

## RADIO BARGAIN VNEWS

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
- 200 to 2000 Meter Models
- 75 to 600 Meter Models
- Radio-Phonograph Models

\* What Is Ghost Timing?

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.

42, 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	110-120	25	A.C.	21.50
46	200 to 2000	220-250	50-60	A.C.	19.50
6	METERS	110-120		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	NOGRAE	PH COM	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	100000000000000000000000000000000000000	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 it required with all orders, balance C. O. D.

All goods are shipped f. o. b. New York. WE SELL WHOLESALE ONLY.

RETURNING GCODS-A "Return Merchandise Tag" must be secured from us before any goods are returned. Returned goods must be shipped back in original containers. Write fully reason for return and give us complete instructions regarding adjustment. Merchandise that is defective within the limit, 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 politage 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 Fy-Warehouse or Railroad Terminal, New York City,

### RATE OF EXCHANGE

Wherever the rate of exchange on foreign money is considerable, we reserve the right to add an amount sufficient to cover this difference to merchandre shipped

k concernent concerned

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

FICHONOMO CHO CHO

- 1. Use our order blank whenever possible 13 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
- 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 order, for less than \$3.00. Besides incurring a loss on such orders. this rule is for your protection. It discourageorders 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.

Response and consequences

### 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. 1. 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 servicement'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.



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

rederated Purchaser Inc. 25 PARK PLACE, New York City

### Utah Remote Tuning and Volume Control

Emcleni and Engity Installed Illuminated Dial



This mail (44-22 in.), but sturdy device will tame and control blidget or and Receivers from a distance. The y are aquipped with a long 18 ft. flexible shall which may be concalled in the wall or along the basboard.

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

Cat.	No. 6	847			*650
Our	Price				 0
in the last	-	_	_	-	

## New Auto-Radio Steering Column Control

Feature Specifications:

Feature Specifications:

Proceed steel construction—all metal process and condensor process place for 4 m, and 30 in. Pleasible that and con any tandard. Special lengths to order.

POSITIVE DRIVE-NO SPRINGS NO BACK LASH-STAYS PUT



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

With each control is included 30 inches with such control is included 30 inches of far ble half and calme, which gives a firstle lad from point at which control is clauped on itering column to a point under the instrument board. Invadditional length required may be secured by coupling on additional leucit of iterible shaft, or solid rod with universal icints. ioints.

### Prices Additional Flexible Shartings and Joints

C	at. No	Our Pric	e
	5163	Fletible shaft, 1 or 2 foot	
	51.08	lea the\$0.36 ft	
	167	Universal joints for rod or	1.
	5168	Bossemer Steel Rod, 34 in.	1.
	9200	dismeter	

the above equipment will provide an ex-culent remote control wherever the auto-tion may be installed — whether under the hood, on the dash or under the floor

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

### Silencer Kits

For all makes of amomobile radios except Butel. ste, with overhead valves. Thes use Cat. No. 6 5 3 4 suppre o.s.



Consists of 4, 6 or 8 mark plus suppresors, 1 distributor alencer, and a 1. Mfd. consists or the marks use a 12 Mfd. condenser while we marke, u e g 10 1 include a 1. Aud.

Cylinders	Cat. No.	Prien
4	4 13 13 7	81.50
6	4238	2.00
8	4230	11,115

Kits for Buick, Willys-Overland and other cars with overhead talv

Cylinders	Cat. No.	Price
4	7022	\$1.50
8	7028 7024	2.00 2.35

## ACRATEST Spark Plug Suppressor



MODIL I

weatherproof tule. Car lourn. Cou-

List Price, 50c-Cat. No. 6450

Price 20c ea.

## ACRATEST Spark Plug Suppressor

For all Bules, Willy Paient and other



Cat. No. 6534 Price 20c ea.

## ACRATEST Distributor Suppressor



Used in cen-ter of dis-tributor cap or coil. Recoil. move conter wire, interplit end, inin er

sert wire in other end.

List Price, 50c-Cat. No. 6451

Price 20c ea.

### Faradon 4 Mfd. 600 V. Condenser



3 14x2 14x3 in. Suitable for A.C. Line Full ..

284 No. 5604 S 75 Our Price

### Distributor Silencer for Automobile Radios

The distribution

of an automobile is ine source of most no live due to the make and break action of the rotor. This condenser and choke coil, when connected in series with the low tension line and the can arounded to the late all distributor conveyed by some of

chassis, win chastis, will aliminate all distributor noise. Used and approved by some of the largest auto radio manufacturers.

Cat. No. 7318

### Generator Silencers

MODEL M

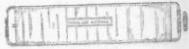


Fuszen case to generator or other metal part of car and connect the generator.

Cat. No. 6448 Cat. No. 6119

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

### De Luxe Car Antenna



### PEATURES

sensitive, in Most cases Execu-More

Reof Reception.
Triple Action Spring Surpension.
Impossible to Short or Ground.
Universally Adaptable to Every Auto-

mobile All Parts Rustproof and Sturdily 5.

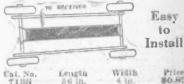
6. High Tension Non-Shorting Lead Wire, 7. Ward Rubber Spiash-Guard Furnished with each Antenna, 8. Permaneni, Efficient and Nasy to in-

6. Cannot Break or Cruth. 10. Proven performance on Philos. Metor-ola, Majestic, General Motors, Spatten, Crosley and all other makes of Auto-Budio.

Shipping weight, 5 De. Cat. No. 240

8025 Our Price .....

## Flexible Car Antenna



Cat. No. 71113 Price 80.85 54 m. 1.25 1.40

Made of closely woven electrolytic copper mesh, and covered with a black meeting entitle leather. It is 62 in long and is mounted underneath the car, tied to springs or axies, as shown, by means of the four storely conven surely sensitive, and efficient.

### Special Automobile Antenna

Same in appearance and construction as the No. 340 Datame ANTENNA, except that the frile have been umitted in order to bring it down to a popular price.

Car. No. 316 # 1 95 Our Price ......

### 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. 227 224 6047 6048 List, \$2.50

lector tubes

BUD POLICE THRILLER fills a long wanted need for a simple device that can easily be attached to the radio set without the necessity of changing any wiring in the set or 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 radius 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 Calls. Instructions for operation of BUD POLICE THRILLER in broadcast receiver is printed on each box in which BUD POLICE THRILLER is proceed.

No. 6048 for sets using screen grid detector tubes.

No. 6050 for sets using screen grid detector tubes.

No. 0049 for sets using 227 or 238 detector tubes.





Evternal Type

	J K		
Tube	Cat. No.		
227	6049		
224	6050		

### Our Price \$1.50

No. 6047 for sets using 227 or 327 de-

### Our Price \$2.10

### 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 coils 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, 40-80 or 80-200 meter coils. Coils may be readily whred into a short-wave converter circuit for use with TR.F. or superheterodyne 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 escutcheon plate marked with wave length. Overall dimensions of entire coil and switch assembly, 4% in. wide by 4% in. high by 6¼ in. long.

## Midget Set Table

This radio table of simple construction, yet handsome design, finds its place in the home where space is a factor. Constructhome where a factor. Construct-ed of selected gum-wood for strength and handsomely high lighted. 2212 high, 12 in. high, 12 in. 1712 in. long. wide.



\$2.50 Cat. No. 507

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

16 to 200 Meters

The finest grade Litz wire wound on akelite forms. Will fit standard UX bakelite



Cat. No. 7180 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 co. Wound on ICA low-loss bukelite forms. Carefully and accurately designed to fit U.X. sockets. Four coils covering band of 16 to 225 meters.

## THE A-C DAYTON Fleweling Short Wave Adapter

Wave length range 18-18 meters; has 3 plug-in colls 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 required, Adapter comes complete with nothing else

No wiring change in your set. Adapter is housed in a beautiful little cubinet finished in Adam brown with an engraved control panel, making a very handsome appearance which will hermonize with the finest of radio cubiness.

Cat. No. 72 The Type UX
Adapter, het
price \$15.00, fits
any set using
UX-201A

UV-201A UX-199, WD-11 or AC-226

Cat. No. 75 type tuces.
The Type UY Adapter, list price \$15.00, fits only those stems using UY-227 A. C. tubes, either at first radio frequency simplifier or as detector in the detector socke.



Price \$4.95 For Either Type

## Air King Short Wave Plug-in Coils



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

\$1.50Cai. No. 4300

### **Naald Coil Forms**

Color Coded Plug-In Coil Forms

Genums Makalot—brillantly colored code rings of red,
green, relow and blue. Diameter 144". Winding space
2". Ovesall 2 11/16". Provided with flange for easy removing. Natural easy grip
that removes coil without
touching or distorting winding.
Center opening to put wire
through when winding and before soldering. Tapered holes
for easy insertion of leads.



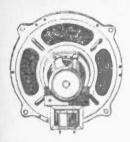
Cat. No. 6695 -+ Prong-15e 6696 -5 Prong 15e 7358-6 Prong-18e

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 6617 99

These are the new 1932 Rola Model K Series with greatly improved reprodnetion Where previ-

outly the K series was specifically designed for use with midget sets, the new K series was engineered for public address and large auditorium work mainly. Extremely large field nots are used, giving greater magnetic strength as well as finer tone reproduction. Greater undistorted output can now be handled without overload.

Single	,				P. P.
Output	1				Dutput
Car				Our	Cat.
No.	Model		Size	Frice	No.
141	K-5	61	5x546"	\$4.50	178
142	K-8	SI	'gf Gzg	4.95	179
143	K-7	91	4x51/2"	5.25	184
144	K-9	11	x514"	5.95	183
-					

Equipped with either single or Push Puil transformer. Standard field coil resistance, 2500 ohms for excitation by 40 to 80 milliamperes of direct current at 75 to 150 volte

### Utah Ralanced D.C. Chassis

2500 Ohm with Input Transformer

Relenged Shielded Dynamic Chassis is the 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. the Instruments



Cat. No. 111 Our Price ..... \$350

## Dynamic Speaker Field Coils



_		
Cat.		Dur
No.	Speaker #	rice
6519	Coloniai 33	1.70
7191	Freed Eiseman 80, 85	1.45
7192	Jeusen 1 000 Ohms	
7267	Peerless 7,000 Ohms	
5819	Radiola 104	
5102	Radiola 80, 82, Westinghouse	
	WR5, 6, 7	2.00
7142	RCA Photophone 1,000 Ohms	3.50
7143	RCA Photophone 6 Ohms	5.50
7314	Silvertone 1000 Ohms	2.50
6522	Victor R32, 52, RE45, 75	

### Series 64 1799

These new Role speakers are designed for use with midget radio sets and small electric phonographs. They are highly suited for multi-speaker installations, such as in notations, such as in notations.

hospitals. Overall speaker is 8 inches diameter

Model F-2, for 45 tubes in push-pull Cat. No. 186 \$3.75

Medel F-P. for one 47 Pentode Tube.

Cat. No. 187 \$3.75

Model F-M-Unit less input transformer. Cat. No. 188 83 25

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

Cat. No. 199 \$2.75

## Magnavox D.C. Dynamic Speaker Chassis

Made by the pioneer speaker manufacturers with all the precision that goes into quality manufacturing. The frequency response frequency response range of these speak-ers is from 35 to 10,000 cycles, giving perfect reproduction from the lowest to the highest tones

Require only 40 mils at 50 to 200 volts.

Cat. No. Туре 

## RADIOLA

Model 106 Speaker D. C. Chassis

This speaker has a field resistance of 1000 ohms and is designed for 110 volt D. C. operation. It can, however, be used as a choke in A. C. Sets or a field exciter unit built to furnish the precessary excite-This speaker necessary excita-tion. Comes equipped with quipped with

former designed to match any single tube up to the UK-250. Voice Coil impedance 12 to 15 ohms, 101/2 in. over-all cone dia.

Cat. No. 114

\$4.95

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

SPECIAL MODEL
110 Volt A.C. 35 or 60 Cycle

A superior heavy duty unit for heme, thea-tre, large hall or outdoor use. Cap-able of handling extreme volume without distorwithout distor-tion. Employs Westinghouse Dry Disc Rectifier and extra heavy transformer suit-

transformer suit-able for 110 volt 25 and 60 cycle A.O. current light-socket supply for field excitation.

Individually packed. Shipping weight, 24 lbs. List \$30.00

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-76, RE-45, R-32, and R-52, in conjunction with Victor 245 Push-Pull Amplifiers.

Operates from 110-volt D.C. Voice coil impedance 15 ohms, D.C. field resistance, 2,500 ohms. Baffle opening 9 in. Diaphragm 7 in. A reproducer of unexcelled tone quality and great power. Suitable for use with any type receiver requiring above resistances. 24 in. cable.

Cat. No. 149

\$5.95

## Majestic Dynamic Speaker

As Used in Majestic 70, 80 and 90 Receivers



2730 Ohms, D.C. field. Without Output Transformer.

Diameter of Cone, 9 in.

Complete with connecting cable and terminal strlp. Very rugged construction and suitable for replacement in other sets and for public address

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 See Terms on Page 3

rederated Purchaser Inc.

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

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



Cat. No. 161 Less Baffle

1000 Ohm Field

These genuine RCA Photophone Dynamic Speakers were designed for use in large theatres, 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. Buy now for future use. future use.

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

t. No. 110—RCA Photophone for 110 V. A.C. use, supplied with one Cat. No. 85 Field Exciter, which \$1250 uses 2-280 tubes ........

### Sound Truck Photophone

t. No. 152—RCA Photophone with 6 V. D.C. field coll 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 transformer for 245, 250, 171A and 230 tubes in push-

Cat No. 2674 **\$ 45** Price Unshielded output transformer, as above.
Cat. No. 2371
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 dynamic 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

Overali Diameter, 9 in.

The unique construction of the Operadio

Dynamic Speaker places it in a class by itself. The field coil pot is lo-cated in front of the diaphragm instead of diaphragm instead of the rear and is supported by extra heavy rigid cast fron frame, 
making the speaker rattleproof and ultra 
sensitive. Supplied fin 
standard field ohmages 
and for all power tubes, 
when right instead of the control of the

at a sensationally low price.

### SINGLE OUTPUT

Cat. No.	Tubes	Field Ohms
190	171A, 245	2500
191	247	2500
193	171A, 245	1800, tapped at 300
194	247	1800, tapped at 300
	P. P. O	UPPUT

171A, 245 196 247 2500 ..Each \$265 All at the Remarkably Low Price of .....

### Jensen "Concert" D.C.



Madel D 7 D.C. 2500 ohm Field 10 in, Diameter 8 ohm Voice Coil

These units contain suitable push-pull transormers and boolutely h ormers and are boolulely humiree. Connect directly to the set

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

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

List \$27.50

Cat. No. 121

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

### Utah Dynamic Auto Speaker



8 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, 233 or 1 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. Type Cat. To.

Single 171, 233, 236, 238 4.45

### Wright-DeCoster Dynamic Reproducers

A popularly priced line of the famous Wright - DeCoster wright - DeCoster speakers with no sarrice in quality. Will handle up to 6 watts without dis-tortion. Overall dia-meter, S in. Equipmoter, S in. Equipped with output transformer. The following models all have a 2500 Ohm



Type Cat. No.

All One Price \$450

### Wright-DeCoster Super De Luxe Speakers

Overall Diameter. 1 2 in.

For Push-Pull 245 and 250 with 1000 Ohm Field.

Cat. No. 347 8995 Our Price ...



### Wright-DeCoster 6 in. Dynamic Speaker

The size of this little unit greatly belied 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 envious 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
entirely shields and dust-proofs the unit.
Complete shielding of the Chassis greatly
decreases the chances of the speaker picking up juntled niches.

ing up ignition pieces.

Cone 41, in. Outside diameter of cone bracket, 61s in. Depth 31s in.
Diameter of Cabinet 71s in. Depth

1 in.
Overall Diameter 6 in.
Cat. No. Type
342 For Single 45,
2500 Ohm Field
244 For Single 47,
2500 Ohm Field

For Single 47 with 1800 Ohm Field tapped at 300 ohms Our Price

Each .



### Wright-DeCoster Automobile Dynamic Speaker

Overall size 7 in.

An inexpensive Auto Speaker with Wright-DeCouter quality. Same chassis as described above.

Cat. No. Туре 345 For Single 171A, 233, 236 and 238

346 For Push-Pull 236 Pull 236 and 238 Our Price

Each

### The Genuine BBL Magnetic Speaker Chassis

Employs the well-Employs the well-known B. B. L. Magnetic unit. Sturdy metal framework, 9 in. burtex diaphragm. Very compact. 5 it. cord included. Shinning weight 6



Shinding weight 6
ib.

For many years
B. B. L. has been
the standard of comparism in peakers. A short time are this speaker
chasals was used by such well known
manufacturers as Amplion. NewcombeHawley, 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.
L's special cobalt steel magnet and oversize coils makes for faithful reproduction.
Will handle 450 volts without burning
out. mit.

Cat. No. 803-List Price 89 Our Price

### Kolster K-6 Speaker

12% in high. 12 in. wide. Tip. deep.



Cat. No. 154 \$335 Each .....



Equipped with a highly sensitive oversize magnet and a driving unit that is one of the finest, the Kol ter responds instantly to the faintest impulse. It is this fully reproduces both voice and or nestra from the faintest whisper to the fullest volume of a brass band. Yet, due to its special construction, the Kol ter cannot 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

Frost Fones continue to maintain their popularity with the radio public. There is a very definite demand for thoroughly high grade phones at a reasonable price and Frost Fones suisify the execting demands of these wighing to obtain extremely sensitive instruments. Light in weight, comfortable to ear and asily adjusted.

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



years has manufactured 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 phones may be depended upon to give perfect satisfaction.

\$1.65 Cat. No. 6200

Eismann Magneto Phones \$1.45 Cas. No. 5723

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

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

RE45 and RE75

The are the famous Stevens Buries cone's edged with soft velour. Voice coil and least for quiet in table and precisely fitted.

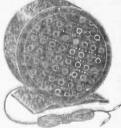
Cat. No. 6519

Our Price \$1.35

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

Standard	Dynan	ne spear	
Make of Speaker	Size	Cat. No.	Our
	110	552	2.75
Atwat r Kent	1214	553	2.25
	91.		
Decutur	10"	554	1.90
Evercady	121,2	555	1.90
Eveready	121	556	2.25
Farrand	7	557	2 25
Farrand Ind.	4.46		
Dyn.	110	558	1.35
First National	1.035	559	1.90
Frend-Eiseran			
NRSO, NRS	7.10"	560	2.70
Jensen DC7			
Comperi	1117	561	2.25
Kolmer	110	4269	.15
Magnavor	7	562	2.25
M j stir 70, 9	0	563	1.80
Newcomb-Haw	1000	P. 4 . 12	0 05
Oxford	9	505	1.95
Orford	84.0	PE 17.65	000
Pageling		nna	7 53/3
Charlie	7 = 1	569	2.25
Strombers			
Carlson	117	570	9.25
Symington	1.0	571	1.96
Symington	121/	572	2.25
Paurlus coupur		47 4 70	An I An I. F
coil	816"	573	1.60
		42 8 43	LOO
Peerl copper	1.0%	574	1.95
		0.14	1.90
Pearles copper	-0 Pars		0.30
eoil	15"	575	2.10
Pearl capper			0 40
coil	1.11.2	576	2.50
Peerless wire			
wound coil	8397	577	1.45
Proplet wir			
	10%"	578	1.65
Peerless with			
	1.435°	579	2.75
Temple	70	EPO	2 40
Temple	11"	581	2.75
Termole			
Auditorium	3.4"	589	2.75
Utah	9"	583	1.90
RCA 106		584	2,00
RCA TO 1		585	9,00
PCA 105		586	2.00
VICTOR		12170	
RE32, etc.		6519	1.35
Wright		017	
DrCoster	8"	588	2.25
Wright	- 13	000	12 . 14 49
	100	589	2.75
DeCoster	11"		
Zenith	4.1	591	2.25
RCA			0.05
Photophone	3	592	2.95
Bosch	11"	593	2.25
Bosch	10"	594	1.90
Brunswick D	9.547	595	2.25
Brunswick B	1415"	596	2.75 2.75
Brunswick E	141,"	597	2.75
Earl Inductor	10"	598	.95
(Continu	ued in r	ext column	n)

### Acratone Magnetic Speakers



There are 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 ducer 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, perforated metal grill and 6-foot silk cord. Chassis also sold separately.

average low price dynamic and can be mounted anywhere.

SPEAKERS Dia. Cat. No. Price 8" 296 \$1.25 6" 297 3.95

CHASSIS ONLY Dia. Cat. No. Price 298 \$2.95 299 2.50

## Phonotex Diaphragm

For Kolster Magnetic and Dynamic Speakers

1112 in. Diaphragm Cat. No. 4269

15c ea.

Con by used for replacement on o

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



Premier Magnetic Speaker

Cat. No. 5366

\$1.50

### PEATURE SPECIFICATIONS

UNIT A new development simple in construction and extremely efficient magnet of 'Chrome' steel.

		-
Majestie G1	9" 599	1.80
Malestic G2	9" 608	1.80
Majestie Gii 1	1" 609	1.80
	1' 610	2.75
Jensen		
	6" 632	1.50
Jensen D4 91		2.25
Jenson	0.3.0	
	3" 634	4.50
Machayox	9" 635	2.25
Nation's-Hawley		2.25
Phileo 65-90 1	1 567	1.50
	637	1.50
Phileo 20		
10.1.1.100.100	9" 641	2.25
Stromberg		
Carlton 12	642	2.75
Stromberg		
40.110.00	9" 643	2.25
	9" 644	2.25
Steinite 1	0" 645	1.90
Utah Stadium 1	2" 647	2.75
Wright		
DeCoster 1	2" 648	2.75
Zenith 52 121	4" 649	2.25
MANAGE 11 2 -	0.20	

Great News for Battery



Complete With Eight Radiotrons

Cat. No. 28 Brand List Price, \$260 New in Original Factory \$13.75 Sealed Including Chapa 8 R.C.A. Radiotrons Radiola 28 Second Har-monic Superheterodyne in distinguished and gracuital tone muhousry cabi-n t Ample compartment

comperiment of a library of a library of a library of the library

eliminators.

Just the set for the home without electricity, for callboats, tourist camps, houses on wheels, etc. Will work anywhere without external connections. Fully self-contained.

This cost is your appositive and

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.

Complete With All Batterles, Tubes and Speaker Ready to Play

Cat. No. 128 \$22.25

### GENERAL ELECTRIC End Table Electrola



Dimensions: 24% in. high 16 in de p, MODEL TS

Has sliding top. A Midget placed on top Radio can be and dimensional when phonograph is

No. 269 Our Price \*1650

### To Meet the Great Demand

## We Have Secured a New Shipment of

### COLUMBIA AUTOMATIC PHONOGRAPHS AND AMPLIFIERS

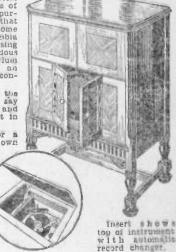
This DeLuxe Columbia Automatic Periord Changer and electrically operated Phonograph is the greatest buy we have ever offered to the public. The size of the re-orders from customers who originally purchased a single sample, is definite proof to us that it is satisfactory universally. Built into a landsome selected walnut cabinet, it consists of a Columbia Fleetric Pick-up; a powerful Kolster Amplifier, using 1-227, 2-245s and 1-280 tube, giving tremendous volume without distortion; a Rola 12" Auditorium Dynamic Speaker; and in addition to all tuis, an automatic record-changing device which records consecutively. secutively.

Just think what you get for only \$29.50. Why, the record-changing device alone is worth more, to say nothing of the Amplifier and Dynamic Speaker and Pick-up and the gorgeous welnut console cubinet in which this outfit is housed.

This unit has many uses. A servicemen 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 everal 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 automobile, the tuning dial could be placed undern ath the lid right alongside of the record-changing device. It has proved very satisfactory and in one particular easy a calibrate of ours has used several of these machines for that purpose.



record changer Cat. No. 200

List Price, \$295.00

\$29.50 Special

Employs: 1-217, 2-245 and 1-289 Tube SET OF UNIVERSAL TUBES \$2.50

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

(S. P. U. 24)



Uses r e 28, one 250, and two 81's.
Used with Victor Electric Orthophonic Phonograph No. 12-15 Electrola and the R. C. A. No. 105 Speaker
Output transformer in amplifier in stehed for 11 ohm voice coll impedance with 1,000 ohm field relistance Supplies dynamic speaker field of 110 voit 1.C. et 110 mils. Undistorted output at 5 waits which is enough to handle at least three dynamic speakers. Amplifier operation of 110-120 50-20 cycle A.C. current. Excilent power amplifier for use with plane raph pick-up or radio ets.

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 limit their pole pieces increasing the magnetic flux. Coli imp ding 171A, 225, 260, or 21 tul 2.

Cat. No. 150 ance 4500 ohms, match-

## Our Price \$1.95

For many years this has been he standard of comparion in scakers. A short time ago this speaker thanks was used by such well known manifecturers. Amplion. Now omb-flowly, Marca, Steart varior, tr. This peaker reproduces the full munical scale with a much fidelity and quality as a dynamic limit to handle and deal of others without rattle or discriming me it applicable for use as a monitor or wall address poster. Special could seel record and counter could make its mining reproduction. Will handle 4.0 with a bout burning out. out burning out.

### Superior Shielded Audio Transformer



A real quality job for pure tene and volume.

Ratio 514 to 1.

Cat. No. 2513 Our Price ...... 69c



### ARCTURUS TUBES

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

Arcturus Tubes carry the endorsement of the Federated Purchaser and are guaranteed for a period of six months from date of sale. Arcturus Blue
Tubes Give You
All These Sales
Advantages

Quick-Action—Arcturus pioneered the original quick-action tube. Immunity to Overloads—Arcturus Blue Tubes resist overload as high as 50%. Less Hum—Comparative tests show that Arcturus Tubes have 52% less hum than other tubes. Long Life—Arcturus Tubes have established an unchallenged world's record for long life. Life-Like Tone—Comparison in any receiver shows the improved tone of Arcturus Blue Tubes.

## 124—Screen

Another 7 second Arcturus 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
126	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
UX099	Detector-Amplifier	2.55	1.35
UV#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
50 De	New Arcturus Tube	S	

	00000 = 0000		
56	Detector-Amplifier	\$1.30	\$ .66
57	Triple Grid Amplifier-Detector	1.65	.87
58	Triple Grid Super-Control Amp.	1.65	.87
82	Amplifier	1.30	.66
46	Class B Amplifier	1.55	.82
134	Super-Control R.F. Pentode	2.80	1.48
139	6.3 V. Var. Mu R.F. Pentode	2.80	1.48
44	6.3 V. Var. Mu R.F. Pentode	2.85	1.51
55	2.5 V. Duplex Diode Triode	1.60	.85
58	Var. Mu R.F. Pentode	1.65	.88
59	Gen. Purpose Power Amp	2.20	1.17
83	5 V. Mercury Vapor Rectifier	1.55	.82
85	6.3 V. Duplex Diode Triode	1.60	.85
89	6.3 V. Gen. Purpose Amplifier	1.80	.96
GA	5.0 V. Power Pentode	2.75	1.45

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.

Detector. 6 Pin Base

## 133—2-Volt Pentode

List Price, 32.80

\$1.48

## 136— 6-Volt Screen Grid

List Price, \$2.80

\$1.48

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

0.17

95c

## 138—Auto Pentode

List Price, \$2.30

\$1.48

## Type "PZ" (247) Pentode

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

85e Sist Price, \$1.60

### 551 Variable Mu

This is the new "Variable Mu" tube. Its use will eliminate cross 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 .....

3.00 1.95

MAIL ORDERS TO REST

Federated Purchaser Inc.

1.95

1.95

3.00

3.00

3.00

25 PARK PLACE, N. Y. C. or to our negrest 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

Type	List	Our Price		Our rice
			232 2-Volt Screen Grid. 2.35	.72
WD11 DetAmp		\$ .72	233 2-Volt Pentode 2.80	.79
WD12 " "		.72	234 D.C. Vario-Mu Pen-	
55 Duo Diode Detector		.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 2.80	.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	.4(
112A " "	1.55	.53	246 A.C. Pentode 1.55	.60
120 3-v. Amplifier	3.00	.72	247 Pentode	.53
171A %-Amp. Amplifier		.38	250 Power Tube 6.20	1.38
182 Sparton	2.50	.87	280 Full Wave Rect 1.05	.40
183 Sparton	2.20	.87	281 Half Wave Rect 5.20	1.4
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 1/4-Amp. Detector.	4.00	.70	283 Rectifier 1.55	.70
201A 14-Amp. Detector.	.80	.32		1.74
210 Power Tube		1.52		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 Heater		.53		2.19
226 Det. Amp	.65	.35	588M Mercury 2.50	1.75
227 Det. Amp	1.05	.38	686 Sparton 4.00	.87
230 2-Volta Det		.65	866 Half Wave Rect 7.50	1.75
231 2-Volt Amplifler	1.65	.65	BH125 Full Wave Rect. 4.50	1.08

### TAYLOR TURES Amplifiers

May.

Normal

volts

450

450

450

Max.

plate

Type	velt	amp.	MI	1 volts	watts
210	7.5	1.5	10	450	20
250	7.5	1.25	3.	8 450	25
520S	7.5	1.5	4.	5 450	25
845	10	2.5	E.	1250	75
211	10	2.5	12	1250	75
	Fil.	k11.		Max. DC	Max. DC
Type	velt	amp.	Mu	modulated	non. mod.
210	7.5	1.5	10	425	500
211	10	2.5	12	1000	1250

Fil.

		Fil.	Fil.
Туре 281	Purpose HW	vels.	amp. 1.25
866	HW Mer.	2.0	5

Fil,

 $\frac{55}{75}$ 2380 25.00 20 15.00 1000 150 2100 3400 3600 25.00 15.00 1000 55 75 1.0 Oscillators Mutual Max. May. RF Plate Aver. cond. M. Mhos milli. plate List Our 7.00 25.00 Price \$ 4.20 watts amps. amps. 4500 6 15.00 100 7.5 175 3400 3600 Rectifiers Our List Price .\$5.00 Price \$3.00

plate

res 4500 1800

1800

# Quaningham

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 Amplifler	3.00	\$1.76
12	Delector Amplifier	3.00	1.76
46	Class B Amplifier	1.55	.91
55		1.65	.94
56	General Purpose Triode.		.77
57	Triple Grid Amp Det.	1.65	.94
58	Triple Grid Super Con-	4.00	124
00	trol	1.65	.91
112A	Amplifier	1.55	.91
120	Amplifier	3.00	1.76
171A	An pliffer	.95	.61
199UV	Detector Amplifier	3.75	1.61
199UX	Detector Amplifier	2.55	1.50
200A		4.00	2.35
201A	Detector Amplifier	.80	.44
210	Power Amplifier	7.00	4.12
224	Screen Grid	1.05	.62
124A	Quick Heater S. G	1.65	
226	A C Amplifian		.97
227	A. C. Amplifier A. C. Detector	.85	62
230	2v. Gen. Purpose Tube	1.65	.02
231	2v. Gen. Purpose 14be		
232	2v. Output Tube	1.65	.97
233	2v. Screen Grid	2.35	1.38
235	D. C. Filament Pentode.	2.30	1.64
	Super Cont. S. G	1.65	.97
236	S. C. R. F. Amp. D. C.	0.00	
0.00	Heater	2.80	1.64
237	Dt. Amp. D. C. Heater	1.80	1.06
238	D. C. Heater Pentode	2.80	1.64
240	Hi-Mu Amplifier	3.00	1.76
245	Power Amplifier	1.10	.61
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	3.06
385	Full Wave Merc. Vapor		
	Rect	1.30	.74
868	Photo Electric Cell	7.50	5.00
874	Voltage Regulator Ballast Tube	4.90	2.88
876	Billast Tube	6.70	3.36

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 constructed for public address and motion picture work.

As an instance, the 250 standard of

tion picture work.

As an instance, the 250 standard of Taylor is pumped for a period of 24 hours to assure the absence of gas and to remove distortion characteristics. The general run of 250 tubes are pumped for 1 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 date of purchase.

Aver. Mutpal

List

\$ 7.00 6.00 7.50

Our

Price \$ 4.20 3.60

4.50

Aver. eond. M Mhos. 1700 2100

2500

Grid

bias volt 30

84

8.1

Plate

milli.

amps.

30

55

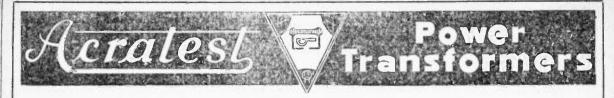
Undis.

output

2.2

4.6

7.0



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 furtion 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 slightest delay. Our transformers may not be the cheapest on the market, but they are the best that money can buy no matter what you pay for them. Order an assortment and convince yourself of their special

## 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 434 in. x 315 in. x 41% in.

Supplies the following V. at 2 amps. C.T.

mps. 730 V. at 75 mils. C.T. (No. 3137) Supplies the (No. 3

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



Size 434" x 316" x 418"

(6025) Supplies the following V. at 6 amps. 5 V. at 1 amp. V. at 8½ 5 V. at 2 amps. aps. 625 V at 50 mils. mils. C.T. 2 V. at 6 am 2 V. at 3 2 amps.

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 5% 5 V. at 2 amps. amps. 625 V. at 60 5 V. at 1 amp. Cat. No. 6556 Our Price

## Universal Midget Replacement Power

Transformer For All Midgets Using Up to 4.224, 1.245 or Pentode and 1-280 Tubes



Supplies the following vol age : 5 V. at 2 amps. 212 V. at 7 amps. 575 V. at 89 mils. Rectified: 325 V. at 30 mils.

Size 37, in. x 31, in. x 31, in. Cadmium Plated Frame. This midget power transformer althourn of small dimensions, is very runted and will furnish sufficient current for 4 screen grid, 1-245 or Pentode amplifier, and -280 rectifier tubes, without overheating. It will fit 90% of the midget sets on the market, like Clarion Junior, DeWald Audiola, Melorad, Radlette, Crosley, Audiola, etc., having the power transformer mounted in an upright position. For midgets using side-mounted power transformer, use our Cal. No. 5187, having the same characteristics as this one except for method of mounting. Size 37 in. x 314 in. x 312 in. Cadmium

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 21½ V, at 12 amps. 7½ V, at 3 amps. C.T. (C.T. 1,200 V, at 160 at 160 mils. CT.

Cat. No. 5700 Our Price

This transformer is ideal for transmitting and public address operation.

It has a 2½ volt winding at 12 amperes, 2-7½ volt winding at 12 amperes, 2-7½ volt windings at 3 amperes and a 1200 volt center-tapped plate winding at 160 milliamperes. Lug terminal arrangement identical to our Cat. No. 5190.

### Heavy Buty Side Mounting Midget Power Transformer

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



Size: 244x314 in. Mounting Holes C. to C.

Cat. No. 2532 \$240 Our Price ....

Supplies the following voltages: 2½ V. at 7 amps, 650 V. High, C.T. to shield. mils., C.T. 2½ V. at 3 amps., O V. High, at 85 mils., CT.

Features:

"250" Power Transformer



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

(5190) Supplies the following
2½ V, at 10½ 7½ V, at 8 amps,
amps. C.T.
7½ V, at 3 amps. 1,090 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 extremety simple to install.

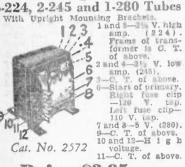
Our Price S950

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 5-224, 2-245 and 1-280 Tubes



**Price \$2.85** 

Supplies the following voltages:
21, V. at 7 smps. C.T. 5 V. at 2 smps.
21, V. at 3 amps. C.T. 635 V. at 10 mils.
Rectified: 650 V. at 85 mils C.T.
Size only 4 in. 7 4 in. x 3% in. Equipped with safety fuse block. For 110-120 v. 50-60 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:
21. V. at 8 4 mps. 5 V. at 2 mps.
600 V at 70 mils.
Retified 375 V. at 70 mils.
Can be used as replacement in such sets as Gioriotone 4-tub., Finited Reporter,
Traveler 4-tubs, Jackson-Hall, Fizz Fin, Paramoun Ethophone 4-tube, Wiring



Bohema included with each Franciormer Weight, 21 lbs.

Cat. No. 6027

Price \$1.35 ea.

## Acralest

Replacement Transformer

With Universal Mounting Brackets For Sets Using Up to 5-216, 1-227, 2-250 and 2-281 Tubes.
Size: 4 a x 312 x 414 in.



Supplies the Supplies the officer of the control Cat. No. 5193

\$3.95

## Meralesk

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. \$194

\$1.45

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

## Acralest

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: 314 in. x 214 in.

\$1.40

This transformer is a perfect replacement in about 10 per cent of all standard tabe checkers. Many experimenters are looking for such a transformer as this for latent transformer are 1½ 2½, 5, 6 and 7½ vol. though the 2 volt and 3 volt tubes may be run of the 1½ and 2½ volt windings at his 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 Tube Upright Mounting

wide, 4% in. high Cat. No. 5454

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



Size: 3/4 in. x 3/4 in. x 3/4 in. x 3/4 in. x 3/4 in. Supplies the following voltages: 1 v. at 7 mp. 2 v. at 1½ mps. v. at 2 amp. 100 v. at 90 mils. Recticed 375 v. at 90 mile

Cat. No. 5187 for 50-60 Cycles

**Price \$1.95** 

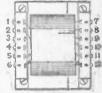
## graties

Midget Replacement Power Transformer

Supplies:

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





at a Amps.

1 & 2-5 V a. Ampt.
3 & 4-Blank
5 & 6-Primary
7 & 9-Han Volters at 6.8 V. at 80
Mil.
10 & 12-2 V. at 8° Ampt.
11-C. T. of soove grounded to frames.
3°4 in. long, 3°4 in. vide, Weight 5 lbs.

\*1º5 Cat. No. 6250 Our Price ......

## Acralest

Power Amplifier Transformer



For 234, 227, 250 and 281 Tubes Supplies: Volts at 8 4 Amps. 2½ Volts at one C.T. 7½ Volts at 2½ Amps. 7½ Volts at 2½ Amps. 7½ Volts at 22. 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: 8-216 Tuber 1-127 Tuber 1-171A Tuber 1-280 Tuber For 110 60 Cycle A C. Size 4 3 1 2 in

Cat. No. 5075 Our Price ....



## Acralesi

## 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
Ease of installation
Universal Application.
Models listed below are for 115-V. 60Cr. A.O.

## Type F-5 Tubes

3-224, 1-247 and 1-280



Size 4%x3%x3¼" Chassis opening 2x214" 1 & 2-Primary 3 & 4-212 V. at 7.25 A. 5 & 9-625 V. at 60 Mils 6-C. T. of High 10 & 11-5 V. (280)

CAT NO. 6757

Cal. No. 6757

## Our Price \$1.95

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

1 6 (10) 2 7 (11) 3 (12) (4)(5) (13)

(14)

3 9

Chassis opening 2x23%" 1 & 10-212 V. at 9 A. 6-C. T. of above 2 & 11-21/2 V. at 31/2 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 436x312x314"

Cat. No. 6758

## Our Price \$2.25

## Type F—12 Tubes

9-224, 2-247 and 1-280

0 6 9 2 7 (10) (3) (11) (12) •

Size 438x334x334 Chassis opening 2x3" 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
to frame to frame 6 & 13—Primary

(5) (5) CAT NO. 6759

(13)

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"

(1) (7) (8) (2) 19 (3) (4) (H) (5) (12) (13) 6

Chassis opening 2-11/16x i & 8-Primary 2 & 3-730 V. at 75 Mils C. T. of high grounded 9 & 10-5 V. (280) 4 & 11-21/2 V. at 101/2 A. 5 & 12-212 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

(8) (2) (9) (3) (10) (4) (II) 5 (12) 6 (7) CAT NO 6761

Size 4x314x4" Chassis opening 2-11/16%

1 & 9-215 V. at 16 A. 2-C. T. of above 8-C. T. of above 4 & 5-5 V. (280) 3 & 10-212 V. at 3½ A. 11 & 12-675 V. at 110 Mills - V. at 110 C. T. of high grounded 6 & 13-Primary

Cat. No. 6761

## Our Price \$2.85

### TYPE F—9 TUBES

1, 3-227, 3-211 and 1-280

Si.e 334x34x51 5-6-21.V. at 123 Yellow-C.T. of above. 7-4-8-21 V. at 3 7-1-3-2 V. at 3 A.C.T. 10-11-5V at 2A. 9-3-12-High, 350V. at 80 mils. 1-2-Primary

0 2 3 4 (3) **(** 

Cat. No. 6243

(11)

(12)

## TYPE F—6 TUBES

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

1 (2) (3) (1) (5)

6

7 PLACE

(8) (10)

Size 37,8x312x538". 7-9 2:2 V. at 6A. Yellow Lead—C.T. of above. 6-8-10-212V. at 3 A.C.T. A.C.T. 1-2-280 5V, at 2A. 3-4-5-High, 300V, at 75 mils. Primary-Black and Green

Size 376x312x578

Cat. No. 2600

## Radiart Step-Down Transformer



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

at. No.

Our Price \$4.25

## Acralest

### Step-Down Transformer

Volt. 60-68. Voit. 50-68. Cycle, A. C. Output— 110-120 Voit Rated at 150-160 Watt For use in lo-calities where 220 volt, 60 cycle A.C. Current is supcurrent is sup-plied. These Transformers adapt current of that voltage to A. C. Radio or other Electrical

Input: 220-250



Cat. No. 3157

Appliance which Cat. No. 3157
consumes up to
180 watts. Encased and easily Shipping wg! 61 lbs.
mounted.

### Our Price \$2.95

### Kolster-Earl Power Transformer

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



1 & Primary 3 & 4-Fil. of 280 (5V. 2A) 5 & ?- Plate (578 V. 60 miler

6-C. r. of 8 & 5-5V.

10 & 11-21 V. 31 LA (227) 31'2 in. long, 3 in. wide, 334 in. tall. & 13-11.V. 11

Weight 3 lbs. A very popular replacement transformer which can be used in many of the early A. C. receivers like Earl, freed, Kolster, 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



	003			
Cat. No.	For Models	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		
6214	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 merchar disc.

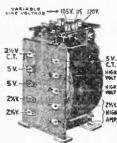
Cat. No.	Part No.	Set No.	Our Price
2551	8335	17, 18, 38, 51	81.50
2573	8173	14, 16	2.25
8729	GW262	44, 46, 220V. A.C.	3.95
2534	61950	48, 12	1.80
2566	8344	60, 62	2.25
2677	GW16	60, 62 25 cycle	2.75
2683	GW117	66	3.95
2676	61144 62401	80-82, 86	1.80
5456	RCA-Victor	34, 35, 39, 37	1.80
2531	RCA-Victor	RE-14, 15	1.80
6670		18, 25 cycle	4,25
6816	8399	4.1	2.50
3734		17.1 s. 33, 51 220V. A.C.	3.95
2675		64, 67	9.45
6009		101 Speaker	4.50
6769	RCA-Victor	RE-35, 39, 57	1.80
6771		Superette	1.95
6919		Theramin	3.95

## Universal Replacement Filament and Power Transformer

### Oversized Power Supply

For 227, 224, 245 or Pentode and 280 Tubes Can be used as replacement in 90% receivers in the market today. All taps mounted on one bakelite panel. Adaptable for 105 to 125 volts, 60 cycle

Size: 4:5 long.
312" wide,
534" high. Supplies the following voltages: 21/2V. at 1.5 Amps. 212V at 3 Amp. 3V. at 2 Amps. 575V. at 100 mils. Rectified: 300V. at 100 mils.



Cat. No. 2560

The center tap of the 227 filament wind-ing and the center tap of the high tension winding are grounded to frame.

The 2550 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 volts to take care of any voltage conditions.

## Acralest

### 21/2 Volt Filament Transformer

Delivers  $2\frac{1}{2}$  V. at  $5\frac{1}{4}$  amps.

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

Primary.
115 volts.
Secondary,
2.5 volts at
5.25 amps.
Length, 27a".
Teight, 23a".
Width, 13a".
Weight, 1 lb.



Cat. No. 6022

Our Price 95c ea.

## $2\frac{1}{2}$ 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.

## 7½ Volt Filament Transformer

Same appearance and size as above. but delivers 715 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. 6%" high, 5%" wide, 4" deep. Weight, 10 lbs.



Cat. No. 5422 \$450 Our Price .....

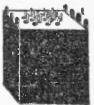
### Used in P.P. ZE 50-60-70

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-15 and RE-75



Cat. No. 6830

Do not confuse this transformer with surplus and reclaimed transformers which we and other mail order houses have been selling for as low as \$1.95. This transformer is the current product of one of the largest transformer manufacturers in the country who have been making quality products for 18 years. The original manufacturers' specifications have been not only adhered to but a greater safety factor added and the transformer finished better all around, so that it has eye value besides standing up under the severest 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 Voits for 5-226 tubes; 5 V. C. T. for 280 rectifier and 800 V. C. T. at 150 mills high. Can is 4½x5x5½ inches. Weight 8 lbs. Do not confuse this transformer with

Cat. No. 2554 For 25 Cycles .....

### Surplus Victor Power Transformer

These transformers have been removed from discontinued Victor Amplifiers, and are guaranteed to be in perfect working order. They are scratched here and there due to handling, but mechanically per-tect. 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 minimum cost and with very little work.

This com-plete power pack furnishes filament and plate current for 4-226, 1-22 1-2 0 and 171A tub

water Kent battery set into 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 terminals for easy connections, 230 tabe socket attached to outside of can. Equipment with "Hi-Lo" switch. Two leads or eight 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% in. tail.

Cat. No. 3155 Our Price .....

## Complete AK 37, 40, 42, 44 Power Pack Replacements



These lacks are moved in a can identical with the original, but without the cover, as the old cover will at. Made according to original specifications and guaranteed. Does not include resistance with an acceptate

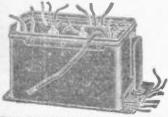
according to original specifications and guaranteed. Does not include resistance strip or socket.

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

\$6.50

### Original - Genuine Atwater Kent Power Packs



These are ganuine power packs manufactured by the Atwater Kent Manufacturing Co. and packed in original scaled factory cartons. Only a few available at this price.

Cat. No. 7050

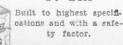
For Models 50, 52

Power Packs for Other A. K. Models

Cat. No. Sets 46-47-52 6166 6845

59.00

Replacement Power Transformer for Atwater Kent Model 37 Sets



Cat. No. 2642

\$2,75

### 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

615x51/2294" Weight, 5 lbs.

Our 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, 3 8, 33, 338, 21, 41

Cat. No. 3738

Our Price \$4.25

## Acralest

Universal Replacement Power Transformer With Universal Mounting **Brackets** ELECTROSTATICALLY SHIELDED

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

Height, 3% in.; Width, 4½ in.; Thickness, 4½ in. Mounting Holes, Horizonal, 3%x2-3/16, Verticel, 3% x2%: Weight, 6% lbs.



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 1.4, to 245 and one 280 tubes are specified. Primary—115 volts 50-50 even Filament 1-2.5 volts 8.75 and Filament 2-2.5 volts amps c. Filament 3-5 volts 2 mps c. Filament 3-6 volts 60 volts 60 mps c. Filament 3-6 volts 60 volts 60 mps c.

Our Price \$2.25

### Jefterson 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 contains the proper condenser and

choke.

Red Wire—

Start of primary.

Green—110 V.

Black-120

Secondary connections shown on ac-companying diagram.

Size: 714 ide, 31 long, wide, high.

Cat. No. 6541 Our Price .....





## Earl and Kolster Power Transformer

For 3-206, -227, 2-171A and 1-280

Cat. No. 2575

Que Price \$2.25



Cat. No. 2008

For 25 Cycles, \$3.00

## Kolster Power Packs

5528 5529 63% 5530 6M 5531 GT 5532 6R

Supply filament and plate volt-ages for a bove ett. Can be used for other sets and for electrication of ballery 'cl



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

Weight, 10 lbs.

Furnishes filament and plate current for 2-281, 1-210 and 7-199 tubes in series. 53," long, 4" wide, 5" tall.

Cat. No. 6009

\$4.50

34 08011

\$7 200013

### 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, 3<sup>1</sup>4 in, Wide, 4 in, High, Weight, 6 lbs, 1 & 5-5 V. (230<sup>3</sup>4) 2 & 12-Hi (350 V.

2 & 12-Hi (350 V.
at 80 mils.)
2-125 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 & 13
A well built rugged transformer that
will stand abuse and not overheat in the
worst conditions. Silicon steel lammations are tightly packed and held in
place by from frames to eliminate vibration. Coil wound with pure electrolytic
copper and all terminals are prought out
to bukelite strips and fastence to lugs
for easy connections. Mounting feet mane
it easy to install this transformer



## Earl Transformer Coil and Terminal Strip

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

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

Cat. No. 3172



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

toriner dons.				
Receiver Model	Coil	Cat. No.		
Columbia—500	2052	3173		
Columbia-Kolster-950	4336	3174		
Kolster-25-cycle for sets re-				
quiring 1100, 15, 712, 112				
and 21/2 V		3175		
Kolster-25-cycle for sets re-				
quiring 550, 5, 112, 212 V	3558	3176		
Kolster-K24	3504	3177		
Earl-25-cycle, 21, 22, 55, 56,				
52		3178		
Freed-25-cycle, 78, 79, 95, 47		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 suf-ficient current for any large set, including radio-phonograph combinations. Also suitable for wash-ing machines and other electrical appliances drawing heavy cur-



C. 11. No. 6014

7% in. long: 4% in. wide; 3% in. tall. Weight, 12 lbs

### RCA-Victor Power Transformer

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



Purnishes the furnishes the following current 212 V at 84 Amps. 212 V, at 3 Amps. 5 V, at 2 Amps. 790 Volts at 140

mils C.T.
C.T. Primary for
105 to 125 V. A.C.
Replacement Power ran form: For the following receivers:

RCA 12, 48; Victor 14, 15, 17, General Electric T11 and Westinghouse WR1.

Part No. 61950. 334X334X134 in. Weight 742 lbs.

Cat. No. 2581 Our Price

\$ 1 80

### ZE7 Filament Transformer

Suprlies:

212 Volts at 6 Amp 112 Volts at 7 Amp 712 Volts at 3 Amp. 31, in. long, 21, in. wide, 34 in. high.



Cat. No. 5736

\$1.25

## Filament and Plate Supply Transformer



for 280 Tube. For B Eliminators and conversion of D. C. dynamic speakers to

Supplies: 100V. out-put of rectifier at 100 mils. 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-yenting inter-stage feed back. RATIO



This transformer has two primary windings, one to match either a high impedance pickup or the plate of a pre-amplifier tube. The or the plate of a pre-amplifier tube. The other winding is approx-imately 200 ohms for either a single button, nike or low impedance, pickup. Can be used to couple a mike and high impedance, pick via impedance pickup.

Cased in brass electromagnetic shield. Brown firmsh case.

Cat. No. 2581 Our Price ...

4 for \$1.00

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

Can be used th 2.5 and with 2.5 247 Tubes.

Electrostatically shielded. In preg-nated against lamination v.bra-tion, assuring amplification on all frequencies.



Output Matches Moving Coil on All Dynamic Speakers

Cat. No. 5744 Per Pack .....

59c

29c

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

30 Henric., 150 Mils 200 Ohms 3x2" ax3" high

Weighs 315 lbs.



Cat. No. 5174 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 good choke is essential. Can be mounted in any position by soldering brackets to the case. Ideal for transmitters and amplifiers. Invest 81 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 leads: 11.V. (226), 21/2V. C.T. (224 or 227) 5V. C.T. (171A or 112A)

316" x 316" x 314" tall

Cat. No. 3724

This transformer is ideal for tube testing outfits. The secondary can be hooked in series to supply any desired voltages like 1½, 2½, 3, 4, 5 and 7½, 1½ and 21/2 V. windings rated at 2 amps. 5 V. winding rated at 1 amp.

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

## Acralesi

Shielded Push-Pull Audio Transformers Permalloy -----



1	aminations		
Cat.	Description	Price	
2552	Audio Transformer, ratio 4/1, for use in 1st or 2nd stage.	\$0.95	
2651	Push-Pull Input for use with 171A, 245, 250, 247, 231, 233, 238, 210	.80	
2652	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

2563 Small heavy duty 30 henry choke, 125 Mils, matches above transformers.....

2673-74-57



### Midget Dynamic Speaker Output Transformer

transformer is standard type of equipment on such midget dynamic speakers as Rola, Jensen, Oxford, Quam, Magnavox, Utah and others. These transformers are extremely popular because of their efficiency and small size, 1822 in.

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

Cat.	Description	Our Price
2000	Single tube output for use with 171A and 245	.70
0233	Single Pentode output for use with 233 and 247	.70
	Push-Pull Output for use with 171A and 245	-70
6235	Push-Pull Pentode output for use with 233 and 247	.70

### T. C. A. Shielded Super Input Transformer



For 171A, 245, 247, 210, 231, 238 tubes. Cadmium plated shield 3 1/6" wide, 234" tall. Weight 2 1/2 lbs.

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

Cat. No. 7204

## Acrales CONCERTONE PUSH-PULL

AUDIO TRANSFORMERS





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

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

case.

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

Cat.	No. Description 1	Price
2647	Push-pull Input, lugs on bottom, for use with 171A, 245, 250, 247, 231, 238, 210	\$1.45
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	1.45
2673	Push-pull Input, lugs on side, for use with 171A, 245, 250, 247, 231, 233, 238, 210. recommended for use where fine tone quality is wanted, due to the flat response curve of this transformer	
2674	Push-pull Output, lugs on one side and tip jacks on other, ratio 35/1, for connection direct to dynamic cice coil, for use with 171A, 245, 250, 231	
5533		
3714		

### Acratest Choke

30 Henry, 150 Mils at 100 Ohms Lug terminals on hottom



Cat. No. 3714

Our Price \$1.20

## Unshielded Push-Pull Audio



Transformers

Horizontal Mount Here is a compact transformer which equals in performance any one on the market today, The ease of mounting and wiring of these instruments makes them suitable for almost any set. The highest quality silicon steel and pure drawn copulations are suitable for the suitable for the

	go into this splendid transform	er.
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	
OFAN	10 ohm voice coil	.80
2567	4-1 Tapped Input with leads and mounting brackets for 171A, 245, 247 or 250 am-	
	plifiers	.85



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

	Lammain			
Cat.	Description	Price		
5831	3 to 1 Straight Audio for use in 1st or 2nd stage	\$1.03		
5834		1.20		
2576	Push-Pull Output for use with 171A, 245, 250, 231, for con- nection to number of speak- ers or to dynamics having	K - 240		
	built-in input transformers.	1.00		
5835	above tubes, ratio 80,1 for connection to 10 ohm voice			
5838	coil of dynamic	1 00		
	aamic	1.00		
5520	Push-Pull Output for use with Peniode tubes only (247, 238, 233), for connection di- rect to voice coil for dy-			
	namic	1.00		

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

Cone is of cermalloy steel lam-inations bound by convenient mounting bracket which also serves as a shield. Di-mensions: 2 x



Cat. No. Input for 171, 112A, 245, 210 and 250 tubes Straight 312 to 1 audio 30 Henry 100 Mil 250 5635 7960 .RA .45

## Amertran Audio Transformer

Volume and Tone Quality Cat. No. 2577

## 95c each



### Grebe Audio Transformer



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

Cat. No. 5105

95c ea.

### Grebe Input Audio Transformer

Same Size and Appearance as the Audio Shown Above.

Cat. No. 6651 \$1.50 ea.

### Kolster First Audio and Interstage Pack



Cat. No. 5534

Fart No. 13305... Used in Models 902 and 980. Housed in steel can and mounted on steel base, with all wire leads. 6" long, 3\"a" wide. 3\"a" tall.

### Keister Bouble Chake



Part No. A58010

Used in Models 6J, 6K, 6M, 6R, 6F

Cat. No. 5543 \$1.95

### Kolster Output Choke



100 Mills tapped at 50

Same dimensions as Audio Trans

Cat. No. 3725

950

### KOLSTER Double Audio Pack



Cat. No. 5587

\$1.95

A99003. used in Models K20 and R21. Ratio 3% to 1 D. C. Resistance
Pri. 1500 ohms each. Sec. 7250 ohms
each. Lead in yellow spaghetti to core
of both transformers.
Transformers
mounted at right angle to each other.
3%" long, 2" wide, 3%" tall.

### Phileo Audio and Push-Pull Transformers





2647

2651-52, 2503

05

Cat Used in No. 5834 Description Models No. Price Models 20, 20A, 90, 90A, 70, 70A, 220, 220A 30, 77, 77A, Push-pull Input 4232 \$0.95 2651 Push-null Input 86, 87, 76

3242 3872 80 Filter Choke 65 87 3518, 3472 Push-pull Input 96, 96A, 65, 95, 296, 111, 2617 3537 1.40

95, 296, 111, 111A 65, 87, 76, 77, 77A, 95, 96, 296, 40, 41 511, 512, 521, Push-pull Output 9659 2848 .95 2552 4/i Str't

511, 512, 521, 531 111, 112, 111A, 112A, 76, 96, 77, 296, 40 41 Audio 3077 1.35 3714 Filter Choke 3499

### Thordarson Interstage Double Audio Transformer

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



## 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 compa 178x178x212 in. 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 trans-formers are built for heavy duty work on amplifiers, and large heavy duty work on amplifiers, and large receivers. Electro-lytic copper wound on a large silicou steel core. Well insteel core. Well in-sulated and mounted on universal brack-

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

Mounting holes 334" O. to C. Height a". Weight 2 lbs. 31/2 to 1 Audio.

Cat. No. 7222, 31/2 to 1 Audio Our Price

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

Cai. No. 7323

Our Price .....

### Sangamo Push-Pull Input Audio Transformer

Model BX



Standard input dio transformer used in Push Pull used in Push Pull formation employing 171, 245 and 250 type tubes. Core is of permalloy steell a m in a tions bound by con-

bracket which also serves as a shield.
Dimensions: 1x23 x33 2 Jn. long. Weight, 2 lbs.

Cat. No. 7323, Push Pull Input for 171A, 245, 210, 250

75c

### **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 Coil.



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

Mounting holes, C. 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 8 50 Our Price .....

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

Cat. No. 3726

F 85 Our Price .....

## Universal Replacement Audio Transformer



Cat. No. 2502

75c ea.

small compact tr an s-former, ideally former, ideally adapted to tight places and can be used in any set, A.C. or D.C., using straight audic amplification

ing straight audio amplification
It has two sets
of brackets for
norizontal or vertical mounting.
Size, 136 in. Size, 138 in. high, 236 in. wide and 21/8 in. deep.

Weight, % 1b.

## Universal Push-Pull Input Transformers



Input

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. brackets.

Approximately 2 in. cube. Wt. 1 lb.

Cas. No. 5597 98c ea.

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 ingenu-ity has endowed this new Jefferson tapped output transformer ty has endowed this new Jefferson tapped on the first transformer with features insuring fexibility beyond the average conception, togesher with quality and workmanship expected only in a transformer of much higher price. It is Universal former of much higher price. It is Universal for coupling any combination of tubes (Nos. 171, 245 or the new 247 pentode either single or pushpull) to any dynamic or magnetic speaker either low, medium or high impedance voice coil. A patented bracket permits mounting in any position.

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

Cat. No. 6028

## **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" battery
Terminal 3—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 Chokes — 40 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

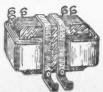
Cat. No. 2515 85c Each

### Earl Double Choke

with

Mounting Brackets Cat. No. 2605

Our Price 8-1 02



### BRUNSWICK Low Impedance Input Transformers



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

Cat. No. 7204

\$1.35

### Stromberg Carlson Filter Chokes



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

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

Single Choke

8 Henries, 200 Mils, 22 ohms resistance, inductance much higher at smaller currents.

6 in. long, 3% in. wide, 6½ in. tall, weight 11 ibs. Bakelite terminal strip. Cat. No. 5252 Our Price .....

### Stromberg Carlson No. Audio Transformer



Permalloy Lainmations. Totally shielded.

Ratio 31/2 to 1. 2x23/4x212" high Weight 1 lb.

Cat. No. 7342 Our Price

950

## 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 tubes



List Price \$6.50

### Atwater Kent Replacement Transfermers

Cat. No. For Models Cat. No. For Models 2606 20, 30, 35, 37 6896 41, 1st audio P.P. Input 7057 40-42-46 Audio 7058 46 Input





### Acratest De Luxe Phonograph Pickup



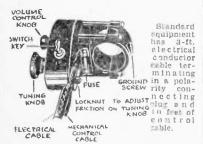
This pickup is especially recommended where particular stress must be placed on beauty of tone. This pickup far exceeds the performance of normal public address equipment and is for those radio engineers who desire the finest electrical reproduction. The pickup is skilfully counterbalanced so that it may be used for 78 or 83-1/3 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.

Overail length 10 in. 7% in. from

Overall length 10 in. 7% in. from center pin to needle point.

ACTIOCS Ivers of	o Mecano bosses		
Cat. No.	Impedance	1	Our Price
6976	200 Ohms		本員95
6977	500 Ohms	-	63
6978	5000 Ohms	)	Each

### The New Federal Steering Column Control



Cat. No. 7485-List Price \$10 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 easily replaceable. The multiple-wire cable for switch, pilot light and volume control consists of five wires, in accordance with the R. M. A. standard color code.

The electrical connecting plug, sturdy in construction and attractive in appearance, protects the connections to batteries and speaker leads and simplifies installation.

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 ck-switch and key, together with a lock-switch spare key.

### 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

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.m. Furnished with 12 in, turniable and special mounting cushions to avert vibrations which is ruinous to good recording. For 110 V. 59-80 evel operrecording For 110 V., 50-60 cycle operation only.

Pur Price \*17<sup>50</sup>

### Frost 10,000 Okm Potentiometer

Graphite Element. Only 7,'16 in. thick. 1½ in. flat shaft with ¾ in. thread and locknut. Will fit all locknut. Wil



A great majority the receivers on market today the potentiometer a ohm potentiometer as a

volume control. This potentiometer will fit 199% of these sets because of its compactness and length of that. Absolutely noiseless. Positive wipning action. Perfectly insulated for 500 wolts. Every serviceman should have a unpuly 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 Our Price .....

29c

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



Cat. No. 3663 Cat. No.

TYPE "A" Small round for 4 volt "A" eliminators

\$1.39 Each



Cat. No.

TYPE "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.

3664

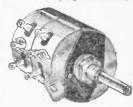
TYPE "B"

for B

eliminators \$1.79

Set of 4

### **Genuine Brand New** Frost Victor Twin Potentiometer



Made by Frost For Models RE32 RE35 RE52 **RE75** 3800-2900 Ohms-Clockwise

Here is the genuine Victor Volume Continuous manufactured by Frost—not to be confused with surplus controls—and incorporating several improvements over the old type. Mounting panel on front of unit makes for ease of installation. Metal strap holds the two units rigidly. Completely shielded and enclosed against dust and moisture. Shaft 32 in. threaded and 1-3/13 in. long. Here is the genuine Victor Volume Con-

Cat. No 7450 Our Price ......95c

### 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

Supplies the following voltages:

2 amps; 300 v. each side of C. T.; 289

This compact

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 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 Cat. No. 5502 95c Cat. No. 7374—For 220 V. A.C....\$1.50

### Acratest Field Exciter for Dynamic Speaker

6 x 41/2 x 31/2" high. Weight 5 lbs.



This unit is capable of delivering 200 milliamperes at approximately 100 volts. It is designed to operate with either one with either one of the new 83 type mercury va-

type mercury vapor full wave rectifiers or two of the 280 type wave rectifiers. Greater efficiency and more current is attained with the 83 tube, due to the lower internal resistance of this tube. The unit is housed in a compact black crackle finished can with mouting holes in the base Reading from left to right, binding posts 1 and 2 and 3 and 4 are separate pairs, and may be used to supply field current for two individual speakers.

Cat. No. 85 Our Price, Less Tubes.....

## Electrolytic ndensers

## No Liquid, Lightweight-Long Life, Compact

### SELF HEALING

Surge limiting characteristics. Unlike

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 Farads condensers is such that when the condenser is broken down due to the application of over-voltage, it will heal itself as soon as the over-voltage is removed.

### Summary of Why Acratest Dry Farads Should Be Used:

- 1. Low cost per microfarad per volt rating.
- 2. High voltage rating.
- 3. Low Voltage leakage.
- 4. No liquids to run or leak out.
- 5. Long life.
- 6. Saving of space, less space required per microfarad than paper or similar condensers.
- 7. Filtering action is very nearly equal to that of paper condensers of the same capacity.
- 8. Complete recovery from breakdown when over-voltage is re-
- 9. Can be mounted in any position.
- 10. Low power factor.
- 11. Minimum chemical action on dielectric film.
- 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

41/4" High

No.	Cap.	Dia.	Anodes	Price
5314	14 Mid.	211"	8-4-2	1.40
5316	16 MEd.	21,00	8-8	1.40
5817	16 Mfd.	21,"	4-4-8	1.95
5318	18 Mfd.	212"	8-9	1.65
5324	24 Mid.	3"		1.60
6520	20 Mid.	212"		1.30
5333	32 Mid.	3"		2.10
5335	36 Mfd.	3"	18-18	2.65
5336	36 Mfd.	3"		2.30
5354	U4 Mid.	312"		3.25
5352	54 Mid.	31/2"		3.25





Diameter 1%" Peak Volts 500



Cata No.	Cap.		Length	Our Price
5301	1. Mfd.	400	38"	\$ .3!
5302	<ol> <li>Mfd.</li> </ol>		1-7-16"	.47
5304	4. Mfd.		23%"	.5
5308	8. Mfd.		414"	. 6
6540	4-4 Mfd.		414"	.9.
6720	6-6 Mid.		41,4"	,4



### C Bias Condensers for Pentode Tubes

Cat.	 op.	Peak Volts	Anodes	ur
5305 5310	Mfd.	50 50	1	\$ .27 .27

## Aratest A TUBULAR Tubular Pigtail Electrolytics

These low voltage tubulars embody all the characteristics of the 500 volt Acratest Electrolytics. They are hermetically enclosed in a non-hygroscopic tube sealed at both ends. Connections are made by means of the pigtails at each end. Polarity is indicated by the wax color at the ends, the positive having red wax and the negative black.

These units are highly efficient as C Biases for Pentode tubes.

Cat.	Cap.	Peak		Our
No.	Mfd.	Volts	Tube Size	Price
6644	7.5	25	% in. O.D.x216 in.	\$ .20
6645	10.	25	34 in. O.D.x21/8 in.	.20
6646	25.	25	% in. O.D.x21/6 in.	.20
6647	2.	50	% in. O.D.x21/2 in.	.25
6648	5.	50	% in. O.D.x21/8 in.	.25
6619	7.5	50	% in. O.D.x21/s in.	.25
6650	10.	50	% in. O.D.x2% in.	.25
6660	2.	100	34 in O.D.x21/8 in.	.30
6661	5.	100	34 in. O.D.x216 in.	.30
6662	1.	200	% in. O.D.x21/8 in.	.30
6668	2.	200	% in. O.D.x21/8 in.	.30
6664	1.	400	% in. O.D.x21/6 in.	.30
6665	2.	400	1 in. O.D.x21/6 in.	.27
6724	.5	500	3/4 in. O.D.x21/8 in.	.24
6725	1.	500	% in. O.D.x2% in.	.29
6726	2.	500	1 in O.D.x216 in.	.33

### Mounting Brackets for Cardboard Condensers



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

## Our Price 5c Each

Acralest 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 cordboard container and is extremely handy at 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
6191	1 Mfd.	1 x 1 x 2	\$ .30
6492	2 Mfd.	1 x 1 x 2	35
6493	4 Mfd.	112X 8X 4	.36
6191	6 Mfd.	112x 1 x 4	.12
6495	8 Mfd.	112x 1 x 4	.43

## Acratest "Power" Filter Electrolytic Condensers

800 volts working, 1000 volts peak

These newly developed These newly developed electrolytics make possible the construction of transmitters and power amolifiers 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 Filter action.

\$ .85

1.05

1.95

Cat. No. Capacity 6931 2 mfd. 134 x 24 x 5" High 6932 4 mfd. 6933 8 mfd.

# 0

· 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 conservatively 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 insulated stranded wire leads and very useful for the service man in repairing sections for filter blocks or bypass condenses.

or by	pass	cond	ensers.	0110
3076	.1	200		.1.1
3077	.25	200	7-16x1 3-16x134	.13
3078	. 5	200	8 aX1 1-16X134	.16
8079	1.	200	*8X1 11-16X134	1319
3080	1.	200	36X112X3 1-3-16	12-2
3081	2.	200	9-16K1 11-16X3 3-16	11
3082	.1	300		.13
3083	.25	300	58X15-16X134	.16
3084	.5	300	9-16×1 9-16×13	.20
3083	5	300	7-16x1 3-16x3 3-16	,20
3083	1.	300	12X1 ax3 3-16	.30
3087	1.	300	1/8×1-4×3 3-6	.30
3088	1.	300	38X158X438	.30
8089	2.	300	5'ax1 13-16x438	.50
3090	. 1	400	38X13-16X134	.16
3091	.25	400	3aX11-16X134	.18
3092	.5	400	11-16x1-11-16x134	.24
3098	.5	400	3 8 X 1 1 2 X 3 3-15	.21
3094	1.	400	5ax1 11-16x3 3-16	.38
3095	2.	400	1x2 9-16x3 3-16	.81
3096	1.	400	9-16x17ax43a	.38
3098	-1	600	5 8 X 1 1-16 X 1 13-16	.20
3099	.25	600	38X112X314	.22
3100	.5	600	9ax1 11-16x314	.33
3101	1.	600	15-16x218x314	.57
3102	2.	600	7sx1'sx43s	.63
3103	.5	1000		.50
3104	1.	1000	1 1-16x2 1/8x43/6	.70
3109	2.	1000	21/ax21ax43a	.21
3110	.1	1250	%x1%x438	
3116	.5	1250	%x77ex43e	
8118	1.	1250	134X178X438	

### Official Refrigeration Service Manual



Compared with servicing a radio set or wiring a house for 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; dia-

carefully explained; diagrams are furnished of every known machine; special care is given to the servicing end. The tools needed are illustrated and explained; there are trouble shooting charts, and other service data. OVER 1,000 DIAGRAMS; 332 pages; 9 x 12 flexible; loose-leaf leatherette binder and complete service data.

Regular List Price \$5.00 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. utmost durability.



Cat. No.	Cap.	D.C.W.V.	Our Price
2991	.1	200	\$0.18
2993	.25	200	0.0
2995	.5	200	.29
2996	1.	200	.33
2999	2.	200	.54
3050	.1	300	1313
11051	-25	300	25
3052	.5	300	.32
3653	1.	300	,15
5 23	2.	300	.65
3054	_1	400	.21
3055	.25	400	27
3056	.5	-100	.37
3057	3	400	.15
3058	.1	600	.25
30.30	*2.6	600	9.7

## Acratest

NON-INDUCTIVE



## High Voltage Filter Condensers

This series is especially This series is especially 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 sections are required.

Cat. No.	Cap.	D.C.W.V.	Our Price
3060	1.	400	\$0.58
3062	4.	400	1.44
3063	6.	400	2.25
3064	1.	500	.63
3065	2.	500	.85
3066	4.	500	1.70
3067	1.	600	.81
3068	2.	600	1.22
3069	4.	600	2.26
3070	- 5	600	.60
3071	1.	800	.95
3072	2.	800	1.78
3073	.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

### 500 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. The negative leads or positive leads can be common or any other combination made depending upon the circuit to be repaired. These electrolytic condensers have the same general characteristics as the Acratest Dry Farad Condensers.

Cat. No.	Capacity	Price
7153	4-4 Mfd.	F .90
7154	6-6 Mfd.	1.05
7155	8-8 Mfd.	1.20
7156	4-6 Mfd.	- 20
7157	4-8 Mid.	.98
7158	6-8 Mfd.	1:10

## Acralest

Multiple Section Cardboard Container Electrolytic Condensers

### 500 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. The negative leads or positive leads can be common or any other combination made depending upon the circuit to be repaired. These electrolytic condensers have the same general characteristics as the Acratest Dry Farad Condensers.

Cat. No.	Capacity	Price
7159	4-4 Mfd.	\$ .70
7160	6-6 Mfd.	.90
7167	8-3 Mra.	1.05
7162	4-6 Mid.	.80
7163	4-8 11fd.	.90
7161	6-8 Mfd.	1.00

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	.2525	400	.44

### NON-INDUCTIVE

### **Base Saving Mounted** Condensers



These con-densers are used where the base space is at a premium. The dealer and service man will find this

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

Cap.	D.C.W.V.	Our Price
1	200	\$.18
	200	.22
-5	200	.27
5	200	.33
.1	300	.20
.25	300	.22
.5	300	.30
.1	400	.20
.25	400	.28
.5	400	.35
	.1 .25 .5 .1 .25 .5 .1	.1 200 .25 200 .5 200 .1 200 .1 300 .25 300 .5 300 .1 400 .25 400

### NON-INDUCTIVE UNIVERSAL BY-PASS Condensers





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

tile Calls	May conson	•	
Cat. No.	Cap.	D.C.W.V.	Out Price
2783	.11	200	\$0.30
2771	5	200	.27
2081	.55	200	.12
2980	1.	200	.30
2778	67 4	300	.54
2184	.11	300	.32
2774	.5	2.70	.30
5819	.151	300	.10
2775	1	300	.45
2785	.11	400	.38
2775	.25	400	.25
2777	.5	400	.30

## Pigtail Condenser Replacement Kit

JUST THE ASSORTMENT FOR THE SERVICEMAN



Cat. No. 3528

These are the standard pig-tail cartridge type condensers, compact, highly emcient, easy to mount and completely insulated.

### **\$2.00 per kit** Kit Contains 20 Pigtail Cartridge Con.

6 — .01 Mfd. 2 — .02 Mfd. 2 — .025 Mfd. 2 — .05 Mfd. 2 — .075 Mfd. 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 Assorted Condenser as follows:

25 Mfd.	200 Volts.
2-1. Mfd.	200 Volts.
25 Mfd.	300 Volts.
2-1. Mfd	300 Volts.
125 Mfd.	400 Volts.
2 ,5 Mfd.	400 Volts.
1-2. Mfd.	200 Volts.
Cat. No. 3532	80
Per Kit	

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



Can Negative 2x134x34" D.C.W.V. 200 Used in General Motors sets.

Cat. No. 5214 Our Price ......

## **Tubular Condensers**



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

Cat. No.	Cap.	D.C.W.V.	Our Price
2804	.25	200	.19
2806	.5	200	.25
2808	.01	300	.16
2811	0.5	300	.16
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 sid to the service man for making repairs. It is a small, compact unit, hermetically sealed and completely insulated. Furnished with tinned pigsal leads which permit free coldering 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	.12
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
5639	.2	300	8L
2837	.25	300	.20
2838	.5	300	.25
5640	.01	400	.13
5641	.02	400	.13
5642 5643 5644 5645 5646 5647 5648 5649 5650	.025 .03 .04 .05 .1 .15 .2 .25 .005	400 400 400 400 400 400 400 600 600	.14 .14 .15 .16 .18 .20 .23 .12
5652 5653	.02	600	.18

## Tubular Condenser Kit

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

Cat. No. 3531

Contains 12 Assorted Condensers as follows:



200 Volts. 2- .25 Mfd. 200 Volts. 2- .5 Mid. 1- .01 Mfd. 300 Volts. 1- .05 Mfd. 300 Volts. 300 Volts. 3- .1 Mfd. 300 Volts. 3- .2 Mfd.

\$2.40 per kit

## camold Fixed Condensers

### MICAMOLD

### Trimmer Condensers



A sturdy, accurate neutralizing halancing or trimmer condenset for size in halancing multiple fund circuits, or equalizing asperate tondensers gugd for single central. Bakelite buse, mice dislocatio, heavy phenomer from apring plates with an error adjustment. The plates are tuned to permit cary seldering.

### For T. R. F. Circuits

Cat No.			Cap	12c	
2881				Millo	140
3883		10	50	Muid	0.0
2883	5	10	100	Minifa	ea.

## For Superheterodyne Circuits

Cat. No.		Ca	60 II -		
2881	109	10	150	Minfei	21c
2885	150	to	209	Minid	
27.86	200	10	250	Minist	ea.
2887				Mnite	

### Precision Mica Condenser Standards 1% Tolerance

Acrobest. accordance request. now fulniling a long wanted need for the radio labor fulniling torv, amateur build



set builder and experiments. We at histing and stocking a completeling of mice could mark Standard, which can be used in critical circuits in tund or dio frequencies and superheterodyne circuits, and can also be used as standards for checking capacity by done and microforad makers. bridges and inicrofarad 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 moded in genuine bakelite under laboratory supervision. They are not affected by moisture or temperature conditions. These condensers are all adjusted to a normal tolerance of 1% of their rated capacity with extremely high insulation resistance and low power factor. Accuracy is maintained under the most trying conditions.

Cat. No.

Cat. No.	Capacity	Our Price
5708	.00005	\$ .28
5709	.0001	.21
5710	.00015	.24
8717	.00025	.01
5712	.0005	.24
5718	.001	.32
5714	.0015	.34
5715	.002	.36

## R.C.A. Buffer Condenser

.002 on Each Side of Common Negative

Cat. No. 2910



\$1.25 Dozen

## MICAMOLD Molded Mica Pigtail Condenser



Size 4 x 38

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

Cat. No.	Cap. Mfd.	Our Price
6629	.00005	\$ .10
6680	.0001	.10
6631	00015	.10
6632	.00025	.10
6633	.0003	.10
6634	.00035	.10
6635	.0005	.10
6636	.00075	.12
6637	.0113	.14
GG1.8	.0015	.14
6639	.002	.15
6640	0025	.18
6641	-003	.22
6642	.0035	.24
6613	.004	.26

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







Set builders, servicemen, experimenter, dealers, all should build this 5 tube Super Heterodyne marvel. This 5 tube Super Het will pull all the stations from all over the country, any time, anywhere and by anyone. It really and truly is the greatest little worder in radio today. Think of it—it works like any 10 tuber, brings in the stations as clear as a bell, with perfect selectivity. No experience required either to build it or operate it. Can be assembled in an hour and about all the essential material required is a 3 gang .0035 Mfd. Condenser, small power transformer and some small carbon resistances. We highly and sincerely recommend this receiver to our customers.

The Coil Kit is made up into 3 conventional metal coil cases as follows:

Pre Selector Coil and Detector Coil.
Oscillator Coil and Ist Intermediate Frequency Transformer—175 K.C.

We are so enthused over the ingeniousness of the design and unique construction of these coil units that we are sure you will be more than pleased when you actually see them. We fully guarantee these coil units to be the fines on the market and will make up when assembled the best Super Heferodyne you ever heard. The Kit of coils come complete with full instruction data and excellent wiring diagram. Shipping Weight 3 lbs.

Cat. No. 7455
Our Price

Cat. No. 7455 Our Price ...

### Micamold Molded Bakelite Mica Condensers





Type J

Made by the world's lates, manufacturers of mice condiners under original process descloped by them. These condensers are molded of cenuine bakelite under extremely high hydreulic pressure, which sals the condenser and is an armored county against all weather conditions, moisture or hemical action. The delectric is of the finest grade of clear india ruby mice in combination with tinfoil plates. delectric is of the mass action 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.

—Type J—

—Type A—

		pc J—	-Type A-	
	Cat.	Our	Cat	Our
	No.	Price	No.	Price
.00003	5426	.10		
.00005	5122	.10	3134	.12
.0001	3123	.00	3135	-10
.00015	2121	,69	3136	,10
.00025	3125	,00	3137	.10
0002	5155	-10		120
.00035	3126	.4119	3138	.10
.0005	3127	.00	3130	.10
.00075	812%	-10	3140	.13
.001	3129	.13	2141	-14
.0015	2130	.12	3142	.14
.002	7131	.14	3143	.15
.0025	3130	.14	3144	.15
.003	3153	1.5	2145	.18
.0035	5428	.15		120
.004	5129	.18	3146	.21
.005		-	3117	20
.006			3148	.24

### MICAMOLD Bakelite Condenser Kit



Contains a complete assortment of the commonly used condensers used with insulated mounting holes for screw mounting direct to metal



Contains 35 Condensers Assorted Capacities

Cat. No. 3530 Per Kit

\$350

### MICAMOLD Bakelite Condenser Kyt

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



Cat. No. 3529



Contains 35 Condensers Assorted Capacities \$2.95 per kit

MAIL ORDERS TO ATT. See Terms on Page 8



## FLFEHIHE

## Non-Inductive Compact Type Filter Condensers Type GF, Rated at 400 V. D.C. (220 rms. A.C.)

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



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

Our (	Cat.		(	JEL MER
No.	Type	Capacity	Size, in.	Price
5272	GF 10	.10 Mfd.	34X134X1	\$0.24
5273	GF 25	.25 Mfd.	34X134X1	.27
5274	GF 50	.50 Mfd.	34×134×1	
5275	GF 100	1 Mfd.	34x3 x1%	.43
5276	GF 200	2 Mfd.	138x2 x178	.65
5277	GF 400	4 Mfd.	1 13/16x2x17	a 1.30

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

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



Now, a brand new type of by-pass condenser of the man n uf a c-turer's type, at a very attractive price. Inverted shell construction, are effective to the unimpeded radio non-leaking direct current obstacles, type GB should be in your specifications. For continuous operating voltages up to 200 voits D.C. (120 rms. A.C.)

	200 volt	s D.C. (L.	(I rms. A.U.)	
Our	Cat.		0	nr Net
No.		Capacity	Size, in.	Price
5266		.10 Mfd.	34x134x1	\$0.18
5267	GB 25	.25 Mfd.		.21
5268	GB 50	.50 Mfd.	%x13,x1	24
5269	GB 100	1 Mid.	34x2 x1%	.32
5270		2 Mfd.	11/8x2 x17/8	.56
5271		4 Mfd. 1	13/16x2x1%	.96

### Non-Inductive Uncased Filter Condensers

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

Without doubt the neatest uncased condenser made. Syme NU is also electrically perfect. The condenser winding is impregated in a non-hygroscopic compound and the whole is wrapped in a waxed paper wrapper, thus making the condenser absolutely moisture-proof. If you have been looking for a truly dependable uncased condenser to employ in fithout doubt the neat-



condenser to employ in all your repair work, we fully recommend type NU as the finest obtainable. Equipped with rubber covered wire leads that won't pull out, it is a real tob that you will always

use 1	n prefe	rence to others.	
Our			Our Net
No.	Type	Cap'ety Size, in.	Price
5278	NU 10	.10 Mfd. 2x1 1 /16x 3	3/16 \$0.21
5279	NU 25	.25 Mfd. 2x114x 14	.21
5280	NU 50	.50 Mfd. 2x136x 12	.30
5281	NU 100	1 Mfd. 2x13/4x 3/4	.46
5282	NU200	2 Mfd. 2x13/4x13/2	.66
5283	NU 400	4 Mfd. 2x1 13/16x3	1/16 1.25

### Non-Inductive 1000 Volt High Voltage Units Type HSM Rated at 1900 V. D.C. (660 rms. RAC)

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



class.

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

Our Cat.				Our
	Type	Capacity	Size	Price
5259	HSM5	.05Mfd.	2x1 3/16x11/16	\$0.57
5260	HSM10	.10Mfd.	2x13/16x11/16	.60
5261	HSM25	.20Mfd.	2x1 3 /16x11 /16	.65
5262	HSM50	.50Mfd.	2x1 3 16x11/16	.70
5263	HSM100	1Mfd.	2x13 16x13/16	.90
5261	HSM200	2Mfd.	45 8X2 3X 4	1,50
6680	HSM201	2Mfd.	2x11ax23a	1.50
5265	HSM400	4Mfd.	45 ax23 ax1 3/16	2.80
6681	HSM401		2x2 tex2 ta	2.80

## Non- Inductive

Midget Condensers

Beautifully made, of highest electrical emciency and handy to use, Flechtheim Midget Con-Flechtheim Midget Condensers are the choice of thousands of radio men who find them reliable for all kinds of work—grid, plate-blocking, by-pass, series antenna, resistance coupling, compensating, neutralizing and other functions. With a working voltage of 500 volts 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 leukage.



eakage.			
at. No.	Type	Capacity	Our Price
6091	M-A	.0001	\$0.20
6092	M-B	.0003	.20
6093	M-C	.00035	.20
6094	M-D	.0005	.20
6095	M-E	100,	9.0
6096	M-F	003	4919
6097	M-G	001	90
6008	M-H	.005	13.3
6099	M-J	.006	.25
6100	M-K	.01	.28
6101	M-L	.02	.30
6102	M-MI	.05	.98

### Non-Inductive High Tension Transmitting Condensers

Because of their small size and light weight they are excellent for use in portable outsix portable outfits, aircraft transmit-ters, etc. Absoluteters. Absolutethe best 1000ly the best 1000-voit transmitting condenser on the market and very attractively priced. Equipped with the next stand-off in-



nest stand-off insulator, the condenser is enclosed
in an all-inetal
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 Voltage up to 2000 Volts D.C. (1600 rms. RAC)

Forcelain tors do not make the condenser! There are adver-tised many nondebrands condensers "equip-ped with porcelain insulator.." It does not pay to buy inferior ones -- exag-gerated claims are made for them and a dubious replace-ment policy tops these elaims. It is best to get a con-denser well known for its dependable manufacture. You can't go wrong



for its dependable construction and relable manufacture. You can't go wrong in getting Flechtheim's.

Cat.

No. Type Capacity Size in Pirce Price 6322 TH 100 1 Mid. 6x3 3.23 87.00 83.75 6324 TH 200 2 Mid. 6x6 x3 4 12.50 6.75 6324 TH 400 4 Mid. 6x8 x6 22.90 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 condensers, 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 Voltage up to 1500 Volts D.C. (1000 rms. RAC)

"Initiation is the "Initiation is the sincerest form of flattery." This well known expression is stated here for reason that many manufacturers have time and have time and and again tied to copy our transmitting condenser. However, in the field of tranniting con-



transitting condensers Flechtheim has been the true pioneer. We have invaluable knowledge which we influse 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 but a flecthleim condenser, you can rest assured of honest value.

value.

Cat.

No. Type Uapacity Size in Price Price
6331 T 100 1 Mfd. 5 4 4 4 1 1 5 3.75 \$2.25
6332 T 200 2 Mfd. 5 4 4 4 1 2 5 3.75
6332 T 200 2 Mfd. 5 4 4 4 1 2 5 3.75
6233 T 400 4 Mfd. 5 4 4 4 3 4 1 1 60
6.00
For the more advanced amateurs, Type
T, familiar to thousands of them, is still
the pest bet for use with the 50 water
with 1000 volts of rectified A.C. on the
plate. Also improved in its construction,
this type condenser is now better than
ever. ever.

(Continued from preceding column)

Cat.

No. Type Cap'ty Size, in. Price Price 6325 TC 100 1 Mfd. 41 x 12 x 11 x 3.90 \$1.65 e226 TC 200 2 Mfd. 41 x 12 x 11 x 3.90 \$1.65 e226 TC 200 2 Mfd. 41 x 12 x 12 x 13 x 5.00 2.73 6327 TC 400 4 Mfd. 41 x 23 x 12 x 5.00 5.00 Here is brand-new type of condenser for low power transmitters. Type TC is now more compact, octler insulated and of improved design.

Type TC: For Continuous Operating Voltages up to 1000 Volts D.C. (750 rms. RAC)

### Replacement Filter Section for Atwater-Rope Models 37 and 35

the the lotte area ery conficient in a det the condition one and the oth had brought out the marked in more he chose from on to, to the old condenses block, clean out old condenses block, clean out old condenses meet the a sembly olock reconnect the choice and field, and you have a new filter Choice accepting at the condenses of the ents s



new filter choke a consider consider consider bely with condenser facilities consider bely manufacturer as constant of the con - it is a street int-

var No 2957

18 8 C

### Replacement 3 Section Liver Condenser int linaier-hees



Speaker By-Pass Condenser for Atwater-kent

1 10 h

For Models !.. 38, 40, 42, 44 and 46



Cat No Missis thate Proc Lich 65 50

### Colonial Replacement ity - Fass Conedenser litter le

Used in Colonial 32 Colonial Park No. 1,153



C.if ... ... 11

654

The fading in Colonial set is caused by leaky by-pass condenser. This content is an improved model of the original one 2 in bose 22, in bight 2 in side

### Triple By-Pass Condenser



3-1/10 Mrd. Sections

In in tal can with thought of the Very deful for bypas in ooth big and high soit-age. Made for Peerre Courier Set

112x11, x7s -in.

Cat. No. 2904

39c eu.

Dubilier .6-C-.6 Buffer Condenser

Excellent for Mike amplifier bille

PLG25

tat No. 5551



## CROSLEY Replacement By-Pass Condensers



These collections electrically and mechara his mentical to the crafmia urel origitals and are felly . ua. afiler d

Cat. No.	Part No.	Price
2.60	West	10.21
2,30 1,20	V-1114	
: 16 0	11 40 1 mg	.00 00.
5.07	W10449	.4.0
5-14	1 - 2 - 1 - 1 - 1 - 1	.10
5:11	1/201 3	, 44
3011	Ve	.55
siv:	V12324	
5.163	V76128	45
5401	W20157	1919
5313	W 20136	.63
5398	W 25426	.38
5399	W4919	.50
5407	W22995	.30
5408	W1753	.43
5409	W49e8	.26
5411	W4313A	19
5413	1	.:6
5497	W20448	.2.3

### Eveready and Bosch REPLACEMENT BY PASS CONDENSER

For Wodel 32 and Ali 1948 29 Set

the condenser r at a applicable to man the tending

Cat. No. 298 -

650 est.



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

Replacement Part No. 22 6.

Used in Models 52, 53, 54, 55, 57, 62, 64, 67, 60, 61, 602, 71,

72, 73, 77.



Fading 1 one of the characteristics of the above sets. You can dop this non-ance by replacing the old type leaky con-denser with this cold-dipped acraiest bypara cenden er

Cat. No. 6478

85c ea.

### Sparton By-Pass Condensers

fixed in . Il "parton

Cat. No. Size 3333 I SLIST



Gur Price 35c ea.

### Potter By-Pass . WED COMPACE





600 VOLT TEST

Cat. No. 2719 30e ea.

## Potter Midget By-Pass Condensers

Working Voltage 200



Cat No. Capacity l mid bloom 5 mid

12c ea.

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



This condition C. A. Victor uncase condenser I composed of the highest grade materials. They site compact and mostation configuration of the compact and most the company of the company o

110 -011	A price vallable		
Cat. No	41.0	bas	ch
59.58	1 Wfd.	350	s3.60 doz
3458	2 Mfd	50.	5.50 doz
3936	A 1000 100 100	854	

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

A small compact that developed for pace economy other economy certification of the control of the c



cutts where man capacities are required at various points and also available in combination of capacities.

at Nu	Cup	DUNY	Our Price
27.79	2.1	.100	20.18
1.31		บบะ	. 25
130	1	200	
1 + 15 d	A 2	300	181.9

MAIL ORDERS TO ASS See Terms on Page 3

Federated Purchaser Inc.

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

# ralesi

### Atwater Kent Replacement Condenser Block

ACTATES

For Model 37 Sets

61 85 Cat. No. 5001 Each .....



This filter assembly for Atwater Kent sets is not to be confused or compared with similar but inferior imitations being offered for less money. Our block is manufactured in our own plant out of the finest ingredients and under the supervision of Acratest engineers. Only brand new condensers are used and not old leaky sections which are often used in imitations. Every condenser is thoroughly oil cured and impregnated with wax and pitch for protection against moisture. The working voltage of our condensers 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

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

### Genuine Atwater Kent Filter Condensers

For AK36 and AK 'B' Ehit.

Cat. No. 7052 She



### Model Y

Condenser and Choke for Model 36 and B Unit

Cat. No. 7053

6. E. 3 Mfd. 600 V Filter Condenser

With Leads and Mounting Bracket.

Dimensions: 5%x23,x1% in

Cat. No. 6045 Each



Replacement Condenser

Blocks far Majestic Sets



\$2,25

Cat. No. 5026 5027 5028 70 Series un Series 90B and 100B 616178

Majestic B 5029 \$1.98 Special Master B 5030

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 sections which are often used in mitation. Every condenser is thoroughly oil cured and impregnated with wax and piton for protection sgainst mosture. The working voltage of our condensers is far in excess of the original manufacturer's specifications. The entire assembly is housed in attractive new can of exact physical dimensions. Compare the 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 outlest the set. fered for less money. Our block is man-

## RCA Filter Block and **Output Choke Assembly**

For Radiolas 18, 33 and 51

Cat. No. 2710

Special 39c ea.



R.C.A. Part 8333

Contains 2-1 mid. filter condensers, coll

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 in. x % in. x 5 in. high Cat. No. 2973

35e ea.



## GENUINE BRAND NEW Victor Replacement Condenser Block

### For Replacement in All Victor Sets

Total capacity 16 Mids. 600 WORKING voltage.
Size: 534 in. long,
5 in high and 4 in.

Housed in metal

Cat. No. 2709



Tap 2-4 Mid. Tap 3-6 Mid. Tap 4-4 Mid. Tap 5-Ground.

## Our Price 95c

### Radiola Filter Condenser Blocks



Original Condenser Block expressiv nusde sets



Westinghouse Our Cat. Price Set No. Part No. 2714 2710 2713 2726 2659 6543 6498 WG4 WG12 WG60 82.15 4149 17 15, 13 5 14, 45 4 .. 233 3.50 2.50 -476 1 60 5.95 2.50 5.75 2.75 3.50 7260 501714

### RCA 4 Mfd. 200 Volt Filter Condenser



Part No. D.L.2593235 in metal can 11, x5x11 in

An all around fine condenier for filter circuits. Her filters transmitters, etc. Will stand 1000 voit flush test.

Cat. No. 7292 Our Price

600

### RCA 20 Mfd. Filter Condenser Block D.C. W.V. 100



Excellent for A.C. line filters and speaker filters, also on transmitters, 5% in long, 2-4 in wide, 5% in tall.

Part No BL2593245

Cat. No. 5445 Our Price ... 85e

### Polymet 2 Mfd. Auto Condenser



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

Cal. No. 5605

65c



### Dubilier 1 Mfd. 400 V. Condenser

BT.1705

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

2x34x5 in.

Cat. No. 5607



### Dubilier 4 Mfd. Condenser

01.010 D.C. W.V. 200

2x114x534 in.

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



### Dubilier 6.1 Mfd. Condenser Block

D.C. W.V. 400 312×212×5 m. PL1156 Cat. No. 5606 \$ 185 Our Price .....

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



6 in long. 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.

Cat. No. 7183 Our Price .....

### Polymet 2 Mfd. Filter Condenser



200 V. D.C.

In metal can 134x112x134" high.

Our Price ..... 350

### General Electric 4 MFD. High Voltage Filter Condensers

D.C. Working Voltage, 800 V.



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

Dimensions: 5x234x1 in.

Cat. No. 6044

69c

### Dubilier 4 Mfd. Filter Condenser Blocks

PL571 600 volts working test for replacement in all eliminators and electric seta.

Cat. No. 2924

\$1.50



## 1/2 Mfd.—1,000 Volts

As used in Peerless Sets 100 Voits, 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 fron Alinitin Baq—designed and heavily nickel plated with bevel-edge bevel-edge sole plate, tip-up heel rest, black handle, complete with cord set. Half attachment plug. Imbedded type

michrome 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 Borgia Model 2, RCA 104 Speaker, RCA Model 30A Pack, RCA 81951 Pack.

43ax5x116 in.

Cat. No. 3721 \$ 1 65 Each . . . . . . . . .

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

314 Mfds. 600 V. unmounted

Cat. No. 3731

### Sprague 8 Mfd. Upright Mounting Electrolytic Condenser

An excellent condenser for replacement in all sets using 8 mfd. 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 et chassis and the condenser then screwed into the base. A shell is provided for the top to keep out mosture and dust. Wire lead from condenser comes thru the hole in the cap. A very compact unit measuring 11% in. In diameter by 4 in. high. Copper container. Puncture proof. Rated at 450 working voltage. An excellent condenser for re-

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. 106 Speaker with 2 1/10

mfd. condensers.
Part No. 6019
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, eliminators, transmitters and various other purposes.

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



We offer you an assortment of sizes for almost any need. These chassis (with the exception 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 wafer sockets, power transformer, filter condensers, coils and tuning unit. 13% In long, 11 in. wide, 3 in tall

Cat. No. 7297 \$100

6 TUBE MIDGET CHASSIS for receiver or amplifier. Out and drilled with standard holes. 14 in. long, 6% in. wide, 2% in. tall.

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

Cai. No. 7298 \$100 Our Price .....

3 TUBE AMPLIFIER BASE for Single 245 or 247 amplifier. 1615 in. long, 91/4 in. wide, 114 in. tall.

Cat. No. 4399
Our Price

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



Cat. No. 5478

Price 35c

All ready out and divided for a 6 tube lay-out. Just the thing for the set builder and experimenter. 14 in. long, 634 in. wide, 2½ in. tall.

### Blank Receiver or Amplifer Chassis



1734 in. long 934 in. wide and 5 in fall.

89c Ea.

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

### Headquarters for Genuine



Replacement Parts

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



Cat. No. 5459



Cat No. 5461



Cat. No. 2684

Cat. No.	Items	For Models	Part No.	List Price	Our Price
5458	Filament Trans.	180	619		\$1.25
	Plate Trans.	180	620	5.00	1.25
	Filament Trans.	70 Series	61	8.00	.90
	Plate Trans.	70 Series	67	8.00	.90
	Filament and				
	Plate Trans.	90 Series			
5462	Double Choke		180	5.00	.95
	Filament and				
	Plate Trans.	00B, 100E	3	12.00	4.75
5465	Filter Choke,				
	100 Mils	70 Series	66	5.00	.95
5459	Double Filter				
	Choke, 250 M	ils 90 Series	231	5.00	1.25
2525					
	Trans.				1.50
2612	Power Trans.	91, 92 (22		5,	
		280 Tub	es)		4.00
6767		130, 131,	132.	233	3.95
	Power Trans.	71, 72 (Pa			4.00
7020	Power Trans.	130, 131,			
		130A, 13		13	5.25
2619	Power Trans.	150 Comb			
		(22%-25)	0-28	1)	7.50
2684		-1 -0			4.75
	In one can	$\frac{71,72}{21,22,23}$			3.95
7239		21, 22, 23			3.95
	Power Trans.	50			3.95
7241		60			3.90
5872	Filament and Plate Trans.	90B, 100	В		4.75

## Majestic 3600 Ohm Resistors



Cat. No. 5466

25c ea.

## Dynamic Speaker Cable

Part No. 119
Cat. No. 4398
Our Price 25e

## 8 Wire Cable

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

Cat. No. 4386
Our Price

## Majestic "A" Replacement Condenser



For Majestic "A"

Cat. No. 5031

\$2.25 each

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

### Majestic By-Pass Condenser Blocks

Cat. No.	Capacity	Model	Part No
5116	.55	70	717
5417	5-5	90	715
3418	.5	180	714

Our Price

29





### Push-Pull Transformers

Cat.	Туре	Models	Part No.	Price
5170	Output	70, 71, 72		
5443	Output	70, 71, 82, 180	64	1.00
6350	Straight	90	134	,75
	Audio	70, 71, 72, 90,		
4813	Input	41, 92		.95
6814	Phono	90	1551	1.25
	Input			
2053	Imput	62	1713	1.25
Our	Price		-	75c
Lach				# EP -

### MAJESTIC I. F. Superhet Transformer



Cat. No.

95c

Used in Majestic Supers and tunes to 175 K.C. Aluminum housing, with 4 wire leads.

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No duplication hetween Volume No. 2. Volume No. 2 is the continua-tion of the Per-petual Trouble Shooter's Manual Shooter's Manual Series. This vol-ume picks up where Volume No. 1 left off.

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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

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- Atwater Kent Electrical Values.
- 3 Point to Point Resistance Values
- Schematic Wiring Diagrams.
- 5 Chassis Lavouts
- 6. Voltage Data.
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and designing of
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gineers.

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Ard How They Work With Complete Technical Data on All Standard and Many Special Tubes By ROBERT HERTZBERG

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## A Control for every need 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 excelience 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. 20 Series

No. 20 Series with Bullt-in Switch

Built-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 ely 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 running of

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	6145
6140	2.000	Untuned Antenna	6146
6141	5.000	Antenna Shunt	6147
	10.000	Anteons and	
		Cathode Blas	6148
6596	3.000		6598
	25,000		6349

Our
Price
<b>50c</b>

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 variable potentiometers or resistors.





No. 70 Series

Built-in Switch

Without Cat. No.	Switch Ohms		Switch Cat. No.
6150	1,000	Untuned Antenna	6165
6151	2,000	Cathode Bias	6166
6152	3,000	R.F. Primary Shunt	6167
6158	5,000	Antenna Shunt	6168
6154	10,000	Antenna or R.F.	
		Primary Shunt	6169
6155	25,000	Phonograph Pick-u	р
	,	Screen Voltage	6170
6156	50,000	Screen Voltage	6171
6157	75,000	Variable-Mu	
	,	Cathode Bias	6172
6158	100,000	R.F. Plate Voltage	6173
6159	250,000	Audio Transformer	
0.00		Shunt	6174
6160	500,000	Audio Transformer Shunt Tone Control	6175

Our	Our
Price	Price
45c	65e
Without	With
Switch	Switch

### FROST 80 SERIES Volume Controls





Contact resistance of these switches is not only low but uniform as well, which makes this unit particularly adapted for use in automobile sets.

You can associate these controls di-rectly 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 insulated Positioning lugs for preventing rotation of the control on the panel are provided in accordance with requirement of the Underwriters' Laboratories.

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

Like all our nighest trade controls

Like all our nighest trade controls these No. 80 series units have sufficient wiping contact to usure keeping down corroson on the contacting member.

Yes! the No. 80 is quiet in operation sufficient down

With Switch Without Switch Cat Cat. No. Ohms Controls No. 1,000 Untuned Antenna 2,000 Cathode Bias 3,000 R.F. Primary Shunt 5,000 Antenna Shunt 10,000 Antenna or R. F. 6798 6740 6730 Antenna or F Primary Shunt Phonograph Pick-up Screen Voltage Screen Voltage Variable-Mu Cathode 25.000 6744 50 000 6134 75,000 Bias R.F. Plate Voltage 100 000 Audio Shunt Transformer 6748

Our Price

6738 500,000

Our Price

Transformer Audio Transformer Shunt Tone Control

6749

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



No. 40 Series Supplied with 1 in, shaft and

a-in. thread.

The No. 40 series have been in use by several of the largest set man-

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 insulation provided between the shaft and live parts allows the use of this control in circuit positions where the potential to ground may be several hundred volts. In addition to these features the abree and any appreciable

sence 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 netween 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.

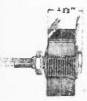
The narrow contacting surface and polishing action, together with the hard polishing action, together with the hard

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

Cat. No. Ohms	Cat. No. Ohms
6180 1.000	6185 25.000
6181 2,000	6186 50.000
6182 3.000	6187 75.000
6183 5,000	6188100,000
618410,000	6189250.000
6100	500.000

Dur Price 50c ea.

### FROST 40 Series Dual Potentiometers





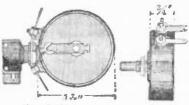


Tanden with Switch Combination

	COMBINATION	
at. No	. Size and Description Pri	ee.
3160		
5535	Same as above, with 2 in. shaft 1.	
6510		
6211		
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	
	switch 1.4 10,000-2,000 ohm Pot. with	15

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

(Bakelite Case and Cover-Shaft Not Insulated)



No. AC1880 Series

No. 1880 Series

With Switch

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

## This is the Frost Control With Interchangeable

These Frost controls have Interchange-These Frost controls have interchangeable shafts and the standard resistance can be used in sets similar to tromberral carlson and Zenith, which were designed with a special shaft that can be taken from the old control and be replaced in the new. We continue to guarantee Frost resistance curves and nousings to be within commercial standards of electrical and mechanical accounter. merianical accuracy. Without Switch

Ohms

5,900	6128
10,000	6129
15.000	6604
25,000	6130
50,000	6131
75.000	6605
100,000	6132
250,000	6606
500.000	6607
•	Our
e	Price
	80c
vt.	With
9	Switch
	10,000 15,000 25,000 50,000 75,000 100,000 250,000 500,000

## Panel Mounting Tone Control

Only 14 in. deep. Will Fit in any Set.

Cat. No.

Allow six different tone adjustments No noise possible. Extra sinooth opera-



Regulates tone from a high treble to the deep bals. Modernire old sets, Bake-lite making and 34 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.





77. \$1.50

Price

1.23

Cat. No	Type & Receivers Used in
3201	Dual type with switch—52, 53, 522, 532, 54, 542, 56, 57, 62, 67, 60, 61, 64, 602, 613, 612, 642, 642, 71, 72, 73, 77, 712, 722, 732, 777.
3204	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, 642, 672
6130	Single Unit—33, 34, 35, 35A, 342, 352, 352A, 362, 35APX, 11, 12, 14, 15, 16, 17, 31, 32, 34, 35, 36, 37, 31, 31, 32, 34, 35, 36, 37, 31, 31, 31, 31, 31, 31, 31, 31, 31, 31

11, 12, 14, 15 32, 333, 353A. .80 6122 Single Unit with switch—39, 39A, 40A, 392, 393A..... 1.28

### Table Tone Control



Cat. No. 4354 List Price, \$2.35

(Dage

Tone Control the keynote of 1931 Radio. All the better types of sets are provided with tone control. That tone control. That is the outstanding difference between present sets and those of the last year or two. A radio set is obsolete without Tone Control. lete with Control. Table

beautifully finished in black and gold; felted base; long connecting cord and

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 vstalline case, with wire and adapters crystalline case, with wire Can be installed in a jiffy.

> 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 switchless 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.

	Cat.		N	iet -
	No.	Ohms		ice
	7026	50	Standard Pot., no taper. \$1	1.47
	3701	100	Standard Pot, no taper	.47
	7027	200	Standard Pot., no taper.	.47
	7028	300	Standard Pot., no taper.	.17
	2029	400	Standard Pot., no taper. Standard Pot., no taper.	.47
	3702 7030	500 750	Standard Pot, no taper.	,50
	3703	1000	Standard Pot., no taper.	,50
	7031	1000	Tapered Pot. for un-	
	8 (7.7 8	1000	tuned Ant. Cont.	.60
	7032	2000	Standard Potentiometer,	
			no taper	.50
	7033	2000	Tapered Pot. for un-	.50
			tuned Ant. Cont.	.50
	7034	2000	Tapered For. sor	.55
	0204	3000	Bias Control Standard Potentiometer,	.00
	3704	3000	no taper	.50
	7035	3000	Tapered Pat. for com-	
	4374319	1000	bined Ant. and "C"	
			bias control	.55
	7036	3000	Tapered Pt. for "C" bias	
			control	.55
	3705	5000	Standard Potentiometer,	=0
			no taper	.50
	7037	5000	Tanered Pot. for com-	
			THE CALL STATES	,55
	7038	5000	bias control Tapered Pot. for "C"	1130
	1029	5000	hias control	.55
	7039	7500	Standard Potentiometer,	
	* O-11.7	1000	no taper	.50
	7040	7500	Tapered Pot. for com-	
			bined Ant. and "C"	~-
			bias control	.55
	7041	7500	Tapeted Too.	.55
	0200	10000	bias control Standard Potentiometer,	.00
	3706	10000	no taper	.50
	7012	10000	Tapered Pot. for Ant.	*1717
	1000	10000	or R F coil control	.59
	2013	10000	Tapered Pot, for com-	
			bined Ant. and "C"	
			bias control	.59
	7044	10000	Tapered Pot. for "C"	***
			bias control	.59
	7045	10000	Grid Voltage control	.59
	0*0*	15000	Standard Potentiometer,	.175
l	3707	13000	no taper	.55
ľ	7016	15000	Tapered Pot. for com-	
ĺ			bined Ant, and "C"	
ĺ			bias control	.59
l	7017	15000	Tapered Pot. for Screen	
l			Grid Voltage control	.59
ĺ	3708	20000	Standard Potentiometer,	.59
l	2010	00000	no tpaer Tapered Pot, for "C"	.39
ĺ	7048	20000	Tapered Pot. for "C" bias control	.65
1			DIAS CUITATOI	100

(Continued in next column)

## CLAROSTAT

### Power Clarostat



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

	audit	orium	amplifi	ers.
Cat. No. 5904 5905	Model Fil. Control Low Range Universal 200	Ra 1 <sub>4</sub> -10 25-10	stance inge 0 ohms 0 ohms	Carryin Capacit 80 watt 80 watt
ออบบ	100,000 ohm			80 watt

### Our Price \$2.06 ea.

## Clarostat Phonograph Pick-Up Control



List Price \$2.00 Cat. No. 2727

\$1.18

Clarostat Graph-Element Volume A Clarostat Graph-ite Element Volume Control of the po-tentiometer type for handy connection between the phonunit and the radio re-

ograph pick-up uni ceiver or amplifier. 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 the headphones and magnetic speakers.

## Abitionnalise Line Voltage Regulator CLAR



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

Cat. No. 5901—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, no taper Standard Potentiometer. 7049 30000 Standard Potentioneter.

10 10000 Standard Potentiometer.

10 1 7049 30000

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 Clarostat 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

Cat.	Resistano	Suggested Use Taper for	Cat. No.
5907 5908 5909 5910 5911 5912 5913	1,000 1,000 2,000 2,000 3,000 5,000 10,000	Untuned Antenna Standard Potentiometer Antenna Untuned Standard Potentiometer Standard Potentiometer Standard Potentiometer Antenna or R.F. Coil Antenna & C Bias	5933 5934 <b>5</b> 935 5936 <b>5</b> 937 5938 <b>5</b> 939
5914 5915 5916 5917 5918 5919 5920	10,000 25,000 25,000 50,000 50,000	Combined Standard Potentiometer Standard Potentiometer Phonograph Pick-Up Screen Grid Voltage Standard Potentiometer C Bias Rheostat R F. Stages	5940 5941 5942 5943 5944 5945
5921 5922 5923 5924 5925 5926 5927 5928 5929 5930 5931	100,000 100,000 200,000 200,000 200,000 250,000 350,000 1 meg	Standard Potentiometer Antenna or R.F. Primary Shunt Tone Control Standard Potentiometer Screen Grid Control Standard Potentiometer Pentode Tone Control Standard Potentiometer Standard Potentiometer Standard Potentiometer Standard Potentiometer Tuned R.F. Coil Shunt Tone Control	5947 5948 5949 5950 5951 6952 5953 5954 5956 5956 5957 5957

70c Without Switch

90c With Switch

## Constant Impedance Controls



For constant impedance work in radio and sound equip-

uniformit.

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

## Dual Type "L" Pad

2839

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

500 ohm for line or mixing 9854 transformer control. 2000 ohm for phonograph or high impedance speaker control.

Our Price \$1.75



## Volume Controls for Stromberg Carlson

Cat.				Our
No.	Type	Rec	civer	Price
3205	Long shaft	642	Rear	\$0.75
3206	Projecting			
	shaft	642	Front	.50
3308	Projecting			
	sliaft.	635	Front	.70
3510	Standard	635	Rear	.65

### 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. Operates quietly and uniformly slways.





35c ea., \$3.60 doz.

### Replacement Volume Control

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

Part No. 62940



Cat. No. 5158

Char Price \$1.45

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



Cat. No. 3772

dhaar. Price \$1.35

### RECTRAD 66



-Without Switch-

3820

5254

10,000

25,000

3,800

250.000

6.000

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 model 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 Electrad "R I" controls.



1.45

.35

1.15

	r Swiffellow	ANTHE		
Cat. No.	Type	(Ohms)	Uses	Less
5633	RI-273	200	Cathode Bias	
2949	RI-274	400	Cathode Blas, Hum Neutrolizer, Mi-	Switch
			rophone Control	4
3038	RI-276	1000	Cathode Bias Control	Our
5378	RI-232	2000	Untuned Antenna	Price
3039	RI-233	3000	R F Primary Shunt	# rice
3040	RI-234	5000	Antenna Shunt	Ab db
2957	R1-240	10,000	Antenna or RF Pri. Shunt.	60c
6848	RI-201	15.000	Antenna and Cathode Bias	40 00
9848	161-201	15,000	Ant. Pot. Center to coil, R. F. Pri-	Each
2958	RI-280	25,000	mary Shunt Phonograph Pick-up Antenna-	
	100	20,000	Ground Shunt, Screen voltage control	Switch
2959	RI-205	50,000	Screen Voltage Control F F Plate	Cover
2911	RI-202	75,000	Voltage Control Variable Mu Cathode Control Blas	Cat. No
			Voltage Control	7,373
2960	RI-242	100,000	R F Plate Voltage Control, Tone Control	60 1
2961	RI-208	250,000	Audio Trans. Sec. Control, R F Coil Shunt	E DE
2962	RI-203	000,000	Audio Trans. Sec. Control	Each
Cat No.	M	USCELLA	NEOUS DUAL TYPE POTENTIOMETERS	
5160	10.000	60.000	Antonna and Grant Polentiomereks	Our Price
5158	50,000	50,000	Antenna and Screen Grid Control.	\$1.23
04.70	50,000	30,000	Antenna and Screen Control, Cathode	Bias

## Genuine Crosley **Volume Controls**



These controls are identical, both physic-ally and elec-

Cat.	Size	Models	Our 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 35,000 ohm	77-1 120 48P, Wigit 30S, 40S, 31S	.50 .50 .50 .35

### Genuine Majestic Volume Controls

at. No.	Models	Size	
5738	180, 181	75,000	Dual
		30,000	Dual
5696	90B, 100B	75,000	Pot.
		645	Pot
5844	100	75,000	Dual
		75 000	Duni



Our Price 35c ea.

### Replacement for Radiola 33

2000 Ohm Potentiometer

List Price 31.95

For Padiola 33. Insulating strip (easily removed) for



metal panels. Cat. No. 3762

## Our Price 60c

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



Twin Adapter used in connec-tion with 905 UY latch look enalyzer plugs.
Test 57-55 tubes with the Jewell 444 analyzer

Cat. No. 7280 Our Price

Same as above but in analyzer plugs without tatch lock. For Jewell 199, Weston 547-565 and 566.

Cat. No. 7281 Our Price

and Screen Control .....

R F Grid and Plate Shunt.....

Antenna and Screen Control.....

Antenna and R F Coupler Shunt.

### **Speaker and Phonograph** Fader



This control enables one to o p e r a t e e i t h e r two phonograph turntables or speakers, control the vol-ume of each and fade them on and off at will. This is a

fourth terminal potentiometer.

2000 ohms-0-200 ohms.

Cat. No. 2857 Our Price .....

8 35

## Acratone MODULATOR

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



Our Price ..... 90c





### Frost Rheostats

6 ohm—Cat. No. 3809 26 phm-Cat. No.

3899

Our Price 180

### CLAROSTAT 2000 OHM **POTENTIOMETERS**

New Type Air Cooled

Used in Sonora Sets Cat. No. 3759 150



### 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, 44 and 52 Sets

For AK 55, 60, 66 Sets

## Hum Control

20 Ohm with Center Tap

and to climinate A.C.

Only a few left at this price.

Cat. No. 3754 Each .....

10c

### YAXLEY Panel Mount Hum Control Wire Wound

SCREWDRIVER TYPE

Cat. No. 8700



Our Price Elach 82.75 Per dezen

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

Price No. 40 with knob 15c 2755 350 3763 300 V.C. 7::75 15000 with

witch bracket 250



### STROMBERG CARLSON RHEOSTATS

(Made by Amsco)

Cat. No. 2 Ohm.  $\frac{4071}{4073}$   $\frac{4074}{4074}$ 30 Ohm. 250 O im.

Our Price 20c ·



### Laboratory Model and **Speed Control** Clarostat



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

screw binding posts, and short-circuit button. Carryin capacity of 80 was

at. No. | Model | Range | Carrying | 6545 | Laboratory | 4-10 clims | 80 watts | 200 to | 100,000 clims | 6547 | Speed Control | 25-500 clims | 80 watts | 25-500 clims | 25-500 Cat. No. Model 6545 Laboratory 6546 Laboratory

Resistance Carrying

Cal No. 7803 49c Gur Price \$2.94 ed.

### Centralab Slide Contact Volume Costrols and Potentiometers



Perfect Slide shaft. Contact. wiping-No Noise Standard 14 in

Cat No. 8758 3775 8777 3770

Desc. Size 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, compact, heat, convenient O-500,000 - ohm range in several turns of knob Micrometric adjustment. On the hole Corvenient screw terminals. Many



applications in present-day sets Cat. No. 3808 Our Price

36 c

### Electrad 250,000 Ohm Volume Control

Wire Wound bakelite frame.

Cat. No. 3890 250



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

Used as Tone Control by Victor Cat. No. 5862 Our Price .....

## RCA No. 106 Dynamic Speaker Rectifier Stacks

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

supply sufficient B voltage on any Dynamic Speaker having 600 oinm field.



RCA Part No. 6898 Cat. No. 5734

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

Federated is headquarters for all public address equipment.

# ELECTRAD Travolt Fixed Resistors

(Every Fixed Unit Can Be Made Adjustable)

Electric TRUVOLT All-Wire Resistors are especially recommended for the in eliminator and power packs. These resistors are available in all the isual 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 selfitors hould not be used where there is note than 500 Veta D.C. pt sent.

02.00	a)		(C.) (c.)	Lype	Resistance in Ohms	Current Milli- amperes	Our Price Each
		In the Line Life		C-11.5	1.250	200 7	
Continue de	THE REAL PROPERTY AND ADDRESS OF THE PARTY AND	hade the part	D. Salar S. Co.	C-15	1.500	182	
	( )			C 4.0	2 000	158	
	(21. 10.			C-11.5		149	
	Type B-25	Watts		C-15	2.500	141	79c
	2 Inches L	one		C-30	3 000	129	1 DU
		Current	45	C-35	3 200	115	
Type B09 B09 B05 B075 B15 B15 B25 B25 B25 B25 B25 B25 B25 B25	Resixtance In Ohms  2 3 5 7 5 10 18 25 50 100 200 200 400	MIIII- amperes 3,500 2,800 2,800 1,800 1,500 1 250 1 000 700 500 353 289 150	Our Price Each	C-10 C-45 C-50 C-80 C-70 C-75 C-80 C-120 C-120 C-150 C-250 C-250 C-250 C-250 C-250 C-100 C	4 000 4 500 6 000 7 000 7 500 8 000 9 000 10 000 12 000 15 000 25 000 20 000 20 000 21 000 21 000 21 000 22 000	105 100 91 84 82 79 74 71 65 38 41	.87 .87 .87 .87 .96 .96 .96 .98 1.03 1.18
B-3 B-7.3	\$00 750	133		C-399	5 1 100	32	1.17
B-8	900	177	40 -	C-600	60 000	-9 -25	1.28
B-10 B-12.5	1 003	153	49c	C-1000	105 000	22.5	1.31
B-15	1 250	141					
B-99 5	2 000 2 250	112			Cat. Na.	5863	
B-25 B-30	2 500 3 <b>0</b> 00	100			Type D-78	Watts	
3-35	3 500	e' * A 1			6 Inches	Long	
B-10 B-15	4 000	19 1				Current	Com
B-50	4 500 5 000	71			Resistance	Milli-	Price
B-60	6 396	S +		Type	in obms	amperes	Tacb
8-76 8-76 8-80 8-80 8-90 8-120 8-120 8-120 8-250 8-250 8-300 8-300	6 500 7 200 7 200 7 500 8 600 9 500 10 000 12 000 15 000 20 000 25 000 30 000 40 000	50 45 50 45 50 25 5	52 .53 .53 .67 .67	D-1 D-2 D-3 D-4 D-5 D-7 D-1 D-1 D-1 D-15 D-15 D-25 D-25 D-25 D-25 D-25 D-25	100 200 201 491 501 750 800 1.094 1.290 2.909 2.150 2.909 2.150 3.000 3.000 3.000	305 619 500 432 201 316 308 274 224 184 182 173 168	94c
	Cat. No. 5			D-40 D-45	4 000	137	
	Type C-50 V			D-50	5,000	129	
	4 Inches Lo	ng		D-60 D-70	6 9 <b>0</b> 0	113	1.00
	C	urrent	Our	D-35	7.500	100	1.400
Type	Resistance	Milli-	Frice	D-80 D-90	000.3 000 F	97 91	1 03
C-1	100 a	mperes	Each	D-100	10.000	87	1.18
C-5	260	700 1		D-130	12 000	79	1.18
C-3	300	500		D-150 D-200	15 000 20 000	61	1.3%
C-4	400	40€ 353		D-250	25,000	55	1.43
C-5	500	316	79c	D-300 D-100	30 000	50	1.12
	750	216		D-500	4 ± 000 50 000	43	1.42
C-7.5							
C-7.5 C-8 C-10	800	252		D-600 D-800	50 000 30 000	35	1.36

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 terminals of any one resistance unit. For high voltages it is advirable to use two or more units in series

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

# Acralest

# Flexible Wire Grid Resistors

CALLERY TO THE WAY STONE OF THE STATE OF THE

While Acratest Wire Grid Resistors are utilized in all high grade radio sets, they are especially adapted for use in small receivers, such as Midget sets, Automobile 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 slik core. In many cases they can be connected directly between the terminals of two components in a radio receiver, thus eliminating exita wiring connections.

Cat. No.	Resis-	Can. in	
Cat. No.	tanne in Ohma	Milliam-	
	Onnig	peres	
5654	5	336	
5655	10	273	
5656	15	228	
5657	25	173	
5658	50	137	
5639	50	199	
5660	7.5	100	Our
4721	100	86	0 441
4732	130	73	The same
4711	200	61	Price
4712	250	55	
4731	300	50	7 -
4733	350	47	15e
1730	400	43	
4715	500	38	60.40
1716	680	35	ea.
1255	700	3.2	
1784	300	30	
4748	750	32	
5061	900	29	
4710	1000	27	
3662	1100	26	
4713	1300	25	
4739	1200	21	Our
4740	1400	23	Out
1705	1366	22	ET2 0
5653	1600	21	Price
7651	1700	20	
3665	1800	.00	24c
5688	1900	19.8	STC
7067	CHH)	198	
5668	. 500	17.5	ea.
2004	0000	16 1	~ ~~
1670	2000	14	

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

# Acralest

Wire Wound Grid Suppressors

Cat. No.	Ohms	Cat. No.	Ohms
7344	5 C.T.	4729	150 C.Y
4700	10	4704	200
4714	10 C.T	4705	400
7345	15 C.T.		550
4702	20	4701	7.50
4724	LUCT	5789	500
7346	25 C T.	4719	1400
7347	OCI	5704	1700
7348	SUCT.	4709	2200
7845	COCT	5703	2500
7350	TOCI	5705	2000
735	100 C.T.		

Per Daz. 8100

MAIL ORDERS TO 15 See Terms on Page 3

rederated Purchaser Inc.



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

The 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. Tin wire leads are soldered to the caps of the resistors which are forced on under a high pressure, thus insuring a permanent, noiseless contact. This is a very important feature in resistors as it eliminates any possibility of poor contact.

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

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

Ohms	Ohms	Ohnis	(	hms
100	1.000	40,000	5	000 00
150	4.000	40.000	6	000,00
200	4 100	50,000	7:	0,000
250				
350	5 000	70 000	1	mieg.
400	6 000	15 000	2	mies.
500				-
700	7.000	80.000	3	ineg.
750	7.500	100 000		meg
875	10 000	125 000	5	Pies
1 000	12,000	150.000		Hier.
1.250	15 ( 10	130 000	7	meg.
1.500	20,000	200 000	8	meg
, -		250 000		_
2 000	25 000	350 000	9	meg
2,500	30 000	400 000		ITLE K
		Congenser		

\$1.00 doz. Cat. No. 5860

ASSORTED



Every servicement should have one of these handy little RMA resistor color code in in 1000 box. A de of celluloid The three re-olving wheels are little graphed in nine color. No charts to consult—no complicated calculation Just turn the wheels to color corresponding to resistor and the value is given instantly. To secure this valuable code key—FREE—II you have to do to purchase any one of the RESISTOR RITS on this page or THREE DOZEN ASSORTED RESISTORS.



SIZE	134		
Ohins	Ohan	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	3 000	30,000	350,000
500	4,000	40,000	400,000
600	4 400	50 000	500,000
650	5,000	00.000	600,000
100	0.000	70,000	750,000
150	7,000	75,000	1 meg.
875	7,500	30,000	11 meg
1,000	10,000	100 000	2 meg.
			3 Rieg.
	Cat.	No. 3500	

\$1.00 doz. Asstd.

# Carbon Resistor Kit



Contents: 38 1 Watt Carbon Pigtail Resistors One Each of the Following Assortment:

Ohms	Chms	Ohms	Ohms
100 150 200	1 500 2 000 2,500	15,000 20,000 25,000	150 000 200 000 250,000
300 400	3 006	10,000	JOO 000
500 750 1 000	9,000 9,000 5,000	50 000 50 000 75 000	2 meg.
1 250	16,060	100,000	
	4 .66	A 1 2 200 .	

\$2.75 kit of 33



Ohms	Ohms	Ohms	Ohms
200	1 730	4,000	60,000
300	2 000	10.000	70,000
400	2 500	12 500	30,000
500	3 000	15 000	90,000
600	3.500	20.000	100,000
บอัย		25,500	.25,000
700	4.000	30,000	1.0,000
750	5,000	35,000	200,000
1,000	6.000	40,000	".5 000
1.250	7 630	50,000	
1.500	8 000		
	C. at. 1	No. 5185	

\$1.75 doz. Asstd.

# Carbon Resistor Kit

Contents: 25 2-Watt Carbon Pigtail Resistors ONE FACH OF THE FOLLOWING:

Ohms 125,000 150,000 200,000 110,000 Ohms 20,050 Ohms Ohms 500 600 25,000 5.000 6,000 1,500 7,500 12,500 66,000 70,000 75,000 80,000 10 000 1,230 15,000 100,000

Cat. No. 6515

# \$3.50 per kit of 25

# Carbon Resistor Kit

Contents: 36 1/2-Watt Carbon Pigtail
Resistors
ONE EACH OF THE FOLLOWING

UNE	EACH OF	THE PULLU	IN I ACT
Ohms	Ohms	Ohms	Ohms
500	5 0:10	10,000	250,000
750	6,000	50,000	560,000
1.000	1010	n0.000	600 000
1.250	10 000	15 000	50 000
1.500	12 500	160,000	1 7.23
2.000	15.049	125,000	2 Meg.
2,500	20,000	150 000	3 Mes.
3.000	25,000	180,000	a Meg.
4 600	30,000	200 000	to Meg.
	C-1	No 6516	

\$2.85 kit of 36

MAIL ORDERS TO ASSESSED Terms on Page 3

Federated Purchaser Inc.

#### D.C. Convertor Resistor

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



Overall length 1317 Heat Discipation

This Ward I conard Vitrohm resistor is con clims and is center tapped, for con-This ward is conser Villohn resister is on ones and is center tapped, for converting AC sets into D.C. 110 Volt sets. It has two mounting brackets on the ends and a protective wire cage goes with it. Used in D.C. sets, transmitters, etc.

8200 Cat. No. 7288 Our Price

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

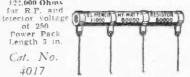


Cat. No.	Ohros	Wafts	Length
7352	1 %	67.69	7, 1 2 "
5848	2.0	41.11	512"
7353	60	1.00	712"
7354	7.3	1.07	735"
7355	5.0	100	71 "
Our Price			75c
Each			

#### 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 \$6 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

A finely-manufactured and finished set for tightening and loosening the small hexagon nuts and thumb screws encountered in radio construction and repair. Four sockets are funrished: One each for hexagon nuts measuring 34, 5/16 and 13-inch between flats, and a four-jawed ocket for handling knurled thumb screws such as found on dry cells, etc. The sockets are deeply drilled to accommodate screw ends and the hexagon portion accurately broached to a size. The sockets are steel, well case-hardened.

Cat. No. 5079 Our Price

# Acralest

# 5 Watt Wire Wound Pigtail Resistors

A registor designed to mee the demand rea onably priced and compact has Midgel, Aeroplane, Automobic and other receivers where space and price are limited. Terminals are of No. 18 tuned copper wire securely embedded in our 3-cost Baked Insulated Enamel. esistance

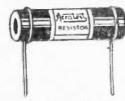
FEATURES

L Special Flastic Insulating Fnimel.

Biken at

Baken at low temperature of only 400 degrees F. Acid. Oil, Moisture, and Fire Freef. Every unit receives three coats of an amount of the coats of an amount of the coats of an amount of the coats of th

eliminate po-



Cat. No. 5300

Maximum Wattage, by Maximum Dia., he had no climinate pomaximum Length, 11" climinate pominus rated resistance.

2 All Acratest Resistors are wound with
Double Coat 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 in

Ohms	Ohms	Ohms	Ohm
5.0	45 (1.0)	-1 () 14)	7,000
100	6.50	5.500	7.500
150	700	3.000	10.000
200	750	4,000	12,500
350	1.000	1.5 10	15,000
\$ 11.63	£250	5,000	1.5 (10)
500	1,500	6,000	20,000

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

.... 25c Ea., \$2 15 Doz. 30 000 Ohm 40,000 Ohms. 50,000 Ohms .... 20c Ea., \$3.50 Doz.

#### Micamold Bakelite Grid Leaks



Cat. No. 4036 Sizes Sizes Sizes SIZES 15

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

#### Lynch Leak Proof Mountings



Meet the most exacting demands in design, mate-rial and con-struction. They are specified as

Standard by leading precision apparatus.
Cat. No. 7436-Single Mounting 20c Our Price ... Cat. No. 7437-Double Mounting 25c Our Price

# PRECISION Wire Wound Resistors



Willin ninging pe on both end. Toler, not eles dep udable,

not elect dependable.

Heed in Television Amphilier, Valimeter Multiple, Meter Stunt, Floto Cell Circuits, Sciend Head Amidiers, Taper Trud H'Pad Altenuator, Decide Boses, Bridg Assembly

ACRATEST PRECISION TYPE RESISTORS are wound with the best grades of alloy were. Every spool of wire is thoroughly checked for insulation breakdown, disneter and temporature to-chicient before entering production. 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 enamed insulations.

#### Cat. No. 6500

Resistance in Ohins	Out Price	Re istan	Our Frice
25 50 100 150 200 500 1500 2 800 2 800 2 800 2 800 4 500 5 500 12 500 12 500 12 500 12 500 12 500 13 500 12 500	\$ .70 .70 .75 .75 .75 .75 .75 .75 .75 .75 .90 .90 .90 .90 .90 .90 .90 .90	40,000 45,000 50,000 60,000 55,000 80,000 125,	1.05 1.05 1.05 1.05 1.15 1.30 1.30 1.30 1.30
35,000	4 41 5		

# Wire Wound Voltage Dividers on Lava Tubes



Cat.	Ohms	Tapped at	Watts	Our
	250	200	100	\$0.00
3265	4,400	1,500, 1,000, 200	50	.77
5751	4.650	2,500, 500, 50 and		
3925	9,000	1 1,600 Jhri sec	50	.636
2000	5.185	4,185, 950	50	.50
3786	5.400	3.000	100	.27
3903	6.850	5 200 900, 750	50	.20
1861	7,095	20, 695, 6,205	5.0	.50
3787	7,120	3,000, 3,000, 840.		
1014	4,120	220, 60	50	.39
3905	7.835	3,400, 3,800, 55, 80,	50	.40
3873	8,000	4,500, 1,500, 1,250,		
		750	100	.40
3851	8.350	7 500, 750 100	50	.33
1790	9.450	5,500, 2,200, 750	5.0	.50
1919	0.800	3,500, 3,500, 2,800	50	.54
3967	10,000	4 Sliders		.80
1288	12,300	8,000, 4,300	50	.51
3785	12,900	9,000, 3,300, 600		.40
		50 Watts		- 13
3900	17,660	CT	50	197
3.013	17,900	2,400, 3,000, 6,500	75	.11
1996	18,100	100, 15,000, 3,000	50	133
3908	6.5	50	100	.40
3911	6 120		75	.8
3915	25,000	4 Slider		
ON A	IL VO	TAGE DIVIDERS	THE	BIAS

MAIL ORDERS TO AFE See Terms on Page 3



# Wire Wound Resistors & Voltage Dividers at unheard of prices

# Wire Wound Fixed Resistance on Baked Lava Tubes



	0		5	
Cat.	Ohms	Size	Watts	Our Price
3928	5	2 in.	10	\$0.25
3950	8	3 in.	50	.25
3974	12	3 in.	75	,25
3910	31	2 in.	50	.25
3909		C. T. 6 in.	100	.40
3902	55	2 in.	50	.30
3916	40	11. in.	25	.20
4703	100	115 in.	5	.20
3975 3932	100	2 in. 2 in.	10	.15
3991	100	2 in.	25	.35
3993	175	2 in.	25	.25
3934	250	2 in.	5	.25
3935	300	2 in.	5	.25
3923	400	2 in	5	.25
3969	420	C. T. 2 in.	25	.25
3936	500	2 in.	10	.2.5
3921	600	2 m.	10	.25
3894	2100	C. T. 3 in.	35	.25
3937	700	2 in.	16	.25
3938	750	2 in.	10	.25
3878	781	1 in	3.0	.25
3931	800	2 in.	25	.25
3971	900	3 in.	50	.30
3942	920	3 in.	50	.30
3851 3855	1000	2 in.	10	.20
3861	1500		10 50	.20
3859	2000	4 in. 2 in.	25	.30
3904	2000	2 in.	5	.20
3989		C. T. 4 in.	50	.40
3912	2500	2 in.	5	.20
3994	2650	11 in.	10	.25
3943	3500	2 in.	25	.30
3944	4000	2 in.	25	.30
3945	4300	2 in.	25	.30
3901	5000	2 in.	10	.25
3998	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	6 in.	75	.55

# Ward-Leonard D. C. Voltage Regulator

50 Ohms-300 Watts

Orizinal resistor as used in Grabe SK4 Receiver

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

Cat. No. 4245 \$2.00

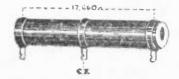
#### General Utility Voltage Dividers

50 Waits 17,900 Ohms Tapped at 3400 8000, 6500. 41<sub>2</sub> in. long. In. diam. On baked lava



Cat. No. 3913 25c

17,660 OHMS C.T. 75 Watts, 41 in, long.



This voltage divided has many uses and applications in electric et. Be electricist transmitters and amplifiers. Will stand up with a wide safety factor. Mode by a nationally known is nufscience to self for several times the price we ask. Get a few at this low price and be prepared for the next repair job.

Cat. No. 3000 250 cm.

#### 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. 7155	Ohms 50 C.T.
7166	1000
7167	100

l5e Each

#### 1,000 Ohm 10 Watt Wire Wound Resistors

245 tibes: and used for many other purpose.
10 watts, 1½ in long



Cal. No. 3924 10c ea.

# ATTENTION — SERVICEMEN:







Every radio de let and servicement should have a complete stock of the above relistors in shot. Relitted in radio are like segar in the greecy business. 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 size of resistors and offering them to you at the 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 50.000 assorted relitted from a milionally known radio manufacturer permits us to make this remarkable offer. Every resistor meter tested for value and most of them mark d. Take advantage of this offer as the opportunity may never come again.

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

5 Watt Carbon	1 Wa	It Carbon Figinits	Wire-Wound	Flexible
Resistors	200 ohm		Grid	Wire-Wound
foun ohnis	30h **	2 5 (1 (1) 3 · ·	Suppressors	Resistors
2000	350 **	30000	i u ohms	200 ohms
20000 0	1000 **	\$ 63 3 63 73	10 CT.	400
22-160	# () () 44	FORGO 9	20 "	500
23000 "	1200 *4	7 ((4) (1))	20 " CT	600 "
100000 "	1.2 (0.00	7.7 (4 14) **	200 "	1200 "
250000 0	25.03	S 11 () (1) 3	401	1490 "
	1001 66	1 22-3 61 , 3 62 48	7.54	1500 4
	4.7 (1.1)	1 5 11111111 14	3 Watt	1
12 Watt Carbon	5000	[ Avir or H	Durham	10 Walt
	B 0 (14) 41	350 00 0	Metalizer	haus'W-eri W
100 coms	T 43 (24) 40	400000	aggelo this t	Resisters
1000	7.54(0) 44	500000	750	Micamold
1000	10000 "	7.5000 0	1000 "	1000 ohnis
25000 11	12000 0	Mer	5000	Harawick
50000	15-109	2 Mies	4000 **	1000 ahms

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

#### 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 Ohms. Used in Temple Models 8-60, 3-80 and 8-90

350



Cat. No. 3867

33 Ohms—Used as Voltage Regulator in Temple DC Sets. Can be used in place of Voltage Regulator Tube in any set

30e



Cat. No. 3861 500 Ohm Registers for Augin Bigs.

250



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

#### Ward Leonard Vitrohm

8359 Ohm Voltage Divider Pepped at 5,090, 3,009 and 350 Ohm 6 n. long



Cat. No. 3863

300 guela

7850 Onins Tapped 750, 7000, 100 4 in long

Bose Peacle Cat. No. 3914 \$3.50 dozen

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

5 WATT-113/4 INCHES LONG



tat. Ohms Color 1,000 Green 5,000 3968 7325 5,000 7326 15,000 4707 10,000 Black 3952 20,000 D. Green 3953 22,000 Black 4708 25,000 Black

Cat. No. Ohms Color 3956 65 000 L Gray 3956 65 000 L Gray 3957 85,000 Black 3958 100,000 Red 3959 250,000 Maroon 3960 500,600 Brown 3961 112 Meg. Black 3962 3 Meg. Orange 3975 100 Black 3954 48,000 Orange 3975 100 Black 3955 50,000 D. Gray 3995 30,000 Orange

Our Price 15c ea. \$1.50 Dozen, Assorted

# Victor Voltage Divider



For all 102) and a Receiver. To a 2.323 Chark tapped at 200, 1,250, 260 and 775.

Cat. No. 3170

# Our Price 65c ea.

# Aerovox Crosley Voltage Divider

5,000 Ohms tanped at 2.000, 25 watts. 4 m. long Wire wound on naked enamel.



# Our Price 50c ea.

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



Specially Designed for Freed-E semann Hodel 78, 79 and 15 Set. Also for Earl, 31, 32 and 41 Sets.

Can Be Und for Any T. p Sat.

Cat. No. 3907

Drer Price 350 CC. \$3.00 doz.

# Freshman Fixed Resistances

Wire Wound-Baked on Lava Tubes



Fic liman 18,000 ohm thill ed i lodel. Tapped 1500, 4500 ed in Victiman N 2200 ohms.

Cat. No. 3963

For Freshman (Mudel G) total 10,950 6 tap. Tapped as follows, 2100 4300 ohms, 300 ohms, 300 ohms, 1250 ohms.

Cat. No. 3966 .

# Our Price 65c ea.

#### Radiola 28 Voltage Divider



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

Cat. No. 6756 Price 75c ea.

# Acralest

#### Wire Wound Vitreous Enameled Resistors



A cratest vitreous enameled resistors are made of the best grade of electrical refractory tubings which have the same co-efficient of expen-

co-emicient of expension as the porcelain enamel and wire, permitting safe heavy loads without fear of injury to the resistor. We use the highest grade of resistance wire, wound on refractory tubes.

resistance wire, wound on refractory tubes.
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 lugs, thus eliminating any possibility of open circuits caused frequently by poor joint contacts. Fired at 1200 Deg. Fahrenheit, durable and permanent. A large assortment carried in stock to meet every requirement.

Cat.	Ohms	Tube	Wattage	Our Price
3678	100	2 in.	10	25c
3988	200	2 in.	10	25c
3679	250	2 in.	10	25c
3680	500	2 Jn.	10	250
3681	750	2 in.	10	25c
3682	800	2 in.	10	25e
3683	1.000	2 in.	10	25c
2084	1,500	2 in.	10	25c
3685	2.000	2 in.	10	25c
2686	2,500	2 in.	10	25c
2637	3,000	2 in.	10	25c
3688	5.000	2 in.	10	25c
3089	7.100	2 in.	10	25c
3026	8,600	2 in.	10	25c
3300	10,000	3 in.	25	30c
3 201	12,500	3 in.	25	30c
3693	15,000	3 111.	25	30c
3693	20,000	3 in.	25	36c
3694	25,000	4 in.	50	45c
3095	30.000	4 in	50	4ñc
3696	40,000	5 in.	75	55c
3693	50,000	5 in.	75	55c

#### 3000 Ohm Davohm Resistor

Position Wife Wound on greated Lava Tube. Accuracy 999



Cat. No. 5699 Price 25c

#### VOLTAGE VARIABLE 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, amplifiers, 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 to 6 resistance. List \$1.50.

Especially adapted for Freshman and Earl Sets.

Our Price 80c ea.

MAIL ORDERS TO AT See Terms on Page 3



# superheterodyne

# ATWATER KENT

Model 55 Replacement R. F. Coils



134 in Diameter. 212 in. high. Primary wound on s e p arate form

\$1.50 Cat. No. 3551

Per Set of 3 Coils

# RADIOLA Super Heterodyne Coils



Used in Radiolas 61 and 67 Victor Models 9-18, 9-54 and 9-56. Enameled wire on bakelite form11 in. diameter x % in. long. R.F. chokes in-

Cat. No. 3732

# \$1.35 per set of 3

RCA Screen Grid RF Coils for Radiolas



Complete with mounting brackets. screen grid lead and condenser.

Cat. No. 4168

# \$1.35 per set of 3

#### Brunswick T R F Coils in Shields



Bor .00035 condensers. With mounting screws

Used in all early Brunswick sets.

Cat. No. 5751 25c Our Price, Each.

# Genuine Victor Radio Frequency Coils



Complete set of 4 coils consisting of 1 Antenna coil and 3 RF coils. Diameter 112 in., height 23% in. For .00035 concensers.

Cat. No. 4169

# 50c per set of 4

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

With Shields for .00035 Condensers

These coils may be used in any set. They are spice wound with enameled wire on bakelite tubing. Coils are equipped with mounting blackets which are brackets which are attached to the alu-ninum shields. Two tapped holes corres-pond with two holes in the shield. These

Per Set of 1

iagh grade coils will give 190 efficiency in any receiver. Set of 4 Colls—1 Antenna, 3 Screen

Grid with Shields Cat. No. 4136 95c

#### Band-Pass, Detector and **Oscillator Coils**



An unusually fine superhet can easily be built with this unique



These coils incorporate a 10 K.C. band pass coil combination and a first

detector and oscillator combination. They will make a sensitive, selective superheterodyne which will receive from great distances. A special feature of these coils is the tap on the oscillator coil which removes all semblance of image frequencies and harmonics. These coils tune with our 5361 4-gang condenser and cover the entire broadcast band. Using these coils with the intermediates, condensers and other equipment listed on this page will make up a low priced superhet of advanced design. Wirling diagram and instructions furnished with each set. and oscillator combination. They

Cat. No. 6654

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

#### Aluminum Shields for Tubes and Coils



7272

7268 7173

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

3 Piece Shield for Type 56, 57, 55 and 58 Tubes. Cat. No. 7173

Per Set .. 2 Piece Shield for Type 82 Tubes. Cat. No. 7568 .130 Per Set .

2 Piece Shield for Type 35 Tubes. Cat. No. 7270 Per Set 2 Pirce Shield for Small Coils, Din-meter, 2 m.; hight, 2% in. Cat. No. 7272

1 Oc Per Set

# Acralest

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

Completely Shielded







Diameter, 2 in.

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

and condensers are matched. Made for 00035 condensers.

Will operate with the 235, 230 tubes and with the new automobile cathode heater tubes, although in some cases it has been necessary to reduce the primary of the coil to prevent oscillation.

Cat. No. 3217

# 98c Set of 3

Consisting of 1 Ant. and 2 R.F. Coils

Cat. No. 3216

\$1.30 Set of 4

Consisting of 1 Ant. and 3 B.F. Colls

# heterodyne

# Acralest,

# 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 conwe 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 KC. separation. The antenna coil is separate while the first detector and oscillator coils are on one form to assure periect 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 rain coils and I.F. transformers exceptional sensitivity and selectivity may be had. This entire set of coils are matched at the factory so that the builder may be assured of a precision receiver capable of receiving stations many thousands of miles away.

#### The Autodyne Kit Consists of

High gain antenna coil.

High gain interstage coil.

Au odyne coil and intermediate com-

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. 14".

Our Price 25c Ea.

# Acralest

#### **Migh Gain Intermediate** Transformer Frequency

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

FEATURES:
1-Condenser adjustment through to #

can.
-Aluminum shield with holes for wires.

Heavy steel supporting brackets.
 Coils properly wound and shielded.
 Compensator.

6-Mounting screws.
7-Mounted on porcelain base.

2 3

Our Price. Each

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. 7813
for 175 K.C.
For center tapped second-

ary for use with 35 Complete with Diagram 95c

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

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

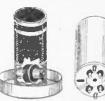
Cat. No. 6755

10c ea.; \$1.90

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 festures are hoke acts at high plate im-pedance. Choke

pedance.
Capacity coupled primary.
Low distributed capacity.
Ease of mounting—fits into tube socket holes.
Compactness.

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

Coils.

Cat. No. 6907

Set of 3-\$1.50

Cat. No. 6908

Set of 4-\$1.95

# Broadcast and Short Wave High Gain R F Coils

For .00035 Condensers Range: 70 to 200 Meters, 200 to 600 Meters.

Same coils as above. Cover the Television. Police, Airplane, Foreign and Amateur Bands. Coils are merely tapped in one spot for wave chunging. 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 Earl and 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 catacombs were used in the RCA and Victor sets a few years ago. They are ex-tremely compact

tremely compact and contain both the intermediate frequency and audio units. Due to their peculiar construction it is hard to replace any parts in them and so a new catacomb is necessary.

Cat. No. 6221

6-tube Catacomb for RCA models 25 and 25AC; Victor models: Alhambia 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. 1% in. Dia.
Used in all late Victor sets. Enameled
with wound on Threaded Bakelite tubing.
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 961. C1 and C3. A very hard to get Item. If you service Kolster, 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

1534" long 914" wide 112" tall Weight,

Green Finish



16¾ in. long, 9¼ in. wide, 1½ in. tall. Weight, 4 lbs.

Cat. No. 4399

Just the thing with which to build that Just the thing with which to during 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 bakelite strip. Cal. No. 4106



Our Price 16c ea.

# Eby Binding Posts

Cat. No. Marked Marked 4066 5685 22V. 5686 Spkr Plus 5678 Flank 5678 B -5680 67V, 5681 45V. 5687 Spkr. -5688 5689 5438-0 2000 5683 Long Ant. 5681 Short Ant. 5691 Gnd. 5692 96V.



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 RF, coils with R.F. chokes, trimmer condensers and R.F. by-pass condensers mounted on metal terminal strip ready for installation in above Radiola models and many other sets. Coils are 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





#### 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 posts, baselite molded in brown composition and mounted on a bakelite strip. The artenua posts artifaled 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

A nigh quality concenser with electrical and mechanical refinements that stamp it as a leader.

The individual sections of this fine unit are scientifically matched. Careful shielding. Compen sing condensers in each section. Capacity, .00035.

#### 3 Gang Super Variable Condenser



414" long, 414" wide, 214" tall. 33" shaft.

A very high grade 3 gang variable condenser made expressly for superheterodyne receviers. Will cover wave band of 200 to 800 meters when used a conjunction with any standard super coils. Equipped with frimmer 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. nd cable. Complete with aluminum drum and Capacity .00035. 912in. long, 3 wide, 5 in. high.



Cat. No. 5796

1 50

#### New Illuminated Drum Smooth Positive Action



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

Cat. No. 4201

Cat. No. 4202

Complete with Dial Light Socket 70c

ESCUTCHEON PLATE FOR THIS MODEL Cat. No. 4042 Our Price, Each

# Illuminated Drum Dial

For Short and Long Wave and Television Sets



Cat. No. 6903

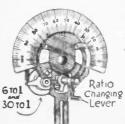
\$1.25 Complete

No Calibrations on Dial Geautiful Escutcheon Plate to Match

Instead of the usual numbers the celiuloid dial has 4 different colored bands running around it, so that a different color may be allocated for each wave band. For 32" shaft. Complete with pilot light socket and plate. 212" 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 5 hort waves. Very ingenious yet simple construction. Nothing to break or snap 2½½" 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, 37a in. Shatt hole for 3a in. or 1/4 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 3% or 1% in shaft. 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.

Por % in. shaft.

Cat. No. 6911

60c

Complete with Plate

#### Fan Dial and Plate



For Midget Receivers

Fan dial with very tegrible black numerals. For 3" shaft. Handsome bronze escutcheon plate. 23" long, 3½" diameter.

Cat. No. 6904

60c

Complete with Plate and Socket

# Escutcheon Dial Plates of Latest Designs



25c



Cat. No. 4042

Cat. No. 4046

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

# The New 'Spot Tuning' Illuminated Dial and Escutcheon



Cat. No. 5505

67c

The light travels along with the station indicator. Now being adopted by leading set manufacturers. Very attractive. For \$\frac{3}{2}\$ in shaft. Translucent scale. Bronze finished plate. Nonslip gear drive. Complete with pilot light sosket.

# 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 ASSECTED TO Page 3

Federated Purchaser Inc.

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

**World Radio History** 

#### Genuine Walnut Wood Carved Knobs



Cat. No. 3215



Cat. No. 3565



Cat. No. 3380



Dia. 116" Cat. No. 3716



Dia. 11/2 Cat. No. 3552



Dia. 15-16" Cat. No. 3717



Our Price for Any of the Above Knobs

10c ea.; \$1 doz. Assorted

# Ornamental Knobs



Brown Batelite Knob with Metal Overlay, Diameter 11a in, Insert 1s in.

Cat. No. 5106

15c ea. \$1.50 per dozen

#### Grecian Design Drum Dial Escutcheon Plate



4 in, x 2% in. Buralshed Bronze Finish

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

Dia. 13, in.,

Cat. No. 5126

Our Price \$1.10 doz.

Dla 1 in.,

Cat. No. 5127

Our Price \$1.10 doz.

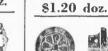




Octagon Pyramid Top Walnut Knob

Dia. 1-1/16 in., 14 in. insert and set screw

Cat. No. 5130 Our Price \$1.15 doz.



Ornamental Top Walnut Knob

Hexagon

Two-Tone

Walnut Knob

Did 114 in., 14 in. insert and set screw

Cat. No. 5128

Our Price

\$1.30 doz.

Dia. 15/16 in.,

Cat. No. 5129

Our Price

Dia. 114 in., 14 in. insert and set screw

Cat. No. 5141 Our Price 95c doz.

#### Vernier Port Dial Ivory, Plate, Black

Die 4 in . Reading 0-100 Cat. No. 5142

Our Price 59c each

Dia. 23, 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 fine vernier dial is a product com-This line vernier dial is a product comparable to any fine instrument. The simplicity in tuning with this dial takes all of the guesswork out of short-wave reception. The accuracy and sharpness of its precision calibration mates 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. tali

Cat. No. 5108





#### **Full-Vision Dial and**

#### Pointer

For replacement on sets now us-ing ordinary dials. Simply re-move the old-fashioned dials, fashioned dials, slip the escutchcon plate over
condenser shaft
and replace old
dial with a small
knob. Will enhance the appearance of any
set. Bronze finish
only, with translucent celluloid
dial strip. Can lucent celluloid



Complete Can also be used as an illuminated full-visio; dial if panel is cut out.

#### Naald Bakelite Tuning Knob



with set screw 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 Knob Assortment



Contains 2.5 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 a beautiful or the service of the s box in his shop for any emergency.

Cat. No. 7319 Our Price .....

MAIL ORDERS TO AND See Terms on Page 3

rederated Purchaser Inc.

# complete switches for every sortment

#### Carter Triple Pole Double Throw Switch



A switch which finds many applications in short and long wave receivers. Due to its special construction it may be used as a three circuit "on" and "off" electric switch carrying up to 50 watts on each circuit without danger of arcing or overheating. Shaft 5" long by 14". Dia. of switch 134".

Cat. No. 7273 Our Price

#### 85c For use with our No. 6309 coils

# CARTER "IMP" Inductance Switches



List Price \$1.00 Cat. No. P4. 5484 5485

40c ea.

Complete with Bakelite Arrow knobs, ompact and rugged and will stand up ader hard usage. All metal frame, cadium plated. Positive snap action. Dialeter of frame 112 in. Extends back of anel only 1,2 in.

# **CUTLER-HAMMER** Rotary Snap Switches



Cat. No. 6688

Cat. No. 6666

Single Circuit with 2% in, shaft and 12 in, leads

Two-Circuit for Radio-phonographs with 1's in. shaft

45c ea.; \$4.80 doz.

#### H. &H. Dual Time **Delay Switch**

Two toggle switches mounted on one helf and so arranged that one is thrown at a time. Used in transmitters, amplifiers (10)



Cat. No. 7433 95c Our Price

#### SELECTOR SWITCHES With Knobs and Plates



Single Pole

Double Pole

Single Pole

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

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

SINGLE POLE

DOUBLE FOLE

SINGLE POLE		DOUBLE POLE			
Cat.			Cat.		
No.	Contacts	Price	No.	Contacts	Price
4185	4	\$0.85	4188	4	\$1,25
4186	7	.90	4189	7	1,45
1187	9	.98	4190	9	1.60

# Toggle Switch



With Long Flexible Leads

5 amperes, 120 volt. Approved by underwriters. 5/16 in. shank.

Cat. No. 4112 17c

# S.P.D.T. Toggle Switch

SHORT SHANK Cat. No. 4105

LONG SHANK Cat. No. 4104

23c



Double Pole, Double Throw Toggle Switch

Cat. No. 4115 45c ea.

# Toggle Switch

With Long Neck (114 in.)



For wooden panels and cabine work. 3 amps., 225 volts.

Cat. No. 4110

Price 17c

# Circuit-Closing Double-Throw Switch



For Phono-Radio and Public Address Systems

Used in cathode 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. Has 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

3 ampere at 110 volt, 1 ampere at 250 vols. All bake-life housing. One hole mount will fit any let. 8 in. let ds. Approved by the underwrit-8 in

Cat. No. 4121



# Our Price 20c

# Yaxley Filament Switch

Very fast make and breat. Com-pact, sturdy and easy to mount. one hole.

Cat. No. 4108

Dage Price



MAIL ORDERS TO ANT See Terms on Page 3

rederated Purchaser Inc.

#### WALL PLATE Radio Outlets



To Fit Any Standard Electric Outlet Box



-		
Cat. No.	Type	Price
5501 5482	Ant., Gnd. and A.C. Outlet. Speaker Tip Jacks	. 8.75
5500	Antenna and Ground Bind Posts	-
	Posts	* *4540

#### **Brass Radio Wall Plates**



of 04 Made 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

Style

"Antena-Ground"
"Speaker" With Single Circuit Jack

Our Price Each

#### Sub-Panel

I" x 816" Bracket



An ideal bracket for receivers using box or large shielding; or large audic frequency transformers. Leaves enough clearance underneath 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. 73:35

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. 7836

36c Our Price. Per Pair

#### Handy Extension Cord Sets

Heavy Silk Cord with Inner Braid, Beauti-ful Assorted Colors.

Approved Socket Approved Cord G. E. Bakelite Cap Only



Cat. No. 3300	Length 6 It.	Each S.25	Dozen \$3.00
3324	9 It.	.29	3.35
3325	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.

#### **Bakelite and Aluminum** Panels



Special sizes of bakelite and aluminum panels can be furnished at short notice. Prices on request.

14	Gauge Al	uminum	3/16 in.	Bakelite
Size	Cat.	Our Price	Cat. No.	Our Price
7x10	5176	80.50	5169	81.00
7x12	5177	.57	5170	1.25
7×14	5178	.67	5171	1.50
7x18	5179	.85	5172	1.90
7x21	5180	.197	5173	2.25
7×24	5181	1.16	5174	2.50
7x26	5182	1.30	5175	2.75

Aluminum shielding can, 5 in, by 6 in, by 9 in, with 4 corner posts.





Aluminum 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 turntable, will shut the current off when the pick-up reaches the end of the record and the arm comes in contact with the switch. Used on all RCA and Victor Radio-phonograph combinations.



Cat. No. 4222

25с еа.

#### Yaxley Phonograph-Radio Switch

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



Cat. No. 4119

lšc ea.

# Rotary Snap Switch For Fada and AC **Dayton Sets**

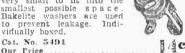
11% in. Shaft

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





# 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 250

#### CARTER CHANNEL Selector Switch With Knob and Plate



and Plate
Gives instant sefection up to 5 channels with constent
impedance of 5000
chins. A switch of
design for
design for ohms. A switch of advanced design for use in centralized nabling the listener to switch to any of 5 programs with constant impedance maintained through

maintained throughout the line. Constructed to fit into
a standard electric
outlet box. The impedance coils are securely riveled to the frame and all wiring
concealed. Depth of cwitch 134 in. Serew
connections provided to all leads.
Equipped with attractive brown bakelite knob, arrow pointer and escutcheon
plate.

Cat. No. 5488

List Price \$5.00

This diagram This diagram illustrates the wiring and action of the Selector Switch.



Bur

MAIL ORDERS TO See Terms on Page 3



# ACRATEST SR. High Precision Condensers

Features: 1 Steel frame



steel.



- Condenser frame provided with three point chassis mounting. Rotors fitted with individual rotor
- point chassis at with individual reports fitted with individual reports for the contact springs.

  Shaft mounted on both end plates, bermitting free turning motion with perfect alignment.

  Frame highly reinforced by means of inter-stage shields.

  Perfect electrical isolation between units.

- Perfect electrical instation between gaing units.
  Extremely low dielectric losses
  Proper rotor capacity distribution.
  Perfectly electrically matched between successive units.
  Stator section provided with individ-

- Stator section provided with individual frimmers.
  High insulation resistance.
  Potors provided with slois for permitting adjustment to take care of distribution of capacity in set circuit.
  Condensers provided with extended low shields between stages.

#### FOR SUPERS FOR STRAIGHT B. F.

Cat.	Gangs	Size	Cat.	Gangs	Price
3000 3000 3204	Two Three Faur	31 x 3 h in 41 x 3 a in. 51 x 3 a in.	5360	Three	\$1.55 2.50 3.25

# Modernistic Full Vision Dial and Escutcheon



Traed sively on exseis mentive and will enhance the appearance of old sets. Plate 51 ." long by 2" Bronze wide.

Cat No. 7175

\$1.25

Complete with escutchson plate and pilot light worket

# Santa Maria Full Vision Dial and Escutcheon



A very attractive new dual in 2 pop-ular moulf. Prior light travels over the isl as knob twined Fiste dia a high 415

Cat. No. 7174

95c

Complete with cutchenn and pilot light socket

# ACRATEST SHORT-WAVE Tuning Condensers



of the half shield type insuring isolation hetween stages. They are all cased in heavy aluminum frames and tapered for remarkable wave spread. Eas-1 ly mounted and precise in operation.

These

densers

con-

8 7 6

Single	Cat. No.	Price	
.00014	6854	8 .95	
.00025	6855	.95	
.00035	6906	.95	
2 Gang			
.00014	6708	1.50	
.00025	6836	1.50	
3 Gang			
.00014	6709	2.50	

# U. S. L. Midget Condensers

For Short Wave Sets



Wave Jets
When used as a
neutralizing condenser the DE JUR
Midget Condenser
is far superior to
the various tymes
of "spring" condensers. It can also
be used as a regenerative conuits or as a means

denser in certain circuits or as a means of greater selectivity when placed in series with the antenna circuit.

Cat. No. Description Our Price 5256 .000025 Mfd. 45e 5258 .0001 Mfd. 65e



Rakelite 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

#### BAKELITE Wafer Sockets

Special construction makes short circuit or flashovers impossible.



Cat. No. 4062-

4 Prong-201A, 226, 112A 245, 210. 171A, 250, 280, 281, 230, 232, 231, 234, 82.



Cat. No. 4063-5 Prong-1 02, 56, 283, 286, 287, 28

Cat. No. 6934-6 Prong-57, 58, 55.

6c ea., 60c doz.

# Genuine Eby Sockets

REGULAR TYPE





Eby UY and UX Sockets are the stand-EDU Ur and UK Sockets are the stand-ard of quality. They can be mounted above or below metal, Bakelite or wood panels. Moided of genume Bakelite with a built-in guide for the tube prongs Phosphor bronze contacts to designed that their sprtng action cannot be designed that rnosphor bronze contacts so designed that their spring action cannot be damaged no matter how often the tubes are in-serted or withdrawn. Standard packages of ten.

SUB-PANEL TYPE

Cat.	Prongs	Price	O M
875	4	.16	116
876	- 6	.16	
936	6	.20	-

# **Base Mounting Sockets**



Phosphor bronze springs and knurled posts. 4-Prong-Cat. No. 5675

5-Prong-Cat. No. 5676 6-Prong-Cat. No. 6937

Our Price 12c ea.

# Sub-Base Mounting Sockets

4-Prong-Cat. No 4080 5-Prong-Cat. No. 40%1

> Cat. No. 4080 Sub Bare Mount



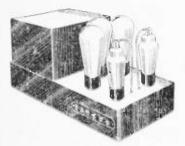
12c ea., \$1.20 doz.

MAIL ORDERS TO ATE See Terms on Page 3



# cratone

# Super Power Spini-Class B 242 Bandes. Vaendeszazete



#### Cadminge Plated Chassis

C# No 10"

13.50

Less Tubes

Power Output-10.3 watts. Power Consumption-55 watts. Power Supply-110-125 volts 60 cycles A.C. Size-1115 in. long, 615 in. wide, 7 in. high. Employs 2-57, 2-245 and 1-280 Tubes.

Amplifier development has taken rapid depoin the rait few months. Small output tuber can be unde to develop i curcidous power in new circuits. Where ordinary push-pull 245 monthless develop a maximum of 4 watts, the pecual circuit of the amplifier enables in uncistored output of 10.3 wasts, and all maintaining exceptional quality.

#### Carcesas

This amplifies is operated as a standard claim A audio amplifier until it official reaches to eaths them a chappe tale place and the CTS tubes form into claim B tubes and the could be considered for the chappe in talen case of by the special attenuator control and is not a sudden chappe, but a smooth gradusted gain.

The first tage in this applifier uses the of the new type 5, periode. The cube is applifiers and a power stage transferring substantial amount of energy to the 15th. This stage is bridge-coupled to the pecial output stage.

#### FOW OF

The maximum power entput of this amplifier is actually 10.3 matts. At this output the quality is its excellent as the lower level. I fire a nor like amplifier in decible is 20.

#### Quality and Performance

The reproduction of this amplifier is a collect and is particularly recommended for recording, medium stated public additional systems and count of the report from this amplifier is good from 20 to 10,000 cycles.

This amplifier will fill an auditorium of the tire sating up to 2,000 people, will operate 3 auditorium tynisms speakers at maximus and can madde up to 6 to his speakers with femoral contents of the speakers with

#### timicorsal lugar and Duiped Connections

The input transformer of this appeties a round for transfer instead double button microplone and for a law or bug a mip dates phonocraph pictup. The official is wound to match condend voice coils and both impediance dynamics at magnetics.

#### Casain Caronteral

The thin control of the amplifier a no ordinary column control but a peculic constituted dual potentioners; giving seculicity guidant over the entire amplification. This control is compared with a graduated plate for calling volume levels.

# Suggested P. A. Systems Using the No. 107 Amphilier:

#### Intercommunicator System No. 761

This system is recommended for inter-This system is recommended for intercommunication in factorial, large offices,
etc., where there is a noise level greater
then the human voice can overcome. The
undistorted output of this outfit is approximately 10 watts. FOR EACH ADDITIONAL POINT OF COMMUNICATION
IT IS NECESSARY TO ADD ONE TWO
BUTTON MIKE, ONE DYNAMIC SPEAKER ONE S. P. D. T. KNIFF SWITCH
THE SAME AS FOUND IN THE LISTING
BELOW. Louinment Cat. No. Price

	The Man I state and	Cut	
1	Acratenc Semi-Class B Amplifier		818.50
1	Ulah A. C. Stadium Dynamic Speaker.	166	8.95
1	Universal Model "X" 2 Button Mike	524	5.44
1	Universal Microphone Ring & Springs		1.47
	Total Price		*3450

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 Anditorinum must Studio Sound System No. 702

This yestem a ideal for muniterium and studio work because of its flexibility and simplicity. It can be rolled from place to place and is mugantly trady for use. The amplifier used is our dual P.P. modified class 'B" amplifier completely de cribed above.

The found board and rack for the engipment is a brantiful ornamental column type portable stand mounted on ball bearing rubber casters. Those of our readers who are familiar with the pecial R. C. A. installation Sound board will readily recognize this stand by the de cription. The regular price of the ound board is \$275.00. It is specially drilled to hold three dynamic speakers so placed that each speaker covers a different part of the stiditorium. The speakers are completely hidden from view. 50 feet of shielded heavy rubber covered cable is provided.

	Equipment	Cat. No.	Price
1	Acratone Semi-Class B Amplifier	107	\$18,50
	RCA Photophore A C Dynamic Speakers	152	30,00
1	verter	271	24.50
1	Universal Mode "BB Mike	200	14.70
1	Universal Microphous Ring & Springs		2.35

#### Small Truck Sound System No. 703

Small sound systems are in big demand. Every serviceman or dealer without taking up any room in his true, or service car, can have this outfit installed. Thereby allowing the use of the car for regular work when he is not selling sound.

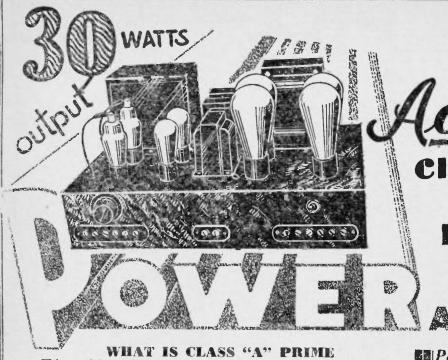
This ound stem utilizes our new Modified Class B Amp. This amp, is a qual push pull utilize. I tibes into 2.215 tubes. It has an undistorted output of 10.4 walls, and has a remark able fidelity curve from 30 to 9000 cycle. The "high," which are generally lacking in amplifiers capable of reaching "lows" as low as 30 cycles and applied to a control of the control of are evident in their correct percentage

The entire outfit connects to your car battery. No additional batteries are necessive and recharging will put back

	Equipment	Cat, No.	Price
	R C A Auditorium Sound Board	410	830.00
	Acratone Semi-Class B Amplifier . Two-Speed Electric	107	18.50
	Turntable	253	9.75
	Acratone Low Im- pedance Pick-up		4.75
1	"EB Mike	200	14.70
- 1		11:1:1	8,50
	S.P.D.T. Stateh	1179	.28
	namic Speakers	114	14.85
1	Field Exciter for		
	above Speakers	85	5.50

Total Price ..... \$106°3

Total Price ..... \$0005



cratone Class A Prime Triple push-pu De Luxe

AMPLIFIER

30 WATTS

Power Consumption 200 WATTS

Power Supply 110-125 V., 60 CY.

Size: 16 in. long, 11 in. wide, 8 in. high

\$57.50 Cat. No. 125 Our Price . . . .

Less Tubes

Employs 2-57, 2-56, 2-250 and 2-281 Tubes

Set of

Universal Tubes .....

Set of Arcturus Tubes ....

#### 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 Trans-

former Output to Voice Coils, 500 Ohm Line or High Impedance

This amplifier "packs a real wallop." Has an output of 30 watts from Power Output 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 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

but in Class "A" Prime the circuit is so arranged that peak volume is always 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 airplane 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 hocked up to this circuit. It has a coverage of up to 10,000 persons 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 potentiometer giving excellent reproduction 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 amplifier eliminates the necessity for additional microphone, input stages. It is wound for use directly with a single or double button microphone 5000 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.

State.....

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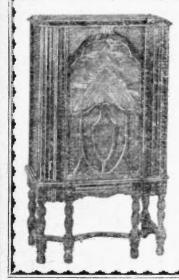
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# ASTOUNDIN



# **Exquisite Six Legged Console**

Especially Suited for the

# Acratone, 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 " ply gum for strength.

Set compartment: 11 in. high,  $21\frac{1}{2}$  in. wide,  $10\frac{1}{2}$  in. deep.

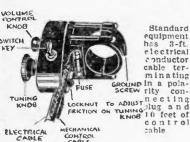
Outside dimensions: 40 in. high, 23 in. wide, 11% in. deep.

Packed in shipping cartons. Completely assembled.

Cat. No. 749 Our Price .... \$ 50

F.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 necesses equivate. ally 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



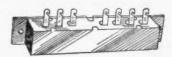
May also be used for piayback where con-stant speed is absolutely required.

This mo-tor is the ultimate for recording purposes. It

has the ability to turn at a constant speed even with a recording lead of 6 lbs. This motor is driven by two mo-tors, one situated at each end of the casing. A special clutch control governor casing. A special clutch control governor enables the maintenance of constant 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 operations of the control of the cont ation only.

Cat. No. 274 Our Price ..

#### Multiple 1/10 Mfd. **By-Pass Condensers**



Compact, metal encased by-pass condensers suitable for General Motors and other receivers. Guerall dimensions  $\delta /x$ 

1½ x ¾ in. Cat. No 7452—4 x 1/10 Mfd. Cat. No. 7458—5 x 1/10 Mfd. Our Price

#### Frost 10.000 Ohm Potentiometer

Graphite Element. Only 7,16 in. thick.
I in. flat shaft with % in. thread and locknut. Will fit all 1/4 in. knobs.

A greet majority of the receivers on the market today



the market today
use a 10,990 ohm
potentiometer as a
colume control. This
potentiometer will fit

potentiometer will fit because of its compactness and length of shaft. Absolutely noiseless. Positive viping 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 effering them for half the price due to a special purchase.

WHILE THEY LAST

Cat. No. 5634

29c

#### 4 or 5 Tube Midget Replace 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 Supplies the fal-

Size: 8x2½x3" high. weight, 2 lbs. 2½ v. at 84 amps; 300 v. each side of C. T.; 289

This compact, yet ruggedly built power transformer can be used as a replace-

# PACENT PUSH TRANS



Generously profor use in sets premium. The imbenefit, in that lent reproductive greater current in tell, 2½ in le versal Mounti Mounting.

Shielded Input \$1.15

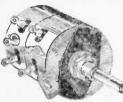
Shielded Input Push-Pull Transformer

Transformer
So well hermetically sealed 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. tail. 2½ in. long, 2% in. wide.

# GVALUES

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 **RE52 RE75** 2800-2900 Ohms-Clockwise

Here is the genuine Victor Volume Con-Here is the genuine Victor volume Control manufactured by Frost—not to be confused with surplus controls—and incorporating several improvements over the old type. Mouating panel on front of unit makes for ease of installation. Metal strap holds the two units rigidly. Competely shielded and enclosed against dust and moisture. Shaft in threaded and 1-3/16 in, long.

Cat. No 7450

... 95c Our Price

#### ment Power Transformer

ment in almost every midget receiver on the market using up to five tubes. It is universal in adaptability, Baving 1 long \$7/32 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 

# PULL AUDIO ORMERS

rtioned; not designed there space is at a eased size is a marked u are assured excelqualities, due to the rying capacity. 2% in xide. UniEquipped with solder Soutpped



Output Cat. No. 7431

\$1.15

Output Push-Pull Tranfsormer

Equipped with 15 ohm impedance econdary—which matches voice coil impedance of R.C.A. Photophone Dynamic Speakers, Racon Units, etc., etc. Also excellent for use with two Jensen Dynamic Speaker Voice Coils in series. in series

Similar in all mechanical respects to Cat. No. 7430 INPUT transformer. For 1 or 2-245, 250, 205, 171

# 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

For Outfit consisting of a 6-Tube Chassis housed in a heavy steel case, Magnavox dynamic speaker shielded cable, shielded battery, steering column clamp and mounting brackets.

Our Net Price Set of Universal Tubes

Can be installed un-der dash or on steering post

\$4.35

#### Acratest De Luxe Phonograph Pickup



This pickup is especially resummended 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. 7% in. from center pin to needle point.

Cat. No. Impedance Our Price This pickup is especially recommended

Cat. No. Impedance 200 Ohms 500 Ohms 5000 Ohms \$595 6977 6978 Fach

#### Polymet 1/4 Mfd. By-Pass Condenser



With mounting lugs and pigtails. Zenith part No.

Size 1 1/4x1 1/4x1/2 in.

Cat. No. 2866

15c Facia

#### Terminal Strips for Mixing Panels and Amplifiers

phosphor bronze screw terminals with "can't with "can't slip" collars. Find many applications in radio and

Bakelite strips with specially designed nickel plated

public ad-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. 71-49 

Strip D—2 post input strip marked input. Cat. No. 7151
Our Price 25e

Strip E—(Not illustrated)—2 post output strip (same size as strip D) marked output. Cat. No. 7152

Cat. No. 7152
Our Price

3 Terminal Strip marked "M—Mo—M"

3 Terminal Strip market
for mike input.
Cat. No. 7448
Our Price
4 Terminal Strip marked "F1 and F2"
for 2 dynamic speaker fields.

Cat. No. 7449 Our Price .....

Date.....

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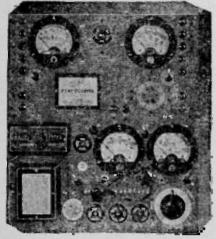
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Balance C. O. D.

# **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.

# 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.

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

Range Inductance Meter from ½ to 50 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 Aux-All measurements without use of Aux-

illary Apparatus. Instructions include Loose Leaf Book in Leatherette Binder covering—Point-to-Point Resistance Mea-surements on Receivers.

METER.
All Values of Inductance on Double
Range Inductance Meter from ½ to 50

\$150°°

\$900

# 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 course! 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.

1-3-stage 245 P.P. Amplifier	
(Cat. No. 120]	12.50
1—Set of Universal Tubes	2.25
523)	1.95
1-RCA Speaker (Cat. No. 103)	3.43
1-Mike Battery (Cat. No. 6656).	.20

\$20.33

#### P.A. Systems Employing the Model 120 Amplifier Club Room and Lodge Meeting P.A. System

1-Mayo 385)  $8.75 \\ 1.47$ 9.50

385)

1-Mike Ring (Cat. No. 3636)...

1-Rotrola Electric Motor, Turntable and Pick-up (Cat. No. 151)...

1-Utah 12 in. Stadium Dynamic (Cat. No. 166)...

1-Mike Battery (Cat. No. 6656).

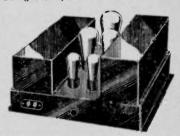
1-SPDT Switch (Cat. No. 4104). 8.95 .20 .24

\$43.86



#### Three Stage Push-Pull 245 Amplifier

Using 2-56's, 2-45's and 1-280 Tubes



Output: 4 Watts. Size: 14 in. long, 10 in. wide, S in. tall. Shipping weight: 35 lbs.

Cat. No. 120 Our Price—Less Tubes	*1275
Set of Universal Tubes	
Set of Arcturus Tubes	2.75

This amplifier has three stages, two of which are voltage gain stages and consist of two of the new 53 type tubes. Output stage is two 4.5's in push-pull and the rectifier is a 280.

and the rectifier is a 250.

An exclusive method of providing for the use of high and low impedance input and 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. be converted, or pick-ups.

#### Serviceman's Truck System

(Portable Advertising Systems)

1—Acratone Pick-up (Low Imperance) (Cat. No. 6898).....
1—Victor Handmike (Cat. No. 523) 4.75 1.95 1-Mike Battery (Cat. No. 6656). 1-SPDT Switch (Cat. No. 4104). 2-Photophone Dynamic (Cat. No. .24 1-Field Exciter (Cat. No. 85).... 5.50

\$50.34

1-32 V. 150 Watt Motor Generator, less filter.

33.75

\$84.09

#### Circuit of No. 101

This amplifies consists of three stages. The first stage uses a basic gain indicate amplifies. 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 relator to a 56 intermediate amplifies 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 maintens pure least quality under all conditions. The imput transformer provides for phonograph, radio and microphone coupling. The culput transformer is tapped at the following impudences. 9, 13, 500, and 1000 ohm. The 9 ohm winding is for coupling to Wright Defosia and similar perskets. The 15 ohm coil is for recorders dynamic units and RCA Pholophone Spealers. The 500 ohm winding is for peacers and miser lives while the 1000 ohms promotry is recommended for magnetic monitor speakers and dynamics that already contain utput transformers.

#### Ounlit's

A true traised line curve from 30 to 10000 cycles has proven that the Actate I Laboratories have really attained perfection in the outfil. The audio transformers used are oil of the large upright type and use the finest grade of pure silicon teel core. The enables the fine frequency response which make this amplifier outstanding.

#### Performance

This complifier will fill a hall, theatre, tedium or an auditorium seating up to 1,500 people. It is capable of filling to maximum 1 auditorium type speakers but will bandle 6 to such speakers with ample power. Special output is provided for use with exponential form, equipped with synamic units.

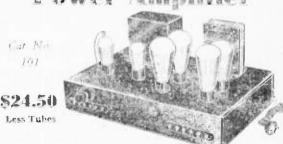
#### Attenuator Control

A control is provided on the front panel for easy access. This axin control moves in a logarithmic curve from complete silence to a deafening roar with volume graduations in smooth steples attenuation. This gives complete control over both the input and output. A graduated scale is provided for charting various cutput level. At all volume levels the same pure tonal quality is maintained. Instructions on output levels for recording and various used auditoriums are discussed in The quality is maintrined colding and various

#### PARTOR.

Generally amplifiers of this type are rated that are output of from 1; to 15 wasts. When measured on actual Western Electric standards the true maximum output of 2-350 in push-pull was obtained, a full 1! wast. The gain of the amplifier measured by the since standards was found to be

# Acratone, 3-Stage -250" Power Amplifier



Power Output 11 watt. Power Consumption-130 watts.

Power Supply-110-125 Jolis, 60 cycle, A.C. Size-16 in. long, 11 in wide, 8 in. bigh,

Employs 1-58, 1-56, 2-250 and 2-281 Tubes.

This Acratore Amphiller has been on continuous test for over a month to as are long his and their stillay to meet varying conditions. The heavy does power transformer is constructed for an extremely large sample and heavy does not be transformed as constructed for an extremely large sample of the angle winding to reduce the capacity and remove all presentative winding to reduce the capacity and remove all presentative of arrive between The temperature rise over a period of 21 hours was 12 degrees. Centigrade from accurate most 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 found systems instead of letting them lie idle. These trucks are rented for advertising surposes and they are quickly repaying the dealers for their efforts. The sound system recommended here is the most suitable one for constant sound work on 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 cutput of 85 D.B. on sike and 75 D.B. on phone. It will easily shridle four RCA Photophone speakers lated at 15 watts each.

The generator used in this outfit is a famour the standard of comparison in motor generators.

The turniable is a special sturdy 2 perd motor lob enabling the use of either 33 r.p.m or 78 r.p.m, records:

		Our
Equipment Used	Cat. No.	Price
Acratone Amp. 1-2 speed motor and	101	\$24.50
turntabl	*****	9.75
Pick-up Univer at 2 Button	5979	4.75
P.B. Mik	209	14.70
1 Universal Mike Ring	3621	2.35
Switch RCA 110 V Photo-	4379	,28
phone Speaker	151	30,00
Sanker	4.5	5.50
1 Janetty Rotary Con- verter, 32 V T.D.		
110 V AC	256	53.00
Total Price	8	4488

# Sound System No. 705

For Auditoriums, Theatres and Outdoors

Where sound system of los price is required to cover a large a tem will work satisfactorily. large area this vo

System No. 3 is ideal for operation its small dance halls, funeral parlors and portable public address work for installation on trucks. It will give about 7 watts undistorted output and cover a average city block in length. It has sufficient power to operate two or three dynamic speakers with very slight output drop, approximately 5 per cent. It can also be used for inter-connection purposes, but is easily too great in volume. It is ideal for phonograph reproduction and microphone work and will easily cover rooms and auditorium, soft, volo ft., or an auditorium seating 1,000 to 1,500 people. System No. 3 is ideal for operation it

11	ng 1,000 to 1,500 peopl		Our
1	Acrasone S stage 250		
	P.P. Amp,	101	\$24.50
7	Universal 2 Button		14.70
	Universal Mike Ring RCA Photophone Dy-	3621	2.35
	namic	151	7.50
1	Field Exciter for Speaker	55	5.50
4	G F. Turntable	215	3.95
l	Acratona Pick-up	5070	1.75
1	D.P.D.T. Knife Salich	4179	.2%
	Total Price		*63 <sup>58</sup>

# Sonochorde A.C. Dynamic Speaker

The new Senoth de Fletro De-rame Spess er represents district
advance in
duction and
purchanical
district Arms
method of cone auspen

for a small air cap resulting in a highly concentrated and a need to field. A ball speaker for 110 V. 50-60 which bala second the bala second to t

duced A C. current in the voice coil is

152 280 rectifier time, heavy duty power transfermer and filtr system conturning 20 Mid. electrotylic condenser. Operate and all hum from the A.C. lines. Reproduces speech and music with remarkable fidelity and is tayable of handling current power willbut distortion.

> \$9.50 Cat. No. 140

# Loftin-White Single Pentode Amplifier



The single 247 (Pentode) amplifier: Uses 1-224, 1-247 and 1-230. The output of this unit is about 4 watts. For high gain this unit is recommended for use in the same purposes as the 245 amplifier.

Cal. Na. 82

\$14.95

#### The Loftin-White '250' (Licensed)

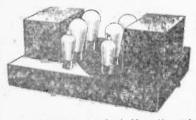
#### For Theatres, Public Address and Microphone Amplification

Employs 1-50, 1-53, 1-58 Tubes
The 250 Amplifier will successfully do
the work that much higher-priced amplifier have been doing in the past. For
thomograph reproduction this model can
be relied upon to deliver sufficient volume
to til a hall containing up to 1,500

people.
The undis orted out out of this unit is 6 water. For small public address systems that to be is used extensively. The employer is adjusted for phonograph, microphore and radio inputs.
The output of the "250" is from 6 to 8 water undistant d.
"239" AMPLIFER—Wired and Tested (less tubes)

Cat. No. 78 \$19.95

# 250 Push-Pull De Luxe Amplifier



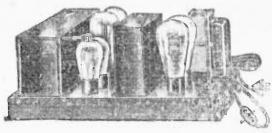
The uliput is rated at 15 watts and at a tapped output of 9, 15, 500 and 4000 ohm. The input is adaptable to blickophor. Radio and Phonograph which is the list word in Loftin-White amplifier. This is the last word in Loftin-White amplifier on, and uses 2-244 in push pull feeding 1200 in push pull with 2-281's as rections. At 400 cycles, the gain is 25 DB. It is ideal for large installations where several speakers are used. The unusually high gain eliminates the present of a pre-amplifier for microphon. Due to the new method of direct coupling and in the unit a degree of tone quality and volume is attained which ha never before been offered. It is relique, the percentage of direction is about 7%, and the amplifier ranges from 30 to 3000 cycles.

Munter in a tiring sizel crystal black! Snighed chassis the unit is the list word in amplifiers from every ansign to taped for microphonic ratio and phonograph inputs. The gain control is built in Size—18° x 10° x 812°.

Sultable for Phono, Mike and Radio Input Cat. No. 79

Cat. No. 79 Lass Tubes

\$42.50



# 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 ingeniuty. It is a three stage amplifier imbodying the new 58 and 56 tubes, and pushpull 250's. The high gain of the new tubes, nearly fourteen watts of undistorted output from the 250's, low hum level, and an impusually fine frequency response result in an amplifier ideally suitable for installation in theatres, auditoriums, dance halls, indiums, and other public places where music or speech must amplified to fill large spaces, and good quality is paramount. quality is paramount

quality is paramount.

Among the notewor by feature is the extremely flat frequency response, as exinced by the frequency response curve published elsewhere on this thee. This flat through the intre-upper resulter resulting in a crispne s and brilliance of tone usually deficient in amoliants. Other saltent features are line voltage adjustment prefective fuse, logarithmic tapined volume control, master feed-thin switch. Belden line cord vito inhards able rubber plug. Field current is after a large dynamic appear in a C. pe see may be connected without the use of external takes or resistor as reguired by most amplifiers supplying field current.

The amplifier is constructed on a heavy steel base, all parts being electrically and mechanically shielded. The finish throughout, is a smooth black lacquer. All materials are carefully selected and folded, a wide safety margin being pips ded. The complete unit is an unparallisted example of fine craftsmanship, critical out on a modern production scale.

SPECIFICATIONS.

Tinc lst tage 1-5s, 2nd stage 1-5s, 2nd stage 1-5s, 2nd stage 2-250 push pull, rectifier 2-2st rull wave.

Laput—To any high impedance pickup Coupling transformer should be used for microphase input or low impedance pick-

Output Low impedance output direct to standard to or 15 ohm voice coil lifeh impedance output to couple to 4000 ohm input transformer. Maximum Undistorted Fower Output

Input Strasl to Obtain Max. U. P. O.

Input Stant to Obtain Max. 0. P. 0. 6 volt.

Gain at 10 to Cycle 1 s. db.

Frquence Character to Substantially flat from 1 to 15000 cycles.

Hom Level 12 for cent or 45 db.

Flow maximum undatored outsit.

Speakers Will supply un to 5 large on name speaker or 25 magnetic

peal, er.

peak.r.

Jield Supply-Will furplish current to
large dynamic hold of 7 m e.ms.
Power Consumption 15 m wall.
Size (overall) - 171, in long, 111 in
wide, 7 m, high
Weight 32 ibs. (app. 271)

\$19.75

Cat. No. 122

# DC High Gain Amplifier



Has an undistorted output of 15 validates 1-237 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 fone to any degree desired. The circuit is a high gain two stage unit taking advantage of the new D. C. pentodes and giving a tone quality never before accomplished on D. C. at his volume. It is ideal for microphone insuit. Very compact, it has the unusually low current consumption of a supere. In additions in no more costly than any A.C. unif of the same power. Size—112, 3 31 a.

Suitable for Phono, Mike and Radio Input \$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

For Victor Receivers RE-75, 32, 42 and 45



Uses one 226 two 245's (push-pull) and one 280 Pusa-buil output transformer n amplifier matched for 15 ohm soics foil and 2.500 ohm field resistance Supclies dynamic speaker field of 116-rolt De. at 50 mis Undistorted output at i waits. Fine for use with phonograph pick-up or radio set. Overates on 118-120 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 smaleria, experimenters and for any installation r quir-ing a samile and s-button macrophone

button microphone
Q R Q is an
exact replica
of the Standard Eroaddard Eroad-cast Model in cast Model in a p pearance.
It is 3½ in. high and is flaished in beautiful polished chrome Model Q R Q



List Price \$5.00

is a single-button, 200 \$2.94 button, 200 ohm carbon interophone with high sen-sitivity 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 57.50 \$3.25

Mike is a genuine single-button carbon microphone of 200 ohms resistance. die-call mounting 312 inches sigh—a replica of the regular Broadcast models. It may be con-It may be con-nected to ampli-fiers or direct to almost any radio set in the mar-

Beby Mike is a Beby Mike is a peritiful miniative microphone firish dim attractive politice decisione.

It is support to ton securely pecked and completely furnished with prong adapter for connection to tube, pin plues for connection to faces or wisding posts, 25-ft, cord, detailed instruction sheet— in short, everything needed to heok up ready to enjoy the fun.

# Universal Model "LL"

An extra rugged, An extra rugged, neavy I y pe, two-button broadcast microphone. The entire assembly is of high carbon steel, ground to within .001 of an inch accuracy. The diaphragm is alloy of exactly the proper nardness and stretch to secure the best results. Pure gold consults. 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.



t wt., 214 lbs. Packed wt., 312 lbs.

Cat. No. 211

List Price \$75.00

\$44.10

Model "LL" is 3½ inches in diameter by 1¾ inches thick and is standard 200 ohms 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 Model 'A" intersphase incorporates improvements that lift the performance of this most reporates ance of this most re-fined single-button mi-crophone above any-thing previously con-sidered possible. The new type of perforated protective facing more than doubles the effec-tive area of the dia-phragm.

phragm.
Model "A" is constructed with Solid 24 Kt. 2013 faced button and highest grade carbon granules which reduce by the button of the butto duce hiss to a mini-mum. Equipped with an extremely thin, light weight diaphragm

Cat. No. 208

Net weight 1 lb

Packed weight

11. Ibs. List Price \$15.00

\$8,82

The super-microphone

in every sense of the word. No other 2-but-

weight disphragmi 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 ohm resistance. Model "A" is 3 in. in diameter by 1½, in. thick. It is beautifully pleted in polished chrome and can be mounted in various ways. Model K Desk stand or 5½ in. suspension ring recommended.

#### Universal Model "BR" 1933 Value-New Super-Design



Cat. No. 209 Net weight 1 lb Packed weight 11, lbs.

List Price \$25.00

\$14.70

lers, experimenters, palls, pull rooms, speaker wagons, Mc. Fin-ished in beautifully finished, highly polished chrome plate Model 'BB' has extra heavy 24-Kt. Pure Gold Spot Centers, Duralumin Diaphragm and has a frequency range of

for voice-pickup, pub-nc address work and for amateur broadcas-

from 70 to well over 4,000 cycles, 200 ohms per button. Owing to the large size and weight of Model "BB," it is recommended that Model "L" desk stand be used for mount-

ing 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 perormance and year after year dependaafter year dependa-onlity can explain the fact that the im-proved Model "KK" continues to be the most popular and fastest selling \$50,00 microphone on the market.

A substantial, sol-id, two-button broad-cast microphone, with cast microphone, with a very minimatm of hiss. Model "KK" is cerefully constructed of the finest materials with a 24-Kt. pure gold spot center alloy diaphrag mwhich is held under tension. Diaphragm has a thickness of only .002 in.

The frequency ran



Net weight, 1% Packed weight, 2

Cat. No. 210 List Price \$50.00 \$29,40

only .002 in.

The frequency 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 resistance 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.

before shipment.

# Universal Model X Two **Button Microphone**

#### A Sensational Microphone at a Sensational Price



Di meter, 212" Thickness, over all, 1" Weight packed, 1 lb. Polished Nickel Plate

Cat. No. 524 List Price S10.00 \$5.88

two-button mic-A two-button microphone listing at only \$10.00. Model "X" sets a new high standard for quality at a price that defles competition.

at a price that defies competition.

Model "X" confirms the reputation for quality and performance that characterizes all Universal products. Every essential feature necessary to insure superior performance and long, care-free service has 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 poprophone at this pop-

rophone at this popular price.

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

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 springs.

Cat. No. 391 8906 Our Price .....



MAIL ORDERS TO See Terms on Page 3

rederated Purchaser Inc.

# Universal New Bullet Type Microphone



WITH TONE CONTROL AND BATTERY COMPARTMENT

Carbon Granule Type with Hiss Eliminating Filter

A double button micro-A double button micro-phone giving the appear-ance of a condenser mike. Recommended to be used wherever the mike is in full view of the audience.

Ballet Microphone	Cat.	List Price	Our Price
"BB""	217	\$50.00	\$29.40
"KK"	210	75.00	44.10
"LL"	223	100.00	58.80

"ILK" 210 75.90 44.10

"LL" 223 100.00 58.80

Vote: All Bullet Type Microphones supplied with cable as shown. Shipped without battery.
Universal Bullet Type Microphones are the 18M word in appearance and performance for the lowest possible cost.

Especially recommended for use in public address work of all kinds where elegante of appearance, beauty of design, and true reproduction of voice and sound ero demanded.

Careful tests have shown that the hiss level of Universal Bullet Type microphones is far below any background noise encountered in public address or similar work, making the proved performance of Universal high grade carbon 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 11 voit No. 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 tension sides make a very ruged assembly that permits a great deal of handling and transportation without effecting performance.

Finished in highly polished aluminum and chrome plate.

Finished in highly polished aluminum of chrome plate.

Desk Stand for Above Mikes

		To	be	mounted	inverted.	
Cat	No.	36	9			86035
Our	Pric	φ.				- Car

Floor Stand for Bullet Type Mikes Cat. No. 390

# Frost Microphones

Desk Microphone

Cat. No. 6201 Our Price .....





These microphones enjoy an enviable reputation for their excellent performance 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 broadcasking use, but are intended for amateur and general apparatus work. These microphones are very sensitive and rugged 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 tradily growing demand for microphones which in themselves are fully protected, are more com-pact, and con be quick-ly demounted. Torpedo

ly demounted. Torpedo ted are supreme in this field. They combine in one instrument the recognized outstending quality of tested Universal microphone performance with the special features demanded.

Connection is made to three spring jacks into which telephone pin terminals are plugged. Not supplied with cord. The pelished chrone placed perforated and screened cup housings are of neavy brass and are firmly fastened. Can not be removed accidentally. Supplied in standard Models "BB," "KK" and "LL."

Model	Cat.	Price.	Our Price
Torpedo "BB"	2:36	\$30.00	\$17.61
Torped) "KK"	228	\$55.00	832.34
Torpedo "LL"	330	\$80.00	517.04

# 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 havinum volume with clear and clean-cut speech reproduction.

The ample button Many

reproduction.

The insle-button HandiMike is built in two models.
"Resuler" and "Home Recording." The university rethistastic praise this micronhous is receiving a establishing it without competition for superior home recording. cording

Handi-Mike is finished in heautifully polished chrome. It is equipped with an "off" and "on" terrale switch. 15-foot cord, and provided with an ere as shown for hang-ing while in or out of use.

List Price \$10.00



213 Reguler Model

# Our Price \$5.88

#### Universal Double-Button "Handi-Mike"

Same size and appearance as the Single Button Mike

Button Mike

The dottele-button Handi-Mike is 200
ohns per button. It is finished in beautifully rollshed chrome and comes equipped 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 particularly good for holding the microphone when making home recordings. It also permits Handi-Mike to be used as a desk annolineer a microphone.

used as a desk aunoincers microphene. Firmished with a rubber covered bale and finished in gun metal

Net weight, 2 lbs. Packed weight, 21 lbs.

Cat. No. 218-List Price \$3.00 Our Price

# UNIVERSAL Miniature Microphones

MODEL W

MODEL Y





Universal Model "W" is the smallest completely protected and workable single-button inferophone manufactured. Supplied particularly for the many special 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 positionatich 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 #3.00

8 77 Our Price, Model W. .....

#### The Super-Sensitive Midget Microphone

Universal Model "Y" is even lighter and more sensitive than Mode" "W," described above. It is of the same general construction as Model "W," except that the front face of the microphone is the diaphragm 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 diaphragm, 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. 323 **8 3 95** 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 sturdy and rugged. It requires but 10 mils of current which may easily be obtained from a 1½ volt 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 Kellogs 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 carbon type is acknowledged. No hiss, no button current necessary. This microphone can be assembled in less than an hour and the an hour and the amplifier built into any convenient box or can. Kit includes a machined unit,

Dural diaphragm.

screening. notective screening. Dural diaphragm, enforated brass backplate, prongless tube use and all necessary hardware. Radio lews (August, 1932) says about this mike: "In fact, this new unit is superior (to the original Western Electricunit) 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 e. Per Kit	8300
Cat. No.	435-Factory Assemble	led \$795
Our Pric	e	

# 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. Amplifier and Turntable And any A.C. appliance consuming up to 65 watts



This device furnishes 110 Volt 60 Cycle Alternating Current from a Standard Six

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 tiself to small Public Address Systems, drawing room from 40 to 65 Watts. Ellminates the necessity of gasoline or other expensive types of Generators. This enables you to use your Public Address on your Auto-

necessity of gasoline or other expensive types of Generators. This enables you to use your Public Address on your Automobile for Advertising Purposes, Outdoor Meetings, Picnics, cct.

Small Electrical Appliances drawing from 40 to 65 Watts may also be used with this Converter. Such Appliances as Fans, Heating Pads, Baby Bottle Warmers, Curling Irons, Juice Extractors, Drink Mixers, Trouble Lamps and many others come in this classification.

The Battery Drain is very small. Due to the fact that the current is taken from the Battery intermittently, the Ammeter coes not accurately record the Drain, but registers only the peak load. However, the actual Drain is about two-thirds of the am after reading. A 60 Watt Radio Set drabet attery Test.

Cat. N 89450 ith Cable and Control Box Comple

#### **Acratest Matching Stage** For Mike, Phono and Radio

radio sets and high impedance phono-graph pick-ups. Input low im-pedance

graph pick-ups.
Input low impedance for use
with low impedance phonograph
pick - ups and
single-button
microphones.
Output impedance 400,000

other of the period of the output. Particularly adaptable for use with Loftin-White amplifiers which are generally supplied without input transformers, or any other amplifier not equipped with input stage. The use of this apput stage in conjunction with Loftin-White amplifiers will permit greater voltage gain and better frequency response, due to the fact that all units are properly matched to the amplifier. Space in the can is provided applied. Space in the can is provided the provided of the period amplifier. Space in the can is provided for a 1½ voit flashlight cell to provide current for the microphone.

Cat. No. 7370 \$925

Our Price .



These units each contain the well known Acra'est Microphone Input Trans-



formers. microphone button cur-rent control and eutout switch to preserve the life

other input switch to preserve the life of the microphone. Frequency range 30 to 7000 cycles. Input standard microphone impedance: output, 400,000 ohms. Completely hielded 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 simple 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.

Brown crackle finished steel case 770 x 221.

Brown crackle finished steel case 7x6 34 in. high. Shipping weight 5 lbs x234 in. hi 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



Cat. No. 7320-JACK List Price 75c Our Price

Cat. No. 7321-PL List Price \$1.50 Our Price ...

That Brings New Thrills Your t o Home and Converts Your Radio Into an ElectricRECORD MAKER Phonograph.

THE PRESTO Record Maker is not a toy or an experiment. It is the crowning achievement of a nationally known manufacturer with twenty years' successful background in the production of sound recording devices. It is a proven scientific instrument that reproduces any



sound with startling realism—the result is life itself! The records are permanent and can be played many hundreds of times without any loss of the original brilliance of reproduction. It is ideally suited for musicians, speakers, actors and teachers to test their offerings and voice infection.

and teachers to test their offerings and voice inflection.

THE PRESTO Record Maker is simple to operate. The instrument is sturdy and compact. No delicate or complicated parts to cause trouble or inconvenience. The PRESTO is always ready to go! In addition to giving you rare joys of home recording, the PRESTO record maker converts your radio into an ELECTRIC PHONOGRAPH that will play all standard records. It brings you the musical gems of all times when, and as often as you want them. you want them.
THE PRESTO Record Maker is

THE PRESTO Record Maker is in no way similar to other record-making devices now being offered. It was made primarily to produce a superlative record which cannot be duplicated. PRESTO uses a smooth disc 6-8-10 or 12-inch size, and cuts its own grooves as it records—assuring an accurate and lasting record that cannot be ind 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, microphone, selector phone, selector switch, and is housed in a beau-

tiful compact portable leatherette case. Cat No. 185 \$2950

#### Look! A Fine Microphone Floor Stand for Less Than \$5.09

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. 1311 8495 Our. Price .....

MAIL ORDERS TO AFF See Terms on Page 3

rederated Purchaser Inc.

# ixing Fransformer

#### Microphone Shielded Input Transformer

This unit is the result of many months of designing and tests. The frequency is exceptionally flat, from 80 to over 7000 cycles. Primary is split—100 olms each side of the recondary impedance is of the order of 600,000 olms. A larger unit than others listing for the



of 600,000 onms. A targer unit than others listing for the same price. The size is 34x34x34 inches. Matches impedance of all standard type carbon 2-button microphones.

Cat. No. 2625



Two Button, Unshielded Microphone Transformer Same Characteristics as out No. 2625

Cat. No. 5596 8 25 Our Price . . . . . .

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



Cat. No. 7145 Our Price

#### Microphone-Phonograph Transformer

This transformer is similar in appearance to No. 7145 and has a primary to match a two-button micropione and a secondary to match the phenograph pick-up posts of any radio set. It may also be used as an output transformer from a single 227, 56 or 30 type tube into a 200 or 500 ohm line.

Cat. No. 7338

\* 1 95

#### Push-Pull Output Transformer to Match

This trans-former is a pusha p u s h -pull transformer for coupling two 171A's, two 250's, two 245's, to vartous types speakers a lines. Th 0.1 n d lines. This transformer has a primary of 4.-



000 ohms center tapped, and secondary windings as follows: Secondary No. 1—4,000 ohms impedance, having a tap at 500 ohms. Secondary No. 2 15 ohms, having a tap at 5 ohms. The 500 ohm impedance winding is for connection to magnetic speaker. Or dynamic speakers having an input transformer. The 9 ohm winding is for connection to the voice coil of the 9 ohm speaker. The 15 ohm winding is for connection to the voice coil of the 15 ohm speaker or 15 ohm recorder.

Cat. No. 6917

\$1.95

#### 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 enthusiastic
acceptance by servicemen, engineers and
amateur. Every radio enthusiast is ansitous to build his own Clas B Amplifier,
but they have been hampered in securing the special parts going into its makeip. Below we have assembled a complete
line of audio transformers, power transformers, and choke especially designed
for Class B operation. Particular care
was taken 19 their design to insure best
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 voit windin For the '82 Reco. Electrostatically

Cat. No. 7125 \$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 2-16'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

World Radio History

#### Acratest Special Matching Transformers for **Mixer Panels**



Each of these transformers were redesigned for a particular purpose, in connection with public address and studio use. With these transformers as a basis, input and output mixing parts may be constructed at exceptionally low cost. Excellent frequency response and high efficiency were the primary considerations in their design. Each of these

ations in their design.

Cal. No.	Description
7131	Micronline to 200 or 500 ohm line transformer. Two or more of these may
	be used for two or more intercphones on one line

\$4.50

Price

Microphone to 50 ohm fransformer. Pour of these transformers with their secondaries in series for 4 mikes into 200 ohms. Diagram furnished 7132 Place of 232, 224 or 257 Tube to 200 or 500 ohms input transfermer, Primary 2625

250,000

Plate of 230, 227 or 56 Tube to 200 or 500 ohm input trans-7135 former

impedance

\$4.50

7134 500 ohm line to from one to six 15 ohm

\$4.50

#### Microphone or Phonograph Input Transformer LARGE AUDIO MOUNTING

This is an escellent transformer for use on any amplifier or and or receiver. It matches the stand ard microphone, viz 200 ohms on each side of cen-ter tap for dou-ble button micro phones and a 5,000 ohm phonograph pick - up. transforme



has an impedance of 250,000 ohms

Cat. No. 7145

\$1.95

#### Filter Choke to Match 15 Henries at

150 Mils. Identical in ap-pearance to the 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 magnet housed in bronze finished brass in bronze finished brass case. Made by R. C. A. and used on R. C. A., Victor, Brunswick, G. E., Westing-nouse and other makes of radio-phonograph combinations

200 OHMS

Cal No 3870 Our Price 81 75

#### RCA-Victor Low Impedance Pick-Up Head With Straight Neck

For RCA, Victor Brunswick, G. E. and Westinghouse Radio-Phonograph Cobinations 31, 32, 42,

Equipped with Special Victor Plug.

Cat. No. 7201 8225 Our Price .....



Brunswick Low Impedance Pick-Up Head

Same a 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

the for the new thrills that radio las to offer today we recommend the building of this law Super-Regen-erative 5 METER RECEIVER for the Ultra - High Fre-



RECEIVER for the Ultra-High Frequencies. The new television broadcasting stations are experimenting on this wave length and thousands of radio amateurs are heard transmitting. This marvelous receiver offers the following

1-It has high sensitivity.

2-Freedom from microphonic noises.

3-Simplicity and effectiveness of adjustment which makes it unnecessary to touch the tuning set at the least vi-bration as is usual with other Short Wave Receivers.

4-Exceptionally quiet in operation.

The GEN-WIN 5 METER COLL 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.

LA and L4 Special Auxiliary Oscillator Coils.

Included with each Coil Kit is a well drawn blue print. Shipping Weight 2 lbs. Cat. No. 7456 S675 Price Complete S275

#### Phonograph Motor Governor



in all G.E and Victor Motors. lo. 5791

75c

#### A New Super Hydro Double Action Pick-up



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

This unit is very efficient with much greater output and we recommend it as a competitive unit, 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 Bullt, 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 resistance points where screw may come in contact with the case. The rubber bumper and rubber piece mounted in back plate holds armature in position in case of drop or sudden pressure on needle point.

The magnetic flux is equal on all 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

PICKUP

STANDARD PHONOGRAPH PIC WITH VOLUME CONTROL

10" overall length, 73%" from center pin to needle point. Cat. No.

at. No. Type
5979 Regular High Impedance
6898' 200 Ohm Impedance

#### Our Price \$4.75

Can be used on Victor and similar re-ceivers. Can be connected drirectly to microphone input transformer.

#### Standard Theatre Balanced Pickup



15%" 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

a lucky pur-chase from the G. E. company and we don't want to hold them, but pass our to our customers



good luck on to our customers.

A compact, powerful motor which really embodies two separate 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 worm out motors; to dismantate 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.

Diameter 8 in. overall, depth 8 in.
Weight 16 lbs. No turntable supplied
Cat. No. 383 Our Price, Less Turntable ...... 750

# Utah Electric Pick-Up



Cat. No. 4751

# Our Price \$3.85

The tone arm is scientifically designed to give the correct support to the pickup unit. The weight of the tone arm is carefully calculated to insure the right smount 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 1600 cycles. Supplied with 6 ft. cord with phone tips. Artistic brown finish. Individually boxed. We recommend our Cat. No. 3610 Acratone Volume Control at 90c. Cat. Nat 90c.

# Universal Tone Control

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

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 echo following the pronunciation of certain words. It provides a flexible adjustable element against these drawbacks when working in a building laving bad acoustics.



Our Price \$4.70

#### GENERAL ELECTRIC Synchronous Motor With 10-inch Turntable

frame advanced design. Silent operation. Only 4 in deep.



Cat. No. 215 \$3.95

#### G. E. PHONOGRAPH Induction Motor With 12-inch Turntable



A compact, powerful, heavy duty induction pe phonotype Being free of commuta-tors, brushes or cutout switches, it cannot set up

Large any disturbances. bearing surfaces provide adequate support and insure long life.

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	7½ 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 Governor 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 78 R.P.M.

A slightly heavier and 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

Cat. No. 304-For 110-120 volt 50-60 cycle A. C. Our Price, Each .....

#### Special Blue Flyer

for 33 1/3 R.P.M.

For new style recordings and synchronous moving pictures.

Cat. No. 305 Our Price, Each .....

# 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.

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



GENUIME WHITE ORIENTAL SAPPHIRE USED EXCLUSIVELY. This sapphire is rated, according to scientists' tables, hardness of which is 20% 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 or used on rough surfaces. Type AW, for cutting SAPPHIRE (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 and playback

Type BW, for recording and playback on Victor type black composition pre-grooved home recording blanks, also pre-grooved aluminum or celluloid with a minimum of surface scratch.
Cat. No. 249
Our Price \*250

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 8200 Our Price Our Price ....

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. 230 \$400 Our Price

Special DIAMOND NEEDLE for CEL-LULOID, used for professional recording. Cat. No. 201 Our Price, Each .....

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.



Cat. No. 6929

#### Fibre Playback Needles for Aluminum Records

Cat. No. 6929 Our Price .....

Package of 50 Needles

Package of 50 Needles..... 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

The original fa-mous Wall-Kane mous Wall-Kane
10-Record Needle
No better needle
made. 50 to a
box, 60 boxes, assorted loud, medium and soft, a 3-color me display stand. metal



Cat. No. 4371 Our Price, Per Package....... \$3.70 Display Stand ...6e

25c

#### Microphone and Public Address Connectors

Composition, steel covered cadmium plated. The adjustable clamp grips the cord tightly, thus relieving the strain from the binding posts, and also prevents the outer cover of cord from unraveling.



			and I	-	
6854-3	5 6	156-7	6358	-9	6360
1 21 10		Descri	pulon	Ou	r Price
6354	2-Wire	Pol 1112	ed Cap	*******	5 .45
1310	2-Wire	Connec	ctor		.70
63.56	3 Wire	Polariz	ed Cap	*********	.50
6357	3-Wire	Conne	ctor		-75
6358	3-Wire	Polari	zed Can	with	
	"Twi	stlock"			-65
6359	3-Wire	Polariz	ed Body	with	
	Twi	stlouk"			1.00
6360	Fiush	Recept	acle t	o fit	8170
	abovo	caps	****** * *****		.65

#### Armoured Bakelite Cable Connectors

Three prong cable connectors insuring perfect contacts and 100% insulation. The stend armor protects the plug and extends over making the cable clamp as hown. No better plug on the market for carbon anderophones. The prong arrangement permits assembly in one position only. 12 inches in diameter.

Cat. No. 6536—Body

Net Price 60c

Cat. No. 4139—Plug Net Price 45c

Cold Mold Composition Conwithout armour. but

Body-No. 7140-30e Cap-No. 7141-20c

# Base Receptacle and 4 in. Cover

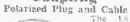
Plush, with 4-in. Round Steel Box Covers
Attached for Trucks, etc.
Cadmium finish, outlet box covers are



10 Amperes, 250 Volts 15 Amperes, 125 Volts Cat. No. 6361

Price 95c

3 Wire Microphone Coupling





The 18 inch cable is perma-nently attached to the micro-phone and the Female plug allows the Instantaneous connecting or disconnecting of the microphone to Prethe line.

unis wear of Cable has 3 different colored conductors. Cat. No. 7291 Our Price ...

THREE CONDUCTOR MALE CAP

Cat. No. 7141 Our Price

# Three Wire 10 ft. Microphone Cable



For 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.	2.25
4413	100 ft.	3.75

# Armored 3 Conductor Microphone Cable



A conductor heavily insulated cable encased in a steel flexible armor which acts as a shield (when grounded). Will resist all weather and the hardest wear. You can run a 10-ton truck over it without injuring it. Ideal for all outdoor public address work.

Cat. No. 4446

# 4c per ft., \$3 per C.

#### Microphone Cords Made Up Cables With Armored Connectors.



Cat. No.	Length	List	Net
4435	6 ft.	\$2.75	\$1.65
4437	12 ft.	\$4.50	52,70
4438	25 ft.	37.50	\$4.50
4139	50 ft.	\$12.00	\$7.20
4440	100 ft.	\$19.00	\$11.40

For outdoor use, over gravel, pavement, platforms, in water, or where crowds are walking, a rubber covered, shielded cable is an absolute necessity. Fitted with genuine G. E. Bakelite connections. Supplied in 3-conductor shielded only, the shield being soldered to the center conductor of the plug and socket. These assemblies made up complete as shown cannot be cuplicated anywhere for the price.

# Microphone Suspension



Springs

For suspension of microphones in rings, desk mounts, floor stands, etc. A much needed small part handy to have and sometimes hard to obtain. Special heads with one long loop, beautifully finished of highest grade spring steel allowing maximum flexibility without stretch. Eight are generally used per set.

Cat. No. 3631 8 for 350

# 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 realed before use and must not be handled by fingers. The very best grade of transmitter carbon granules, each vial contains sufficient to re-carbon one ordinary two-button microphone. No, 100 size.

Cat. No. 6974 59c

List, per Vial . . . \$1.00

#### Shielded Microphone



Cable

		Pr	ice
Cat. No.	Wires	Per Ft.	100 Ft.
4490	3	Ge	\$5,50
4480	5	10c	9.00

The shielding is fully insulated and may be used as an additional conductor.

This multiple conductor has a tinned copper shield beneath its extra thick rubber insulation and may also be used as an additional conductor. Each conductor is insulated and braided. Will stand plenty of abuse. For all public address work, indoors or outdoors. Acid resisting.

# A Gain Control Plate



Cat. No. 6940 Diameter 114" Hole 25"

Ile ea.

This plate will be found excellent for public address amplifiers, raders, phonograph pick-ups, etc. It is graduated in 20 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 upply and input to main amplifier.

Cat. No. 4477

MAIL ORDERS TO ATS
See Terms on Page 3

Federated Purchaser Inc.

# P. A. HORNS

#### Suspension Horns



REFLEX 6 foot Exponential

AIR COLUMN

Designed primarily to reinforce the voice reproduction in the-

atres. It has found usefulness in portable 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, 144 in. Overall dimensions, 17 1/2 x 16 x 14 1/2 in. Air column, 5 feet.

Equipped with cast aluminum throat, bronze loose coupling.

An excellent horn for monitoring and for all types of sound systems requiring a portable horn.

Weight, 716 pounds.

Cat. No. 119-List Price \$18 \$1058

#### Public Address Dynamic Units

TYPE GAC-4N

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 at 6 volts D.C. The ource 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-4N is 16 ohms.



Available also for 110, 220 volts D.C.

Cat. No. 162-List Price 850 89040

#### 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

Available also for 110, 220 volts D.C.

Cat. No. 164-List Price \$38 \$2234 Our Price ....

#### **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 nodes.

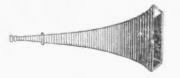
Cat. No. 192-List Price \$20 \$1 176 Net Price .....



Type S-9 A 4 ft. Square Cone Trum-t of special all weather material. All ints metal reinforced. Standard finish alliminum. Speaker Enclosure.

Length, 48 in.; bell, 30x22 in.; weight,

Cat. No. 108-List Price \$30 8 764 Net Price .....



Type S-3054. A 6 ft Square Cone Trumpel. Metal reinforced joints. Spe-cial all weather material. Standard fin-ish—aluminum. Speaker enclosure.

Size bell opening, 31x31 in.; length, 6 ft.; weight, 26 lbs.

Cat. No. 109-List Price 836 89 117 Net Price .....

The R-207 Speaker Unit consists of a baffle horn 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.

gray finish.

Cat. No. 112-List Price \$17 \$100 Net Price .....

R-207-W. Same as R-207 but built for

Finish, aluminum. Weight, 18 lbs. Cat. No. 113-List Price \$18.50 81080 Net Price ...

#### TRUMPET HORNS for Amplification of Direct Speech

The types described are especially re-



commended for: Confor: Conventions. Open Air Assemblies. Political Gatherings,

Stations, Race Tracks, Athletic Fields, Stadiums.

Stadiums.

Bell, 30 in. round; length, 6 ft.

Heavy Duty, equipped with demountable aluminum throat, one inch metal beaded edge, suspension ring, finish beaded edge, suspension ring, finish brench gray. Standard threads.
Weight, 22 lbs.
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 82722 Net Price .....

Bell, 23 in round; length, 3½ ft. Heavy Duty: Equipped with demountable throat, beaded edge and suspension ring, coupling for dynamic units. Weight, 10 lbs.

Cat. No. 173-List Price \$31 \$1 92:: Net Price ...

Bell 18 in; length, 3 ft.
Standard: 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 820 8 60 Net Price .

#### 312 FT. STORMPROOF TRUMPET

Bell, 22 in round; length, 31, ft. Equipped with metal beaded edge, cast aluminum ferrule and suspension ring. Guaranteed for one year. For outdoor use in all climates and

Weight, 916 lbs.

Cat. No. 185-List Price 810 89 952 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

For outdoor use in all climates and weathers. Single unit horn.
Weight, 21 lbs.

Cat. No. 176-List Price S65

Net Price .

# Multiple Horn Couplers



For connecting two or more horns to a single dynamic unit. Standard threads.

Double Connector Cat. No. 7300

85.40

Triple Connector Cat. No. 7301 811.60

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.

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

Federated Purchaser Inc.

# Esco Rotary Converters Transforms 6, 12, 32, 110 and 230 Volts D. C. to 110 Volts 60 Cycle A. C. Current



Ksco the perfected products of a pioneer man-ufacturer who has been building mo-tors, genera-tors, converters and other high voltage machines for a long num-

ber of years. Esco machines are specified as standard by the United States Army, the United States Army, the United Standards and hundreds of the leading colleges and universities. It was the excellent performance of the Esco high voltage generator that enable Commander Byrd to keep in touch with the outside world. world

world.

Base rotary converters are manufactured to the same degree of accuracy as other Base 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 phonographs from direct current. These converters also supply alternating current for operating public address and sound vistems from trucks. All Esco converters are furnished complete with correctly designed filters which insure perfect radio reception. reception.

Our Cat. No	Esco Cal. No.	Input DC Volt:	Output s Watts	Our
305	2R61	6	4.0	\$37.39
206	2812	1 12	8.0	40.15
349	4R12	2 12	150	56.25
350	2R32	2 30	150	42.53
357	2R32	3 82	200	47.00
358	2R32	1 32	300	51.45
381	2R32	5 32	400	58.11
371	2815	1 115	2.0	32.93
362	2R15	2 44	120	34.30
372	2R15	3 **	1.50	37.89
363	2R15	4 **	200	45.52
21614	2R13	5 "	300	49.30
::65	2R15	R **	400	58,41
370	2R15	7 4	5.0.0	63.11
::78	2R23	1 220	200	47.00
377	2R23	5 **	300	51.45
378	2R28	R **	400	62.43
3380	2R23	F 11	300	65.17
33.733	2R23		9.6	33.96
:174 The :	2R23:		120 clude fil	36.36
	s not desi	red 100	may	be de-

# Copper Sleeving for Shielding



This shielding is used on amplifiers, speakers, public address conduits, automobile radios and wherever it is desirable to eliminate electrical interference. The conductors are run through the sleeving and the sleeving is grounded. The ways is very flexible and can be stretched to double its original length.

Cat. No.	Size	Dia.	OUR Per ft.	PRICE 100 ft
4458	1	lin.	80.11	\$10.00
4439	2	1 2 in.	.02	8.30
4120	3	2 1E	.97	4.50
4475	4	1 4 IB	.05	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 Battery Replacements.

Battery Expense. Battery Voltage Drops.



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-radio set. Whatever the voltage requirements of your autoradio set may be a JANETTE "Auto-B-Power" can be furnished for the correct voltage. (See table on reverse side of this page.)

#### Quiet—Compact Vibrationless

JANETTE "Auto-R-Power" has Ine JANETTE "Auto-R-Power" has a dynamically balanced armature: thus it iuns with a minimum of vibration. Virtually inaudible when placed under the hood, floor boards or seats. Requires but little room—measures only 12x6x5½ in. weighs 20 lbs.

#### Data and Prices

Cat. No.	Code	Input Volt.	Output Volt.	At. 40M.A.
365	AUTEX	6	135	2.8
266	AUTOB	6	180	3.0
267	AUTAK	12	135	1 4
279	AUTIL	12	180	1.5
: Cnden	ords include	la unit	s complet	e words

conswords include units complete with voltage and 1 extra tap. If two extra taps are required, add fellowing codeword; TABBY.

\*These current values are maximum. In most cases battery drain will be much less than those indicated in this table. List Price Complete with Voltage Divider and Extra Taps. \$32.00

Our Price \$18.82 COMPLETE

#### JANETTE Rotary Converters

Transforms 6 12, 32, 110 and 220 V. D.C. to 60 Cycle A.C. Current

Janette Rotary
Converters are
compact, dynamically baianced units
which change change direct 110 volt. to 60 cycle, alternatthe operation of A.C. radio sets or amplifiers on D. C. circuits.



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

Creales Big Market for A.C. Sets

The Janette Rotary Convertee, and especially the new CA-25-P opens up a fertile field for A.C. radio salles. Over 500,000 farmers own 32 or 110 volt D.C. lighting plants. Every one of them is a prospect for a double-profit side consisting of an A.C. radio set and a Jaintie Rotary Converter. Alert radio dealers and jobbers everywhere are seizing this opportunity to build new volume.

And on top of it all there is the great public address—plus the marrine field.

#### Perfect Radio Reception

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

erters are to be used where is employed, the filter may be Shipped from New York of If converters tuner is omitted. Chicago.

#### 6 Volt Input to 110 V. A. C. Output Models

OUR PRICE With Imput Loss Filtor Cai. No. Filter Amps Watts 326 826.25 27.75 37.80 20 9.0 820.59 230 30 22.05 34.55 38.22 160 262 60

# 12 Volt Input to 110 V. A. C. Output Models

331	2.0	4.5	26.25	20.58
388	3.0	7.0	27.75	22.05
263	5(1)	15.0	37.80	34.55
264	120	19.5	41.30	35.22
265	160	22.0	56.70	48.50

#### 32 Volt Input to 110 V. A. C. Output Models

		-		
282	8.0	4.5	29.40	25.00
254	110	6.5	35.00	31.24
255	1.5.0	8.5	28.75	34.92
265	300	15.0	53.00	44.10

# 115 Volt Input to 110 V. A. C. Output Models

257	110	1.9	35.00	31.24
258	150	2 4	38.75	84.52
259	9.30	4 (1)	50.00	42.10
260	500	6 1	64.00	54 50

#### 220 Volt Input to 110 V. A. C. Output Models

254	5.0	1.0	29 40	25.00
266	110	1.9	36 05	82.50
267	130	2 4	30.55	35.00

MAIL ORDERS TO AS See Terms on Page 3

rederated Purchaser

# older a

# Acrales!

"E-Z" Flow Wire Solder What Every Service Man Is Looking For

Diameter 1 MM.

Cat. No. Spool of Weight Our Price \$ .50 117 ft. 1 . lb. 6521 1 lb. .75 235 ft. 5997



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. De pite its extreme thinness (1 mm.) it has a flaid core which make, 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 request.

# "PERFECTO" Soldering Fluid



Any Solder, when used in connection with Perfecto Fluid, 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 fouch 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

Cat. No. 4211 Box of 12 Cans.

Retails at 15e ca.

# Eveready Rosin Core Solder



high-grade solder for wiring and general house work 111 0. Miractive specia and caus.

Avers

	-	
Cat No	Sire	Our Price
4156	3 02.	S1.35 per display carton of 10.
4175	1 07.	.25 cach
4176	1 1b	.i0 each



# Rosin Cere

The small packers of times Rimin Care Solder, being of the flat et minon the Rec manufact of the flat et minon the Rec manufact of the same cut sale and non-conductive. De grade for the practice of the conduct display carton.



L'origient

Cat. No. 5220 



Tor General Radio Mark Acid-Berlin-Cor. Our I'rice shool Cat. No. 5221 910, 711 1.95

#### SOLDERALL



10c Retail Size In Counter Display Carten of 24 Tubes

Cat. No. 4,67 SIN

per carton of 24

This is a complete metal solder and fluc combined. A small quantity applied to the joints to be oldered when he led will flow and unite the parts the same as wire or bar solder. Furnished in collapsible

#### P. D. Q. Plastic Metalic Solder



A new discounty. Is a semilegard that can be used to
repair almost any broken article. It is water proof, gaseline proof, and will withstand
best. With it you can repair broken furniture, bathroom fixtures, broken crockery,
procelain, leaky pois and pane,
broken dishes, leaky radiators
gas tanks, water pipes, broken
who shields or cracked cylinder
and, of automobiles. It will
lick to wood, metal, glass,
aluminum, pewter, lead, rubber, leather,
in fair rimor any surface.

Dries r pidly, will withstand 3500 of

Dies repidly, will withstand 3500 of best and acid

Cat. No. 7856 Our Price, per doz. \$200

SAMPLE 20c

#### "TWIN-TAPE"

Pubber and Friction Combined in One. One was in tead of

1- 1 India covering

1-Millin to ening.
2 - Rubbir tape.
3 - Friction tape.
The interpretation tape.
The interpretation tape. The cert quality of materials obtainable is used in 115 manufacture, which in uses under the interpretation of the One to the workman



8 Ounce Rolls-Cat. No. 5565

9c each

# Friction Tape

Cat. No. 4226

1-Ounce Rolls. marked Each "

70c Per box of 32 Rolls



2-ounce Rolls, marked "10c

Cat. No. 4219
Per box of 16 Rolls..... 70c

C. t. No. 1215 8c 1-oz. Rolls, Each .....

Cil. No. 1223 8-or. Rolls, Each -

Parked in individual carlons and attractive dis

> Friction Tape "Ends" S-oz. 1913, scaled in hoxes. Cat. No. 7457

Our Price, per lb. 15c

# LENK BLOW TORCHES

A Model for Every Purpose



Handy for any ordering pur-pose Made of trans head-nickeled 1200 degrees needle-point rhame.

Size: 5 in x in.
Packed six on a counter di-play card. Shipping we ut per dozen, two pounds.

Cat. No. 6694 30c en. 21.75 Display

Card of 6

#### LENK TORCH

Five Improved



1 - Extension base margaret

- 2-Screw-top make; it to let
- to load 3-Notil ap prendit (1900-
- ration

  I Capper hear commenter
  yenerates quickly

   Bigger current holes more

tiel.
Blows it eif. Operate im
lengtured a conol. Solid vale
makes it inechanically lead a troof

Size 51 x21 xx1 in Pacted of to a

Cat. No. 6693 6660 Our Price, each Display Card of G. 

#### Lenk Wouth Blotorch



A HEAVY DUTY MASTER PRODUCT

Filling a demand from ELE TRICIANS in d MECHANISTOR S SUESTANTIAL TOGI PROOF TORCE

Lare and Top of leavy Broaze Costings

WI K SCIENTIFICALLY ENCASED prevents buil-ang over of fact

Balticed to prevent damage when drogped or abused. Extra long

Extra fong rubber tube with commouth piece. Unequivocally quaranteed. Size 77ax21 in Shipping wight. Ibs. Packed in individual correspond

Cat. No. 7318

#### HACKSAW



Cat. No. 5076

# Price 85c

They are adjustable from 8 to 12 little. with back, arms and clips made of a very hard grade of steel. The notes maped pistol grip handle; made of tell sampings, corrugated to give a good grip. The handle is riveted to the frame. All other joints are everlastingly welded together.

#### Lenk Handy Blotorch | Lenk Duo-Buty Blotorch



Strong Sturdy Structure!! Duo-Flame Control

Needle-point and Mechanically Balunaced Heavy Cast Broaze Base

t leaning Pin securely held in cool handle.

PEULI TO LAST A LITETIME

Unequivocally Gaaranteed

Sire That 1- The in. Snipping weight,

Cat. No. 5127-List Price 83.50 8510 Cur Price

#### Lenk Waster Blotorch

A Combination Alcohol Torch

Forestial 2200 blast with attached being One turn of thimb screw releases and producing 1700 needle-point



Double the lor a herdle-lord fine - add the attream ht the action a lead

teme dans de distate que talte -Than o'er no will.

A cleaning pin lway nandy who you want i kent concl. in

- A mil grip numble, cways coe. Substantially built-to last a lifetime. Void-proof continuation—no adjustment sec surfy.
- Filler screen in jet presents plugging an utilize.

Cat. No. 542.1 8995 Gur Pris



#### Hand Drill

lins tool represents an un-This tool represents an Un-moul value in a drill of '4, the capacity. The frame is a little lighter than the pre-dain dries and no ide andle is provided, and econ-omies in finite histo been made. Its performance is ew-Hent

8 | 24 Price .....

#### Serewdriver



Citation served fiver, carefully manufac-tured from the best materials obtains he for the purpose and finished in keeping. The creating accordingly useful in serving according to bardeness, and the blade.

Cat. No. 5053 Our Price

4()c

#### Electric Soldering Irons



A handy soldering from for the radio fan. Equipped with removable copper tip, herest cord und a two-piece attach-ment plus, thoy co-ment.

FULLY GUARANTIED

59c Cat. No. 2720

75 Watt High Heat Soldering Iron with removable housing tip approved heater

Cat. No. 5113 81.65 ea.

100 Watt Extra Heavy High Heat Iron ich brown ramovable handle, approved

Cat. No. 3305 \$2.00 ett.

75 Watt. 220 V.

\$1.50 ea. Cat. No. 6707

#### EXTRA TIPS

Cat. No.	Watts	Type	Price
7447	7.5	Roand	80.25
7448	100	Round	.35
7 4 459	1 .5	Cuiver	.4.5
7450	1 (11)	Chisel	3.5

# Mueller Battery Light



Cat. No. 0 180

A Handy and Inexpensive New Batiery Shop Tool

#### Our Price 38c ea. Six for \$2.10

The MULLLER BATTERY LIGHT usethe storage nattery tell as the logical ourse of power for lighting up the wor-when cells are being teplenished with

Ideal as a Temporary Voltmeter

The MUELLER BATTERY LIGHT pro-rides a simple and ure means of show-ing up a bad cell without the necessity of removing the battery from the car. Packed in Individual Boxes.



This new tool is built for the home of shop to provide a highly efficient drill at a very reasonable price.

It drill et ht different size roles qual-It drill so ht different size hole quant-ly and with surprising ease in mard and sold wood, oft metals, wall beard, plast-er, etc. The eight drill coints are con-tained in the numbered compartments in the missizine mandle made of shin, jet black modded bakelite. They are abely locked in until wanted.

Eight fleted shault drill points, 1-16-ii.ch to 11-63-inch in diameter are fur-nished with each drill

Length 5+ things. Wash' 6 ounces.

Cat. No. 5081 Our Price

0

#### Machine and Wood Screw Assortments

4142 Round machine per box.

Flat Head 6-32 H. P. Machine SCIEW.



4741 Oval Head 6-32 N. P. Machine

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 Pibre Washers and Grom-mets, 100 per box. Round, Flat and Oval Head As-sorted Size Wood Screws, 85 per

4745 Round Head 6-32 Screws, nuts and washers, 100 per box.
Our Price Per Bux 25e

#### Angle and Bracket Assortment

All Nickel Plated Brass 25 pieces in a box.

Very handy for the service man.

Our Price, Per Box 25c





#### Transformer Brackets

Brass, Nicke! Plated 3a in. wide.

		Hole	Price
Cat. No.	Length	Center	Set of 4
5367	3 12 In.	2 12 in.	30.20
5368	1 2 1D.	3 2 in.	.30
5389	5 42 In.	1 1 2 in.	.40

# DE JUR PIN JACKS

Direct connection to the loud speaker or ear-phones without the use of a phone-plug is fa-cultated by the use of the DE JUR Pkn Jack. This useful DE JUR Pin Jack. This useful ittle terminal device finds adequate application in modern receivers where reception over a wide band of wave-lengths is accomplished with the use of plug-in coils. Their use on lug-in coil. Their use on te



Cat. No. 4129

# 50c dozen

Package of 100 \$3.50 Solderless Phone Tips, Cat. No. 5373, 50c Dozen.

# 540 Ohm "C" Bias Resistor



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

10 Watts.
Tapped at 90, 90, 256 in. long.

lõe ea. Cat. No. 5103

#### Round Head Machine Screws

These machine screws are packed 10 screws to an en-velope. Each envelope has an illustration and the quantity of the product on the front.



Cat. No. Round Head N. P. 3626/32 15x6/32 54x6/32 5966 5967 5968 34x6/32 x6/32 5970 5971 11486 32

# Our Price 5c

Per Envelope

#### Wood Screws in Envelopes



The wood screws are packed 10 to an envelope, each envelope illustrates the type of the wood screw head and always states and always the quantity. states

12 x No. 5, 10 Round Wood Screws

to an envelope.

5 x No. 6, 10 Round Wood Screws to an envelope.

34 x 6, 10 Round Wood Screws to 6474

6475 an envelope.
1 x No. 6, 10 Round Wood Screws 6476

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. 13/2x6/32 Oval Head Machine Screws, Nuts and Washers, 4x8/32 Oval Head Machine Screws, Nuts and Washers, 1 x6/32 Oval Head Machine Screws, Nuts and Washers 3651 3652

The above mentioned merchandise is packed 12 of each in an envelope as follows: 12 muts, 12 washers. The envelopes are printed in three colors and have an illustration of the product. Merchandise is brass nickel plated and packed 50 envelopes to a standard package.



#### Our Price 10c per envelope of 36 pieces

Soldering Lugs



Tinned Brass

Cat. No. 4260

25c per hundred

# Hexagon Nuts, Knurled Nuts, and Washers in Envelopes

5959 6/32 x 14", 20 nuts backed to an envelope. 5960 8/33 x M", 20 nuts backed to an envelope. 5961 6/32 x 5-16". 15 nuts

to an envelope.

6/32 x 5-16", 15 nuts
packed to an envelope.

5963 8/32 x 5-16", 15 nuts
packed to an envelope.

5963 6/32 x 5-16", 6 nuts
packed to an envelope.

5964 No. 6 Washers, 25 washers packed to an envelope.

velope. 5965 No. 8 Washers, 25 washers packed to an envelope.

All of this merchandise packed to an envelope with an illustration of the product on the front side, also the quality

# 5c per Envelope

# Brass and Copper Tinned Terminal Lugs

The No. 1 and 2 lugs are

and 2 lugs are commonly used on battery cables.
The No. 3 lug is a solderless lug for round or square busbar.



The No. 4 lug is a flat lug for bus-bar 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 tug. Tite-Lock, 7% in. in

All terminal lugs are backed 180 to boy Style Cat. No. Style Cat. No.

5975 5972 2 5973 5 3976 11 5917 5974

# Our Price 19c

Per Box of 100

82.25 box of 50 assorted envelopes

# SCREEN GRID Tube Caps with Leads

These Screen Gria Tube Caps have a lead soldered directly to the cap. The cap itself is manufactured of a opring brass and is cadmium placed.



Cat. No. 3892

# Our Price 20c doz.

Cat. No. 4173-Without Leads 15c Dozen

#### FUSE CLIPS

Spring Phosphor iuse clips that he carefully deserved rately spring rhosphor Bronze luse clips that have been carefully designed and accurately made to as to insure perfect electrical efficiency and durability.



Cat. No. 3893

läc 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



Cat. No. 6754

Adapts a %" con-denser shaft for a '4" dial or knob Nickel plated brass Length 7a".

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. orass. 56" long.

### **Bakelite Tubing** (Coil Forms)

Cat. No. 4085

1% in. dia., 4 in. long

Cat. No. 3812



#### The Handy Scratch Remover

Mars and Scratches on Radio Cabinets and Furniture Vanish Instantly.

Cat. No. 3379 \*360 Per Dozen ...

Sample 35c (Sold one dozen to carton with counter display.)

### 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.



Cat. No. 3662

19c ea.

### Professional Hardware Assortment, 5 Pounds

For the dealer's and servicemen's shop. Contains an extra large assort-ment of every size ment of every size of screws, nuts, washers and lugs for every radio purpose. This assortment is indispensable to the man who does repairing



and building and will pay for itself over and over.

> 75c Cat. No. 3816

### 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.

Cat. No. 4743 Our Price

25c

### Rubber Howl Arrester

Fits over the tube and prevents oscillation and mi-crophonic noises.

Cat. No. 6669

10с еа.

\$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.



Cat. No. 6470 Size 314 in. 75c day Size 2½ in. Size 2 in. 60c doz. Cat. No. 4427 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 phane envelope, mounted on attractive display card. Retail at 55c per card.

Cat. No. 4067

Retail at 25c per card

\$1.00

per doz. cards

### EASY SOLDERING Phone Tips



These new Phone Fips are very easily soldcred as may be noted by the illus-tration, merely in-nert 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 crew and you have a good solderless screw and 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 ATT See Terms on Page 3

Federated Purchaser Inc.

### Universal Condenser Microphones



The model herewith illustrated is the result of exhaustive experiments to produce a microphone for film and disc recording, in which field 90% of the pro-duction of this model is used. Universal Condenser Microphones are in use in mearly all parts of the civi-lized world in film record-ing and in broadcast

Studios.

Universal Condenser Micmodels, 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: are detail descriptions:

A single stage microphone using a 440 tube with an ottput of approximately Minus 15, D. B., with an almost flat response from 32 to 7000 cycles. Amplifler

minus 15, D. B., with an allmost flat response from 32
to 7000 cycles. Amplifier
housing of pure aluminum,
drawn in one piece without seams or
rivets. Amplifier base casting of bronze
with transmitter head ring of brass. Neat
and business-like in appearance, finished
in beautiful statuary bronze plate. Battery regulzed 6V "A" and 200V "B." The
output is designed to feed into a 200 ohm
load, or the input terminals of an amplifier, where a carbon microphone has previously been used. The current consumption on the 200 volt tap is only 2 milliampere with filament current of .25
amp. Size 6 inches by 3 inches. Net
weight, 11 lbs. Packed weight, 17 lbs.
Complete with 25 feet Rubber Covered
Shielded Cable

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 particular as Model No. 1440, except the current consumption on the 260 volt tag is only 4 milliampere with filament current of .5 amp. Size 6 inches by 6 inches by 3 inches. Net weight, 12 lbs. Packed weight, 18 lbs. Complete with 25 feet Rubber Covered

Shielded Cable

\$205.80 Cat. No. 243 List Price S350

#### Extra Heavy Condenser Microphone Floor Stand

(Illustrated above)

Built especially for condenser microphones. An idea of its ruggedness can be ettimed from the main body tube which is these in diameter. The entire assembly a statuary broize plated and presents a time studio appearance. A flange top clows for easy mounting. The adjustment lock screw is firm and positive and locks or releases by the slightest framb pressure. Net weight, 21½ lbs.

\$22.80 Cat. No. 244 List Price \$40.00

#### Telescope Portable Floor Stand

Besil collepsed Lightweight, No name plate. Polished Nickel.
Cat. No. 292 Our Price ....

#### Universal Banquet Stand

A half height stand for use on tables, at banquets, desks, pulpits, etc., also preferred by some for stu-dio announcer's use.

Adjustable from 18 in. 28 in, high.

to 28 in, high.

Base 7 in, in diameter.

Top ring 6% in, in diameter.

Furnished 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 

All microphone desk stands. NOTE: All microphone desk stands, floor stands and banquet stands are now equipped with call letter name plate, as shown. Call letters or other wording can be painted in this space. If desired, paper or metal letters may be cemented in the space provided allowing the user to change lettering as desired. We do not furnish plates lettered or letters.

All stands are mechanically perfect. Not made up of lamp fixture or smoking stand parts; are silent in 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, I the right size in every ay. The top ring is  $0^{1/2}$  a. In diameter, the base of the top ring is in. in diameter, the base 12 in. in diameter, and complete weight 18 lbs. Total extended height 532

Total extended height 532 feet.

This stand is smooth in operation and is not easily tipped. The clamp lock is positive, yet is operated by the slightest 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.

equipped with blank call letter nameplate as shown.
At the new List Price of \$20.00, this superior Universal floorstand offers the best buy on the market.
Net weight 19% lbs. Packed weight

weight 30 lbs.

Cat. No. 387-List Price \$20 FT 170 S Suspension Springs Included

### Universal Suspension Rings

Made of solid brass, for suspending mi-conhones from ceilings or beams. For Made of solid brass, for suspending microphones from ceilings or beams. For use especially with Models "A", "BB", "KK," or "LL," etc. Beautifully finlished in polished chromium

JUNIOR RING Size 51, in. diameter by 12 in. wide by 18 in. th 1 ck — 8 suspension springs included.

> Cat. No. 3656 \$1.47

SENIOR RING

Size 6½ in. diameter by ½ in. wide by ½ in. thick—8 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 sprung into position, eliminating trick mechanisms which liable to rattle. N mechanisms which are liable to rattle. Makes a substantial and business-like appearance. Same stand and frame as on Model "K" with-Cat. No. 250 out 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 occurbed for Model "K" are fitted to the 64s Inch diameter of the Model "L" mounting. Extra room is provided in ide the ring and screened covers to allow freedom of movement without danger of jur or shorting of wires. Polished cincome finish, it is most attractive and business-like in appearance. Full instructions for mounting. Call letters furnished. Any letter can be mounted at no extra cost.

Net weight 312 lbs.; Packed weight 41 lbs.

Cat. No. 232

\$9.51

8 Suspension Springs Included

List Price \$16.00

MODEL "L" DESK MOUNT

MODEL "L" DESK MOUNT
WITHOUT COVERS

Model "L" is 61, inches in diameter
and is used for mounting Model "LL"
387 W. or New Type "BB" or other large,
heavy types of microphones An extremely well-built and attractively finished in chrome plate mount following the
innes of Universal's general designs. Presents a highly professional appearance.

Entire assembly 1012 inches high. Net weight, 3 lbs. Packed weight, 41, lbs 8 Suspension Springs Included. List \$10.00

Cat. No. 239

\$5.88

#### Universal Desk Type Mountings MODEL "K" DESK MOUNT

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

The base is set in moulded rubber ring forming a cushion papers to be a preventing damage to polished surfaces.

The entire unit is peautifully finished in chrome plates Provided with a finger ring for carrying | Cable palses through the hollow base.

Net wt., 21 lb.

WITHOUT COVERS

Net wt., 21, 1b... Packed wt., 51, ibs. Entire are inbl. 8 in high

8 Suspension Springs Included

List Price \$5.00

Cat. No. 238

\$2.94



## USALITE

#### FLASHLIGHTS Two Best Sellers



2-Cell Large Size Focusing Spotlight Will throw a beam of light over 400 fee 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 1% In. by 912 in. Head 3% 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 lo switch that locks on and off in addition to intermittent flashes for signalling (popular with Boy Scouts.)
- Hinged ring on bottom cap for hang-
- 6-Head is Octagon-shaped to prevent

rolling i-Shock absorber at hase of bulb.

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 oox.



### 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 photofash 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. 6-1½ Volt Dry Cell

This is a Dry Cell of the highest quality and will give satisfaction in any service for which this type of cell is adapted. It is especially qualified for all kinds of ignition work, doorbells, buzzers, Radio "A" Battery, and for other general uses of the Drycell. 21½" diameter x 6½" high

BEST 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 2½" deep. Packed 5 in a shipping carpping car-weighing 8 lbs. Cat. No.



Our Price 58c ea. \$2.90 Standard Carton of 5

#### Merit Flashlight Cells

LARGE SIZE

Fit Both Flashlights Shown Above.

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

Cat. No.	Volts	Style
5092	212	Clear
5093	212	Opal
5094	312	Clear
5095	312	Opal
The selection of	20 4- 41	b 100 to



Packed 10 to the box, 100 to carton

Our Price 30c Box \$2.50 per Carton

### NEON Pilot and Night Lamps

Uses Very Little Current. Burns 24 Hours Per Day For 5 Cents Per Month. Can Be Used Anywhere-

No. 3673-1 Watt....50c No. 3674-2 Watt....65c



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

Carton Volts Cat. No. of 10 21/8 3665 88c 3675 5

No Less Than 10 Sold

#### Independent Pilot Lights

Cat. No. Volte Carton of 10 45c

#### Pilot Lamps

110 V. Candelabra Base



For Pilot Receptacles and General Use.

Cat. No. Color Clear 5091 5091A Amber

PACKED 25 to the box

## Our Price 9c ea.

\$2.00 Box of 25

### Round Decorative Lamps

Regular base, G1812 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

88c ea.



Carton of 5 \$4.00

MAIL ORDERS TO APP See Terms on Page 3

rederated Purchaser Inc.

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

# ial - Lead-in and HOO

#### AERIAL WIRE



Cat. No. 4401

Seven-Strand No. 26 Copper 90-ft. Cotis

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. Colls

Lots of 25 coils . . 22c ea. Lots of 50 coils . . 20c ea. Lots of 100 coils . . 18c ea. Cat. No. 4462 1000 ft. Spool......\$2.00

7-24 Stranded Enamel Wire Cat. No. 4421-100 ft. colls 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 \$2.75

### Gold Plated Aerial Wire

Used on all U. S. Battleships.

Cat. No. 4213



55c eu.

\$5.50 dozen

### Indoor Aerial Tape

Cat. No. 4311 OUR PRICE

30c ea. \$3.35 dozen



Tape is a flexible metallic ribbon antenna especially manufactured for indoor reception. Gives reception far superior to any other type of indoor aerial or loop. Can be easily placed about the room in convenient places. Placed around the moulding.

#### LEAD-IN WIRE

Solid Copper, Rubber Covered

50-ft. Rolls

Cat. No. 4403

15c ea.

25 coils for \$3.15

100-ft, Rolls

Cat. No. 4404 28c ea. 25 coils for \$6.50

#### SPECIAL SHIELDED Lead-in Wire

Shielded Lead-in Wire consists of stranded cable with stranded cable with Easy-Strip Rubber Insulation enclosed



Insulation enclosed in a braided shield of tinned copper wire. In service the shielding is grounded. Shielded Lead-in Wire is solving the problem of trouble-some interference and thus protects the signal energy from interference caused by high tension lines, motors and similar disturbances.

Cat. No.	Length	Price
4460	50 ft. Coil	\$ .50
4461	100 ft. Coil	.95
4464	500 ft. Coil	4.50
4465	1000 ft Coil	8.50

### SOMETHING NEW! Continuous Aerial

and Lead-in Wire SPECIAL OFFER!

Rubber Covered Tinned Copper Lead-in Wire

Underwriters' Label On Each Coil 500 Ft. Coils



With this wire it is not necessary to use insulators or make any splices. You sim-

ply tie 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 this fine insulated copper wire.

Cat. No.	Guage	Type	Our Price
4422	16	Solid	\$2.65
4430	18	Stranded	1.75

The solid wire has a 3 84 rubber cover and is cotton braided and weather-proofed. The stranded wire has a lacquered cotton braid over the rubber insulation

#### Serviceman's Handy Wire Spool Assortment



Now! Every Serviceman can have complete assortment of Wire in stock without large Investment

### Our Price 95c

For Any Spool Listed Below

Knowing that it is essential that every Knowing that it is essential that every service shop has a complete assortinent of electircal and radio wire in stock for every job, but very few servicemen can afford to invest too much money in wire, we have arranged with a very large wire mill to furnish us with every popular type of wire, put up in handy spools, so that a complete assortment is in the reach of everyone. For a small investment of \$6.50 you can have a good supply of every popular type of wire in stock. Cat. No. Description

4493 100 ft. No. 18, 1/64 Cotton Covered twisted green and yellow. 4498 100 ft. No. 18, 1/32 Silk Parallel,

assorted colors. 100 ft. No. 18, 1/64 Silk Parallel,

assorted colors.
100 ft. No. 18, 1/64 Silk Parallel,
assorted colors.
50 ft. No. 14 Cotton Covered
Twisted for heavy filament circuits
carrying exceptionally large cur-1103

ent. 209 tt. No. 13, 1464 Single con-ductor Cotton Covered, for zerial and ground wire, lead-in wire, filament leads and general repair 14:26

work.

100 ft. No. 14, 1/32 Single conductor Cotton Covered, for heavy flament work and general use.

100 ft. No. 18, 1/64 Silk Covered, twisted for filament leads and extensions. Assorted colors. 1497

1148

tensions. Assorted colors. 250 ft. No. 22, 1/64 Single conductor for hock-up wire, assorted 1489

### No. 18 Bell (Annunciator) Wire

A rest cuality No 18 single wire. Made by one of the largest wire companies and wire companies and priced right.

Cat. No. 4409 All Cotors in Boxes



Lalb. Coils. 15e ea.—\$1.50 doz.

15-ft, coils, white, for inside work, 25 coils 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.



	Single C		Double (		Single Silk		Double Silk	(Green)	Feet	Plain £1		Feet Per Spool
Gauge	Cat. No.	Price	Cat. No.	Price	Cat. No.	Price	Cat No.		Per Speol			
18	6056	\$ .15	6063	S .17	6077	\$ .21	6084	8 .27	45	6070	\$ .15	50
20	6057	.17	6064	.13	6078	.12.1	6085	.30	75	6071	.16	80
22	6058	.18	6065	.21	6079	.25	6086	.36	110	6072	.17	120
24	6059	.19	6066	.24	6080	.30	6087	.12	190	6073	.18	200
26	6060	.24	6067	.30	6031	.36	6088	.51	280	6074	.19	320
28	6061	.27	6068	.35	6082	.12	6089	.66	440	6075	.21	500
30	6062	.33	6069	.42	6083	.18	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.

4408 100-ft. Roll \$0.50 4441 500-ft. Roll 2.00 4412 1 000-ft Roll 3.75

#### Stranded Push-Back Wire

For filament leads and wherever flexi-dity is desired. Finned for quick soldering.

	_	Cat.	No.	4463	
100	ft.	coll		\$0.1	10
500	ft.	coil		1.8	45
1000	ft.	coil		3.7	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 windand for making loop aerials. It is the most sensitive wire known and is excellent for indoor antennas.

14 lb. spools.

Cat. No. 4243 20c

### Colored Rubber Covered Stranded Hook-Up Wire



Very Lexible finand wire covered with blue, yellow, green or red rubper Ideal for viring or hoot-Harris meta.

Cat. No.	Length	Each	Dozen
4405	15 11	11e	81.20
1116	50.11	200	2 27
1107	100 1.	1186	1.000

#### Radio Set Hook-Up Wire

So many of our costomer have asked us to supply them with the some type of hook-up wire that is used by the large production manufacturer of radio set. This type of wire is mobilinable in the usual channels of trade and is made uponly on order, which orders must be ulficiently large to make the wire on a production bath. We have arranged to took this wire for the dealer and ervicement trade at extremsly low prices.

Specifications Stranded copper, TINNED; if or easy soldering): 1 64 rubber plazed cotton braid The braid is then lacquer d. making it abso-intely moistur-proof. The lac-quer also causes the braid to adhere 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 ef-

### Service Man's Handy Wire Assortment



A complete assortment of wire lengths from 4 in, to 15 in, of every type of wire used in a service depart-ment. Contains hook-up, push-back, bus bar, Contains 150 ft. of Wire

Cat. No. 4415

you money on wire. Very handy to have on fire repair bench or in your service kit.

#### Our Price 39c

#### Special Heavy Duty Rubber Covered Stranded Filament Lead Wire



For 112 and 21 volt filament leads and wherever a heavy flow of current is carried.

Cat. No. 4197-14 Gauge-Will carry 15 

Cat. No. 4459-12 Gauge-Will carry 20 Amps at 110 Volts

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

12 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 woven double braided and heavy rubber insulated stranded copper wire for all general uses. Green and yellow, white or brown, cotton covered.

Cat. No. 4418

### \$2.15 per 250 ft coil \$3.75 per 500 ft.

### No. 18 Type "PS" 1/64 Reinforced Cord



Used for all portable applications like vacuum cleaners, etc.

Ruggedly built, substantial and will give real service and long wear.

Cat. No.	Length	Our Price
4431	100 ft.	\$1.75
4432	500 ft.	5.50
4433	1000 ft.	9.50

#### Flat Cotton Parallel

Will Stand a lot of Approved No. 18, 1/3 Rubber All Colors

Wire

3	

4449	1000 ft.	8.00
4448	500 ft.	4.25
4447	250 ft.	\$2.25
Cat. No.	Length	Price
001013		

### No. 16 Double Lighting



Lacquered Braid For Auto Ignition Work Oil Proof

Wire

Cat. No.	Length	Our Price
4479	100 ft.	\$1.25
4487	500 ft.	5.50
4488	1000 ft.	10.50
1100	1000 IL.	10.50

### HEAVY DUTY "SI" 2 Cond. Garage Wire

Run a 10-ton truck Ryn a 10-ton truck over it; leave it out in sleet and snow; will stand almost very copular for trouble lamps, notor lead emporary outside nace a vacuum cleaner cord de luxe.



An e ir a heavy duty flexible rubber cat. No. 4457 or red cord, poilible tetra 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. Parallel Silk Wire for wiring homes with baseboard conven-ience outlets, lamps, extensions and a hundred other uses.

This is the fastest moving wire, and every dealer and ser-vice man should



Furnished in white, green, maroon brown and gold 1.000-ft, spools only

and. Cat. No. Size 4410 18-1/64 4434 20-1/64	Price pe 1,000 ft \$5.85 4.95
--	--

### Single Conductor Cotton Covered Fixture Wire



With inner and rubber insula-tion. For hooking up set to aeria ground and electrical use. general

#### 1000 FT. SPOOLS

Cat. No.	Gauge	Color
4484	18	Brown
4485	18	White
Our	<b>Price</b>	\$3.20

Cat. No. Color Gauge 20 Brown 4486

#### 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 cid fume proof, heavy rubber covered. Due to the heavy flexible conductor resistance is cut to a minimum. cut to a minimum, and breakage of wire is almost unknown due to the many strands used.

The finest to manufacture.

100 it. spools The finest battery cable it is possible

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 fit right.

Cat Madel and Tune

No.	Set, Model and Type Price
	Amrad 8420c
	Atwater-Kent, 35, 37, Left & Right23c
6563	Atwater-Kent, 60, 61, Set of 2, Left & Right40c
6363	Atwater-Kent, 30, Belts: Set of 2, Left & Right
6231	Atwater-Kent, 55, Belts: Set of 2, Left & Right20c
6364	Atwater-Kent, 44, Belts: Set of 3, Left & Right40c
	Balkeit Cable25c
5229	Bosch Model 58a23c
4290	Bosch Model 48a
5729	Bosch 2823c
5730	Bosch 58, 6023c
6366	Bremer-Tuily, 14, 21, Cord & Lug.14c
5930	Colonial 31 32 30e
6367	Colonial 33, 34, 35, 37, Drive Ca- bles, Set of 2
6368	Columbia, All Nos., 2 Drive Cables & Spring
5236	Crosley Model 40-S, 60-S, 80428c
5237	Crosley Model 601-602-60728c
5232	Emerson
6369	Eveready, All Nos., Drive Cables. 23c
4058	Freed-Eisemann Belts, Model N. R. 60
5335	Freshman Model 237e
	First National37c
	Kellogg, Set cf 245c
5584	Kolster, Heavy Cord & Beads on End23c
6370	Kolster, 43, 44, Drive Cable 45c
5728	Majestic, 62
4279	Majestic Band Model, 70-71-72 and Comb
6371	Peerless, All Nos., Drive Cable 27c
5731	Philco, All Models25c
4270	R.C.A. 16, 17, 18, 33, Linen14c
4283	R.C.A. Dial Cable, Model 17-18-46-
5357	64-67 25e R.C.A. 64, 67 (very heavy phosphor bronze wire) complete with Con- mector 256
6372	Sparton, All Nos., Drive Cables. 427c
6373 6565	bronze wire) complete with Con- mector
	20Sphor



10Spnoi Bronze al Cable

> Cat. No 5288

\$2.50

Per 150 Ft. Spool

MAIL ORDERS TO ACT See Terms on Page 3

Federated Purchaser Inc.

### CORD SETS For All Electrical Appliances



Best grade asbestos heater cord, 2 pc. bakelite cap only. Type Each Doz 3318 With cold mold plug, no switch .. \$0.17 \$1.80 3315 Same as above, plug and silk cord. 4.45 With 3320 Bakelite switch plug..... 3.60 .35

#### Immersion Heater



This practical little appliance will heat water quickly safely and economicalir in the home, office, barber slop, beauty parlor, dentists and doctors offices are supported to the contest of the tors offices, etc. Sump-iv pluz into light the heater into the

light the socket and place the heater into the water. Instructions with each heater

Cat. No. 6489 Our Price

90c

### Triple Outlet Cube Tap



Cord is of 2/18 sitk parallel with inner oraid approved by underwriters. Gen-eral Electric attachment plug. Cap only

words to the comment blug. Cap only Monowatt cube tap.

Very handy for connecting one or more mamps, radio sets, etc., from the outlet. Cat. No. Length Each Dozen Length 6 ft. 9 ft. 3302 \$ .19 \$2.00 3330 .25 2.40 2.75 3353 15 It. 2% 3.10 3.60

#### Special Therapeutic Electric Lamp Relieves Pain With Heat

A quality product of neavy aluminum, highly polished. One-half of in-side silver etched; scientifically correct in size, shape, etc., with 260 watt standard first watt standard nest quality carbon lamp. All made with 6 ft. silk cord, 2-pc. sttachment plug, knob or push through socket. Will stand up under high



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 Scalp-tor's Buralloy Metal Ht. 4% Wd. 5 Dp. 212 Dial: Satin Silver Finish .3 . Finish

Nile Green

distinctive lillipution timopiece rendered in the modern main. Note the rhythmic, simple but strang reversed fluings that accent the gaptral contour. Whether on a crowded desk or a liny end-table or night-stand, there is always room for Morpheus.

Cat. No. 811 Our Price

#### Wingdale

Breakfast Nook, Kitchen or Wall Clock



Heavy Sculptor's Duralloy Metal Ht. 8127, 1741. 812

Dp. 234"

Dial: With a . . The breakfast nook or kitchen needs a practical, dirt-neisting, castly readable timeplece. Here's a real departure in wall clock silhouether. Sets and starts from the front; enclosed duck, notched for electric cord instable wall a pable the wall

Cat. No. 640 Ivory Cat. No. 650 Blue

hanger.

Each, 8 | 95

#### "KWIK-LITE" **Delivers** a Lighted Cigarette When You Pull the Lever



New | Amazing | Beautiful | North Beautiful! Nothing else like it! Inter-ests all smokers, either men or women

For the office, lifor the omee, il-brary, living room, and boudoir. A won-derful and appreci-ated gift, as well as fast-selling item for rsonal use

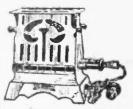
Plus into house currit, ther hits hd, fills top with

cigarettes (it holds a full pack), and pulls the lever. Kwik-Lite lights and puffs the cigarette and delivers it through the slot, ready for smoking. Fully guaranteed.

Cat. No. 5297-List Price \$3.50 \$929

### Special Toaster Value!

e u s igned, Guar-anteed l e ment. n s ulated fibre hand les.
Takes largest slices of bread slices To a sting quickly and evenly.



q ii i ckij and evenly. Large base prevents Toaster 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 a Base Tiavylie in from

Height -7 in. Base-758X518 in. Weight-21a lbs.

> 89c Cat. No. 393

#### GOLD SEAL Automatic Water Heater

When Faucet is Turned On, Heating Element is Connected

When Turned Off. Current is Off, Also.

No Switches to Bother With -Completely Automatic

Made of the Finest Materials

71, it. Rubber Electric Cord Non-Breakable Rubber Plug Aluminum Case — Highly Polished GUARANTEED

Just slip over faucet and plug into near-st socket. Permanent installation in less an two minutes. Operates on 110-130 est socket. Permanent installation in less than two minutes. Operates on 110-120 Volt 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 Films



SPOT LIGHTING is effectively employed to focus ettention on a section or portion of e display to oring same out prominently.

Varied beautiful lighting effects may be produced by using spotlights with the colored getatine screens of five assorted colors furnished with this outfit. Finds a ready sale in all retail stores, automobile show rooms, drug stores and should be used in every show window where you wish to have some article stand out. Built of heavy gauge aluminum with universal bracket and porcelain socket. Furnished complete with adjustable brackets and office assorted color films. SPOTLIGHTS will help eliminate daylight reflections in plateglass windows which are so annoying to merchants eager to compel attention to their window displays during the daytime as well as at night.

MAIL ORDERS TO A See Terms on Page 3

rederated Purchaser Inc.

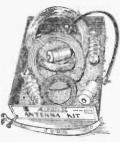
#### COMPLETE AERIAL KITS

(We can supply Aerial Kits in quantities to your own specification)

#### Kit No. 4216

90 lt. 7/22 Stranded Copper Wire 50 ft. Rubber Covered
Lead-in Wire
25 ft. Ground
Wire.
L Approved

- Lightning Arrester. Copper Ground Clamp. 1 Lead-in
- Strip. Glass 2
- Insulators. 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.

ern 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 Nollit Frebr

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 (m. maiestockeup)

Cat. No. 4251

25 for 75c 50 for \$1.16

### GIANT Lightning Arrester

Cat. No. 4210 15c

\$1.80 doz.



Fested and Approved Proceedings Arrester, large type. Made from high tension, thoroughly vitrified poscession brown glazed Expansion and contraction has no effect on the air gap of brown gr this arrester

arresters are so constructed that may be installed indoors and out Our arresters are they may

#### White Wiring Nails Packed 100 to a box



Cat. No. 6658 15c per 100 \$1.35 per 1000

nails are Wiring wiring nails are ideal for fastening wire to base-board when making extra electric outlets for the radio, lamps, etc. They are white colored to harmonize with the woodwork.

### Rodale Soft Rubber Handle Screw Driver



Packed 6 of each size on a card.

Cat. No. 6490

### 35c for card of 12

**New Grip-Tite Ground** 

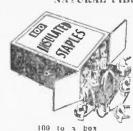
Clamp

Makes a real g connection on pipe good up to 2 in. diameter.

Cat. No. 6046 \$100



#### INSULATED STAPLES NATURAL FIBRE



500Staples 50c

1000 Staples

Cat. No. 4253

These staples also furnished with white or brown fibre to match indoor woodwork. Cat. No. 6852-White

Cat. No. 6853-Brown

per 1000 \$1.60

### Jiffy Baseboard Wire Clips

Jiffy Wire Chips replace the old-fashioned double end tack for staple, or fastening insulated wires; and do a NEAT JOB for you INSTANTLY.



Your Radio Lead-in, inside Acrial, Tele-phone, and Lamp Wires are held by this device between trim and wall and cannot mar or damage your woodwork.

Cat. No. 3264

50c per 100

#### INSULATED Window Lead-In



Cat. No. 4208

Entirely insulated and equipped with 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. 234 in

Cat. No. 5299



Our Price 9c ea. 25 for \$1.90

#### CORD CONNECTORS

Cat. No. 4255



6c ea. 10 for 55c

#### HYDROMETER PACRED IN REAT DISPLAY BOXES

CINC. DO LARGE SIZE THE PIECE BURBER BULS CLEAR READINGS ON FLOAT

Packed in Neat Display Boxes

Cone piece rubber bulb clear rending on float,

25c ea. Cat No 4200

Extra Readed Floats 10c ea. Cat. No. 420

### PORCELAIN Nailit Knobs

Two-Piece

Cat. No. 2767

\$1.00 per 100



3-In. Screw Eve Insulators

Galvanized Screw Car No 2703

\$2.00 per 100

### SPRING AERIALS



For Indoor and Outdoor Use Solid Brass, 75 ft. Cat. No. 3657

30c ea., \$3.50 doz. Copper-Plated, 75 ft. Cat. No. 3658

10c ea., 25 for \$2.25

### SILK GRILL CLOTH

Green and Gold Diameter, 11 in. For replacement in epeakers and consoles



Cat. No. 6686

Our Price

#### PORCELAIN Rase Knife Switches



insulated handle clopper blades and contacts Milret S e

Cat. No. 4159

S. P. S. T. 95c Box of 10

Cat. 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



### Radio Cartridge Fuses 1. 2. 3 and 5 Amp.

Cut No 4206 .

lic box of i \$2.75 per 1 (00)



#### Universal Dry Ribbon A Rubber Insulated

DKY PIEBON STRIP

Lead-In Strip

Cat. No. 6505

\$1.75 Box of 25

### DE JUR AUTOMATIC PHONE PLUG



This handy phoneolugis extremely
small in size. Automatic sure-grip clips
midde the plug assure positive contact
without the use of
tools. To connect the
speaker or phone tips, simply insert them
in the holes. No buttone to press, no
screws to tighten.

Our Price 15c ea.

#### UNIVERSAL Battery and Radio Clips

Seriew forme flors—no old 7 regal of Channel con traction from four Para-indications. For positive, 70

No. 15-Pee Wee Cad-mium tlated, 11; in. long.

Cat. No. 6485 30c per box of 10

No. 48B—Cadmium Plated, 13. in. long. Cat. No. 6486 35c per box of 10

No 21A-Lead Coated\*, 1 in long.

60c per box of 10

No. 214-Lead Couted", 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

Petter than i'm aid rars Petter than the aidmary aerial insultor because it can readily be attriched to a pole wall, roof etc. Brown stated porcelain. He in overall it is a gain and a gain and a series.

Cat No 61.4

7c ea., \$6.50 ver 100

I. C. A. Double Phone Plag



Moulded of brown bak-file and, hard-ware a nickel plated braze. Tarkes tak-sets of phone cord which are held, filmi-in place by set acrews. Individually boyed

Cat. No. 6937

30x

### Fused Triple Outlet Plug



An ingenious plus whin not only protects any delirate institute its and electrical appliances on the line, but also prevents the fases on the main line from blowing out. Short circums are localized so that they are quickly detected. Stand-

ard cartridge type fuse are morried in the slots said instantly replaced when recessar. Will protect radio receiver, analyses, meters, etc. No took be-

Cat. No. 7357 Our Price Each

MAIL ORDERS TO See Terms on Page 3

25 PARK PLACE, N or to our nearest

#### Two Piece Attachment Plugs

Bakelite Plug Complete

Car. No. 3202 Package of 25

\$1.00 Cap for Above Cat. No. 3266

Package of 25 55c



Armored Cap Cat. No. 3268 Se each

### Bakelite Handle Cap

Cat. No. 3260

Our Price 25 for \$1.00



Live Rubber Cap, same as above, Cat. No. 3276 10 for 50c

#### Round-Cord Connector



Confideror Only No Lab Car. Va. -338

10 for \$1.20

Tur Same

tal vo 1266

#### Bakelite Midget Cord Connector

Smallest connector made r'or small motors united mile maclines, etc.



Cat. No. 3345

\$1.60 box of 10

#### Special Twinlight



Box of 25 \$1,50 Bux of 25 \$1.50

Here we offer what we consider and what our county part experience has proven the meet lang of its limit. Well made of the finet cold moid material med for the purpose. Abouting a we price stee our

Cat. No. 3303 Our Price, bach



#### Baseboard Outlets Unit Carton. 20

	1	Lai	ton
al No		10.1	20
2.11	Composition	31	UH
			11(1
1111	Dall Clife	- 1	10
	Louble Porceiam	1	95

### GENERAL ELECTRIC Flush Receptacle

provides un a.C. conappliance for standard 601, 140 6668

10c ea.

#### 3-WAY CUBE TAP



A small, nest and compact 3-way plag with blades as shown to fit pin type receptacle. A very useful item for which there is always a big demand It makes three cutlets where there was one before

Cat. No. 3329

BAKELITE Bux of 25 ......

#### Bakelite Side Outlet Pull Chain Socket



Pall chain mechanism controls bottom fight only. Slide outlet for from or other appliance remains white. A very handy kitchen accessory

Cat. No. 3376

### Our Price 27c ea.

\$2.30 per Display Box of 10

### BAKELITE Twin Light Socket



One-plece condenciion

Cat. No. 3:35

Our Price \$1.05

Carion of 10

### Bakelite Heater Plug

Small and of exceedingly all in tive appearance

Cat. No. 3343



Unit Carton, 10

#### Our Price 65c Box of 10

Bakelite Heater Plug with "On-Off Switch

Cat. No. 3320

#### \$1.95 Box of

Armored Heater Plug

Cat. No. 3304

Unit Carton 10 for 80c 6

#### BAKELITE Feed Thru Switch

Used as a make and break switch on any electrical appli-ance carrying up to 50 watt load Un-breakable moulded orealable moulded case Can also be used on electrical figures or as a pendant matter.



Car No. 332

### 15c ea., \$1.44 doz.

#### Twin Flasher

Wonderful Tree Light

> Cat. No. 1319



Made of genuine Bakelite. Has blades which can be inserted directly in receptacles. Has two outlets, both of which have a flashing mechanism.

### Our Price 19c ea.

### Bakelite Current Tap

One-piece construction with I no Thread

Unit varion to



Cat. No. 3334

Our Price \$1.05 Box of 10

MAIL ORDERS TO See Terms on Page 3

Federated Purchaser Inc.

#### Just Think! An Electric Drink Mixer for Less Than \$1.00



A beautifully flui hed rapid mixer. Does eterything that an expensize machine will do.

Cat. No. 129 Special, Each

Shipping carton 

Will sell like hotcakes at \$1.98.

Size-Total overall height, " in. Width 3 to L p

Finish—Motor rase is fini and in Ivory enamel with band in highly polished nickel. The registror and sheft are of special polished nickel plate. The base illitude green enamel with rubber pads attached to both sides of bottom to keep plass from slipping and entire apparatuatrom scratching surface it tests upon

For use on 50-60 Cycle Operation For use on 50-60 0 Volts Alternating Current only.

#### Superior Electric Bell 214 Inch



Works on dry cells or bell-ringing transtormer.

sturdy con-Mary truction and guaranced.

C.t. No. 3257

dret.

### Superior Electric Buzzer

Works on dry cells or pell-ringing transformer Same construction as the bell. sell-ringing





#### 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). le in. Lock Cap.

Cat. No. 7200 

#### NICHROME WIRE



On Card

Paguires no further cutting. For repairing all electrical appliall

One to the card.

14c ea. Cat. No. 3557 Carton of 10, \$1.15

#### UNIVERSAL Flatiron Element

Gennine Nichrome Ribbon Clamant



Cat. No. 3332

Our Price 23c \$2.10 Carton of 10

### GLOWCOIL Heating Elements





Cone

Straight No. 3275

#### 200 earela Box of 10 \$1.80

It at one to nearly. But grade of coiled "Nichrome" wire used, 110-120 years, 600 to 650 water

#### "Sun-Health" Lapin Ultra Violet and Infra Red Rays



Supply Vitamin D—Purity Blood—Aid Circulation and Body Poison Elimination Guards the body against infection - kill Fills germs and pre-tents disease. Frees the skin

frees the skin from pumple and temporary hiemishes—pro-ness a clear all ruddy comte, the glands

viger and vitality and relieves ner-Vousness

vousness.

The SUN HEALTH lamp is equipped with a 11 in. aluminum reflector protected with a heavy wire ecreen, mounted on a spun aluminum frame; two 5 in x 8 mm. carbons; heavy chrome nickel resitance coll. Base and backbone are cast aluminum alloy. The lamp is very sturdy and will stand rough treatment it is fully guaranteed for one year. Each lamp is fully equipped with goggles and carbons and is ready to plug in on either A.C. or D.C. current. Draws 9

Complete With Goggles and Carbons

EXTRA CARBONS Type Sunshine Per Doz \$1.00 1.25 Cat. No. 6699 6700 Tanting \$6,95 Cat. No. 505 Price

#### CIGAR LIGHTER

INIT ONLY

For replacing units that have burned out. This is the unit without the socket. Mounted on attractive display card.





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. Full 60% rubber. Impervious to greatine, oil and weather. Will last in-of-nitely.

Cat. No.	Length	Buch	Dozen
3254	12 11.	\$ .60	\$7.00
3258	20 It.	.85	9.75

### ALL-RUBBER Trouble Light



With Rubber Handle and Rubber Handle

Cap.	Packed one to the	carton.
Cat. No.	Length	Price
3321	10 ft.	51.00
3322	20 ft.	1.10
5749	30 ft.	1.20

#### BENWOOD-LENZ B12 Rectifier

For New Tobe, Muter and other A elimin tors. Sterling dynamic speakers, etc.

Cat. No. 1153

\$2.50



MAIL ORDERS TO See Terms on Page 3



# Handy Tools Radio Ben

## **GOODELL-PRATT TOOLS**

Ratchet Screwdriver Set



These tools can be used as automatic screwdrivers for driving screws, or the spirals can be locked for use as plain screwdrivers for either driving or drawing screws. They are simple in construction, but are strong and durable and will not get out of order.

Cat. No. 5078

95c

#### Steel Rule



30c Cat. No. 5082

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 8th and 32nd inches. Plain, deeplyetched 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 volts. 8 in. long. Used by electricians and linemen.

### Long Nose Pliers



Cat. No. 6825

Fully nickel plated; milled jaws, with cutter. long, tapered,

### Diagonal Cutting Pliers



Cat. No. 6826

Our Price 39c ea.

Fully nickel plated; for close outting; as durable cutters. 51/2" long.

Scriber

This scriber 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.

> 21cCat. No. 5084

#### BENCH VISE

These bench vices are different in design and gen-eral appearance from any other from any other small tools of this small tools of this character. They are constructed to mest the dcmand for a small vise of better construction than those which have previously been made.



\$2.05 Cat. No. 5080

#### Right Angle Ratchet Screwdriver

Cat. No. 6480



Weight, 3 ounces

There are innumerable places around automotive, electrical and radio equipment where this little unique screw driver will perform juickly 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 hit is ½-in. wide, ½-in. long, and has a square shank with a spring retainer to hold it firmly in the square ratchet socket. Tool is 4 inches long overall. The handle and head are finished in red and black enamel and 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



Toggle mechanism housed in polished bakelite casing.

Cat. No. 7872 18e

#### Grip-Type Nut Wrench



How many times have per trying to get at nuis in tight places or to pick up a nut dropped into a set? This in senious tool will do boll in the content of the con incentous tool will do both for you easily and quickly. Will grasp any shape nut and hold it last until it is loosened or tightened. By preseing the button on top, the jaws of the wrench open and when the button is released the jaws close.

Overall length 101/2 in Polished black handle.

Cat. No. 7440 Our Special Price ..... 25c

#### A Necessary Adjunct to Every Serviceman's Tool Kit



This RMA Resistor Color Code is ingeniously designed, yet extremely simple to use. It has three wheels lithographed 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 fits into your vest pocket. Worth its weight in gold.

Cat. No. 7432 Our Price .....

You can secure this Color Code FREE ordering one of the Resistor Kits let-on page 38 or three or more dozen assorted Acratest Resistors.

### Radio Shaft Clamp



The Clemp is adaptable to practically every set on the market. It is also a convenient tool to turn the volume or other controls of the set that are too other cortrol tight to turn.

Cat. No. 6677

Our Price 49c ea.

### SIGNAL

#### Wireless Practice Set

Just the instrument for those who want to learn the code. The code is printed or a little brass plate fastened to base. Equipped with Type R-60 High Frequency Buz-

zer.



R-68 "Signal" Wireless Practice Set

Cat. No. 3554 List Price, \$3.40

#### Our Price \$1.98

### I. C. A. 50 Watt Trans-

mitting Socket with Isolantite Base

Cat. No. 3653

\$1.50

An excellent power tube socket. Fits all standard 50 watt tube bases. Maximum insulation is obtained by the use of heavy glazed isolantite 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 336. Two mounting holes.

#### Signal Twin Wireless Practice Set

Here is a practical, instructive and scientific toy that every modern boy



every modern boy
wants — 10's the
new R-70 Signal
Jr. Twin Wireless
Practice Set leading toy stores everywhere are selling. Sets operate
efficiently up to
1000 feet on any
standard dry cell
batteries. 75 feet
of wire is included with each
set.

5 0 0

Each instrument 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

45c ea

Less Battery



Finely molded base. Nickel plated hardware. High pitched buzzer. Works on a single flashlight cell. Telegraph code etched on base. A wonderful 98c seller.

# ACRAPHONE, JR. Wireless Key



5¼ in. long, 2¾ 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 2rm 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 standard 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 lacquered. Brass base. Bakelite finger rests.

Cat. No.		Contacts	List Price	Our Price
3556	R-62	14.in.	\$3.50	\$1.98
3557	R-63		3.70	2.21
3558	R-64		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 Telephones 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 carron 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 meighbor.

#### ON THE FARM

One farmhouse to another—House to barn—House to dairy—Home of one radio fan to that of another.

#### IN FACTORIES

Manager's effice to factory—One factory department to another.

# The Connecticut Duplex Telegraph Set

Every boy will want this real telegraph set to practice on and learn the code. Continental code on etched vlate in large, easily read fig-



easily read figures mounted beside key. Instruments may be used separately for practice. Just the set for Boy Scouts—can be carried on hikes and set up in camp in a few minutes. Manufactured and designed by engineers who have been building telegraph instruments for 37 years. Each instrument has its own buzzer. Will operate efficiently up to 1000 feet. Mahogany finish with black enamel parts and gold trim. Packed in attractive display box with 50 feet of wire and complete instruction booklet.

Weight complete, 4 lbs.

Cat. No. 6579 \$3.75

complete

### Signal Junior Key



Black enamel key base. Mahogany finish base. Nickel plated lever. Coin silver contacts.

Cat. No. 3555

List Price \$2.25

Our Price \$1.35

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

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

**World Radio History** 

# need Adapters for your Lab

## Acralest

### Speaker and Headset Adapters



These adapters are of the same appearance 0. 8 appearance as the above and are used to connect one or more additional magnetic or dynamic

nette or dynamic up to any set using a single or push-pull pentode output or 45 output. Simply remove the power tube from the socket, insert the adapter and replace the power tube or tubes. Can be used in the ACRA tube or tubes. Can be used in the ACRA-TONE 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



Allows the Use of the Pentode Tube in 245 Sockets Simply remove the 245 tube, insert the Acralest Pentode Adapter into the top of the adapter, Insert new tube.

Ma Ma		
Cat. No.	5200	39c
Fach		- 7

#### **Multi Prong Connector**

This connector is proving pop-This connector is proving popular for dynamic speaker extension, microphone cables, battery cables, analyzer cable, etc. It is made up of an easy grip handle cap and a removable socket.



Cat. No. 7360—4 Prong Cat. No. 7361—5 Prong Cat. No. 7362—6 Prong

Our Price 30c Each

### Naald Pick-Up and Microphone Adapter



For UX or UY Sockets

Connects to filament 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.





#### Na-Ald Analyzer Plugs and Test Adapters



All Na-ald Analyzer Piugs are moided 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 piug into sets equipped with small base tube sockets and close-dimensioned shielding. The plug has a latch actuated by a spring. This latch slips over a slot in the center stud of the adapters, preventstud of the adapters, prevent-ing 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, SUPREME and HICOCK Cat. No. 5887-5 Prong Analyzer \$ 80 Plug with Screen Grid Cap......

Cat. No. 7364-6 Prong Analyzer \$210 Plug with 2 Screen Grid Caps....

#### Adapters for 5 Prong Analyzer Plugs

Type 5 to 4 prong 5 to 6 prong Cat. No. 5888 5 to 4 prong Cat. No. 7146 5 to 6 prong Adapters for 6 Prong Analyzer Plugs

Type 6 to 4 prong 6 to 5 prong 6 to 7 prong Cat. No. 7365 Cat. No. 7366 Cat. No. 7367

Our Price of Any Adapter Above.....

#### Naald Tube and Test Adapters



Each

These ad-apters are ex-tremels compact, measur-ing only ";" high and ing only 5,"
high and
1," in dunieter. They



substituting new type tubes in old sets, remodeing tube checkers and for testing the latest tubes in set unalyzers. Moulded bekeltle. A locater ring on top of the adapter fecilitates the insertion of tubes. The proper connections are made within the adapter so that no error can be made by the user. Good connections on the prongs. 588% cannot be used for pentode tubes.

Cal. No. Description

To insert a 4-prong tube into a 5-prong socket.
To insert a 5-prong tube into a 4-prong socket.
To insert a 5-prong tube into a 5-prong socket.
insert a 7-prong tube into a 5-prong socket. 5882 5884

6962

7326 To 6-prong socket. Our Price

> Frost Phone Plug For Speakers and Headsets



Our Price, Each ....

amail neat plug with phos-phor bronze

for in mismous connection contacts and disconnection of phone tips. Brass hardware with hard black nor body. Cat. No 7371

.....18c

60c

#### NAALD ADAPTERS

Makes detector of any stage UV tube, breaking grid circuit for grid leak and condensers. Also breaks plate with phone tip terminals for head-phones.

Cat. No. 5885 4 Prong Cat. No. 5886 5 Prong Cat. No. 6994 6 Prong



#### Adapter and Trouble Finder for Servicemen

Especially adapted to trouble finding and making all circuit connections to cuit connections to a 5 prong tube base where no wires are exposed. Plate, grid, cathode, or heater circuits can be open-ed readily for con-nection of meters or test equipment. We



test equipment. May be used for con-necting phonograph pickups or meters to radio sets or amplifiers.

cat. No.			Net
4257	Universal		
4258	Universal		Socket
	Adapted		95c

#### Naald Special Adapters for Testing New Type Tubes

For 55 and 85 Duo Diode Detectors

This adapter is for set analyzers and tube checkers and allows the testing of each of the dlode plates as well as the audio plate of these tubes. The switch throws the meter from one plate to the other through the set of the other through the set of the other trong one plate to the other trong one of the other trong of the o



Cat. No. 7359 Our Price .... 8 80

### I. C. A. Loud Speaker Adapters

For connecting additional speakers to sets ising simple or push-pull 112A, 171A, 245, 247, 256, etc., power tubes. For single power tube order 1; for push-pull order 2 adabters



Each

attioners.		0	-61
SINGLE TUBES	Cat. No. 6942 6943 6944	Prongs 4 5 6	20c Each
PUSH	Cat.		40c

#### Test Adapter for 280 Tube



Cat. No. 6963

With this adapter one may make all desirable tests on a 280 rectifier, including plate current, d.c. output voltage filament, a.c. filament, a.c. press filament, a.c. fila-ment voltage across filaments. Leads are attached 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. 6961-4-prong Cat. No. 6965-5-prong

### Our Price 60c ea.

#### Oscillation Control Adapters

adapters connection with tip jacks. They may be used for controlling oscillation by attaching resistors in series with grid circuit, and can also be used for general testing of grid circuit. 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. (5 prong) 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. sets.

### 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-Prong	29c
Cat. No.	6990—6-Prong	150

#### Speaker and Analyzer Plugs



These handy plugs are extremely useful around any service shop. Easily attached to any four or five wire cable Made of genuine bakelite.



C	at. No.	Our Price	
	5868 5869 5870	4-prong short cap20c 5-prong short cap20c 4-prong long analyzer	
		plug250 5-prong long analyzer	
	0011	cap25c	
	6991— 6992	-6-prong shot cap25c 6-prong long analyzer cap .25	

### Earphone, Speaker and Testing Adapter (4 Prong)



Cat. No. 5250

29c

Has many uses, such as allowing the use of head-phones on any set, connecting an extra speaker up. Simply re-move power tube, insert phone tips of extra appliance into convenient jacks on the adapter, A connector with phone tips on each end nurnished wi

each adapter so that the adapter can be shorted out when not in use instead of having to remove it from the socket.

Additional Adapters for all Testing Purposes on Page 86

### **Additional Adapters**









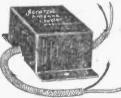
Adapters are listed for use in testing the many new tubes which have recently appeared in the market. They are available for testing with set testers, and also tube testers. Where reference is given to certain Readrite testers, the same adapter may be used with similar testers of other manu-

	This list is very complete for all new tubes available.	1111111111
Cat. No.		our Price
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	45e
7426	A special adapter used only on Readrite cable plug applying to set testers No. 610 and 710, for testing six prong tube circuits	60c
7427	A special adapter used only with Readrite 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	60c
5884 5884 6962 6962 7428	To test 36, 38 and 39 type tubes in 01A sockets	- 50c
5200	To test '47 type tubes in '45 sockets	39c
5200	To test '82 type tubes in '45 sockets	50c
7429	To test Wunderlich type tubes in '24 sockets	75c
5883 5884 5884 6962	To test 4 prong tubes in 5 prong sockets	<b>50</b> c
	dernize your old set by using the new type tubes with these Ad the expense of rewiring or changing parts.	dapters,
6962	To use a '57 type tube in place of a '24 tube in the detector socket only	50c
6962	To use a '58 type tube in place of a '24, '35 or '51 type tubes	50c
5200	To use a '47 type tube in place of a '45 tube in power stage only	39c

#### Multiple Antenna Coupler

Now! 50 to 100 Sets on One Antenna

With this device, a single aerial will accommodate as many as 50 receivers, one coupler being used at each point of installation. It does away with the man 33714h + h 1 s

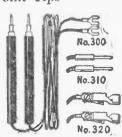


point of installation. It does away with the many tangled and abandoned aerials on roofs which are a fire hazard. Many of the larger cluies have already banned roof aerials and house owners are looking for just such an item as the Aeratest Multiple Antenna Coupler. This coupler is a newly developed fixed band pass circuit which automatically adjusts your set to any antenna condition. If you are using too long an antenna, the Aeratest 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 apperiment houses in your locality, you can interest their owners in this device. You can enhance the appearance of his property and remove the fire hazard by remaying all the aerials for one good one with couplers for each tenant. The installation of Aeratest Multiple Antenna Coupler will pave the way for you to service the tenants receivers and thus increase your revenue. In your own store you can use the Aeratest Multiple Antenna Coupler 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 ..... 75

#### Heavy Duty Laboratory Type Test Prods With Needle Point Tips Tips Can

Also Be Inserted Into Phone Jacks The body of the needle tips act as phone tips when inserted into standard phone tip jacks. Equip-ped with 5 ft.



heavy flexible wire with black and red fibre handles 5 in. long and ½ in. dia. The needle point phone tip is made of the highest grade phone tip is

Cat. No. 6913 with Test Clips

GOC per pair
Cat. No. 6914—With Spade Terminals 50c per pair

#### 16 Wire, 50 Foot Cable

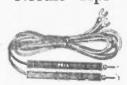
For Remote Control and Public Address Work



Also suitable for unnunciator systems. Cat. No. 5537

\$2.00

### Test Leads With Chuck for Phonograph Needle Tips



These test prods are a great improvement over the ordinary prods, being equipped with two chucks in which are inserted any standard phonograph needles for tips. The 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

The Test Leads are a convenience to the set owner and a necessity for the Radio Service Man and Radio Dealer. They are unsurpassed for testing sets and tracing trouble in sets where shorts, open and other defects common to radio sets are encountered.

They can quickly be attached to any meter for testing batteries or any electrical apparatus.

cal apparatus.

They are supplied with red and black wire for positive and negative identifica-

#### 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 handy for testing in the laboratory and shop.

### Utility Test Leads



Consists of one No. 6020 test prod, 24 inches of finest grade incqureed wire and a No. 6019 crocodile clip. A very handy accessory for the service man.

30c ea. Cat. No. 6985

#### **Multiple Conductor** Cables



- 1	100			
Cat. No.	Make	Wires	Length	Our Price
7184		4	2 ft.	\$0.15
6763	General Electric	6	6 ft.	.20
7328		7	6 ft.	.25
6587	General Electric	8	6 ft.	.25
4474	Belden	10	8 ft.	.40
6761	General Electric	10 10	6 ft.	.30
6765	General Electric	12	8 ft.	.45

### **EXTENSION** Speaker Cords



Cat. No.	Length	Each
4451	20 ft.	\$0.16
4452	30 ft.	.24
4453	50 ft.	.35

#### Headphone Cords (Double)

6 ft. long, with loop eyes on one end and pin tips on other.

10c ea. Cat. No. 4454 \$1.00 dozen

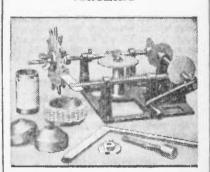
SPECIAL SPEAKER CORD 8 FT. LONG WITH LUGS ON ONE END AND PINS ON OTHER

10c ea. Cat. No. 4455 \$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, Sol-noids, etc., in different widths and diameters, and will use wire of different gauses. An ideal machine for the experimenter and amateur.

Cat. No. 526—List Price \$7.50 \$445

Our Price

MAIL ORDERS TO See Terms on Page 3



### I.C.A. 5 in 1 Neutralizing Compensating Tools

This tool set is a comoination of a 14" nut wrench, a 5/16" nut wrench, a neutralizing screw driver with 14" blade and a full size screw driver. So constructed that all the parts telescope so that the entire outfit when closed is no larger than a fountain pen Pocket clip attached.



Cat. No. 6946

### Our Price 90c Set

Extra Neutralizing Attachments for above Set

For Majestic Sets-Cat. No. 6947 lãc ea.

For Croslev Sets-Cat. No. 6948 I5c ea.

### I. C. A. Neutralizing Tools With Metal Nibs



The 1t season of the tin st cuality means are constructed of the tin st cuality means are constructed of the tin st cuality means to the tin st cuality means to the tin st cuality constructed, the screw driver fits into the duplex when making it a four-inone set. The other end of the screw driver is a special magnetic steel for picking up and placing of screws, bolts, nuts, washers, etc. The I.C.A. Neutralizing Tools work on all standard make radio receivers.

Cat. No. 6457

### Our Price 88c

### Neutralizing Wrench and Screw Driver



A Very Handy Tool for the Service Man

The wrench and screwdriver is made of case hardened steel. The handle is made of bakelite-prevents body capacity. Especially suited for Radiola sets.

Cat. No. 4207

Our Price 45c ea.

### The Famous M16 Elkon Replacement Rectifier

NEW TYPE "XB16"

May be used on the following "A" elinunators: Majestic, Mayolian, Elkon, Phileo, Webster, Knapp, Gen. Fada, Inst., Metro. Bernard, Sentinel, Elkon, 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 Trav

Size 14x612x6 in

Movable trav partitions Matched hardware. Permanent embossed rule on cover.



Cat. No. 414 Our Price, Each 8 T 00

The 411 Utility Chest, truly the chest of a thousand uses, originally developed by UNTON, refined and further improved with automatic tray as shown in the 414, has proved a merchandising sensation.

Usable as a mechanic's tool chest, fish-Usable as a mechanic's tool chest, hishing 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 sold, 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 1314", depth 4", width

FINISH Especially hard baked enamel. COLOR—Attractive nile green.
HARDWARE—Brass plated throughout.
CONSPRUCTION — Heavy gauge cold rolled steel with electric welded flush seams. Equipped with sturdy handle and LOCK WITH KEY. Paneled top for rigidity and strength.
WEIGHT—(per chest) 2½ los.
PACKED—12 chests per shipping carton.
SHIPPING WEIGHT—35 pounds per carton.

Cat. No. 7317 Our Price, Each .....

Dozen \$6.50

### INSULATED HANDLE Pocket Screw Drivers



A very handy and useful little tool for everybody. Put a dis-play 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. current.
- 3. Will show how many cycles.
- 4. Will detect the live and ground wires.
- Will act as pilot on any electrical ap-

Cat. No. 3255

### Our Price 88c

# I.C.A. "Short-O-Tester"

Every Serviceman Should have one



With 214 V. Lamp

Cat. No. 6956 \$1.50

The I. C. A. "Short-O-Tester" is an ingenious new circuit tester containing a 2½ voit lamp and a small tubular flashlight battery so connected that when the flexible wire lead with its spade tip is attached to one turn of the electrical circuit tested and contact made through the pin terminal on one end of the tester, it will indicate whether said circuit is open or closed. It is an excellent continuity tester for radio and electrical work and should prove a very useful tool to the serviceman. It can also be used as a flashlight in an emergency by 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.

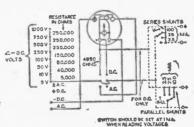
# WESTON RADIO INSTRUME

### 31/4 Inch Panel Instruments



Model 301 Universal A.C.-D.C. Meter Cat. No. 321

Our Net Price \$13.97



Designed for the serviceman who desires to build a multi-range instrument to fill his particular testing requirements. It is for use with external shunts and external resistances for measuring D.C. voltages and currents and A.O. voltages.

The instrument is of the permanent magnet moving coil type with a self-contained copper oxide rectifier for the A.C. measurements. It is self-contained for 5 volts and 1 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 instrument, shunts and resistances may be purchased separately and the meter built up for any range desired.

This high grade matched line of meters 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—MODEL 301.—
Permanent magnet moving coil type. Accurate within 2%. They are supplied as Voltmeters, Volt-Ohnmeters, Ammeters, Millian 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 oxide rectifier 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

Model 301 D.C. Voltme Ranges 1, 1½, 2, 3, 5, 10, 15, 25, 50 and 100 Volts 250 250	\$5.88 7.85 8.09
Model 301 Volt-Ohmme	
Volts Ohm Scale Ohms per volt 4.5 0-100,000 10000 15 0-500,000 1000  Model 301 D.C. Amme	Net Price \$8.82 8.82
1, 1½, 3, 5, 10, 20, 30, 50 Amperes (have a drop of +-	
5%)	\$5.88
Model 301 D.C. Voltmo	
Resistance 1000 Ohn	ns
per Volt	
Range No. 5, 10, 25, 50, 100	t Price \$8.82 10.66 12.87 15.38

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 indi-cations decrease approximately ½ of 1% for each thousand cycles per second.

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 are 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 Miliammeters. 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 3	01 D.C.	Milliamn	ieters
Range			et Price
1, 11/2, 2	. 8		\$7.35
8, 10, 25,	50, 100, 5	00, 1000	5.88

Rectifier Type-Model 301 Voltmeters 1000 Ohms per Volt

# 

Rectifier Type 301 Milliammeters Net Price

Model 425 Ammeters Range Net Pri 1, 1½, 2, 5, 10, 20...... \$9.93 Net Price (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 such delicate equipment as galvanometers, microammeters



INSTRUMENT LITTLEFUSE Showing "Locked"

microammeters and milliammeters, radio tubes testers, radio "B" circuits, small radio and rectifier tubes, etc. See also "Where to use—A Littelfuse."

		Aver.	
		Description Max. Resis.	
Cat.	Rating	and Load 5 Mil Our	
	Amps. 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	1/8	0-10 to 0-50 milliammeters. 0-50 to 0-100 m. a. thermo- couples. Radio "B" circuits in auto and bat- tery sets. Un- derwriters ap- proved 100 16 .09	
7218	1	proved 100 16 .09 0-500 to 0-750 milliammeters. 0-600 to 1 amp. thermo-couples.	
		Small rectifiers, 1000 .36 .06	

#### Single Pole Mounting for Littlefuses



For Instrument Littelfuses, Black moulded bakelite base 11/2x5/2x3/16".

base 1½x²sx3/16".
Finned, shakeproof terminals and extra quality phosphore plated fuse clips.
Mounting hole takes No. 8 or No. 10 Flat Head Screw. Overall length, 17%". Height, %". Standard package, 20. Weight, ½ lb.

Cat. No. 7279 Our Price	9c
(Continued from pr Model 425 Mi	
Range 120, 250, 500	Net Price \$11.03
Model 476 A.C	. Voltmeters
Range	Net Price

200	0	•					*********
				. ,		100	
150 250.	30						
500						***********************	
Mad	-1		76	. 4	٧	denser	Matan
MOG	eı	4	F ( C	, (	JOI	menser	Meter

15, 1.5 ...

Model 476 A.C. Ammeters Range Net Price 

Model 476 Milliammeters 15, 25, 50, 100, 250, 500...... Range

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

### THE FAMOUS JEWELL

### Trio Panel Mounting Instrumentas





The Jewell Trio of radio instruments is popular for cultime special test panels and service instruments for use on experimental laboratory apperatus, and in amateur transmitting. Patterns 88, 63 and 76 comprise a new arries of instruments aradiable in flush type bakelite cases that duplicate the old Patterns 54, 64 and 74 in metal cases.

Patterns 88, 58 and 78 are furnished for moveting in cases of moided bakelite. Frange diameter, 312 in. case diameter, 31 in. Approximate shipping weight 3 lbs.

When ordering Jewell meters, please note that types Nos. 54, 64 and 74 have metal cases. Specify which type your desire, in the zero position which may vary slightly owing to normal changes in temperature.

metal

#### 88 (Bakelite) D.C. Instruments

High range instruments are supplied with external resistors, having moided bakelite heads which are amply large to take care of various requirements. These instruments are not recommended for testing the voltage of B power supply.

Cat.			Our
No.		Price	Price
514	0-8, 10, 15, 30, 50 volts	\$7.50	\$5.51
515	0-150 volts	9.50	6.98
516	0-300 volts	12.00	8.82
454	U-500 Volts	15.50	11.39
455	0-750 volts	19.00	13.97
519	U-1000 VOITS	22.50	16.54
457	0-1500 volts	28.50	
458	0-2000 volts	34.50	19.96
459	0-3, 5, 10, 15, 25, 50, 100,	98.00	25.55
-00	150, 200, 250, 300, 500		
	milliam pares		
160	milliamperes	7.50	5.51
461	0-1 millia: iperes	9.00	6.61
463	0-1.5 milliamperes	9.00	6.61
493	0-200, 300, 500 micro-		
	amperes	24.00	17.64
161	0-1, 1.5, 2, 3, 5, 10 and 15		
	amperes	7.50	8.81
165	50-0-50 galvanometer	9.00	63, 62.9
4.4	meters can also b	E frimas	distant of
WILL	metal cases 33, in flance	2 400	0000
at su	me price. Specify Type 5	for n	notal
-	-posts, tipe o	* 101 11	it titl.

### JEWELL Pattern 88 Rectifier Type A.C. Instrument

The pattern 88 consists of a sensitive Jew II D'Arsonval direct current instrution used in conjunction with a self-contained full wave copper oxide rectifier unit.

	mullammeters	1
Cat. No.	Range	Net Price
478	1.	\$9.38
479	1.5	9.38
480	2.	9.38
481	5.	9.38
182	0-500 Microammeter	10.88
	Xf 1.	

Voltmeters 1000 OHMS PER VOLT Cat. No. Range 483 5 15 \$10.50 181 485 10.50 These volimeters also supplied 2000 ohms per voli at \$1.88 additional.

# JEWELL. Pattern 68 Radio

Frequency Instruments
PATTERN 68 RADIO FREQUENCY
INSTRUMENT
Pattern \*9 furnished in bakelite cases,
flush type only. Flange diameter, 3½ in.,
Case diameter, 2¾ in. Appréximate shipping weight, 3 lbs. Cat. Elst Our Price Price 

### JEWELL Pattern 78 A.C. Instruments

PATTERN 78 A. C. INST	RUME	VTS
Cat. No.	List Frice	Our
468 0-3, 5, 10, 15, 20 and 30		
469 0-150 volts 470 0-300 volts	\$7.50 9.50	40. 8540
war 0-2-2-120 Triple Range		
472 0-25, 50, 100, 200, 300,		
473 0-1, 2, 3, 5, 10, 15 ain-	7.50	5.51
The above meters can	7.50	6.00
nished in metal cases 33 in. i	Part Thousand	may 27.6
in lead of 68 and 74 in lead	of 7	8 for

### JEWELL Pattern 89 Ohmmeter-Pattern 89 Voltmeter



Approximate shipping weight, 3 lb Cat. List Our Type Price Price 309 Pat. 98 Ohmmeter, with either 0-1000, 0-3000, 0-10,000 or 0-30,00 elim 0-10,000 or 0-30,00 enm ranges, including bettery and test. 1a.50 12.13 0-100,000 ohms 10.50 14.14 0-5,000-50,000 ohms dou-ble scale) 19.50 14.14 PAT. NO. 89 VOLTMETER 0-30-300-600 volts triple range), 1000 ohms per volt, with test leads... 25.00

Jewell Pattern 444 Analyzer



Complete with accessories; data book and pad of tube charts

Cat. No. 315

### Our Price \$82.32

Jewell's Newest Set Tester and Analyses, tests all types of tubes including triedes, peniodes and tetrodes, and both plates of a 230 recipier tube wishout the use of

This new Jewell Analyzer is the most complete radio service instrument ever

complete radio service instrument sure built.

Its compact, rugged construction rinkes it easy to earry and enables it to stand up under the herdinips of mervice work, and its professional abusarance gives presting to the radio service sum. This new Jewell Set Analyses and Tules Checker marks a hig step forward in Radio Trating Equipment, with its practically every test can be made with a degree of accuracy hever believe annuned. It incorporates features not Jound on any other type of radio act tester.

The Palisan No. 641 tests stery escutt in any totalway, regardless of the type of tuber used. Pull wave rectifier, variablemu, output contects and used seed having a direct connected fifth element, may be necursally tould under actual operating conditions.

conditions.

A.C. and D.C. circuit tests are controlled by separatic rotary solicior switches making it necessary to set only one switch to obtain any desired test.

The following measuring ranges are provided: A.C.: 0.4-B amorrs: 0.20-100 milliamperes: 0.4-1-20-805 volts. D. C.: 0-12-86-120 milliamperes: 0.4-1-2-0-20-120-201-600 volts; 0.400-100-100-000 chms; and low-medium-high output ranges.

#### Pattern 209 Checker

Tests Screen-Grid Tubes

For ratio dealers who require an ap-curate and effec-tive tube checker at a sanderas price. Operates am a 50-60 dycle, 110-120 year A.C. Nacda



120 voit A.C. Needs no betteries. Has a D.C. naver with his table sockets in a case of molded lakelite. The sockets provide filament voltages of 15, 2.5, 2.7, 5 and 7.5 to 4-proung sockets, and 2.5 to a 5-promise socket. Terminals are provided for tubes with terminals at the too.

Makes all tests. Correct values of readings are given in an engraved chart on the face of the table checker.

Car. No. 314

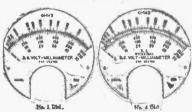
### Dials, Shunts and Multipliers for Meters

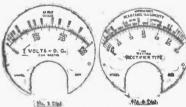
To be used with Weston Type 301 (Cat. No. 521) or Jewell Part 88

(Cat. No. 521) or Jewell Part 88
(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 pole 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 turnish 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 45c Type D-1 For Jewell Cat. No. 7331

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 45c Type D-2 For Jewell Cat. No. 7332 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. 60 cy, line. Hookup furniched.

For Weston Cat. No. 6802 45c Type D.4

Type D-4

Cat. No. 6802
For Jewell
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. Its temperature co-efficient being practically nil at 900c 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 ere 27 milivolt (for the mil. D. C. mod. 301 with internal resistance of approx. 27 ohms) and 50 milivolt for the D. C.—A. C. Universal with an internal resistance of 50 ohms.

In the A. C. Shunt it is necessary to create a five volt drop, 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 shunts cannot be used in series. When using series shunts always connect the end of the largest shunt direct to the meter. The series shunt using a single pole switch is the simplest, but an extra binding post and switch contact will be necessary if the 1 mil. scale is desired also.

Cat.

No. Type Description

30 00	JILLE WILL		
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
6801	50-DO	For Universal Weston Model 301 Meter, 50 M. V. Furnished in 5, 10, 25, 50, 100 and 500 milliamperes.	90
6805	27-5	10-100 Mil. Series Combination. For 1	
6806	50-5	D. C. meter, 27 M. V. 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.	1.80

#### Blue Print

A. C .- D. C. Universal Hookup, with set of insert leaves.

Our Cat Price No. 25c Complete 6808

#### Radio Set Analyzers AND HOW TO USE THEM Full Instructions

With

With Full Instructions and Descriptions of Set Analyzers, Tube Checkers, 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 short cuts.

RADIO SET ANALYZERS How to Use Them I management of description of some street description on the graphing to be Van der Med. Fine 501

PADIO 18K IN NO

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 your present 0-1 D.C. milliameter by using this rectifier. This will make an A. C. voltmeter up to 1,000 volts by the use of multipliers, which can be obtained from us. Rectifier is small enough to install in meter, if desired. Curve and diagram furnished. 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-

Cat. No.	Ohms	Our Price
6784	4,950	8 .60
6785	5.000	.60
6786	10,000	.60
6787	40,000	. 715
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 means of these brackets and panel, any Jewell or Wes-ton 31/4" flush type meter may be meter may be mounted on instru-ment panel or over test bench for quick reference. reference. Brackets are made so that meter can be de-mounted in a jiffy for a portable tert. Prevents the break-



age and injury of delicate instruments.

Set of hardware, consisting of 2 sets of brackets and 2 metal binding posts,

Cat. No. 7310 2 ½" hole.

Cat. No. 7311
Our Price, Each
Non-removable top bakelite Binding Posts.

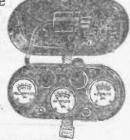
Cat. No. 5678 Our Price Per Pair



Pentode Tester and Carrying Case



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. colt-me'er 0-60-300, and repulsion type A.C.-D.C. volumeter 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 jack 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 handle. Size 4x84 kx34 in. high. Cover finished in baked black enamel, wrinkie finish.

### Readrite Output A.C. Voltmeter

Copper-oxide Rectifier Type

A reliable instrument for indicating output voltage of a radio set. Used for lining up| r.f. |and i.f. stages by determining maximum gain. Also comparing gain of tubes, r.f. tuner selectivity, hum, and fading. A practical, low priced d.c. voltmeter with copper-oxide rectifier of the full wave type. Model No. 555 is same assembly



recorder of the full wave type. Model No. 555 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. Case is baked enamel over seamless steel 4½" dia. The assembly includes voltmeter, rectifier, jacks and condenser. Connect low voltage (0-50) jacks to dynamic speaker voice coil, and high voltage (0-50) jacks to magnetic speaker terminals.

CASE TYPE

Cat. No. 486

List Price \$7.50

\$4.41



### Readrite Customer Tube Tester No. 430

\$23.52 NET TO DEALER

Complete with No. 407 Tube and Short Tester

\$41.36 NET TO DEALER



The No. 430 Display Case is designed for use in connection with No. 408 or No. 407 Counter Tube Testers. The metal Display Case contains a color chart precision meter for direct reading of tubes and batteries. An A. C. Voltmeter with rheostat controls the line voltage. An ON and OFF toggie switch, tip Jacks, and outlet receptacle complete the equipment of the No. 430 Display Case.

The No. 407 Tube and Short Tester is

of the No. 430 Display Osse.

The No. 407 Tube and Short Tester is plusged into the receptacle and the tip jecks. The eter on this tester is then used for show testing of all tubes under operating colitions. 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 trives 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.

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**



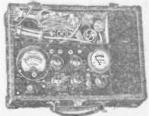
List Price \$22.50 No. 900 Complete

Net \$13.23

For servicing electrically operated re-frigerators, ironing machines, water pumps, oil burners, stokers, ventilating systems, ranges and general household appliances.

Contains input and output amperes, A. C. Ammeter reading up to 20 amps., A. C. Voltmeter reading up to 300 volts, and a complete direct reading Ohmeter 0-40, 0-10,000 ohms for continuity testing.

#### READRITE Continuity and Capacity Tester No. 1000 For Set Analyzing, Testing Resistance and Capacity



The Modern Analyzer. Contains Ohmmeter 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 servicemen will tail to recognize its superiority and outstanding advantages. Every serviceman needs this instrument to properly test modern receiving sets.

vantages. Every serviceman needs this instrument to properly test modern receiving sets.

The No. 1000 Tester combines the very latest method into one instrument for testing resistances, continuity and capacity of radio receiving sets. The 314" D. C. precision meter has full scale deflection of one in a. The lower scale is divided into kilohms. 003 to 3. This scale are nament makes easy reading, and resistance tests are quickly made with extrame accuracy. Provision is made for increasing each scale or eding 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 ohm. The A. C. meter is calibrated for reading directly in microfarads. The lower cale reading is .003 to .25. The upper scale reading is .1 to 10 mids. The instrument is calibrated for use on 60 cycle at 110 voits. The rheostat regulates the correct voltage to be applied.

C. M. No. 1000

Cat. No. 1000 List Price \$55.00

\$32.34

Something New for Testing Condensers Electrolytic-Paper Types



No. 850 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 mfds. The D.C. voltmeter connects to rectiner 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 2 m.a. per mfd. In a seamless met I case, with or without cover. A very practical and convenient instrument.

Cat. No. 850

\$8.82

Same as above for testing paper type condensers only. In a seamle, metal case, 41% 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 screen-grid and another for other tubes. Makes testing of all type tubes simple and thorough. A 4½-volt grid battery is furnished. The battery is used for the grid test and also continuity testing of transformers, chokes, etc. Capacity and resistance charts are turnished 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 0-20-100 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, Pills every need for the expert service-man or the beginner for radio set analyzing. Size 10%x31428.

The No. 600 contains the same equipment as No. 700. The carrying case is largest with leatherette covering and equipped with lock. Rooms is provided for carrying tubes, tools and supplies. The test equipment and panel is in a removable tray in the top of the case. The tray equipment may be used separately as a complete test panel for shop purposes. Size: 14%x7x7%.

Cat. No. 610 List Price \$30.00

### Our Price \$17.64

#### **Electric Extension** Lamp Cord



S tect of cotton parallel wire with a live rubber attachment plug.

Cat. No. 7304 ....15c Our Price, Each ..... Per dozen .....

#### Counter Tube Testers

- No. 407 No. 105 - No. 406 -



Dealers ervicemen use the No. for checking all new and old tubes used in receiving sets. Test to penel gives structions.

operate. A single push button provides two plate current readings for determining the conductance and worth of a tube. A new and outstanding feature applies the same test to rectifier as all other types of tubes. A separate push button provides for testing both plates of '80 type tubes.

Cat. No. 406 Our Price .....

#### **Tube and Short Tester** Combined

The No. 407 tube tester combines with the No. 406 described above, a complete short test of the tube. All shorts, gas and leakage tests are made with the tube heated under operating conditions. Tube is tested for its worth in the same socket used for short testing. The pilot light for illuminating the dial is also used to indicate the shorts, gas and leakage condition.

Cat. No. 407

Our Price ...

No. 405 Tube Tester is similar to No. 405, but has a two scale meter and 412 volt grid battery.

Cat. No. 405 \$1470 Our Price .....

#### **Visual Tuning Meter**



Cat. No. 6762 990 Our Price ... 80 Less Escutcheon

Escutcheon Plate as shown Cat. No. 7330 15c

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 testiment when the needle swings to its furthest position. The transluscent dial is illuminated through the rear window. Comecomplete with cable leads, attachment studs and nuts.

#### READRITE Resistance Meter

No. 501 Resistno. bul Resistance meter is used in above ohnmeter. Furnished either with wide with wide flange as shown or narrow rim type for rear type for read clamping. A thoroughly retiable instrument at a popular price. Requires three analysis of the control of the con



quires three small flashlight cells, which with lesistance to be measured, are connected in series with meter. Used for testing resistances in radio receiving sets, and circuits generally. Fine for continuity tests.

Cat. No. 5389

List Price, \$2.50

Our Price \$1.47

#### READRITE

#### Portable Type Voltmeters



Readfite portable meters are of-fered in vari-ous ranges for particular purposes. The A.C. Volt-meters are of meters are of the repulsion type and can be used with equal accu-racy for either A.C. or D.C. testing. This type should

not be confused with the ordinary vane type instrument with its restricted applications. Readrite A.C. Voltmeters are accurately calibrated and have very uniform divisions throughout the scale lengths. The higher reading voltmeters contain over 100 ohms per volt resistance. The D.C. Voltmeters are of the polarized vane type. Standard package portable meters 25. Average weight 20 lbs.

#### VOLTMETERS Description

With 3 in. Case List Our Price Price Cat. No. Type 346, for testing "B"
Eliminators—0-300 V...\$4.00 \$2,40 5381 Type 347, for testing "B" Eliminators—0-500 V. . 5.00 3.00 With 216 in. Base Type 349-0-300 Volts... Type 246P-0-60-300 Volts, 92,640 Ohms ..... 3.00 1.80 5383

#### A.C.-D.C. VOLTMETERS

Cat.	List Price	
5385	For testing A.C. Current Supply Line—0-150 Volts	
	—Type 348\$4.00	\$2.40
6567	Type 355P-0-10-140 Volts A.C	2.40
5386	0-600 Volts A.CD.C 6.00	3.60
5387	0-150-750 Volts A.CD.C 8.00	4.80
5388	0-300 Volts A.CD.C 5.00	3.00
5390	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
5392	0-300 D.C. Milliammeter (.8 Ohm), Panel Mount -Type 399 1.00	.60
5393	0-50 V. UX Socket Test- ing Grid Voltmeter (15,400 Ohms) — Type 150	1.80
5394	o-10 V. Filament Meter for UX Sockets (100 Ohms)—Type 152 2.50	



Cat. No.	Type 0-50 V.	Each \$0.40	Box of 10 \$3.80
3575	0-50 V. 0-50 A.	.60	5.50
3579	0-10 V.	.40	4.20

# New Heights of perfection

reached with the

Acratone, AUTO-RADIO

FTER months of experimenting, ACRATEST A engineers have perfected a really marvelous automobile radio, utilizing the new type auto screen grid tubes throughout, giving uniformly good reception in all locations and the most simple of sets to install.

Now everybody can afford a radio in their ear! You can sell the ACRATONE 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

Five Tubes-2 RF Pentode Amplifiers No. 39

1 Tetrode Detector No. 36

1 Triode A.F. Amplifier No. 37 1 Pentode Output Stage No. 41

3 Tuned ciruits litz coils—high gain—fully shielded. Sensitivity—power—tone quality.

The new 41 power tube—indirect heater pen-tode—assures wonderful quality and ample power on only 135 volts (3 blocks of B Battery).

Lew battery consumption, only 20 M A.

Full range Super Dynamic Speaker, properly buffled especially matched to output of sel-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 installation.

Heavy steel battery bo ample for 3 heavy duty blocks of B Battery.

Shipping Weight Complete-42 lbs.

### New Scientific Refinements Bring —GREATER VOLUME! —CLEARER TONE!

-WIDER RANGE!

A highly perfected 5-tube chassis, designed by famous entiners specializing in Auto Redios, 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!



Compact

The ACRATONE Auto Radio is The ACRATONE Auto Radio is the most compact on the market. It measures only 5½ in. wide, 7½ in. long and 6½ in. high, and weighs 71bs. The Magnavox Dynamic Speaker is 7½ in. in diameter and housed in a metal case. with mounting prachets case, with mounting prackets and has a center bolt so that it may be easily mounted on the cowl, on the celling, on back of the driver's seat or on the dash.



LICENSED

The set is fully The set 1 fully enclosed in a hand ome black crackel finish metal box. Has illuminated draft and direct

Complete—Nothing Eise to

Buy

Here is what you get for \$24.50!

1-Magnavox Matched Dynamic Speaker.

Brackets, Screws, Nuts, Etc.

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 set.

1-Acratone 1933 Auto Radio.

-45V. Large B Batteries. 1-Complete Suppressor Kit. 1-Ward Auto Antenna.

5-Sylvania Tubes.

1-Steel Battery Box. 2-Snielded Cables.



Super - dynamic and peaker, enclosed in a cylindrical case matching the itself.



Substantial metal battery box for "B" batteries is also furnished.



11-Piece suppressors of finest quality are furnished with the

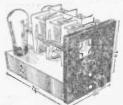
Wherever you are . . . in the city or in the country . . . whether you are driving or are parked . . . this marvelous Auto Radio will provide the Pick of the Air for your



#### 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 consumation. con.um tion:

The compact chassis is cadmium plated and is housed in a metal can. Only 2 serews to loosen in order to remove the chassis.



# 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,

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.

EARL (O) 31, 31S, 32, 32S, 33, 33S, 24, 41, 55, 56	3.00 3.75 3.25 3.85 3.50 2.45 3.50 2.85
EARL (0) 31, 31S, 32, 32S, 33, 33S, 24, 41, 55, 56	3.75 3.25 3.85 3.50 2.45 3.50 3.50 2.85
55, 56  £CARL (O), 55, 56  £CARL (O), 55, 56  £CHOPHONE (O), 8 Tube	3.75 3.25 3.85 3.50 2.45 3.50 3.50 2.85
EARL (0), 55, 56 ECHOPHONE (0), 8 Tube	3.25 3.85 3.50 2.45 3.50 3.50 2.85
ECHOPHONE (0), 8 1456	3.85 3.50 2.45 3.50 3.50 2.85
ECHOPHONE (0), 8 1456	3.85 3.50 2.45 3.50 3.50 2.85
EDISON (D), R4	3.50 2.45 3.50 3.50 2.85
EDISON (D), R2, C2 Plate Trans 6998 EDISON (D), R2, C2 Plate Transformer 6998 EDISON. R1, R2, C2 Plate Transformer 6998 EVEREADY (O), 30 6026 EVEREADY (O), 40, 50 2617  F FADA, 35 7226 FADA, 43 7228 FADA, 16, 17 7229	2.45 3.50 3.50 2.85
EDISON (D), R2, C2 Plate Transformer. 6993 EDISON, R1, R2, C2 Plate Transformer. 6993 EVEREADY (O), 30	3.50 3.50 2.85
EDISON, RI, RZ, CZ Plate Haistonia (2026) EVEREADY (0), 30	3.50 2.85
FADA, 35	2.85
FADA, 35	
FADA, 35	2 05
FADA, 35	2 05
FADA, 16, 17	2 05
FADA, 16, 17	3.33
FADA, 16, 17	3.95
FADA, 16, 17	3.95
FADA, 42, 44, 46, 47	
	3.95
	3.95
FADA, 42, 44, 45, 47. FADA, 50, 70, 71, 72 (420 Electric Unit) 7230 FADA, 50, 70, 71, 72 (180 Electric Unit) 7231	3.95
FADA, 75, 77	3.95
FADA, 45	3.95
FADA, 45	3.95
FADA (D), Special	3.50
	2.75
TO TEN (A) MARCH 18, 180, 19, 190, 90, 90, 90, 90, 90, 90, 90, 90, 90,	
60 Cycle	4.25
FREED-EISEMANN (O), MACCON 2410	3.95
I WCIP	
THE PROPERTY AND THE PROPERTY OF THE PROPERTY	4 25
	4.50
FREED-EISEMANN (O), NR85, 60 Cycle 2412	4.50
FIGURE TO ETCENTANN (III). WIGHEL TO. OU CYCLE,	
	2.2
FREED-EISEMANN (O), NR73 2662	4.50
FREED-EISEMANN (O), NRCO. 2661	4.2
	2.9
	2.9
FRESHMAN (D), ERAC 6842	4.8
FRESHMAN (O), Model G-60-S, 60 Cycle	
FRESHMAN (O), Model G-60-5, 60 5555 2419	2.2
	-
FRESHMAN (O), Model G-60-S, 60 Cycle	
(Pilament)	.9
2553	3.5
FRESHMAN (O), EAC	3.5
MADESTRALAN (11) EISHEIL TISHSIOIHEA	5.5
PERECUENTANI (OI) N 25 CVCICS	
WIND TROTTON AND TOOL OF THE CVCCC	3.8
	4.5
I WIND STREET AND COLD COLD COLD COLD COLD COLD COLD COL	6.0
THE WAR CHITSTANI (OI N) KII CVCICS	5.5
PREDILIMAN (O), 11, 00 cjeles 2627	5.
FRESHMAN (U), Q, 20 Cycle	
C	
CENERAL ELECTRIC (D). T41 2531	1.
A CENT DIECEDIC (O) HRI HSI HILLAND 4010	1.
GEN. ELECTRIC (O), 1131, 1101, 1101, 2676	1.
GRAYBAR (U), 100, 110, 900 5044	3.
CDERF (O) SK4	0.
CRERE (O) 1931 Series with Clarostat Line	1 - 1
Pollest (6), 1001 5652	3.
K	
8504	4.
	4.
TELLOGG (D) 523 526	
TENDESTINITATE OF 24	3.
TERMINEDAY (D) 10 20 SU Series	2.
	4.
TANIGHT IN THE TANIA KOO 7235	3
KOLSTER INTERNATIONAL, MOD 7238	3
KOLSTER INTERNATIONAL, K80 1250	-
	-
(Continued on new page)	
(D)=Duplicate; (R)=Replacement.	
	K  KING (0), Power Pack. 6504  KELLOGG (D), 523, 526. 7000  KENNEDY, 26, 34 7234  KENNEDY (D), 10, 20, 30 Series. 6753  KNIGHT (D), P. T. and Choke. 2529  KOLSTER INTERNATIONAL, K90 7235  KOLSTER INTERNATIONAL, K80 7236

MAIL ORDERS TO See Terms on Page 3



or to our nearest branch

POWER TRANSFORMERS	6	Set	Model S	Cat.	
(Continued from page 96) Set Model Cat.		SLEEPER MONO	TROL. Type 70	7242	Price 3.50
K No.	Price	I SPARTUN (D), 6	31, B31 9, <b>79</b> A, 89 <b>A</b>	5851	3.40 2.98
KOLSTER INTERNATIONAL, K70 7237 KOLSTER INTERNATIONAL, K60 7238	3.95 3.95	1 SPARTON (O).	301, 564, 570, 750,	Part	
KOLSTER (D), K29	2.05	I SPARTON (D), 5	89	7039	3,8 <b>5</b> 4.75
RULSTER (U), 6H, K5	4.25 7.85	STEINITE (O), 40	31 OA, 40S, 40, 45A	5866	4.75 3.40
<b>KOLSTER</b> (0), 20, 21, 22, 23	4.95 3.95	I DITTITUTE IN OU	ER (D), 100A-B-E.	5364	3.95
KOLSTER (O), K38 5503	6.50	SIEWART WARN	(ER (D), 801 8014 8	09 7091	3.75 3.25
MULSTER (0), K43, 48, using 171A or 245	8.85	STROMBERG-CA	RLSON (D), 638	6768	6.50 4.50
KOLSTER (O), K44 5506	4.85 6.75	1 STRUMBERG-CA	RLSON (D), 635, 636 RLSON (D), 10, 10A,	3799	4.25
KOLSTER (0), K25, 27. 5718 KOLSTER (0), K24 2655	6.85	STROMBERG-CA	RLSON (D). 846	5601	5.25 4.50
M	5.50	STROMBERG-CAL	14	7244	$\frac{3.95}{3.95}$
MAJESTIC B ELIMINATOR (D) 2525	1.50	STROMBERG-CAI	RLSON, 29 RLSON (D), 40, 41	7245	3.95
MAJESTIC 91, 92 (227, 245, 280 tubes) 2612 MAJESTIC (D), 130, 131, 132, 233 6767	4.00 3.95	l l	Т	2003	4.50
MAJESTIC (D), 71, 72 (Pack No. 7BP6) 5104 MAJESTIC (D), 130A, 230A, 130, 131, 132,	4.00	TEMPLE (O), 8-6	0, 8-80, 8-90, 8-61, 8-81	, 8-91 5583	3.75
MAJESTIC 180 (Radio-Phono Combination)	5.25	U. S. TELEVISION	& RADIO (O), Gioria	atone 6250	2.35
(227, 250, 231)	7.50	U. S. KADIO & T.	ELE. (O), 561 ELE. (O), 540	2501	1.50 1.50
MAJESTIC (0), 71, 72 Filament and Plate transformers in one can	4.75	U. S. RADIO & T.	ELE. (O), 581	2510	1.50
MAJESTIC (0), 90B, 100B. 5872 MAJESTIC (0), 180 Filament. 5458	4.75	U. S. RADIO & T	ELE. (O), 680 ELE. (O), 681	2516	1.50 1.50
MAJESTIC (U). 180 Plate EACO	1.25 1.25	U. S. RADIO & T	ELE. (O), 682 ELE. (O), 1945	2507	1.50
MAJESTIC (0), 70 Series Filament. 5464 MAJESTIC (0), 70 Series Plate. 5468	.90		V		2.00
Plate	2.95	VICTOR (0), R-33	2, R45, 75 2, 25 Cycles	6830	2.90
MAJESTIC, 21, 22, 23	3.95	VICTOR (0), 14,	15, 17	2531	3.75 1.80
MAJESTIC, 50	3.95 3.95	VICTOR (O), RE	35, 39, 57, Part No. 6 73, Part No. 6173	2676	1.80
MAJESTIC (0), 90B, 100B Filament and Plate	4.75	VICTOR (0), RE	14, 15, 220 V. A.C.,	Part.	2.95
P	7.10		W		
PEERLESS (0), Courier, 65	2.75 4.85	WESTINGHOUSE	(0), WR4: (0), WR5, WR6, WR	2531	1.80 2.25
PHILCO (0), 20, 220	2.80 2.80	ZENITH (D). XES	Z	6841	3.25
PHILCO (0), 70	2.80	ZENITH (U), Supe	r 27. No. 4 Pack	2568	1.85
FRILCO (0), 82, 86	2.80 2.80	ZENITH (0), 53, 54	1, 12, 60 cycle 4 ,55, 52, 57, 62, 60, 61	64	2.75
PHILCO (0), 87	2.80 2.80	67, 522, 602, 613, 6 712, 722, 732, 77	522, <b>64</b> 2, 672, <b>7</b> 1, <b>7</b> 2, <b>7</b> 3	5422	4.25
PHILCO (O), (using 247 tubes). 6247 PHILCO (O), 95, 96, 296. 6246	2.80	ZENITH. 9		6841	3.25
FRILCO (0), 111, 112, 211, 212	2.80 2.80	ment transforme	Plate and Rectifier	111a- 5793	2.25
PHILCO (O), 500 Series	2.80 3.95		RANSFORMER		7
POLYDYNE (O), Model Q, 60 cycle (222 Tube)	3.25	Receivers		Cat. No.	Price
R	0.20	Atwater Kent Atwater Kent	40, 42, 46, 1st audio 46 Input	7057	.50
<b>RADIOLA</b> (0), 18, 25 Cycle	4.25	Atwater Kent	P.P. Output	7058 7168	.50
R C A (U), 17, 18, 33, 51, for 220 V A C 3734	1.80 3.95	Atwater Kent Atwater Kent	20, 30, 35, 37 41, 1st audio	2606 6896	
R C A (O), 41	2.50 2.25	Atwater Kent Brunswick	41, 2nd audio 32, 42 Input	6897	100
R C A (D), 48, 42	1.80 2.25	Columbia	902, 920	7204 5534	1.35 3.85
R U A (U), 50, 52, 25 Cycle	3.75	Crosley	126 D.C., 126-1 D.C., Double PP Input	7212	1.25
R C A (0), 66	3.50 1.80	Earl Earl	41 All	3720	1.50
R C A (0), 80, 82, 86, Part No. 61144. 2676 R C A (0), 104 Speaker. 6009	1.80	Freed	95	2515 3720	.85 1.50
R U A, 64, 67	4.50 9.45	General Motors Kolster	A Input Trans. K20, K21	726 <del>4</del> 5587	1.65 1.95
R C A SUPERETTE (0)	1.95 3.95	Philco	See Complete Phi Page 19.		ng on
R C A -VICTOR (0), R35, R39, RE57	1.80	RCA	17 18, 33, 51	2512	1.40
K C A (U), 34, 35, 39, 220 V. A C Part	1.80	R C A-Victor	4t 47, 66 Alı, Push-pull	5625 2566	.60
No. 62825 7294 R C A-VICTOR (O), 50, 55 7424	2.95 3.95	Sonora Stromberg Carlson	Input Transformer 846 Audio & Input	7266	.95
R C A (O), 80, 82, 86, 25 cycle, Part No. 62491	3.00	Victor Victor	All	6517 2581	2.75
SEARS ROEBUCK (0), Power Pack 6504		Zenith	All early models Push-pull pack	5744	.59
SILVERTONE (0), Power Pack 6504	4.50		50, 60, 70 series Interstage	6585	2.75

#### Blocks for Standard Filter Condenser

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 partiarm as wall as the originals.

to perform as well as th	Pa	rt No. C	at. No.	Price	Make	Models	Part No.	3120	1.50
Mark CC	A		7035	3.95	Freshman.	M12 (171 tube)		5013	3.50
Atwater Kent, 66 Atwater Kent, 37			5001 5395	1.85 1.35	Freshman,	Model G-60-S, 60 Cycle		2432	3.50 2.40
Atmater Kent. 44 (Con	denser				Freehman.	Model N-60-S, 60 Cycle		2433	3.75
and Choke)			7170	1.50	Freshman.	Model Q. 2Q, 3Q, 60		2434	2.75
Atwater Hent, 46 (concer-	al omily)		5396 6513	2.75 4.25	Cycle	Model QD, 60 Cycle		2439	2.75
Atwater Kent, 55, 55C, 55	E E		7051	.50	Freshman.	Model M-60-S, cu Cycle		2440	3.10
Atwater Kent, 66			70.25	.70	Freshman.	ABC Elim., 60 Cycle.		2442	1.60
Atwater Kent, To			10 6	.50		G			
Anex: 46, 46A			6834	1.85	Grebe ACE	complete with resistors		6624	3.95
Aper. 47, 47A			6836	2.25	Carles ST			6924	1.50 95
Armer 41			6837	2.25	Greene-Br	owne "B"		7287	30
Apex, 48, 48A			7 143	2.95		K		5000	1 22
tapes, con, const	30				Knapp, A	Elim. Condenser		5009 5020	1.35 2.00
F	10		7169	2.75	Kodel A	Elim. Single Condenser.		5019	3.75
Bosch, 501-2-3			67/2	2.75	Kodel, A I	Elim. Double Condenser.		5018	5.00
Rosch, 50 Series			29.18	3.25	Kodel, A	Elim. Triple Condenser. H, K5	2316	2815	3.25
Rosch 48			20.53	8.50	Kolster K	30. D.C	3844	5609	1.50
Bosch, 73			7249	2.95	Koleter K	23 Rectiner	000111	5612	1.95
Basel, a		1838	5613	2.45	Kolster K	25, 27, 28, 25 Cycle	3000	5615 2812	1.95 2.50
Brandes, Blo. 3.7 Mid.	4	4049	5614	.95	Kaleter K	21	. 0311	6774	2.50
Brandes, B11		5038	5519	1.95	Walster K	63		6775	2.75
Runner Tulley, 6-40, 6-4	1		6.925	2.50	Kolster, E	J, 6K		6776	2.50
Bremer-Tully, 8-20, 8-21			7251	3.95	Roister, 6				
Bromer-Tuliev, 14, 22, 81	. 04		6220	.49		M M		5031	2.25
Branswick, 14, 22, 81, 8			7203	1.85	Majestic,	"A" Elim		7256	3.45
Brunswick, 15, 22, 32, 42,	Pars 3209		1200	2.017	Majestic,	7P3, 25 Cycle		7257	3.45
	C		7107	1.08	Bio instin	7BP3		7258	3.45
Calonial, 39		40 70	7197	1.25 3.50	Majestic.	171 Sets		5026	2.25
Columbia, 950		4372	5311 7236	1.50	Malestic.	250 Sets	9	5027 5028	2.25
Columbia, C4			1390	2.00	nIn lectio	245 Sets	•	6678	2.25
	E		5405	2.75	Majestic,	90 B	•	5029	1.98
Earl, 31 and 32			5406	2.75	Malestie,	Master B. Super B Special Master B		5030	1.98
Fast 21 and 12			1840	3.50	Drajestic.	50	1.0	6838	2.50
Edison, R6, R7 Edison, R4, C4, R5			7252	2.95	Mohawk.	Using Majestic Pack	•	5032	2.5
Elkon, "A" Condenser			5009	1.35		р			
Fria. 224		5429	5624	2.50	Populoge	22		2856	3.9
Erin. A2			5006	2.00	Philes.	511	. 2200	2933	.6
Everendy, 50 Series			2988	2.95	Peerless.	70		6839 2933	3.0
	165			9.05	Philen 5	11	2200	2934	2.9
Fada, 18	2-	-1252MS	7179	3.95 3.25	Philen 8'	7	5701	2935	3.5
Ends 16, 11, 31,			7172 3012	3.75	Phileo. 8	7, 25 Cycle	3515	2936	2.9
Feda 25 352 40		1790X	3740	3.25	Philos W	lidget		3009	3.2
Forth 41 44, 46, 47			7:253	3.95	Philen 8	2		6621	2.9
Fada, 70 Fada, 'K'			6704	4.00	Philen, 6	2		6622	2.9
Fuels, A Eliminator			5009	1.35	Polydyne	Model Q. 60 Cycle		2437 2438	2.7
F-4- E420 for 50-70-71	2515 (		5410	3.25 3.25	Polydyne	Model QD. 60 Cycle	• •	2200	104
Easts 95 Part No 1780	30 St 1000000		3011	3.25		R		TOEO	6.9
Ends 25 Part No. 1801	N. HULLIAN		6512	3.25	Radiola.	105 Speaker		7259 6543	5.
The second secon			5416		Radiola.	64	0.0	7260	5.
Falls ADO Ellevingion	1 W				Radiola.	67	4.0	2714	2.3
Fada, ABO Eliminator Federal, D. E. P. G and	I District						0400		
Fada, ABO Eliminator Federal, D. E. F. G and Freed, Model 55, 56, 65,	70, 79, 79S,		2443	2.75	RCA, 17	22 61		2710	
Fada, ABO Eliminator Federal, D. E. F. G and Freed, Model 55, 56, 65,	70, 79, 79S,				RCA. 18	. 33. 61		2710 2715	
Fada, ABO Eliminator Federal, D. E. F. G. and Freed, Model 55, 36, 65, 90, 95 Freed-Elsemann, No. 1	70, 79, 79S, 6 "B" Elim.		2443 5010		RCA, 18	. 46	••	2715 5033	3.
Fada, ABO Eliminator Federal, D. E. F. G. and Freed, Model 55, 56, 65, 90, 95 Freed-Eisemann, No. 1 Block	70, 79, 79S, 6 "B" Elini.		5010	3.75	RCA, 18 RCA, 44 RCA, 41	, 46	8346	2715 5033 2726	3.
Fada, ABO Eliminator Federal, D. E. F. G. and Freed, Model 55, 56, 65, 90, 95 Freed-Eisemann, No. 1 Elock Freed-Eisemann, Mod	1 70, 79, 79S, 6 "B" Elim. el 411, 60			3.75	RCA, 18 RCA, 44 RCA, 41 RCA, 62	, 33, 61	8346 8487	2715 5033 2726 2659	3. 2. 1.
Fada, ABO Eliminator Federal, D. E. F. G. and Freed, Model 55, 56, 65, 90, 95 Freed-Eisemann, No. 1 Block Freed-Eisemann, Mod Cycle	1 H, 79, 79S, 6 "B" Elim. 6 411, 60 1 NR70, 60		5010 2428	3.75 3.95	RCA, 18 RCA, 44 RCA, 41 RCA, 62 RCA, 60	, 33, 61	8346 8487	2715 5033 2726 2659 6888	3. 2. 1. 2.
Fada, ABO Eliminator Federal, D. E. F. G. and Freed, Model 55, 36, 65, 90, 95 Freed-Eisemann, No. 1 Block Freed-Eisemann, Mod Cycle Freed-Eisemann, Mode Cycle	1 H. 79, 79S, 6 "B" Elim. el 411, e0 1 NRTO, 60		5010	3.75 3.95	RCA, 18 RCA, 44 RCA, 41 RCA, 62 RCA, 60 RCA, 80	2, 60	8346 8487	2715 5033 2726 2659	3. 2. 1. 2.
Fada, ABO Eliminator Federal, D. E. F. G. and Freed, Model 55, 56, 65, 90, 95 Freed-Eisemann, No. 1 Block Freed-Eisemann, Mod Cycle Freed-Eisemann, Mode Cycle Cycle	78, 79, 79S, 6 "B" Elim. el 411, 60 1 NRTO, 60		5010 2428	3.75 3.95	RCA, 18 RCA, 44 RCA, 41 RCA, 62 RCA, 60 RCA, 80 RCA, 10	, 33, 61 , 46 	8346 8487	2715 5033 2726 2659 6888 3721	3. 2. 1. 2.
Fada, ABO Eliminator Federal, D. E. F. G. and Freed, Model 55, 56, 65, 90, 95 Freed-Eisemann, No. 1 Block Freed-Eisemann, Mod Cycle Freed-Eisemann, Mode Cycle Freed-Eisemann, Mode Cycle	1 78, 79, 79S, 6 "B" Elim. 6 411, 60 1 NR70, 60		5010 2428 2429	3.75 3.95 3.75	RCA, 18 RCA, 44 RCA, 41 RCA, 62 RCA, 60 RCA, 10 RCA, 3 81951	33, 61 , 46 , 60 	8346 8487	2715 5033 2726 2659 6888 3721	3. 2. 1. 2. 1.
Fada, ABO Eliminator Federal, D. E. F. G. and Freed, Model 55, 56, 65, 90, 95 Freed-Eisemann, No. 1 Elock Freed-Eisemann, Mode Cycle Freed-Eisemann, Mode Cycle Freed-Eisemann, Mode Cycle	78, 79, 79S, 6 "B" Elim. 1 411, 60 1 NR70, 60 1 NR80, 60		5010 2428 2429 2430 2431	3.75 3.95 3.75 1.50	RCA, 18 RCA, 44 RCA, 41 RCA, 62 RCA, 60 RCA, 10 RCA, 3 81951 RCA, 3	, 33, 61 , 46 	8346 8487	2715 5033 2726 2659 6888 3721	3. 2. 1. 2. 1.
Fada, ABO Eliminator Federal, D. E. F. G. and Freed, Model 55, 56, 65, 90, 95 Freed Eisemann, No. 1 Block Freed Eisemann, Mode Cycle	78, 79, 79S, 6 "B" Elim. el 41J, 60 1 NR70, 60 1 NR80, 60 1 NR85, 60		5010 2428 2429 2430 2431 5420	3.75 3.95 3.75 1.50 3.10 3.30	RCA, 18 RCA, 44 RCA, 41 RCA, 62 RCA, 66 RCA, 80 RCA, 10 RCA, 3 81951 RCA, 3	33, 61 , 46 	8346 8487	2715 5033 2726 2659 6888 3721 3721 5445	3. 2. 1. 2.
Fada, ABC Eliminator Federal, D. E. F. G. and Freed, Model 55, 56, 65, 90, 95 Freed-Eisemann, No. 1 Block Freed-Eisemann, Mode Cycle Freed-Eisemann, 480 Freed-Eisemann, 480 Freed-Eisemann, 480	1 78, 79, 79S, 6 "B" Elim. 6 41J, 60 1 NR70, 60 1 NR80, 60 1 NR85, 60		5010 2428 2429 2430 2431 5420 5415	3.75 3.95 3.75 1.50 3.10 3.30 5.2.50	RCA, 18 RCA, 44 RCA, 41 RCA, 62 RCA, 66 RCA, 10 RCA, 3 81951 RCA, 3	, 33, 61 , 46	8346 8487	2715 5033 2726 2659 6888 3721	3. 2. 1. 2.
Fada, ABO Eliminator Federal, D. E. F. G. and Freed, Model 55, 56, 65, 90, 95 Freed Eisemann, No. 1 Elock Freed Eisemann, Mode Cycle Freed-Eisemann, 480 Freed-Eisemann, 480 Freed-Eisemann, 480 Freed-Eisemann, 480	1 78, 79, 798, 6 'B" Elim. el 411, 60 1 NR70, 60 4 NR85, 60 A.C.		5010 2428 2429 2430 2431 5420 5415	3.75 3.95 3.75 1.50 3.30 3.30 5.50 4.80	RCA, 18 RCA, 44 RCA, 41 RCA, 62 RCA, 60 RCA, 80 RCA, 18 RCA, 3	33, 61 , 46 	8346 8487	2715 5033 2726 2659 6888 3721 3721 5445	3. 2. 1. 2. 1.
Fada, ABO Eliminator Federal, D. E. F. G. and Freed, Model 55, 36, 65, 90, 95 Freed Elsemann, No. 1 Elock Freed Elsemann, Mode Cycle Freed-Elsemann, Mode Cycle Freed-Elsemann, Mode Cycle Freed-Elsemann, Mode Cycle Freed-Elsemann, 480	1 78, 79, 79S, 6 "B" Elim. el 411, 09 1 NRT0, 60 1 NRS5, 60 A.C		5010 2428 2429 2430 2431 5416 5418 3214	3.75 3.95 3.75 3.10 3.30 3.30 5.25 4.30 4.30	RCA, 18 RCA, 41 RCA, 41 RCA, 62 RCA, 60 RCA, 80 RCA, 10 RCA, 3 81951 RCA, 3	33, 61 46	8346 8487	2715 5033 2726 2659 6888 3721 3721 5445	3. 2. 1. 2.' 1.
Fada, ABO Eliminator Federal, D. E. F. G. and Freed, Model 55, 36, 65, 90, 95 Freed-Eisemann, No. 1 Block Freed-Eisemann, Mode Cycle Freed-Eisemann, 480 Freed-Eisemann, 480 Freed-Eisemann, 480 Freed-Eisemann, 480	78, 79, 79S, 6 "B" Elim. el 41J, 60 1 NR70, 60 1 NR80, 60 1 NR85, 60 A.C.		5010 2428 2429 2430 2431 5420 5415	3.75 3.95 3.75 1.50 3.10 3.30 3.30 3.30 3.30 3.30 3.30 3.3	RCA, 18 RCA, 41 RCA, 41 RCA, 62 RCA, 66 RCA, 80 RCA, 10 RCA, 3 81951 RCA, 3	33, 61 , 46 	8346 8487 No.	2715 5033 2726 2659 6888 3721 3721 5445	

<b>By-Pass</b>	Condensers	for	Standard	Sots
	O THE CHARLE A	TANK	PACTED SECTION	31-16

By-P	ass Co	nden	se
Sets and Models Atwater Kent	Capacity	Cat. No.	Price
37, 38, 40, 42, 44, 46	325 mfd. 15 mfd.	2985	\$0.6
Speaker Condenser Bosch	15 mig.	2984 7211	.7:
1928-1929 models	225 mfd. 130 mfd.	2983	.65
Brandes B-10	.6-C6 mfd.	5618	.30
Colonial 32	225 mfd.	3211	.65
Crosley	210 mfd. 1.5 mfd.	5807	.50
60S, 61S, 62S, 63S, 65S Roamio	W6471 W7944	2780	.21
41, 41A, 42, 704, 706	W4013C	5219 2980	.30
608, 618, 628, 638, 658	.6 mfd.	2781	.25
	W20449	5209	.40
	W22412 W20446	5210	.40
	W7753B	5211 5212	.55
	W20186	5213	.65
	W5943	5402	.25
	W6428 W20187	5403	.45
	W25426	5404 5398	.22
	W4919	5399	.38 .30
	W22995	5407	.42
	W7753	5408	.55
	W4968 W4313A	5409	.26
	W23736	5411 5412	.27
5 .	W20448	5427	.70
Dayfan All	21 mfd.	2761	.10
Earl All			
Eveready	.5 mfd.	2872	.15
1928-1929	225 mfd.		
1020	130 mfd.	2983	0.5
Fada		2303	.65
All	1. mfd.	2902	.35
Federal			.00
D, E, F, F, H	325 mfd.	2939	.40
	.001 mfd. 4 mfd.	2968	.05
Freed	4 mid.	5604	1.75
All	.5 mfd.	2872	.15
General Motors			
1930 Series A	31 mfd.	5214	.40
	1,202,685	5215	.65
	1,202,273 1,202,251	5216 5217	.50
	1,202.287	5218	.60 .85
Kellogg	1,203,860	5400	1,50
Kellogg All	Emfd	0.00	
Kolster	.5 mfd.	2752	.25
44, 45	35 mfd.	EC1"	F0
43, 48	.6-C mfd.	5617 5618	.50 .30
44, 45	1. mfd.	5627	.35
430, 32 D.C. 44, 45	C1-5 mfd.	5628	.30
6. 6L, 6F, 6M, 75	.5 mfd. 4. mfd.	5608	.20
6J	.6-C6 mfd.	5603 5581	.95
Majestic			.00
70, 90, 180	.5 mfd.	5448	.30
	25 mfd. 35 mfd.	5446 5447	.30
Peerless		JIZ (	.30
All Kylectron	.5 mfd.	2903	.30
	71 mfd.	2864	.30
	15 mfd. 31 mfd.	2904	20
Courier		2304	.39
65	31 mfd.)	7191	.45
Kennedy	100025")		
20	9x¼ mfd.)		
	1-1 mfd.)	7183	.48
			1.0

Sets and Models	Capacity	Cat. No.	Price
Radiola	- 11 10 10 10 10	ORDI 140.	A LICI
64, 67		4180	1 11
	325 mfd.	4182	1.75
	21 mfd. )	4181	.40
	125 mfd.)	4101	.45
80, 82, 86	31 mfd.)	3000	.15
	15 mfd.)	3000	.1.
42, 48	31 mfd.	3026	.15
44, 46, 47	.25-C25 mfd.	3028	.15
44, 46, 47	31 mfd.	3026	.15
	125 mfd.	3020	.10
All Models			
11104613	R.F. Choke		
Sparton	2001 mfd.	2910	doz. 1.25
All	½ mfd.	2000	
	1. mfd.	5833	.35
410	41 mfd.	6894	.35
Victor	=z mnu,	6608	.35
9-18, 9-54, 9-56	21 mfd.	4180	1.75
	125 mfd.	4180	1 00
Victor	av mitu.	4100	1.75
RE 14, 15	31 mfd.	3026	.15
	21 mfd.	3027	.15
J. S. Radio & Television	- 1- 11-041	3021	61.
2010/13/011	2378	2004	10-
	964A	5204 5205	1.25
	2628	5205	.75
	170	3013	.50
	2235B	5208	.35
Zenith		0200	1.25
50, 60, 76 ries	42 mfd.	6478	.69

# FILTER CONDENSER BLOCKS

		LOUI	
ı	(Continued from page 93)		
ı	Make Models Part No.	Cat. No.	Price
١	Sonora, Using 245 tubes	2914	1.85
ł	Sparton, 930	5039	3.50
Į	Sparton, AC 5	3159	3.50
Į	Sparton, AC7, 601, 62, 63	5040	3.50
ł	Sparton, 89	6576	3.95
	Sparton, 109	7261	4.95
ĺ	Spiitgori, M6	7263	2.95
ı	Stemite, 70	7262	2.95
l	Steinite, 45, 70A	5037	3.50
l	Stellife, 40A	5038	3.50
Į	Stewart Warner, 950, 100A	6575	3.25
ı	Stromberg-Carlson, 635, 636, 639	3723	4.50
l	Stromberg-Carlson, 641, 642, 652	0120	4.50
	654	6514	4.95
	Tr		1.0.,
	Temple, 8-60, 8-80, 8-90	2754	0.5
	Temple, Same as above for 25 cycles	2758	.95 .95
	Temple, 7-50, 7-80	2753	.95
		4100	.95
	U		
	U. S. Radio & Television, 46, 46A.	6777	1.75
	U. S. Radio & Television, 47, 47A.	6778	1.75
	U. S. Radio & Television, 41	6779	1.95
	U. S. Radio & Television, 48, 48A.	6780	1.95
	v		
	Victor, R-32, R-42, RE-45 and		
	RE-75	2709	.95
	victor, Electrola, Hyperion and		.00
	Borgia	3721	1.65
	w		2100
	Willard, B Elim. Condenser	5041	3.25
	Z		
	Zenith, ZE11, 12, 14, 18 PL1145	2800	1.35
	Zenith, ZE1835PX, 35APX and 37A	2701	4.50
	Zenith, ZE17333X and 353AX	2700	1.50
	Zenith, ZE10	3160	3.00
	Zenith, ZE13	3161	4.00
	Zenith, ZE6	3171	5.00
	Zenith, 39	3181	3.75
	Zenith, ZE8 (set of 2)	5042	7.50
	Zenith, ZE9 Pack	5043	2.50
	Zenith, 9E, 11E, 14E	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 dupli-

cates of the original controls.

These controls are the products of Frost, Centralab, Electrad, Clarostat and Yaxley.

The resistance taper, value, size of shaft, size 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.

Receiver Models Cat. 1	No. Price	Receiver Models Cat. No. 7409 Brunswick Panatrope	Price
014	8 \$9.70	Buckingham 80	.50
Acratone, 2, 3, 4, Midgets		Dulous M501	.90
All-American Lyric, K		Timbers 3/701	.65
III-American Mohawk, 90 series, C6, J 614		Bulova, C751	.85
All-American Mohawk, D		Bush & Lane, 10 12 3203	.65
All-American Mohawk, S80		Bush & Eane, 10 22.	
Amrad. 31. Bel Canto series	36 .50		.50
Amrad. 71, 7100, 70			.70
Anex. 80 series			70
Ampy, 40 series		Diamon 61 63 bb	.90
Angy 30 series		Clarion 40 45	
Atchison, 5 and 6	42 .50	Clasion 20	.65 .85
Atwater-Kent, 1928-29 Models 524	1.10	Clarica Of	
Atmotor Wort 61 61A 66	95 1.75	Clarione 112	.50
Atwater-Kent, 37, 38, 36, 44, 40, 42, 52 371	.40	Colonial 22 DC & 12 AC	1.25
Atwater-Kent, H2, H1	86 .50	Colomial 20 20DC	1.50
Atwater-Kent, 55. 55C, 60, 66		Colonial 31 33	.90
		Columbia Radio SG 8	.70
ALWALPPOREELL, DU CCIACA		1 Columbia Phone C11, 961, 902, C4, 980, K22 0100	.50
MINTERIOR OTIONS OF THE PROPERTY OF THE PROPER		Columbia Phono Cl. C2. C3	.50
		Columbia 39 24	.65
		Columbia, 31, 33	.90
		Colonial, 32	.45
		Crosley, 602, 608, 609, 610	.35
		Crosley, 704, 705, 706, 706DC, 804, 704B 6113	.35
		Crosley, 48P. Wigit	.50
Audiola, 8430		Crosley, 481. Wight 6105	.50
Audiola, 889	38 .50		.85
Audiola, 31	142 .50		.75
B			.65
	.50		.35
	42 .50		.50
	42 .50		.50
	42 .50	Crosley Roamin	.68
	42 .50		
PSOSCIE, 13. 12. 20 accessors to the contract of the contract	142 .50		.80
		Charley 704 Short Shatt.	.68
		Cuarles 96	.60
	840 1.75	D	
Rosch, 58	115 .80	Davien Navigator	.50
Possb 98 99	502 .90	I Dayfan 8AC. A5003. 5091	.50
Rosch 5 20, 20J. 20K. 20L. 31, 32, 73	075 .90	Dowley 5065	.50
Rosch SA	388 .93	Dayler 5057	.50
Parch 40	411 1.08	Dowfon 5051	.50
Dosch 54 74 20 20V 20K, 201, 31, 30, 13	412 .9	Dayfon 5 AC	.50
Rosch 80 84	410 .00	De Wald, 632	.70
Bosch 100 Auto Rodio	415 .68	De Wald, 032	
	725 .9	Edison, C1, C2, R1, R2 5378	.50
Bremer-Tully, 640, 641	100 .70	Edison Abbey	.60
Bremer-Tully, 7-70, 7-71	142 .50		.50
Bremer-Tully, 8-20, 8-21	127 .6		.50
Bremer-Tully, 6-20, 6-21	132 .5		
	170 .6	kela 745	1.40
	588 .9 180 .5	Fela SC Combination	
MIGWHIII AND THE ST. DO. DO THE STREET		Fart 21 22 24	
Browning-Drake, 69	142 .5	Feel 31 32 41 33	
Renweing-Drake, 70-71	189 .5	Reg 31S 32S 33S	
Brunswick, 10	101 1.0	*   Emonion F100A	
Rrunswick, 18	102 .6	Fyorogdy 1 2 3	
Remewick, 3KR8, 3KR0, 3KR6	1165 .4	Everandy 50 Series	1.75
Rrunswick, 5KR, 5KRO, 2KRO, 5KR6	165 .4		
Brunswick, 5NC8. 5NO, 5NC8	170 .5	0 7098	1.00
Brunswick, PR-17-8, R-1, K1104	1165 .7	Fada, 48, 49	
ATERISAN MUN, LIU-LI O, AULA, ALAUA	5185 .5		
Buttmomiale 14 91 and 91			
Brunswick, 14, 21 and 31		Fada, 45, 55, 51	68
Brunswick, 14, 21 and 31	5588 .5	Fada, 1653 AB	.68
Brunswick, 14, 21 and 31 Brunswick, S14, S21, 331, S81, S82	6588 .5 6223 .5		7 .68

# Volume Control Guide

Receiver Models	Cat. No.	Price	Receiver Models	Cat. No.	Price
Fada, 51	7098	.60	Lincoln, 31 Superhet	6185	.50
Fada, 35B	7099	1.40	M		
Fada, 265UA, 262, 265CA, RP-65UA, RP-65CA, 262UA, 262CA, RP-62UA, 262CA,			Majestic, 20 Series	5157	.90
RP-62UA, RP-62CA	5853	C.S.	Majestic, 130A, 230A	6139	.50
Fada, 7AC, 475UA, 472CA, SF45/75UA,	2022	.65	Majestic, 90, 91, 92, 100	6187 6184	.50
CA45/72	5841	.65	Majestic, 180, 181	5738	.35
Fada, 10, 11, 30, 31, 10Z, 11Z, 30Z, 31Z, 50,	0011	.00	Majestie, 90B, 100B	5696	.35
70, 71, 72	5842	.65	Majestic Equalizer, 90, 90B, 91, 92, 100, 100B	5698	1.25
Fada, 16, 17, 32, 16Z, 32Z, 18D.C	5842	.65	Majestic, 60, 160	7065	.60
Fada, 20, 20Z, 25, 25Z, 15M, 15MZ	5493	.65	Majestic, 15, 15B, 150, 155	7066	1.00
Federal, D, E, F	6126	.60	Majestic, 15, 15B, 150, 155 Tone Control	7067	.65
Federal, D, E, F Federal, G, H, K, M	6126	.60	Majestic, 25	7068	1.00
Freed, 65. 78, 79, 95	7188	.40	Majestic, 25, Tone Control	7069	.65
Freed, 78S, 79S, 95S	7190	.40	Majestic, 100	5844	.35
Freed-Eisemann, NR78, 79AC, NR90S, NR-			Majestic, 130	7401	.68
95AC NP00PG NP00AG NP05	6186	.50	Majestic, 30	7421	1.20
Freed-Eisemann, NR80DC, NR80AC, NR85.	3819	.50	Majestie, 50	7422	1.20
Freed-Elsemann, NR55DC, NR56DC, NR-	6100	20	Majestic, 50 Series	5697	.75
78DC, NR79DC	6189 3820	50	McMillan, 8AC, Series 900	6142	.50
Freed-Elsemann, NR55, NR56	2962	.35	Melorad, Cathedraltone	6175	.65
Freshman	7193	.60	N N	44	
Freshman, K60S, G, 2N, M, N	3772	1.35	Norden-Hauck, Super DZ-5A	6185	.50
Freshman, Q15, Q16, 3Q15, 3Q16, QD16S	3767	.35	P		
French, Jesse Jr., G.	7119	1.75	Peerless, 65	3763	.35
French, Jesse, 8, 5-093G	6119	1.25	Peerless, K71, 72	0603	.55
G			Peerless, K70	3040	.60
Garod, E. A	6190	.50	Philos, 511, 512, 513, 521, 87, 82, 86	6142	.50
General Electric, H-31, H-51, H-71	6141	.50	Phileo, 65	6186	.50
General Motors, A	5535	1.25	Philco, 95, 96, 96A, 296, 296A, 211, 211A,	2100	~~
General Motors, 120, 130, 140	7120	1.50	111, 111A, 30	6190	.50
General Motors, S3A, S3B, S2B, 252-3-4-5-6,			Phileo, 77, 77A, 20, 20A, 41D.C., 42D.C., 220, Phileo, 112, 112A, 112F, 212, 212A, 212E	E202	CO
28	7121	.90	220A, 70, 70A, 270, 270A	7383	.60 1.25
General Motors, S1A, S1B, 216, 217, 219, 250	7122	.90	Phileo, 50, 50A	6118 7404	1.20
General Motors, 510A, 220	7418	1.05	Phileo, 90, 90A	7405	1.20
General Motors, 59A, 59B	7319	1.05	Pilot, All-elec Air Scout, SG105 K106	6189	.50
Graybar, 700, 779, 900	6141	.50	Pilot. Midget, PE6SG, K122, 123, 124, 126,	***************************************	.00
Graybar 600	2956 4165	.45	128	6186	.50
rebe, AHI	3041	.85	Pilot, Auto 180	6188	.50
Drebe, SK4	3698	.50	Pilot, Pilotone, K108, K117	6142	.50
Grebe, AC7	3039	.60	R		
Grebe, De Luxe, AC6	3040	.60	Radiola, 33, 33 D.C	3762	.60
Grebe, HS-4, Model 5	7059	1.00	Radiola, All combinations	3794	.45
Grebe, HS-4, Model 5 Tone Control	7060	1.50	Radiola, 17, 41, 41DC	5741	.50
Grebe, HS-4, 1, 2, 3, 4	7061	1.00	Radiola, 48, 42	5158	1.45
Grebe, FiS-4, 1, 2, 3, 4 Tone Control	7062	.65	Radiola, 60, 62, 66	6138	.50
Grebe, HS-4	7063	.90	Radiola, 64, 67	3798	.50
Guibransen, 8, 9	6142	.50	Radiola, 80, 82, 86	6141	.50
H			Radiola, 44, 46, 47	3785	.41
Howard, Green Diamond, S.G.A., S.G.C	5160	1.25	Radiola, 21, 22, 46DC	6186	.50
Howard, 135, 395, 445, 495	6141	.50	Radiola, 18, 50, 51, 18DC Radiola, R10, R11, RAE26, RAE18	4165	.45
Howard, D4	7064	.85	Radiola, R7A. 7DC, 9DC, Superette	7070	.75
Jackson-Bell, 62	6588	00	Radiola, R5. R5X	7071 7072	.60
R	0000	.90	Radiette, F14	6146	.70
Kellogg, 523, 526, 524, 525, 527, 528	6142	.50	Radiola, 16	7403	.95
Kennedy. 10, 20, Royal 34, 26, 826B, 36, 38,	0.14	.00	RCA Victor, RAE59, 79, R50, 55, RE28	7389	.68
40, 22, 20. 32, 30	3203	.65	S	1000	,00
Kennedy, 60, 80	6190	.50	Sentinel. 11, 12, 15, 16, 104, 105, 440, 444,		
Kennedy, 56	7391	1.20	666, 666C	6142	50
Kennedy, 52A, 62 (tone control)	7392	.80	Sentinel, 108A, 109, 110, 111	7073	.50
Kennedy, 56, (tone control)	7393	.68	Sentinel, 118, 120	7974	1.00
Kennedy, 62	7394	.68	Silver, 710, 720, 724, 740, 35A, 34A, 36A	3039	.50
Rennedy, 52, 52A	7395	.80	Silver, 620, 770	2958	.50
King, J. H.	6141	.50	Silver, 712, 714, 722, 30, 30B, 60B, 75B, 90B.	6142	-50
King, E80, 81, FGH, 97, 98, Monarch	6142	.50	Sonora, 2PP25, 3R, 4R, 5R, A30, A32, B31,		-00
Kolster (Brandes), K20, K21, K23, K24, K28,			A36, A46, A40, 44	5378	.50
K22, K25, K27, K42, K45, B10, B15, B16	5725	.95	Sparton, 110, 931, 101, 103, 109, 301, 591,		acres,
Rolster (Brandes), K42, 43. 45	5254	1.15	593. 930	6589	.90
L			Sparton, 600, 610, 620, 737, 740, 750, 574, 870,		
Lang, BA5AC, BD6DC	6182	.50	589	6590	.90
Lang, F9DC, J7DC, M7AC, R8DC	6141	.50	And the Charles have been been a facilities and the contract of the contract o		
	6141	.50	Sparton, 111, 564, 570	7077	.80

MAIL ORDERS TO RESERVED See Terms on Page 3

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.	y rach	71 1140	Dec.:
Make Models and Values	No. Part	No. Cat.	Price
A		ance	me .
Amrad, A.C.—4,080 ohms		6857	.75
B 10,000			
Balkeit, AB6, 180A, 180B — 10,800		6858	.75
ohms Balkeit, B7, B9—24,800 ohm		6381	.95
Balkeit, G. 4 370 Ohm		6382	.55
Balkeit, C—4,370 ohm Brandes, B11—4,650 ohm	4919	3922	.40
Brandes, B-10			.75
Brandes, B-10 Brandes, B15, B16—2,955 ohms		6859	1.00
Bosch, 48, 49 Bosch, 60, 61—9.000 ohm		5750	.10
Bosch, 60, 61—9.000 ohm		5752 5848	1.00
Bosch, 54 D.C.—20 onm, Edison Base		2010	.00
Bremer-Tully, 820A, 8-21A - 13,400		5758	.75
ohms		6860	1.00
Brunswick, 3, 8, 10, 11, 13—5,110 011112 Brunswick, 3ER8—6,265 ohms		6861	1.00
Brunswick, SRU, X902, 3NW8-			
7.780 ohms		6862 6863 68 <b>64</b>	1.00
3,040 ohms		6863	1.00
4,470 ohms			1.00
Brunswick, PR6—11,700 onms		6865	1.00
C			
Colonial, 33, 34, 110,000 ohms tapped		4015	
at 60,000		4017 5453	.50 .95
Colonial, 32 D.C., 34.9 ohm		5727	.75
Colonial, 32, 33, 34—122,000 ohm Colonial, 36, 39 A.C.—165,000 ohms		0141	
tapped at 65,000		5636	.50
Colonial 22 34 35 - 80 000 0hms			
tapped at 25,000		7199	
tapped at 25,000		3969	
Colonial, 31 D.C.—Speaker Resistor Colonial, 31 D.C. 60 ohm	_	7205	3.00
Colonial, 31, A.C.		5674 5856	.75 .85
Colonial, 31 D.C., 60 onm	•		
Colonial, 28—7,200 ohm		6378 3924	.10
Colonial 36 D.C		7196	.95
Colonial, 36, D.C		4014	.39
Columbia, C5—7,835 ohms		3905	.40
Columbia, C5—7,335 ohms		4014	
Colonial, 950-50.000 onm	. 4010	5517	.30 .75
Columbia, 902, 950, 980—13-110 ohm	5478	5716 5521	.40
Columbia, 930—2,060 ohm		6699	40
Columbia, 980—6,155 ohm		5523	.40
Columbia, 902—430 ohm	4290	5523 5527	.30
Columbia, 902—430 ohm	•	6866	.75
Columbia, 902, 930, 980—2,220 ohms.		6866 6867 6868 6968	.75
Columbia, 931—9,035 ohms		6868	.75
Columbia, 931—9,035 ohms Columbia, 940—2,955 ohms		0968	1.00
Crosley, 602, 740-5,000 ohm, tapped	a	3965	.50
at 3475 Crosley, 50, 102—25.867 ohms	•	6710	
Crosley, 50, 102-25.007 Ullills		6711	
Crosley, 77, 77-1-4.295 ohms		6870	.95
Crosley, 40C, 601, 102C—6,515 ohms. Crosley, 77, 77-1—4,295 ohms. Crosley, 602, 704—650 ohms.		6871	.75
Make Models and Values	No.	No. Cat.	Price
E	Part	Cat.	
Edison, R-1, R-2, C-2-13,400 ohm.		6520	.75
Earl, Model 31-32, 32S-41, 5,000 ohm		3907	.35
F			
Freed, Model 65-78-79-95-90, 4,000	-		
750 ohm		3840	.45
Freed-Eisemann, 78, 79, 95 - 5,00	0	2005	.35
ohm	•	3907	.50

Freed-Eisemann, Model NR80, 1,750-		
2 000 chms	3842	,60
Freed-Eisemann, Model NR80, 4,000-	2042	co
350 ohms	3843	.60
Freed-Eisemann, Model NR85, 1,000-	3844	.80
350-2,000 ohms Freed-Eisemann, NR70, 85	5765	.80
Freed-Eisemann, NR80	5766	.80
Freed-Eisemann, 411 B Eliminator	5767	.80
Freshman, All N Models—18,000 ohms	3963	.65
Erechman G-10 950 ohms	3966	.65
Freshman, G10—6,560 ohms tapped at 1,100, 1,500, 1,460, 1,500, 1,000.		
at 1,100, 1,500, 1,460, 1,500, 1,000	3918	.75
Freshman, Gous-113,000 offins	5762	.75
Eveready—8,925 ohms	6872	1.00
G		
Community DA1	6393	1.50
General Motors, 16005 — 9,372 ohms tapped at 800, 59, 1,863, 2,000, 4,500 14547		
tapped at 800, 59, 1,863, 2,000, 4,500 14547	3169	.80
Canaral Mainrs, 202 (-2.102 Ullilla	6385	1.25
General Motors, 5524, 5525 — 6,300	2000	
ohms	6873	.75
General Motors, 5050-18,530 onms	6874	1.00
Graybar 678	6398	1.20
Grebe, SK4—D.C. Fliament Resistor.	4245 5768	2.00 1.00
Grebe, AC6-7,090 ohms	6512	1.00
Grebe, AC6—9,450 ohms	0312	1.00
K		
Kolster, 6-H, K-5	5513	.65
Kolster, 6J, 6K, 6L, 6F, 6R - 7,120	1001	00
ohms		.39
Kolster, K42—3,580 ohms		.40
Kolster, K38-4,430 ohms	5515	.50
Kolster, K24, K28-7,835 ohms 3983		.40
Kolster, 6J—6,560 ohms	3918	.75
Kolster, 6K, K20, K22, K25, K27-	4014	90
7.120 ohms	4014	.39
Kolster, K23—25,000 ohms	4024	.50
Kolster, 6H, 6K—Fixed Resistance 471: Kolster, K43—2,980 ohms		.25
Kolster, K43—2,980 ohms	5864	1.10
L		
L. I.vrie (Rudolph Wurlitzer), 6,200 tap-		
Lyric (Rudolph Wurlitzer), 6,200 tap-	6 3482	.80
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900Y-439-Re	6 3482	.80
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900Y-439-R		.80
Lyric (Rudolph Wurlitzer), 6,200 tap- ped at 2,000, 1,000, 3,000, 900Y-439-Ro M Majestic, 9P6—3,600 ohm Resistor 39		
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900¥-439-Re  Majestic, 9P6—3,600 ohm Resistor 39  Majestic, 30—10,471 ohms	9 5466	.25
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900Y-439-Remails.  Majestic, 9P6—3,600 ohm Resistor 39 Majestic, 30—10,471 ohms	9 5466	.25
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900Y-439-Re  Majestic, 9P6—3,600 ohm Resistor 39  Majestic, 30—10,471 ohms	9 54 <b>66</b> 6875	.25
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900Y-439-Re  Majestic, 9P6—3,600 ohm Resistor 39  Majestic, 30—10,471 ohms	9 54 <b>66</b> 6875	.25
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900Y-439-Remarks    M Majestic, 9P6—3,600 ohm Resistor 39 Majestic, 30—10,471 ohms    Philoo, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500    Line 511, 521, 531, 551, 551, 551, 541, 541.	9 5466 6875 5 3987	.25
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900Y-439-Remails of the second se	9 5466 6875 5 3987 W 5568	.25 1.00 .80 .95
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900Y-439-Removed Majestic, 9P6—3,600 ohm Resistor 39 Majestic, 30—10,471 ohms P  Philco, 76, 77, 77A—4,900 B Resistor tapped at 1,400. 1,500	9 5466 6875 5 3987 W 5568 0 3880	.25 1.00 .80 .95
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900Y-439-Removed Majestic, 9P6—3,600 ohm Resistor 39 Majestic, 30—10,471 ohms	9 5466 6875 5 3987 W 5568 0 3880 5771	.25 1.00 .80 .95 .60
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439-Remails of the state of the sta	9 5466 6875 5 3987 W 5568 0 3880 5771 5772	.25 1.00 .80 .95 .60 .75 .75
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439-Removed at 2,000, 1,000, 3,000, 900 Y-439-Removed at 2,000 ohm Resistor 39 Majestic, 30—10,471 ohms P  Philco, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500 386 Philco, 511, 521, 531, 551, 571, 541, 561, 581—23,965 ohms 3088 Philco, 20, 20A, 220, 220A—5,102 ohms 423 Philco, 65 Philco, 87 Polydyne—Using 250 Tube	9 5466 6875 5 3987 W 5568 0 3880 5771 5772 3963	.25 1.00 .80 .95 .60 .75 .75 .65
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439-Remail   M Majestic, 9P6—3,600 ohm Resistor 39 Majestic, 30—10,471 ohms P Philco, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500 386 Philco, 511, 521, 531, 551, 571, 541, 561, 581—23,965 ohms 3088 Philco, 20, 20A, 220, 220A—5,102 ohms Philco, 87 Philco, 87 Philco, 87 Polydyne—Using 250 Tube Polydyne—Using 171 Tube	9 5466 6875 5 3987 W 5568 0 3880 5771 5772	.25 1.00 .80 .95 .60 .75 .75
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439-Removed Majestic, 9P6—3,600 ohm Resistor 39 Majestic, 30—10,471 ohms P  Philco, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500 386. Philco, 511, 521, 531, 551, 571, 541, 561, 581, -23,965 ohms 3088 Philco, 20, 20A, 220, 220A—5,102 ohms Philco, 65 Philco, 87 Polydyne—Using 250 Tube R	9 5466 6875 5 3987 W 5568 0 3880 5771 5772 3963 3966	.25 1.00 .80 .95 .60 .75 .75 .65
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439-Remark M  Majestic, 9P6—3,600 ohm Resistor 39  Majestic, 30—10,471 ohms 9  Philco, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500 386. Philco, 511, 521, 531, 551, 571, 541, 561, 581—23,965 ohms 3088 Philco, 20, 20A, 220, 220A—5,102 ohms Philco, 65 9  Philco, 87 9  Polydyne—Using 250 Tube Polydyne—Using 171 Tube R  RCA, 33 D.C.—584 ohm tapped at 80. 257	9 5466 6875 5 3987 W 5568 0 3880 5771 5772 3963 3966	.80 .95 .60 .75 .65 .65
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439-Removed at 2,000, 1,000, 3,000, 900 Y-439-Removed at 2,000, 1,000 and Resistor 39 Majestic, 30—10,471 ohms 39 Majestic, 30—10,471 ohms Philco, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500 386 Philco, 511, 521, 531, 551, 571, 541, 561, 581—23,965 ohms 3088 Philco, 20, 20A, 220, 220A—5,102 ohms Philco, 65 423 Philco, 65 423 Philco, 87 423 Philco, 87 423 Philco, 87 424 Polydyne—Using 171 Tube R	9 5466 6875 5 3987 W 5568 0 3880 5771 5772 3963 3966 1 3871 2 3872	.80 .95 .60 .75 .75 .65 .65
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439-Removed at 2,000, 1,000, 3,000, 900 Y-439-Removed at 2,000 ohm Resistor 39 Majestic, 30—10,471 ohms P  Philco, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500 386 Philco, 511, 521, 531, 551, 571, 541, 561, 581—23,965 ohms 3088 Philco, 20, 20A, 220, 220A—5,102 ohms Philco, 65 Polydyne—Using 250 Tube Polydyne—Using 250 Tube Polydyne—Using 171 Tube R  RCA, 33 D.C.—584 ohm tapped at 80. 257 RCA, 18, 33, 51—3,940 ohms 224 RCA, 17—voltage divider, 8,195 ohms.	9 5466 6875 5 3987 W 5568 0 3880 5771 5772 3963 3966	.80 .95 .60 .75 .65 .65
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439-Removed at 2,000, 1,000, 3,000, 900 Y-439-Removed at 2,000 ohm Resistor 39 Majestic, 30—10,471 ohms P  Philco, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500 386 Philco, 511, 521, 531, 551, 571, 541, 561, 581—23,965 ohms 3088 Philco, 20, 20A, 220, 220A—5,102 ohms Philco, 65 Polydyne—Using 250 Tube Polydyne—Using 250 Tube Polydyne—Using 171 Tube R  RCA, 33 D.C.—584 ohm tapped at 80. 257 RCA, 18, 33, 51—3,940 ohms 224 RCA, 17—voltage divider, 8,195 ohms.	9 5466 6875 5 3987 W 5568 0 3880 5771 5772 3963 3966 1 3871 2 3872 3030	.80 .95 .60 .75 .65 .65
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439-Removed at 2,000, 1,000, 3,000, 900 Y-439-Removed at 2,000, 1,000 and Resistor 39 Majestic, 30—10,471 ohms 39 Majestic, 30—10,471 ohms 39 Majestic, 30—10,471 ohms 39 Majestic, 30—10,471 ohms 386 Philco, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500 386 Philco, 511, 521, 531, 551, 571, 541, 561, 581—23,965 ohms 3088 Philco, 20, 20A, 220, 220A—5,102 ohms Philco, 65 3088 Philco, 65 3088 Philco, 65 3088 Philco, 87 3088 Philco, 90	9 5466 6875 5 3987 W 5568 0 3880 5771 5772 3963 3966 1 3871 2 3872 3030	.80 .95 .60 .75 .75 .65 .65
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439-Remails of the ped at 2,000, 1,000, 3,000, 900 Y-439-Remails of the ped at 1,400 of tapped at 1,501, 531, 551, 571, 541, 561, 581—23,965 ohms of tapped at 2,3965 ohms of tapped at 80 of tapped 2,3965 ohms ohms of tapped 2,3965 ohms ohms of tapped 2,3965 ohms ohms ohms of tapped 2,3965 ohms ohms ohms ohms ohms ohms ohms ohms	9 5466 6875 5 3987 W 5568 0 3880 5771 5772 3963 3966 1 3871 2 3872 3030 3 6396	.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-Remediate (Section 1), 471 ohms M  Majestic, 9P6—3,600 ohm Resistor 39  Majestic, 30—10,471 ohms 39  Philco, 76, 77, 77A—4,900 B Resistor tapped at 1,400. 1,500 386.  Philco, 511, 521, 531, 551, 571, 541, 561, 581, -23,965 ohms 3088  Philco, 20, 20A, 220, 220A—5,102 ohms 423  Philco, 87  Polydyne—Using 250 Tube RCA, 13, 33, 51—3,940 ohms 224  RCA, 17—voltage divider, 8,195 ohms.  RCA, 44, 46, 47—8,250 ohms, tapped at 2750, 900, 3500, 1100 254  RCA, 33 D.C., 46 D.C.—48 ohms, tapped at 16	9 5466 6875 5 3987 W 5568 0 3880 5771 5772 3963 3966 1 3871 2 3872 3030	.80 .95 .60 .75 .65 .65
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439-Remover American Series of S	9 5466 6875 5 3987 W 5568 0 3880 5771 5772 3963 3966 1 3871 2 3872 3030 3 6396 2582	.25 1.00 .80 .95 .60 .75 .75 .65 .65 .25 .30 .60 1.05
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900Y-439-Removed at 2,000, 1,000, 3,000, 900Y-439-Removed at 2,000, 471 ohms  Majestic, 9P6—3,600 ohm Resistor 39 Majestic, 30—10,471 ohms  P Philco, 76, 77, 77A—4,900 B Resistor tapped at 1,400. 1,500 386 Philco, 511, 521, 531, 551, 571, 541, 561, 581—23,965 ohms 3088 Philco, 20, 20A, 220, 220A—5,102 ohms Philco, 65 Philco, 65 Polydyne—Using 250 Tube R RCA, 33 D.C.—584 ohm tapped at 80. 257 RCA, 18, 33, 51—3,940 ohms 224 RCA, 17—voltage divider, 8,195 ohms. RCA, 44, 46, 47—8,250 ohms, tapped at 2750, 900, 3500, 1100 254 RCA, 105 Speaker—3,825 ohms, tapped at 16 RCA, 105 Speaker—3,825 ohms, tapped at 1050. 1475	9 5466 6875 5 3987 W 5568 0 3880 5771 5772 3963 3966 1 3871 2 3872 3030 3 6396 2582 6554	.25 1.00 .80 .95 .60 .75 .75 .65 .65 .25 .30 .60 1.05
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900Y-439-Removed at 2,000, 1,000, 3,000, 900Y-439-Removed at 2,000, 10,471 ohms  Phileo, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500	9 5466 6875 5 3987 W 5568 0 3880 5771 5772 3963 3966 1 3871 2 3872 3030 3 6396 2582 6554 5867	.80 .95 .60 .75 .65 .65 .25 .30 .60 1.05 .75
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439-Removed at 2,000, 1,000, 3,000, 900 Y-439-Removed at 2,000, 1,000 at Resistor 39 Majestic, 9P6—3,600 ohm Resistor 39 Majestic, 30—10,471 ohms  P  Philco, 76, 77, 77A—4,900 B Resistor tapped at 1,400. 1,500 386 Philco, 511, 521, 531, 551, 571, 541, 561, 581—23,965 ohms 3088 Philco, 20, 20A, 220, 220A—5,102 ohms Philco, 65 Philco, 87 Polydyne—Using 250 Tube Polydyne—Using 171 Tube RCA, 33 D.C.—584 ohm tapped at 80. 257 RCA, 18, 33, 51—3,940 ohms 224 RCA, 17—voltage divider, 8,195 ohms. RCA, 44, 46, 47—8,250 ohms, tapped at 2750, 900, 3500, 1100 254 RCA, 33 D.C., 46 D.C.—48 ohms, tapped at 16 254 RCA, 105 Speaker—3,825 ohms, tapped at 16 254 RCA, 41, Receptor Pack—25,300 ohms RCA, 64—7,780 ohms	9 5466 6875 5 3987 W 5568 0 3880 5771 5772 3963 3966 1 3871 2 3872 3030 3 6396 2582 6554 5867 5784	.25 1.00 .80 .95 .60 .75 .75 .65 .65 .25 .30 .60 1.05
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439-Removed at 2,000, 1,000, 3,000, 900 Y-439-Removed at 2,000, 1,000 at Resistor 39 Majestic, 9P6—3,600 ohm Resistor 39 Majestic, 30—10,471 ohms  P  Philco, 76, 77, 77A—4,900 B Resistor tapped at 1,400. 1,500 386 Philco, 511, 521, 531, 551, 571, 541, 561, 581—23,965 ohms 3088 Philco, 20, 20A, 220, 220A—5,102 ohms Philco, 65 Philco, 87 Polydyne—Using 250 Tube Polydyne—Using 171 Tube RCA, 33 D.C.—584 ohm tapped at 80. 257 RCA, 18, 33, 51—3,940 ohms 224 RCA, 17—voltage divider, 8,195 ohms. RCA, 44, 46, 47—8,250 ohms, tapped at 2750, 900, 3500, 1100 254 RCA, 33 D.C., 46 D.C.—48 ohms, tapped at 16 254 RCA, 105 Speaker—3,825 ohms, tapped at 16 254 RCA, 41, Receptor Pack—25,300 ohms RCA, 64—7,780 ohms	9 5466 6875 5 3987 W 5568 0 3880 5771 5772 3963 3966 1 3871 2 3872 3030 3 6396 2582 6554 5867	.80 .95 .60 .75 .65 .65 .25 .30 .60 1.05 .75 1.45 1.00 1.25
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439-Removed at 2,000, 1,000, 3,000, 900 Y-439-Removed at 2,000, 471 ohms	9 5466 6875 5 3987 W 5568 0 3880 5771 5772 3963 3966 1 3871 2 3872 3030 3 6396 2582 6554 5867 5784	.25 1.00 .80 .95 .60 .75 .75 .65 .65 .25 .30 .60 1.05 .75
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439-Removed at 2,000, 1,000, 3,000, 900 Y-439-Removed at 2,000, 471 ohms	9 5466 6875 5 3987 W 5568 0 3880 5771 5772 3963 3966 1 3871 2 3872 3030 3 6396 2582 6554 5867 5785	.80 .95 .60 .75 .65 .65 .25 .30 .60 1.05 .75 1.45 1.00 1.25
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439-Removed at 2,000, 1,000, 3,000, 900 Y-439-Removed at 2,000 colors at 2,000 c	9 5466 6875 5 3987 W 5568 0 3880 5771 5772 3963 3966 1 3871 2 3872 3030 .3 6396 2582 6554 5867 5784 5785	.80 .95 .60 .75 .65 .65 .30 .60 1.05 .75 1.45 1.00 1.25 1.25
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439-Removed at 2,000, 1,000, 3,000, 900 Y-439-Removed at 2,000 colors at 2,000 c	9 5466 6875 5 3987 W 5568 0 3880 5771 5772 3963 3966 1 3871 2 3872 3030 3 6396 2582 6554 5867 5784 5785 6398 6876	.25 1.00 .80 .95 .60 .75 .75 .65 .65 .25 .30 .60 1.05 .75 1.45 1.25 1.25
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439-Removed at 2,000, 1,000, 3,000, 900 Y-439-Removed at 2,000 colors at 2,000 c	9 5466 6875 3987 W 5568 0 3880 5771 5772 3963 3966 1 3871 2 3872 3030 3 6396 2582 6554 5867 5784 5785 6398 6876 6877	.25 1.00 .80 .95 .60 .75 .65 .65 .25 .30 .60 1.05 1.25 1.25 1.25 1.20 .75 .75
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439-Removed at 2,000, 1,000, 3,000, 900 Y-439-Removed at 2,000 ohm Resistor 39 Majestic, 30—10,471 ohms  P Philco, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500 386 Philco, 511, 521, 531, 551, 571, 541, 561, 581—23,965 ohms 3088 Philco, 20, 20A, 220, 220A—5,102 ohms Philco, 65 Philco, 87 Polydyne—Using 250 Tube	9 5466 6875 5 3987 W 5568 0 3880 5771 5772 3963 3966 1 3871 2 3872 3030 .3 6396 2582 6554 5867 5784 5785 6398 6876 6877 6878	.25 1.00 .80 .95 .60 .75 .75 .65 .65 .25 .30 .60 1.05 .75 1.25 1.25 1.25 1.25
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439-Remover at 2,000, 1,000, 3,000, 900 Y-439-Remover at 2,000 to make a sister 39 Majestic, 30—10,471 ohms P  Philco, 76, 77, 77A—4,900 B Resister tapped at 1,400, 1,500 386 Philco, 511, 521, 531, 551, 571, 541, 561, 581—23,965 ohms 3088 Philco, 20, 20A, 220, 220A—5,102 ohms Philco, 87 Polydyne—Using 250 Tube Polydyne—Using 171 Tube R  RCA, 33 D.C.—584 ohm tapped at 80. 257 RCA, 18, 33, 51—3,940 ohms 224 RCA, 17—voltage divider, 8,195 ohms. RCA, 44, 46, 47—8,250 ohms, tapped at 2750, 900, 3500, 1100 254 RCA, 33 D.C., 46 D.C.—48 ohms, tapped at 16 RCA, 105 Speaker—3,825 ohms, tapped at 1050, 1475 254 RCA, 41, Receptor Pack—25,300 ohms RCA, 64—7,780 ohms RCA, 41, Receptor Pack—25,300 ohms RCA, 64—7,780 ohms RCA, 41, 46, 47—2,580 ohms RCA, 44, 46, 47—2,580 ohms RCA, 44, 46, 47—2,580 ohms RCA, 47,44, 46, 47—2,580 ohms RCA, 64—7,335 ohms RCA, 42, 48 S	9 5466 6875 5 3987 W 5568 0 3880 5771 5772 3963 3966 1 3871 2 3030 3 6396 2582 6554 5785 6398 6876 6877 6878 6879	.25 1.00 .80 .95 .60 .75 .75 .65 .65 .25 .30 .60 1.05 1.25 1.20 .75 .75 1.20
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439-Remover Ammajestic, 9P6—3,600 ohm Resistor 39 Majestic, 30—10,471 ohms P  Philco, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500 386 Philco, 511, 521, 531, 551, 571, 541, 561, 581—23,965 ohms 3088 Philco, 20, 20A, 220, 220A—5,102 ohms Philco, 87 Pollydyne—Using 250 Tube Pollydyne—Using 171 Tube R  RCA, 33 D.C.—584 ohm tapped at 80 257 RCA, 18, 33, 51—3,940 ohms 224 RCA, 17—voltage divider, 8,195 ohms. RCA, 44, 46, 47—8,250 ohms, tapped at 2750, 900, 3500, 1100 284 RCA, 105 Speaker—3,825 ohms, tapped at 16 RCA, 41, Receptor Pack—25,300 ohms RCA, 61—7,780 ohms RCA, 41, Receptor Pack—25,300 ohms RCA, 64—7,780 ohms RCA, 41, Receptor Pack—25,300 ohms RCA, 64—7,780 ohms RCA, 44, 46, 47—2,580 ohms RCA, 67—4,030 ohms RCA, 67—4,030 ohms RCA, 42, 48	9 5466 6875 5 3987 W 5568 0 3880 5771 5772 3963 3966 1 3871 2 3030 3 6396 2582 6554 5785 6398 6876 6877 6878 6879	.25 1.00 .80 .95 .60 .75 .75 .65 .60 1.05 .75 1.45 1.00 1.25 1.25 1.20 .75 .75
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439-Remover Ammajestic, 9P6—3,600 ohm Resistor 39 Majestic, 30—10,471 ohms P  Philco, 76, 77, 77A—4,900 B Resistor tapped at 1,400, 1,500 386 Philco, 511, 521, 531, 551, 571, 541, 561, 581—23,965 ohms 3088 Philco, 20, 20A, 220, 220A—5,102 ohms Philco, 87 Pollydyne—Using 250 Tube Pollydyne—Using 171 Tube R  RCA, 33 D.C.—584 ohm tapped at 80 257 RCA, 18, 33, 51—3,940 ohms 224 RCA, 17—voltage divider, 8,195 ohms. RCA, 44, 46, 47—8,250 ohms, tapped at 2750, 900, 3500, 1100 284 RCA, 105 Speaker—3,825 ohms, tapped at 16 RCA, 41, Receptor Pack—25,300 ohms RCA, 61—7,780 ohms RCA, 41, Receptor Pack—25,300 ohms RCA, 64—7,780 ohms RCA, 41, Receptor Pack—25,300 ohms RCA, 64—7,780 ohms RCA, 44, 46, 47—2,580 ohms RCA, 67—4,030 ohms RCA, 67—4,030 ohms RCA, 42, 48	9 5466 6875 5 3987 W 5568 0 3880 5771 5772 3963 3966 1 3871 2 3872 3030 3 6396 2582 6554 5867 5785 6398 6876 6877 6878 6879 6398	.25 1.00 .80 .95 .60 .75 .75 .65 .65 .25 .30 .60 1.05 1.25 1.20 .75 .75 1.20
Lyric (Rudolph Wurlitzer), 6,200 tapped at 2,000, 1,000, 3,000, 900 Y-439-Remover 2,000, 1,000, 3,000, 900 Y-439-Remover 2,000, 900 Y-439-Remover 2,000 Y-439-Remover	9 5466 6875 5 3987 W 5568 0 3880 5771 5772 3963 3966 1 3871 2 3030 3 6396 2582 6554 5785 6398 6876 6877 6878 6879 6398	.25 1.00 .80 .95 .60 .75 .75 .65 .65 .25 .30 .60 1.05 .75 1.25 1.20 .75 .75 1.20

MAIL ORDERS TO RESERVED See Terms on Page 3

Federated Purchaser Inc.

VOLTACE DIVIE	ימבו	7			
VOLTAGE DIVID			VOLUME CONTROL G	UIDE	
Par	No.	Price	(Continued from page 101)		
Silver-Marshall, 651-7,200 ohm tap- ped at 6,200 (large)	3186	1.06	Receiver Models Sparton, 410, 420, 9A, 600A, 610A, 620A	Cat. No.	Price
Silver-Marshall, 651 - 9 720 obms	3100	1.85	Sparton, 25, 26	7078	1.75
(SILIAII)	3167	1.10	Sparton, 15	7307	1.05
Silver-Marshall, 672—5,500 ohms Sonora, A33	3168	.75	Sparton, 10.	7200	1.05
Sparton, 110-7,000 tapped at 2,000. A4260	5773	1.00	Sparton, 5, 9	7300	1.05
Sparton, De Luxe-7,000 A353	0 3976 5 3977	.80	Sparton, AR19	7410	.80
Sparton, 110 A.C.—10,000	3 3978	.50	Sterling Midget Sterling, 1930 Models inclusive	7420	1.40
Sparton, 301, 931—110 ohms	5857	.20	Stewart-Warner, 50, 40, 102, 40C, 60C, 70,	6119	1.25
Sparton, 110-29,000 ohms	6880	.95	80, 95, 991, 992, 993	9041	.60
Splitderf, 153C	5774	1.00	Stewart-Warner, 900 Series	2941	.60
at 3,500, 3,500, 2,800	3873	.40	Stromberg Carlson, 19, 20, 21	7384	.60
Stewart-Warner - 15,000 tapped of		.40	Stromberg Carlson, 12, 14	7385	.95
10,000	3990	.95	Stromberg Carlson, 20, 21 (tone control)	7386	.95
Stewart-Warner-600 ohms C.T 62163 Steinite, 991-2,500 ohms		.50	Splitdorf, E175	7387	80.
Steinite, 50—25,877 ohms	6881	.75	Stewart-Warner, 950 and R100 Series	5739	.85
Steinite, 70, 80, 95, 22, 440 ohms	6882 6400	.95	Stewart-Warner, 715, 720	3750	.25
Stromberg-Carlson, 19, 20-3,285 pluns	6883	.75	Storey & Clark, 36, 43, 51.	7079	.65
Stromberg-Carlson, 638-9,000 olims	6884	.75	Story & Clark, 3A, 4.	6142	.50
Stromberg-Carlson, 10, 11-4,880 ohms	5775	1.25	Stramberg-Carlson, 846, 848 Front, Stromberg-Carlson, 846, 848, Rear	6591	.55
Stromberg-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	6593 3203	.55
Stromberg-Carlson, 403-3,770 ohms.	5778	1.00	Stromberg-Carlson, 638 R gr	6593	.75
Stromberg-Carlson, 635, 636 — 9 270	5780	1.00	Stromberg-Carlson, 635, 636	3208	.70
ohms	5586	.95		3210	.65
ohms	5781	1.38	Stromberg-Carlson, 641, 642, 652, 654	3206 3205	.50
Stromberg-Carlson, 846, 848 - 6380		1.00	Steinite, 36, 43, 51	6142	.75
ohms	5782	1.13	T	0.12	.50
Olims	5783	1.25	Temple, 8-60, 8-80, 8-90.	3802	.25
Stromberg-Carlson, 635 D.C. — 30 ohms	5847	6.0	Temple, 861, 881, 891	5243	1.75
T	2041	.75	Victor, R14, R15, R17.		
mple, 8-60, 8-80, 8-90-6 850 ohms	3864	.30	Victor, 1-25	5158 7030	1.45
emple. D. C.—33 ohme	3867	.35	VICTOR, 7-11	7081	.55
Temple, All—1,500 ohm audio bias Temple, D. C.—250 ohm tapped at 50	3861 3865	.30	Victor, R32, RE45, RE52, RE75. Victor, R34, R35, RE39, RE57.	5740 6501	.95
Inorardson, 210 Resistor—8 000 ohm	2000	.25	Victor, RE73	7289	1.75
tapped at 6,800	3163	.60	PL.		
tapped at 2,000, 3,000, 3,000, 3000			Ware, SB45	7082	.90
Models and Values No.	No. Cat.	Price	Ware, SBF	7083	.90
and 2,000	3162	.95	ware, SBA	7084 7085	.85
V			Ware, D.1 D.0	7086	.80
Victor, R-32, R-42, RE-45 and RE-75		1	Wells-Gardner, C. CG, 82, 72.	7087 6142	.80
2,525 ohm tapped at 200, 1,350, 200 and 775	3170	.65	wens-wardner, 13-10	7088	.75
Victor, 9-54, 9-18-4,470 ohms	6397	.95	Westinghouse, WR5, WR6, WR7	7089 6141	1.00
Victor, 7-11, 7-25, 7-26, 9-16 8,195 ohms	6885		Westinghouse, Wha	5158	1.45
Victor, 9-18-7,935 ohms	6886	.75	westinghouse, WRIU	7402	.80
Victor, 9-18-3,670 ohms	6887	.95	Zanev Gill 51	-	
W	6398	1.20	Zaney Gill, 54 Control	7090 7091	.85
Westinghouse, WR4-4,805 ohms	8300	1.00	Zenith, AH, CH, RH, 2012	7092	.65
Z	6398	1.20	Zenith, 33, 34, 35, 35A, 342, 352, 352A, 362, 35APX, 11, 12, 14, 15, 16, 17, 31, 32, 333.		
Zenith, 33, 34, 35, 35A, 342, 352, 352A			333A	6120	.80
302-IOT Packs 10, 13-22,700 ohme 62-25	3897	.95	Zenith, 39, 39A, 40A, 392, 392A	6121	.80
Zenith, 34P, 35P, 35AP, 342P, 352AP, 37—7,200 ohms—for Packs 11, 14—			Zenith, 52, 53, 522, 532, 54, 542, 55, 57, 62	6122	1.25
0,750 0nms 83_79	3980	.95	64, 67, 60, 61, 602, 613, 622, 642, 672. (Note: Some of these models were later		
Zenith, 35PX, 35APX, 352PX, 352APX —35,800 ohms—for Pack 18 63-97			Changed to dual contros See below)	3204	1.25
Zenith, 39, 39A, 392, 392A, 40A-for	3979	.95	Zenun, 52, 53, 522, 532, 54, 542, 55, 57, 69		
Packs 12, 16 63-76	3983	.95	67, 64, 60, 61, 602, 613, 622, 642, 672, 71, 72, 73, 77, 712, 722, 732, 777.	3201	1.50
11 mile 100 400 mile 100 100 mile 100 m					

MAIL ORDERS TO See Terms on Page 3

Federated Purchaser Inc.

### WESTON Model 590 I.F. and R.F. Oscillator



A New Weston Instrument for Alignto Aligning of Gang Condensers — Determining Sensitivity of Receivers — Checking R.F. Transformers and Condensers — Making Selectivity Transformers and Condensers — Making Selectivity Tests and Checking the Oscillator Stage of Radio Receivers

The new Weston Model 590 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 550-1500 kilocycles. Frequencies between 200 and 550, and above 1500 kilocycles may be obtained by means of harmonics.

The oscillator is aguipped with an in-

tained by means of harmonics.

The oscillator is equipped with an instrument which is mounted on the panel and which serves as a Grid Dip Milliammeter, Filament Voltmeter and Plate Voltmeter. This instrument remains in the grid circuit at all times unless connected across the Plate or Filament circuits by means of push button switches.

Two type '30 tubes are used in the oscillator, one for the R.F. and the other to modulate the R.F. to produce an audible note of 400 cycles with 30% modulation. The output of the oscillator is controlled by an especially designed attenuator.

The batteries for operating the oscillator are contained in a shielded compartment in one end of the case. They consist of an ordinary 22 ½ 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 lours of continuous operation.

An output metar is a presessing access.

hours of continuous operation.

An output meter is a necessary accessory for this instrument and a compartment has been provided in the case for the Weston Model 571 which can be purchased with the oscillator as shown above for \$22.50 additional.

Dimensions: 16½x6½x6½x5½ inches—approximate weight, 15 pounds.

The Grid 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.

fible to test each stage of the translation of the ridividually.

The Filament Voltmeter can be used to keep the filament voltage constant at two volts which is necessary to maintain accurate calibration of the oscillator and obtain maximum battery and tube life.

The attenuator is adjustable from practically zero up to its maximum range by smooth, 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. it can be used in testing short wave udapters 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.

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.

Furnished with 22 2 v. and 3 v. batteries One 30 tube is used. Cable is carried in the removable cover. Full operating instructions and wiring diagram included.

Bufft to a high standard. All parts are sturdy and strongly built to remain per-manently accurate. A modern instru-ment for all old and new sets.

In leatherette case, 6x12x15 in. Weight, 8 lbs.

### Complete Less Output Meter

List Price, \$30.00

Cat. No. 550

### Our Price \$17.64

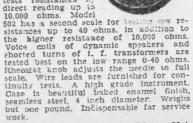
Complete With Output Meter

List Price, \$35.00

Cat. No. 551 Our Price \$20.58

#### READRITE Direct Reading Ohmmeters Models 500-502

These chmmeters are complete with a small 3-cell flashrent crain is negligilight bettery; curble. Tests resistances up to 10,000 ohms. Model 500 ohms. Model bettests resistances by direct reading up to chms. Model



Net Range List Cat. No. \$6.00 \$3.53 0-10,000 5380 0-10,000 & 0-40 7.00 6960

### WESTON Model 566 Type 3 Radio Set Tester



SERVICE MANUAL

A complete Service Manual comes with every Model 566—Type 3. It tells the probable causes of poor reception, how to occute 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 loose-leaf form and additional information is forwarded from time to time to Eeep it up-to-date.

Cat. No. 318

### Our Net Price \$84.53

SERVICING SCOPE OF WESTON MODEL 566—TYPE 3

ISTS WITH TESTER PLUG INSERTED IN RADIO SET

INSERTED IN RADIO SET
All Felament Voltages . All Heater
Voltages . Two Cathode Voltages . .
Three Bias Voltages . Two Control
Grid Voltages . Two Plate Voltages
. Screen Currents . Bias Voltage
on Voltage on D.C. Sets with Reversed
Filaments . Space Charge Grid Volts
(on 250 volt 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.

Line Voltage Measurements on the A.C.

Line Voltage Measurements on the A.C. Meier.
Meier.
Heater Voltage at Power Pack — Three Ranges on A.C. Meter.
Plate Current at "B" Supply Taps—
Three Ranges on D.C. Meter.
"B" Supply at Power Pack—Three Ranges on D.C. Voltmeter.
"A", "B" and "C" Battery Voltages—
Six Ranges on D.C. Voltmeter.
Six Ranges on D.C. Voltmeter.
4½ Volt Battery and the D.C. Voltmeter with a resistance of either 1,000 or 100 ohms per volt as desired.
Resistance Measurements—The D.C. Voltmeter also serves as a Direct Reading Ohmmeter with Ranges of 0-10,000 or 6-100 000 Ohms.
Condenser Measurements can be made

6-100 000 Ohms.

Condenser Measurements can be made from .601 (By Pass) to 2 Microfarads—from 110 Volts A.C. line without resistors or adapters.

Tube Checker for all Filament and Heater True Tubes under the same condition of crists when in their sockets.

Input to Redio Set—On 4 Ampere A.C. Rance and Small A.C. Measurements such as Currents in Voice Coil or Speaker, etc., using the A.C. 100 or 20 MA. 18052.

range.
Rect fier Type Output Meter-Range 100-5
Vo ts.

MAHL ORDERS TO ATT See Terms on Page 3

Federated Purchaser Inc.

### GEM LINE Interference Eliminator



A great many noises interfering with your recep-tion are caused by motors, such as electric refrigerators, vacuum cleaners and elevators, and numerous electrical

merous electrical appliances. The Gem Line interference climinator any A.O. or D.C. line interference climinator interference from entering into your radio.

Due to the fact that the Gem Line Interference Eliminator is plugged into your wall socket, the power coming to your radio is filtered through, and the results obtained will please every set owner. Installation instructions are very simple, and can be easily followed by simple, anyone. be easily followed

Cat. No. 5121 \$1.65

#### I.C.A. Wonder Aerial



Cat. No. 6955 List \$1.00

Net

A my velous device which eliminates the cutdod aerial and yet is equal to it. It is scientifically designed and will work on all types of sets.

### F. & H CAPACITY Aerial Eliminator



Attractively Colored Counter Display

Furnished with 6 Capacitators

Cat. No. 4264

The F. & H. Capacity Aerial Eliminator has the capacity of the average 75-root has the capacity of the average 75-root has the capacity of the average 75-root aerial, is attached directly to radio set and complete with an attached wire for a fround connection.

The F. & H. Aerial Eliminator has many advantages. Increases selectivity, easier 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

mproves reception. Equals 75 foot outdoor antenna. y compact. 2" diameter. Improves Very company high.

Cat. No. 7299 Oure Price, Each .... 69c

### Panel Switch and 2 Keys



A good switch for ignition, autoradios and other uses. in. cylin-der. All nickel plated. Equip-ped with 2 ped

Cat. No. 7305 Our Price, Complete

#### Filtervolt, Jr. Light Duty Line Noise Eliminator

Fa.

Fittervolt, Jr., is the popular size line noisa eliminator, suitable for eliminating all line noises caused by vacture elements. noises caused by vac-num cleaners, switch-ing on and off lights, electric heating pads, electric toasters and all electrical apparatus with make and break contacts or small mo-tors.

Like the Filtervolt Jr., is installed either at radio set or at the source of interference.

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 enamel metal with nickel plated end rings.

Cat. No. 3406

81.70

### Storm King Lightning Arrester

The arrester with the FREE \$100 fire insurance policy. The

Genuine molded bakelite. No air cap. Na-tionally adver-tised at \$1.00.



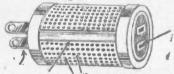
Cal. No. 6581

Special 35c ea.

### Line Voltage Regulator

Differential Resistance automatically adapts itself to any set

Air cooled by draft holes. Steel clad perfectly freproof. Standard outlet will take any set.



Fits any standard socket or outlet. Small, neat, compact; finished in nickel.

Cat. No. 3277 35c ea.

An air cooled, dependable voltage regulator. Will deliver correct voltage of any set. Less than the cost of an ordinary tube. Fits any standard set socket or outlet. Protects set from current surges, saves tubes outlet. Dsaves 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. 4153



Our Price \$1.10

#### Line Voltage Ballasts Used in Majestic and other The Real Line sets. Voltage Regulator

Blectrically and mechanically, as well as merchandisly, as well as merchandisly, 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 specified by tube manufacturers, on the primary, even though the line voltage may fluctuate as much as 30%. It is usually function between the dmits 135 volts.



Set Cat. No.
Bremer Tuliy 4023
Brunswick 4029
Grebe 4030 Majestic 70
Majestic 72
Majestic 80
Majestic 90
Nath'l Baldwin 4034 4035 Hi-Q 30 Hi-Q 31 4029 4032 41138 Kennedy 4030 Sonora Kylectron 4038 40-29

\$1.47 ea.

### SWAN-HAVERSTICK Light Socket Aerial





The modern sets and especially the supers require a short aerial, and this device is ideal for this purpose. Eliminates all unsightly wires, Does not use current. Printed instruction sheet with each one, packed in attractive display box.

#### STICKTAPE AERIAL



Cat. No. 4256

59c ea. \$6.40 doz.

> Packed Display Carton

Sticktape is made of a new metalic alloy of great capacity, the back of which is coated with an adhesive rubber that will stick to any surface. It can be easily concealed behind picture moulding, of on baseboard or under rug on floor or behind drapes, etc. It is the most amazing aerial of modern times and will increase the receiving range of any radio receiver.

### GOLD TEST AERIAL

Cat. No. 4268



\$1.60

The 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 static. Improves reception. Works exceptionally well with superheterodyne receivers. Can be installed inside radio cabinet or on hasphored. baseboard.

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			The second secon

# NOW WITH Tubes Acratone

The Model 17 uses the of the new 57, one type 56 and one type 55 super power tubes, which ity and better tone quality.

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 perman at installation anywhere without the necessity of creeting 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 load peaker volume.

#### Automatic **Volume Control**

leretofore this feature has en incorporated in only high priced receivers. Automiltie volume control was a lige 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 combine 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 does.

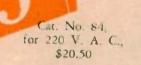
Automatic volume control is not a mere sales feature, but is an actual necessity in outlying districts where broad-costing stations have a tendency to fade.

#### 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 the color, without blast or blare. Full true tone is attained 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 r 110 V. A. C.



#### Selectivity

The pre-selector slage 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 circula highly selective, it does not cut side bands, which tend to distort or rain good reception. Every stage is carefully tuned and balanced at the factory, so that no receiver which does not perform as above described masses, assection. 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

This splendid receiver is hous d in a carefully firished walnut cabinet of realished wainut cannet of really enchanting design. The handsome Fleur d'Lis grill has grace and beauty of lines as well as lending to-ward simplicity, rather than elaborateness. It in, high, 15 in, wide, 312 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 balls. This speaker is desired 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 rule of high impedance

Has special winding for phonegraph pick-up.

Magnetically shielded prevent-ing inter-stage feed back Cat. No. 2581

Our Price

Push-Pull Audio Transformer Pack Can be used with 245 and

217 Tubes.

Output Matches Movino Coil on All Dynamic Speakers

Cat. No. 5744 Our Price, Per Pack



Genuine Mershon 8 Mfd. Inverted Type Electrolytic Condensers A most fortunate scoop of the net

type famous Mershon Electrolytic Contype ramous aversnon recurrence conditions and the sound densers enables us to offer them to you densers enables us to oner men The 8 at 80% off the regular list price one of the Mfd. Inverted type is used in the receivers on the market today. threaded stud is insulated and the can the can the can may not be grounded with lock may of the set 1-13/32" in diameter washer and nut washer Regularly old for Occ.

Cat. No. 7369

Cat. No. 7369 the receivers on the market and the can

Our Special Price. Fach . . . .

30 Henry Choke

RCA Victor 150 Mils, 200 Ohms Weighs 316 lbs

Cat. No. 5474 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, 227, 56, or 57 linkes (or a combination of same), 1-245 or 247 and 1-280 tubes.

Supplies the following amps, 5 v. at amps.

amps, 5 v. at amps.

300 v. atch add of C.T.

239 v. rectified at 60 mils.

Cat. No. 5502 Our Price

# Frost 10,000 Ohm **Potentiometer**

Graphite Element, Only 7/16-thread and locknut, Will fit at Cat. No. 5634

While they Last

Our Price, Each . . . . f for \$1.00 Three Stage Push-Pull Using 2.56%. 2.45% and 1.280 Tubes

Output 4 Wall-Size: 14" long 10" wide.

8" tall Shipping weight 35 lbs

Our Price, Leve Tuhes Cat. No. 120

Our Price, Leve Tubes

Set of Universal pressure consists of two of the property of the proper

**World Radio History**