mounting—fits into tube socket holes.
5. Compactness.
6. All councitions marked.
The coils are matched at the factory which is extremely important if selectivity and aensitivity are to be assured.
Everybody is now leaning to High Gain Ceils.

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 Amatur Bands. Coils are merely tapped in one spot for wave changing. Short wave end is separate heavy winding.

Set of 3—Cat. No. 6909

Price \$1.75 Per Set

#### Earl and Freed RF Coil

Used in all Earland Freed sets.
Dianater 134 in, height 2 in., with brackets.

Cat. No. 5375

45c ea.



Acratest RF Choke

85 Millihenries

With Mounting Brackets

Cat. No. 2871



17c ea.; \$1.75 doz.

#### Genuine RCA-Victor and Brunswick Catacombs



These ceta comb

These cetacombiner were used in the ROA and Victor sets a few years ago. They are extremely compact and contain both 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

6 tube Catacomb for RCA models 25 and 25AC; Victor models: Alhambra 11, Florenza; Brunswick models: 1-B, 1-C, Cordova 6.

Cat. No. 6220

8-tube Superheterodyne Catacomb for ROA models: 28, 28AC, 30, 30A, 30AC, 32AC; Victor models: Hyperion, Borgia, Cromwell, Tuscany, 9-15, 9-25, 9-40, 9-55; Brunswick models: BR-18, Cordova 8, 2-0, BRP-4, BRP-4A.

#### Our Price \$5.50 ea.

#### Genuine Victor R.F. Coils



R.F. Coll Cat. No. 5376

50c ea.

3% in Long, 11 in Dia.
Used in all late Victor sets. Enameled
wire wound on Threeded Bakelite tuning.
R.F. chokes included in both. R.F. coil
also has midget tuning condenser attached.

#### Kolster Variometer (Antenna Coupler)

Used in Kolster K20, K-22, Columbia 281, C1 and C3. A very hard to get item If you service Kol-ster, you should have a few in stock at this low price.

Cat. No. 5536

75c

#### Power Amplifier Or Midget Chassis Base of Heavy Gauge Steel

1 13 " long 914" wide 11 tall Weight,



Green Finish 16% in. long, 9% in. wide, 1% in. tall. Weight, 4 lbs.

Cat. No. 4399

Just the thing with which to build that amplifier or midget receiver you have been planning. All holes cut out and drilled for transformer, condenser, choke, sockets, switch, etc. Made for Stromberg-Carlson power amplifiers. Has many uses.

#### EBY

Triple Binding Posts "Short Ant," "Long Ant" and "Gnd"

Unremovable top posts mounted on bakelize strip. Cat. No. 4106



#### Our Price 16c ea.

#### **Eby Binding Posts**

Marked Marked 5685 22V. 5686 Spkr. Plus 5687 Spkr. — 5688 "1" 4066 — 5678 Blank 5681 Short Ant.



#### 50c per doz. Ass't

#### "Push-Down" Spring **Binding Posts**

Nothing to turn-makes positive strong contact.

Cat. No. 5495-"Antenna" Cat. No. 5196-"Ground Cat. No. 5497-Blank



#### Our Price 5c each

#### Complete R. F. Coil Assembly

For Radiola Models 17, 18 and 33



Consists of Antenna coil and 2 R.F. coils with R.F. chokes, trimmer condeners and R.F. by-pass condeners mounted on metal terminal strip ready for installation in above Radiola models and many other sets. Coils are 1½ in, dia, by 1½ in, long.

Cat. No. 3733

#### Our Price \$1.50 Per Complete Set

#### Midget Set Escutcheon Plate

2-5/16 in high 2 in wide

Cat. No. 4043

15c



#### Eby Twin-Jacks

In a prown bakelite strip.

Cat. No. 4060 Marked "Phono"

Cat. No. 4069 Marked "Speaker"



#### Our Price .06c ea.

#### Eby Twin-Posts

Two Eby non-removable binding post-bakelite molded in brown composition and mounted on a bakelite strip. The an-tenna post-miduled from metal panels



Cat. No. 4068 Marked "Field"

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

Our Price Ilc ea.

#### 4 Gang Condenser



Cat. No. 4356 Our Price

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. Compensing condensers in each section. Capacity. 00035.

#### 3 Gang Super Variable Condenser



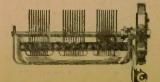
4%" long, 4%" wide, 214" tall. 38"

A very high grade 3 gang variable condenser made expressly for superheterodyne receviers. Will cover wave band of 200 to 600 meters when used a conjunction with any standard super coils. Equipped with trimmer condensers. Bail bearings on both ends. Made to sell for twice the price we offer them for.

Cat. No. 7337 Our Price

#### **Tuning Condenser** Assembly

As used in Radiolas 17, 18 and 33. Complete with aluminum drum and cable. Capacity .00035. 9½in. long, 3¼ in. wide, 5 in. high.

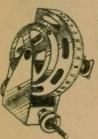


Cat. No. 5796

15 T 50

## New Illuminated Drum

Smooth Positive Action



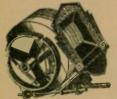
New type cable drive permits smooth positive regulation, entirely free of backlash. Standard 4s in shaft and 1s in coupling — calluloid scale, beautiful engraving—callurated in numbers from 0 to 100.

Cat. No. 4201 Main. Shart Cat. No. 4202 3; in. Shaft

Complete with Dial Light Socket 70e

#### Illuminated Drum Dial

For Short and Long Wave and Television Sets



Cat. No. 6903

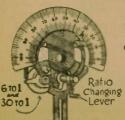
\$1.25 Complete

No Calibrations on Dial Beautiful Escutcheon Plate to Match

instead of the usual numbers the celuloid dial has 4 different colored bands
running around it, so that a different
color may be allocated for each wave
band. For %" shaft. Complete with
pilot light socket and plate. 21%" dia.,
5" high.

#### Special Dual Ratio Dial and Escutcheon for Dual Wave Sets

This 6 to 1 ratio dial can be instantly changed to a 30 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. 2½1½" wide, 3" high. Transluscent celluloid dial.



COUNTER CLOCKWISE DIAL (Illustrated)

Cat. No. 7171

\*250

Complete with Escutcheon

CLOCKWISE DIAL Cat. No. 7327

# Metal Belt Friction Drive Tuning Dial



Outside diameter of dial, 3% in. Shait hole for 3% in. or 14 in. shaft.

Cat. No. 4041

Cat. No. 4128

75c

Complete with Pilot Light Socket

#### Spring Friction Drive Tuning Unit

Outside diameter of dial 3% in. Shaft hole for either % or ¼ in haft. Pyralin translucent scale of 0 to 100.

Cat. No. 4040

Cat. No. 4127

50c

Complete with Pilot Light Socket

#### Midget Fan Dial

A very compact full vision dial with transluscent strip and pilot light socket mounted on rear top. Attractive bronze escutcheon plate to match.

Dia. 3 in., 3½ in. high.

in. deep.

For % in. shaft.

Cat. No. 6911



60c

Complete with Plate

#### Fan Dial and Plate



For Midget Receivers

Fan dial with very legible black numerals. For %" shaft. Handsome bronze escutcheon plate. 2%" long, 3½" diameter.

Cat. No. 6904

60c

Complete with Plate and Socket

# Escutcheon Dial Plates of Latest Designs



25c



Cat. No. 4042 Cat. No.

Coin Embossed Bronze Finish Modernistic Design. Especially suited for Drum Dials, similar to our Cat. No. 4201-4202 6 in. high, 2% in. wide.

# The New 'Spot Tuning' Illuminated Dial and Escutcheon



Cat. No. 5505

67 c

The light travels along with the station indicator. Now being adopted by leading set manufacturers. Very attractive. For in shaft. Translucent scale. Bronze finished plate. Nonship gear drive. Complete with pilot light socket.

#### Medium Sized Escutcheon Plate



For Either Midget or Larger Sets Size: 3 in. high. 2½ in. wide

Cat. No. 4044

18c

# Complete Full Vision Dial and Escutcheon Plate

With Pilot Socket

Cat. No. 4045

Cat. No. 4047



4 order blanks have been included in the center of this catalog for your convenience.

Use them.

MAIL ORDERS TO ASSESSED TO Page 3

Federated Purchaser Ine.

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

#### Genuine Walnut Wood Carved Knobs



Dia. 136" Cat. No. 3215



Dia, 114" Cat. No. 3565



Cat. No. 3380



Dia. 114" Cat. No. 3716



Dia, 134 Cat. No. 3552



Dia. 15-16" Cat. No. 3717

Dia. 134 Cat. No. 3561

Our Price for Any of the Above Knobs

10c ea.: \$1 doz. Assorted

#### **Ornamental Knobs**



Brown Bakelite Knob with Metal Overlay. Diameter 1% in. Insert % in.

Cat. No. 5106

15c ea. \$1.50 per dozen

#### Grecian Design Drum Dial Escutcheon Plate



4 in. x 2% in. Burnished Bronz Fini h

Cat. No. 5107

18c ea.

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

#### Complete Line of Modernistic Bakelite Knobs





Two-Tone Walnut Knob

Dis. 1 . in ,

Cat. No. 5126

Our Price \$1.10 doz.

Dia 1 in., Cat. No. 5127

Our Price \$1.10 doz.





Octagon Pyramid Top Walnut Knob

Dia. 1-1/16 in., 14 in. insert and ct -crew

Cat. No. 5130 Our Price \$1.15 doz.



Dia. 15/16 in., Cat. No. 5129 Our Price

\$1.20 doz.

Hexagon

Two-Tone

Walnut Knob





Walnut Knob Dia. 114 in., 14 in. in ert and et screw

Cat. No. 5141

Our Price 95c doz.

#### Vernier Port Dial Ivory, Plate, Black

Din 4 in Regions 0-100 Cat. No. 5142

Our Price 59c each

Dia 2% in (for Midget and auto sets)

Cat. No. 5143



#### Our Price 49c each

#### Walbert Univernier Dial

Calibrated 0-180. Ratio 10-1. Bakelite knob. Etched plate.

Cat. No. 4117



## 10c ea.

Attention Short Wave Fans and Hams! A Precision Vernier Dial Geared 10 to 1! This fins vernier dial is a product comparable to any fine instrument. The simplicity in tuning with this dial takes all of the guestwork out of short-wave reception. The accuracy and sharpness of its precision calibration makes it particularly desirable for television work free from backlash and slipping. Sure-grip!

#### Escutcheon Plate for **Midget Sets**

Burnished Bronze Finish. 2 in. wide, 234 in. tall

Cat. No. 5108





#### **Full-Vision Dial and**

#### Pointer

For replacement on sets now using ordinary dials. Simply remove the old-fashioned dials, slip the escutcheon plate over condenser shaft and replace old slip the escutch-con plate over condenser shaft and replace old dial with a small knob. Will en-hance the ap-pearance of any set. Bronze finish



23, in. high Cat. No. 5737

hance the appearance of any set. Bronze finish only, with translucent celluloid dial strip. Can also be used as an illuminated rull-vision dial if panel is cut out.

#### Naald Bakelite Tuning Knob



vith set screv Black only

Cat. No. 340

8c ea. 75c per dozen

#### Kurz-Kasch Bakelite Knob



for rheostals and volume controls.
Mahogany and Black

Cat. No. 4123

5c ea.

50c per dozen

#### Serviceman's k nob Assortment



Contains Wood and Bakelite Knobs

How many times have you needed a knob to replace one on a set with a stripped or broken set serew and have been unable to get one? This assortment of 25 wood and bakelite knobs include styles to replace a majority of sets on the market. Will pay for itself over and over. Every serviceman should have over. Every serviceman should have box in his shop for any emergency.

Cat. No. 7319 Our Price

MAIL ORDERS TO ASS See Terms on Page 3

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

#### complete switches for every assortment need

#### Carter Triple Pole Double Throw Switch



A stich which finds many application in short and long wave receivers. Due to its special construction it may be used as a three circuit "on" and "on" electric witch carrying up to 50 watts on each circuit without danger of arcing or overheating. Shoft 5 "long by "a". Dis. of switch 1 %".

Our Price For use with our No. 6309 colls

# 85c

#### CARTER "IMP" Inductance Switches

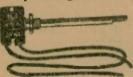


List Price \$1.00 Cat. No. Pt. 5484 5485

40c ea.

Complete with Bakelite Arrow knobs, ompact and rugged and will stand up near hard users. All metal frame, escition plated. Positive enep action. Disease of frame 1% in. Extends back of anel only 1% in.

#### CUTLER-HAMMER Rotary Snap Switches



Cat. No. 6688

Cat. No. 6666

Single Circuit with 27 in hait and 12 in. lead

Two-Circuit for

45c ea.; \$4.80 doz.

#### H. &H. Dual Time **Delay Switch**



No. 7433 95e

#### SELECTOR SWITCHES With Knobs and Plates





Single Pole

Double Pele

Single Pole

Switches are so constructed that switch cannot be leotened in panel by turning knot. Definite stops are provided so that undue force cannot be applied to contacting members. Knobs are keyed to shafts to prevent their supplies. All contact members are of spring D 10 sp h or brouze and all insulation of baketized material. Shaft is entirely insulated from electrical circuits, thus eliminating danger of shock.

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

SINGLE POLE

Cat.

Contacts Price 4186 4187

No. Contacts Price \$1,25 1,45 1,60 4189

#### Toggle Switch



With Long Flexible Leads 5 amperes, 120. volt. Approved by inderwriters, 5/18 in. shank.

Car. No. 4112

17c

#### S.P.D.T. Toggle Switch

SHORT SHANK Cat. No. 4105

LONG SHANK Cut. No. 4104

23c

Double Pole, Double Throw Toggle Switch

Cat. No. 4115 45c ett.

#### Toggle Switch

With Long Neck (114 in.)



Fur wooden panels and cabinot work. 3 amps. 225 volts.

Cal. No. 4110

Price 17c

#### Circuit-Closing Double-Throw Switch



For Phone-Radio and Public Address Systems

Used in cathods circuit of radio for shorting to ground or closing phono pick-up circuit.

Cat. No. 5285

38c ea.

#### GENERAL ELECTRIC Three-Circuit Toggle Switch

Same appearance as above, but makes and breaks three lines at one time. Mas many uses in radio-phonograph, set ana-lyzer and public address work.

25c each Cat. No. 6566

#### ACRATEST Single Pole Double Throw Switch



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

49c

#### GENERAL ELECTRIC Filament Switch

ampere at 110 wolt, 1 ampere at 250 welt. All bakes the hole mount will fit any set. 8 in. 1 e a d s. Approved by the underwriters.

Cat. No. 4121



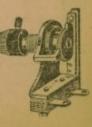
#### Our Price 20c

#### Yaxley Filament Switch

Very fess make and break. Com-pact, sturdy and e asy to mount, one hole.

Cat. No. 4108

Our Price 20c



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World Radio History

#### WALL PLATE Radio Outlets



To Fit Any Standard Electric Outlet Box



Cat. No.	Type	Price
5301	Ant., Gnd. and A.C. Speaker Tip Jacks .	Outlet . \$.75
5500	Antenna and Groun	d Bind-
	Posts	

#### **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.	
6595	41/
4141	**5
5491	W

Style

ntena-Ground" peaker" th Single Circuit Jack

Our Price Esch

#### Sub-Panel Brackets

1" x 816" Bracket



An ideal bracket for receivers using box or large ableiding; or large audic frequency transformers. Leaves enough clearance undermeath the sub-panel for average by-pass or fixed condenser. Will accommodate any sub-panel up to 9 inches in width. Aluminum construction. Shipping weight, 4 lbs.

Cat. No. 73:15

Our Price, Per Pair ......

2" x 9" Bracket



An improved sub-panel bracket with cutout corners that will fit any type of cabinet. Aluminum construction. Shipping weight, per pair, 4 lbs. Cat. No. 7336 36c Our Price. Per Pair

#### Handy Extension Cord Sets

Havy Silk Cord with Inner Braid Beauti-ful Assorted Colors.

Approved Socket Approved Cord G. E. Bakelite Cap Only



Cat. No.	Length 6 it.	Each 8 .25	Dozen \$3.00
3324	9 11.	.29	3.35
2325	12 rt.	.32	3.75
2316	15 It.	.35	4.00
3301	20 ft.	40	4.65

4 order blanks have been included in the center of this catalog for your convenience. Use them.

#### **Rakelite and Aluminum** Panels



Special sizes of bakelite and aluminum panels can be furnished at short notice. Prices on request.

14 Gauge Aluminum			3/16 in. Bakelite		
Size	Cat. No.	Our Price	Cat. No.	Our	
7x10	5176	80.50	5169	81.00	
7x12	5177	.57	5170	1.25	
7x14	5178	.67	5171	1.50	
7x18	5179	.85	5172	1.90	
7x21	5180	.97	5173	2.25	
7x24	5181	1.16	5174	2.50	
7x26	5182	1.30	51.75	2.75	

Aluminum shielding can, 5 in. by 6 in. by 9 in. with corner posts.





Al iminum Corner Posts for making aluminum boxes. 6 in. long with holes drilled and tapned at each end.

Cat. No. 5183 Oure Price, Each 20c

#### Automatic Electric Turntable Switch

This device, when installed on any electric turnsable, will shut the current off when the pick-" preaches the end of the record and the arm comes in contact with the switch. Used on all ROA 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

15c ea.

#### Rotary Snap Switch For Fada and AC **Dayton Sets**

11/2 in. Shaft

Cat. No. 5284

25c

#### Carter "IMP" Jack

Single circuit open.
These jacks are made very small to fit into the smallest possible space.
Bakelite washers are used to prevent leakage. Cat. No. 5491 Our Price



Rotary Snap Switch

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

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.

Our Price, Each 25c

#### CARTER CHANNEL Selector Switch With Knob and Plate



With Knob and Plate

Gives instant section up to 5 channels with constant impolance of 5000 ooms A witch of advanced design for use in centralized radio instellations, mabling the listener to switch to any of 5 programs with constructed to fit into a transled throughout the line. Constructed to fit into a transled throughout the line. Constructed to fit into a transled to all leads.

Equipped with attractive brown bake-lite knob, arrow pointer and escutcheon plate.

Cat. No. 5488

List Price \$5.00

This diagram illustrates the wiring and action of the Selector Switch.



Price 85c

Our.

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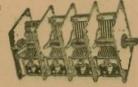
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#### ACRATEST SR. High Precision Condensers

Features:

Steel nium plated. Shart. hard-ened

steel



Conden, r frame provided with three point chassis mounting.
Rotors fitted with individual rotor

Point chassis mounting.
Rotors fitted with individual rotor contact porings.
Shafe mounted on ball bearing mechanism, mounted on both end plates, permitting free turning motion with perfect alignment.
Frame highly reinforced by means of inter-stage shields.
Perfect electrical isolation between many units.
Extremely low dielectric losses.
Proper rotor capacity distribution.
Perfectly electrically matched between successive units.
Stator section provided with individual irinmers.

Stator section provided with indexequal trimmers.
High insulation resistance.
Roiors provided with siols for permitting adjustment to take care of distribution of capacity in set circuit.
Condensers provided with extended law shields between stages.

#### FOR STPERS FOR STRAIGHT H. F.

Cat.	Ganes	Size		Cat.	Gangs	Price
5298	Two Three Faur	314x354 414x354 514x354	in.	5360	Two Three Four	\$1.75 2.50 3.25

#### Modernistic Full Vision Dial and Escutcheon



Used sively on exseis pansiva and will enhance the appearance of old sets. Plate 51 " long by 2" Bronze wide. finish.

Cat. No. 7175

\$1.25

Complete with escutches plate and pilot light corket.

#### Santa Maria Full Vision Dial and Escutcheon



A very attractive new disl in a popular metif. Pilos light travels over the disl na knob is turned. Piate 41, dis. 3" high.

Cat. No. 7174 95c

Complete with accurations and pilot light socket.

#### ACRATEST SHORT-WAVE Tuning Condensers



densers ATE of the half shield type insuring isolation between stages. They are all cased in heavy sluminum frames and tapered for remarkable wave spread. Essily mounted and precise in operation.

These

con-

Single	Cat. No.	Price
.00014	6854	\$ .95
.00025	6855	.95
.00035	6906	.95
2 Gang		
00014	6708	1.50
.00025	6856	1.50
3 Ganz		
.00014	6709	2.50

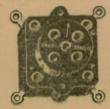
#### U. S. L. Midget Condensers

For Short Wave Sets



When used a nurshing condenser the DE JUR Midget Condenser is far superior to the various tracs of "pring" condensers. It can also be used as a regenerative conference selectivity when placed in series with the antenna circuit.

Ct. No. Description Our Price 5255 .00003 Mid. 45c 5255 .0001 Mid. 65c



Bakelite U. X. Sockets

Cat. No. 4075 Spring Socket 20c

#### Reinforced Spring Wafer Sockets

Bronze Prones Phosphor Non-Shorting 4 Prong

280, 281, 171A. 245, 201A Cat. No. 4064

Our Price 5c ea.

#### BAKELITE Wafer Sockets

Special construction makes short circuits or flashovers impossible.



Cat. No. 4062-

4 Frong-201A, 236, 112A 171A, 245, 210, 250, 280, 281, 280, 232, 231, 254, 82.



Cat. No. 4063-5 Front-227, 224, 16 52, 56, 255, 256, 237, 258, 239, 247

Cat. No. 6934-6 Prong-57, 58, 55.

6c ea., 60c doz.

#### Genuine Eby Sockets

REGULAR TYPE

No. Prong Print 5873 5 16 5874 4 16 693 6 ...



Thy UY and UX Seckets are the standard of quality. They can be mounted above or below metal. Bakelite or wood panels. Molded of resume Bakelite with a built-in mide for the tube prongs. Phosphor bronze contacts so designed that their spring action caunat be damaged no matter how often the tubes are inserted or withdrawn. Stendard packages of ten.

SUB-PANEL TYPE

Cat. No. 5875 Prongs



#### Base Mounting Sockets



Phosphor bronze springt and knurled posts. 4-Prong— Cat. No. 5675 5-Prong— Cat. No. 5676 6-Prong— Cat. No. 6937

Our Price 12c ca.

#### Sub-Base Mounting Sockets

4-Probs-Cat. No. 4980 5-Pross-Cat. No. 4051

> Cat. No. 4050 Sub Bare Mount



12c ea., \$1.20 doz.

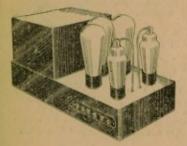
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# cratone

# Super Power Semi-Class B 245 Power Amplifier



Cadmium Plated Chassis

Cat. No. 107

R.50

Less Tubes

Power Output-10.3 watts. Power Consumption-55 watts. Power Supply-110-125 volts 60 cycles A.C. Size-1114 in long, 614 in, wide, 7 in, high. Employs 2-57, 2-245 and 1-280 Tubes,

Set of Arcturus Tubes ...... 33.39

Amplifier development has taken rapid steps in the last few months. Small output tubes can be made to develop iremendous power in new circuits. Where ordinary push-pull 248 amplifiers develop a maximum of 4 watts, the special strenth of this amplifier enables an andistorted output of 10.3 watts, and shift maintaining exceptional quality

#### Circuit

This amplifier is operated as a standard class A audio amplifier until its output reaches 4 water, then a change taken place and the 245 tubes turn into class B tubes and the result is tremendous output. This shane is taken care of by the special attenuator control and is not a sudden change, but a smooth, graduated gain.

The fort stage in this amplifier uses two of the new type 57 pentones. There tubes act both as the voltage amplifiers and a power stage transferring a substantial amount of energy to the 245 a. This stage is bridge-coupled to the special output stage.

#### Power

The maximum power output of this amolifier is actually 10.2 waits. At this output the quality is as excellent as the lower levelst. The pain of this amplifier in decibles is 80.

#### Quality and Performance

The reproduction of this amplifier is excellent and is particularly recommenced for recording, medium sized public address systems and round cars. The response from this amplifier is good from 20 to 10,000 cycles.

This amplifier will fill as auditorium or theatre resting up to 2,000 people; will operate 3 auditorium dynamic speakers at maximum and can handle up to 6 such speakers with tremendous power.

#### Deiversal Input and Print Connections

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

#### Gisafina Cannerma

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 cooling volume levels.

#### Suggested P. A. Systems Using the No. 107 Amplifier:

#### Intercommunicator System No. 701

This system is recommended for inter-The system is recommended for information in factories, large offices, etc., where there is a noise level freater than the human voice can overcome. The indicatored output of this outfit is approximately 10 waits. FOR FACH ADDITIONAL POINT OF COMMUNICATION IT IS NECESSARY TO ADD ONE TWO BUTTON MIKE, ONE DYNAMIC SPEAKER, ONE S. P. D. T. KNIFE SWITCH THE SAME AS FOUND IN THE LISTING BELOW.

Ecuipment	Cat. No.	Price
1 Acratone Semi-Class B Amplifier	107	\$18.50
Dynamic Speaker	166	8.95
1 Universal Model "X" 2 Button Mike	524	5.88
Ring & Spring.		1.47
	-	

\*3450

Total Price ......

When in New York, be sure to visit our newly completed and fully equipped Sound Studios, at 25 Park Place. Experienced sound engineers in charge will assist you in your selection of sound equipment.

#### Special Auditorium and Studio Sound System No. 702

This system is ideal for auditorium and studio work because of its flexibility and simplicity. It can be rolled from place to place and is instantly ready for use. The amplifier used is our dual P.P. modified class "B" amplifier completely described above.

The cound board and rack for the equipment is a beautiful ernamental column type portable stand mounted on ball bearing rubber chaters. Those of our readers who are familiar with the special R. C. A. installation Sound heard will readily recognize this stant by the decription. The resular price of the wound board is \$275.00. It is specially drilled to hold three dynamic speakers so placed that each speaker covers a different part of the suditorium. The speakers are completely hidden from view. 50 feet of shielded heavy rubber covered cable is provided.

	Equipment	Cat. No.	Price
1	B Amplifier	107	\$18,50
	Dynamic Speakers Accatone Au o Con-	152	30.00
	verter Universal Model "BB"	271	24.50
	Mike	209	14.70
1	Ring & Springs	3621	2.35

#### Small Truck Sound System No. 703

Small sound systems are in hig demand. Every serviceman or dealer without taking up any room in his truck or service car, can have this outil installed. Thereby allowing the use of the car for regular work when he is not selling sound.

This sound system utilizes our new Moderned Class B Amp. This amp, is a dual push pull using 2 as lubes into 2 215 tubes. It has an undistorted output of 10.4 watt, and has a remarkable fidelity curve from 20 to 2000 cycle. The highs which are generally lacking in amplifiers capable of reaching "lows" as low as 30 cycles are exident in the correspondent of the cor are evident in their correct percentages.

The entire outfit connects to your carbatters. No additional batteries are necessary and recharging will put back what you take out.

Equipment	Cat. No.	Price
1 P.C.A Auditorium Sound Board	410	830.00
1 Acraione Semi-Class B Ampline 1 Two-Speed Electric	107	18.50
Turntable	253	9,75
pedance Pick-up	GS98	4,75
BB Mike	300	14.70 S.50
1 S.P.D.T. Switch	1179	-28
namic Spaker	114	14.85
above Speakers	85	5,50

Total Price ..... \$106°5

Total Price ..... 80005



WHAT IS CLASS "A" PRIME This amplifier "packs a real wallop." Has an output of 30 watts from a phonograph pickup or microphone Accomplished by 3 push-pull stages using high gain tubes and Class "A" output stage. The first stage uses two type 57 high gain pentodes in push-pull, bridge—coupled to a pair of type 56 general purpose tubes in push-pull coupled to a special Class "A" Prime Transformer to a pair of 250 in push-pull. Class "A" Prime is a modification of Class "B" audio.

To explain its reaction, let us illustrate by some of your own experiences. Do you remember switching on a battery set that had either abnormal "C" bias or none at all? Recall the sudden burst of volume which just as suddenly lapsed into distortion? Well, that is the basis of Class "A" Prime; but in Class "A" Prime the circuit is so arranged that peak volume is always maintained with no distortion.

maintained with no distortion.

Specially designed parts prevent any semblance of distortion with resultant

marvelous quality.

#### Quality, Power And Performance

This amplifier is particularly adapted for a irplane advertising, sound trucks, stadiums, broadcast transmitters and for multi-speaker installations in hotels, wired radio systems, hospitals and convention halls. Up to 25 dynamic speakers may be hooked up to this circuit. It has a coverage of up to 10,000 persons and a space coverage of over sons and a space coverage of over three square city blocks. The tonal reproduction of this amplifier is as fine as can be obtained from any, regardless of cost. A true straight line curve from 30 to 10,000 cycles proves this claim. The use of high quality audio transformers and bridge coupling assures consistently perfect reproduction

#### **Attentuation Control**

The Attenuator Control of this amplifier is no ordinary volume control but a specially constructed dual potentiom ter giving excellent repro-duction over the entire output range This control has absolutely no audio frequency discrimination and the original quality is maintained at high or low volume levels. A graduated plate aids in locating proper volume levels for various installations.

#### UNIVERSAL INPUT AND OUTPUT CONNECTIONS

The input transformer of this ampliner eliminates the necessity for additional microphone, input stages. It is wound for use directly with a single or double button microphone 500 ohm speech line or condenser microphone amplifier. This transformer also enables the use of a low or high impedance

The output transformer is wound as follows:

9 ohms for Wright-DeCoster and similar speakers.

15 ohms for RCA Photophone Dynamics, recorders and Dynamic units.

500 ohms for speech lines, multiple speakers and mixer lines.

4000 ohms for magnetic speakers and dynamics already containing output transformers.

#### MONITOR SPEAKER OUTPUT

Two special output posts are brought out for use in multi-speaker installations or where speakers are distantly located for monitoring or listening-in with phones or magnetic speaker. This output is at a low level for comfort. This in no way affects the volume or quality of the amplifier. Power Output 30 WATTS

Power Consumption **200 WATTS** 

Power Supply 110-125 V., 60 CY.

Size: 16 in. long, 11 in. wide, 8 in. high

Cat. No. 125 \$60 7.50 Our Price . . . . . . .

Less Tubes

Employs 2-57, 2-56, 2-250 and 2-281 Tubes

Set of Universal Tubes ......

Arcturus Tubes ......\$14.75

#### Features:

Triple Push Pull Class "A" Prime Audio Monitor Speaker Output **Attenuator Control** Gain 90 DB. Built-In Microphone Preamplifier

Input from Mike or Phone -With Built in Transformer

Output to Voice Coils, 500 Ohm Line or High Impedance

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World Radio History

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Lowest Prices in Radio History -Buy now and hasten the return of National Prosperity!

# ASTOUNDIN



# **Exquisite Six Legged Console**

Especially Suited for the

#### Accatone, MODEL 35 CHASSIS

A beautiful example of modern radio furniture, of simple design, delicate lines and expert workmanship. Instrument panel of 5 ply center matched rotary cut walnut. Top center of rail elm burl. Balance of cabinet of 3 ply gum for strength.

Set compartment: 11 in. high, 21% in. wide, 10% in. deep.

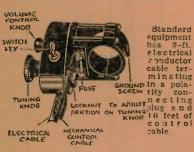
Outside dimensions: 40 in. high, 23 in. wide, 11% in. deep

Packed in shipping cartons. Completely assembled.

Cat. No. 749 Our Price ..... \$950

P.O.B. Indianapolis, Ind., or New York City

#### The New Federal **Steering Column Control**



Cat. No. 7435-List Price \$10

The Federal Remote Control consists of a control unit, condenser driving unit, flexible drive cable, multiple-wire cable, and electrical connecting plug. It provides positive, simple, manual control of the receiver through a one-eighth inch flexible cable which is thoroughly weatherproof. The operating cable, firmly anchored to both units, and easily adjustable to any length, drives the tuning condenser of the radio receiver by means of a pulley attached to the condenser shaft, and enclosed in the snug-fitting housing of the condenser driving unit. One complete turn of the hand-grip tuning control covers the entire tuning range of the radio receiver. The unit is specially constructed to give precise, accurate tuning.

The control unit is beautifully finished to harmonize with the rest of the equipment in any well-appointed automobile.

All control units are equipped with a lock-switch and key, together with a spare key.

#### Brown Flier Twin Recording Motor



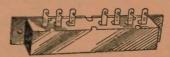
May also be used for playback where con-stant speed is ab jolucely required

This motor is the ultimate for recording purposes.

has the ability to turn at a containt speed even with a recording lead of 6 lbs. This motor is driven by two motors, one situated at each end of the casing. A special clutch control governor enables the maintenance of constent speed at 78 r.p.m. Furnished with 12 in, turntable and special mounting cushions to avert vibrations which is ruinous to good recording. For 110 V., 59-60 cycle operation only.

Cat. No. 274

#### Multiple 1/10 Mfd. **By-Pass Condensers**



Compact, metal encard by-pass con-densers suitable for General Meters and other receivers Overall dimensions 5 x

1½ x ¾ in. Cat. No 7452—4 x 1/10 Mfd. Cat. No. 7453—5 x 1/10 Mfd. Our Price

#### Frost 10.000 Ohm Potentiometer



Graphite Element. Only 7,16 in. thick.
11 in. flat shaft with "5 in. thread and locknut. Will fit all 14 in. knobs.

A great majority of the receivers on the market today use a 10,090 ohm potentiometer as a rolume control. This potentiometer will fit 199% of these sets because of its compactness and length of shaft. Absolutely noiseless. Positive wiping action. Perfectly insulated for 500 voits. Every serviceman should have a supply of these controls on hand for any emergency. Made to sell for 500, we are charing them for half the price due to a special purchase.

WHILE THEY LAST

Cat. No. 5634

29c

#### 4 or 5 Tube Midget Replac



For sets using up to 3 - 224, 235, 551, 227, 66, or 57 tubes (or a combination of samel, 1-245 or 247 and 1-280 tubes

and 1-280 tubes

Size 3x24x3" high

Weight, 2 lbs.

2 amps.; 300 v. each ide of C. T.; 289

rectified at 60 mils.

This compact, yet ruggedly built power transformer can be used as a replace-

# PACENT PUSH TRANS



Generously prof for use in sets premium. The in-benefit, in that is lent reproductive greater current in tall, 2½ in leveral Mounting

Shielded Input \$1.15

Shielded Input Push-Pull Transformer

Transformer
So well hermetically scaled within an attractive black japanned steel case that life-long, uninterrupted service is assured! Ideal for universal mounting applications. Equipped with well insulated fiexible leads. 3% in. tall. 2½ in. long, 2% in. wide.

# G VALUES!

Items featured in this supplement were received too late to be included in the pages of the Catalog

#### Genuine Brand New Frost Victor Twin Potentiometer



Made by Frast For Models RE32 RE35 RE75

3800-3900 Ohms-Clockwise

Here is the genume victor Volume Control manufactured by Frost not to be confused with surplus controls—and incorporating several improvements over the old type. Mounting manel an front of unit makes for ease of installation. Metal strap holds the two units rigidly. Competely shielded and enclosed against dust and moisture. Shaft 1, in, thresded and 1-3/18 in, long.

Cat. No 7450

95c

#### ment Power Transformer

ment in almost every midget receiver on the market using up to five tubes. It is universal in adaptability, laving 4 long 8/32 mounting screws for horizontal mounting. It has a shielded top. The wire leads are adequately long and are instantaneously identified.

Every service man should have several of these fine transformers on hand for any emergency and the first job will more than pay for half a dozen transformers. Buy them now at this extreme low price as you may not have another opportunity like it again.

Cat. No. 5502

95c Our Price .... Cat. No. 7374—For 220 V. A.C. ...\$1.50

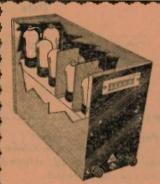
#### PULL AUDIO FORVERS





Outrut Cat. No. 7431 \$1.15

Cutput Push-Pull Transformer
Equipped with 15 ohm impedance
secondary—which matches voice coll
impedance of R.C.A. Photophone Dynamic Speakers. Recon Units, etc.,
etc. Also excellent for use with two
Jansen Dynamic Speaker Voice Colis
in series!
Similar in all mechanical respects
to Cat. No. 7430 INPUT transformer.
Por 1 or 2—245, 256, 265, 171
Tubes.



and mounting brackets.

Our Net Price

Set of Universal Tubes

# STERLING **Automobile Radio**

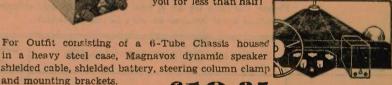
The set of simple installations, marvelous operation

Utilizes All Heater Type Tubes— 2-236, 2-237, 2-238

you for less than half!

Illuminated Dial . . . Lock Switch . . . Magnavox Dynamic Speaker. Made to sell for around \$45.00 to the dealer and now offered to

1933 Model



Can be installed un-der dash or on steer-ing post

\$4.35

#### Acratest De Luxe Phonograph Pickup



This pickup is especially recommended where particular stress must be placed on beauty of tone. This pickup far exceeds the performance of normal public address equipment and is for those radio engineers who desire the finest electrical reproduction. The pickup is skilfully counterbalanced so that it may be used for 78 or 33-1/3 r.p.m. No volume control supplied due to the fact that generally volume controls decrease the sensitivity and cut down the frequency response of an otherwise excellent pickup. Maximum output .65 volts, which exceeds by more than 1 volt the output of its nearest competitor.

Overall length 10 in. 734 in. from genter pln to needle point.

Cat. No. Impedance Our Price

Cat. No. 6976

Impedance 200 Ohms 500 Ohms 5000 Ohms

Our Price \$595 Each

#### Polymet 1/4 Mfd. By-Pass Condenser



With mounting ligs and pigtails. Zenith part No.

Size 1 14x1 12x14 in. Cat. No. 2866

15c

#### **Terminal Strips for Mix**ing Panels and Amplifiers



strips with specially designed nickel plated phosphor bronze screw

Bakelite

terminals
with "can't
slip" collars.
Find many
applications
in radio and
public a d
dress work.

Strip A-6 post input strip for micro-phone and phonograph pickup and ground. Marked G. M. Mc. P. P.

Strip B—6 post output strip for voice coil, 500 ohm line and 400 ohms. Marked L. 9, 15, H. 5C, 4M. Cat. No. 7149

Strip D-2 post input strip marked input.

Cat. No. 7151
Our Price
Strip E-(Not illustrated)-2 post output strip (same size as strip D) marked output.

Cot. No. 7151

output.
Cat. No. 7152
Our Price

3 Terminal Strip marked "M—Mc—M"
for make input.
Cat. No. 7448
Our Price

4 Terminal Strip marked "F1 and F2"
for 2 dynamic speaker fields.
Cat. No. 7449

Cat. No. 7449 Our Price .....

**World Radio History** 

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	substitute,	ve always send equal or better value at lowest possible price.	Note: At Least 20% Deposit Must		Every Order	

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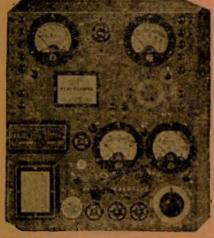
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## **Laboratory Accuracy With the**







## THE FIRST-ALL NEW-SET TESTER DEVELOPMENT IN YEARS

Size 12 1/16x134x3 in.

The only service device which measures every unit in a radio re-

The only Tester which locates every defective receiver unit when the receiver is entirely inoperative.

METER.
All Values of Inductance on Double
Range Inductance Meter from ½ to 50
Henries.

# What It Measures Range Capacity Meter from .05 to 15 Micro Farads. Ranges .05 to 1 M.F., ¼ to 15 M.F. Capacities from .0005 to .05 measured on Megohmeter. TESTS ELECTROLYTIC CONDENSER LEAKAGE AND CAPACITY UNDER OPERATIVE CONDITIONS. OUTPUT OF RECEIVERS MEASURED ON MILLIAMMETER

All Values of D. C. Volts on Quadruple Range Voltmeter from 0 to 1000 Volts—High Sensitivity Voltmeter, 1686 Ohms per Volt. Ranges 0 to 20, 0 to 200, 0 to 500, 0 to 1600 Volts.

All Values of A. C. Volts on Quadruple Range A. C. Voltmeter 0 to 800 Volts.
Ranges 0 to 8, 0 to 40, 0 to 160, 0 to 800 Volts.

All Values of D. C. Milliamperes on Double Range Milliammeter from 6 to 200 Milliamperes. Ranges 0 to 40, 0 to 200 Milliamperes.

All Values of A. C. Milliamperes on Double Range Milliammeter from 0 to 200 Milliamperes. Ranges 0 to 40, 0 to 200 Milliamperes.

All Values of Resistance on Triple Range Ohmmeter from 12 Chm to 20 Megohms. Ranges 14 to 1000. 200 to 200,000 Ohms, and 2000 Ohms to 20 Megohms.

Megohms.
All Values of Canacity on Double

Cat. No. 412-List Price \$250.00 Our Net Price .....

Cat. No. 413-List Price Carrying Case \$15.00

Henries.
Tests Radio Tubes by the most accurately known method by applying standard values of D. C. Voltage to Plate and Grid, reading standard values of plate current, mutual conductance and gas content.

All measurements without use of Auxiliary Apparatus. Instructions include Leose Leaf Book in Leatherette Binder covering—Point-to-Point Resistance Measurements on Receivers.

\$15000

#### Store and Specialty Salesman's P.A. System

There is a big market for radio men that is being overlooked. All over the country you will find window space devoted to special sales where a man or woman holds up cards for the public to see what he wants to say. Why not say it through an amplifier. Of coursef Price is of paramount importance in this case. This system will fill the bill under all conditions. With an outfit of 4 watts a crowd of from 500 to 700 people will be able to hear perfectly.

1-RCA Speaker (Cat. No. 103). 1-Mike Battery (Cat. No. 6656)

\$20.33

#### P.A. Systems Employing the Model 120 Amplifier Club Room and Lodge Meeting P.A. System

Meeting P.A. System
The Boys' Clubs, Athletic Clubs, and
arious Lodges in your town need an
amplifier when the discussion becomes
heated and the speaker cannot be heart
Also they are always running private
shows and open meetings where entertainment is necessary. This amplifier system is ideal for such purposes.

1—3-stage 345 P.P. Amplifier
(Cat. No. 120)
1—Set of Universal Tubes.

2.25
1—Mayo Model F Mike (Cat. No.
385)
2.75
1—Mike Ring (Cat. No. 3636).
1.47
1—Rotrolz Electric Motor, Turntable and Pick-up (Cat. No.
151)
9.50

table and Pick-up (Cat. No. 151)

1-Utah 12 in. Stadium Dynamic (Cat. No. 166)

1-Mike Battery (Cat. No. 6656)

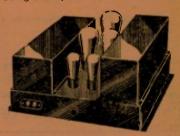
1-SPDT Switch (Cat. No. 4104). 9.50 8.95 .20

\$43.86



#### Three Stage Push-Pull 245 Amplifier

Using 2-56's, 2-45's and 1-280 Tubes



Output: 4 Watis.
Size: 14 in. long, 10 in. wide, 8 in. tall.
Shipping weight: 35 lbs.

This emplifier has three stages, two of which are voltage gain stages and consist of two of the new 55 type tubes. Output stage is two 45's in push-pull and the rectifier is a 280.

and the rectifier is a 280.

An exclusive method of providing for the use of high and low impedance output is incorporated in this unit. The input is suitable for use with single button microphone or low impedance phonograph pick-up. The high impedance input is suitable for use with the plate of a radio tube so that a Radio Tuner can be converted, or with high impedance pick-ups.

#### Serviceman's Truck System

1—Acratone Pick-up (Low Imperance) (Cat. No. 6898)..... 1—Victor Handmike (Cat. No. 523) 4.75 1.95

1-Mike Battery (Cat. No. 6056). 1-SPDT Switch (Cat. No. 4104). 2-Photophone Dynamic (Cat. No. .24 1-Field Exciter (Cat. No. 95) ... 5.50

\$50.34

1-32 V. 150 Watt Motor Generator, less filter.

33.75

\$84.09

Circuit of No. 191

This amplifier consists of three stages. The first stage has a 5 an a high gain turings amplifier. This stage acts as a per-amplification unit which gives added power to microphone or phonograph input. This stage is coupled by a balanced bridge of resistors to a 5d intermediate amplifier which is transformer coupled to a pair of 250 tubes.

The accondary of this transformer is equalized to keep the amplifier from reaching distortion levels and maintains pure least quality under all condition. The input transformer provides for phonograph, radio, and microphone coupling. The cutput transformer is tapped at the following impedances 9, 15, 500, and 1000 chus. The 2 ohm winding is for coupling to Wright DeCosia and similar speakers. The 15 ohm coil is for recorders, dynamic units and BCA Shalophone Speakers. The 500 chm winding is for speakers and mirer lines white the 4000 choils recondary is recommended for magnetic monitor speakers and dynamics that already contain output transformers.

Quality

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

Performance

This emplifier will fill a half, theatre, tedium or an auditorium scating up to 4,500 people. It is capable of alling to maximum 4 auditorium type speakers but will handle 6 to 8 such speakers with ample power. Special output is provided for use with exponential borns, equipped with dynamic units.

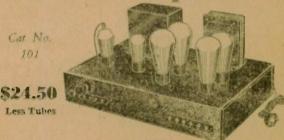
Attenuator Control

A 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 stepless attenuation. This gives complete control over both the input and output. A graduated scale is provided for charting various cutput levels. At all volume levels the same pure tonal quality is maintained. Instructions on output levels for recording and various sized auditoriums are discussed in The imput and output. A greed various output levels. At al quality is maintained. Ins cording and various sized instruction sheet.

Power

Generally amplifiers of this type are rated as having an output of from 12 to 15 waits. When measured on actual Western Electric standards the true maximum output of 2-250° at push-pull was obtained; a full 11 wait. The gain of this amplifier measured by the same standards was found to be \$7 D B.

Acratone 3-Stage \*\*250" Power Amplifier



Power Output-11 watts.

Power Consumption-130 watts.

Power Supply-110-125 volts, 60 cycles A.C.

Size-16 in. long, 11 in wide, 8 in. high, Employs 1-58, 1-56, 2-250 and 2-281 Tubes.

This acratone Amplifier has been on continuous test for over a month to assure long life and their ability to meet varying conditions. The heavy duty power transformer is constructed for an extremely large safety margin. An electrostatic shield is used between the primary and high voltage winding to reduce the capacity and remove all possibility of arcting between. The temperature rise over a period of 24 hours was 42 degrees Centigrade from normal room temperature.

#### P. A. Systems in Which the Acratone Three Stage "250" Amplifier Is Used:

#### Large Truck Sound System No. 704

A great many servicemen and dealers are taking advantage of todays' market by equipping their trucks with cound avstems instead of leiting them lie idle. These trucks are rented for sdvertising purposes and they are quickly repaying the dealers for their efforts. The sound system recommended here is the most autable one for constant sound work on all regular rentals.

The amplifier used in this outil is our

all regular rentals.

The amplifier used in this outfit is our already famous 101 amplifier. This amplifier is a three stage 250 P.P. amplifier with an undistorted output of 85 D.B. on mike and 75 D.B. on phone. It will easily mindle four ECA Photophone speakers tailed at 15 waits each.

The generator used in this outfit is a fametic "the standard of comparison" in motor generators.

The turn table is a special sturdy 2 speed motor is to be enabling the use of either 35 r.p.m. or 78 r.p.m. records:

2.0	400	Our
Louipment Used	Cat. No.	Price
Acritone Amp.	TOT	\$24.50
turninble	253	9.75
Pick-up	5979	4.75
B.B. Mike	209	14.70
1 Universal Mike Ring	3621	2.35
Switch RCA 110 V Photo-	43.79	.28
phone Speakers	151	30,00
1 Field Exciter for	85	5.50
1 Janetia Rolary Con-		
110 V. A.C.	256	58.00
Total Price	*	14453

#### Sound System No. 705

For Auditoriums, Theatres and Outdoors

Where ound system of low price is required to cover a large area this sys-tem will work satisfactority.

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 71 watts undistorted output and cover an average city block in length. It has sufficient power to operate two or three dynamic speakers with very shall output drop, approximately 5 per cent.

It can also be used for inter-communication purposes, but is easily too greaters with very shall output drop, approximately 5 per cent.

It can also be used for inter-communication purposes, but is easily too greaters will easily cover rooms and auditorium. 100 ft. x 100 ft., or an auditorium seating 1,000 to 1,500 people.

11	ng 1,000 to 1,500 people		Our
,	Equipment Used	Cat. No.	
1	P.P. Amp	101	\$24.50
1	Universal 2 Bution "B" Mike	209	14.70
	Universal Mike Ring		2.35
1	RCA Photophone Dy-		7.50
ī	Field Exciter for Speaker	85	5.50
2	G.E. Turntable	215	8.95
i	Acratome Pick-up	5979	9.75
1	D.P.D.T. Knife Switch	4170	.28
	Total Price		*6355

#### Sonochorde A.C. Dynamic Speaker

The new Senocherde Electro Dy-namic Speak-er represents a distinct er represents a distinct advance in sound reproduction and mechanical design. A new method of cone auspusion allows for a s mall sir gap tending in a highly comment at a magnification of the contracted magnetic field. A ham speaker for 110 V. 50-60 which balances out the induced A.C. current in the voice coil is built into every unit.

Uses 280 rectifier tube, heavy duty power transformer and filter system con-taining 20 Mfd. electrolytic condenser. Operates without hum from the A.C. lines. Reproduces speech and music with remarkable fidelity and is capable of handling extreme power without distortion.

> 89.50 Gat. No. 540

#### Loftin-White Single Pentode Amplifier



The single 247 (Pentode) amplifier: Cless 1-724, 1-247 and 1-250. The output of this unit is about 4 waits. For high year this unit is recommended for use to the same purposes as the 245 amplifier.

Cat. No. 82

\$14.95

## The Loftin-White '250'

(Licensed) For Theatres, Public Address and Microphone Amplification

Employs 1-30, 1-34, 1-31 Tubes
The 250" Amplifier will successfully do
the work that much higher-priced amplifiers have been doing in the past. For
phonograph reproduction this model can
be relied upon to deliver sufficient volume

be relied upon to deliver aufficient 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 bob is used extensively. The supplier is adaptable for phonograph, microphone and radio inputs.

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

watts, undistorted.
"259" AMPLIFIER-Wired and Tested
(less tubes)

Cat. No. 78 \$19.95

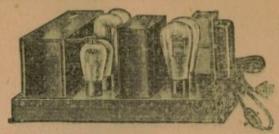
#### 250 Push-Pull De Luxe Amplifier



The output is rated at 15 watts and has a tapped output of 2, 15, 500 and 4600 ohms. The input is adaptable to Microphane, Radio and Phonograph which are built into the amplifier. This is the list word in Loftin-White amplification, and uses 3,224's in push pull faceding 2,250's in push pull with 3,231's as rectifiers. At 400 dycles, the gain is 125 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 offseed. At full volume, the percantage of discontinuous about 7% and the amplifier ranges from 30 to seed cycles. Mounted in a strong steel cryat; tolgek finished chassis the unit is the last word in amplifiers from every angle a tapped output with engraved rymbols makes for ease of operation. The input it aims tapped for microphonic radio and phonograph inputs. The gain control it built in Size—15" x 10" x 250". Suitable for Phone, Mike and Radio Input Cat. No. 79

Less Tubes

Less Tubes



# Type PA-1 3 Stage 250 Amplifier

In presenting the PA-1 amplifier a precedent has been established. Never before has an amplifier of such outstanding merit been produced, or offered, in the low-priced field. Combining all the worthy features found in more costly amplifier with many novel improvements, the PA-1 amplifier represents a triumph in engineering skill and manufacturing ingenuity. It is a three stage amplifier embodying the new 58 and 58 tubes, and push poll 250%. The high gain of the new tubes, nearly fourteen waits of undiscreted output from the 250%, low hum level, and an unusually line frequency response result in an amplifier feedly suitable for installation in theatres, auditoriums, dance balls, stadiums, and other public places where music or speech must be amplified to fill large spaces, and good quality is paramount.

quality is paramount.

Among the noteworthy features is the extremely flat frequency response, as evinced by the frequency response curve published chewhere on this sheet. This is flat through the entire upper register, resulting in a crispness and brilliance of tone usually deficient in amplitures. Other salient features are line voltage adjustment, protective fuse, logarithmic tapered volume control in a ster feed-thread the salient features are line cord with unbreakable for a large dynamic speaker neight or an A.C. speaker may be connected without the use of external inchess or resistors as required by most amplifiers supplying field current.

The amplifier is constructed on a beavy steel base, all parts being electrically and mechanically shielded. The mish throughout, is a smooth black lacture. All materials are carefully selected and tested, a wide safety margin being provided. The complete unit is an unparalleled example of fine craftsmanship, carried out on a modern production scale.

Tuber-1st stage 1-58. 2nd stage 1-58. Brd stage 1-58. 2nd stage 1-58. Ind stage 1-59. Tuber-1st stage 1-58. 2nd stage 1-59. Trd stage 2-281 full wave.

Laput-To any high impedance pickup. Coupling transformer should be used for microphone input er lew impedance pick-

Output Low impedance output direct to standard to or the ohm voice coil. High impedance output to couple to andoohm input transformer.

Maximum Undistorted Power Output—

S watts. Input Signal to Obtain Max. U. P. O.

Input Signet to Obtain Max. U. P. C.

G. volts.
Gain at 1000 Cycles—18 fb.
Frequency Characteristic—Substantiality flat from 45 to 15000 cycles.
Hum Level—4.3 ser cant of 45 fb.
below maximum undistorted output.
Speakers—Will supply up to 5 large
dynamic speakers. At 25 max natic
speakers—Field Supply—Will furnish current to
large dynamic field of 750 cims.
Power Consumption—150 waits.
Size (overall—174; in. long, 114; in.
wide, 74; in. high.
Weight—32 .bs. (uncrated).

Cat. No. 122

OUR PRICE, Less Tubes . . . . . . . . . . . .

# DC High Gain Amplifier



Has an undistorted output of 2.5 waits.

Uses 1-287 and 2-257 output tubes in push pull. This output is equivalent to the output of the average 245 amplifier. A tone control is supplied to vary the tone to any degree desired. The circuit is a nigh gain two stage unit taking advantage of the new D. C. peatodes and giving a tone quality gever before acomplished on D. C. at this volume. It is ideal for microphone input. Very compact, it has the unusually low current consumption of it ampere. In addition, is no more tostly than any A.C. unit of the same power. Size—11% x \$1."

Suitable for Phono, Mike and Radio Juput Cat. No. 287 \$17.50 Cat. No. 287

4 order blanks have been included in the center of this catalog for your convenience. Use them.

#### Victor 2-Stage 245 Amplifier

\$19.75

For Victor Receivers RE-75, 32, 42 and 45



Uses one 226, two 245's (puth-pull) and one 260 Puen-pull output transformer in amplifier matched for 15 ohm voice coil and 3.500 ohm field resistance. Supolies dynamic speaker field of 110-coli i watts. Pine for use with phonograph pick-up or radio set. Operates em 110-120 volts. 50-60 cycle A.C. current.

Cat. No. 62 \$7.65

#### Universal Model "O R O"

An exceptionally efficient, small low cost microphone for amateur, experimenters and for any menters and for an instellation requiring a simple single button inderophone Q R Q is an exact replica of the Standard Erocast Model in

cast Mod 1 in a p p sarance. It is 31 in, high and is finished in beautiful poln is hed in beautiful pol-ished chrome Model QRQ is a single-button, 200

Furnished with 3-ft phone tip cord.
Packed wt., 1 lb. 1 oz Cat. No. 212

List Price \$5.00

\$2.94

button, 2000 on microphone with high sensitivity and clear, natural reproduction. The button is solid 24-karat Gold faced, giving it extremely long life.

#### Universal Baby Mike



UNIVERSAL "BABY MIKE"

Cat. No. 206 List Price 87.50

Baby Mike is a genuine single-button carbon misrophone of 200 ohms resistance. It is mounted in a dis-east mounting 3½ inches of the regular Brondess models. It may be connected to amplifiers or direct in almost any radio set in the market.

set in the mar-ket. Haby Mike is a beautiful minia-ture microphone, finished in attrac-tive polished chrome.

It is shipped to you securely packed and completely furnished with prong adapter for connection to take, pin plugs for connection to takes or winding pour, 25-it, cord, detailed instruction sheet-in short, everything needed to hook up ready to enjoy the fur.

#### Universal Model "IL?"

An extra rused, neavy type, twobutton oroadcast microphone. The entire
assembly is of high
carbon steel, ground
to which foll of an
inch accuracy. The
diaphram is alloy
of exactly the proper
hardness and stretch
to secure the best results. Pure gold contacts are placed on
each side. The materials used and the
precision of manufacture combine to
make this model
stand out as the superlative microphone
reproducing a range
from 30 to 7,000
cycles. An extra rugged,



wt. 214 lbs. acked wt., 315 lbs.

Cat. No. 211

List Price \$75.00

\$44.10

Model "LL" is 31's inches in diameter by 11's inches thick and is standard 200 chas per button. Polished chrome finish.

#### Universal Model "A" America's Most Highly Developed Single-Button Microphone

New Heavy Duty Design

The new design of the neavy duty Medel A microphone meorthe neary duty Mores "A" microphone incorporates improvements that lift the performance of this most refined single-button microphone above anything previously considered possible. The new type of perforated protective facing more than doubles the cffective area of the diaphragm.

Model "A" is constructed with Solid 24 Kt. gold faced button and highest grade carbon granules which reduce hiss to a minimum. Equipped with an extremely thin, light we ight to diaphragm which is also gold face

Cat. No. 208

Net weight 1 lb

Packed weight

List Price \$15.00

which is also gold faced. The scientific damping permits Model "A" to handle frequencies from 100 to 3,000 cycles.

The single button is 200 olm resistance. Model "A" is 3 in. in diameter by 1½ in, thick. It is beautifully plated in polished chrome and can be mounted in various ways. Model K Desk stand or 5½ in. suspension ring recommended.

#### Universal Model "BB" 1933 Value-New Super-Design



Cat. No. 209 Net weight 1 lb Packed weight

List Price \$25.00

\$14.70

by the fact that Model
"BB" is 2 in. in diameter by 2 in. thick.
It is built expecially
for voice-pickup, pubic ddress work and
for amateur broadcasters, experimenters,
palls, pall rooms, speakmanuals, cell proalls, ball rooms, speak-er wagons, etc. Fin-ished, highly polished chrome plate. Model "BB" has extra heavy 24-Kt.

The super-microphone

the super-microphone in every sense of the word. No other 2-but-ton microphone can give such superlative value for such a low price. Model "BB" is

white for such a low price. Model "BB" is dearly twice as heavy as any other releva-abone in its class. Built to hair-line precision. An idea of the rugged-

Pure Gold Spot Centers, Duralumin Diaphraum and has a frequency range of from 70 to well over 4,000 cycles, 200 chms per button,

Owing to the large size and weight of Model "BB." it is recommended that Model "L" desk stand be used for mounting instead of Model "K," especially when

All Microphones are shipped in original factory sealed containers. Due to the delicate construction of these instruments, repairs and adjustments are made by the factory only.

#### Universal Model "KK"

#### Top-Notch Double-Button Broadcast Microphone

Only supreme per-formance and year after year dependa-oilty can explain the fact that the im-proved Model "KK" continues to be the most popular and festect selling \$50.00 microphone on the market.



microphone on the merket.

A substantial, sold, two-button broadcast microphone, with a very minimum of hiss. Model "KK" is zarefully constructed of the finest materials with a 24-Kt. pure gold spot center alloy diaphragm has a thickness of only .002 in.

The irequency range of Model "KK" is all that can be desired in a carbon microphone, namely from 50 to well over 6000 cycles. The buttons are of 200 ohms resistence each. Entire microphone finished in 24-Kt. polished gold. It is 2½ in. in diameter and 11½ in. thick.

Each unit is carefully laboratory tested before shipment.

#### Universal Model X Two **Button Microphone**

A Sensational Microphone at a Sensational Price



A two-button microphone listing at only \$10.00. Model "X" sets a new high standard for quality at a price that descompetition.

Model "X" confirms the reputation for quality and performence that characterizes all Universal products. Every especially and performence that characterizes all Universal products. Every especial products. Every especial feature necessary to insure superior performance and long, care-free and long, care-free level as been incorporated in the design of this model. 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 Contacts. Dura lumin non-breakable diaphrasm. 200 ohnes per button. Very low hiss level. Scientifically Damped. Frequently range from 1,000 to 4,000 cycles, Model "X" is ruggedly nuit and finished in non-corrosive, polished nickel plate. Can be mounted in any Universal mountains. Diameter, 2½ in. Overall thickness, 1 in.

1 in. Nowhere can a better microphone be purchased at anywhere near this aston-ishingly low price.

Special Desk Mount for Model X Mike with 8 prings.

Cat. No. 391 8906 Our Price



MAIL ORDERS TO See Terms on Page 3

rederated Purchaser Inc.

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

#### Universal New Bullet Type Microphone



WITH TONE CONTROL AND BATTERY COMPARTMENT

Carbon Granule Type with Hiss Eliminating Filter

A double button micro-prione giving the appear-ance of a condenser mike. Recommended to be used wherever the mike is in full view of the audience.

Bullet Microphone	Cat.	List Price	Our
"BB"	217	\$50.00	\$29.40
"KK"	210	75.00	14.10
"LL"	223	100.00	58.80

"ILL" 223 100.00 58.80

Note: All Bullet Type Microphones supplied with cable as shown. Shipped without battery.

Thiversal Builet Type Microphones are the last word in appearance and performance for the lowest possible coal. Especially recommended for use in public address work of all kinds where elegance of appearance, beauty of design, and true reproduction of voice and sound are demanded.

Careful tests have shown that the hiss level of Universal Bullet Type microphenes is far below any background noise encountered in public address or aimlies work, making the proved performance of Universal Bullet Type microphones especially favored for that type of work.

Universal Bullet Type Microphones consist of a tube with a center partition, providing space for a standard 14, void 180. 6 dry cell battery. Microphone head is fixed, assuring vertical position at all times. Adjustment screw, operated through side of tube, permits microphone adjustment for varying acoustic conditions. Flexible wire connections, long enough to permit easy battery replacement. Rubber cushions and spring fension sides make a very rugged assembly that, permits a great deal of handling and transportation without affecting performance.

Enished in highly polished aluminum

formance.
Finished in highly polished aluminum and chrome plate.

Desk Stand for Above Mikes

		WA CLE	THE OWNER AND AND	ATTAC PROFILE	
Cat	No.	389			8635
001	Price		********	*********	. The

Floor Stand for Bullet Type Mikes Cat. No. 390 81176

#### Frost Microphones

Desk Microphone

Cat. No. 6201 84 80 Our Price



Cat. No. 6203 \*375 E Our Price ......

These microphones enjoy an envisible reputation for their excellent performance and appearance. Their design is based on over thirty-five years experience in the telephone manufacturing field and they are guaranteed to give complete satisfaction when used in proper circuits. They are not designed for commercial broadesting use, but are intended for amiscur and general apparatus work. These microphores are very sensitive and ruged in construction. Available in two different standard styles complete with cord.

#### Universal Torpedo Type Microphones



This new type of Universal Microphone is supplied to meet the steadily growing demand for microphone which in themselves are fully protected, are more compact, and can be quickly demanded. Type Microphone of the design illustrated are supreme in this field. They combine in one instrument the recognized outstanding quality of tested Universal fiedures demanded.

Connection is made to these contacts

features demanded.

Connection is made to three spring jacks into which selephone pin terminals are plugged. Not supplied with cord. The polished chrome plated perforated and screened cup housings are of neavy bross and are firmly fastened. Can not be removed accidentally. Supplied in standard Models "BB." "KK" and "LL."

Modei	Cat.	List Price	Our
Torpedo "BB"	226	\$30.00	\$17.61
Torpedo "KK"	228	\$55.00	\$32.34
Torpedo "LL"	239	\$60.00	\$17.04

#### Universal Single Button "Handi-Mike"

Pre-eminent for all uses where a hand microphone of single-button construction is desired. It is intended for voice only and in this field it has inaximum volume with clear and clean-cut speech reproduction.

The single-button Mandi-Mike is built in two models—"Remaier" and "Home Recording." The universally enthuissic press this microphone is receiving is establishing it without competition for superior home recording. cording

Hand-Mike is finished in beautifully pollabed chrome. It is equipped with an "off" and "on" tennic switch, 15-foot cord, and provided with an see as shown for hang-ing while in or out of use.

List Price \$10.00



Cat. No.

#### Bur Price 85.88

#### Universal Double-Button "Handi-Mike"

Same size and appearance as the Single

button Mike.

The devole-button It is full-but in beautifully nollabed chrome and comes equirped with a 6-ft silk braid covered cable.

Cat. No. 227

#### Our Price \$8.82

#### Universal Handi-Mike Stand

Designed for Handi-Mike, either one or two-button. Is narticularly good for holding the microphone when making home recordings. It also permits Handi-Mike to be used as a desk announcer's microphone.

Furnished with a rubber covered base and finished in gun metal.

Net weight, 2 lbs.
Pecked weight, 2½ lbs.
Cat. No. 218-List Price \$5.00 Our Price

#### UNIVERSAL Miniature Microphones

MODEL W

MODEL Y





Universal Model "W" is the smallest completely protected and workable single-button microphone manufactured. Supplied particularly for the many spacial uses requiring a small, very sensitive compact microphone that can be depended apon to give full quality performance. A favorite type for use in hidden positions such as a detectophone, or on the coat lapel.

High sensitivity, light weight and competeness are the outstanding features of this model. 200 ohms. Equipped with Pure Gold Spot Center Diaphragm, completely enclosed, protecting it against injury during handling and use. 1% in. in diameter. 14 in. thick.

Cat. No. 221—List \$3.90

Our Price, Model W. .....

#### The Super-Sensitive Midget Microphone

Universal Model "Y" is even lighter amalier and more sensitive than Model "W," described above. It is of the same general construction as Model "W," except that the front face of the microphone is the disphragm proper.

Model "Y" is extremely sensitive. When placed in any hidden position, it will pick up sounds and conversations. Recommended for use where high sensitivity and extreme compactness are necessary. Should be placed in protected locations, behind screen or grill work. Suitable for use with some of the less expensive types of ear phones. Because of the exposed disphragm, great care must be exercised in handling.

Cat. No. 222-List \$2 00 Our Price, Model Y. ....

#### **RCA-Victor Hand** Micropohone

Priced Extremely Low!

Cat. No. 328 Our Price

Manufactured by

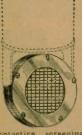
Kellogg Switchboard & Supply Co.



This fine microphone is being used by RCA-Victor in their \$750 radio and phonograph combinations. Its extremely fine response curve makes it suitable for home recording, public address and amateur broadcasting. The entire casing and handle is of steel in gun metal finish, making it stundy and rugged. It requires but 10 mils of current which may easily be obtained from a 1½ voit dry cell or power pack. For home broadcasting it is not necessary to use a coupling transformer with this mike as it will perform perfectly when inserted in series with the cathode of the detector tube. This mike is manufactured for ROA by Kellogg Switchboard and Supply Co., whose equipment is standard in 90 per cent of the world's broadcasting stations.

#### **Build The Radio News** Condenser Microphone With This Complete Kit

For Only 83.00!



The superiority of the condenser micro-phone over the carphone over the carbon type is acknowledged. No hiss, no
button current necessary. This nitrophone can be assembled in less than
an hour and the
amplifier built into
any convenient box
or can. Kit includes
a machined unit.
(bural displaragm,
kulate promeless tube

rotective screening, Dural displicagm, erforated brass backplate, prongless tube use and all necessary hardware. Rudio rews (August, 1932) says about this nike: "In fact, this new unit is superior (to the original Western Electric unit) in that it is ready for use and does not require any machine work or changes of any kind." Complete instruction sheet furnished with each kit.

Cat. No. 7451	*300
Our Price, Per Kit	
Cat. No. 435-Factory Assen	abled \$795
Our Price	****

## Acralest **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. Amplifie and Turntable And any A.C. appliance con-suming up to 65 watts



This device furnishes 110 Volt 60 Cycle Alternating Current 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 room from 40 to 65 Watts. Eliminates the necessity of gasoline or other expensive types of Generators. This is ble you to use your Public Address on your Automobile for Advertising Purposes, Outdoor Meetings, Picnics, ect.

Small Electrical Appliances drawing from 40 to 65 Watts may also be used with this Converter. Such Appliances as Fans. Heaving 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 of the fact that the current is taken from he Battery intermittently, the Ammeter coes not accurately record the Drain, but registers only the peak load. However, the actual Drain is about two-thirds of the am ster reading. A 60 Watt Radio Set draw between six and seven Amperes by actual actual Train is about two-thirds of the am ster reading. A 60 Watt Radio Set draw between six and seven Amperes by actual termittently.

Cat. N 89450 ith Cable and Control Box Comple

#### **Acratest Matching Stage** For Mike, Phono and Radio

Input high impedance for use with radio seis and high impedance phonograph pick-ups. Input low impedance for use with low impedance phonograph pick - u p s and s i n g l e-button m i c r o phones. Ou p u t i m pedance 400,000 ohms.

Out put 1 impedance 400,000 ohms.

Base 51 x 31 in. Heich 5 in. Weight 5 lbs.

This unit a compact, housed in a small black crackle finished tactal case. Equipped with a volume control which assures fine, noiseless control of the output. Particularly adaptable for use with Loftin-White amplifiers which are generally supplied without input transferners, or any other amplifier not equipped with input stage. The use of this apput stage. The use of this apput stage in conjunction with Loftin-White amplifier will permit greater voltage gain and better frequency response, due to the fact that all units are properly matched to the amplirer. Space in the can is provided for a 1½ volt flashlight cell to provide current for the microphone.

Cat. No. 7370

Our Price

#### Acraphone Microphone **Input Stages**

These units each contain the well known Acratest Microphone Input Trans-



formers phone button cur-rent control and cutout witch to pregree the life

of the microphone.
Frequency rams 30 to 7600 evels. Input standard microphone impedance; output, 400,000 ohms. Completely shielded to avoid excessive feed-back. A volume control with an "on-off" switch for controlling current at the microphone are included. The volume control has a very fine adjustment not ordinarily found in other input stages. A single No. 6 dry cell is used for microphone current supply and is carried in the flat space. The size and finish of this unit harmonize with any surroundings. surroundings

Brown crackle finished steel case. 7x6
x23a in high Shipping weight 5 lbs.
less battery.

For Single Button Mikes

Cat. No. 5628 Our Price

For Double Button Mikes Cat. No. 6529 Our Price

#### 3-Conductor Telephone Type Plug and Jack For Mike and Mixing Circuits

A special design of 3conductor plug and lock
for microphone use, Standard size. High insulation
factor, Connection made by
solder joint insuring positive connection. Plug size
— length overall, 2% in.
Diameter, % in. Tip—
length, 1-3/16 in. Diameter % in. Jack fits 7/16
im. mounting hole and may
panel up to % in. thick.
Over-all length 3% in.

o. 7320—JACK

Cat. No. 7320-JACK List Price 75c Our Price

Cat. No. 7321-PLIG List Price \$1.50

That Brings, New Thrills to Your Home and Converts Your Radio a n ElectricRECORD MAKER

Phonograph.

THE PRESTO Record Maker is not a toy or an experiment. It is the crowning achievement of a maionally known manufacturer with twenty years accessful background in the production of abund recording devices. It is a proven accentific instrument that reproduces any



sound with startling realism—the result is life itself! The records are permanent and can be played many bundreds of times without any loss of the original brilliance of reproduction. It is ideally suited for musicians, speakers, actors and tracters to test their offerings and voice infliction.

THE PRESTO Record Maker is simple to operate. The instrument is simple to operate. No delicate or complicated parts to cause trouble or inconvenience. The PRESTO is always ready to go! In addition to giving you tray joys of home recording, the PRESTO record maker converts your radio into an ELECTRIC PHONOGRAPH that will blay all standard records. It brings you the musical gems of all times when, and as often as you want them.

you want thern.

THE PRESTO Record Maker is war similar to other record-maked vices now being offered and the control of the c was similar to other record-making devices now being offered. It was made primarily to produce a superlative record which cannot be duplicated. PRISTO uses a smooth disc 6-6-10 or 12-luch rice, and cuts its own prooves as it records—assuring an accurate and lasting record that cannot be nad with devices using pre-grooved records. A special recording head, instead of the phonograph picking, also insures perfect reproduction. There is no substitute for PRESTO!

This instrument comes to you complete with motor, turn-table volume control microphoue, selector which, and is noused in a beau-

tiful compact portable leatherette case. Cat No. 185 \*2950

#### Look! A Fine Microphone Floor Stand for Less Than \$5.00

Adjustable.

Maximum height, 6 ft. 5 in.

Minimum height, 3 ft, 10 in.

Antique bronze finish.

Substantial weighted base.

Microphone cable runs thru the center of the stand and comes out at the base.

A remarkable value.

Cat. No. 434 Our Price 8,495

MAIL ORDERS TO AFE See Terms on Page 3



# ixing Transformers

#### Microphone Shielded Input Transformer

This unit is the result of many months of designing and tests. The frequency is exceptionally fast, from 80 to over 7000 cycles. Primary is split—100 the recondary impedance is of the order of 400,000 ohms. At arger unit than there listing for the

of 400,000 ohms.

larger unit than
others listing for the
same price. The size is 3%x3%x3% inches.
Matches impedance of all standard type
carbon 2-button microphones.

Cat. No. 2625 Our Price ...



Two Button, Unshielded Microphone Transformer Same Characteristics ns out No. 2625

Cat. No. 5596 ST 25 Our Price .....

Two button unshielded icrophone transformer microphone transformer with 5000 ohm winding for standard pickup and a center tapped secondary so that it may be used with p u a h - p u !!



Cat. No. 7145 Our Price

#### Wicrophone-Phonograph Transformer

This transformer is similar in appearance to No. 7145 and has a primary to match a two-button microphone and a secondary to match the phenograph pick-up posts of any radio set. If may also be used as an output transformer from a single 227, 56 or 50 type tube into a 200 or 500 ohm line.

Cat. No. 7338 Our Price

#### Push-Pull Output Transformer to Match

This trans-former is a p u s h pull transformer for coupling two 1714's, two 250's,



pull transformer for coupling two 1714%, two 250%, two 245%, two 250%, two 245%, two 2

\$1.95 Cat. No. 6917

#### Class B Transformers AUDIOS, CHOKES POWER SUPPLY (Circuit diagrams free with each item)

Circuit diagrams free with each item)
Class B Amplifiers, a recent development, have already won the enthusiaste
acceptance by servicenen, 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 makequ. Below we have assembled a complete
line of audio transformers, power transformers, end chokes especially designed
for Class B operation. Particular care
was taken in their design to insure beet
tone quality. The best filton ateel is
used for the cores and pure electrolytic
copper wire for the coils.

#### Class B Power



Supplies filament and plate for 10 tubes, Has 3-212 volt winding For the 32 Reco Electrostatically

\$2.85

#### Class B Coupling Transformer



Input For a Single 46 Into 2-46's

Cat. No. 7127

\$1.95

For 2-227 or 56's into 2-46's Cat. No. 7144 \$1.95

For 2-245's into 2-46's Cat. No. 7129 \$1.95

Output to 9 ohm, 15 ohm, 500 ohm and 4000 ohm from 2-246's.

Cat. No. 7128

\$2.95



Class B First Choke Cat. No. 7126

95c



Class B Second Choke

Cat. No. 7130

95c

#### Acratest Special Matching Transformers for **Mixer Panels**



Each of these transformers were designed for a particular purpose, in sonnection with public address and studio use. With these transformers as a basis, input and output mixing partis may be constructed at exceptionally low cost. Excellent frequency response and ations in their design.

Cal. No. Description.

Microphone to 200 or 500 ohm line transformer. Two or more of these may be used for two or more microphones on one line 7131

\$4.50

Microphone to 50 ohm transformer. Pour of these transformers with their secondaries in series for 4 nukes into 200 ohms. Diagram furnished 7132 ni hed

\$4.50

Piate of 232, 224 or 267 Tube to 200 or 500 ohms input ir a former, Primary and date 250,000 2625 Plate of 230, 227 or 56 Tube to 200 or 7133

500 ohm input trans-

\$2.75

500 chm line to from one to six 15 chm roise coils . . . 7134

\$4.50

#### Microphone or Phonograph Input Transformer LARGE AUDIO MOUNTING

This is an ex-cellent transfor-mer for use on cellent transformer for use on any amplifier or radio receiver. It matches the standard microphone, cir. 200 ohms on each side of center tap vor double button microphone. In do the control of the contr raph pick -



has an impedance of 250,000 ohm

\$1.95 Cat. No. 7145

#### Filter Choke to Match 15 Henries at

150 Mils. identical in ap-6915 input transformer.

Cat. No. 6916



95c ea.

#### Brunswick Low Impedance Electric Pick-Up Head



An exceptionally fine pickup head with a cobalt steel
permanent magret housed
in bronze finished brass
case. Made by R. C. A. and
used on R. C. A., Victor,
Brunswick, G. E., Westingnouse and other makes of
radio-phonograph combinaradio

200 OHMS

Tel No 3870 Our Price ...

\$1 75

#### RCA-Victor Low Impedance Pick-Up Head With Straight Neck

For RCA, Victor Brunswick, G. E. and Wastinghouse Radio-Phonograph Com-binations 31, 32, 42.

Equipped with Special Victor Plug.

Cat. No. 7201 8925 Our Price .....

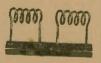


Brunswick Low Impedance Pick-Up Head

Same as No. 7201 above, except with female plug.

Cat. No. 7200 Our Price

#### The Latest and Greatest Hit of the Day Gen-Win 5 Meter Super-Regenerative Coil Kit



For the new thrills that redto las to offer today we recommend the building of this new Super-Regentrative 5 METER RECEIVER for the Ultra-High Frequencies. The new television broadcasting stations are experimenting on this wave length and thousands of radio amaleurs are heard transmitting. This mervelous receiver offers the following features:

1-It has high sensitivity.

2-Freedom from microphogic noises.

3-Simplicity and effectiveness of adjustment which makes it unnecessary to touch the tuning set at the least vibration as is usual with other Short Wave Receivers.

4-Exceptionally quiet in operation.

The GEN-WIN 5 METER COIL KIT is expertly constructed with precision and infinite care and of the finest material. The kit consists of the following:

L1 Tuning Coil; L2 Tuning Coil.

Special Radio Frequency Choke Coil. Li and Lt Special Auxiliary Oscillator

Included with each Coil Kit is a well drawn blue print. Shipping Weight 2 lbs. Cat. No. 7456
Price Complete

#### Phonograph Motor Governor



in all G.E and Victor Motors lo. 3791

A New Super Hydro Double Action Pick-up



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

This unit is very efficient with much greater output and we recommend it as a competitive unit, against any make, regardless of price, size or output. A positive working principle and of the indestructible type.

Neat—Simple—Compact Construction All workmanship Precision Built, with the finest grade of material obtainable, unconditionally guaranteed. Beautiful statuary bronze 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 gouge the groove at the warp. Rubber insulated needle screw top will stop any resistence 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 four 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 most pickups and with less scratch and a full round tone.

STANDARD PHONOGRAPH PICKUP WITH VOLUME CONTROL

STANDARD PHONOGRAPH PICKUP WITH VOLUME CONTROL 10" overall length, 734" from center pin to needle point.

Cat. No. at. No. Type
5979 .....Regular High Impedance
6398\* .....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



1514" overall length. Arm is balanced for required type.

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



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 consummate art of its creators.

Our Price \$6.95

#### General Electric Induction Start-Synchronous **Drive Phonograph** Motor



price. The answer is that we made a lucky purchase from the G. E. company and we don't want to hold them, but pass our good luck on to our customers.

A compact, powerful motor which really embodies two separete motors—one induction and one synchronous. The induction part overcomes the starting torque so that it starts off immediately but as soon as it rotates at a speed of 78 r.p.m. the synchronous motor comes into action and keeps the revolutions at exactly 78 r.p.m. constant. No brushes—no radio interference. At the price asked, you can afford to buy several of these motors to replace old weak and worn out motors; to dismantale for parts like coils, governors, gears, etc., and for window displays. Amateur experimenters in radio, television and machinery should take advantage of this opportunity. The motor will drive anything within its power.

75c

#### 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 issure 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 1000 cycles. Supplied with 6 ft. cord with phone tips, Artistic brown finish. Individually boxed. We recommend our Cat. No. 2610 Accatone Volume Centrol 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 fit adverse conditions. Shrill, high pitched voices may be toned dowr to normal, and gruf, deep voices may be tuned to more pleasing positions in the voice frequencies.

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



Our Price \$4.70

#### GENERAL ELECTRIC Synchronous Motor With 10-inch Turntable

frameadvanced 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 phone

Quick Starting Torque

Exceptionally quick starting torque. Full speed is attained instantly without manual assistance. Equipped with 12-inch turntable, cord and 2-piece plug.

Cat. No. 135

\$7.95

#### Remsen Aluminum Record for Home Recording

Cat. No.	Dia.	Price
5070	6 in.	13c
5071	71/2 in.	20c
5073	10 in.	33c
5072	12 in.	50c

Especially designed for recording devices utilizing blank records, like the Presto Home Recorder. Can be used on both sides.



#### Universal Pregrooved Records

Cat. No.	Size	Price Ea.
7176	6 in	18c
7177	8 in.	29c
7178	10 in.	44c
7179	12 in.	59c

#### "Echo" Pregrooved Aluminum Record Blank

Can be used on any phonograph or electric turntable. Just sing or talk into horn or mike.

Cat. No. 5363-Diameter 6 in.

\$1.80 dozen

Including 2 Recording Needles

#### The New Two-Speed Green Flyer

Model D Motor. 78 & 331-3 R.P.M.



One demonstration and they want it. Put on a new Long Playing Phonograph Record. Explain its 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 Records. 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.

records.

Backed

records.

Backed by over 15 years of Flyer Phonograph Motor and electrical manufacturing success. Responsibly guaranteed. Order a sample TODAY.

New Green Flyer Two-Speed Governoc Controlled Electrical Motor—33 1/3 and 78 R.P.M., complete with 10" turntable, speed indicator dial, speed indicator pointer, speed change escutcheon plate, speed change pointer, mounting screws and washers. speed change pointer, mounting screws and washers.

Model "D"—110 Volts A.C., 60 Cycles

Turntable Cat. No. \$ 9.75 10" 253 12" 10.75 275

#### "Blue Flyer" Motors

A slightly heavier and sturdier type than the "Green Flyer." Recommended for non-synchronous sound or other heavy duty installations where a specially dependable motor is required. Very high torque, on actual test will out-pull any similar motor. Will not heat in enclosed cabinet. Complete with 12 inch turntable.

Cat. No. 304-For 110-120 volt 50-60 cycle A. C. Our Price, Each .....

> Special Blue Flyer for 33 1/3 P.P.M.

For new style recordings and synchronous moving pictures.

Cat. No. 305 Our Price, Each ..... 8**9**75

# Special Acratone Carbon Steel Recording

This needle has been developed especially for recording. It may be used on either pre-grooved or blank discs of either aluminum or composition.

either aluminum or composition.

This recording needle is made of extremely hard carbon steel which is nickel plated and highly polished. Backgroundnoise is reduced 50% with this new type of needle. The tip of this needle is blunt 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

4 order blanks have been included in the center of this catalog for your convenience. Use them.

#### **Genuine Sapphire** Reproducing and Cutting Needles



CLUSIVELY. This sapphire is rated, according to scientists' tables, hardness of which is '10'% of that of the diamond. Consequently, it is very durable. To insure its long life, care must be taken that it is not dropped on a hard surface. Type AW, for cutting (grooving) and recording on ALUMINUM. It will work on practically all commercial and home made recorders. Its radius and angle is specially made to cut a fine groove. Same needle when used with a powerful motor, will also cut on ERAYDO.

Cat. No. 250

Type BW for recording or the surface.

Type BW, for recording and playback on Victor type black composition pregrooved home recording blanks, also pregrooved aluminum or celluloid with a minimum of surface scratch.

Cat. No. 240

Our Price

Type CW, for playback on regular commercial records such as Victor, Columbia, Brunswick, etc., also electrical transcriptions when all above are made to play at the rate of 78 revolutions per minute. Cat. No. 289

Type DW, for cutting grooving and recording on CELLULOID. This needle does not push away the material but cuts out a fine thread of celluloid while recording.

Cat. No. 200 \$400

Our Price ...

Special DIAMOND NEEDLE for CEL-LULOID, used for professional recording. Cat. No. 291

All above needles are tested and inspected before shimment and are guaranteed against defective materials and workmanshin. They are used extensively by recording studios, laboratories, universities, language schools, etc.



#### Fibre Playback Needles for Aluminum Records

Cat. No. 6929 25c

Package of 50 Needles

Package of 50 Needles......25c First—Perfect Reproduction. Second—Plays many records without repointing.

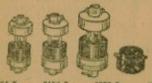
Third—Plays all makes of Disc Records. Fourth—No Surface Noise. Fifth—No Injury to Records. Sixth—Improves Tone Quality.

#### Wall-Kane 10 Record Needles



#### Microphone and Public Address Connectors

Composition, steel covered cadmium plated. The adjustable clamp grips the cord tightly, thus relieving the strain from the hinding posts, and also prevents the outer cover of cord from unraveling.



		The state of the s			
6354-1	5 8	456-7	635	8-9	6260
Cat. No	No.	Descr	iption	Ou	r Price
6354	2-Wire	Polar	ized Ca	D	5 .45
1355	2-Wire	Conne	ector		.70
6356	3-Wire	Polar	ized Cay	D	.50
6857	3-Wire	Conn	ector		.75
6858	3-Wire	Polar	ized Ca	n with	
	"Twi	stlock'	*******		.65
6359	3-Wire	Polar	zed Hoc	iv with	
	Twi	stiock'	***********		1.60
6368	Final	Recep	otacle.	to fit	1900
	above	caps		**********	.65
-	_				

#### Armoured Bakelite Cable Connectors

Three prong cable connectors insuring perfect contacts and 100% insulation. The steel armor protects the plug and extends over making the cable clamp as shown. No better plug on the market for carbon unicrophones. The prong arrangament permits assembly in one position only. 112 inches in diameter.

(at. No. 6538—Body Net Price 6de

Cat. No. 4130-Plug Net Price 450

Cold Mold Composition Con-nector, same as above, but without armour,

Body-Ne. 7140-30e Cap-No. 7141-20c

#### Base Receptacle and 4 in. Cover

Flush, with 4-in, Bound Steel Box Covers Attached for Trucks, etc. Cadmium finish, outlet hox covers are



10 Amperes, 250 Volts 15 Amperes, 125 Volts Cat. No. 6361

Price 95c

#### 3 Wire Microphone Coupling

Polarized Plug and Cable



The 18 inch cable is perma-nently attached to the micronently attached to the microphone and the 
Iemaie plug allows the instantaneous connecting or disconnecting of the 
microphone to 
the line. Prevents wear of 
Cable has 3 difrs.

mike and saves time. Ga ferent colored conductors. Cat. No. 7291 Our Price

THREE CONDUCTOR MALE CAP

Cat. No. 7141

#### Three Wire 10 ft. Microphone Cable



micropho coupling and other uses.

Cat. No. 3626 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 rubber insulated and cotton braided. The ideal microphone cable.

Cat. No.	Length	Our Price
4425	12 ft.	\$0.60
4441	25 ft.	1.25
4442	50 ft.	2.35
4443	100 ft.	3.75

#### **Armored 3 Conductor** Microphone Cable



A conductor heavily insulated table en-cased in a steel flexible armor which acts as a shield (when grounded). Will re-sist all weather and the hardest wear. You can run a 10-ton truck over it with-out injuring it. Ideal for all outdoor public address work.

Cat. No. 4446

#### 4c per ft., \$3 per C.

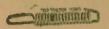
Microphone Cords Made Up Cables With Armored Connectors.



Cut. No.	Length	List	Net
		1 1 2 2	Dille
6435	6 It.	\$2.75	\$1.68
4137	12 ft.	\$4.50	52.70
4488 -	25 ft.	\$7.50	\$4.50
4139	50 ft.	\$12.00	\$7.20
4110	100 ft.	\$19.00	\$11.40

For outdoor use, over gravel, parement, platforms, in water, or where crowds are walking, a rubber covered, shielded cable is an absolute necessity. Fitted with genuine G. E. Bakente connections. Supplied in 3-conductor shielded only, the shield being soldered to the center conductor of the plug and socket. These assembles made up complete as shown cannot be emplicated anywhere for the place.

#### Microphone Suspension



Springs

For suspension of microphones in rings, deak mounts, floor stands, etc. A much needed small part handy to have and sometimes hard to obtain. Special head with one long loop, beautifully finished of highest grade spring steel allowing maximum flexibility without atretch. 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 refilling old buttons. They must be kept sealed before use and must not be handled by fingers. The very best grade of transmitter carbon granules, each visit contains sundient to re-carbon one ordinar two-button microphone. No. 100 size.

Cat. No. 6974 59C

List, per Vial . . . \$1.00

#### Shielded Microphone



Cable

		Price	
Cat. No.	Wires	Per Ft.	100 Ft
4490	3	60	\$5.50
4180	5	10e	9.00

The shielding is fully insulated and may be used as an additional conductor.

This multiple conductor has a timed copper shield beneath its extra thick rubber insulation and may also be used as an additional conductor. Each conductor is insulated and breated, will stand pleaty of abuse. For all public address work, indoors or outdoors. Acid resisting.

#### A Gain Control Plate



Cat. No. 6940 Diameter 134" Hole 56"

10c ea.

This plate will be found excellent for public address amplifiers, faders, phonograph pick-ups, etc. It is graduated in 30 equal divisions and 10 numbered places. Etched aluminum with silver numerals.

#### 7 Wire Shielded Microphone Cable

With Coupling Plugs

50 FEET LONG



For condenser micro-phones connects battery supply and input to main amplifier.

Cat. No. 4477

MAIL ORDERS TO ATE

# P. A. HORNS

#### Suspension Horns



REFLEX 6 foot Exponential

AIR COLUMN

Designed primarily to reinforce the voice reproduction in the talking picture installations, centralized radio systems, for sales conventions, schools, etc. Its compact size, carrying and tonal qualities are startling in realism.

Air column, 6 feet; depth, 26% inches; weight, 25 pounds; bell, 29x29 inches.
Especially adapted for: Small Capacity Theatres, Ice Skating Rinks, Dance Halls, Small Auditoriums, Churches, etc.

Cat. No. 117-List Price \$55 \$3234 Net Price .....

Bell, 13x15 in Depth, 141/2 in. Overall dimensions, 174x16x1416 in. Air column, 5 feet.

Equipped with cast miuminum throat, bronze loose coupling.

An excellent horn for monitoring and for all types of sound systems requiring a portable horn.

Weight, 71/2 pounds.

Cat. No. 119-List Price 818 81038

#### Public Address Dynamic Units

TYPE GAC-IN

Giant Electro Dynamic Horn Unit-Operates on an Output of 10-30 Watts - Weight, 19 lbs. - Standard Threads - Response 50-8,000 Cycles

Requires a field supply of 1.6 amperes 6 volts D.C. The

at 6 volts D.C. The ource of supply may cither be a 6 volt stronge battery or a rectifier that will give 6-8 volts D.C. from 110 volts A.C. The standard volce of 11 impedance of 12 volce of 12 volce of 13 volce of 14 volce of 15 volce



Available also for 110, 220 volts D.C.

Cat. No. 162-List Price \$50 \$90 40

#### TYPE GAC-3N

Junior Electro Dynamic Horn Unit-Operates on an Output of 7-10 Watts -Weight, 10 lbs.-Standard Threads -Response 50-8,000 Cycles

Requires a field supply of 1.6 amperes at 6 volts D.C. The source of supply may either be a 6 volt storage battery or a rectifier that will give 6-8 volts D.C. from 110 volts A.C. The standard voice coil impedance of type GAC-3N is 16 obms.

Available also for 110, 220 volts D.C.

Cat. No. 164-List Price \$38 \$9934

#### **Exponential Stormproof** Cone Trumpets



Bell, 30" Depth, 24" Weight, 11 lbs. Opening, 9"

For the Amplification of Human Speech Used in Classrooms, Department Stores, Hospitals, etc.

A bell flare makes a directional speaker of a non-directional one, concentrates the sound emanating from the cone and sends it to a direct course, thereby adding greater efficiency to the output. It loads the diaphragm of the cone, thus giving it an air column. This prevents blasting and in addition retains the high

Cat. No. 192-List Price \$20 \$1 176



Type S-9. A 4 ft. Square Cone Trum-ts of special all weather material. All ints metal reinforced. Standard finish aluminum. Speaker Enclosure.

Length, 48 in.; bell, 30x22 in.; weight,

Cat. No. 108-List Price \$30 \$1 764 Net Price



Type 5-305. A 6 R Square Cone Trumpet. Metel reinforced joints. Spe-cial all weather material. Standard fin-ish-aluminum. Speaker enclosure.

Size bell opening, 31x31 in; length, 6 it; weight, 26 lbs.

Cat. No. 109-List Price \$36 \$2117 Net Price .....

The R-207 Speaker Unit consists of a hame born with speaker enclosure, into which may be mounted a dynamic cone type speaker.

Dimensions: Horn opening—height, 18 in.; width, 30 in.; total depth, 24 in.; weight, 14 lbs. Standard French gray finish.

Cat. No. 112-List Price \$17 Net Price

R-207-W. Same as R-207 but built for

Finish, aluminum. Weight, 18 lbs. Cat. No. 113-List Price \$18.50 8 8

#### TRUMPET HORNS for **Amplification of Direct** Speech

The types described are especially



commended for: Confor: Conventions. Open All Open Air Assemblies, Political Gatherings,

Race Tracks, Athletic Fields

Stations, Race Tracks, Athletic Fields, Stadiums.

Bell, 30 in. round, length, 6 ft. Heavy Duty, equipped with demountable aluminum throat, one inch metal beaded edge, suspension ring, finish French gray. Standard thread.

Weight, 22 lb.

Cat. No. 165-List Price \$55

Net Price .....

Standard: PA-6 equipped with metal beaded edge, cast aluminum throat, and suspension ring for interior use.

Weight, 14 lbs.

Cat. No. 167-List Price \$48 \$2722

Bell, 23 in round; length, 23 ft. Heavy Duty: Equipped with demountable threet, beaded edge and suspension ring, coupling for dynamic units. Weight, 10 lbs.

\*182:: Cat. No. 173-List Price \$31

Beil 18 in.; length, 3 ft.
Slandard: PA-43 equipped with cast
aluminum throat, beaded edge, and suspension ring. For interior use, and temporary exterior use.
Weight, 8 lbs.
Cat. No. 175—List Price \$20

#### 314 FT. STORMPROOF TRUMPET

Bell, 22 in round; length, 34 ft. Equipped with metal beaded edge, cast aluminum ferrule and suspension ring. Guaranteed for one year. For outdoor use in all climates and

Weight, 914 lb.

Cat. No. 185-List Price 810 82252 Net Price .....

6 FOOT STORMPROOF TRUMPET Bell, 30 in. round; length, 6 ft. Equipped with metal beaded edge, cast aluminum throat and 4 inch suspension

ring.
For outdoor use in all climates and weathers. Single unit horn.
Weight, 21 lbs.

Cat. No. 176-List Price \$65 Net Price

#### Multiple Horn Couplers



For connecting two or more horns to a single dynamic unit. Standard threads.

Cat. No. 7300

85.40

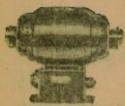
\$11.60

Cat. No. 7301

By using these adapters, two or three horns may be connected by a single unit. Sound is evenly distributed, covering a wide range of frequencies. Dispersion angle of double coupler 75 degrees, of triple coupler 105 degrees.

rederated Purchaser Inc.

# Esco Rotary Converters Transferms 6, 12, 32, 110 and 230 Volts D. C. to 110 Volts 60 Cycle A. C. Current



Converier are the perfected products of a product man-ufficturer who has been has b building ma-tors, genera-tors converi-

ber of years. Esco machines and other high voltage machines for a long number of years. Esco machines are peculied as standard by the United States Army the United States Army the United States and hundreds of the Esco high voltage generator that enable Commander Eyed to keep in touch with the outside world.

Esco total converting the state of the Esco high voltage generator that enable Commander Eyed to keep in touch with the outside world.

world.

Been folary converter are manufactured to the same degree of accuracy another areo machines. These converters open a large field for the radio dealer and service man, they make possible the using of modern AC radio sets and ohomographs from direct current. These converters also supply alternating current for operating public address and sound visions from trucks. All Exce converters to furnished complete with correctly designed filters which insure perfect radio reception. reception

Our Cat. N			In DC 1		Outpu	t Our Prices
305		R61		6	4.0	837.39
206	1	R121		12	80	40.15
349	4	R121		12	150	56.25
350	1	B322	2	32	150	42.53
357	2	R323		82	200	47.00
358	- 3	Rase		32	300	51.45
361		R325		32	400	53.11
371	5	RIST	1	15	0.0	32.93
362	- 1	R152		64	120	34.30
372	- 4	R158		**	150	37.39
363	2	E154		44	200	45.52
::64	2	R155		**	300	49.39
365	2	B156	To be	14	100	58.41
370	2	R157	-	14	200	63.11
378	2	R284	21	20	200	47.00
377	2	R235	1	14	300	51.45
378	. 2	R236		4	400	62.43
380	2	Rest		•	208	65.17
373		R231			90	33.96
374		R232			120	36.36
The	above is not	desur	orices	ine	lude 1	ilter. If be de-
ducted.	11076	GOWII	-	10.50	far W A	he de-

#### Copper Sleeving for Shielding



This shielding is used on amplifiers, peakers public address conduits, automobile radios and wherever it is desirable to eliminate electrical interference. The conductors are run through the seeving and the sleaving is grounded. The wire is very facults and can be stretched to double its original length.

fat No.	Size	Dia.	OUR Per ft.	PRICE 100 ft
4469 4469	2	1 in.	50.11	\$10.00
4476	3	i in	-07	6.50 4.50



Delivers 180 volts at 30 mils and 135 volts at 40 mils. Requires but 2.1 Amps. at 6 volt input. Size 10x7x3 in.

Cat. No. 273

\$14.95

#### Janette Auto-B-Power

Perfect Auto Radio Reception

Free From-Baltery Replacements. Battery





THE JANETTE "Auto-B-Power" consists of a small JANETTE dynamotor and altering device mounted in a strong, attractively finished steel box. It Fransforms the 6 or 12-voit current of an automobile or airplane storage battery into the higher voltage "B" current required by your auto-redio set. Whatever the voltage requirements of your autoradio set may be a JAN TTE "Auto-B-Power" can be turnished for the correct voltage. (See table on reverse side of this page.)

#### Quiet—Compact Vibrationless

JANETTE "Auto-R-Power" has a The JANUTTE "Auto-re-rower" has a dynamically balanced armature; thus it tuns with a minimum of vibration. Virtually inaudible when placed under the hood, floor boards or seats. Requires but little room—measures only 22x6x5½ ln. weigns 20 lbs.

#### Data and Prices

	Battery Drain				
Cat. No.	Code	Input Volt.	Output Volt.	At 40M.A.	
265	AUTEX	6	135	2.8	
265	AUTOB	6	139	3.0	
267	AUTAK	12	135	1.4	
270	AUTIL	12	180	1.5	

Concurred include units complete with voltage and 1 extra tap. If two extra taps are required, add following codeword.

These current values are maximum. 

Our Price \$18.82 COMPLETE

#### JANETTE Rotary Converters

Transforms 6, 12, 32, 110 and 220 V. D.C. to 60 Cycle A.C. Current

Janetic Roter, Converters are compati, ev-namically nal-anced unit anced uni which change direct current which change direct current to 110 volt, 60 evele, alternat-ing current for the operation of A.C. radio sets or ampli-fiers on D. C. circuits.



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

The Janetic Rotary Converten and especially the new CA-25-F opens up a fertile field for A.C. radio ales. Over 500,000 farmers own 32 or 110 voit D.C. lishing plants. Every one of them 55 prospect for a double good side consisting of an A.C. radio as and Janeting of an A.C. radio as and Janeting of the convertence o

#### Perfect Radio Reception

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

of converters are to be used where tuner is employed, the filler may be tited. Shipped from New York or Chicago.

#### 6 Volt Input to 110 V. A. C. Output Models

OUR PRICE Output Watts With Loss Filter Cat. No. 326 330 261 262 20 30 9.0 14.0 16.0 22.0 826.25 27.75 37.80 41.30 \$20.58 22.05 34.55 38.22

#### 12 Volt Input to 110 V. A. C. Output Models

331	20	4.5	26.25	20.58
348	3.0	7.0	27.75	22.05
263	80	15.0	37.80	34.55
264	126	19.5	41.30	38.22
265	180	22.0	56.70	48.50

#### 32 Volt Input to 110 V. A. C. Output Models

282	80	4.5	29.40	25.00
254	310	6.5	35.00	31.24
255	150	8.5	38,75	34.02
265	300	15.0	53.00	44.10

#### 115 Volt Input to 110 V. A. C. Output Models

257 258	110	1.9	35.00	31.24
259	800	1.0	50.00	34.92
260	500	6.4	64.00	54.50

#### 220 Volt Input to 110 V. A. C. Dutput Models

254	=0	1.0	29.40	25.00
269	110	1.9	36.05	32.50
267	110	2.4	39.55	35.00

MAIL ORDERS See Terms on Page 3

Federated Purchaser Inc.

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

# older and Tap

# Acralest

"E-Z" Flow Wire Solder What Every Service Man Is Looking For

Diameter 1 MM.

Cat No. Spool of Weight Our Price 36 lb. 1 lb. \$ .50 117 ft. 6521 235 ft.



Note Special Fluid (not resin) in Center. No Corresion No Oxidation Quick Action "Use Half as Much Solder Twice as Long."

This finest of solders is used by the largest radio and electrical manufacturers. Despite its extreme thinness (1 mm.) it has a fluid core which makes it hold to aluminum, nichrome wire and highly polished surfaces. The real advantage of this solder is that only sufficient solder to make the connection is used, while with many ordinary 3m.m. solder, a large globule is needed to make a connection. Will last twice as long as ordinary solder. Once you use this solder, you will never go back to ordinary solder. Sample free on re-QUEST.

#### "PERFECTO" Soldering Fluid



Any Bolder, when used in connection with Perfecto Pluid, will enable you to solder substances which ordinary solder will not mend. Will also facilitate soldering of other metals. All that is necessary is to touch the fluid with the tip of the iron.

Cat. No. 5377

Our Price 25c Per 2 oz. Jar

Nokorode Solder Paste

Packed 12 cans in attractive display

Cai. No. 4211 Box of 12 Cans.

Retails at 15e ca.

#### Eveready Rosin Core Solder



1 lb.

4176

A very high-grade saider for wiring and general nouse work use. Attractive

spools and

cams. Our Price Cat. No. Sire \$1.35 per display carton of 10. 3 02 4156 36 02 .25 cach 4175

## KESTE SOLDE

.40 each

#### Rosin Cere

The small package of Scaler Rosin-Octe-Solder, being of the flat or ribbon type. Recommended by leading radio engineers for it is absolutely non-controsive neighbor of the amateur set builder and for radio maintenance work. A liberal cell of solder is packed in a lithographed tin can; ten cans are put up in a handsome counter display carton.

Cal. No. 5220 Per Carton of 10.....





Radio General Seed Cat. No. Cat. No. Our 80.43

Electrical

#### SOLDERALL



10c Retail Size In Counter Display Carten of 24 Tubes

Cat. No. 4467

\$1.35

per carton of 24

This is a complete metal solder and flux I'ms is a complete water according to the joints to be coldered when heated will flow and unite the parts the same as wire or bar solder. Furnished in collapsible

#### P. D. Q. Plastic Metalic Solder



A new ductivers. Is a semiliquid that can be used to
vepair almost any broken article. It is water proof, gasoline proof, and will withstand
heat. With it you can repair broken furniture, bathroom fixtures, broken crockery,
porcelain, leaky poit and pan,
broken dishen, leaky radiators,
mas uniks, water pipea, broken
windshields ar cracked cylinder
heads of automobile. It will
litek to wood, metal, glass,
aluminum, pewier, lead rubber, leather,
in fact almost any surface.

Dries rapidly, will withstand 3500 of

Dries rapidly, will withstand 3500 of heat and acid.

Cat. No. 7356 Our Price, per doz.

\$200

SAMPLE 20c

#### "TWIN-TAPE"

Rubber and Priction Combined in One. One wrap instead of

I-Muslin covering.

1—Musita coering.
2—Rabber tape.
2—Priction tape.
Twin-Tape represents the highest grade of invaluation tape. The cest quality of materials obtainable is used rials obtainable is used in its manufacture, which in a ures informity and long the time roll instead of two means raving in members and convenience to the workman



8 Ounce Rolls-Cat. No. 5565

9c each

#### Friction Tape

Cat. No. 4225

1-Ounce Rolls. marked "5c

70c Per box of 32 Rolls



2-nunce Rolls, marked "10c Each.

Cat. No. 4219 Per box of 16 Rolls 70°

Cat. No. 4215 J-oz. Rolls, Each ......

Cat. No. 4223 S-or, Rolls, Each.

Packed in individual cartons and at-tractive display containers which makes sales easier.

Friction Tape "Ends" S-oz. rolls profied in boxes. Cat. No. 7457

Our Price, per lh. 15c (2 S-or, rolls)

## LENK BLOW TORCHES

A Model for Every Purpose

#### Lenk Handy Blotorch



Handy for any soldering purpose. Made of brass heavily nickeled. 1200 degrees needlepoint flame.

Size: 5 in x % 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 TORCH

Five Improved Features



1-Extension base improved

2-Screw-top makes it easier to lond. B-Nozzle-cap prevents evapo-

ration.

- Capper heat conductor generates quickly.

- Bigger Larrel holds more

Blows itself. Operates on denatured slophol. Solid base makes it mechanically leak-proof.

Size: 5 %x25xx1 in. Packed it to a

Cat. No. 6693 68c Our Price, each Display Card of G. 800.50

#### Lenk Wouth Blotorch



A HEAVY DUTY MASTER PRODUCT

Filting a demand from ELECTRICIANS a b w MECHANICS for a SCESTANTIAL FOOL-PROOF TORCH.

Base and Top of Heavy Bronze Castings

WICK SCIENTIFICALLY ENCASED prevents buil-ing over of fuel.

Balunced to prevent damage when drop-

Extra long rubber tube with ebony mouth piece. Unequivocally guaranteed. Size 7 %x216 in. Shipping weight, 1% has. Packed in individual corrusated

Cat. No. 7316 A 20 Our Price

#### HACKSAW

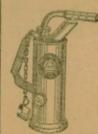


Cat. No. 5076

#### Price 85c

They are adjustable from 8 to 12 inches, with back, arms and clips made of a very hard grade of steel. The nicely-shaged pistol grip handle is made of steel stampings, corrugated to give a good grip. The randle is riveted to the frame. All other joints are everlastingly weided together.

#### Lenk Duo-Duty Blotorch



Strong Sturdy Structure!! Duo-Flame Conirol

Needle-point and Bunsen Blast Mechanically Balanaced Heavy Cast Bronke Base Cleaning Pin

in cool handle. BUILT TO LAST A LITETIME

Unequivocally Guaranteed

lize, 74x444x24; in. Shipping weight, b. Packed one in a carlon.

Cat. No. 5433-Lisi Price \$3.50 89 10 Our Price

#### Lenk Master Blotorch

A Combination Alcohol Torch

Powerful 22000 blest with attached burner. One turn of themb screw reteases barner, producing 17000 needle-point



Double burner -one for a needle-point fixme - add

point filme - acc the attachment for a heavy in-lense flame. The pressure re-fease valve - no a nuttering, no woiling over, no accuration no bolting over, no evaporation, no

least.
A cleaning pin always handy when you want it

A full grip nandle, clways cool.

Substantially built—to last a lifetime. Fool-proof construction-no adjustment necessary.

7. Filter screen in jet prevents plugging of crifice.

Size Tx 134x3"

Cat. No. 5431 馬6095 Our Price .



#### Hand Brill

This tool represents an un-This tool represents an un-usual value in a drill of 14, inch capacity. The frame is a little lighter than the pre-ceding drills and so side handle is provided, and econ-omies in finish have been made. Its performance is

8124 Cat. No. 5077 Price ......

#### Screwdriver



Cabinet serewdriver, carefully manufac-tured from the best materials obtainable for the purpose and finished in keeping. This screwdriver is particularly useful in servicing Atwater-Kent, 8/2-inch blade. Cat. No. 5053

40e

#### Electric Soldering Irons



A handy soldering from for the radio fan. Equipped with removable copper tip, heater Cord and a two-piece attach-ment plug, gloy element.

FULLY GUARANTEED

59c Cat. No. 2720

75 Watt High Heat Soldering Iron with removable heating tip, approved heater cord.

Cat. No. 5113 81.65 eu.

100 Watt Extra Heavy Righ Heat Iron ith brown temovable handle, approved with brown removable heater cord.

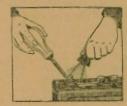
Cat. No. 3305 \$2.00 eu.

75 Watt, 229 V.

\$1.50 ea. Cat. No. 6707

Cat. No.	Wates	Type	Price
7447	75	Round	80.25
7448	100	Round	.35
7449	7.5	Chisel	.25
7450	100	Chisel	185

#### Mueller Battery Light



Cat. No. 6586

A Mandy and Inexpensive New Battery Shop Tool

#### Our Price 38c ea. Six for \$2.10

The MUTLLER BATTERY LIGHT uses the storage battery uself as the logical source of power for lighting up the work when cells are being replenished with

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.

## Automatic Drill



This new tool is built for the home or shop to provide a highly efficient will at a very reasonable price.

at a very reasonable price.

It drills eight different size holes quickly and with surprising ease in hard and
coft wood, soit metals, wall board, plaster, etc. The eight drill points are contained in the numbered compartments
in the magazine handle made of shiny
jet black, molified bakeline. They are
safely locked in until wanted.

Eight fluted shank drill points, 1-16-inch to 11-64-inch in diameter, are furnished with each drill.

Length 9% inches. Weight 6 ounces.

Cat. No. 5081

Our Price

0

#### Mackine and Wood Screw Assortments

4142 Round machine per box.

1288 Flat Head 6-32 N. P. Machine actews, 85 per box.



4741

4748

Oval Head 6-32 N. P. Machine Screws, 85 per box.
Round Head 8-32 N. P. Machine Screws and Nuts, 75 per box.
Assorted Fibre Washers and Grommets, 100 per box.
Round, Flat and Oval Head Assorted Size Wood Screws, 85 per box.

4745 Round Head 6-32 Screws, nuts

#### Angle and Bracket Assortment

All Nickel Plated Brass 28 pieces in a box.

Very handy for the service man

Our Price, Per box 25c





#### Transformer Brackets

Bruss, Nickel Plated -s In wide.

Cat. No.	Length	Hole	Price Set of
5367	Stain.	2 12 in.	\$0.20
5368	4 10 In-	3 to in.	.30
5369	5,5h in.	in in	.40

#### DE JUR PIN JACKS

Direct connection to the loud speaker or ear-phones without the use of a phone-plue is facultated 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 loug-in coils. Their use on terrips is also a great convenience. terminal

Cat. No. 4129

#### 50e dozen

Package of 100 \$3.50 Solderless Phone Tips, Cat. No. 5373, 50c Dozen.

#### 540 Ohm "C" Bias Resistor



Used for taking off "C" Yoltage from and B Eliminator. 10 Watts. Tapped at 90, 20, 200 onm.

15e ea. Cat. No. 5103

#### Round Head Machine Screws

These machine screws are packed 10 % screws to an envelope. Each envelope nas an illustration and the quantity of the product on the the product front.



Cat. No. 5966 5967 5968 36x6/32 1,26 32 2x6 32 3,x6,32 1 x6 32 1 4x6 32 Round Round Round Round Round Head N. P. Head N. P.

#### Our Price 5c

Per Envelope

#### Wood Screws in Envelopes



The wood serews are packed 10 to an envelope, each envelope illustrates the type of the wood screw head and always states the quantity.

6474

6475 6476

15 x No. 5, 10 Round Wood Screws to an envelope. 58 x No. 6, 10 Round Wood Screws to an envelope. 54 x 6, 10 Round Wood Screws to an envelope. 1 x No. 6, 10 Round Wood Screws to an envelope. 114 x No. 6, 10 Round Wood Screws to an envelope.

#### Our Price 5c per envelope

#### Machine Screws, Nuts, and Washers

Cat. No. 3656 15-x6/32 Oval Head Machine Screws, Nuts and Washers. 3651 4-x5/32 Oval Head Machine Screws, Nuts and Washers. 3652 1 x6/32 Oval Head Machine Screws, Kuts and Washers.

The above mentioned merchandise is packed 12 of each in an envelope as follows: 12 machine serews, 12 nuis, 12 washer. 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

25e per hundred

#### Hexagon Nuts, Knurled Nuts, and Washers in Envelopes

5959 6/32 x 1.", 20 nuts packed to an envelope.

9969 8/32 x 14", 20 nuts packed to an envelope.

1911 6/32 x 5-16", 15 nuts packed to an envelope.

1921 8/32 x 5-16", 15 nuts packed to an envelope.

1913 6/32 x 5-16", 5 nuts packed to an envelope.

1913 6/32 x 5-16", 6 nuts packed to an envelope.

1914 8/32 x 5-16", 5 nuts packed to an envelope.

1915 No. 6 Washers, 25 washers packed to an envelope.

1916 No. 8 Washers, 25 washers packed to an envelope.

All of this merchandise navierbage.

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 commonly used on battery cables. The No. 3 lug

is a solderless lug for round or squ re bus-



The No. 4 lug is a flat lug for bus-ba connections.

The No. 5 lug is also flat but is ? in in length. This type of terminal is easily bent to any desired angle or shape.

The No. 11 lug. Tire-Lock. 7% in in length.

All terminal lugs are packed 100 to boy Style Cat. No. Style Cat. No. 5975

5971 5973 5 3976 5974 11 5977

# Our Price 19c

Per Box of 100

\$2.25 box of 50 assorted envelopes

#### SCREEN GRID Tube Caps with Leads

These Screen Griu Tube Caps have a lead soldered directly to the cap. The cap itself is manufactured of a spring or lass and is calmium plated.



Cat. No. 3892

#### Our Price 20c doz.

Cat. No. 4173-Without Leads 15c Dozen

#### FUSE CLIPS

Spring Phosphor Stones use clips that have been carefully desired and accurately made to as to insure partect electrical emitted and durability.



Cut. No. 3893

lie per doz.

### Pilot Light Sockets With Mounting Bracket



Can be used in any set Both contacts insulated from mounting.

Cat. No. 4076

\$1.50 per dozen

Cat. No. 4077-Without Bracket

\$1.00 dozen

# "Clamp-On" Type Pilot Light Socket

Can be attached to any dial not already equipped with pilot light.

Cat. No. 6571

6c ea., 60c doz.

### Condenser Shaft Reducer



Adapts a 36" condenser shaft for a 1," dial or knob Nickel plated brass Length 7.".

# Our Price 15c Ea.

### Shaft Coupling



Cat No. 5166

15c ea.

This fitting connects two 14" shafts together. Very handy for connecting condensers, volume controls, etc. With 2 set-screws. N. P. brass. 56" long.

## **Bakelite Tubing** (Coil Forms)

Cat. No. 4085 1% in. dia., 4 in. long

Cat. No. 3812



112 in. dia., 3 in. long Our Price 10 ea.

### The Mandy Scratch Remover

Mars and Scratches on Radio Cabinets and Furni-ture Vanish Instantly.

Cat. No. 3379 Per Dozen .....

display.)

Sample 35c (Sold one dozen to carton with counter

## Special Screw and Nut Assortment

Contains a generous supply of screws, nuts, washers, lugs, etc., which are indispensable to the service man. Should be in every repair man's kit. Can also be sold across the counter to set builders.



19c ea. Cat. No. 3662

## Professional Hardware Assortment, 5 Pounds

For the dealer's and servicemen's shop. Contains an extra large assortment of every size



ment of every size of screws, nuts, washers and lug for every radio purpose. This assortment is indispensable to the man and building and will pay for itself over and over.

Cat. No. 3816 75C

# KUPROX RECTIFIER Replacement Unit

Type A-110. For use on the following popular trickle chargers Bakelite Type 'K' (.4-.5 Amp.); Silite (6 Amp.); Vesta (.5 Amp.).



Cat. No. 5852

85c ea.

### Washer Assortment



Contains 100 of the most commonly used fibre washers and grommets.

Our Price

25e

### Rubber Howl Arrester

Fits over the tube and prevents oscillation and mi-cropnonic noises.

Cat. No. 6669

10c ea.

\$1.00 dozen



### Live Rubber Casters For Radio Cabinets and **Furniture**

vibrations. Prevents 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.



Size 3½ in. Size 2½ in. Size 2 in. Cat. No. 6470 75c daz. Cat. No. 4427 60c doz. 40c doz. Cat. No. 6471

### Supersensitive Crystals

Individually boxed

A real mineral product.

Cat. No. 4054



\$1.25 per doz.

### Melomite Cat-Whiskers For Crystal Sets



Three in a cello-phane envelope, mount-d on attractive dis-play card. Retail at '5c per card.

Cat. No. 4067

Retail at 25c per card

\$1.00 per doz. cards

EASY SOLDERING

# Phone Tips



These new Phone Ins are very easily soldered as may be noted by the illus-tration, merely in-sert wire and drop solder in the side

9c per env. Cat. No. 6531 10 to an envelope 50 envelopes to a box

Yaxley Solderless Phone Tips Simply insert wire and tighten up on screw and you have a good solderless connection.

35c doz. Cat. No. 7185

## Flush Type Pin Jacks



Nickle-Planted Complete with solder lug.

Cat. No. 5629

45c per dozen \$3.50 per 100

MAIL ORDERS TO AND See Terms on Page 3

Federated Purchaser Inc.

### Universal Condenser Microphones



The model herewith illustraied is the result of exhaustive experiments to produce a micrephone for produce a microphone for him and disc recording, in which field 90% of the pro-duction of this model is used. Universal Condenser Microphones are in use in meanly all parts of the civi-lized world in film record-ing and in broadcast studios.

Universal Condenser Mic-models, Model 1440 and 2440 rophones 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:

and appearance. Following are detail descriptions:

A single stage microphone using a 440 tube with an oatput of approximately minus 15, D. B. with an element of a stage of a s

Shielded Cable

\$176.40 Cat. No. 242 List Price \$300

A two-stage microphone using two 440 tubes with an output of approximately Plus 2 D. B. This model is the same in every porticular as Model No. 1440, except the current consumption on the 260 volt tap is only 4 milliampere with figurent current of 5 amp. Size 6 inches by 6 inches by 3 inches. Not weight, 12 lbs. Peaked weight, 18 lbs. Complete with 25 feet Rubber Covered

Shielded Cable

\$205.80 Cat. No. 243 List Price \$350

### Extra Heavy Condenser Microphone Floor Stand

(Illustrated above)

Built especially for condensar micro-phones. An idea of its ruggedness can be attained from the main body tube which is 2 inches in diameter. The entire as-sembly is statuary bronze plated and pre-sents a fine studio appearance. A flange at top allows for easy mounting. The ad-justment lock serew is firm and positive and locks or releases by the slightest thumb pressure. Net weight, 21% lbs. Packed weight, 28 lbs.

\$22.80 Cat. No. 244 List Price \$40.00

Essily collapsed. Lightweight. No name Cat. No. 302
Our Price

### Universal Banquet Stand

A half height stand for use on tables, at bunquels, desks, pulpits, etc., also preferred by some for stu-dio annowheer's use.

Adjustable from 18 in.

to 28 in, high.

Base 7 in, in diameter.

Top ring 6 % in, in diameter.

Purnished with 4 eyes for suspension of Universal "A" "BB" "KK",

"LL" and any other carbon microphone.

Finished in highly polished chrome plate and equipped with blank call letter nameplate as shown.

Packed in individual cartons.

Net weight 11 lbs. Packed weight 15 lbs.

Cat. No. 386-List Price 815 Our Price S Euspension Springs Jucluded

NOTE: All microphone desk stands, floor stands and banquet stands are new equipped with eall letter name plate, as shown. Osll etters or other wording can be painted in this space. If desired, paper of metal letters may be comented in the space provided allowing the user to change lettering as desired. We do not furnish plates lettered or letters.

All stands are mechanically periect. Not made up of lamp lixture or smoking stand parts; are sized to operation when raised or lowered. Present a highly professional studio appearance. Cord can be run down through the tubes and out at the base.

### Universal Floor Stand

A really good floor stand, of the right size in every way. The top ring is distinct in in diameter, the base 12 in in diameter, and complete wishe 18 lbs. Total stended height 5.2 feet.

Total extended height 3-2 feet.

This stand is smooth in operation and is not easily tipped. The clamp look is positive, yet is operated by the saightest pressure.

Hundreds of these stands are in use in all parts of the world, and all users are enthusiastic about them.

Finished in highly polished chrome plate and equipped with blank call letter nameplate as shown.

At the new List Price of \$20,00; this superior Universal ficor stand offers the best buy on the market.

Net weight 19% ibs. Packed weight 30 lbs.

Cat. No. 387-List Price \$20 \$ 1 170 Our Price .... Springs Included

# Universal Suspension Rings

Made of solid brass, for suspending mi-crophones from ceilings of beams. For use especially with Medels "A". "EB". "KK." or "LL." etc. Beautifully finished in polished chromium.

JUNIOR RING Size 51 in diameter by 4 in wide by 1 in. t in 1 the 8 suppersion springs included.

Cat. No. 3636 \$1.47

SENIOR RING Size 51 in. diameter by 15 in. wide by 15 in, thick-3 suspension springs included.

Cat. No. 3621

\$2.35

# 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 covered Model "K". The covers are spring into position, eliminating trick mechanisms which are liable to rattle. Makes a substantial and bostness - like appearance. Same stand and frame as on Model "K" with cut covers.



8 Suspension Springs Included, List \$9.00

Our Price \$5.29

### Model "L" Desk Mount with Covers and Letter Shield

with Covers and Letter Shield.

The same type of covers as described for Model "K" are fitted to the 645 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 as shorting of wires. Polished chrome fluish, it is most attractive and business-cike in appearance. Full instructions for mounting. Call letters furnished. Any letter can be mounted at no extra cost.

Net weight 3% bs.: Packed weight 4% lbs.

Cat. No. 232

8 Suspension Springs Included

Tiet Price \$16 00

MODEL "L" DESK MOUNT
WITHOUT COVERS
Model "L" is 615 inches in diameter
and is used for mounting Model "LI":
387 W. or New Type "BB", or other large,
heavy types of microphones. An extremely well-built and attractively finished in chrome piate mount following the
lines of Universal's general designs. Presents a nighty professional appearance.

Entire assembly 1015 laches high. Net weight, 3 lbs. Packed weight, 415 lbs. 8 Suspension Springs Included, List \$10.00

Cat. No. 239

\$5.88

## Universal Desk Type Mountings

MODEL "K" DESK MOUNT

MODEL "K" DESK MOUNT
WITHOUT COVERS

Moder "K" is a mehes in diameter and
is used for mounting Model "A", or "KK"
microphones on a points of suspension,
using a springs—the ideal way to suspension,
using a springs—the ideal way to suspension
using a springs—the ideal way to suspension
this new larger unit.

The base as set in moulded rubber file
forming a cushion against vibration sno
prevenling damage to polished surfaces.

The entire unit is resultivity minimum
or charme plate; Provided with a finger
ring for carrying; Cable passes through
the hollow base.

Net wt. 235 its.

Net wt., 255 lbs. Packed wt., 255 lbs. Entire assembly 8 in high.

8 Suspension Springs

List Price \$5.00 Cat. No. 238

\$2.94

# USALITE

# FLASMLIGHTS

Two Best Sellers



2-Cell Large Size Focusing Spotlight Will throw a beam of light over 400 feet. Size 194"x634"

Cat. No. 6679

85c

Complete



3-Cell Large Size Focusing Sea with Extra Large Head Searchlight, Will throw a beam of light over 1000 feet. Size 134 in. by 912 in.

Head 334 in. Diameter

Cat. No. 6684

\$1.35

Complete

- 1-Heavy gauge solid brass cases.
  2-Body finished in black.
  3-Fully Nickeled.
  1-Fool-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

- ing.
  6-Head is Octagon-shaped to prevent rolling
  i-Shock absorber at base of oulb.
  8-All parts are ribbed for sturdy usage
  9-Each Flashlight is complete with Bulb,

and Batteries.

Each Flashlight is packed in an in-dividual attractive ops.



### New "Photoflash" Lamp and Holder

Photoflash Holder with 7-in. Reflector and Batteries

Cat. No. 3377 65c

Makes picture taking easy under any condition, in door or outdoor, day or night. No fire hazard, noiseless 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 1½ deep.
Packed 10 in a chipping carton weighing
10 pounds.

Cat. No. 6655

Our Price 20c ea. \$1.90 Standard Carton of 10

## No. 6-11/2 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. 214" diameter x 642" high

No. 6 DRY CELL Cat. No. 6656

20c ea.

\$5.00 per Carton of 25 Packed 25 in a shipping carton weighing 60 lbs.

22½ Volt "B" & "C" Battery

4" long x 3"
high x 2\\"
deep.
Packed 5 in a
shipping carton weighing
8 lbs.
Cat. No.



BEST

Our Price 58c ea. \$2.90 Standard Carton of 5

### Merit Flashlight Cells

LARGE SIZE

Fit Both Flashlights Shown

Size 114 inches by 214 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

at. No.	Volts	Style
5092	214	Clear
5093	212	Opal
5094	312	Clear
5095	31,	Opal
Doolead	to the	how 100 to



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 For VICTOR and COLONIAL Sets

Intermediary Base, Frosted

Cat. No. 4224



# \$1.50 Carton of 10

# NATIONAL Mazda Pilot Lights

FOR RADIO SETS

Volta Cat. No. 3665 21/2 88c 3675 No Less Than 10 Sold

### Independent Pilot Lights

Cat. No. Volts Carton of 10 45c

### Pilot Lamps

110 V. Candelabra Base



For Pilot Receptacles and General Use.

Cat. No. Color 5091 Clear 5091A Amher

> PACKED 25 to the box

# Our Price 9c ea.

\$2.00 Box of 25

### Round Decorative Lamps

Regular base, G1816 and A19 Packed 10 to the box.



Color No. Color No. 5096 White 5099 Blue 5097 Amber 5100 Green 5098 Red

90c Box of 10

45 VOLT 'B' Batteries Cat. No. 6905





**Carton of 5 \$4.00** 

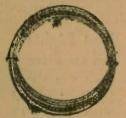
MAIL ORDERS TO ASS See Terms on Page 3

rederated Purchaser Inc.

or to our nearest branch 25 PARK PLACE, N. Y. C.

# Aerial - Lead-in gnet and Hook-up

### AERIAL WIRE



Cat. No. 4401

Seven-Strand No. 26 Copper 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. Coil

Lots of 25 coils . . 22e ea. Lots of 50 coils . . 20c ea. Lots of 100 coils . . 18c ea. Cat. No. Price 4462 1000 ft. Spool.......\$2.00

7-24 Stranded Enamel Wire Cat. No. 4421-100 ft. coils Our Price 35c per coil

No. 14 Solid Enameled Wire Cat. No. 4416 100 ft. coils Our Price 30c per coil

Cat. No. 4475 1000 ft. roll 82.75

Gold Plated Aerial Wire Used on all U. S. Battleships,

Cat. No. 4213



55c ea.

\$5.50 dozen

# Indoor Aerial Tape

Cat. No. 4311

\$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 foom in convenient places. Placed around the moulding.

### LEAD-IN WIRE

Solid Copper, Rubber Covered

50-ft. Rolls

Cut. 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 consits of trand d cable with



Wire consists of attanded cable with Easy-Strip Rubber Insulation enclosed in a braided sheld of tinned copper wire. In service the shielding is grounded. Shielded Lead-in Wire is olving the problem of troublesome intrinsure and thus protects the signal energy from interference caused by high tension lines, motors and similar disturbances.

Cat. No.	Length	Price
4460	50 ft, Coll	\$ .50
4461	200 ft. Coil	.95
4464	500 ft. Coil	4.50
4165	1000 ft Coll	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 sulices. You sim-



ply the one end on some high object on the roof and oring the other end down over the side of the roof and into the window. For a quick and secure installa-tion, there is nothing better than the one insulated copper wire.

Our Price Cat. No. Guage Type 4422 16 Solid \$2.65 4430 18 Stranded

The solid wire has a 3/64 rubber cover and is cotton braided and weather-proofed. The stranded wire has a lac-quered cotton braid over the rubber in-

### Serviceman's Handy Wire Spool Assortment



Now! Every Serviceman can have complete sortment of Wire in stock without large Invest-

### Our Price 95c

For Any Spool Listed Below

Raowing that it is essential that every service shop has a comblete assortment of electrical and radio wire in stock for every fob 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

4442 100 ft. No. 18, 1/64 Cotton Covered twisted reen and yellow.
4488 100 ft. No. 18, 1/32 Silk Parallel,

4494

100 11. No. 18, 1/32 Silk Parallel, assorted colors.
100 ft. No. 18, 1/64 Silk Parallel, assorted colors.
50 ft. No. 14 Cotton Covered Twist of for heavy filement circuits earlying exceptionally large cur-1165

1408

200 t. No 1. 1.64 Single con-que or Cotton Covered, for trial and ground wire, lead-in wire, filment trads and general repair

nilment teat and general repair vork.
100 ft. No. 14, 1/32 Single conductor Cotton Covered, for heavy filament work and general us.
100 ft. No. 13, 1/64 Silk Covered, twisted for filament leads and extensions. Assorted colors.
250 ft. No. 22, 1/64 Single conductor for hood-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 sight.

Cat. No. 4409 All Colors in Buxes



1/2-lb. Coils. 15c ea.—\$1.50 doz.

25-ft. cotts, white, for inside work, 25 cods to a box.

Cat. No. 6302

Our Price \$1.25

Per Box of 25 Coils

MAIL ORDERS TO See Terms on Page 3

Federated Purchaser Inc.



Gauge	Single C Cat. No.	otton Price	Double Cat. No.	otton Price	Single Silk Cat. No.	(Green) Price	Double Silk Cat. No.		Per Speel	Plain Er Cat. No.		Per Spool
13	6056	\$ .15	6063	\$ .17	6077	\$ .21	6084	\$ .27	45 75	6070 6071	\$ .15	50 80
20 22	6057 6058	.17	6064 6065	.18	6078 6079	.25	6085 6086	.30	110	6072	.17	120
24	6059	.19	6066	.24	6080 6081	.30	60ST 60SS	.42	190 280	6073 6071	.18	320
26 28	6060 6061	.24	6067 6068	.35	6082	.42	6089	.86	440	6075	.21	500
30	6062	.33	6069	.42	6083	.48	6090	.84	630	6076	.23	800

### "Push Back" Wire Radio Hook-up Wire

Every Dealer and Service Man Needs This Item



A high grade hook-up wire for general work. The 19-gauge wire is tinned, ready for soldering. Covered with paratfined push-back insulation. Black.

Used for wiring sets and general repair work. At this price you can afford to get 500 feet. Cat. No. Price

4408 100-ft. Roll \$0.50 4411 500-ft. Roll 2.00 4412 1.000-ft. Roll 3.75

### Stranded Push-Back Wire

For nament leads and wherever flexi-bility is desired. Finned for quick sol-dering.

		Cat.	No.	4463	
100	Tt.	coll			\$0.40
500	ft.	coil			1.85
1000	11	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 actials. 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.

Cat. No.	Length	Each	Dozen
4105	25 ft.	11e	\$1.20
4406	50 11.	200	2.25
13417	100 ft.	400	4,50

### 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 production 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 servicement trade at extremely low prices.

man trade at extra Specifications Stranded copper, TINNED, if or casy solderings; 1/64 rubber; glazed cotton braid. The braid is then lacquered, making it absolutely noisture proof. The lacquer also causes the braid to adhere permanently here permanently to the rubber.



VERY EASY STRIPPING ALL COLORS Packed on 250 ft. Spools.

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, Philoo, RCA-Victor and all the large set

## Service Man's Handy Wire Assortment



A complete assortment of wheelengths from 4 in. to 15 in. of every type of wire used in a service department. Contains hook-up, mush, mush, cok-up, mush. Contains 150 ft. of Wire

Contains 150 ft. of Wire

Cod. No. 4415

you money on wire. Very handy to have on the repair bench or in your service kit.

### Our Price 39c

### Special Heavy Duty Rubber Covered Stranded Filament Lead Wire



For 11 and 21 volt filament leads and wherever a heavy flow of current is carried.

Cat. No. 4497-14 Gauge-Will carry 15 

Cat. No. 4459-12 Gauge-Will carry 20 Amps. at 110 Volts 95c

Same wire as above also furnished in twisted pairs for A.C. leads and other uses where two conductors are required.

14 Gauge-Cat. No. 4495

1? Gauge-Cat. No. 4500

95c per 50 ft.

MAIL ORDERS TO See Terms on Page 3

Federated Purchaser Inc.

### No. 18 Twisted Lamp Cord

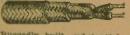


A closely were double braided and heavy rubber insulated stranded copper wire for all general uses. Green and yellow, white or brown, cotton covered.

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 application like vacuum cleaners, etc.

Ruggedly built, substantial and will give real service and long wear.

Cat. No.	Length	Our Price
4431	100 it.	\$1.75
4432	500 ft.	5.59
4433	1000 ft.	9.50

### Flat Cotton Parallel

Will Stand
a lot of
abuse
Approved
No. 18, 1/32
Rubber
All Colors

Wire

ed 1/32 er	- (1999) - (1999) - (1999)	
	Langth	Walso

Cat. No.	Length	Price
4447	250 ft.	\$2,25
4448	500 it.	4.25
4449	1000 ft.	8.00

### No. 16 Double Lighting Wire



Lacquered Braid For Auto Ignition Work

at No.	Length	Our Price
4479	100 ft.	\$1.25
1487	500 ft.	5.50
4488	1000 ft.	10.50

## HEAVY DUTY "SI" 2 Cond. Garage Wire

Run a 10-ton truck over it; leave it out in sleet and snow; will stand a lm o at any a buse. Very copular for trouble lamps, motor leads. lamps, motor lends, semporary outside lines and it will make a vacuum cleaner cord de luxe.



duty flexible rubber Cat. No. 4457 covered cord, positively water and oil proof. Suitable for garages, shops, etc. A full 60% Para rubber cord priced about 50% below market

per 100 ft. spool

### Extra Special Value Silk-Covered Parallel Wire

For Electrical, Radio and General Use

No. 18, 1/64 R. C. Parallel Silk Wire for wring homes with base-board convenboard conven-ience outlets lamps, extensions and a hundred other uses.

This is the fastest moving wire and every dealer and service man should ha



Furnished in white. brown and gold

	1,000-1	L. SUUDIS OHLY
ave a spool	on	Price pe
ano.		
at. No.	Size	1,000 ft
4410	18-1/64	\$5.85
4434	20-1/64	4.95
REGE	2/02	3100

### Single Conductor Cotton Covered Fixture Wire



With inner braid and rubber insula-tion. For hooking up set to aerial and ground and general electrical u.e.

### 1000 FT. SPOOLS

Cat. No.	Gauge	Color
4484	18	Brown
4485	18	White
Our	Price	\$3.20

Cat. No. 4486 Color 20 Brown

20 Our Price \$3.00

### Asbestos Heater Cord



4499

A closely woven heavy duty wire used for all appliances.

White

Cat. No. 4423 Cotton Braid Overall Per 500 ft. \$5.50 Per 250 ft. \$3.00

### Battery Charging Cable (Single)



Heavy, extremely flexible battery cable. Weatherproof, a c i d proof and rume proof, heavy rubber covered. Due to the heavy flexible conductor resistance is cut to a minimum, and breakage of wire is aimost unknown due to the many strands used.

The linest pattery cable it is possible to manufacture.

100 it, speeds.

95c per 100 ft.

### We Carry a Complete Line of Cables, Cords and Belts for All Standard Receivers



Our Dials and Belts are made in ac cordance with the original manufactur-ers' specifications and are guaranteed to n right.

No.	Set, Model and Type Price
5732	Amrad 8420c
	Atwater-Kent, 35, 37, Left & Right
6563	Atwater-Kent, 60, 61, Set of 2, Left & Right0c
6363	Atwater-Kent, 30, Belts: Set of 2, Left & Right20c
	Atwater-Kent, 55, Belts: Set of 2, Left & Right
6364	Atwater-Kent, 44, Belts: Set of 3, Left & Right0c
5234	Balkeit Cable25c
5229	Bosch Model 58a3c
4290	Bosch Model 48a23c
5739	Bosch 28
5730	Bosch 58, 6023c
6366	Bremer-Tuily, 14, 21, Cord & Lug 14c
5230	Colonial 31, 32
6367	Colonial 33, 34, 35, 37, Drive Cables, Set of 2
6368	Columbia, All Nos., 2 Drive Cables & Spring
	Crosley Model 40-S, 60-S, 804 28c
5237	Crosley Model 601-602-607 28c
5232	Emerson
	Eveready, All Nos., Drive Cables .28c
	Freed-Eisemann Belts, Model N. R. 60
5235	Freshman Model 2 37e
5233	First National37c
	Kellogg, Set cf 245c
	Kolster, Heavy Cord & Beads on End
6370	Kolster, 43, 44, Drive Cable 45c
	Majestic, 62
	Majestic Band Model, 70-71-72 and Comb
6371	Peerless, All Nos., Drive Cable 27c
	Philco, All Models25c
4270	R.C.A. 16, 17, 18, 33, Linen14c
1283	R.C.A. Dial Cable, Model 17-18-46-64-67 25e
5357	64-57 25e R.C.A. 64, 67 (very neavy phosphor bronze wire) complete with Con- nector 25c Sparton, All Nos., Drive Cables, 427c
6872	Sparton, All Nos., Drive Cables. 427c
6373	Steinite, All Nos
6565	Temple, 2 Drum Cables and Springs
	iosphor



Bronze al Cable

> Cat. No 5288

Per 150 Ft. Spool

MAIL ORDERS TO ATT See Terms on Page 3

Pederated Purchaser Inc.

## CORD SETS For All Electrical Appliances



Best grade asbestos heater cord, 2 pc. bakelite cap only. Type Each Doz With cold mold 3318 plug, no switch. . \$0.17 \$1.80 Same as above, plug and silk cord 4.45 Bakelite With 2322 switch plug..... .35 3.60

### **Immersion** Heater



This practical little appliance will heat water quickly, safely and economically in the home, office, harbor shop, beauty parlor, denties and doctors offices, etc. Simply plug into light water. Instructions with each heater. Attractively packed.

Cat. No. 6489 Our Price

900

### Triple Outlet Cube Tap



Cord is of 2/18 silk patallel with inner oraid approved by underwriters. General Electric attachment blug. Cap only Monowatt cube tap.

Very handy for connecting che or more amps, radio sets, etc., from the outlet. Cat. No. Length Each Dozen 3302 6 ft. \$ .19 \$1.00 23330 9 ft. .22 2.40 3352 12 ft. .25 2.75 3359 15 ft. .28 3.10 3.10

### Special Therapeutic Electric Lamp Relieves Pain With Heat

A quality product of neavy aluminum, nighty polished. One-half of inside silver stohed; scientifically correct in size, shape, etc., with 260 watt standard first quality curbon lamp. All made with 6 ft. slik cerd, 2-pc. attachment plug, knob or push through socket. Will stand up under high these.



Cat. No. 388

Either A.O. or D.C. current, mended by physicians everywhere,

**Each \$1.65** Complete with 260 Watt Bulb

### Morpheus



Boudoir er Desk Type Heavy Sculp-tor's Duralloy tor's De Metal Ht. 4% Wd. 5 Dp. 212 Dial: Satin Silver Finish Finish

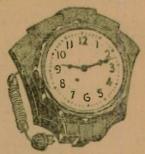
Nile Green distinctive lilliputian timepiece rend ered in the modern manner. Note the rhythmic, simple but strong reversed fluings that accent the general contour. Whether on a crowded desk or a tiny end-table or night-stand, there is always room for Morpheus.

Cat. No. B11 Our Pries

\$ 95

### Wingdale

Breakfast Neok, Kitchen or Wall Clock



Heavy Sculptor's Duralloy Metal Ht. 816", 17d. 815

Dp. 234"

Dial: What 4%

The breakfast nook or kitchen needs a practical dirt-resisting, easily readable timepiece. Here's a real departure in wall clock silhouettes. Sets and starts from the front; enclosed back, notched for electric cord invisible wall hanger.

Cat. No. 640 Ivory Cat. No. 650 Blue

Each, \$195

### "KWIK-LITE" Delivers a Lighted Cigarette When You Pull the Lever



New J Amering | Beautiful J Nothing else like it! Inter-ests all smokers, either men or we-

For the office, li-brary, living room, and bouder. A won-derful and appreci-ated gift, as well as fast-selling item for personal use.

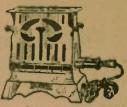
Phugs into house current. User lifts lid, fills top with

cigarettes (it holds a full pack), and pulls the lever. Kwik-Lite lights and pulls the cigarette and delivers it through the slot, ready for smoking. Fully guaranteed.

Cat. No. 5297-List Price \$3,50 86 29 Our Price

### Special Toaster Value!

R i c hiy d e signed, G u a r a n t e d e i e ment. I n s ul ted Tree largest lices of bread.



To a sting quickly and evenly. I from the state of the st q n i ekly
and erenly. Large base prevents Tonster
from tipping. Made sturdy of heavy
metal not tin Genuine nichrome wire
imbedded in genuine refractory hooks.
Equipped with electric cord and plug.
Each packed in individual carton.
Height—7 in Base—77ax51s in.
Weight—21s lbs.

89c Car. No. 393

### GOLD SEAL Automatic Water Heater

When Faucet is Turned On, Heating Element a Connected

When Turned Off, also

No Switches to Bother With -- Completely Automatic

Made of the Finest

Non-Breakable Rubber Plug Aluminum Case — Highly Polished

GUARANTEED Just slip over faucet and plug into near-est socket. Permanent installation in less than two minutes. Operates on 110-130 Voll A.C. Also made in 220 Volt at slight additional cost.

Cat. No. 6570

### Commands Attention to Your Displays

Cat. No. 379

\$2.75

Complete with 5 Assorted Color Filme



SPOT LIGHTING is effectively employed to focus extention on a section or por-tion of a display to oring same out prominently.

Varied beautiful lighting effects may be prounted by using spotlights with the colored greatine screens of five assorted colors furnished with this outiful finds a ready sale in all retail stores, automobile show recons, drug stores and should be used in every show window where you wish to have some article stand out. Built of heavy sauge cluminum with universal bracket and porcelain socket. Furnished complete with adjustable brackets and complete with adjustable brackets and was assorted color films. SPOTLIGHTS will help eliminate daylight reflections in plettellass windows which are so abnoying to merchants eager to compel attention to their window displays during the dayling as well as at night.

MAIL ORDERS TO RE-See Terms on Page 3

rederated Purchaser Inc.

### COMPLETE AERIAL KITS

(We can supply Aerial Kits in quantities to your own specification)

Kit No. 4216

90 (t. 7/22 Stranded Copper Wire 50 ft. Rubber Covered Lead-in Wire 25 ft. Ground



1 Lead-in Strip. 2 Glass

2 Nailit Knob



65c ea.; 10 for \$6.25

### Kit No. 4217

90 ft. No. 7/26 Stranded Copper Aerial Wire 25 ft. R.C. Lead-in Wire 25 ft. Hook-up Wire 1 Copper Ground Clamp 1 Lead-in Strip 2 Glass Insulators 2 Nailit Knobs

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.

dern midget receiver.
Contents:
90 ft. 7,27 Stranded Copper
Aerial Wire
25 ft. R.C. Lead-in Wire
1 Lead-in Strip
1 Ground Clamp
2 Nailit Knobs
2 Glass Insulators

**35c ea.**; 10 for \$3.25

### **NEW GRIP-TITE** GROUND CLAMP



Makes a real good connection on pipe up to 1 in. diameter.

Cat. No. 6046

Our Price \$1.55

Box of 50

**GLASS INSULATORS** 31/2 in. length. Packed 100 to a box.

Cat. No. 2769

\$3.00 per 100



Smaller Quantities-4c Each

## GROUND CLAMPS CK CLIP)

Cat. No. 4251

25 for 75c 50 for \$1.16

GIANT Lightning Arrester

Cat. No. 4210 15C

SI.80 doz.



Pested and Approved Perty Lienthian.
Arrester, large type. Made from high tension, thoroughly utritled perceaus, brown glazed Expansion and contraction has no effect on the air gap of this arrester.
Our arresters are so constructed that they may be intracted.

are so constructed that installed indoors and out they may 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 fastenting wire to base-board when making extra electric outlets for the ralamps, etc. They are white colto harmonize with the woodwork.

## Rodale Soft Rubber Handle Screw Driver



2 Sizes. Packed 6 of each size on a card.

Cat. No. 6490

## 85c for card of 12

New Grip-Tite Ground

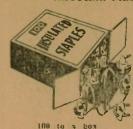
Clamp

Makes a real good connection on pipe up to 2 in, diameter.

Cat. No. 6046 \$100 Box of 50 ..... 1



### INSULATED STAPLES NATURAL FIBRE



Cat. No. 4253

500 Staples 50c

1000 Staples

These staples also furnished with white or brown fibre to match indoor woodwork.

Cat. No. 6852-White Cat. No. 6853-Brown

\$1.60 per 1000

### Jiffy Baseboard Wire Clips

July Wire Clips replace the old-fashloned double end tack for staple, or fastening insulated wires; and do m NEAT JOB for you INSTANTLY



Your Radio Lead-in, inside Arrial, Tele-phone, and Lamp Wires are held by this device between frim 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 Fahnestock Clips. Packed 50 to a carton.

\$1.45 per box of 50

# Lightning Arresters Approved by Fire Underwriters



Cat. No. 4209 25 for \$1.50

### PORCELAIN Lead-In Anchor

Nickel plated fittings. Diameter 2 in. Ht. 214 in

Cat. No. 5299



Our Price 9c ea. 25 for \$1.90

### CORD CONNECTORS

Cat. No. 4255



be en. 10 for 55c

# HYDROMETER

LANGE SIZE

Packed in Neat Display Boxes
LARGE SIZE
One piece rubber only clear reading on
float.

Cat. No. 4200 25c ed.

Extra Beaded Floats 10c ca. Cat. No. 4203

### PORCELAIN Nailit Knobs

Two-Piece

Cat. No. 2767

\$1.00 per 100

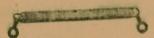


3-In. Screw Eve Insulators Galvanized Screw

Cat. No. 2768

\$2.00 per 100

### SPRING AERIALS



For Indoor and Outdoor Use Solid Brass, 75 ft. Cat. No. 3657

30c eu., \$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 epeakers and consoles



Cat. No. 6686

Our Price 10c ea.

### PORCELAIN Base Knife Switches



insulated handle Copper blades and contacts. Midget Size.

Cat. No. 4159

S. P. S. T. 95e Box of 10

Car. No. 4177 S.P.D.T. \$1.60 Box of 10





Cat. No. 4178 DPST. \$2.00 Box of 10

Cat. No. 4179 D.P.D.T. \$2.75 Box of 10



### Radio Cartridge Fuses 1, 2, 3 and 5 Amp.

Cat. No. 4206 .

läc box of 5 \$2.75 per 100



### Universal Dry Ribbon A Rubber Invulated

DRY RIBBON LEAD IN STRIP

Lead-In Strip

Cat. No. 6505 \$1.75 Box of 25

### DE JUR AUTOMATIC PHONE PLUG



This handy phoneplus is extremely
small in size. Automatic sure-grip clips
inside the plus assure positive contact
without the use of
tools. To conject the
in the holes. No suttont to press, no
screws to tighten.

Our Price 15c eu.

### UNIVERSAL Battery and Radio Clips

Screw connections—no solder required Channel construction invogation. Polarist todications. For positive, for table

No. 15-Pee Wee Cad-minm Flated, 114 in. long. Cat. No. 6485

30e per box of 10

No. 182—Cadeniam Plated, 144 in, long, Cat. No. 6486 35c per box of 10



No. 3tA-Lead Coated\*, 21; in. long. Cat. No. 6487

60c per box of 10

No. 21A-Lead Coated\*, 37s in. long. Cat. No. 6488

\$1.20 per box of 10 Lead finish protects the clip against acid.

# Grip-Tite Ground Clamp

Cat. No. 4212

\$1.75 for 50

4c each



### PORCELAIN Screw Insulator

Better than the ordinary aerial insulator tecause it can readily be attached to a pole, wall, roof, etc. Brown placed porcelain, 3th in overall, with a galvanized screw.

Cat. No. 6114

7c ea., \$6.50 per 100

I. C. A. Double Phone Plag



Moulded of brown bakelite and, hard-ware a nickel plated trass. Tartes two sets of phone cord which are held firmly in place by set screws. Individually boxed

Cat. No. 6957

30c

## Fused Triple Outlet Plug



An ingenious plus while not only protects any delicate instruments and electrical appliances on the line, but also prevents the fuses on the main line from blowing out. Short circuits are localized so that they are quickly detected. Standage type fuses are inserted in and instantly replaced when Will protect radio receivers, meters, etc. No tools ne-

Cat. No. 7357 Our Price. Exc

MAJL ORDERS TO ME See Terms on Page 3 Federated Furch

25 PARK PLACE, N or to our nearest

### Two Piece Attachment Plugs

Bakelite Plug Complete

Cat. No. 3262

Package of 25 \$1.00

Cap for Above Cat. No. 3266

Package of 25 55e



Armored Cap Cat. No. 3268 5e each

### Bakelite Handle Cap

Cat. No. 3260

Our Price 25 for \$1.00



Live Rubber Cap, same as above, Cat. No. 3276 10 for 50e

### Round-Cord Connector



Connector Only, No Cap Cat. No. 3338

10 for \$1.20

Attachment Flugs for Same

Cat. No. 3266 25e

### Bakelite Midget Cord Connector

Smallest connector made. for small motors. nalted milk machines, etc.



Cat. No. 3345

\$1.60 box of 10

### Special Twinlight



Box of 25 \$1.50 Here we offer what we consider and what our actual past experience has proven, the finest plug of its kind. Well made of the finest cold mold material used for this purpose. Absolutely low price gives you.

Cat. No. 3303 Our Price, Each

### Baseboard Outlets Unit Carton.

20

Cat. No.						Per or 20
3311	Composition		 	 		\$1.00
5314	Bakelite Double Porc	elati	 	 		1.70

### GENERAL ELECTRIC Flush Receptacle

Provides an A.C. con-nection on any electrical appliance for standard attachment cap.

Cat. No. 6668

10c ea.

### 3-WAY CUBE TAP



A small, nest and compact 3-way plug with blades as shown to all pla type receptacle. A very use-ful item for which there is always a big demand. It makes three cutlets where there was one before.

Cat. No. 3329

BAKELITE Box of 25 .....

\$1.75

### Bakelite Side Outlet Pull Chain Socket



Pall chain mechanism controls bottom light only. Bilde outlet for iron or other appliance temains 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

Carion 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 applicance carrying up to 150 watt load. Unpreakable moulded oreakable moulded case. Can also be used on electrical neures or as a pendant switch.



Car. No. 332

## 15c eu., \$1.44 doz.

### Twin Flasher

Wonderful for Christmaz Tree Light

Cat. No. 3319



Made of senuine Bakelite. Has blades which can be inserted directly in recep-tacles. Has two outlets, both of which have a flashing mechanism.

## Our Price 19c ea.

## Bakelite Current Tap

One-place construction with Uno Thread Unit carrier, 10

Cat. No. 3334



Our Price \$1.05 Box of 10

MAIL ORDERS TO AGE See Terms on Page 3

Federated Purchaser Inc.

### Just Think! An Electric Drink Mixer for Less Than \$1.00



A brantifully finished rapid mixer. Does sverything that an expensive machine will do.

Cat. No. 429 Special, Each

Shipping carten of 12 ......\$11.50

Will sell like hoteakes DESCRIPTION

-Total overall height, 9 in. Width Length 4% in. Clip holds any 3% in. Len

Finish—Motor case is finished in Ivory enamel with band in highly poinshed nickel. The agitator and shaft are of special polished nickel plats. The base is lettice green enamel with rubber pada attached to both sickes of bottom to keep glass from slipping and entire apparatus from scratching surface it rests upon.

For use Operation - For use on 50-60

### Superior Electric Bell Ul4 Inch



Works on dry cells or bell-ringing trans-

stardy contruction and guaranteed.

Cat. No. 3257

22c est.

### Superior Electric Buzzer

Works on dry cells or pell-ringing transformer. Same construction as the bell.





### Bell-RingingTransformer



105-125V on Primary 6-8 Volt Secondary

Cat. No. 3331 55c ea.



G. E. Keyless Intermediate **Brass Socket** 

Makes an excellent handy test or trouble light in conjunction with our Cat. No. 4224 lamp (15c). % in. Lock Cap.

Cat. No. 7290 

### NICHROME WIRE



On Card
Requires no further cutting. For repairing all electrical appli-

One to the card.

14c ea. No. 3337 Carton of 10, \$1.15

### UNIVERSAL Flatiron Element

For replacement in all 6-lb, from,

Centine Nichrom Ribbon Element

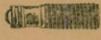


Cat. No. 3332

Our Price 23c \$2.10 Carton of 10

GLOWCOIL Heating Elements





Conc No. 3261

Straight No. 3275

20c each Box of 10 \$1.30

Fit all screw type heaters. Best grade I colled "Nichrone" wire used, 110-120 sits, 600 to 600 watts.

# "Sun-Mealth" Lamp Ultra Vielet and Infra Red Rays Sapply Vitamin D—Purity Blood—Aid Cir-



culation and Body Poison Elimination Guards the hody against infection - kills germs and prevents disease. Frees the skin rees the aking from pimples and temporary blemishes pro-luces a clear nd ruddy com-lexion. Stimu-

vigor and vitality and relieves ner-

vousness.

The SUN HEALTH lamp is equipped with a 11 in. aluminum redector protected with a heavy wire screen, mounted on a spun aluminum frame; two 5 in x 8 rum, carbons; heavy chrome nickel resistance coils. Base and backbons are cast aluminum alloy. The lamp is very stardy and will stand rough treatment. It is fully guaranteed for one year. Each lamp is fully equipped with corpless and carbons and is ready to plug in on either A.C. of D.C. current. Draws 9 amps.

Complete With Gorries and Carbons EXTRA CARBONS at No. Type 9er Doz 66700 Sunstine \$1.00 67700 Tanning 1.25 Per Doz. \$1.00 1.25 \$6005 6700 Cai. No. 505 Price

### CIGAR LIGHTER

UNIT ONLE

For teplacing units that have berned 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 neavy duty super-service cord. Pull 60% rubber. Impervious to gasoline, oil and weather. Will last indefinitely.

Cat. No.	Length	Each	Dozen
3254	12 ft.	\$ .60	\$7.00
3258	20 ft.	.85	9.75

# ALL-RUBBER Trouble Light



With Rubber Bandle and Rubber Randle

Comp.	RUGHER AND TO THE	CMERCHI
Cat. No.	Length	Price
3321	10 ft.	51.00
3322	20 ft.	2.10
5749	30 ft.	1.20

### BENWOOD-LENZ B12 Rectifier

For New Tobe, Muter and other A eliminators, Sterling dynamic speakers, etc.

Cat. No. 4155

82.50



MAIL ORDERS TO See Terms on Page 3



**World Radio History** 

# Handy Tools Radio Bench

# **GOODELL-PRATT TOOLS**

Ratchet Screwdriver Set



These tools can be used as automatic acrewdrivers for driving screws, or the spirals can be locked for use as plain acrewdrivers for either driving or drawing acrews. They are simple in construction, but are strong and durable and will not get out of order.

Cat. No. 5078

95c

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 5th and 33nd inches. Plain, deeply-etched graduation and large, clear figures.

INSULATED Side Cutting Pliers



Cat. No. 6824

Our Price 42c ea.

Drop forged steel tempered; polished head. Hard black rubber insulation to withstand 5,000 voits. 8 in. long. Used by electricians and linemen.

Long Nose Pliers



39c eu. Cat. No. 6825 Pully nickel plated; long, tapered, milled jaws, with cutter. 5th long.

Diagonal Cutting Pliers



Cat. No. 6826

Our Price 39c ea.

Fully nickel plated; for close outting; as durable outters. 5%" long.

Scriber

This soriber is made of a fine grade ground steel with a beautiful tapered point that is carefully tempered, ground and polished. The body is finely knurled and 5/32-inch in diameter.

21c Cat. No. 5084

### 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 that at hose which have previously been made. These bench vices



Cat. No. 5080

\$2.05

Right Angle Ratchet Screwdriver

Cat. No. 6480

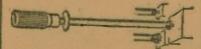


(Dage Price

Weight, 3 ounces

There are innumerable places around automotive, electrical and radio equipment where this little unique screw driver will perform quickly and easily where an ordinary screw driver cannot be used. The rachet mechanism is entirely enclosed in the head, thru which runs a square socket to hold the bit. The bit is ¼-in. long, and has a square shank with a spring retainer to hold it firmly in the square ratchet socket. Tool is a inches long overall. The handle and head are finished in red and black enamel and all exposed parts are nicely polished. Packed one in box, 12 to a display carton.

Screw-Holding Screw Driver



Cat. No. 4166, 8 in. .... 85c each

General Electric Feed Thru Switch



mechaniam housed in polished bakelite casing.

Cat. No. 7879 18e

Grip-Type Nut Wrench



How many times have you lost time and temper trying to get at nuts in tight places or to pick up a nut dropped into a set? This ingentious bool will do both for you easily and quickly. Will grasp any chape nut and hold it fast until it is locened or tightened. By preseing the button on ton, the jaws of the wrench open and when the button is released the jaws close.

Overall length 10% in Polished black handle.

Cat. No. 7440 Our Special Price..... 25c

A Necessary Adjunct to Every Serviceman's Tool Kir.



This RMA Resistor Color Code is ingeniously designed, yet extremely happen to use. It has three wheels lithographed in nine colors corresponding to a color on the resistors. Simply arrange the wheels to correspond to the resistor and you have the value at once. No charts to consult. No calculations. Made of celluloid and his into your vest pocket. Worth its weight in gold.

Cat. No. 7482 Our Price

You can secure this Color Code FREE by ordering one of the Resistor Kits [fried on Dage 38 or three or more depen assorted Acrabest Resistors.

## Radio Shaft Clamp



The Clamp is adaptable to practically every set on the market. It is also a convenient teel to turn the volume or other controls of the set that are too tight to turn.

Cat. No. 6677

Our Price 49c ea.

# SIGNAL

### Wireless Practice Set

Just the in-strument for those who want to learn the code. The code i tile brass plate fastened to base.
Equipped with Type R-60 High Frequency Buz-

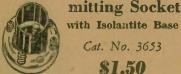


R-68 "Signal"
Wireless Practice Set

Cat. No. 3554 List Price, \$3.40

### Our Price \$1.98

# I. C. A. 50 Watt Trans-



excellent power tube socket. Fits all and 50 watt tube bases. Maximum An excellent power tube mocket. Fits all standard 50 watt tube bases. Maximum insulation is obtained by the use of heavy glazed isolanthe 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

### Signal Twin Wireless **Practice Set**

Here is a practical, scientific toy that eve



cal, instructive and every modern bey wants — it's the new R-70 Signal Jr. Twin Wireless Practice Set leading toy stores everywhere are selling. Sets operate chiciantly up to 1000 feet on any tandard dry cell batteries. 75 feet of wire is included with each set.

Each in-

strument is a complete sending

and receiving unit equipped with a key, buzzer and code plate mounted on a metal base. Rubber feet on the base protects table tops. Full instructions for connecting and operating are included with each R-70. Color of the sets are maroon and gold. Box is unusually attractive.

Attractively boxed with full instructions.

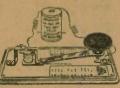
Cat. No. 7302 Our Price, Per Set .....

4 order blanks have been included in the center of this catalog for your convenience. Use them.

### Na-Ald Code Practice Set

Cat. No. 6986





Finely molded base. Nickel plated hardware. High pitched buzzer. Works on a single flashlight cell. Telegraph code etched on base. A wonderful 98c

### ACRAPHONE, JR. Wireless Kev



514 in. long, 2% in. wide, Weight 8 oz. Cat. No.

6819

### Our Price \$1.10 ea.

This is a really fine little instrument for the amateur, ham or for practicing. Steel lever arm and brass fittings. German silver contacts. Phosphor bronze tension spring. 4 adjustments. Composition finger rest. 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 tandard frequency control. Has standard resistance of 2 ohms. Can be operated on a 6V circuit. Can be furnished in special resistances on quantity orders. Black crystalized lacquer finish.



Cat. No. 3559 75c



## Signal Wireless Key

A long time favorite with all amateurs, Universally used by most operators. Sturdily made. Coin silver contacts, All parts brass. Beautifully polished and lac-quered. Brass base. Bakelite fanger rests.

Cat. No.		Contacts	Price	Our Price
3556	R-62	3/16 in.	\$3.50	\$1.98
3557	R-63	14.in.	3.70	2.21
3558	R-64	% in.	3.90	2.30

## Headband for Earphones

Indispensable to Short-Wave Fans and "Hams"

Cat. No. 3623

15c each

# The New Connecticut Duplex Telephone Set



Cat. No. 6555

# Price \$5.63 per set

Connecticut Duplex Teleghones are the result of 37 years experience in telephone manufacturing and are fully guaranteed for one year. Affords the easiest, simplest and least expensive means of communication between two neighboring points. Simple to install. Requires 2 ordinary dry cells at each end. Cases are of heavy gauge steel, finished light green. Packed in attractive display carton with 100 ft. of wire, staples and instruction book.

### Uses 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 barr—House to dairy—Home of one 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 with this real tegraph set to practice on and learn the code Continental



Continental code on the code of the code o

Cat. No. 6579 \$3.75

complete

## Signal Junior Key



Black enamel key base. Mahogany finish base. Nickel plated lever. Coin silver con-tacts.

Cat. No. 3555

List Price \$2.25

Our Price \$1.35

112-K Key

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

MAIL ORDERS TO ASS See Terms on Page 3

Federated Purchaser Inc.

**World Radio History** 

# ou need Adapters for your Lab.

# Acralest

### Speaker and Headset Adapters



are of the same appearance a set the above and are used to connect one or more additional magnetic or dynamic or recording pick-up to any set using a single or push-pull pentode output or 45 output. Simply remove the power tube from the socket, maser the adapter and replace the power tube or tubes. Can be used in the ACRATONE and other midget sets.

Cat. No.	Set Output Our Price
6524	Single '45\$ .75
6525	Single '47
6526	Push-pull '45 1.25
6527	Push-pull '47 1.25
6987	Single 6 prong75
6988	Push-pull 6 prong. 1.25

### Acratest Pentode Adapter



Aflows the Use of the Pentode Tube in 245 Seekets Simply remove the 245 tube neer the Acraiest Pentode Adapter into the top of the idaptor, Insert new tube.

4.14.		
Cat. No.	5200	39c
Each		- P. H.C.

### Multi Prong Connector

This connector is proving pop-ular for dynamic speaker ex-tension, microphone cables, bat-tery cables, analyzer cable, etc. It is made up of an easy grip handle cap and a removable



Our Price 30e Each

## Naald Pick-Up and Microphone Adapter



For UX or UY Sockets Connects to Diament and grid for UX tubes or grid and cathode of UY tubes.

Cat. No. 4111

18c ea.

### For Testing 82 Rectifier Tube

This adapter is for tube checkers and affords the testing of this tube where the filament supply is 5 volts. The switch throws a resistor into the filament circuit to reduce the voltage to 2.5 for the 82 tube.

Cat. No. 7295 Our Price .....



### Na-Ald Analyzer Plugs and Test Adapters



All Na-ald Aualyzer Plugs are molded for easy grip and strength out of the best insulating black bakelite. Na-ald know the dangers of using cheap composition. The diameter and height are calculated so that there will be no difficulty in putting the analyzer plug into sate equipped with small base tube sockets and close-dimensioned shielding. The plug has a latch actuated by a spring. This latch alips over a slot in the center stud of the adapters, preventing the adapter from slipping off until the release is pressed. This feature prevents the adapters from getting stuck in inaccessible places.

STANDARD FOR JEWELL, WESTON, DAYRAD, SUPRIME and HICOCK.

Cat. No. 5887-5 Prong Analyzer # 180 Plug with Screen Grid Cap ......

Cat. No. 7364-6 Frong Analyser \$210 Plug with 2 Screen Grid Caps....

### Adapters for 5 Prong Analyzer Plugs

Cat. No. 5888 5 to 4 prong Cat. No. 7146 5 to 6 prong Adapters for 6 Prong Analyzer Plugs

72c of Any Adapter Above .....

### Naald Tube and Test Adapters



These ad-epters are ex-tremely com-pact, messur-ing only %"

pact, measuring only 5% high a nd 1% in display and 1% in display are used for substituting new type tubes in old sets, remodeling tube checkers and for testing the latest tubes in set analyzer. Moulded bakelite. A locater ring on top of tubes. The proper connections are made within the adapter so that no error an be made by the user. Good connections on the prongs. 5883 cannot be used for pentode tubes.

Cal. No. Description

Cal. No. Description

6883 To insert a 4-prong tube into a 5-prong socket.

6884 To insert a 5-prong tube into a 4-prong socket.

6962 To insert a 6-prong tube into a 5-prong socket.

7829 To insert a 7-prong tube into a 6-prong socket. Our Price 60e

Each

### Frost Phone Plug For Speakers and Headsets



A small neat plug with phosphor bronze for instantaneous connection and disconnection of phone tips. Brass hardware with hard black fibre body.

Cat. No. 7371 

### NAALD ADAPTERS

Makes detector of any stage UV tube breaking and circuit for grid learned condensers. Also breaks plate with phone tip terminals for head-phenes.

Cat. No. 5885 4 Prong Cat. No. 5886 5 Prong Cat. No. 6994 6 Prong



72c ea.

### Adapter and Trouble Finder for Servicemen

Especially adapted to trouble finding and making all circuit connections to a 5 prong time 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.			Net
4.257	Universal Adapted		
4258	Universal Adapted		

# Naald Special Adapters for Testing New Type Tubes

For 55 and 85 Duo Diode Detectors

This adapter is for set analysers and tabe check-ers and allows the tea-ing of each of the diede plates as well as the audio plate of these tubes. The switch throws the meter from one plate to the other.



Cat. No. 7359 Our Price

# I. C. A. Loud Speaker Adapters

For connecting additional speakers to sets ising simple or pash-pull 112A, 171A, 245, 247, 256, single power tubes. For consider 1; for push-pull order 2 udapters.



Each

Cat. No. 6942 6943 8944 20c SINGLE Each 40c

### Test Adapter for 280 Tube



Cat. No. 6963 90c

With this adapter one may make all desirable tests on a 280 rectifier, including plate current, d.c. output voltage flament, a.c. filment voltage across flaments. Leads are statched to all prongs for above tests.

### **Neutralizing Adapter**

For use in balancing neutralizing condensers in superheterodyne or neutrodyne 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 60c ea.

### **Oscillation Control** Adapters

These adapters creek a connection with tip jack. I may be used for controlling illation by attaching resistors in series with erid circuit, and can also be used for general testing of grid circuits.



Cat. No. 6949-4-prong Cat. No. 6956-5-prong

### Our Price 75c ea.

### Phono-Radio Switch and Adapter

For A.C. Cat. No. 6953 List Price \$2.75 For D.C.

(4 prong)



Cat. No. 6954 Our Price, Each .....

The simplest method of connecting a phonograph pick-up 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. sers,

### Plug In Adapters

For Test Kits and Short Wave Sets

Also used to connect dynamic speaker to chassis. A very handy accessory in the shop.



Cat. No. Our Price	3526—5-Pronz	29e
	6990-0-Prong	

### Speaker and Analyzer Plugs



These handy plug are exaround any service shop. Easily attached to any four or five wire cable Made of genuine bakelite.



Cat. No.		Our Price
5868	4-prong short cap	20c
5869	5-prong short cap	20c
5870	4-prong long anal	
5871	5-prong long anal	yzer
	cap	250
6991-	-6-prone shot cap.	
	6-prope long anal	

### Earphone, Speaker and Testing Adapter (4 Prong)



Cat. No. 5250

Has many uses, such as allowing the use of head-phones on any set, connecting an extra speaker use. Simply remove power tube, meet phone tips of extra appliance into convenient facks on the adapter, A connector

29c since the adapter to that the adapter can be shorted out when not in use method of having to remove it from the socket.

Additional Adapters for all Testing Purposes on Page 86

# **Additional Adapters**









Adapters are listed for use in testing the many new tubes which have recently appeared in the market. They are available for testing with set testers, and also tube testers. Where reference is given to certain Readrite testers, the same adapter may be used with similar testers of other manu-

facture. This list is very complete for all new tubes available.	
Cat. No. Our Pr	ice
7425 Used to test 2 volt series tubes in earlier model tube testers, like the No. 400 Readrite which did not have 2 volt tap at the socket but has a 224 and 227 socket. Consists of a four hole socket on a five prong plug	5e
7426 A special adapter used only on Readrite cable plug applying to set testers No. 610 and 710, for testing six prong tube circuits	)e
7427 A special adapter used only with Readrice Nos. 610 and 710 set testers connected to the cable plug for testing seven prong tube circuits. Consists of six hole socket with one center prong on a seven prong plug	)e
5884 To test 36, '38 and '39 type tubes in '01A sockets	<b>)</b> c
5200 To test '47 type tubes in '45 sockets	e
5200 To test '82 type tubes in '45 sockets	)c
7429 To test Wunderlich type tubes in '24 sockets	e
5883 To test 4 prong tubes in 5 prong sockets	e
Modernize your old set by using the new type tubes with these Adapte saving the expense of rewiring or changing parts.	rs,
6962 To use a '57 type tube in place of a '24 tube in the detector socket only	e
6962 To use a '58 type tube in place of a '24, '35 or '51 type tubes	)e
5200 To use a '47 type tube in place of a '45 tube in power stage only .	e

### Multiple Antenna Coupler

Now! 50 to 100 Sets on One Antenna

With this



Now: 50 to 100 Sets on One Antenna
With this
device, a
single aerial
will accomno date as
many as 50
receivers, one
coupler being
used at each
raceiver at
point of installation. It
does away
with the many tangled and abendoned
aerials on roofs which are a fire hazard.
Many of the larger cities have already
banned roof aerials and house owners
are looking for just such an item as the
Acratest Multiple Antenna Coupler.
This coupler is a newly developed fixed
band pass circuit which automatically
adjusts your set to any antenna condition. If you are using too long an antenna, the Acratest coupler will preserve
the pick-up of such an aerial but sharpen
the selectivity of your receiver. It is very
small and can be installed on the baseboard or in the radio cabinet. Complete
instructions included with each circuit.
If there are large apprignent houses in
your locality you can interest their ownets in this device. You can enhance the
appearance of his property and remove
the fire hazard by remyting all the aerials for one good one with couplers for
each tenant. The installation of Acratest Multiple Antenna Couplers will pave
the way for you to service the tenants
receivers and thus increase your revenue.
In your own store you can use the
Acratest Multiple Antenna Couplers to
great advantage by operating all your
demonstrators on a single aerial and at
the same time explain the use of this
device to your customers.

Cat. No. 6613
Our Price, Each

Cat. No. 6613 Our Price, Each

### Heavy Duty Laboratory Type Test Prods With Needle Point Tips

Inserted Into Phone Jacks

Tips Can

Also Be



Cat. No. 6913 with Test Clina

60c per pair
Cat. No. 6911—With Spade Terminals 50c per pair

16 Wire, 50 Foot Cable

For Remote Control and Public Address Work



Also suitable for snauhciator systems. Cat. No. 5537

\$2.00

### Test Leads With Chuck for Phonograph Needle Tips



These test prods are a great improvement over the erdinary prods, being equipped with two chucks in which are inserted any standard phonograph needles for tips. The needle 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

# 30c per pair

### Servicemen's Test Leads



Cat. No. 4331— With Spade Tips Cat. No. 6676— With Phone Tips 23c

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 teating sets and tracing troube 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



## Our Price 90c

The test leads have phonograph needle prods and the ends are attached to a double phone plug which makes it hands for testing in the laboratory and shop.

## Utility Test Leads



Consists of one No. 8020 test prod, 24 inches of finest grade lacqureed wire and a No. 6019 crocodile clip. A very handy accessory for the service man.

30c ea. Cat. No. 6985

### Multiple Conductor Cables



Cat. No.	Make	Wires	Length	Our Price
7184		4	2 ft.	\$0.15
6763	General Electric	6	6 ft.	.20
7528		7	6 ft.	.25
6587	General Electric	8	011.	
4474	Belden	10	8 ft.	*&D
6784	General Electric	10	6 ft.	,30
6765	General Electric	12	art.	.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 it. long, with loop eyes on one end and pin tips on other.

10c ea. Cat. No. 4454 \$1.00 dozen

SPECIAL SPEAKER CORD 8 FT. LONG WITH LUGS ON ONE END AND PINS ON OTHER

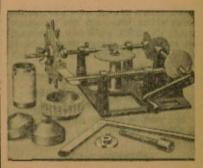
Cat. No. 4455 10c en.

\$1.00 dozen

5 FT. SPEAKER CORD WITH LUGS AND TIPS

Cat. No. 4456 10c ea. \$1.00 dozen

### The Morris Improved Universal Coil Winding Machine



For winding Honeycomb, Spider Web, Solrnoids, etc., in different widths and diameters, and will use wire of different gaues. An ideal unchine for the experimenter and amateur.

Cat. No. 526—List Price \$7.50

9.445

MAIL ORDERS TO ADD See Terms on Page 3

rederated Purchaser Inc.

# I.C.A. 5 in 1 Neutralizing Compensating Tools

This tool set is a com-omation of a 'a" nut wrench, a 5/16" nut wrench, a neutralizing screw driver with 'a" blade and a full size screw driver. So constructed that all the parts telescope so that the entire outfit when closed in 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



casier, quicker and more accurate to work with, are constructed of the finest quality insulating materials and are finished with highly nickel plated trass ribs. Compactor constructed, the acrew driver fits into the dupler wrench making it a four-in-one set. The other end of the screw driver is a special magnetic sized 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. 6457

## Our Price 88c

### Neutralizing Wrench and Screw Driver



A Very Mandy 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.

# The Famous M16 Elkon Replacement Rectifier

NEW TYPE "XB16"

May be used on the following "A" eliminators: Majestic, Mayolian, Elkon, Phileo, Webster, Knapp, Gen. Inst., Metro, Pade, Bernaro, Sentinel, El-kon, and Briggs and Stratton, Also special- Cat. No. 4152 ly adapted for use List Price \$7.00 with many standard dynamic speakers.



\$3.75

### The 414 Utility Chest With Automatic Cantilever Tray

Size 14x616x6 in

Movable trav partitions Matched hardware. Permunent embossed rule on cover.



Cat. No. 414 Our Price, Each

\$T 00

The 111 Utility Chest, truly the chest of a thou and 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 merchandising sensation.

Usable as a mechanic's tool check, fishing tackle box, for household tools, bathing suits, lunch and outing box. valuable papers and other uses too numerous to mention, hundreds of thousands of these boxes have been add, until there are now more than a million in use.

### Utility Chest and Cash Box with Lock and Key

Tray Has Movable Partitions and Square Base at Each End Permitting It to Be Used Out of the Box



Specifications

SIZE-Length 131/2", depth 4", width

FINISH—Especially hard baked enamel.
COLOR—Attractive nile green.
HARDWARE—Brass plated throughout.
CONSTRUCTION Heavy Baues cold
rolled steel with electric welded flush
seams. Eguipped with sturdy handle
and LOCK WITH KEY. Paneled top
for rigidity and strength.
WEIGHT—(per chest) 2½ lbs.
PACKED—12 chests per shipping carton.
SHIPPING WEIGHT—35 pounds per carton.

Cat. No. 7317 Our Price, Each .....

60c

Dozen \$6.50

### INSULATED WANDLE Pocket Screw Drivers



A very bandy and useful little tool for everybody. Put a display eard of 12 on your counter and watch them sell. Three sizes.

Cat. No. 3263

## Our Price 75c per card of 12

## DETECTO-LITE Tells All at a Glance!



Indispensable to Any Service Man

- Will test any current from 110 volts to 550 volts and will indicate voltage.
- Will tell instantly whether A.C. or D.C.
- Will show how many cycles.
- 4. Will detect the live and ground wires.
- Will act as pilot on any electrical apparatus.

Cat. No. 3255

### Our Price 88c

# I.C.A. "Short-O-Tester"

Every Serviceman Should have one



With 24 V. Louis

Cat. No. 6936 \$1.50

The I. C. A. "Short-O-Tester" is an ingenious new circuit tester containing a 2½ 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, if will indicate whether asid 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 touching 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.

MAIL ORDERS TO ATT See Terms on Page 3

Federated Purchaser Inc.

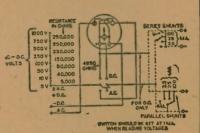
# WESTON RADIO INSTRUME

# 31/4 Inch Panel Instruments



Model 301 Universal A.C.-D.C. Meter Cat. No.

Our Net Price \$13.97



Designed for the serviceman who desires to build a multi-range instrument to fill his perticular testing requirements. It is for use with external shunts and external resistances for measuring D.C. voltages and currents and A.O. voltages.

The instrument is of the permanent magnet moving coll type with a self-contained copper oxide rectifier for the A.C. measurements. It is self-contained for 5 volts and 1 milliampere A.C. and 50 millivolts and I milliampere D.C. It has a double scale—one for A.C. and the other for D.C., each calibrated 0-5 volts.

A connection diagram giving suggested ranges is shown below, however the instru-ment, shunts and resistances may be purchased separately and the meter built up for any range desired.

This high grade matched line of meters offers an exceptionally wide range selection in D.C., A.C. and Thermo-Couple type instruments. Because of their inimitable 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 Bakelite cases at no additional charge.

D.C. INSTRUMENTS—MO DE L. 301.—

D.C. INSTRUMENTS—M ODEL 301.— Permanent magnet moving coll type. Accurate within 2%. They are supplied as Voltmeters, Voit-Ohmmeters, Ammeters, Millia m meters and Microammeters. Weight approximately 8 ounces.

Weight approximately 8 ounces.

A.C. INSTRUMENTS—MODEL 301 RECTIFIER TYPE.—Extremely high sensitivity
A. C. Instruments are obtained by using a
full-wire copper order rectiner in conjunction with a standard Model 301 D,C.
movement. They have the excellent damping, even scale characteristics and high
over-load capacities of the D.C. instruments.

Temperature errors at ordinary room

temperatures and frequency errors over the power frequency range of 25 to 133 cycles are negligible. Frequency errors on higher frequencies up to 35,000 cycles may be corrected for as the instrument indications decrease approximately ½ of 1% for each thousand cycles per second.

MODEL 425 A.C. AND D.C. INSTRUMENTS.—These instruments are of the thermocouple type. The ammeters are for use on D.C. and on A.C. of any frequency. The milliammeters and Thermo-Galvanometer free for use on A.C. only. They may also be used on any frequency without impairing their accuracy. These instruments are accurate with 2%. Approximate weight 6 ounces.

MODEL 476 A.C. INSTRUMENTS.—

weight 6 ounces.

MODEL 476 A.C. INSTRUMENTS.—
Movable iron type for A.C. only. Supplied as Voltmeters, Ammeters and Millammeters. They are accurate within 2%.

MODEL 476 CONDENSER METERS.—
These meters are calibrated to read the capacity of condensers direct in microfarads. They are of the movable iron type and are accurate within 3% when used on the voltage for which they are adjusted.

### Model 301 D.C. Voltmeters Ranges No. 1, 112, 2, 3, 5, 10, 15, 25, 50 and 100 Volts Net Price

Model 301 Volt-Ohmmeter Ohm Scale Ohms per volt Price 0-100,000 10000 \$8.82

Model 301 D.C. Ammeters Ranges Net Price 1½, 3, 5, 10, 20, 30, 50 Amperes (have a drop of + - 5%)

Model 301 D.C. Voltmeters Resistance 1000 Ohms

	her	AOIF	
Range	- Hall		let Price
5, 10, 25, 50,	100	*********************	\$8.82
150, 200, 250			10.66
		*******************	12.87
750			15.38
1000			19.20

Model 301 D.C. Milliammeters Net Price 

Rectifier Type-Model 301 Voltmeters 1000 Ohms per Volt

2000 Ohms per Volt

Rectifier Type 301 Milliammeters

Model 425 Ammeters

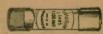
Range 1, 112, 2, 5, 10, 20...... \$9.93 (Continued on next column)

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.

### Instrument Littlefuses

(Low Voltage)

This line is designed especially for the protection of



protection of such delicate equipment as galvanometers, microammeters and milliammeters, radio "B" circuits, small radio and rectifier tubes, etc. See also "Where to use—A Littelfuse."

AN ANDUCIALISE	
Cat. Rating	Description Max. Resis. and Load 5 Mil Our
No. Amps. 7275 1/100	Application M.A. Load Price Use for galvano- meters, micro- and 0-1 mil- liammeters. 0-5 thermo-couples. 5 138 12
7276 1/32	0-1 to 0-5 mil- liammeters. 0-5 to 0-15 m. a. thermo-couples. 15 65 .12
7277 1/6	0-10 to 0-50 milliammeters. 0-50 to 0-100 m. a. thermocouples. Radio "B" circuits in auto and battery sets. Underwriters approved 100 16 .09
7278 1	0-500 to 0 - 750 milliammeters. 0-600 to 1 amp. thermo-couples.
	Small rectifiers. 1000 .36 .06

### Single Pole Mounting for Littlefuses



Cat. No. 7279 Our Price ......9c

(Continued from preceding column) Model 425 Milliammeters Range Net Price 120, 250, 500...... \$11.03

Model 476 A.C. Voltmeters

 1½, 2, 5, 10, 25, 50, 100
 \$5.88

 150
 7.35

 250, 300
 8.82

 500
 11.76

Model 476 Condenser Meter

Model 476 A.C. Ammeters 

Model 476 Milliammeters
15, 25, 50, 100, 250, 500............ \$5.88
Range Net Price

MAIL ORDERS TO See Terms on Page 3 Federated Purchaser Inc.

# THE FAMOUS JEWELL

# Trio Panel Mounting Instrumentas





The Jeweil Trio of radio instruments is popular for building special test panels and service instruments for use on experimental inhoratory apperatus, and in amateur transmitting. Patterns 82, 63 and 76 comprise a new series of instruments available in flush type bakelite cases that duplicate the old Patterns 64, 64 and 74 in metal cases.

Patterns 88, 68 and 78 are furnished for mounting in cases of molded bakelite. Flusne diameter, 3½ in. case diameter, 3½ in. Approximate shipping weight 3 lbs.

When ordering Jeweil meters, please note that types Noz. 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 backeits heads which are amply large to take care of various requirements. These instruments are not recommended for testing the voltage of B power supplies.

2000	and the spreade of P Sower subl	16.37
Cat	List	Our
No.	Price	Price
514	0-8, 10, 15, 30, 50 volts., \$7,50	85.51
515	0-150 volts 9.50	6,98
516	St. Anna	
454	A TON	8.83
455		11.39
519	0-700 volts 19.00	13.97
	0-1000 volts 22.50	16.54
457	U-1000 VOILS 28.50	19,56
458	0-2000 Volts	25.55
459	0-3, 8, 10, 15, 25, 50, 100,	40.00
	150, 200, 250, 300, 500	
	milliammeres	
160	D.1 milliamanana	5.51
465	0-1 milliamperes B.06	6.61
463	0-1.5 milliamperes 9.00	6.61
400	0-200, 300, 500 micro-	
	amperes 24.00	17.64
464	0-1, 1.5, 2, 3, 5, 10 and 15	
	amperes	8.81
165	oc-c-no galvanometer ona	45.419
11	IN HOUSE INCHES CAN Also be from	I to be made
wish	metal cases, 324 in flange, 3 in.	AUTO CO
at se	ome prices. Specify Type 54 for m	case
-	specify Type D4 for it	spray.

## JEWELL Pattern 88 Rectifier Type A.C. Instrument

The pattern 88 consists of a sensitive Jewell D'Arsonval direct current instrument used in conjunction with a self-contained full wave copper oxide rectifier unit.

Milliammeters

478	1.	\$9.38
479	1.8	9.38
480	2.	9,38
481	8.	9.38
482		
904	0-500 Microsmmeter	10.88
	Voltmeters	
	1000 OHMS PER VOI	T
Cat. No.	Range	Not Price
483	5	\$10,50
484	15	30.50
485	25	
		11.25
These	volumeters also supplied	2000 ohess
per velt	at \$1.88 additional.	soon depute
THE REAL PROPERTY.	The second second second	

# JEWELL Pattern 68 Radio Frequency Instruments

PATTERN 68 RADIO FREQUENCY
Pattern \*9 furnished in bakelite cases, flush type only Flange dismeter, 3½ in., Case diameter, 2% in. Appreximate shipping weight, 3 lbs.

### JEWELL Pattern 78 A.C. Instruments

476 0-300 voits 9.50 6.38 476 0-300 voits 12.00 8.82 471 0-3-5-150 Triple Range voits 12.00 9.93 472 0-25, 50, 100, 200, 300, 500 milliamperes 7.50 5.51 473 0-1, 2, 3, 5, 10, 15 amperes 7.50 5.51 The above meters can also be furnished in metal cases 374 m. flame, 3 in. case, at same prices. Specify Type 65 instead of 68 and 74 instance of 98 for	PATTERN 78 A. C. INST	RUME	NTS
468 0-3, 5, 10, 15, 20 and 30  volts	No.		
\$476 0-300 voits 9.50 6.88   \$476 0-300 voits 12.00 8.82   \$471 0-3-5-150 Triple Range voits 12.00 9.93   \$472 0-25, 50, 100, 200, 300, 500 milliamperes 7.50 5.51   \$473 0-1, 2, 3, 5, 10, 15 amperes 7.50 5.51   The above meters can also be furnished in metal cases 374 m. flame, 3 in. case, at same prices. Specify Type 65 instead of 68 and 74 instance of 98 for		)	
471 0-3-5-150 Triple Range volts 13.00 9.93 472 0-25, 50, 100, 200, 300, 300, 500 millisuperes 7.50 5.51 473 0-1, 2, 3, 5, 10, 15 amperes 7.50 5.51 The above meters can also be furnished in metal cases 3'4 in fiame, 3 in, case, at same prices. Specify Type 6's instead of 68 and 74 intrans of 95 formstead of 95 f	469 0-150 volts	87.50	\$5.51
72 0-25, 50, 100, 200, 300, 500 milliamperes 7.50 5.51 73 0-1, 2, 3, 5, 10, 15 amperes 7.50 5.51 The above meters can also be furnished in metal cases 374 m. fiange, 3 in. case, at same prices. Specify Type 65 instead of 68 and 74 instance of 78 for	WAS DESIGNATED STREET,	32.00	8.82
500 milliamperes 7.50 5.51 473 0-1, 2, 3, 5, 10, 15 amperes 7.50 5.51 The above meters can also be furnished in metal cases 3% in. fiance, 3 in. case, at same prices. Specify Type 65 instead of 68 and 74 instead of 78 for	volts	19.00	
peres 7.50 5.51  The above meters can also be furnished in metal cases 334 in. flange, 3 in. case, at same prices. Specify Type 65 instead of 68 and 74 instead of 78 for	*** U-ZD, DO, 100, 200, 200.		
The above meters can also be fur- nished in metal cases 3% in. fiance, 3 in. case, at same prices. Specify Type 65 instead of 68 and 74 instead of 78 for	473 0-1, 2, 3, 5, 10, 15 am-	7.50	5.51
case, at same prices. Specify Type 65 instead of 68 and 74 instead of 78	The above meters can al	7.50	Fants.
	case, at same prices. Succi	flange,	3 tn.

### JEWELL Pattern 89 Ohmmeter-Pattern 89 Voltmeter



For the radio serviceman who relies upon resistance, continuity, and independent voltage tests the Pattern 89 Ohmmeter and the Pattern 89 Voltmeter provide a combination that 13 unequaled for convenience, accuracy and speed in testing by any other equipment of comparable price. These instruments are mounted in cases of moled balcelite with suitable terminals, as illustrated with suitable terminals, as illustrated of the Pattern 39 Ohmmeter makes it independent of outside cources of energy. A magnetic shunt provides convenient adjustment to compensate for variations in cell voltage. Since this adjustment may be made before sach series of testa, very accurate direct resistance readings are assured.

Approximate shipping weight, 3 lbs. List Our Price Price Type  Jewell Pattern 444 Analyzer



Complete with necessories; data book and pad of tube charts

Cat. No. 315

# Our Price \$82.32

Jewell's Newcet Set Tester and Analyzer, tests all types of tubes including triodes, pentodes and tetrodes, and both plates of a 230 rectifier tube without the use of adapter.

This new Jewell Analyzer is the most implete radio service instrument ever

This new Jewell Analyzer is the most commiete radio zervice instrument ever built,

Its compact, rugged construction makes it easy to carry and enables it to stand up under the herdanips of service work, and its professional appearance gives prestre to the sadio zervice man. This new Jewell Set Analyzer and Tube Checker marks a hig 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 errout in any receiver, regardless of the type of tubes used. Fall wave rectifier, variablemu, output neutode, and pentedes 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 previded: A.C.: 6-4-8 ampres; 0-20-100 milliamperes; 0-4-5-16-800 voits. D. C.: 0-12-61-20 milliamperes; 0-6-12-60-900 obms; and low-medium-high output ranges.

### Pattern 209 Checker

Tests Screen-Grid Tubes



readings are given in an engraved chart on the face of the tube checker.

Cat. No. 314

MAIL ORDERS TO AT See Terms on Page 3



# Dials, Shunts and Multipliers for Meters

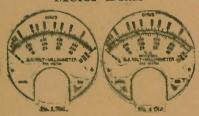
tipliers for Meters

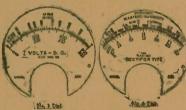
To be used with Weston Type 301
(Cat. No. 521) or Jewell Part 88
(Cat. No. 460) Milliammeters

By the use of these shunts and multipliers, many combinations of current and voltage values for both A.C. and D.C. can be measured and all easily read on the No. 4 Dial. The use of three pols switches in connection with the A.C.-D.C. circuit shown gives you instant selection of any of the values that you have incorporated in your meter box. This circuit specifies the most popular values, but you may replace them with others—to suit your need. Both series shunts and series multipliers may be used in the circuit.

With each circuit blueprint we furnish special insert leaves to give you a wide combination, such as series shunts multipliers, low range d.c. ohms, capacity, etc. The accessories listed below are very small in size and cost, yet very accurate and made of the best materials.

### Meter Dials





For Weston Cat. No. 6799 For Jewell Cat. No. 7331 45c Type D-1

For the 1 mil D.C. with 27 ohm internal resistance (27 milli-volt). Has three scale readings and an ohm scale 0 to 100,000 using a 4½ volt battery.

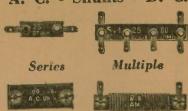
For Weston Cat. No. 6800 For Jewell Cat. No. 7332 45c Type D-2 Each Same at D1 except for the scales.

For Weston Cat. No. 6801 For Jewell Cat. No. 7333 45c Type D-3

For the 1 mil. A.C. Rectified (not the universal). This dial has two scales for A.C. volts from which many can be made by adding imaginary zeros. 5,000 to 1 meg. A.C. ohms, capacity range .0004 to 7 microfarads. Uses current supply from 115 V. 50 cy, line. Hookup furnished.

Type D-4 For Weston Cat. No. 6802 For Jewell Cat. No. 7334

A special arrangement to allow the reading of many ranges of A.C. voltage and current from only one set of numerical figures, the scale in the center being for A.C. The main A.C. scale divisions connect to the D.C. divisions of the same value. At the top is a 0 to 100,000 D.C. scale using a 4½ V. battery. By using a 10 mil. shunt across the meter and readjusting the circuit resistance, a 0 to 100,000 ohm scale will result.



A.C.

A.C.

"VAN" Shunts are very small and compact. They are made of the best noncorrosive alloy wire. It's temperature
co-efficient being practically nil at 900
F. D. C. shunts are of two types and
two voltages. Single or parallel and
several connected in series. Each type
having their advantages and disadvantages, preference being given to parallel
connections using multipolar switches.
Voltages are 27 millivolt (for the mil.
D. C. mod. 301 with internal resistance
of approx. 27 ohms) and 50 millivolt for
the D. C.—A. C. Universal with an internal resistance of 30 ohms.

In the A. C. Shunt it is necessary to
create a five volt drog, which is the
lowest voltage range of the A. C.—D. C.
Universal meter, therefore it is not advisable to use them in circuits of less
than 100 volts. Shunts running into
Amperes should not be connected externally to the binding post terminals.

Accuracy of shunts + or — 2%.
Single thunts cannot be used in series.
When using series shunts always connect the end of the largest shunt direct
to the meter. The series shunts always connect the end of the largest shunt direct
to the meter. The series shunts always connect will be necessary if the 1 mil, scale
is desired also.

Cat.

Our

15 CID:	Stred Als	0.	
Cat.	Туре	Description	Our Price
6803	27-DO	For 1 Mil. D. C. Meter, 27 M. V. Furnished in 5, 10, 25, 50, 100 and 500 milliamperes.	\$.90
6804	50-DO	Model 301 Meter, 50 M. V. Furnish d in 5, 10, 35 50 100 and 500 milliumperes.	90
6805	27-5	Combin tion. For 1 D. C. meter, 27 M. V.	1.50
6806	50- <b>5</b>	5-25-100 Mil. Series Combin. D. C. for Universal Model 301,	
6807	5V-AO	50 M. V. 100, 500 Mils. and 21/2 amps.	

### Blue Print

A. C.—D. C. Universal Hookup, with set of insert leaves.

Cat Price No. 25c Complete 6808

# Radio Set Analyzers

Radio Set Analyze

AND HOW TO USE THEM

With Full Instructions
and Descriptions of Set
Analyzers, Tube Checkcrs, Oscillators, Etc.
By L. VAN DER MEL

This book explains
thororughly the operation of set analyzers,
tube checkers, oscillators and other testing
equipment. For every
radio man this book is
extremely helpful. It
covers every phase of
testing and gives you
valuable thore cuts.

PAD THE TO AT **RADIO SET** ANALYZERS How to U eThem

Our Price 50c

# A. C. - Shunts - D. C. | Copper Oxide Rectifier

For D. C. Meter Conversion Size, 1/2 in. x 1/2 in.



Make a Rectifier
Type Meter from
sour present 0-1 D.C.
milliameter by using this rectifier.
This will make an
A. C. voltmeter up
to 1,000 voits by the
use of multipliers,
which can be obtained from us. Rectifier is small enough
to install in meter,
if desired. Curve and
diagram furnished.

Cat. No. 6675

Our Price \$2.95

### Multipliers



These multipliers are of the pigtail type, very lightweight, have no metal end caps, well insulated and may be mounted very close together. Resistance change is less than 1/2 of 1% plus or minus under ordinary temperature. Rated 1 watt. Accuracy 2% plus or minus. Size 1/4" x 11/2" exclusive of pig-

Cai. No.	Obms	Our Price
6784	4,950	\$ 60
6785	5,000	.60
6786	10,000	.60
6787	40,000	.75
6788	45,000	.75
6789	50,000	-75
6790	95,000	.90
6791	100,000	.90
6792	200,000	1.20
6793	245,000	1.20
6794	250,000	1.20
6795	500,000	1.80
6796	600,000	1.80
6797	750,000	2.10
6798	1,000,000	2.10

### **Bakelite Meter Mounting** Panel and Brackets

By meers of these brackets and panel, any Jewell or Wes-ton 34" flush type meter may be mounted on instru-ment panel or over test bench for quick reference. Brackets are made so that reference. Brackets are made so that meter can be demounted in a jiny for a portable test. Prevents the break-



age and injury of delicate instruments.

Set of hardware, consisting of 2 sett of brackets and 2 metal binding posts,

Cat. No. 7810 Per Set of 4 .... bakelite panel with 4 x 31 21," hole.

Cat. No. 7311
Our Price. Each
Non-removable top bakelite Bunding Posts.

Cat. No. 5678 Our Price Per Pair



Pentode Tester and Carrying Case

> Cat. No. 245

For A.C.-D.C. and Screen Grid Tubes



### Our Price \$11.76

Tests Screen Grid Tubes

This tester is especially designed for the new sets with 224 and 245 tubes. It is equipped with three double reading instruments: a milliameter 0-20-100, a D.C. coll-meter 0-50-300, and repulsion type A.C.-D.C. voltimeter 0-10-140. This latter instrument should not be confused with the vane type, with its restricted application. A grid bias switch is provided.

Extra cords and tip tack connections permit the use of each meter individually, Also checks line voltage. Very compact and complete.

The extra cords are carried in the metal cover, which has a leather handla, Size 4x8½x3½ in, high. Gover finished in baked black enamel, winkie finish.

### Readrite Output A.C. Voltmeter

Copper-oxide Rectifier Type

Copper-oxide Rectifier Type

A reliable instrument for indicating output voltage of a radio set. Used for ining upl r.f. land if. stages by determining m a x i m u m gain. Also comparing gain of tubes, r.f. tuner electivity, bum, and fading. A practical, low priced d.c. voltmeter with copper-oxide rectifier of the full wave type. Model No. 550 is same assembly as used on No. 550 oscillator. For convenience the portable instrument Model No. 575 has been designed. Test leads are furnished with Model No. 575 has been designed. Test leads are furnished with Model No. 575. Case is baked enamel over sesmiles steel 4½° dia. The assembly includes voltmeter, rectifier, jacks and condenser. Connect low voltage (6-5) jacks to magnetic speaker terminals.



CASE TYPE

Cat. No. 486

List Price \$7.50

84.41



### Readrite Customer Tube Tester No. 430

\$23.52 NET TO DEALER

Complete with No. 407 Tube and

Short Tester

841.36



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 ON and OFF toggle switch, ip lacks, and outlet receptacle complete the equipment of the No. 430 Display Case.

The No. 430 Display Case.

of the No. 430 Display Gase.

The No. 407 Tube and Short Tester is plugged into the receptacle and the tip jacks. The eter on this lester is then used for show testing of all tubes under operating con litions. 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

10° high, and the base is 15 x 11°.

This Customer Display Tester will not only increase your tube sales, but will add that 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 claborate testers at much higher cost.

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



List Price \$22.50 No. 900 Complete

Net \$13.23

For servicing electrically operated re-frigerators, ironing machines, water pumps, oil burners, stokers, ventilating systems, ranges and general household appliances.

READRITE

Continuity and Capacity Tester No. 1000 For Set Analyzing, Testing Resistance and Capacity



The Modern Set Analyzer. Contains Ohnumeter 0-6,000,000 ohms, and Capacity Meter, 008 to 10 mfds, both direct reading. A unique and exclusive circuit is employed, providing a new method of set analysis. No serviceman will fail to recognize its superiority and outstanding advantages. Every serviceman needs this instrument to properly test modern receiving sets.

The No. 1000 Tester combines the very latest method into one instrument for festing resistances, continuity and capacity of radio receiving sets. The 3½° D. C. precision meter has full scale deflection of one in a. The lower scale is divided into kilohms, 1003 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 0 to 6 million ohms. The A. C. meter is calibrated for reading directly in microfarads. The lower scale reading is 3 008 to 25. The upper scale reading is 1 to 10 mids. The instrument is calibrated for use on 60 cycle at 110 volts. The rheostat regulates the correct voltage to be applied.

Cat. No. 1000

Cat. No. 1000 List Price \$55.00

\$32.34 NET TO DEALER

Something New for Testing Condensers Electrolytic-Paper Types



No. 250 Capacity Tester contains one D.C. and one A.C. meter. Reads 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 mids. The D.C. voltmeter connects to rectifier tube and adjusts to 300 volts. Selector switch provides for measuring voltage, also forming and testing milliampere capacity of electrolytic condensers. The maximum reading for a good electrolytic condenser is 3 m.a. per mid. In a scamless metal case, with or without cover. A very practical and convenient instrument.

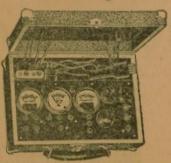
Cat. No. 850

Same as above for testing paper type condensers only. In a seamless metal case, 4% in. dia., baked enamel finish.

Cat. No. 800 \$5.49

### PENTODE

Set Testing Reduced to Simplicity Equipped with 6 Prong Tube Adapter



List Price \$25.00

Cat. No. 710

# Our Price \$14.70

These 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 accentaged and another for other tubes. Makes testing of all type tubes simple and thorough. A 4%-volt grid battery is used for the grid test and also continuity testing of transformers, choices, 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 0-60-300-600 D. C. volts, 0-10-140-700 A. C. volts and 0-20-200 milliamperes. Both A. C. and D. C. filament voltages are accurately measured on the one meter. Housed in a strong case with leatherette covering. Attractive. Compact. Complete. Fills every need for the expert serviceman or the beginner for radio set analyzing. Size 10-4x3-4x8.

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 nanel for shop purposes. Size: 14/2878734.

Cat. No. 610

List Price \$30.00

### Our Price \$17.64

### Electric Extension Lamp Cord



s iect of cotion parallel wire with a live rubber attachment plug.

### Counter Tube Testers

No. 405 — No. 406 — No. 407



servicemen use the No. 4 0 6 Tester 4 0 6 Tester for checking all new and old tubes used in receiving sets. Test mard attached to panel gives simple inatructions.
Anyone can button provides as for determinworth of a six-

eperate. A single push future 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 separate push button provides for testing both plates of '80 translations.

type tubes. Cat. No. 106 Our Price ..... \*1470

### Tube and Short Tester Combined

The No. 407 described above, a complete short test of the tube. All shorts, gas and leakage tests are leads with the tube heated under operating conditions. Tube is tested for its worth in the same secket 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

Our Price

No. 405 Tube Tester is similar to No. 405, but has a two scale meter and 412 voit grid battery.

Cat. No. 405 81470 Our Price .....

### Visual Tuning Meter



Cat. No. 6762 DBC Less Escutcheon

Escutcheon Plate Cat. No. 7330 15e

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

### READRITE Resistance Meter

No. 501 Resist-No. 501 Resistance meter is used in above ohumeter. Furnished either with wide flange as shown or narrow rism type for rear



range as or narrow fine type for rear clamping. A thoroughly retiable instrument at a popular price Requires three small flashight cells, which with resistance to be measured, are connected in series with meter. Used for testing resistances in radio receiving sets, and cirsistances in radio receiving sets, and circumstances in radio receiving sets.

List Price, \$2.50

Our Price \$1.47

### READRITE

### Portable Type Voltmeters



Hendrita nortable meter are of-tered in vari-ous ranges for particular

type instrument with its restricted applications. Readrite A.C. Voltmeters are accations. Readrite A.O. Voltmeters are accurately calibrated and have very uniform divisions throughout the scale lengths. The higher reading voltmeters contain ever 100 chms per volt resistance. The D.O. Voltmeters are of the polarized vane type. Etandard package portable meters 25. Average weight 20 lbs.

### D.C. VOLTMETERS Description

Cat.	With 3 in. Case	Our Price
5381	Type 346, for testing "B" Eliminators—0-300 V\$4.00	\$2,40
5382	Type 347, for testing "B" Eliminators -0-500 V 5.00	3.00
	With 216 in. Base	
5383	Type 349-0-300 Volts 3.00	1.80
5384	Type 2467-0-50-300 Volus, 92,610 Ohms 5.00	3.00

# A.C. D.C. VOLTMETERS

Cat.	List Price	
5285	For testing A.C. Current Supply Line-0-150 Volts	
	Тург 318 \$4.00	\$2.40
6567	Type 355P-0-10-140 Volts	2.40
5386	0-500 Voits A.CD.C 6.00	3.60
5387	0-150-750 Volts A.CD.C., 8.00	4.80
5388	0-300 Volta A.CD.C 5.00	3.00
5890	0-60-300 Volts (300 Ohms per Volt) 4.50	2.70
5391	Type 249-0-750 V. A.C., Panel Mount 7.00	4.20
5393	0-300 D.C. Milliammeter (.8 Ohm), Panel Mount Type 309 100	.60
5393	0-50 V. UX Socket Test- ing Grid Voltmeter (15,400 Ohms) - Type 150 3.00	1.80
5894	0-10 V. Filament Meter for UK Sockets (100 Onns) Type 152 2.50	1,50



Cat. No.	Type	Each	Box of 10
3560	0-50 V.	\$0.10	\$3.80
3575	0-50 V. 0-50 A.	60	5.30
and the same of	0-00 71,	10	4 20

# New Heights

reached with the

Acratone AUTO-RADIO

FIER months of experimenting, ACRATEST engineers have perfected a really marvelous automobile radio, utilizing the new type anto 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 Acrarone Auto Radio for less than \$50 completely installed, and still double your investment! Despite the extremely low price the ACRATONE has the following features:

Direct control-steering column or dash mounting.

Pive Tubes-2 RF Pentode Ampliflers No. 29

1 Tetrode Detector No. 35

1 Triode A.F. Amplifier No. 37 1 Pentode Output Stage No. 41

3 Tuned circles litz coils high gain-folly shielded. Sensitivity power tone quality. The new 41 power tube indirect heater pen-tode assures wonderful quality and ample power on only 135 volta (3 blocks of B Battery).

Low battery consumption, only 20 M.A.

Full range Super Dynamic Speaker, properly bailled especially matched to output of set-equipped with shielded cable and plug-in-stantly connected.

Shielded battery cables made up in plug for quick installation.

Smooth vernier dial with restful green scale illuminated for quick station finding. Mounting brackets provided for either steering column mounting or for dash and floor in-

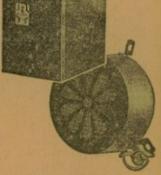
column n

Heavy steel battery bo ample for 3 heavy duty blocks of B Battery.

Shipping Weight Complete-42 lbs.

# New Scientific Refinements Bring

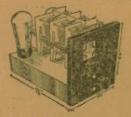
A highly perfected 5-tube chassis, designed by famous engineers specialising in Auto Radios, incorporating the newest advances plus many exclusive features making this the outstanding Auto Radio of all time! Clarity and full tone assured through the use of a full sized, full powered Dynamic Speaker!



### The Receiver

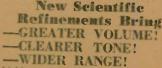
The ACRATONE Automobile Radio is a super-sensitive 5 tube improved radio frequency receiver employing new type auto radio tubes of low current consumption:

The compact chassis is cadmium plated and is housed in a metal can. Only 2 screws to loosen in order to remove the chassis.



### Compact

The ACRATONE Auto Radio is The ACRATONE Auto Radio is the most compact on the market. It measures only 5½ in. wide, 7% in. long and 5½ in. bigh, and weighs 7 lbs. The Magnavox Dynamic Speaker is 72% in. in diameter and housed in a metal case, with mounting prachets and has a center bolt so that it may be sasily mounted on the cowl, on the celling, on back of the driver's seat or on the dash. the driver's seat or on the dash,





LICENSED

set is fully enclosed in a handsome black or a ckel finish metal box. Has illuminated dial and direct con-

Complete-Nothing Else to

Buy

1--Acratone 1933 Auto Radio.

2—Shielded Cables. Brackets, Screws, Nuts, Dtc.

5-Sylvania Tubes. 3-45V. Large B Butteries. 1-Complete Suppressor Kit.

1-Ward Auto Antenna.

1-Steel Battery Box.

Here is what you get for \$24.50!

1-Magnavox Matched Dynamic Speaker.

The receiver is readily attached, by means of the brackets furnished, to the steering column of the car, thus avoiding the necessity of marring or defacing the car. There are no cumbersome or fussy flexible cables—the set is tuned in directly like any other receiver. An illuminated dial enhances the



Super - dynamic speaker, enclosed in a cylindrical case matching the itself.



Substantial metal battery box for "B" botteries is also furnished.



11-Piece suppressors of finest quality are fur-nished with the

Wherever you are . . . in the city or in the country . . . whether you are driving or are parked . . . this marvelous Auto Radio will provide the Pick of the Air for your

# 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 polishly product. In case, we 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 break-downs in the receiver. Wherever the transformer is contained in a can both the finish and physical characteristics are identical to the original.

Where the original transformer has been du it is a reliable product. In many of the received	plicated, rs listed	and physical characteristics are identical to the original	mal.
or are tot Cut.		Set Model E Cat.	rice
Set Mosei	Price	EARL (O) 31, 31S, 32, 32S, 33, 33S, 24, 41.	
	\$2.95		3.00
A.C. 13 (I.V.R.(C) (D), 90, 83, 94, 95 6922	3.75		3.75
ATT ABSENCE AND STATE OF STATE	The second second		3.85
AND ATT OF THE PERSON OF THE P		EDISON (0), R4	3.50
			2.45
APEX (D), 10 Series Supers		ENTERN DI RZ. CZ Pinte Transferin	3.50
A TRIVET A TRIVET BE BEINGTH. BUS PRINCES I LILLIANS UNIVERSITY OF THE PRINCES OF	T T T T T T T T T T T T T T T T T T T		2.85
WALKEL WALLES IN FEMALE, RIP BATTERING TENTON OF STREET	2 2 2 2	EVEREADY (0), 40, 50 2617	1000
A COURT A PRODUCE THE PROPERTY SEEDS NOW AND ADDRESS OF THE PARTY OF T	M. Market	1	
ATWATER KENT (D), 55, 55C	7 4.75	FADA, 35 7226	3.95
			3.95
APPEAR APPEARS IN BUILDING SERVICE AREA CO. CO. CO. CO. CO.	7 7 7 7	FADA, 43, 16, 17	3.95
			3.95
ATWATER KENT (D), 84 (Early and Late). 701 ATWATER KENT (D), 84F (Early and Late) 701	2 4.50		3.95
ADDITATED RENT (D) 80F 83F	4 56		3.95
A THE REST OF THE PARTY OF THE			3.95
ATTENDED RENT (III) 81. 89. 89F	5 4.00 6 4.95	FADA (D), Special 5865	3.50
ATWATER KENT (D), 39F			2.75
В		PROPERTY (FIL MARRI 18, 188, 18, 188, 80, 80, 80,	4.25
BRANDES (0), B10, B11 54	21 1.95		-
THE A STEEL OF THE LEASE CONTRACT OF THE PARTY OF THE PAR	MIT THE STATE OF	FREED EISEMANN (O), Model NR80, 60 Cycle 2410	3.95
WATER THE STATE OF THE PARTY OF	4100	THE PERSON NAMED IN COLUMN TO PERSON NAMED I	231/19
		Circulate Contract Co	4.50
BOSCH, 28 65: BOSCH, 48		PREFERENCES IN THE PROPERTY OF	4.50
		FREED-EISEMANN (O), Model 16, 60 Cycle, B and C Elimbrator	2.25
PROPERTY S-14, 5-21, 5-01, 5-04	25 3.95 24 3.50	I was stored to the part of the last of th	4.50
			4.25
BRUNSWICK (O), 31, 32, Part No. 755 72 BRUNSWICK, 15	22 3,95	I SUSPECIALAN OF OM TABLE THE STREET	2.95
	23 3.95	DESCRIPTION K	4.85
THE TIME THE PARTY OF THE PARTY	17 3.75		133390
91 31 32 cvcle	18 4.75	FRESHMAN (O), Model CI-60-S, 60 Cycle (Plate)	2.25
20 15-32 (4-324, 2-245,		Model G-60-S, 60 Cycle	
1-280) without case	739 2.85	(Wilamont)	.95
C C		EAC 2003	3.50
	enn # 50		3.50 5.50
COLONIAL (D), 31	632 5.50 045 3.75	1 THE PROPERTY OF THE PROPERTY	3.85
		FRESHMAN (O), Q, 60 cycle	4.50
COLONIAL (O), 33	198 2.50	1 whereast (6) OD % cvcic	6.00
		I WHENCE THE AN (41) N. SO CUCIOS	5.50 5.50
		FRESHMAN (0), Q, 25 cycle 2627	3.30
COLUMBIA (O), 990		G	
II AND THEFT (C) 920 931	STATE OF THE PERSON NAMED IN		1.80
		1 CON FIRCURIC (O), H31, H51, H11	1.80
		1 2 1 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1.80
COLUMBIA (O), 950	THE RESERVE TO STATE OF	POPPE (A) SK4	3.95
II AND AND THE PART OF A PART OF THE PARTY O	MARKET MALES	1 appropriate to 1001 Series with Cisrostat Line	3.78
		Ballast	3.13
CROSLEY (O), 608 CROSLEY, 47, 48, Part No. 21432		Dames Dock States 6504	4.50
CROSLEY, 47, 48, Part No. 21402	7214 1.50	1 TENTE (D) 523 526	4.50 3.95
THE CONTRACT THE TRACE DESCRIPTION OF THE PARTY OF THE PA	7215 2.50		3.35
		KENNEDY (B), 10, 20, 30 Sense. 2529	4.50
CROSLEY, 53, 54, 51, 55, Pate 10, 2055100 CROSLEY, 122, Part No. 22356	7218 2.5	A REPORT OF THE PERSON AND PERSONS ASSESSED FOR THE PERSON AND PERSON ASSESSED FOR THE PERSON ASSESSED	3,95
		KOLSTER INTERNATIONAL, K80 7236	3.95
E		(Continued on next name)	THE REAL PROPERTY.
EARL (O), 21, 22-25 cycle	2658 2.7		
Code: (O) -Original Manufacts	urer's Mode	l; (D)=Duplicate; (R)=Replacement.	-
Code, (O) - Original Control	-		branch

PO	OWER TRANSFORME	ERS		Set	Model	Cat,	
Set	(Continued from page 96)			SLEEPER MO	NOTROL, Type 70	No.	Price
Set	Model K	Cat.	Price	1 SUNURA (U).	A31. B31.	2603	3.40
KOLSTER	INTERNATIONAL K70	7097	3.95	SPARTUN O	), 69, 79A, 89A )), 301 564 570 750 Par	t .	2.98
MOLDIER	(D) K29	STR1	3.95	No. B2538 .		7007	3,85
MULSTER	(D), 6J 6K	9594	3.95 4.25	SPARTON (D)	, 589 , 931	. 7003	4.75
MULDIEK	(O), 6H, K5 (O), 20, 21, 22, 23	5639	7.85 4.95	STEINITE (O)	, 40A, 40S, 40, 45A	5866	3.40
MULDIEM	101, 28	5507	3.95	I STEWART WA	80	6921	3.95 3.75
WOTPIER	(O), K38 (O), K45	5503 6815	6.50 8.85	I STEWART WA	RNER (D), 801, 801A, 802 CARLSON (D), 638	7091	3.25
MOLSTER	(O), K43, 48, using 171A or 245			004		2663	6.50 4.50
ROLSIER	(O), K41	5506	4.85 6.75	I STRUMBERG-	CARLSON (D), 635, 636 CARLSON (D), 10, 10A, 11.	3722	4.25
WOTUTER	(O), K25, 27 (O), K24	571R	6.85	DIMUMBERG-	CARLSON (D), 846	5601	5.25 4.50
	M	2000	5.50	I STRUMBERG-	12 14 CARLSON, 19, 20	7244	3.95 3.95
MAJESTIC	B ELIMINATOR (D)	2525	1.50	STRUMBERG -	CARLSON, 29	7945	3.95
MAJESTIC	91, 92 (227, 245, 280 tubes) (D), 130, 131, 132, 233	9619	4.00	SIRONDERC	CARLSON (D), 40, 41	2663	4.50
DIAGESTIC	(D), 71, 72 (Pack No 7BP6)	5104	3.95	TEMPLE (O),	8-60, 8-80, 8-90, 8-61, 8-81, 8-9	5583	3.75
133	(D), 130A, 230A, 130, 131, 132,	7020	5.25		U		
MAJESTIC	180 (Radio-Phono Combination)		1	1 U. S. KADIO &	ON & RADIO (O), Gioriatono ETELE. (O), 561	2501	2.35 1.50
MAJESTIC	(0), 71, 72 Filament and Plate	2619	7.50	U. S. RADIO &	: TELE, (O), 540	2509	1.50
transform	ers in one can. (0), 90B, 100B	2684	4.75	U. S. RADIO &	TELE. (O), 581	2514	1.50 1.50
DIRCAECTE	117), 180 Filament	3450	4.75 1.25	U. S. RADIO &	TELE. (O), 681	2516	1.50
MINDESCIC	(O), 180 Plate (O), 70 Series Filament	SAGO	1.25	U. S. RADIO	TELE. (O), 1945	2517	1.50
METAJESTIC	(U), 70 Series Plate.	468	.90		v		
MAJESTIC	(O), 90 Series Filament and	ART		VICTOR (O) I	R-32, R45, 75, R-32, 25 Cycles	6830	2.90
MAJESTIC.	21, 22, 23	230	2.95 3.95	VICIOR (O). I	4. 15. 17	2531	3.75
MAJESTIC.	50 60 7	240	3.95 3.95	VICTOR (0),	34, 35, 39, 57, Part No. 61730 RE73, Par No. 6173.	5456 2676	1.80
MAJESTIC	(O), 90B, 100B Filament and		5.35	VICTOR (0)	RE14, 15, 220 V. A.C. Part		1.00
rate	b	872	4.75	No. 62828	w	7293	2.05
PEERLESS	(O), Courier, 65 2	615	2.75	WESTINGHOU	SE (0), WR4	2531	1.80
FELELIE'S	(O), K70, 20, 22	SRO	4.85	WESTINGHOUS	SE (O), WR5, WR6, WR7	2627	2.25
THILLY TO	1, 00	RAGA	2.80	ZENITH (D),	XE9	6841	3.25
EXEMPLO (O	), 70	0.40	2.80	ZENITH (0), S	uper 27, No. 4 Pack	2568	1.85 2.75
ENILLO (O	1, 82, 86,	2.11	2.80	ZENITH (0), 53	3, 54 .55, 52, 57, 62, 60, 61, 64	2021	
FILLU IO	), 87	947	2.80	712, 722, 732,	13. 622, 642, 672, 71, 72, 73, 77, 777	5422	4.25
FINILUO (U	), (using 247 tubes)	947	2.80	ZENITH, 9		6841	3.25
FRILLO (U	J. 111, 112, 211, 212	9.14	2.80	m ni transiei	ZE7 Plate and Rectifier fila- rmer	5793	2.25
PHILCO (O	1, 500 Series 2	620 621	2.80				
PULLUINE	(U). Model Q. 60 cycle (222	021			TRANSFORMER G		
rube)	R	423	3.25	Receivers Atwater Kent	Models Cat. 40, 42, 46, 1st audio 70		Price .50
RADIOLA (	O), 18, 25 Cycle	770	4.25	Atwater Kent Atwater Kent	46 Input 70		.50
A U A (U),	14, 18, 33, 51,	551	1.80	Atwater Kent	P.P. Output 7168 20, 30, 35, 37 260	06	.50
A U / (U).	17, 18, 33, 51, for 220 V. A.C 37	216	3.93	Atwater Kent Atwater Kent	41, 1st audio 689 41, 2nd audio 689		
Me C M (D),	44, 46	373	2.25	Brunswick	32, 42 Input 720		1.35
The Car I all 1	6U 6Z 95	SEE	1.80	Crosley	902, 920 553 126 D.C., 126-1 D.C.,	4	3.85
R C A (0).	66	177	3.75		Double PP Input 721		1.25
R C A (U),	**- #5 IOT 220 V. A.C. 96	277.0	1.80	Earl Earl	41 372 All 251		1.50
IL C M (U)	80, 82, 86, Part No. 61144 26 10 Speaker	109	1.80	Freed General Motors	95 372	0	1.50
R C A, 04,	RETTE (0)	175	9.45	Kolster	A Input Trans 726 K20, K21 558	7	1.65
E C A LIE	RAMIN (O)	71	1.95 3.95	Phileo	See Complete Philoo Page 19	Listin	g on
TO COM - VICI	TOR (0), R35, R39, RE57 67 OR (0), RE14, RE15 25	69	1.80	RCA	1" 18, 33, 51 251	2	1.40
RCA(O)	34, 35, 39, 220 V. A. C. Part		1.80	R C A-Victor	4t 47, 66 562 Ah, Push-pull 256		.60
R C A-VICT	OR (O), 50, 55 72	24	2.95 3.95	Sonora	Input Transformer 726	6	.95
To C 12 (0),	ov. oz. 80, 25 cycle. Part No.			Stromberg Carlson Victor	n 846 Audio & Input 651 All 258		2.75
			3.00	Victor Zenith	All early models		
SILVERTON	BUCK (O), Power Pack 65 (O), Power Pack 65	04	4.50		Push-pull pack 574-50, 60, 70 series	-	.59
20.11	1077 2 0 101 Fack 85	U	4.50 (		Interstage 658	5	2.75
					The same of the sa		

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.

to perform as well as the originals.			Part No.	cat. No. P	rice
	at. No.	Price	Make Modely	AND DESCRIPTION OF THE PARTY OF	1.50
А			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		3.50
Atwater Acut, 00	7055	2.95	Freshman, M12 (171 tube)	The second second	3.50
Atwater Kent. 37	5001	1.85	Treach man b. N11 (200 tube)	2432	2.40
Atwater Kent, 40 (condenser only)	5395	1.35	Freshman, Model G-60-S, 60 Cycle		3.75
Atwater Kent, 44 (Condenser	7170	1.50	Freshman, Model N-60-S, 60 Cycle		
and Choke)	5396	2.75	Freshman, Model Q. 2Q, 3Q, 60 Cycle		2.75
Atwater Kent, 46 (condensar only)	6513	4.25	Freshman, Model QD, 60 Cycle		2.75
Atwater Kent, 55, 55C, 55F	7054	,50	Freshman, Model M-60-S, 60 Cycle		2.10
Atwater Kent, 60	7055	.70	Freshman, ABC Flim., 60 Cycle.	2442	1.60
Million Britis, Dos	7056	.50	The state of the s		
Atwater Kent, to	6834	1.85	O	6624	3.95
Apex, 46, 46A	6835	1.85	Grebe, AC6, complete with resistors		1.50
Apex, 47, 47A	6836	2.25	Figure SK	7287	.95
Apex, 41	6837	2.25	Greene-Browne "B"	1000	N. P. Contraction
Apex, 48, 48A	7248	2.95	K	2000	1.00
Apex, 20A, 20A2		-	Knapp, A Elim. Condenser	5009	1.35
В	7100	2.75	Kada A Klim Single Condenser.	5020	2.00
Bosch, 501-2-3	7169	2.75	Kodel A Elim, Double Condenser.	5019	3.75
Bosch, 28	6772 2988	3.25	Kodel A Elim, Triple Condenser.	5018	3.25
Bosch, 50 Series	2853	8.50	Maleton 6H K5	2815	1.50
Bosch, 43	7249	2.95	Makes Ell D.C 3022	5609 5612	1.95
Bosch, 73	7250	2.45	Kaletae K23 Recuifier 330122	5615	1.95
Bosch, 5 4838	5613	2.75	Kolster, K25, 27, 28, 25 Cycle 3003	2812	2.50
Brandes, B10, 3.7 Mid 4050	5614	.95	Moleton W21	6774	2.50
	5619	1.95	Kolster K43	6775	2.75
	6925	3.50	Kalalar K44	6776	2.50
Bremer Tulley, 6-40, 6-41	7251	3.95	Hoister, 6J, 6K	4.74	1000
Bremer-Tully, 8-20, 8-21	6229	.49	M	-003	0.05
Bremer-Tulley, 14, 22, 81, 82 Brunswick, 14, 22, 81, 82	6229	.49	Majestie, "A" Elim	5031	2.25
Brunswick, 15, 22, 32, 42, Pars 3209	7203	1.85	Matestie, 9P3, 25 Cycle	7256	3.45
Didiswick, 10, 22, 02, 42, 1217 0217			Malestic, 7P3, 25 Cycle	7357	3.45
0	7197	1.25	Majestic, 7BP3	7258	3.45
Colonial, 39	5611	3,50	Majestic, 171 Sets	5026	2.25
Columbia, 950 4512	7286	1.50	Majestic, 250 Sets	5027 5028	2.25
Columbia, C4	- Control	10000	I Maleutic, 245 Sets	6678	2.25
E		0.00	Majestie, 90 B	5029	1.98
Earl, 31 and 32	5405	2.75	Maiostic, Master B. Super B	5030	1.98
Earl. 21 and 22	5406	2.75	Majestic, Special Master B	6838	2.50
Edison BE E7	6840	3.50	Majestic, 50 Pack	5032	2,50
Filiam R4 Cd. Ed	7252	2.95	Mohawk, Using Majestic Pack	1 19 19	
Euler "A" Condenser	5009 5624	2.50	P	0000	202
Fela. 224	5008	4.00	Peerless, 23	2856	3.95
Erla, A2	2988	2.95	Philos. 511	2933	3.00
Eveready, 50 Series	2000	and a	Pearless 70	6839	.65
P	10000	1000	Philipp 511	2933 2934	2,95
Fada, 182-1252MS	3010	3.95	Philon 87	2935	3.50
Fada 78 11 Si	23337	3.25	Philes 87, 25 Cycle	2936	2.05
Fada, 35, 352, 40 1790X	3012	3.75	Phileo. 65	3009	3.25
Fada, 41, 44, 46, 47	3740	3,25	Phileo Midget	6621	2.95
Wards 70	7253	3.95	Phileo, 82	6622	2,95
Fada. "K"	6704	4.00	Phileo, 62	2437	2.75
B) Pade A Eliminator	5009	1.35	Polydyne, Model Q, 60 Cycle	2438	2,75
Fada E420 for 50-70-71 and 72	5410	3,25		, , ,	
Toda 95 Port No. 1780 X B 19303	3011			FORA	0.00
The second of the No. 1801 X 16805.	3025 6542		Radiola, 105 Speaker	7259	6.55
II Fada ARC Eliminator B. Collais	5416			6543	5.95
Badaeal D E F G and H	9210	-	Padiala 67	7260	5.75
H Freed Model 55, 56, 65, 78, 78, 78,	2443	2.75	RCA 17	2714	3.15
	2110		REA. 13. 33. 61	2710	2.50
Freed-Eisemann, No. 15 "B" Eilm.	5010	3.75	RCA, 44, 46	2715 5033	3.50
Dinole	2020	-	I RCA. 41	2726	2.54
Freed-Eisemann, Model 411, 00	2428	3.95	ECA 62 60	2659	1.60
Cycle Model NR70 60			1 RCA. 66	6888	2.75
Freed-Eisemann, Model NR70, 60	2429	3.75	DETA SO	3721	1.65
Cycle Model NB80 60	-		RCA. 104 Speaker	01=1	2
Freed-Eisemann, Model NR80, 60	2436	1.50	RCA 30A Filter Block, Part No.	3721	1.65
Oycle Model NR35, 60			81951	5445	.85
Freed-Eisemann, Model NR35, 60	2431		RUA, 20A, 20 Mfd	7210	
Cycle	5420		S		
Freed-Eisemann, 480 A.C Freed-Eisemann, 480 D.C	541			5034	2.45
Freed-Eisemann, 485	541		Silvertone Midget (USING 3-222		
Freed-Eisemann, 285 Freed-Eisemann, NR57, 60	321		1 9/5 on/ 1=280 10005), 5 040		
Freed-Eisemann, NR60 ,	677		NO 5875	7197	1.25
Freed-Eisemann, Nation	725		Continued on Page 99!		
Freshman, K	725	5 2.4	5 Combination		
A A CONTRACTOR OF THE PARTY OF				THE PERSON NAMED IN	A SHAREST PROPERTY.

By-Pass	Condensers	for	Standand	Soto
6/	o difference is	TAT	PARTIE STREET STREET	

By-P	ass Co	nden	se
Sets and Models	Capacity	Cat. No.	Price
Atwater Kent 37, 38, 40, 42, 44, 46	325 mfd.	2985	\$0.6
Speaker Condenser	15 mfd.	2984	.75
Bosch		7211	.40
1928-1929 models	225 mfd. 130 mfd.	2983	.65
Brandes B-10	.6-C6 mfd.	5618	
Colonial 32			.30
	225 mfd. 210 mfd.	3211	.65
Crosley	1.5 mfd.	5807	.50
60S, 61S, 62S, 63S, 65S Roamio	W6471 W7944	2780 5219	.21
41, 41A, 42, 704, 706	W4013C	2980	.30
608, 618, 628, 638, 658	.6 mfd. W20449	2781	.25
	W22412	5209 5210	.40
	W20446	5211	.55
	W7753B W20186	5212 5213	.55
	W5943	5402	.65 .25
	W6428 W20187	5403	.45
	W25426	5404 5398	.22 .38
	W4919	5399	.30
	W22995 W7753	5407	.42
	W4968	5408 5409	.55
	W4313A	5411	.27
	W23736 W20448	5412 5427	.70
Dayfan All			
Earl	21 mfd.	2761	.10
All Eveready	.5 mfd.	2872	.15
1928-1929	225 mfd.		
Toda	130 mfd.	2983	.65
Fada All			
Federal	1. mfd.	2902	.35
D, E, F, F, H	325 mfd.	2939	.40
	.001 mfd.	2968	.05
Freed	4 mfd.	5604	1.75
All General Motors	.5 mfd.	2872	.15
1930 Series A	31 mfd.	5214	40
	1,202,685	5215	.65
	1,202,273 1,202,251	5216	.50
	1,202,231	5217 5218	.60 .85
Kellogg	1,203,860	5400	1.50
All	.5 mfd.	2752	.25
Kolster			
44, 45 43, 48	35 mfd.	5617	.50
44, 45	.6-C mfd. 1. mfd.	5618 5627	.30
430, 32 D.C.	C1-5 mfd.	5628	.35
44, 45 6. 6L, 6F, 6M, 75	.5 mfd. 4. mfd.	5608	.20
6J	.6-C6 mfd.	5603 5581	.95 .35
Majestic 70, 90, 180			3 1 2
10, 30, 160	.5 mfd. 25 mfd.	5448 5446	.30
Doorloss	35 mfd.	5447	.30
Peerless All Kylectron	.5 mfd.		
2300001	71 mfd.	2903 2864	.30
	15 mfd.		.30
Courier	31 mfd,	2904	.39
65	31 mfd.)	7194	.45
Kennedy	100025")	A PROPERTY OF	
20	9x14 mfd.)		
	1-1 mfd.)	7183	.48

Sets and Models	a	_	
Radiola	Capacity	Cat. No.	Price
64, 67			
04,01	0.05-81	4180	1.75
	325 mrd.	4182	.40
	21 mfd. )	4181	.45
80, 82, 86	125 mfd.)		
00,00,00	31 mfd.)	3000	.15
42, 48	15 mfd.) 31 mfd.		
44, 46, 47		3026	.15
44, 46, 47	.25-C25 mfd.	3028	.15
, -0, 11	31 mfd.	3026	.15
	125 mfd.		
All Models	R.F. Choke		
~	2001 mid.	2910	doz. 1.25
Sparton			
All	% mid.	5833	.35
410	1. mfd.	G894	.35
410	41 mfd.	6608	-35
Victor		4180	1.75
9-18, 9-54, 9-56	21 mfd.		
T71 - 4	125 mfd.	4180	1.75
Victor			
RE 14, 15	31 mfd.	3026	.15
	21 mfd.	3027	.15
U.S. Radio & Televisio	n		
	2378	5204	1.25
	964A	5205	.75
	2628	5206	.50
	170	3013	.35
	2235B	5208	1.25
Zenith	Delegation of the last of the	0200	1.43
50, 60, 70 ries	42 mfd.	6478	.69

# FILTER CONDENSER BLOCKS

	DLOCI	2
(Continued from page 98	,	
Make Models Part No		D-1
Sonora, Using 245 tubes		Price
Sparton, 930 Sparton, AC 5	2914	1.85
Sparton, AC 5	5039	3.50
Sparton, AC7, 601, 62, 63	3159	3.50
Sparton, 89	5040	3.50
Sparton, 109	6576	3.95
Spirtuori, Mb	7261	4.95
Steinite, 70	7263	2.95
Steinite, 45, 70A	7262	2.95
Steinite, 40A	5037	3.50
Stewart Warner, 950, 100A	5038	3.50
Stromberg-Carlson, 635, 636, 638.	6575	3.25
Stromberg-Carlson, 641, 642, 652,	3723	4.50
654	CETA	4.00
	6514	4.95
Town I am a man T		
Temple, 8-60, 8-80, 8-90	2754	.95
Temple, Same as above for 25 cycles	2758	.95
Temple, 7-50, 7-80	2753	.95
II		
U. S. Radio & Television, 46, 46A.	6777	1.75
U. S. Radio & Television, 47, 47A. U. S. Radio & Television, 41	6778	1.75
U. S. Radio & Television, 48, 48A.	6779	1.95
o. S. Italio & Television, 48, 48A.	6780	1.95
V		
Victor, R-32, R-42, RE-45 and		
RE-75	2709	0.5
Victor, Electrola, Hyperion and	2109	.95
Borgia	3721	1.65
	2121	1.00
w		
Willard, B Elim. Condenser	5041	3.25
Z		
The second of th	0000	
	2800	1.35
	2701	4.50
Zenith, ZE17333X and 353AX Zenith, ZE10	2700	1.50
Zenith, ZE13	3160	3.00
Zenith, ZE6		4.00
Zenith, 39	3171	5.00
Zenith, ZE8 (set of 2)	3181	3.75
Zenith, ZE9. Pack	5042 5043	7.50
Zenith, 9E, 11E, 14E		2.50
***************************************	5043	2.95

This list of replacement volume control is not a haphazard collection of make-shift substitutes, but the result of four years of experience in merchandising re-

placement 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 electrical specifications in each case are exact duplicates of the original controls.

These controls are the products of Frost, Centralab, Electrad, Glarostat and Yanley.

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.

Executiva, Otta Obtav and I amend		-		
Received Models	Oat. No.	Price	Receiver Models Cat. No.	Price
Reselver Rodels		- Control of	Brunswick Panatrope	.68
Acratone, 2, 8, 4, Midgets	6148	\$0.70	West of the Control o	90
All-American Lyric, K	6190	50	Walong Mint	.65
All-American Mohawk, 90 series, C6, J.	6142	.50	Timboro Bd 701	.85
All-American Mohawk, D	7093	1.40		.65
All-American Mohawk, 880	7094	70	Bush & Lane, 10 12	-
Amrad, 31, Bel Canto series	6186	.50	0	60
Amrad. 71, 7100, 70	6140	.59	Case, 80	.50
Aper, 80 series	6142	-50	William Tel CO	.79
Apex, 40 series	6138	.50	Illapion his has borressessessessessessessessessessessesses	70
Apex, 30 series	6142	.58	Charles 40 45	90
Atcaison, b and 6	6142	.50	Clarion 80	65
Atwater-Kent, 1928-29 Models	000 3241	1.10	Charion, 90	.85
Atwater-Kent, 61, 61A, 66	5695	1.75	(1) 0190	.50 1.25
Atwater-Kent. 37, 38, 36, 44, 40, 42, 52.	0119	.40	Colonial, 22 DC & 12 AC	
Atwater-Kent, H2, H1	*** 0100	.50	Colonial 32 32DC	1.50
Atwater Kent 55, 55C, 50, 66,	1144	.40	Colonial, 31, 33	.90
Atwater-Kent. 20 Series	1318	.95	Columbia Redio SC 8	
Atwater-Kent, St.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0010 1019	1.20	Columbia Phone. C11, 961, 902, C4, 980, K24, 0185	.50
Atwater-Kent. 80	**** 1360	1.20	Calumbia Phono. Cl. C2 C3	65
Atmater-Kent, S2DC:	1001	95	Columbia 32 34	.90
Atwater-Kent, 82Q. 85	TOOL	68	Columbia, 31, 33	.45
Attentor-Karat 53	0 2000	.95	Colonial 32	.35
Andiola Jr.	see William	.50	Franks 602 608 609 610	.35
Andiola, 20B and 7230	ser Order	.50	Crosley, 704, 705, 706, 706DC, 804, 702B 6115	.50
Audiola, 8430	0101	.50		.58
Audiola, 889	0100	-50		.85
Audiola, 31	6142	.50		.75
B			i traciev. 124 Tolic Contitor.	.65
W-11 14 AD AT AD	6190	.50		.35
Balkeit, A3, A5, A7		.50		.50
Malkeit, F		.50		.50
Balkeit, C		.50	Crosley, Roamio 6186 Crosley, 828, 408, 418, 458, 428. 7377	.68
Bosch, 73, 74, 20	0142	.50	Crosley, 828, 405, 418, 498, 428. 7407 Crosley, 706, Long Shaft. 7408	.80
Bonok 40	0174	.59	Crosley, 704, Short Shaft	.68
Bosch, 60, 62	6190	.50	Crosley, 26	.80
Bosch, 54, 48, 56, 49	5840	1.75	Crosicy, 20	
Boseh, 58	6115	.80	Darton Navigator 6142	.50
Bosch, 28, 29	0004	.90	Daylor 84C A5003 5001	.50
Rosch 5 20, 20J, 20K, 20L, 31, 32, 73	11101 1010	.90	Daylan, 5065	.50
ensch. SA	1000	.95	Dayfar 5057	.50
Perch 40	acces (Wall	1.08	1 Payeon 5051	.50
Busch 5A 7A 20, 20V, 20K, 201, 31, 3	6, 73 741%	.95	Thursday 5 AC	.50
Bosch 80, 84	4220	.68	De Wald, 632 6148	.70
Hoseb 100 Auto Roote		.68	IV CONTRACTOR	-
Beaudes Bio Bio Bio	esses Direct	-95	Edison, C1. C2. R1. R2 5378	.50
Rreuter-Tully 64() 641	1800	.70	I dicon Ahhev	.60
Rremer-Tilly, 7-70, 7-71	9572	.50	Water D7	.50
Bremer-Tully, 8-20, 8-21	**** 01-1	60	E-1- 924 AC	.50
Bremer-Tully, Counterpliase 5	**** 0102	.50	E-10 945	.85
Bremer-Tully, 81-82	**** 07.10	.65	Fels SC Radio	1.40
Bremer-Tully, S-81 82	5558	,90	I I I SG Combination	1.30
Browning-Drake, 34, 36, 38	0100		1 Fabl 91 99 94	.35
Beawning-Drake, 69	0 DITE		1 Earl. 31, 32, 41, 33,	.50
Browning-Drake, 79-71	**** 0108		1 Wast 914 194 995	40
Branswick 10			I Engreen FIGOA	.95
Brunswick, 18	110		Evarondy 1 2 3	90
Remarking SKR8, 3KR0, 3KR6	416		Eveready, 50 Series 5840	1.75
Brunswick, 5KR, 5KRO, 2KRO, 5KRO	A			7.00
Rrunswick, 5NC8, 5NO, 5NC8			Fada, 48, 49 7095	
Brunswick, PR-17-8, R-1, K1104	**** 910		Toda 40 40 Flesh	
Brunggrick 14 21 and 31	DADE		Wada 45 53 57	.35
Brunswick, S14, S21, 331, S81, S82	622		Fada, 1653 AB 7417	.68
Brunswick, 1930 Models			(Continued on next page)	
Brunswick, D11, 12, 16, 33	130	100		THE REAL PROPERTY.

MAIL ORDERS TO ATT See Terms on Page 3

Federated Purchaser Inc.

# Volume Control Guide

Fada, 35B. Fada, 265UA, 2622, 268CA, RP-65UA, RP-65CA, 262UA, 262CA, RP-65UA, 262CA, 262CA	at. No. Price 6185 .50 5157 .90 6139 .50
Fada, 2501A, 262, 255CA, RP-68UA, RP-65CA, 262CA, 262CA, RP-68UA, RP-65CA, 262CA, RP-68UA, 262CA, RP-65CA, 262CA, RP-68UA, 262CA, RP-65CA, 262CA, RP-66UA, RP-65CA, 262CA, RP-66UA, RP-	5157 .90 6139 .50
## Freedom   Fre	6139 .50
8521 A. RP-62UA. RP-62UA. SP6-82UA. SESSA	
Add	
CA45/72 Fada, 10, 11, 30, 31, 102, 11Z, 30Z, 31Z, 50, 70, 71, 72 Fada, 10, 71, 32, 16Z, 33Z, 18D.C. 5842 Fada, 20, 20Z, 25Z, 25Z, 15M, 15MZ. 5493 Federal, D. E. F. 6128 Federal, D. E. F. 6128 Federal, G. H. R. M. 6128 Federal, G. H. R. M. 6128 Freed, 58, 78, 79, 95. 7128 Federal, G. H. R. M. 6128 Freed, 78S, 79S, 955. 7128 Freed-Restanan, NR78, 79AO, NR90S, NR-95AC Freed-Elsemann, NR85DC, NR86AC, NS285 Freed-Elsemann, NR85DC, NR86BO, NR8-78BO, NR90S, NR-95AC Freed-Elsemann, NR85DC, NR86BO, NR8-78BO, NR9DC Freed-Elsemann, NR85DC, NR85BO, NR8-78BO, NR9DC, NR9DC, NR9DC, NR9DC, NR9DC, NR9DC, NR9DC, NR9D	6187 .50
Fada, 20, 21, 13, 30, 21, 102, 112, 302, 312, 50, 70, 71, 73, 21, 162, 112, 302, 312, 50, 50, 50, 50, 50, 50, 50, 50, 50, 50	6184 .50 5738 .35
10	5696 .35
Fada, 30, 12 32, 182, 32, 181, 181, 181, 184, 184, 184, 184, 184	5698 1.25
Federal, G. F. 6128 66 Federal, G. H. K. M. 6128 66 Freed, 65, 78, 79, 95. 7188 40 Freed, 65, 78, 79, 95. 7188 40 Freed, 65, 78, 79, 95. 7188 40 Freed, 785, 795, 95. 7188 40 Freed-Elsemann, NR78, 79AO, NR90S, NR-95AC Freed-Elsemann, NR78, 79AO, NR90S, NR-95AC Freed-Elsemann, NR85DC, NR86GDC, NR8 78DC, NR70DC 6189 50 Freed-Elsemann, NR85DC, NR86GDC, NR8 78DC, NR70DC 6189 50 Freshman, L, LS, G66S, H. K. 2962 80 Freshman, MR55, NR56 2820 820 Freshman, MR55, NR56 2820 80 Freshman, MR55, NR56 3820 820 Freshman, C, LS, G66S, H. K. 2962 80 Freshman, MR55, Q16, QD16S, 3767 35 French, Jesse Jr., G. 7119 1.35 French, Jesse Jr., G. 7119 1.35 French, Jesse, S, 5-093G 619 1.25 General Motors, 120, 130, 140 General Motors, 120, 130, 140 General Motors, S3A, S3B, S3B, S3B, S3B, S3B, S3B, S3B, S3B	7065 .60
Freed, 57, 8, 79, 95, 7188	7066 1.00
Freed, 65, 78, 79, 95. 71, 71, 71, 72, 73, 73, 73, 73, 73, 73, 73, 73, 73, 73	7067 .65 7068 1.00
Freed. 78S, 79S, 95S. 7199 40 Majestie, 100 55 Freed. Elsemann, NR78, 79AC, NR90S, NR-95AC	7068 1.00 7069 .65
### Preced Elsemann, NR78, 79AC, NR90AC, NR55 ### Freed Elsemann, NR50DC, NR50DC, NR55DC, NR55	5844 .35
Freed-Elsemann, NR55DC, NR56DC, NR5 58 58 Freed-Elsemann, NR55DC, NR56DC, NR79DC  Freed-Elsemann, NR55DC, NR56DC, NR56DC, NR79DC  Freed-Elsemann, NR55D, NR56  3820 .35  Freshman, L, LS, G66S, H, K. 2962 .60  Freshman, K, LS, G66S, H, K. 2962 .60  Freshman, K60S, G, 2N, M, N. 3772 .35  Freshman, R60S, G, 2N, M, N. 3772 .35  French, Jesse Jr., G. 7119 .75  French, Jesse Jr., G. 7119 .175  General Motors, A 6119 .25  General Motors, A 6535 .125  28 . 60 .10 .10 .10 .10 .10 .10 .10 .10 .10 .1	7401 .68
Freed-Elsemann, NR55DC, NR56DC, NR-78DC   NR79DC   6189   .50	7421 1.20
Freed, Fisemann, NR55, NR56	7422 1.20
Preed	5897 .75 6142 .50
Freshman	6175 .65
Freshman, K60S, G, 2N, M, N	and a second
Freshman, Q15, Q16, 3Q15, 3Q16, QD16S, 3767 35 French, Jesse Jr., G. 7119 1.75 French, Jesse, 8, 5-093G 6119 1.25 Garod, E., A. G. 6190 50 General Electric, H-31, H-51, H-71 6141 50 General Motors, A. 6141 50 General Motors, S1A, S1B, 16, 217, 219, 250 7122 50 General Motors, S1A, S1B, 216, 217, 219, 250 7122 50 General Motors, S1A, S1B, 216, 217, 219, 250 7122 50 General Motors, S1A, S2B, S2B, 252-3-4-5-6, 721 20 General Motors, S1A, S1B, 216, 217, 219, 250 7122 50 General Motors, S1A, S2B, 228, 252-3-4-5-6, 8 Phileo, 85, Phileo, 85, Phileo, 81, 512, 512, 512, 512, 512, 512, 512, 51	6185 .50
French, Jesse, 8, 5-083G 6119 1.25 French, Jesse, 8, 5-083G 6119 1.25 Garod, E. A. 6190 50 General Electric, H-31, H-51, H-71 6141 50 General Motors, A 5535 1.25 General Motors, 120, 130, 140 7120 1.50 General Motors, S3A, S3B, S3B, S3B, S2B, 252-3-4-5-6; 28 General Motors, S1A, S1B, 216, 217, 219, 250 7122 90 General Motors, 510A, 220 7418 1.05 General Motors, 510A, 220 7418 1.05 General Motors, 59A, 59B, 7319 1.05 Graybar, 700, 770, 980 6141 50 Graybar, 311 4165 45 Frebe, AH 3041 85 Frebe, AH 3041 85 Grebe, HS-4, Model 5 Tone Control 7060 1.50 Grebe, HS-4, Model 5 Tone Control 7062 65 Grebe, HS-4, Model 5 Tone Control 7062 65 Grebe, HS-4, 1, 2, 3, 4 Tone Control 7062 65 Grebe, HS-4, 1,	200
French, Jesse, 8, 5-093G 6119 1.25  Garod, E. A. 6190 5.0  General Electric, H-31, H-51, H-71 6141 5.0  General Motors, A. 5535 1.25  General Motors, 120, 130, 140 7120 1.50  General Motors, S3A, S3B, S2B, 252-3-4-5-6, 28  General Motors, S1A, S1B, 216, 217, 219, 250 7122 90  General Motors, S1A, S1B, 216, 217, 219, 210, 210, 210, 210, 210, 210, 210, 210	3763 .35
Garod, E. A. 6190 50 General Electric, H-31, H-51, H-71. 6141 50 General Motors, A. 5585 1.25 General Motors, A. 5585 1.25 General Motors, S3A, S3B, S2B, S2B, S52-3-4-5-6, 28 General Motors, S1A, S1B, 216, 217, 219, 250 7122 90 General Motors, S1A, S1B, 216, 217, 219, 250 7122 90 General Motors, S1A, S1B, 226, 217, 219, 250 7122 90 General Motors, S1A, S1B, 226, 217, 219, 250 7122 90 General Motors, S1A, S1B, 216, 217, 219, 250 7122 90 General Motors, S5A, S9B, 7319 1.05 Graybar, 700, 770, 900 6141 50 Graybar, 600 2956 45 Graybar, 711 4165 45 Febe, SK4 8968 50 Graybar, 311 4165 45 Febe, AC7 Grebe, De Luxe, AC6 8904 60 Grebe, HS-4, Model 5 Tone Control 7060 1.50 Grebe, HS-4, Model 5 Tone Control 7060 1.50 Grebe, HS-4, 1, 2, 3, 4 Tone Control 7062 65 Grebe, HS-4, 1, 2, 3, 4 Tone Control 7063 66 Grebe, HS-4, 1, 2, 3, 4 Tone Control 7063 66 Grebe, HS-4, 1, 2, 3, 4 Tone Control 7063 66 Grebe, HS-4, 1, 2, 3, 4 Tone Control 7063 66 Grebe, HS-4, 1, 2, 3, 4 Tone Control 7063 66 Grebe, HS-4, 1, 2, 3, 4 Tone Control 7063 66 Grebe, HS-4, 1, 2, 3, 4 Tone Control 7063 67 Grebe, HS-4, 1, 2, 3, 4 Ton	6603 .55
Garod, E. A. 6190 50 General Electric, H-31, H-51, H-71 6141 50 General Motors, A 5555 1.25 General Motors, 120, 130, 140 7120 1.50 General Motors, 120, 130, 140 7120 1.50 General Motors, S3A, S3B, S2B, 252-3-4-5-6, 28 General Motors, S1A, S1B, 216, 217, 219, 250 7122 90 General Motors, S1A, S1B, 216, 217, 219, 250 7122 90 General Motors, 510A, 220 7413 1.05 General Motors, 59A, 59B 7319 1.05 Graybar, 700, 770, 900 6141 5.0 Graybar, 700, 770, 900 6141 5.0 Graybar, 311 4165 45 Graybar, 311 4165 45 Grebe, AH 3041 3.5 Grebe, AH 3041 3.5 Grebe, BS-4, Model 5 7008 7059 1.00 Grebe, HS-4, Model 5 Tone Control 7060 1.50 Grebe, HS-4, Model 5 Tone Control 7060 1.50 Grebe, HS-4, Model 5 Tone Control 7060 1.50 Grebe, HS-4, 1, 2, 3, 4 Tone Control 7062 65 Grebe, HS-4, 1, 2, 3, 4 Tone Control 7063 265 Grebe	3040 .66
General Motors, A	6142 .50
General Motors, 120, 130, 140.  General Motors, S3A, S3B, S2B, 252-3.4-5-6, 28  General Motors, S1A, S1B, 216, 217, 219, 250 7122 50  General Motors, 510A, 220.  General Motors, 50A, 59B.  Graybar, 700, 770, 900.  Graybar, 600.  Graybar, 311.	6185 .50
General Motors, S3A, S3B, S2B, 252-3-4-5-6, 28 General Motors, S1A, S1B, 216, 217, 219, 250 General Motors, S1A, S1B, 216, 217, 219, 250 General Motors, S1A, S2B, 226, 217, 219, 250 General Motors, S1A, S2B, 226, 217, 219, 250 General Motors, S1A, S2B, 216, 217, 219, 250 General Motors, S1A, S2B, 226, 217, 219, 250 General Motors, S1A, S2B, 216, 217, 219, 250 Graybar, 700, 770, 900 6141 50 Graybar, 700, 770, 900 6141 50 Graybar, 311 65 Graybar, 311 66 Graybar, 311 67 Grebe, AHI 68 Grebe, AC7 68 Grebe, AC7 69 Grebe, BS-4, Model 5 Grebe, HS-4, Model 5 Grebe, HS-4, Model 5 Grebe, HS-4, Model 5 Grebe, HS-4, 1, 2, 3, 4 Grebe, HS-4, 1, 2, 3, 4 Tone Control 7063 1.60 Grebe, HS-4, 1, 2, 3, 4 Tone Control 7063 1.60 Grebe, HS-4, 1, 2, 3, 4 Tone Control 7063 1.60 Grebe, HS-4 1.60 Grebe, HS-6 1.60 Grebe, HS-6 1.60 Grebe, HS-6 1.60 Grebe, HS-1 1.60 Grebe, HS-6 1.60 Grebe, H	6190 .50
28	2200
General Motors, SIA, SIB, 216, 217, 219, 250 7122 50 General Motors, 510A, 220 7418 1.05 General Motors, 59A, 59B, 7319 1.05 Graybar, 700, 770, 990 6141 50 Graybar, 600 2956 45 Graybar, 311 4165 45 rebe, AHI 3041 85 Greek, AHI 3041 85 Greek, AC7 Greek, De Luxe, AC6 3040 60 Greek, HS-4, Model 5 7066 1.50 Greek, HS-4, Model 5 7066 1.50 Greek, HS-4, Model 5 7066 1.50 Greek, HS-4, I, 2, 3, 4 Tone Control 7060 1.50 Greek, HS-4, 1, 2, 3, 4 Tone Control 7062 65 Greek, HS-4,	T283 .60
General Motors, 59A, 69B	6118 1.25
Graybar, 700, 770, 900. 6141 50 Graybar, 600 2956 45 Graybar, 311 4165 45 rebe, AHI 3041 85 Greek, AHI 3041 85 Greek, AC7 Greek, De Luxe, AC6 3040 60 Greek, HS-4, Model 5 7000 7000 1.50 Greek, HS-4, Model 5 7000 7000 1.50 Greek, HS-4, 1, 2, 3, 4 7000 1.50 Greek, HS-4, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	7404 1.20
Graybar, 600	7405 1.20 6189 .50
Graybar, 311	11100 1001
rebe, AHI       3041       .85       PHot, Auto 180       6         Grebe, SK4       3698       .50       Pilot, Pflotone, K168, K117       6         Grebe, AC7       3040       .60       Radiola, 33, 33 D.C.       R         Grebe, HS-4, Model 5       7059       1.00       Radiola, All combinations       3         Grebe, HS-4, Model 5       7060       1.50       Radiola, All combinations       3         Grebe, HS-4, Nodel 5       7060       1.50       Radiola, 48, 42       5         Grebe, HS-4, 1, 2, 3, 4       7061       1.60       Radiola, 48, 42       5         Grebe, HS-4, 1, 2, 3, 4       7062       .65       Radiola, 60, 62, 66       8         Grebe, HS-4, 1, 2, 3, 4       7062       .65       Radiola, 60, 62, 66       8         Grebe, HS-4, 1, 2, 3, 4       7062       .65       Radiola, 60, 62, 66       8         Grebe, HS-4, 1, 2, 3, 4       7063       .90       Radiola, 60, 62, 66       8         Grebe, HS-4       7063       .90       Radiola, 80, 82, 86       8         Howard, Green Diamond, S.G.A., S.G.C.       5160       1.25       Radiola, 21, 22, 45DC       6         Howard, D4       7054       .85       Radiola, R7A, 7DC, 9DC, Superette	618650
Crebe, SK4     3698     50       Grebe, AC7     3039     60       Grebe, De Luxe, AC6     3040     60       Grebe, HS-4, Model 5     7059     1.60       Grebe, HS-4, Model 5     7060     1.50       Grebe, HS-4, 1, 2, 3, 4     7061     1.60       Grebe, HS-4, 1, 2, 3, 4     7062     65       Grebe, HS-4, 1, 2, 3, 4     7062     65       Grebe, HS-4, 1, 2, 3, 4     7062     65       Grebe, HS-4, 1, 2, 3, 4     7063     90       Guibransen, 8, 9     6142     50       Radiola, 60, 62, 66     8       Radiola, 80, 82, 85     8       Radiola, 44, 46, 47     3       Howard, Green Diamond, S.G.A., S.G.C.     5160     1.25       Radiola, 21, 22, 46DC     6       Howard, 135, 395, 445, 495     6141     50     Radiola, 21, 22, 46DC       Howard, D4     7064     .85     Radiola, R7A, 7DC, 9DC, Superette     70       Jackson-Bell, 62     888     96     Radiola, R5, R5X     70       Radiola, R7A, 7DC, 9DC, Superette     70       Radiola, R7A, 7DC, 9DC, Superette     70       Radiola, R6     E8	6188 .50
Grebe, AC7 Grebe, De Luxe, AC6 Grebe, HS-4, Model 5 Grebe, HS-4, Model 5 Grebe, HS-4, Model 5 Grebe, HS-4, Model 5 Grebe, HS-4, 1, 2, 3, 4 Grebe, HS-4	6142 .50
Grebe, HS-4, Model 5 Tone Control	
Grebe, HS-4, Model 5 Tone Control	3762 .60
Grebe, HS-4, 1, 2, 3, 4	3794 .45 5741 .50
Grebe, HS-4, 1, 2, 3, 4 Tone Control. 7062 .65 Radiola, 60, 62, 66 .6 Radiola, 60, 62, 66 .	5158 1.45
Grebe, HS-4	E138 .50
Howard, Green Diamond, S.G.A., S.G.C. 5160 1.25 Radiola, 44, 45, 47 3 3 46 47 45 45 45 45 45 45 45 45 45 45 45 45 45	3798 .50
Howard, Green Diamond, S.G.A., S.G.C. 5160 1.25 Radiola, 21, 22, 46DC 6 Howard, 135, 395, 445, 495. 6141 50 Radiola, R10, P11, RAE56, RAE18 70 Howard, D4 7064 85 Radiola, R10, P11, RAE56, RAE18 70 Jackson-Bell, 62 8588 90 Radiola, R7A, TDC, 9DC, Superette, 71 Radiola, R5, R5X 72 Radiola, R5, R5X 73	6141 .50
Howard, 135, 395, 445, 495. 6141 .59 Radiola, 18, 50, 51, 1810C .4  Howard, D4 .7064 .85 Radiola, R10, R11, RAE56, RAE18 .70  Jackson-Bell, 62 . 8588 .90 Radiola, R5, R5X71  Radiola, R5, R5X71  Radiola, R5, R5X71	3785 45
Howard, D4	6186 .50 4165 .45
Jackson-Bell, 62	7076 .75
Radiette, F14	7071 .60
Follows con for the case con the control of the con	7672 .76
REMARKS NAV. NAV. NAV. NAV. NAV. NAV. NAV. NAV.	6146 .70
	7403 .95 7389 .68
40, 22, 26, 32, 30	7389 .68
Kennedy, 60, 80 6190 .50   Sentinel, 11, 12, 15, 16, 104 103, 440, 444	
Kennedy, 56	6142 .50
Kennedy, 52A, 62 (tone control) 7392 .80   Sentinel, 108A, 109, 110, 111	7073 .90
Kennedy, 56. (tone control)	7074 1.00
	3039 .50
King, J. H	2958 .50
Ning, Edv. St. Fun, 97, 98, Monarch 5142 .50   Senora, 2RP25, 3R 4R 5R Age Age 195	6142 .50
Kolster (Brandes), K20, K21, K23, K24, K28, A36, A46, A46, A46, 44	5378 .50
K22, K25, K27, K42, K45, B10, B15, B16. 5725 .95   Sparton, 110, 931, 101, 103, 109, 301, 591,	
Koister (Brandes), K42, 43, 45	658.9 .90
Sparton, 600, 610, 620, 737, 740, 750, 574, 870,	
Lang, BA5AC, BD6DC	6590 .99
Printer Philippens Company of the Printer Prin	7077 .89
Console	200

MAIL ORDERS TO AND Federated Purchaser Inc.

or to our nearest branch 25 PARK PLACE, N. Y. C.

# 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 originals and in many cases the safety factor has been brought up above normal load.

brought up above normal load.			7000	ı
Make Models and Values	Ne	No.	Price	ı
	Part	Cat.	A COLUMN TO THE REAL PROPERTY OF THE PARTY O	ı
Amrad, A.C.—1,080 ohms		6857	.75	ı
В				ı
Balkeit, AB6, 180A, 180B - 10,800			1000	
Allarias		6858	.75	ı
13 13 13 13 13 13 13 13 13 13 13 13 13 1		6381	.95	ı
Balkeit, C-4,370 ohm Brandes, B11-4,650 ohm	4919	3922	.40	ı
Brandes, B-10		5756	.75	ı
Brandes, B15, B16-2.955 ohms		6859	1.00	۱
Bosch, 48, 49		5756 5752 5848	1.00	ı
Bosch, 50, 61—9.000 ohm  Bosch, 54 D.C.—20 ohm, Edison Base Bremer-Tully, 820A, 8-21A — 13,400 ohms  Brunswick, 3, 3, 10, 11, 13—6,770 ohms Brunswick, 3ER8—6,265 ohms  Brunswick, 3ER8—6,265 ohms		5848	.85	ı
Bremer-Tully, 820A, 8-21A - 13,400		5750	.75	ı
ohms a no 11 12 6 770 ohms		5758 6860 6861	1.00	l
Brunswick, 3, 8, 10, 11, 13-0, 10 bittle		6861	1.00	ı
Brunswick, SRU, X902, 3NW8-				-
Brunswick, SRU, X902, 3NW8— 7,780 chms 2,040 chms		6862 6863	1.00	1
3,040 ohms		6863 6864 6865	1.00	I
Brunswick, PR6—11,700 ohms		6865	1.00	1
C				1
Colonial, 33, 34, 119,000 ohms tapped		4017	20	1
at 60,000		5453	.95	ı
Colonial, 32 D.C. 34.9 ohm		5453 5727	.75	ł
Colonial, 32, 33, 34—122,000 ohm Colonial, 36, 39 A.C.—165,000 ohms			20	ı
tapped at 65,000		5636	.50	1
Colonial, 33, 34, 35 — 80,000 onnis		7199 3969	.35	1
Colonial, 33, 34-420 ohm C.T		3969	.25	1
tapped at 65,000		7205 5674	3.00	1
Colonial, 31, A.C			.85	ı
Colonial 28—7.200 ohm		5856 6378	.75	H
Colonial, 32, 1,000 chm blas Colonial, 36, D.C.		3924 7196	.10	ı
Colonial, 36, D.C.		4014	.39	I
Columbia, C1, C3, 960		3905	.40	1
Columbia, Cl. C3-7.120 oilms	4030	4014	.39	1
Colonial 95050.000 0hm	4810	5517 5716	.30	ı
Columbia, 902, 950, 980—13-110 ohm.	5478	5521 5522		1
Columbia, 930—2,060 ohm Columbia, 980—6,155 ohm		5522	.40	1
Columbia, 300, 930, 500, 2,640 ohm Columbia, 902—430 ohm	4290	5523 5527	.40	ı
Columbia Ch 961-8 Uni Ottils	4230	GREE	7.5	ı
Columbia, 902, 930, 980-2,220 ohms		6867 6868	.75	ı
Columbia, 931—9,035 ohms		6088	1.00	ı
Columbia, 940—2.955 chms Crosley, 602, 740—5,000 ohm, tapped				
at 3475		3965	.50	
at 3475 Crosley, 50, 102—25,867 ohms		3965 6710 6711	.50	
Crosley, 40C, 601, 102C -6.515 ohms Crosley, 77, 77-1-4,295 ohms		6870	.50 .95	
Crosley, 602 704—650 ohms		6871	.75	
Make Models and Values	No. Part	No. Cat.	Price	
No.			100	
Edison, R-1, R-2, C-2-13,400 ohm Earl, Model 31-32, 325-41, 5,000 ohm.		5520	.75 .35	
		3907	.00	
Freed Model 65-78-79-95-90, 4,000-	7 %			
750 ohm		3840	.45	
Freed-Eisemann, 78, 79, 95 - 5,000		9007	95	
ohm		3907	-35	
	- A - A - A - A - A - A - A - A - A - A	-		

Freed-Eisemann, Model NR80, 1.750-		
2 600 ohms	3842	.60
Freed-Eisemann, Model NR80, 4.000-	The same of	
350 ohms	3843	.60
Freed-Eisemann, Model NR85, 1,000-	12014	00
350-2,000 ohms	3844	.80
Freed-Eisemann, NR70, 85	5765 5766	.80
Freed-Lisemann, NR80		.80
Freed-Eisemann, 411 B Eliminator Freshman, All N Models—18,000 ohms	3963	.65
Freshman, All N Models—10,000 olinis Freshman, G—10,950 ohms	3966	.65
C10_6 560 ohms taoped	10 (40) 5 10	
Freshman, G10—6,560 ohms tapped at 1,100, 1,500, 1,460, 1,500, 1,000.  Freshman, G60S—113,000 ohms	3918	.75
Freshman G60S113.000 ohms	5762	.75
Eveready—8.925 ohms	6872	1.00
G		
	6393	1.50
General Electric, P41	01100	
tapped at 800, 59, 1,863, 2,000, 4,500 14	547 3169	.80
General Motors, 5057—5,185 ohms	6385	1.25
General Motors, 5524, 5525 — 6,300		1 1
ohms	6873	.75
Coperal Motors 5050-18,530 ohms	6874	1.00
Graybar, 678 Grebe, SK4—D.C. Filament Resistor.	6398	1.20
Grebe, SK4-D.C. Filament Resistor.	4245	2.00
Grebe, AC6-7,090 ohms	5768	
Grebe, AC6-9,450 ohms	6512	1.00
K	THE RESERVE	147
Kolster, 6-H, K-5	5513	.65
Kolster, 6J, 6K, 6L, 6F, 6R — 7,120	COLUMN TO SERVICE	
olims	441 4014	.39
Kolster, K42-3.580 ohms 5	071 5516	.40
Kolster, K38—4,430 ohms	5515	.50
Kolster, K24, K23-7,835 ohms	1983 3905	.40
Kaletor 6.1-6.560 ohms	3918	.75
Kolster, 6K, K20, K22, K25, K27 —	The Contract of	00
7 120 ohms	4014	.39
Kolster, K23-25,000 ohms	4024	.30
Kolster, 6H, 6K-Fixed Resistance	1713 4025	.25
Kolster, K43-2,980 chms	5864	1.10
L		
Twee (Rudolph Wurlitzer), 6,200 tap-		
Lyric (Rudolph Wurlitzer), 6,200 tap- ped at 2,000, 1,000, 3,000, 900Y-439	-R6 3482	.80
Lyric (Rudolph Wurlitzer), 6,200 tap- ped at 2,000, 1,000, 3,000, 900Y-439	)-R6 3482	.80
Lyrie (Rudolph Wurlitzer), 6,200 tap- ped at 2,000, 1,000, 3,000, 900Y-439		.80
Lyrie (Rudolph Wurlitzer), 6,200 tap- ped at 2,000, 1,000, 3,000, 900Y-439 M Majestic, 9P6—3,600 ohm Resistor		
Lyrie (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900Y-439  Majestic, 9P6—3,600 ohm Resistor Majestic, 30—10,471 ohms	399 5466	.25
Lyrie (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900Y-439  Majestic, 9P6—3,600 ohm Resistor  Majestic, 30—10,471 ohms	399 5466	.25
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900Y-439  Majestic, 9P6—3,600 ohm Resistor  Majestic, 30—10,471 ohms	399 5466 6875	.25 1,00
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900Y-439  Majestic, 9P6—3,600 ohm Resistor  Majestic, 30—10,471 ohms  Philoo, 76, 77, 77A—4,900 B Resistor	399 5466 6875 3865 3987	.25
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900Y-439  Majestic, 9P6—3,600 ohm Resistor  Majestic, 30—10,471 ohms  P  Phileo, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500	399 5466 6875 3865 3987	.35 1,00 .80
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900Y-439  Majestic, 9P6—3,600 ohm Resistor  Majestic, 30—10,471 ohms  P  Phileo, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500	399 5466 6875 3865 3987	.80 .95 .60
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900Y-439  Majestic, 9P6—3,600 ohm Resistor  Majestic, 30—10,471 ohms  P  Phileo, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500	399 5466 6875 3865 3987	.80 .95 .60
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900Y-439  Majestic, 9P6—3,600 ohm Resistor  Majestic, 30—10,471 ohms  Philoo, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500	399 5466 6875 3865 3987 088W 5568 4230 3880 5771	.80 .95 .60
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439  Majestic, 9P6—3,600 ohm Resistor  Majestic, 30—10,471 ohms  Phileo, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500  Phileo, 511, 521, 531, 551, 571, 541, 561, 581—23,965 ohms  Phileo, 20, 20A, 220, 220A—5,102 ohms  Phileo, 65  Phileo, 87  Polydyne—Using 250 Tube	399 5466 6875 3865 3987 088W 5568 4230 3880 5771 5772 3963	.80 .95 .60 .75 .75
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439  Majestic, 9P6—3,600 ohm Resistor  Majestic, 30—10,471 ohms  Phileo, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500  Phileo, 511, 521, 531, 551, 571, 541, 561, 581—23,965 ohms  Phileo, 20, 20A, 220, 220A—5,102 ohms  Phileo, 65  Phileo, 87  Polydyne—Using 250 Tube	399 5466 6875 3865 3987 088W 5568 4230 3880 5771 5772	.80 .95 .60 .75
Lyrie (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900Y-439  M Majestic, 9P6—3,600 ohm Resistor  Majestic, 30—10,471 ohms  Phileo, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500  Phileo, 511, 521, 531, 551, 571, 541, 581, 581—23,965 ohms  Phileo, 20, 20A, 220, 220A—5,102 ohms  Phileo, 87	399 5466 6875 3865 3987 088W 5568 4230 3880 5771 5772 3963	.80 .95 .60 .75 .75
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439  Majestic, 9P6—3,600 ohm Resistor  Majestic, 30—10,471 ohms  P  Phileo, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500  Phileo, 511, 521, 531, 551, 571, 541, 551, 581—23,965 ohms  Phileo, 20, 20A, 220, 220A—5,102 ohms  Phileo, 65  Phileo, 87  Polydyne—Using 250 Tube  Polydyne—Using 171 Tube	399 5466 6875 3865 3987 088W 5568 4230 3880 5771 5772 3963 3966	.80 .95 .60 .75 .75 .65
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439  Majestic, 9P6—3,600 ohm Resistor  Majestic, 30—10,471 ohms  P Phileo, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500  Phileo, 511, 521, 531, 551, 571, 541, 561, 581—23,965 ohms	399 5466 6875 3865 3987 088W 5568 4230 3880 5771 5772 3963 3966 2571 3871	.80 .95 .60 .75 .75
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439  Majestic, 9P6—3,600 ohm Resistor  Majestic, 30—10,471 ohms  Phileo, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500  Phileo, 511, 521, 531, 551, 571, 541, 561, 581—23,965 ohms  Phileo, 20, 20A, 220, 220A—5,102 ohms  Phileo, 65  Phileo, 65  Phileo, 87  Polydyne—Using 250 Tube  Polydyne—Using 171 Tube  RCA, 33 D.C.—584 ohm tapped at 80.  RCA, 18, 33, 51—3,940 ohms	399 5466 6875 3865 3987 088W 5568 4230 3880 5771 5772 3963 3966 2571 3871	.80 .95 .60 .75 .75 .65
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900Y-439  Majestic, 9P6—3,600 ohm Resistor  Majestic, 30—10,471 ohms  Phileo, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500  Phileo, 511, 521, 531, 551, 571, 541, 561, 581—23,965 ohms  Phileo, 20, 20A, 220, 220A—5,102 ohms  Phileo, 87  Polydyne—Using 250 Tube  Polydyne—Using 171 Tube  RCA, 33 D.C.—584 ohm tapped at 80. RCA, 18, 33, 51—3,940 ohms  RCA, 17—voltage divider, 8,195 ohms.	399 5466 6875 3865 3987 088W 5568 4230 3880 5771 5772 3963 3966 2571 3871 2242 3872	.80 .95 .60 .75 .65 .65
Lyrie (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439  Majestic, 9P6—3,600 ohm Resistor  Majestic, 30—10,471 ohms  Phileo, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500  Phileo, 511, 521, 531, 551, 571, 541, 551, 581—23,965 ohms  Phileo, 20, 20A, 220, 220A—5,102 ohms  Phileo, 65  Phileo, 87  Polydyne—Using 250 Tube  Polydyne—Using 171 Tube  RCA, 33 D.C.—584 ohm tapped at 80.  RCA, 18, 33, 51—3,940 ohms  RCA, 17—voltage divider, 8,195 ohms.  RCA, 44, 46, 47—8,250 ohms, tapped at 2750, 900, 3500, 1100	399 5466 6875 3865 3987 088W 5568 4230 3880 5771 5772 3963 3966 2571 3871 2242 3872	.80 .95 .60 .75 .75 .65 .65
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439  Majestic, 9P6—3,600 ohm Resistor  Majestic, 30—10,471 ohms  Phileo, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500	399 5466 6875 3865 3987 088W 5568 4230 3880 5771 5772 3963 3966 2571 3871 2242 2872 3030 2543 6396	.80 .95 .60 .75 .75 .65 .65
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439  Majestic, 9P6—3,600 ohm Resistor  Majestic, 30—10,471 ohms  P  Phileo, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500  Phileo, 511, 521, 531, 551, 571, 541, 551, 581—23,965 ohms  Phileo, 20, 20A, 220, 220A—5,102 ohms  Phileo, 87  Polydyne—Using 250 Tube  Polydyne—Using 171 Tube  R  RCA, 33 D.C.—584 ohm tapped at 80.  RCA, 18, 33, 51—3,940 ohms  RCA, 17—voltage divider, 8,195 ohms.  RCA, 44, 46, 47—8,250 ohms, tapped at 2750, 900, 3500, 1100  RCA, 33 D.C., 46 D.C.—48 ohms, tapped at 16	399 5466 6875 3865 3987 088W 5568 4230 3880 5771 5772 3963 3966 2571 3871 2242 2872 3030	.80 .95 .60 .75 .65 .65
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439  Majestic, 9P6—3,600 ohm Resistor  Majestic, 30—10,471 ohms  P  Phileo, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500  Phileo, 511, 521, 531, 551, 571, 541, 551, 581—23,965 ohms  Phileo, 20, 20A, 220, 220A—5,102 ohms  Phileo, 65  Phileo, 87  Polydyne—Using 250 Tube  Polydyne—Using 171 Tube  RCA, 33 D.C.—584 ohm tapped at 80.  RCA, 18, 33, 51—3,940 ohms  RCA, 17—voltage divider, 8,195 ohms.  RCA, 17—voltage divider, 8,195 ohms.  RCA, 44, 46, 47—8,250 ohms, tapped at 2750, 900, 3500, 1100  RCA, 33 D.C., 46 D.C.—48 ohms, tapped at 16  RCA, 105 Speaker—3,825 ohms, tapped at 16  RCA, 105 Speaker—3,825 ohms, tapped at 16  RCA, 105 Speaker—3,825 ohms, tapped	399 5466 6875 3865 3987 088W 5568 4230 3880 5771 5772 3963 3966 2571 3871 2242 2872 3030 2543 6396 2582	.80 .95 .60 .75 .75 .65 .65
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439  Majestic, 9P6—3,600 ohm Resistor  Majestic, 30—10,471 ohms  Philoo, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500  Philoo, 511, 521, 531, 551, 571, 541, 551, 581—23,965 ohms  Philoo, 20, 20A, 220, 220A—5,102 ohms  Philoo, 65  Philoo, 87  Polydyne—Using 250 Tube  Polydyne—Using 171 Tube  RCA, 33 D.C.—584 ohm tapped at 80.  RCA, 18, 33, 51—3,940 ohms  RCA, 17—voltage divider, 8,195 ohms.  RCA, 44, 46, 47—8,250 ohms, tapped at 2750, 900, 3500, 1100  RCA, 33 D.C., 46 D.C.—48 ohms, tapped at 16  RCA, 105 Speaker—3,825 ohms, tapped at 16  RCA, 105 Speaker—3,825 ohms, tapped at 16	399 5466 6875 3865 3987 088W 5568 4230 3880 5771 5772 3963 3966 2571 3871 2242 3872 3030 2543 6396 2582 6554	.80 .95 .60 .75 .75 .65 .65 .25 .30 .60
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439  Majestic, 9P6—3,600 ohm Resistor  Majestic, 30—10,471 ohms  P  Phileo, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500  Phileo, 511, 521, 531, 551, 571, 541, 551, 581—23,965 ohms  Phileo, 20, 20A, 220, 220A—5,102 ohms  Phileo, 87  Polydyne—Using 250 Tube  Polydyne—Using 250 Tube  RCA, 33 D.C.—584 ohm tapped at 80. RCA, 18, 33, 51—3,940 ohms  RCA, 17—voltage divider, 8,195 ohms. RCA, 44, 46, 47—8,250 ohms, tapped at 2750, 900, 3500, 1100  RCA, 33 D.C., 46 D.C.—48 ohms, tapped at 16  RCA, 105 Speaker—3,825 ohms, tapped at 1050, 1475  RCA, 41, Receptor Pack—25,300 ohms	399 5466 6875 3865 3987 088W 5568 4230 3880 5771 5772 3963 3966 2571 3871 2242 3872 3030 2543 6396 2582 6554 5867	.80 .95 .60 .75 .65 .65 .65 .30 .60 1.05
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439  Majestic, 9P6—3,600 ohm Resistor  Majestic, 30—10,471 ohms  P  Phileo, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500  Phileo, 511, 521, 531, 551, 571, 541, 551, 581, 581—23,965 ohms  Phileo, 20, 20A, 220, 220A—5,102 ohms  Phileo, 87  Polydyne—Using 250 Tube  Polydyne—Using 171 Tube  RCA, 33 D.C.—584 ohm tapped at 80.  RCA, 18, 33, 51—3,940 ohms.  RCA, 44, 46, 47—8,250 ohms, tapped at 16  RCA, 30 D.C., 46 D.C.—48 ohms, tapped at 16  RCA, 105 Speaker—3,825 ohms, tapped at 1050, 1475  RCA, 41, Receptor Pack—25,300 ohms  RCA, 41, Receptor Pack—25,300 ohms  RCA, 41, Receptor Pack—25,300 ohms	399 5466 6875 3865 3987 088W 5568 4230 3880 5771 5772 3963 3966 2571 3871 2242 2872 3030 2543 6396 2582 6554 5867 5784	.80 .95 .60 .75 .75 .65 .65 .25 .30 .60 1.05
Lyrie (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439  Majestic, 9P6—3,600 ohm Resistor  Majestic, 30—10,471 ohms  Phileo, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500  Phileo, 511, 521, 531, 551, 571, 541, 561, 581—23,965 ohms  Phileo, 20, 20A, 220, 220A—5,102 ohms  Phileo, 65  Phileo, 87  Polydyne—Using 250 Tube  Polydyne—Using 171 Tube  RCA, 33 D.C.—584 ohm tapped at 80.  RCA, 18, 33, 51—3,940 ohms  RCA, 17—voltage divider, 8,195 ohms.  RCA, 44, 46, 47—8,250 ohms, tapped at 2,750, 900, 3500, 1100  RCA, 33 D.C., 46 D.C.—48 ohms, tapped at 16  RCA, 105 Speaker—3,825 ohms, tapped at 1050, 1475  RCA, 41, Receptor Pack—25,300 ohms  RCA, 41, Receptor Pack—25,300 ohms  RCA, 30A—6,700 ohms	399 5466 6875 3865 3987 088W 5568 4230 3880 5771 5772 3963 3966 2571 3871 2242 3872 3030 2543 6396 2582 6554 5867	.80 .95 .60 .75 .75 .65 .65 .30 .60 1.05
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439  Majestic, 9P6—3,600 ohm Resistor  Majestic, 30—10,471 ohms  Phileo, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500  Phileo, 511, 521, 531, 551, 571, 541, 551, 581—23,965 ohms  Phileo, 20, 20A, 220, 220A—5,102 ohms  Phileo, 65  Phileo, 87  Polydyne—Using 250 Tube  Polydyne—Using 171 Tube  RCA, 33 D.C.—584 ohm tapped at 80.  RCA, 18, 33, 51—3,940 ohms  RCA, 17—voltage divider, 8,195 ohms.  RCA, 44, 46, 47—8,250 ohms, tapped at 2,750, 900, 3500, 1100  RCA, 33 D.C., 46 D.C.—48 ohms, tapped at 16  RCA, 105 Speaker—3,825 ohms, tapped at 16  RCA, 41, Receptor Pack—25,300 ohms  RCA, 41, Receptor Pack—25,300 ohms  RCA, 30A—6,700 ohms  RCA, 30A—6,700 ohms  RCA, 51—curlent apped 2, 997, 860—400	399 5466 6875 3865 3987 088W 5568 4230 3880 5771 5772 3963 3966 2571 3871 2242 3872 3030 2543 6396 2582 6554 5867 5784 5785	.80 .95 .60 .75 .75 .65 .65 .25 .30 .60 1.05 1.25
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439  Majestic, 9P6—3,600 ohm Resistor  Majestic, 30—10,471 ohms  P  Phileo, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500  Phileo, 511, 521, 531, 551, 571, 541, 551, 581—23,965 ohms  Phileo, 20, 20A, 220, 220A—5,102 ohms  Phileo, 87  Polydyne—Using 250 Tube  Polydyne—Using 171 Tube  RCA, 33 D.C.—584 ohm tapped at 80. RCA, 18, 33, 51—3,940 ohms  RCA, 17—voltage divider, 8,195 ohms. RCA, 44, 46, 47—8,250 ohms, tapped at 2750, 900, 3500, 1100  RCA, 33 D.C., 46 D.C.—48 ohms, tapped at 16  RCA, 105 Speaker—3,825 ohms, tapped at 16  RCA, 105 Speaker—3,825 ohms, tapped at 1050, 1475  RCA, 41, Receptor Pack—25,300 ohms  RCA, 30A—6,700 ohms  RCA, 504—7,780 ohms  RCA, 50A—6,700 ohms  RCA, Electrola, AP952, 997, 860—400	399 5466 6875 3865 3987 088W 5568 4230 3880 5771 5772 3963 3966 2571 3871 2242 2872 3030 2543 6396 2582 6554 5867 5784 5785 6398	.80 .95 .60 .75 .75 .65 .65 .25 .30 .60 1.05 1.45 1.00 1.25 1.25
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439  Majestic, 9P6—3,600 ohm Resistor  Majestic, 30—10,471 ohms  P  Phileo, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500  Phileo, 511, 521, 531, 551, 571, 541, 551, 581—23,965 ohms  Phileo, 20, 20A, 220, 220A—5,102 ohms  Phileo, 87  Polydyne—Using 250 Tube  Polydyne—Using 171 Tube  RCA, 33 D.C.—584 ohm tapped at 80. RCA, 18, 33, 51—3,940 ohms  RCA, 17—voltage divider, 8,195 ohms. RCA, 44, 46, 47—8,250 ohms, tapped at 2750, 900, 3500, 1100  RCA, 33 D.C., 46 D.C.—48 ohms, tapped at 16  RCA, 105 Speaker—3,825 ohms, tapped at 16  RCA, 105 Speaker—3,825 ohms, tapped at 16  RCA, 41, Receptor Pack—25,300 ohms  RCA, 30A—6,700 ohms  RCA, 44, 46, 47—2,580 ohms  RCA, 44, 46, 47—2,580 ohms	399 5466 6875 3865 3987 088W 5568 4230 3880 5771 5772 3963 3966 2571 3871 2242 2872 3030 2543 6396 2582 6554 5867 5784 5785 6398 6876	.80 .95 .60 .75 .75 .65 .65 .25 .30 .60 1.05 1.25 1.25
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439  Majestic, 9P6—3,600 ohm Resistor  Majestic, 30—10,471 ohms  Philoo, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500  Philoo, 511, 521, 531, 551, 571, 541, 551, 581—23,965 ohms  Philoo, 20, 20A, 220, 220A—5,102 ohms  Philoo, 65  Philoo, 87  Polydyne—Using 250 Tube  Polydyne—Using 171 Tube  RCA, 33 D.C.—584 ohm tapped at 80.  RCA, 17—voltage divider, 8,195 ohms.  RCA, 17—voltage divider, 8,195 ohms.  RCA, 44, 46, 47—8,250 ohms, tapped at 16  RCA, 33 D.C., 46 D.C.—48 ohms, tapped at 16  RCA, 105 Speaker—3,825 ohms, tapped at 1050, 1475  RCA, 41, Receptor Pack—25,300 ohms  RCA, 30A—6,700 ohms  RCA, 30A—6,700 ohms  RCA, 50—400 ohms  RCA, 44, 46, 47—2,580 ohms  RCA, 44, 46, 47—2,580 ohms  RCA, 44, 46, 47—2,580 ohms	399 5466 6875 3865 3987 088W 5568 4230 3880 5771 5772 3963 3966 2571 3871 2242 2872 3030 2543 6396 2582 6554 5867 5784 5785 6398	.80 .95 .60 .75 .75 .65 .65 .25 .30 .60 1.05 1.45 1.00 1.25 1.25
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439  Majestic, 9P6—3,600 ohm Resistor  Majestic, 30—10,471 ohms  P  Phileo, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500  Phileo, 511, 521, 531, 551, 571, 541, 551, 581—23,965 ohms  Phileo, 20, 204, 220, 220A—5,102 ohms  Phileo, 87  Polydyne—Using 250 Tube  Polydyne—Using 171 Tube  R  RCA, 33 D.C.—584 ohm tapped at 80.  RCA, 18, 33, 51—3,940 ohms  RCA, 17—voltage divider, 8,195 ohms.  RCA, 44, 46, 47—8,250 ohms, tapped at 2750, 900, 3500, 1100  RCA, 33 D.C.—48 ohms, tapped at 1050, 1475  RCA, 41, Receptor Pack—25,300 ohms  RCA, 41, Receptor Pack—25,300 ohms  RCA, 54—7,780 ohms  RCA, 54—7,780 ohms  RCA, 54—7,780 ohms  RCA, 54—6,000 ohms  RCA, 41, Receptor Pack—25,300 ohms  RCA, 44, 46, 47—2,580 ohms  RCA, 54—7,780 ohms  RCA, 50—1,340 ohms  RCA, 60—1,340 ohms	399 5466 6875 3865 3987 088W 5568 4230 3880 5771 5772 3963 3966 2571 3871 2242 3872 3030 2543 6396 2582 6554 5867 5785 6398 6877	.80 .95 .60 .75 .75 .65 .65 .25 .30 .60 1.05 .75 .75
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439  Majestic, 9P6—3,600 ohm Resistor  Majestic, 30—10,471 ohms  P  Phileo, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500  Phileo, 511, 521, 531, 551, 571, 541, 581, 581—23,965 ohms  Phileo, 20, 20A, 220, 220A—5,102 ohms  Phileo, 87  Polydyne—Using 250 Tube  Polydyne—Using 171 Tube  R  RCA, 33 D.C.—584 ohm tapped at 80. RCA, 18, 33, 51—3,940 ohms  RCA, 17—voltage divider, 8,195 ohms. RCA, 14, 46, 47—8,250 ohms, tapped at 2750, 900, 3500, 1100  RCA, 33 D.C., 46 D.C.—48 ohms, tapped at 16  RCA, 105 Speaker—3,825 ohms, tapped at 1050, 1475  RCA, 41, Receptor Pack—25,300 ohms  RCA, 30A—6,700 ohms  RCA, 44, 46, 47—2,580 ohms  RCA, 67—4,030 ohms  RCA, 67—4,030 ohms  RCA, 67—7,335 ohms	399 5466 6875 3865 3987 088W 5568 4230 3880 5771 5772 3963 3966 2571 3871 2242 3030 2543 6396 2582 6554 5867 5784 5785 6398 6876 6877 6878	.80 .95 .60 .75 .75 .65 .65 .65 .25 .30 .60 1.05 1.25 1.20 1.25
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439  Majestic, 9P6—3,600 ohm Resistor  Majestic, 30—10,471 ohms  Philoo, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500  Philoo, 511, 521, 531, 551, 571, 541, 551, 581—23,965 ohms  Philoo, 65  Philoo, 87  Polydyne—Using 250 Tube  Polydyne—Using 171 Tube  RCA, 13, 33, 51—3,940 ohms  RCA, 17—voltage divider, 3,195 ohms.  RCA, 44, 46, 47—8,250 ohms, tapped at 2750, 900, 3500, 1100  RCA, 33 D.C.—48 ohm tapped at 1050, 1475  RCA, 41, Receptor Pack—25,300 ohms  RCA, 41, 46, 47—2,580 ohms  RCA, 41, 46, 47—2,580 ohms  RCA, 67—4,330 ohms  RCA, 67—7,335 ohms  RCA, 67—7,335 ohms  RCA, 42, 48	399 5466 6875 3865 3987 088W 5568 4230 3880 5771 5772 3963 3966 2571 3871 2242 3030 2543 6396 2582 6554 5867 5784 5785 6398 6879 6879 6398	.80 .95 .60 .75 .75 .65 .65 .25 .30 .60 1.05 1.25 1.25 1.20
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439  Majestic, 9P6—3,600 ohm Resistor  Majestic, 30—10,471 ohms  P  Phileo, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500  Phileo, 511, 521, 531, 551, 571, 541, 581, 581—23,965 ohms  Phileo, 20, 20A, 220, 220A—5,102 ohms  Phileo, 87  Polydyne—Using 250 Tube  Polydyne—Using 171 Tube  R  RCA, 33 D.C.—584 ohm tapped at 80. RCA, 18, 33, 51—3,940 ohms  RCA, 17—voltage divider, 8,195 ohms. RCA, 44, 46, 47—8,250 ohms, tapped at 2750, 900, 3500, 1100  RCA, 33 D.C., 46 D.C.—48 ohms, tapped at 16  RCA, 105 Speaker—3,825 ohms, tapped at 1050, 1475  RCA, 41, Receptor Pack—25,300 ohms  RCA, 64—7,780 ohms  RCA, 30A—6,700 ohms  RCA, 44, 46, 47—2,580 ohms  RCA, 44, 46, 47—2,580 ohms  RCA, 44, 46, 47—2,580 ohms  RCA, 67—4,030 ohms  RCA, 67—4,030 ohms  RCA, 67—7,335 ohms  RCA, 42, 48  S  Silver-Marshall, 655—11,350 ohms	399 5466 6875 3865 3987 088W 5568 4230 3880 5771 5772 3963 3966 2571 3871 2242 2872 3030 2543 6396 2582 6554 5867 5784 5785 6298 6879 6398 3164	.80 .95 .60 .75 .75 .65 .65 .25 .30 .60 1.05 .75 1.25 1.25 1.20 1.00
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439  Majestic, 9P6—3,600 ohm Resistor  Majestic, 30—10,471 ohms  P  Phileo, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500  Phileo, 511, 521, 531, 551, 571, 541, 561, 581—23,965 ohms  Phileo, 20, 20A, 220, 220A—5,102 ohms  Phileo, 87  Polydyne—Using 250 Tube  Polydyne—Using 250 Tube  RCA, 33 D.C.—584 ohm tapped at 80. RCA, 18, 33, 51—3,940 ohms  RCA, 17—voltage divider, 8,195 ohms. RCA, 44, 46, 47—8,250 ohms, tapped at 2750, 900, 3500, 1100  RCA, 33 D.C., 46 D.C.—48 ohms, tapped at 16  RCA, 105 Speaker—3,825 ohms, tapped at 1050, 1475  RCA, 41, Receptor Pack—25,300 ohms  RCA, 64—7,780 ohms  RCA, 30A—6,700 ohms  RCA, 44, 46, 47—2,580 ohms  RCA, 44, 46, 47—2,580 ohms  RCA, 44, 46, 47—2,580 ohms  RCA, 67—4,335 ohms  RCA, 67—7,335 ohms  RCA, 42, 48  Silver-Marshall, 655—11,350 ohms	399 5466 6875 3865 3987 088W 5568 4230 3880 5771 5772 3963 3966 2571 3871 2242 3030 2543 6396 2582 6554 5867 5784 5785 6398 6879 6879 6398	.80 .95 .60 .75 .75 .65 .65 .25 .30 .60 1.05 1.25 1.25 1.20
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439  Majestic, 9P6—3,600 ohm Resistor  Majestic, 30—10,471 ohms  Phileo, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500  Phileo, 511, 521, 531, 551, 571, 541, 551, 581—23,965 ohms  Phileo, 20, 20A, 220, 220A—5,102 ohms  Phileo, 87  Polydyne—Using 250 Tube  Polydyne—Using 171 Tube  RCA, 18, 33, 51—3,940 ohms  RCA, 17—voltage divider, 3,195 ohms.  RCA, 44, 46, 47—8,250 ohms, tapped at 2750, 900, 3500, 1100  RCA, 33 D.C.—46 D.C.—48 ohms, tapped at 1050, 1475  RCA, 41, Receptor Pack—25,300 ohms  RCA, 41, Receptor Pack—25,300 ohms  RCA, 50—7,780 ohms  RCA, 50—7,780 ohms  RCA, 50—6,700 ohms  RCA, 41, Receptor Pack—25,300 ohms  RCA, 44, 46, 47—2,580 ohms  RCA, 50—1,340 ohms  RCA, 50—1,340 ohms  RCA, 67—7,335 ohms  RCA, 67—7,335 ohms  RCA, 42, 48	399 5466 6875 3865 3987 088W 5568 4230 3880 5771 5772 3963 3966 2571 3871 2242 2872 3030 2543 6396 2582 6554 5867 5784 5785 6398 6879 6398 3164 3165	.80 .95 .60 .75 .75 .65 .65 .25 .30 .60 1.05 .75 1.25 1.25 1.20 1.00

MAIL ORDERS TO ASS.

See Terms on Page 3

Federated Purchaser Inc.

VOLTAGE DIVII	DER	٩	VOLUME COMPROY OF		
Make Models and Values N	No.	Price	VOLUME CONTROL G	UIDE	
Silver-Marshall, 651-7,206 ohin tap-	t Cat.		(Continued from page 101) Receiver Models		
ped at 6,200 (large)	3166	1.85	Sparton, 410, 420, 9A, 600A, 610A, 620A	Cat. No. 7078	Price 1.75
Silver-Marshalt, 651 — 9,720 ohms (small)		1	Sparton, 25, 26	7208	1.05
Silver-Marshall, 672-5,500 ohms	3167	1.10	Sparton, 15	7997	1.05
Sonora, A33	5779	1.00	Sparton, 10	7398	1.05
Sparton, 110-7,000 tapped at 2,000 . A426	0 3976	.80	Sparton, AR19	7399	1.05
Sparton, Do Luxe-7,000	5 3977	.70	Sterling Midget	7420	1.40
Sparton, 110 A.C.—10,000		.50	Sterling, 1930 Models inclusive	6110	1.25
Sparton, 110—29,000 ohms	5857	.29	Stewart-Warner, 50, 40, 102, 40C, 69C, 70,		
Splitderf, 153C	5774	1.00	80, 95, 991, 992, 993. Stewart-Warner, 900 Series	2941 2941	.60
Stewart-Warner - 8.000 ohms tanned			Stromberg Carlson, 19, 20, 21	7784	.60
at 3,500, 3,500, 2,500	3873	.40	Stromberg Carlson, 12, 14	7385	.95
10,000	5 3990	.95	Stromberg Carlson, 22, 24	7386	.95
Stewart-Warner-600 ohms C.T. 6216	3 3989	-50	Stromberg Carlson, 20, 21 (tone control) Splitdorf, E175	7387	.68
Steinite, 991—2,500 ohms	5881	.75	Stewart-Warner, 950 and R100 Series	7423 5739	.85
Stelaite, 70, 80, 95, 22, 440 ohms	5882 6490	.95	Stewart-Warner, 715, 720	9750	.25
Stromberg-Carlson, 19, 20-3,285 ohms	6883	.75	Storey & Clark, 36, 43, 51	7073	.65
Stromberg-Carlson, 638-9,000 ohms.	6884	.75	Story & Clark, 3A, 4	6142	.50
Stroraberg-Carlson, 10, 11-4,880 ohma	5775	1.25	Stromberg-Carlson, 846, 848 Front Stromberg-Carlson, 846, 848, Rear	6591	.55
Stroneberg-Carlson, 12, 14-6,570 ohms	5776	1.38	Stromberg-Carlson, 10, 11	3205	.75
Stromberg-Carlson, 10, 11—9,860 ohms Stromberg-Carlson, 401	5777	1.38	Stromberg-Carlson, 638 Front	8593	.55
Strongberg-Carlson, 403-3 770 ohme	5778 5780	1.00	Stromberg-Carlson, 638 Rear	6592	.75
Stromberg-Carlson, 635, 636 — 9 270	5160	1.00	Stromberg-Carlson, 635, 636	3208	.70
ohms Stromberg-Carlson, 12, 14 — 11,025	5586	.95	Stromberg-Carlson, 641, 642, 652, 654	3210	.65
United acceptance of the control of	5781	1.38		3206 3205	.50
Stromberg-Carlson, 346, 843 — 6,380 ohms	6700	1	Steinite, 36, 43, 51	6142	.56
Strumberg-Ugrison, 246 848 - 0 900	5782	1.13	T		
Stromberg-Carlson, 635 D.C 30	5783	1.25	Temple, 8-60, 8-80, 8-90	3802	.25
ohms	5847	.75	Temple, 861, 881, 891	5243	1.75
T			Victor, R14, R15, R17	5158	1.45
mple 8-60, 8-30, 8-90—6,850 ohms	3864	.30	vactor, ("All researches and a second	7080	.55
Temple, All 1,500 ohm audio plas.	3867 3861	.35	Victor, R32, RE45, RE52, RE75	7081 5740	.55
temple, D. C.—250 ohm tanned at 50	3865	.30	victor, 1034, R3b, RE39 RE57	6501	1.75
Thorardson, 210 Resistor—8,000 chm apped at 6,800	3163	.60	Victor, RE73	7289	.45
a word runon, 171 Resistor—13 000 ohm	2103	-00	Ware, SB45	-	- 1
Make Models and Value No.	No.	Price	ware, red	7082	.90
and 2,000 Part	Cat.	100000	ware, obr	7084	.85
V	3162	.95	Ware, S-1	7085	.85
Victor, R-32, R-42, RE-45 and DE-75			Ware, B-1, B-2 Wells-Gardner, C. CG, 82, 72	7087	.80
4,920 ONDE tabbed at 200, 1 356 and	1600	2	Weits-Gardner, 13-10	6142 7088	.75
and 775. Victor, 9-54, 9-18-4,470 chms	3170 6397	.65	Westinghouse, WR5 WR5 WR7	7089	1.00
ohms		1	Westinghouse, WR5, WR6, WR7 Westinghouse, WR4	5158	1.45
ohms Victor, 9-18-7,933 ohms	6885	.75		7402	.80
Victor, 9-18-3,670 ohms Victor, 14, 15	6887	.95	Tanan CON 24		
	6398	1.20	Zaney Gill, 54 Tone Control.	7090	.85
Westinghouse, WR4-4,805 ohms	6900	100	Zemin, An. CH. RH. 2012	7091	.65
Z	6398	1.20	35APX, 11, 12, 14, 15, 16, 17, 21, 22, 232,		
Zenith, 33, 34, 35, 35A, 342, 352, 352A				6120	.80
302-10F Packs 10, 13-22,700 ohres 62 of	3897	.95	ANGELIA GO, DUZI, TUZI, DUZI, DUZI,	6121	.80
Zenith, 34P, 35P, 35AP, 342P, 352AP, 37-7,200 chins—for Packs 11, 14-			Zenita, 52, 53, 522, 532, 54, 549 58 57 29	6122	1.25
6,730 ohms	3980	.95	(Note: Some of these models ware loter		
and the state of t	9070		Change to qual contros. See below).	3204	1.25
Advisor, og. ogg. ggz. ggz. ana. tow	2019	.95	67, 64, 60, 61, 602, 613, 622, 642, 673, 71		
Packs 12, 16 63-76	3983	.95		3201	1.50
AH ANDERS MS			The state of the s		

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### WESTON Model 590 I.F. and R.F. Oscillator



A New Weston Instrument for Aligning I.F. Stages — Aligning of Gang Condensers — Determining Sensitivity Condensers — Determining Sensitivity of Receivers — Checking R.F. Transformers and Condensers — Making Selectivity Tests and Checking the Oscillator Stage of Radio Receivers

The new Weston Model 598 Oscillator is a very complete and practical signal generator. It has an intermediate frequency range of approximately 110 to 200 kilocycles and a broadcast range of 550-1504 kilocycles. Frequencies between 200 and 550, and above 1550 kilocycles may be obtained by means of harmonics.

tained by means of harmoules.

The oscillator is equipped with an instrument which is mounted on the panel and which serves as a Grid Dip Milliammeter, Filament Voltameter 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 ts modulate the R.F. to produce an audible note of 400 cycles with 30% modulation. The output of the oscillator is controlled by an especially designed attenuator.

ator.

The batteries for operating the oscillator are contained in a shielded compartment in one end of the case. They consist of an ordinary 22 is volt "B" battery and four 1½ volt unit cells commonly used in flashlights, which are connected automatically when inserted in their compartment and which will give over 20 hours of continuous operation.

An output mater is a necessary agency.

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 shown above for \$22.50 additional.

chased with the oscillator as shown above for \$22.50 additional.

Dimensions: 16½x6½x5¾ inches — approximate weight, 15 pounds.

The Ord Dip Milliammeter is particularly important. It assures the service man that the oscillator is definitely operating and that when no output is 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 Voltmetes can be used to be the filament voltage constant at two oots which is necessary to maintain accurate calibration of the oscillator and obtain maximum battery and tube life.

The attenuator is adjustable from prac-

The attenuator is adjustable from practically zero up to its maximum range by smooth, gradual changes and not by steps. This makes it possible to obtain any degree of audibility desired.

Because it produces signals above 1500 K.C. is can be used in testing short wave adapters and receivers.

Model 590 Oscillator without Output Meter with tubes less batteries.

Cat. No. 590

Our Net Price \$79.38

## NEW! Readrite Oscillator



A necessary serviceing oscillator for adjusting r. f. and i. f. circuits.

justing r. f. and i. f. circuits.

Used to align r.f. gang condensers, locate defective r.f. transformers, adjust i.f. transformers, check oscillator stage and determine sensitivity of a receiver. A modulated instrument which covers the broadcast band 550-15.00 k.c. and the intermediate circuit made with trimmer condenser through panel.

Fornished with 22½ v. and 3 v. batteries. One 36 tube is used. Cable is carried in the removable cover. Full operating instructions and siring diagram included.

Buffs 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 leatherate case, 6x12x15 in.

In leatherette case, 6x12x15 in. Weight, 8 ths.

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 Direct Reading Ohmmeters Models 500-502



List 0-10,000 6960 6-10,000 & 0-40

### WESTON Model 566 Type 3 Radio Set Tester



SERVICE MANUAL

A complete Service Manual comes with every Model 568-Type 3. It tells the probable causes of poor reception, how to locate them and what to do to fix them. It is more than an instruction book. It is a practical service man's handbook. This service manual is made in locate-leaf form and additional information is forwarded from time to time to keep it up-to-date.

Cat. No. 318

### Our Net Price 884.53

SERVICING SCOPE OF WESTON MODEL 566—TYPE 3

TESTS WITH TESTER PLUG INSERTED IN RADIO SET

INSERTID IN RADIO SET
All Flament Voltages . All Heater
Voltages . Two Cathode Voltages .
Three Bias Voltages . Two Control
Grid Voltages . Two Plate Voltages .
Sereen Currents . Bias Voltage on Voltage on D.C. Sets with Reversed Filaments . Space Charge Grid Current (on 250 voit range) . Charge Grid Current (on 25 M.A. range) . Readings of Both Plates of Rectifier Tubes .
Three Plate Current Ranges.

EXTERNAL TESTS THAT CAN BE MADE WITH MODEL 566

Measurement of Power Transformer up to 1,000 Volts A.C.

1.006 Volts A.C.
Line Voltage Measurements on the A.C.
Meter.
Heater Voltage at Power Pack — Three
Eanges on A.C. Meter.
Plate Current at "B" Supply Tapa—
Three Ranges on D.C. Meter.
"B" Supply at Power Pack——Three Ranges
on D.C. Voltmeter.
"A" "B" and "C" Battery Voltages—
Sir Ranges on D.C. Voltmeter.
Continuity Tests—Using 201f-contained
the Volt Battery and the D.C. Voltmeter with a resistance of either 1,900
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
6-100,600 Ohms.
Condenser Measurements can be made

0-100-600 Ohms.
Condenser Measurements can be made from -001 (By Pass) to 2 Microfarads --from 110 Volta A.C. line without resistors or adapters.
Tube Checker for all Filament and Heater Type Tubes under the same condition of exists when in their sockets.
In but to Radio Set-On 4 Ampere -A.C. Rance and Small A.C. Measurements such as Currents in Voice Coll or Speaker, etc., using the A.C. 100 or 20 MA. 12055.

range. Rectifier Type Output Meter-Range 100-5

MAHL ORDERS TO AT See Terms on Page 3 Federated Purchaser Inc.

### GEM LINE Interference Eliminator



A great many noises interfering

A great many online interfering with your reception are caused by motors, such as electric refrigurations, and mumerous electrical appliances. The Gem Line interference climinator ference climinator is plugged into your wall socket the power coming to 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 List \$1.00

Net

A my velous 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 Col-ored Counter Display

Furnished with 6 Capacitators

Cat. No. 4264

Cat. No. 4264

The F. & H. Capacity Aerial Eliminator has the capacity of the average 75-foot cerial, 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, essier and cheaper to install, elimination of lightning hazards, unsightly poles, guywires, mutilation of woodwork for leadin 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.

### Super "No Aerial"



Aerial Eliminator and Static Reducer

Improves reception. Equals a 75 foot outdoor antenna. Very compact. 2" diameter, 3 %" high.

Cat. No. 7299 Oute Price, Each ..... 690

### Panel Switch and 2 Keys



A good switch for ignition, autor radies and other uses. % in. cylinder. All nickel plated. Equipped with 2 keys.

Cat. No. 7805 Our Price, Complete

### Filtervolt, Jr. Light Duty Line Noise Eliminator

Filtervolt, Jr., is the popular size line noise climinator, suitable for eliminating all line noises caused by vacuum cleaners, switching on and off lights, electric heating pads, electric tensters and all electrical apparatus with make and break contacts or small meters.

tors.

tors.

Like the Plitervolt of the Plitervolt of the Plitervolt of the Plitervolt of the tradio set or at the source of interference. It is quickly and easily attached without the use of tools and is an extremenly small and compact unit. The housing is made of black chamel metal with nickel plated ent rings.

Cat. No. 3406

\$1.70

# Storm King Lightning Arrester

The arrester with the PREE \$100 fire insur-ance policy.

Genuine molded bakelite. No air gap. Na-tionally adver-tised at \$1.00.



Cat. No. 6581

Special 35c ea.

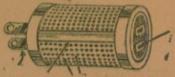
# Line Voltage Regulator

Differential Resistance automatically adapts itself to any set.

Air cooled by draft holes.

Steel clad perfectly fireproof.

Standard outlet will take any set.



Pits any standard socket or outlet. Small, nest, compact; finished in nickel.

Cat. No. 3277 35c ea.

An air cooled, dependable voltage regu-lator. Will deliver correct voltage of any set. Less than the cost of an ordinary tube. Pits any standard set socket or outlet. Protects set from current surges, saves tubes.

# KODEL DRY DISC Rectifier With Brackets

For replace-ment in Kodel Kuprox power units and Dy-namic speak-ers, etc. Single Unit, Cat. No. 6153



Our Price \$1.10

# Line Voltage Ballasts

Used in Majestic and other new sets. The Real Line

Voltage Regulator

Bectrically and mechanically, as well as merchandishing and servicing stand-points, the Line Ballast represents 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 epecified by tube manufacturers, on the primary, even though the line voltage may fluctuate as much as 30%. It is usually designed to function between the dmits of 95 and 135 volts.

Set Cat. No. Set Cat. No.



\$1.47 ea.

## SWAN-HAVERSTICK Light Socket Aerial

Cat. No. 6580 43e



The modern sets and especially the supers require a short serial, and this device is ideal for this purpose. Eliminates all unsightly wires. Does not use current, Printed instruction sheet with each coe, packed in attractive display box.

### STICKTAPE AERIAL



Cat. No. 4256

59c ea. \$6.40 doz.

Packed

Sticktape is made of a new metalic alloy of great capacity, the back of which is conted with an adherive rubber that will stick to any auriace. It can be easily concealed behind picture moulding, of on baseboard or under rug on floor or behind drapes, etc. It is the most amazing serial of modern times and will increase the receiving range of any radio receiver.

## GOLD TEST AERIAL

Cat. No. 4268

\$1.60



The Wellston Gold Test Aerial is the world's smallest indoor antenna and yet it is as efficient as a 75-ft, outdoor aerial. Gets distance and reduces statio. Intervers reception. Works exceptionally well with superheterodyne receivers. Can be installed inside radio cabinet or on baseboard.

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The Model 17 user one of the new type 58, one type 57, one type 56 and one tupe 55 super power tubes, which give more selectivquality.

MODEL 17 Six Tube Superheterodyne

with Automatic Volume Control

### **Operates Without Aerial or Ground**

A special built in antenna is an added feature. This unique A special built in antenna is an added feature. This unique device allows demonstration or permauent installation anywhere without the necessity of erecting an aerial or making a ground connection. Just plug in at any available A. C. outlet and tune in. This arrangement enables reception up to 1000 miles with the same splendid quality and good loud speaker volume.

### Automatic **Volume Control**

Teretofore this feature has heen incorporated in only high priced receivers. Automatic volume control was a file of quality to receivers or discriminating people. and now ACRATONE leads again with this marvelous Superheterodyne receiver with real AUTOMATIC VOLUME CONTROL!

### What Is Automatic Volume Control?

AUTOMATIC VOLUME CONTROL in radio is the same as the SUPER-CHARGER is in aviation. It maintains uniform over the entire wave band. When the signal strength of a station drops below good volume level, AUTOMATIC VOLUME CONTROL boosts it up to normal.

### New Type Tubes

The new type 55 tube, which is a duo-diode detector-automatic volume control tube, and an audio amplifier, is a development of the Radio Corporation of America, and combines the excellent performance of each of these operations in one efficiently operating radio tube. This tube not only figuratively takes the place of three tubes, but actually

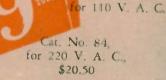
Automatic volume control is not a mere sales feature, but is an actual necessity in outlying districts where broad-casting stations have a tendency to fade.

### Superheterodyne Circuit

The 1932 ACRATONE SUPERHETERODYNE embraces the most advanced design and is built for utmost selectivity, with the usual ACRATONE quality. The circuit is composed of one stage of band pass pre-selector, a Triode oscillator; two stages of intermediate frequency amplification, one of which is the second detector; automatic volume control, one stage of pentode audio amplification and a full wave rectifier. One cannot visualize a more modern

### **Automatic and Manual Tone Regulator**

Proce of automatic tone control or regulated blend of tone incorporated in this receiver, allowing a wide range of one color, without blast or blare. Full true tone is attained y matching each of the component parts of the receiver self, while the accentuated bass or treble tones are rought out by the tone regulator.



### **Tubes Used**

1-55, 1-56, 1-57, 1-58, 1-247 and 1-280 Set of Universal Tubes, \$3.50 Set of Arcturus Tubes, \$4.50

Cat. No. 17



### 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 ACRA-TONE SUPERHETERO-DYNE. Distant stations come in without fading and distortion, and sound like locals.

### Cabinet

splendid receiver is d in a carefully fir-This This splendid receiver is housed in a carefully finished walnut cabinet of really enchanting design. The handsome Fleur d'Lis grill has grace and beauty of lines as well as lending toward simplicity, rather than elaborateness. 17 in. high, 15 in. wide, 14 in. deep.

### Spot Tuning

A full vision dial behind which travels a pointer and light to give easy identification of the dial setting. The dial is geared to move slowly so that no stations are passed in tuning and greater sensitivity is the result. Encircling this dial is a beautifully designed escutcheon which lends character to the receiver.

### Large Dynamic Speaker

full-sized really powerful A full-sized really powerful dynamic speaker is housed behind a wall of sound insulating baile. This speaker is designed so that it will efficiently handle even the tremendous output of the powerful receiver without blasting or distortion.

Equipped with Phonograph Pick-Up Jacks.

MIGH

**World Radio History** 



# Audio Transformer

With Pick-Up Coil Winding For Replacement in Victor Sets

Can be used for any tube of high impedance.

Has special winding for phonograph pick-up.

Magnetically shielded prevent-ing inter-stage feed back

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Push-Pull Audio Transformer Pack

Can be used with 245 and

Output Matches Movino Coil on All Dynamic Speakers

Cat. No. 5744 Our Price, Per Pack



Extraordinary Offering of Genuine Mershon Mfd. Inverted Type Electrolytic Condensers A most fortunate scoop of the wet

type famous Mershon Electrolytic Contype famous Mershon Electronytic conditions of the regular fixt price. The 8 at 80% off the regular fixt price. densers enables us to oner mem to you at 80% off the regular list price, 90% of Mfd. Inverted type is used in day. The state of the receivers on the market today. threaded stud is insulated and the can threaded stud is insulated and the can the may or may not be grounded to lock chassis of the set 1-13/32" in diameter.

Washer and nut. wasner and not 110700 in the 4" long. Regularly sold for one

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30 Henry Choke RC | Victor 150 Mils. 200 Ohms

Weighs 31/2 lbs.

Cat. No. 5174 Our Price . . . . 4 for \$1.00

Universal Replacement Power Transformer for 4 or 5 Tube Midgets



For sets using up to 3-224, 235, 551, 327, 56, or 57 tubes (or a combination of same), 1-245 or 247 and 1-280 tubes.

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Frost 10,000 Okm Potentiometer

Graphite Element Only 7/16-threk, 11/4" flat shaft with 16" thread and lockaut, Will fit all Cat. No. 5634 While They Last

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Three Stage Push-Pull Using 2.56%. 2.45% and 1.280 Tubes

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**World Radio History**