

Years of Radio Leadership

SERVING SINCE 1924

FALL & WINTER

1938

Our Plus

SERVICE

is Dependable

Amateur Parts

Service Parts

School Laboratory
Apparatus

Commercial
Transmitter
Equipment

Public Address
fixed-mobile

Experimenters' and
Set Builders' Parts

Diathermy Parts
and Tubes

•
Free Parking

Chestnut 7934

Central 4039

WALTER ASHER RADIO CO.

1100 PINE ST. - ST. LOUIS, MO.

WALTER ASHE RADIO CO.

ELEVENTH AND PINE STREETS

ST. LOUIS, MISSOURI

1924

1938

SERVICE

TERMS;- WHEN CASH IS SENT WITH ORDER 2% MAY BE DEDUCTED, NATIONAL PRODUCTS EXCEPTED. 25% DEPOSIT REQUIRED ON C.O.D. SHIPMENTS.

ALL PRICES F.O.B. ST. LOUIS, MO.

STANDARD MANUFACTURER GUARANTEES APPLY TO ALL ITEMS IN THIS CATALOG. WHERE QUESTION OF GUARANTEE IS INVOLVED, FINAL DECISION RESTS WITH MANUFACTURER OF ITEM.

SUBSTITUTIONS WILL BE MADE ONLY WITH AN ITEM OF EQUAL OR SUPERIOR QUALITY. ALL SUBSTITUTIONS SUBJECT TO YOUR "OK". IF NOT SATISFACTORY, ITEM MAY BE RETURNED FOR CREDIT OR REFUND.

ALL PRICES IN THIS CATALOG ARE NET.

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

WE MAINTAIN A COMPLETE DEALER AND AMATEUR SERVICE DEPT.

Delivery Service

TWO DELIVERIES A DAY IN ST. LOUIS, ONE A DAY TO ST. LOUIS COUNTY, EAST ST. LOUIS AND THE TRI-CITIES. ORDERS OF \$3.00 OR MORE, FREE DELIVERY. \$1.01 TO \$3.00, CHARGE FOR DELIVERY .10. ON ORDERS OF \$1.00 OR LESS ADD .15 FOR DELIVERY.

Parking Facilities

FREE PARKING AT ALL TIMES FOR OUR CUSTOMERS IN THE PARKING LOT RIGHT NEXT TO STORE OR IN LOADING ZONE ON CORNER OF 11TH AND PINE. THESE SERVICES ARE FOR YOUR CONVENIENCE, PLEASE USE THEM.

WALTER ASHE RADIO COMPANY

1100 Pine Street

St. Louis, Missouri

BCA Radiotron RADIO TUBES

STANDARD GLASS TYPES

TYPE	LIST	UNDER 25 NET	OVER 25 NET	TYPE	LIST	UNDER 25 NET	OVER 25 NET	TYPE	LIST	UNDER 25 NET	OVER 25 NET
01A	\$.75	\$.41	\$.37	12Z3	\$ 1.35	\$.73	\$.67	49	\$ 1.25	\$.68	\$.63
1A4	1.75	.95	.88	15	2.25	1.22	1.13	50	2.50	1.35	1.22
1A6	1.75	.95	.88	19	1.25	.68	.63	53	1.75	.95	.88
1B4	2.25	1.22	1.13	20	2.25	1.22	1.13	55	1.50	.81	.75
135	1.25	.68	.63	22	1.75	.95	.88	56	.80	.43	.40
1C6	1.75	.95	.88	24A	1.00	.54	.50	57	1.25	.68	.63
1F4	1.50	.81	.75	25Z5	1.25	.68	.63	58	1.25	.68	.63
1F6	2.25	1.22	1.13	26	.70	.38	.35	59	2.00	1.12	1.00
1V	1.10	.60	.55	27	.80	.43	.40	71A	.90	.49	.45
2A3	2.50	1.35	1.25	30	1.00	.54	.50	75	1.10	.60	.55
2A5	1.20	.65	.60	31	.90	.49	.45	76	.80	.43	.40
2A6	1.20	.65	.60	32	1.75	.95	.88	77	1.35	.73	.67
2A7	1.50	.81	.75	33	1.35	.73	.67	78	1.20	.65	.60
2B7	1.60	.86	.80	34	1.75	.95	.88	79	1.50	.81	.75
5Z3	1.10	.60	.55	35	1.10	.60	.55	80	.70	.38	.35
6A4	1.50	.81	.75	36	1.10	.60	.55	81	2.25	1.22	1.13
6A6	1.60	.86	.80	37	.90	.49	.45	82	1.50	.81	.75
6A7	1.40	.76	.70	38	1.25	.68	.63	83	1.60	.86	.80
6B7	1.50	.81	.75	39	1.25	.68	.63	83V	2.25	1.22	1.13
6C6	1.20	.65	.60	41	1.10	.60	.55	84	1.60	.86	.80
6D6	1.20	.65	.60	42	1.20	.65	.60	85	1.20	.65	.60
6E5	1.50	.81	.75	43	1.40	.76	.70	89	1.50	.81	.75
6F7	1.75	.95	.88	45	.90	.49	.45	V99	1.50	.81	.75
6G5	1.50	.81	.75	46	1.50	.81	.75	X99	1.50	.81	.75
10	2.75	1.49	1.37	47	1.50	.81	.75	112A	.90	.49	.45
12A7	2.25	1.22	1.13	48	3.50	1.89	1.75	6N5	1.75	.95	.88

ALL-METAL TYPES

5T4	\$ 2.50	\$ 1.35	\$ 1.22	6F6	\$ 1.35	\$.73	\$.67	6Q7	\$ 1.35	\$.73	\$.67
5W4	1.00	.54	.50	6H6	1.25	.68	.63	6R7	1.35	.73	.67
5Z4	2.00	1.12	1.00	6J7	1.50	.81	.75	6X5	1.50	.81	.75
6A8	1.50	.81	.75	6K7	1.35	.73	.67	25A6	1.50	.81	.75
6B8	1.75	.95	.88	6L6	2.25	1.22	1.13	25L6	2.25	1.22	1.13
6C5	1.25	.68	.63	6L7	1.75	.95	.88	25Z6	1.50	.81	.75
6F5	1.25	.68	.63	6N7	1.75	.95	.88				

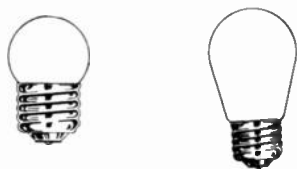
G SERIES TYPES

1C7G	\$ 2.25	\$ 1.22	\$ 1.13	5Y4G	\$ 1.00	\$.54	\$.50	6L6G	\$ 2.50	\$ 1.35	\$ 1.22
1D5G	2.25	1.22	1.13	6A8G	1.50	.81	.75	6L7G	1.75	.95	.88
1D7G	1.75	.95	.88	6B8G	1.75	.95	.88	6N7G	1.75	.95	.88
1E5G	2.25	1.22	1.13	6C5G	1.25	.68	.63	6Q7G	1.35	.73	.67
1E7G	2.75	1.49	1.37	6D8G	2.25	1.22	1.13	6R7G	1.35	.73	.67
1F5G	2.25	1.22	1.13	6F5G	1.25	.68	.63	6S7G	2.25	1.22	1.13
1F7G	2.25	1.22	1.13	6F6G	1.35	.73	.67	6T7G	2.25	1.22	1.13
1H4G	1.00	.54	.50	6H6G	1.25	.68	.63	6V6G	1.75	.95	.88
1H6G	1.75	.95	.88	6J5G	1.35	.73	.67	6X5G	1.60	.86	.80
1J6G	1.35	.73	.67	6J7G	1.50	.81	.75	25A6G	1.50	.81	.75
5U4G	1.50	.81	.75	6K5G	1.35	.73	.67	25B6G	1.75	.95	.88
5V4G	2.35	1.27	1.18	6K6G	1.35	.73	.67	25L6G	2.25	1.22	1.13
5X4G	1.50	.81	.75	6K7G	1.35	.73	.67	25Z6G	1.50	.81	.75
5Y3G	1.00	.54	.50	6L5G	2.25	1.22	1.13				

IT'S EASY TO PARK AT WALTER ASHE . . .

WALTER ASHE RADIO COMPANY

1100 Pine Street St. Louis, Missouri



GENUINE "G.E." NEON BULBS

1/4 WATT	NET \$	.40
1/2 "	"	.40
1 "	"	.40
2 "	"	.50



GENUINE "G.E." TUNGAR BULBS

6/10 AMPERE	NET	\$3.00
2 "	"	3.00
6 "	"	6.00

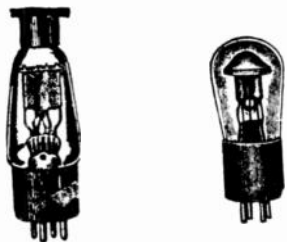


"DURESITE" BALLAST TUBES

#98	NET	\$1.62
#105	"	1.62
#110	"	1.62
#164	"	1.62
#169	"	1.62

RAYTHEON "BR" RECTIFIER TUBE FOR MALLORY ELIMINATOR,

NET EACH, \$ 1.50



PHILMORE REPLACEMENT TUBES

RAYTHEON "BH"	NET	\$1.50
KELLOGG 401	"	1.50

AMPERITE

REPLACEMENT REGULATORS FOR A.C. - D.C. Sets.

AMPERITE NO.	STARTING WITH LETTER	WITH NUMBERS FROM	ENDING IN
KL-45 KL-25 KL-75	K, L, M, OR BK	36 TO 67 10 " 36 67 " 105	A, B, C, OR D " "
KL-25H KL-50H KL-75H	" " "	11 TO 26 36 " 67 67 " 105	F, G, OR H " "
KL-50S1 KL-50S2 KL-50S3	K OR L " "	40 TO 100 " "	S1 S2 S3
KL-50E	"	36 TO 67	E

AMPERITE KL-45 OCTAL BASE

WILL REPLACE ALL BALLASTS SHOWN IN TABLE
ABOVE AND ALSO

K36A	K42A	K49A	K55A	K61A	2VR 215
K36B	K42B	K49B	K55B	K61B	2UR224
K36C	K42C	K49C	K55C	K61C	2CR241
K36D	K42D	K49D	K55D	K61D	3CR241
L36B	L42B	L49B	L55B	K67A	8598
L36C	L42C	L49C	L55C	K67B	W 43357
L36D	L42D	L49D	L55D	K67C	
			L75CC	K67D	

AMPERITE 4P-45 4-PRONG BASE WILL REPLACE

140RL	165R8	185RL	KX42B	KX49B	KX55A
140R8	165RL	185R8	KX42C	KX49C	KX55B
140RL4	165L4	185RL4	KX42D	KX49D	KX55C
140LL	165L8	185LL	LX42B	LX49B	KX55D
140L8	165LL4	185L8	LX42C	LX49C	LX55B
140LL4	40A2	185LL4	LX42D	LX49D	LX55C
50X3T	40B2				LX55D

AMPERITE 50-AB OCTAL BASE WILL REPLACE

24B2	42A1	49A1	55A1
2LR212	42A2	49A2	55A2
		49B2	55B2

AMPERITE 3-40 4-PRONG BASE - WILL REPLACE

5B	50X3	165R	KX42A	KX55A
50	140R	185R	KX49A	G-133

ANY TYPE, NET EACH \$.60



MIDGET BASE ROUND 110 VOLT
PILOT LIGHT BULB. 2 C.P.
NET EACH \$.50

NEON TATTLETE TESTER

"It tells the Tale"



NET EACH, \$.60

IT'S EASY TO PARK AT WALTER ASHE . . .

WALTER ASHE RADIO COMPANY

1100 Pine Street

St. Louis, Missouri

3

• PILOT LIGHTS •



#40
41
42



MAZDA
No. 51

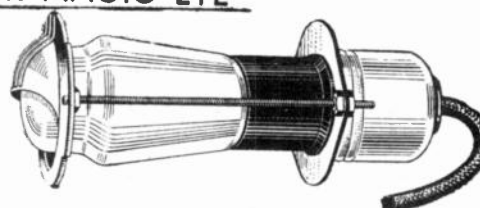


MAZDA
No. 50

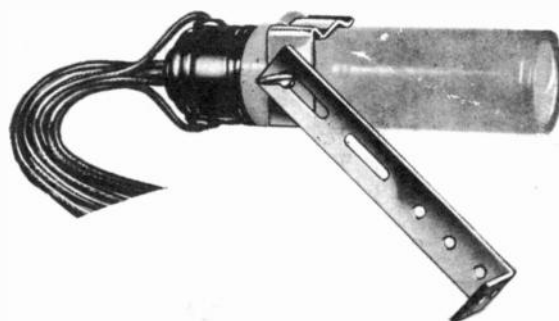
TYPE	VOLTAGE	NET EACH	NET PER BOX OF 10
40	6.3	\$.06	\$.54
41	2.5	.06	.54
42	3.2	.08	.72
50	6-8	.06	.60
51	6-8	.06	.60

AMPHENOL SOCKET ASSEMBLY FOR MAGIC EYE

NOW YOU CAN PUT A "MAGIC EYE" ON ANY SET THAT HAS A.V.C. USES 2E5, 6E5 OR 6G5 TUBE, NET EACH LESS TUBE \$.75



FOR 913 CATHODE RAY TUBE



THIS "AMPHENOL" WIRED PLUG AND BRACKET ASSEMBLY SIMPLIFIES THE APPLICATION OF THE RCA 913 CATHODE RAY TUBE TO TEST EQUIPMENT. THE PLUG, COMPLETELY WIRED, NEEDS ONLY TO BE CONNECTED TO THE CIRCUIT. THE UNIVERSAL BRACKET PERMITS MOUNTING EITHER ON THE BASE OR PANEL OF THE APPARATUS ON WHICH IT IS TO BE USED. NET EACH - - - \$.60



PHONO NEEDLE TIP TEST PRODS WITH KINKLESS WIRE

Equipped with chucks and nuts to hold the standard type phonograph needles and can be easily changed when the needle is broken. The tip will make contact thru insulation or pitch. Come in red and black for easy identification. Fibre handles are 4" long and 3/16" thick.

#230 WITH PHONE TIPS, NET PAIR, \$.36
#240 WITH SPADE LUGS, " " .36



SOLDERLESS TIP TEST PRODS WITH KINKLESS WIRE

The Test prod wire runs thru the solderless phone tip and is tightened with the knurled nut. Red and Black fibre handles and wire for easy identification. Handles are 4" long and 3/16" thick. A necessity in testing for shorts.

#200 WITH PHONE TIPS, NET PAIR, \$.36
#210 WITH SPADE LUGS, " " .36

RECEIVING TUBE MANUAL



NEW " R. C. A. " TUBE MANUAL NOW IN
STOCK. CONTAINS ALL TUBES NOW MADE.

NET -

25¢

LOT NEXT TO STORE OR LOADING ZONE

WALTER ASHE RADIO COMPANY
 1100 Pine Street St. Louis, Missouri

CORNELL - DUBILIER CONDENSERS



TYPE EE

TYPE EE PEAK VOLTAGE 525 V. D.C.

Working Voltage	Cap. Mfd.	Cat. No.	List Price	Size LxWxD	Code Word	Your Cost
450	2	EE-9020	\$.65	4 1/8 x 1 3/8 x 1 1/8	Aloud	\$.39
450	4	EE-9040	.75	4 1/8 x 1 3/8 x 1 1/8	Alpen	.45
450	6	EE-9060	.90	4 1/8 x 1 3/8 x 1 1/8	Alpha	.54
450	8	EE-9080	.95	4 1/8 x 1 3/8 x 1 1/8	Alpia	.57



TYPE EH

TYPE EH PEAK VOLTAGE 525 V. D.C.

Working Voltage	Cap. Mfd.	Cat. No.	List Price	Size LxWxD	Code Word	Your Cost
450	4-4	EH-9404	\$1.20	4 3/8 x 1 7/8 x 1 1/8	Amper	\$.72
450	4-8	EH-9408	1.35	4 3/8 x 1 7/8 x 1 1/8	Amuck	.81
450	6-8	EH-9608	1.45	4 3/8 x 1 7/8 x 1 1/8	Anana	.87
450	8-8	EH-9808	1.50	4 3/8 x 1 7/8 x 1 1/8	Ancor	.90



TYPE EB

SINGLE AND MULTIPLE SECTION DRY ELECTROLYTICS IN ROUND METAL CANS.

WORKING VOLTAGE 450-PEAK VOLTAGE 525

CAPACITY	TYPE	LIST	NET
8	EB-9080	\$1.05	\$.63
4-4	EB-4400	1.30	.78
4-8	EB-4800	1.45	.87
8-8	EB-8800	1.60	.96

TYPE EP9080 SAME AS EB9080 BUT HAS POSITIVE BROUGHT OUT TO LUG. CAN IS NEGATIVE.

"EP" 9080 8 MFD. NET \$.63



TYPE "JR"

DWARF MIDGET DRY ELECTROLYTICS

TINY SILVER COATED CARDBOARD CONTAINERS. CODED WIRES AND MOUNT FEET. APPROX. SIZE. 2 1/2 X 1 X 3/4

WORKING VOLTAGE 200 - PEAK V. 250

TYPE	CAPACITY	LIST	NET
JR-204	4 MFD.	\$.65	\$.39
" 208	8 "	.80	.48
" 210	10 "	.90	.54
" 212	12 "	.95	.57
" 216	16 "	1.05	.63
" 244	4-4 "	.90	.54
" 248	4-8 "	1.15	.69
" 288	8-8 "	1.25	.75
" 2816	8-16 "	1.45	.87
" 2888	8-8-8 "	1.90	1.14

WORKING VOLTAGE 450 - PEAK V. 525

JR-502	2 MFD.	\$.65	\$.39
" 504	4 "	.75	.45
" 508	8 "	.95	.57
" 510	10 "	1.15	.69
" 512	12 "	1.30	.78
" 544	4-4 "	1.20	.72
" 548	4-8 "	1.35	.81
" 588	8-8 "	1.50	.90
" 5816	8-16 "	1.90	1.14
" 5888	8-8-8 "	2.20	1.32

ALL UNITS LISTED HAVE SEPARATE LEADS NO COMMON NEGATIVES.

WRITE US OR ASK US FOR A COMPLETE "CORNELL DUBILIER" CATALOG ON REPLACEMENT CONDENSERS. A COMPLETE CATALOG ON INDUSTRIAL AND TRANS-MITTING CONDENSERS IS ALSO AVAILABLE. YOURS FOR THE ASKING.

IT'S EASY TO PARK AT WALTER ASHE . . .

1100 Pine Street

St. Louis, Missouri

CORNELL - DUBILIER



TYPE ED

These tubular electrolytic units are an example of the advanced engineering which is embodied in the manufacture of Cornell-Dubilier condensers.

PEAK VOLTAGE 75 V. D.C.

Cap. Mfd.	Cat. No.	List Price	Size L x W x D	Code Word	Your Cost
50	5	ED-2050	.50	2 3/8 x 3/4	Bogus .30
50	10	ED-3100	.65	2 3/8 x 7/8	Alon .39
50	25	ED-3250	.80	2 3/8 x 1 1/4	Alone .48
50	50	ED-3500	1.20	2 3/4 x 1 3/8	Alony .72

PEAK VOLTAGE 35 V. D.C.

Cap. Mfd.	Cat. No.	List Price	Size L x W x D	Code Word	Your Cost
25	5	ED-2050	.50	2 3/8 x 3/4	Bolas .30
25	10	ED-2100	.50	2 3/8 x 3/4	Along .30
25	20	ED-2200	.60	2 3/8 x 7/8	Booth .36
25	25	ED-2250	.65	2 3/8 x 1	Aloof .39
25	50	ED-2500	.95	2 3/8 x 1 1/8	Alose .57
25	5-5	ED-2055	.75	2 3/8 x 3/4	Betap .45
25	0-10	ED-2101	.75	2 3/8 x 1	Betap .45

AUTO RADIO CONDENSERS



TYPE VU



TYPE VL



TYPE VC

SPECIAL OIL-FILLED VIBRATOR CONDENSERS

TYPE VU, METAL "POSTAGE STAMP" UNITS—2000 V.D.C.

Cap. Mfd.	Cat. No.	List Price	Size L x W x D	Code Word	Your Cost
.007	VU-D7	.45	3/8 x 7/8 x 9/32	Vibra	.27
.008	VU-D8	.45	3/8 x 7/8 x 9/32	Vibse	.27
.01	VU-S1	.45	3/8 x 7/8 x 9/32	Vibtl	.27
.015	VU-S15	.45	3/8 x 7/8 x 9/32	Vibuo	.27
.02	VU-S2	.45	3/8 x 7/8 x 9/32	Vibvu	.27
.03	VU-S3	.45	1/8 x 7/8 x 9/32	Vicon	.27

TYPE VL, METAL CASED REPLACEMENT UNITS

Cap. Mfd.	Cat. No.	List Price	Size L x W x D	Code Word	Your Cost
.01	VL-S1 (1500V)	.60	3-3/16 x 17/32 x 3/8	Velco	.36
.5	VL-P5 (200V)	.65	3-3/16 x 27/32 x 3/8	Velop	.39



TYPE FC



TYPE SC



TYPE IC

TYPES IC, SC, FC, AUTO GENERATOR UNITS—400 V. D.C.

Cap. Mfd.	Cat. No.	List Price	Size L x W x D	Code Word	Your Cost
.5	IC-4PS	.50	1 3/4 x 1 1/16	Flout	.30
.5	FC-4PS	.50	1 3/4 x 1 1/16	Forde	.30
1	IC-H-2W1A	.70	2 1/4 x 1 1/4	Flour	.42



THESE UNITS ARE VERY WELL MADE AND CAN BE RELIED UPON TO GIVE MAXIMUM SERVICE IN RADIO SERVICE AND ALLIED LINES.

WORK. VOLT. 400 V.D.C. - TEST 800 DC.

TYPE	CAP.	NET EACH	NET EACH LOTS 10-25	NET EACH 25-OVER
DT-4S1	.01	\$.09	\$.08	\$.07
4S2	.02	.09	.08	.07
4S3	.03	.09	.08	.07
4S5	.05	.09	.08	.07
4P1	.1	.12	.10	.08
4P25	.25	.15	.13	.11
4P5	.5	.21	.17	.15
4W1	1.0	.30	.25	.22

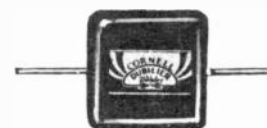
WORK. VOLT. 600 V.D.C. - TEST 1200 DC.

TYPE	CAP.	NET EACH	NET EACH LOTS 10-25	NET EACH 25-OVER
DT-6S1	.01	\$.09	\$.08	\$.07
6S2	.02	.12	.10	.08
6S3	.03	.12	.10	.08
6S5	.05	.12	.10	.08
6P1	.1	.15	.13	.11
6P25	.25	.21	.17	.15
6P5	.5	.30	.25	.22

MOULDED MICA CONDENSERS

ESPECIALLY ADAPTED FOR RECEIVERS AND LOW POWER TRANSMITTERS FOR USE AS RF BYPASS, PADDER, PLATE BLOCKING AND GRID STOPPING. D.C. WORK. VOLT. 500.

CAPACITY	NET
.00001	.12
.000025	.12
.00005	.09
.0001	.09
.0002	.09
.00025	.12
.0003	.12
.0005	.12
.001	.15
.0015	.15
.002	.18
.003	.24
.004	.27
.005	.30
.006	.36
.01	.45



LOT NEXT TO STORE OR LOADING ZONE

CORNELL - DUBILIER



TYPE EA

TYPE EA PEAK VOLTAGE 525 V. D.C. Multiple Section Units—Can Common Negative

Working Voltage	Cap. Mfd.	Cat. No.	List Price	Size L x D	Code Word	Your Cost
450	5-15	EA-5150	\$2.30	4 3/8 x 2 1/2	Eyrie	\$1.38
450	8-8	EA-8801	1.80	4 3/8 x 2 1/2	Aulbe	1.08
450	8-8	EA-8800*	1.80	4 3/8 x 2 1/2	Augur	1.08
450	8-16	EA-8160	2.35	4 3/8 x 2 1/2	Bairn	1.41
450	4-4-4	EA-4440	2.15	4 3/8 x 2 1/2	Bacon	1.29
450	8-8-8	EA-8880	2.70	4 3/8 x 3	Bajra	1.62
450	9-9-18	EA-9918	3.75	4 3/8 x 3	Ferry	2.25
450	8-8-8-8	EA-8888	3.60	4 3/8 x 3	Bekey	2.16
450	8-8-16-16	EA-8810	4.50	4 3/8 x 3	Bavex	2.70



TYPE D

A drawn metal, shielded radio frequency bypass condenser of the non-inductive type, available in a complete range of capacities in single and multiple units.

Hermetic sealing and rigid specifications insure long life.

TYPE D

METAL CASED PAPER DIELECTRIC CONDENSERS

Cap. Mfd.	Cat. No.	List Price	Size L x W x D	Code Word	Your Cost
SINGLE SECTION 400 V. D.C. UNITS					
.05	DA-4005	\$.45	1 1/8 x 1 x 3/4	Accoy	\$.27
.1	DA-4011	.50	1 1/8 x 1 x 3/4	Acera	.30
.25	DA-4025	.60	1 1/8 x 1 x 3/4	Achar	.36
.5	DA-4050	.75	1 1/8 x 1 x 3/4	Achia	.45
1	DA-4100	1.00	2 x 1 3/4 x 1 1/8	Achor	.60
2	DA-4200	1.55	2 x 2 x 1 1/8	Actus	.93

TYPE "EVL"

LOW VOLTAGE HIGH CAPACITY CONDENSERS OF THE FINEST ELECTRICAL CHARACTERISTICS.

TYPE CAP. VOLT. NET

EVL 1210	1000	12	\$2.14
EVL 1220	2000	12	3.79
EVL 1510	1000	15	2.55
EVL 1520	2000	15	4.66
EVL 1810	1000	18	2.98
EVL 1820	2000	18	5.50
EVL 2510	1000	25	3.94
EVL 2520	2000	25	7.46



TYPES PE

Paper dielectric condensers with a high degree of safety margin against voltage breakdown. Not intended to replace electrolytics, but made in the same physical construction to facilitate mounting in restricted space, where a paper dielectric condenser is preferred.

450 V. D. C. Working Voltage—600 V. D.C. Peak—1000 V. D.C. Test
Cardboard container units, with wire leads; Duals, separate leads no common

Replacement Cap. Mfd. for	Cat. No.	List Price	Size L x W x D	Code Word	Your Cost
2	PE-C4002	\$.75	4 1/8 x 1 3/8 x 1 1/8	Pecka	\$.45
4	PE-C4004	.90	4 1/8 x 1 3/8 x 1 1/8	Pecle	.54
8	PE-C4008	1.15	4 1/8 x 1 3/8 x 1 1/8	Pecmi	.69

600 V. D.C. Working Voltage—800 V. D.C. Peak—1200 V. D.C. Test
Cardboard container units, with wire leads; Duals, separate leads, no common

Replacement Cap. Mfd. for	Cat. No.	List Price	Size L x W x D	Code Word	Your Cost
2	PE-C6002	1.00	4 1/8 x 1 3/8 x 1 1/8	Pecan	.60
4	PE-C6004	1.20	4 1/8 x 1 3/8 x 1 1/8	Pecep	.72
8	PE-C6008	1.60	4 1/8 x 1 3/8 x 1 1/8	Pecir	.96

600 V. D.C. Working Voltage—800 V. D.C. Peak—1200 V. D.C. Test

Metal container units; types PE-B with wire leads, inverted screw mounting; Duals, separate sections, no common. Types PE-A, lug terminals, upright ring mounting, insulated common negative, with provision to ground negative by means of attached lug.

Replacement Cap. Mfd. for	Cat. No.	List Price	Size L x D	Code Word	Your Cost
4	PE-B6004	1.35	4 3/8 x 1 3/8	Pebaz	.81
8	PE-B6008	1.75	4 3/8 x 1 3/8	Pebey	1.05

8-8 PE-B6808 4 1/2" X 1 1/2" 1.59

TYPE RM UNCASED, CELLOPHANE WRAPPED, BYPASS AND FILTER CONDENSERS



TYPES RM

Carefully made and sealed to protect the winding against moisture and mechanical injury, these units are used to repair condenser blocks, in circuits where there are high voltage surges, in places where space is limited and in general everywhere a dependable paper condenser can be used to advantage.

Cap. Mfd.	Cat. No.	Size L x W x D	Code Word	Your Cost
WORKING VOLTAGE 400 V. D.C.—Equipped with Black wire leads				
.1	RM-4010	2 x 3/4 x 1 1/8	Jaunt	\$.21
.25	RM-4025	2 x 1 x 1 1/4	Jolly	.24
.5	RM-4050	2 x 1 x 1 1/2	Jenny	.30
1	RM-4100	2 x 1 3/8 x 1 1/8	Jerry	.45
2	RM-4200	2 x 1 7/8 x 1	Jetty	.69

Cap. Mfd.	Cat. No.	Size L x W x D	Code Word	Your Cost
WORKING VOLTAGE 600 V. D.C.—Equipped with Red wire leads				
.1	RM-6010	2 x 1 x 1 1/8	Joker	\$.24
.25	RM-6025	2 x 1 x 3/8	Jolly	.30
.5	RM-6050	2 x 1 3/8 x 1/2	Joule	.36
1	RM-6100	2 x 1 7/8 x 3/4	Judge	.54
2	RM-6200	3 3/8 x 1 7/8 x 7/8	Juice	.81

Cap. Mfd.	Cat. No.	Size L x W x D	Code Word	Your Cost
WORKING VOLTAGE 1000 V. D.C.—Equipped with Blue wire leads				
1	RM-10100	4 1/4 x 1 7/8 x 7/8	Kiosk	.90
2	RM-10200	4 1/4 x 1 7/8 x 1 1/4	Knack	1.50

IT'S EASY TO PARK AT WALTER ASHE . . .

WALTER ASHE RADIO COMPANY

1100 Pine Street

St. Louis, Missouri

CORNELL DUBILIER

TYPE "KR" CORNELL DUBILIER CONDENSERS ARE NO LARGER THAN A 6K7 METAL TUBE. AVAILABLE IN WORKING VOLTAGES OF 250 V.D.C. (300 PEAK) AND 450 V.D.C. (525 PEAK).

TYPE KR



WORKING VOLTAGE 250 V.D.C. 300 PEAK

TYPE	CAPACITY	LIST	NET
KR-204	4	\$.75	\$.45
208	8	.95	.57
212	12	1.10	.66
216	16	1.35	.81
248	4-8	1.30	.78
288	8-8	1.45	.87
2816	8-16	1.95	1.17
2888	8-8-8	2.10	1.26

WORKING VOLTAGE 450 V.D.C. 525 PEAK

TYPE	CAPACITY	LIST	NET
KR-504	4	\$.85	\$.51
508	8	1.05	.63
512	12	1.40	.84
516	16	1.55	.93
548	4-8	1.45	.87
588	8-8	1.60	.96
5816	8-16	2.25	1.35
5888	8-8-8	2.30	1.38

CORNELL DUBILIER TYPE "TL" DYKANOL FILTER CONDENSERS



HERMETICALLY SEALED IN ROUND ALUMINUM CONTAINERS, THE TYPE "TL" PAPER FILTER CONDENSERS ARE DYKANOL IMPREGNATED AND FILLED. DESIGNED FOR POWER SUPPLIES, HIGH POWER AMPLIFIERS AND ANY CIRCUIT WHERE HIGH VOLTAGE IS USED. CAN BE MOUNTED IN ANY POSITION. CAN IS NEGATIVE.

WORKING VOLTS 600 D.C.

CAPACITY	NET
2 MFD.	\$1.35
3 "	1.65
4 "	1.80

WORKING VOLTS 1000 D.C.

CAPACITY	NET
1 MFD.	\$1.35
2 "	1.65

WORKING VOLTS 1500 D.C.

CAPACITY	NET
.5 MFD.	1.80
1 "	2.10

CAPACITY NET

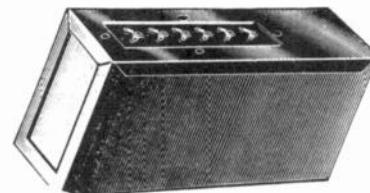
.00005	\$.24
.0001	.24
.00015	.24
.0002	.24
.00025	.24
.0005	.24
.001	.30
.0015	.30
.002	.30
.003	.36
.004	.36
.005	.42
.006	.51
.01	.69
.012	.72
.015	.75

SANGAMO TYPE A CONDENSERS 1000 V. DC Test

Are Accurate



Stay Accurate



"MAJESTIC" EXACT DUPLICATE FILTER CONDENSER BLOCKS BY FREED MFG. CO.

MODEL	TYPE NO.	NET
70-70B-71-72-7P6	5525	\$1.98
70-70B-71-72-7BP6	5527	1.98
90-91-92-9P6-100	5529,	1.98
180-181-8P3-8P6	5530	3.62
90B-100B-102-103	5531	2.58

LOT NEXT TO STORE OR LOADING ZONE

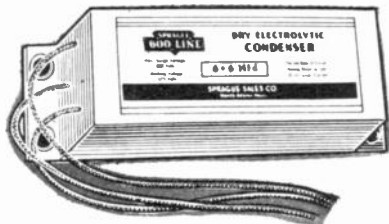
WALTER ASHE RADIO COMPANY

1100 Pine Street St. Louis, Missouri



THE "ROLLS ROYCE" OF CONDENSERS

DRY ELECTROLYTICS BY-PASS CONDENSERS



CARDBOARD UNITS • Type DC

Trouble with open contacts and short circuits has also been eliminated by an exclusive Sprague process to the extent that these units can be installed safely in any radio set requiring a substantially made, thoroughly efficient cardboard type condenser. Supplies in attractive aluminized cardboard casings. Pigtail leads have push-back insulation for quick, easy installation. Note the special mounting flanges which may be used or clipped off as desired. Extremely low power factor—low leakage—high voltage and sold with Sprague guarantee.

Continuous Working Voltage 475 Volts Maximum Surge Voltage 600 Volts

Cat. No.	Capacity Mfd.	Dimensions	List Price	Your Price
DC-2	2	2 1/2 x 3/4 x 7/8	\$.95	\$.57
DC-4	4	4 1/2 x 1 1/2 x 7/8	1.15	.69
DC-6	6	4 1/2 x 1 1/2 x 7/8	1.30	.78
DC-8	8	4 1/2 x 1 1/2 x 1 1/8	1.35	.81
DC-44	4-4	1 1/2 x 1 1/2 x 1 1/4	1.80	1.08
DC-88	8-8	4 1/2 x 1 1/2 x 1 1/4	2.20	1.32



TYPE AC
(SINGLE UNIT)



TYPE AC
(MULTIPLE UNIT)

ALUMINUM CAN UNITS • Type AC

The chief troubles with ordinary dry electrolytic condensers—open contacts and short circuits—are now definitely eliminated in these units by an exclusive Sprague process. Cased in substantial aluminum can containers with mounting brackets. Packed in individual orange and blue boxes. Can be mounted in any position—impervious to heat and moisture—stable in operation—give finest performance under all operating conditions.

NOTE: Special slotted holes in elongated mounting clamps are used to make condensers easily fit any mounting holes—even though replacing cans of larger type.

Continuous Working Voltage 475 Volts Maximum Surge Voltage 600 Volts

Cat. No.	Capacity Mfd.	Dimensions	List Price	Your Price
AC-2	2	1 x 3 1/2	\$1.10	\$.66
AC-4	4	1 x 3 1/2	1.25	.75
AC-6	6	1 x 4 1/8	1.45	.87
AC-8	8	1 1/8 x 4 1/8	1.50	.90
SC-88	8-8	1 1/2 x 4 1/8	2.40	1.44

MULTIPLE UNITS • Type AC

Sprague Multiple section units are constructed under the same special process as the single units and are greatly in demand for replacement purposes. A distinctive mechanical feature is the double screw nut positive connections for use with soldering lugs. The extremely low power factor and low leakage makes this an extraordinary unit. Packed with special slotted mounting clamps in attractive boxes.

NOTE—Special slotted holes in elongated mounting clamps are used to make condensers easily fit any mounting holes—even though replacing cans of larger type.

Continuous Working Voltage 475 Volts Maximum Surge Voltage 600 Volts

Cat. No.	Capacity Mfd.	Dimensions	List Price	Your Price
AC-88	8-8	1 1/2 x 4 1/8	\$2.40	\$1.44
AC-444	4-4-4	1 1/2 x 4 1/8	2.80	1.68
AC-888	8-8-8	3 x 4 1/2	4.00	2.40
AC-515	5-15	2 1/4 x 4 1/2	3.35	2.00



BATHTUB • Type BP

These units have long been in use by the most prominent radio set manufacturers for all By-Pass installations calling for small, compactly built units of high capacity—they are of standard specifications and will fit practically all chassis. Enclosed in a drawn metal case, they have the added individual feature of the special Sprague waxing process which protects them against heat and moisture.

TEST VOLTAGE 1200 WORKING VOLTAGE 400 VOLTS PEAK VOLTAGE 600

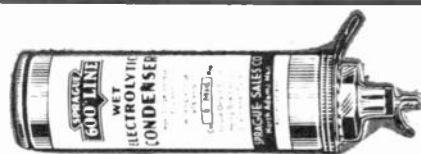
Cat. No.	Capacity Mfd.	Dimensions	Mtg. Dim.	List Price	Your Price
BP-1	.1	1 1/2 x 1/2 x 1 1/2	2 1/2	\$.50	\$.30
BP-25	.25	1 1/2 x 1/2 x 1 1/2	2 1/2	.60	.36
BP-50	.5	2 x 1 1/2 x 1 1/2	2 1/2	.75	.45
BP-10	1-0	2 x 1 1/2 x 1 1/2	2 1/2	1.00	.60
BP-21	1-1	1 1/2 x 1/2 x 1 1/2	2 1/2	.65	.39
BP-225	.25-.25	2 x 1 1/2 x 1 1/2	2 1/2	.80	.48
BP-250	.5-.5	2 x 1 1/2 x 1 1/2	2 1/2	1.00	.60
BP-31	1-1-1	2 x 1 1/2 x 1 1/2	2 1/2	.85	.51

SHORT WAVE HIGH FREQUENCY — Oil Impregnated Condensers



Cat. No.	Capacity	Working Voltage	Your Price
SW-22	.002	1500	\$.27
SW-25	.005	1500	.27
SW-11	.01	1500	.42
SW-12	.02	1500	.45
SW-15	.05	1000	.48
SW-1	0.1	1000	.54

Unexcelled as Mica Substitutes
in Many Circuits.



WET ELECTROLYTICS Type WC

Sprague Wet Electrolytic Condensers are well-known to the radio industry—this company having been one of the first to discover the advantages of a wet filter condenser. Electrolysis, resulting usually in corrosion and deterioration of condenser, has been overcome by the special Sprague chromium plated can.

An unusual feature is the hidden or non-tamperable vent. The "500" Wet Electrolytic is self-healing—has long life—durability—and can withstand high peak voltages without injury.

D. C. PEAK VOLTAGE—500 VOLTS

Cat. No.	Capacity Mfd.	Dimensions	List Price	Your Price
WC-4	4	1"	\$.80	\$.48
WC-6	6	1"	.85	.51
WC-8	8	1"	.95	.57
WC-10	10	1 1/8"	1.05	.63
WC-12	12	1 1/8"	1.15	.69
WC-16	16	1 1/8"	1.35	.81

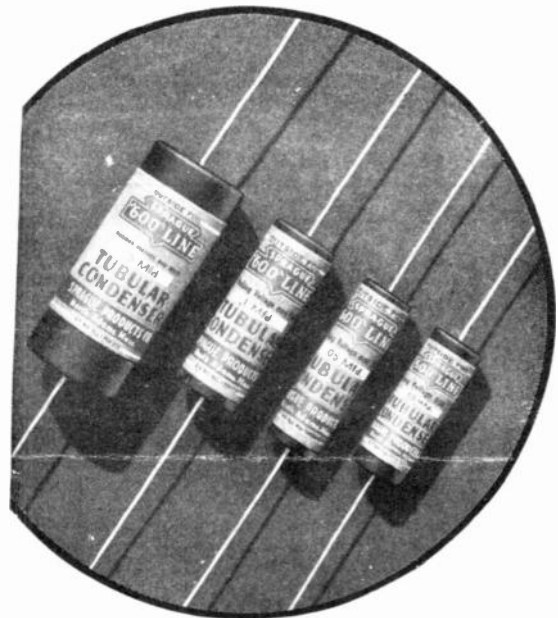
IT'S EASY TO PARK AT WALTER ASHE . . .

Sprague Quality—

NOW YOU CAN AFFORD TO USE SPRAGUE TUBULARS IN ALL YOUR REPAIR JOBS. ASSURE YOUR CUSTOMERS A PERFECT JOB AND YOURSELF MORE SATISFACTION AND PROFIT.

*Not a Failure
in a Million!*

Note These
NEW LOW PRICES
on
FAMOUS SPRAGUE
TUBULARS



WORKING VOLTAGE 600 VOLTS

Cat. No.	Cap. Mfd.	Old List	Your Cost Old Price	New List	Your Cost New Price
TC-31	.0001	.25	.15	.15	.09
TC-325	.00025	.25		.15	
TC-34	.0004	.25		.15	
TC-35	.0005	.25		.15	
TC-21	.001	.25		.15	
TC-22	.002	.25		.15	
TC-23	.003	.25		.15	
TC-24	.004	.25		.15	
TC-25	.005	.25		.15	
TC-26	.006	.25		.15	
TC-11	.01	.25		.15	
TC-12	.02	.30		.15	0.09
TC-13	.03	.30		.20	0.12
TC-14	.04	.30		.20	0.12
TC-15	.05	.30		.20	0.12
TC-16	.06	.35		.25	0.15
TC-1	0.1	.35	0.21	.25	0.15
TC-2	0.25	.45	0.27	.35	0.21
TC-5	0.5	.60	0.36	.50	0.30
TC-10	1.0	1.00	0.60	.80	0.48

LOT NEXT TO STORE OR LOADING ZONE

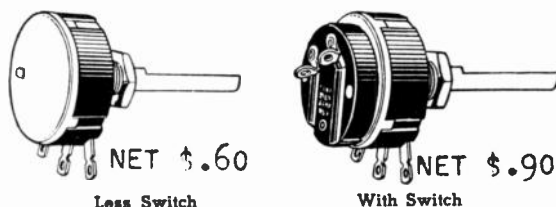
WALTER ASHE RADIO COMPANY

1100 Pine Street St. Louis, Missouri

Centralab

Standard and Midget Replacement Radiohms

● Standard Radiohm



Case diameter 1 3/8". Depth 1 1/8".
Soft aluminum shaft 2 1/2" long, milled flat.
May be cut to exact length needed.

PRICE..... NET WITHOUT TAP
LESS SWITCH.. \$.60 WITH SWITCH. \$.90

Catalog Number	Without Switch	With Switch	Usual Circuit Location	Resistance Ohms	Resistance Curve
72-118	62-118		Voltage Divider.....	500	1
72-107	62-107		Voltage Divider.....	1000	1
72-101	62-101		Voltage Divider.....	2000	1
72-108	62-108		Voltage Divider.....	3000	1
72-109	62-109		Voltage Divider.....	4000	1
72-110	62-110		Voltage Divider.....	5000	1
72-204	52-204		Antenna Shunt.....	5000	6
72-139	62-139		Voltage Divider.....	7500	1
72-114	62-114		Antenna, C-bias.....	10000	1
72-113	62-113		Antenna, C-bias of One Tube.....	10000	3
70-205	52-205		Antenna, C-bias of Two Tubes.....	10000	4
72-100	62-100		Antenna Shunt.....	10000	6
72-115	62-115		Antenna, C-bias.....	15000	3
79-006	99-006		Antenna, C-bias.....	15000	4
72-119	62-119		Antenna, C-bias.....	20000	3
72-111	62-111		Voltage Divider.....	25000	1
70-206	52-206		C-bias.....	25000	4
72-102	62-102		Antenna Shunt.....	25000	3
72-103	62-103		Voltage Divider.....	50000	1
72-117	62-117		Tone Control.....	50000	6
72-123	62-123		Tone Control.....	75000	6
70-202	52-202		C-bias.....	75000	4
72-104	62-104		Voltage Divider.....	100000	1
72-122	62-122		Audio Grid or Tone.....	100000	6
72-136	62-136		Audio Grid or Tone.....	150000	6
72-120	62-120		Audio Grid or Tone.....	200000	1
72-131	62-131		C-bias.....	200000	4
72-121	62-121		Audio Grid or Tone.....	250000	6
72-105	62-105		Audio Grid or Tone.....	500000	6
72-106	62-106		Voltage Divider.....	500000	1
70-203	52-203		Series in R. F. Plate.....	500000	4
72-140	62-140		Audio Grid or Tone.....	750000	6
72-116	62-116		Audio Grid or Tone.....	1 Meg.	6
72-137	62-137		Audio Grid or Tone.....	2 Megs.	6
72-132	62-132		Audio Grid or Tone.....	3 Megs.	6

TAPPED RADIOHMS NET
LESS SWITCH. NET \$.90 WITH SWITCH... \$1.20

72-138	62-138	Tapped Audio Grid.....	250000	10
72-134	62-134	Tapped Audio Grid.....	500000	10
72-135	62-135	Tapped Audio Grid.....	1 Meg.	10
72-142	62-142	Tapped Audio Grid.....	2 Megs.	10

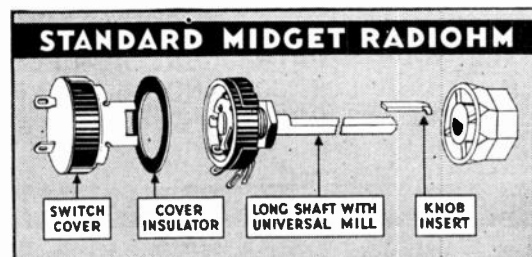
Radiohm Switch Covers

Any plain radiohm can be converted to the switch type by replacing the plain cover with this switch cover.

No. 10 Single Pole—Single Throw . \$.30
No. 11 Single Pole—Double Throw.....
No. 12 Double Pole—Single Throw.....
No. 15 Four Point



● Midget Radiohm



Bakelite case 1 1/8" diameter. 1/4" diameter aluminum shaft 3 3/8" long milled for standard push-on knob. Knob insert supplied. Shaft easily cut to desired length.

LESS SWITCH. NET \$.60 WITH SWITCH... \$.90

Catalog Number	Without Switch	With Switch	Usual Circuit Location	Resistance Ohms	Resistance Curve
N-106	P-106		Voltage Divider.....	5000	1
N-107	P-107		Antenna, C-bias.....	10000	1
N-100	P-100		Antenna, C-bias of One Tube.....	10000	3
N-108	P-108		Antenna, C-bias of Two Tubes.....	10000	4
N-109	P-109		Antenna Shunt.....	10000	6
N-110	P-110		Antenna, C-bias of One Tube.....	15000	3
N-111	P-111		Antenna, C-bias of Two Tubes.....	15000	4
N-112	P-112		Antenna, C-bias.....	20000	3
N-113	P-113		Voltage Divider.....	25000	1
N-101	P-101		Antenna, C-bias.....	25000	3
N-114	P-114		Voltage Divider.....	50000	1
N-115	P-115		Tone Control.....	50000	6
N-116	P-116		Voltage Divider.....	100000	1
N-117	P-117		Audio Grid or Tone.....	100000	6
N-102	P-102		Audio Grid or Tone.....	250000	6
N-118	P-118		Voltage Divider.....	500000	1
N-103	P-103		Audio Grid or Tone.....	500000	6
N-104	P-104		Audio Grid or Tone.....	1 Meg.	6

TAPPED MIDGET RADIOHM NET
LESS SWITCH NET \$.90 WITH SWITCH... \$1.20

N-119	P-119	Tapped Audio Grid.....	250000	10
N-120	P-120	Tapped Audio Grid.....	500000	10
N-121	P-121	Tapped Audio Grid.....	1 Meg.	10
N-122	P-122	Tapped Audio Grid.....	2 Megs.	10

Midget Radiohm Switch Cover

K-155 Single Pole Single Throw..... NET \$.30
K-156 Single Pole Double Throw..... .36
K-157 Double Pole Single Throw.....
K-158 Four Point.....

● Free . . . the latest Centralab Volume Control Guide. Ask for your copy.

Bigger and better than ever. 168 pages listing standard and exact duplicate volume, tone and sensitivity controls for more than 7,000 different models.

Complete catalog of parts and general information for receivers not listed.



IT'S EASY TO PARK AT WALTER ASHE . . .

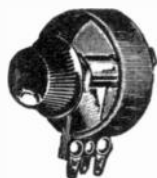
WALTER ASHE RADIO COMPANY

1100 Pine Street

St. Louis, Missouri

Centralab Projection Controls.. Power Rheostats

Centralab Power Rheostats



25 Watt Rheostat

Work at High
Temperatures
Without
Damage



50 Watt Rheostat

IDEAL for many commercial applications, such as small motor speed controls, charging rate adjusters, or soldering iron temperature regulators. Give maximum dissipation for size because of complete air circulation. All metal frame and core, insulated with treated asbestos. Practically indestructible.

Made in three sizes, all two inches in diameter. Bushing $\frac{3}{8}$ " x $\frac{1}{2}$ " long. Shaft $\frac{1}{4}$ " x $\frac{1}{2}$ " long. Depth behind panel — 25 watt, $\frac{3}{4}$ "; 50 watt, $1\frac{1}{4}$ "; 75 watt, $1\frac{3}{4}$ ".

All sizes furnished with bakelite knob and panel insulating washers.

Twin Replacement Controls



NET
\$1.50

74-601—Back base 25,000 Ohms.
Shaft base 10,000 Ohms.
74-602—Back base 50,000 Ohms.
Shaft base 10,000 Ohms.

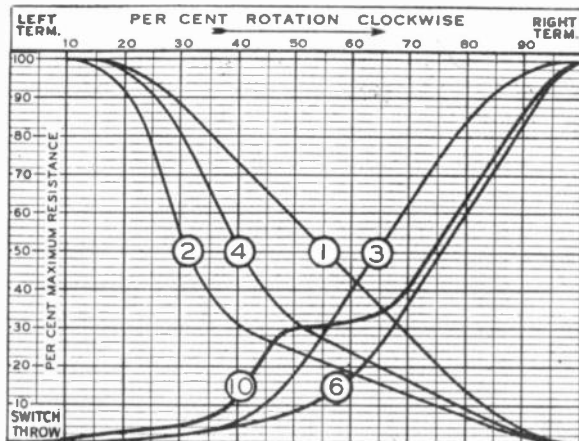
Duc! Grid Volume Control

4010805 Both Bases 100,000 Ohms.
4010807 Both Bases 250,000 Ohms.
4010804 Both Bases 500,000 Ohms.

Two resistances completely insulated from each other and from the shaft and bushing.

There are so many possible combinations in Twin Controls that most replacements are adapted to only one model set. There are many sets now giving trouble with single controls, however, that can be immensely improved with Part No. 74-601 where the original control is in the "C" bias circuit or with Part No. 74-602 for the screen grid circuit. In both cases the back base is wired in like the original control, and the shaft base shunted from antenna to ground.

Part numbers 4010804-5-7 are designed for use as dual grid volume controls in audio amplifiers using a push-pull input stage. The two bases are alike and are tapered to curve six.



"CENTRALAB" MANUFACTURES A COMPLETE LINE OF INPUT CONTROLS FOR BROADCAST STATIONS, PUBLIC ADDRESS SYSTEMS AND RECORDING APPARATUS. LINE INCLUDES "T" PADS, "L" PADS. ATTENUATORS, FADERS, GAIN CONTROLS, ETC.

	Part No.	Resistance, Ohms	Price
25 Watt	48-002	2	NET
	48-006	6	
	48-010	10	
	48-015	15	
	48-026	25	
	48-042	40	\$1.20
	48-050	50	
	48-100	100	
	48-150	150	
	48-200	200	
	48-250	250	
	48-300	300	
	48-400	400	
	48-500	500	
50 Watt	48-810	1000	\$1.50
	48-815	1500	
	48-850	5000	
	48-025	25	
	48-060	60	
	48-151	150	
	48-201	200	
	48-501	500	
75 Watt	48-811	1000	\$1.80
	48-835	2500	
	48-851	5000	
	47-277	50	
	47-278	150	
	47-279	300	
	47-280	500	
	47-281	1000	

Economy P/A Controls

THESE controls are intermediate to the Series II line and the older Series I types. As their name implies, they are economy controls, designed primarily for inexpensive sound equipment, where original cost is a limiting factor. They are designed for all types of fading and mixing systems.

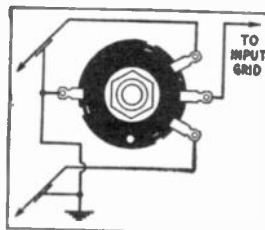


Fig. 1

GAIN CONTROL: Available in four resistance values. Special taper for uniform attenuation. Maximum attenuation 45 db. to infinity.

STRAIGHT FADER: For fading with two high impedance sources. Center tapped and tapered for best operation. See Fig. 1 for connections to two crystal pickups. Resistances given are each side of center tap.

"DELTA-T" PAD: An entirely new control. Maintains constant impedance to both sides with economy of a twin control. Ideal for low impedance mixing panels. See Fig. 2 for connection diagram. Maximum attenuation 45 db. to infinity. Resistance listed is line impedance.

ALL units have $\frac{3}{8}$ " diam. brass bushing, $\frac{3}{8}$ " long. $\frac{1}{4}$ " aluminum shaft $2\frac{1}{4}$ " long — no mill. Two mounting nuts and lockwasher supplied on bushing. Small diameter bakelite case same dimension as Standard Radiom. Non-rubbing contact for smooth, quiet operation. Limited to input applications. Maximum power rating for all units 1 watt.

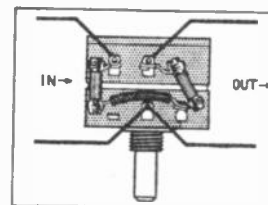


Fig. 2

Catalog No.	Description	Resistance Ohms	NET
M-140	Gain Control.....	250M	\$1.05
M-141	Gain Control.....	500M	
M-142	Gain Control.....	1 Meg.	
M-143	Gain Control.....	2 Meg.	
M-144	Straight Fader.....	500M	1.20
M-145	Straight Fader.....	1 Meg.	
M-146	"Delta-T" Pad.....	50	2.10
M-147	"Delta-T" Pad.....	200	
M-148	"Delta-T" Pad.....	500	

LOT NEXT TO STORE OR LOADING ZONE

WALTER ASHE RADIO COMPANY

1100 Pine Street St. Louis, Missouri



Controls

Exact duplicates of the original in mechanical and resistance specifications, but not necessarily in appearance

Some model radio receivers require controls with dual resistances or special mechanical requirements, and these are listed as special controls. Other receivers, such as Philco, Majestic and RCA have had such wide spread distribution that controls especially made for them are preferred by the service man.

Make and Model No.	Part No.	Price
All American 70, 73-75.....	70-501	\$2.50
All American DC.....	74-815	2.50
All American Model "D" Twin.....	5011911	3.00
Allied Radio Corp. S. G. 9.....	75-525	3.00
American Bosch 28, 29.....	72-207	1.50
American Bosch 48, 49, 48AA Late.....	72-167	1.50
American Bosch 58, 59.....	72-166	1.50
American Bosch 60, 61, 63.....	74-501	2.50
American Bosch 48, 49 Early.....	D-260	1.50
American Bosch Corp. 536 (with plain type control), 636, 637.....	E-239	2.00
American Bosch Corp. 524; 536 (with switch type control), 565, 634.....	R-106	1.50
American Bosch Corp. 736, 737, 738, 838.....	72-112	1.50
Atwater Kent Co. 37, 38, 40, 41, 42, 43, 44, 45, 47, 52, 53.....	74-521	2.50
Atwater Kent 60, 80-F, 83, 83-F, 90, 90-F.....	2011905	2.00
Atwater Kent 60, 60-C, 70 (D Chassis), 70 (L Chassis), 74 (D Chassis), 74 (L Chassis), 76 (D Chassis), 76 (L Chassis), 76 (P Chassis), 87-D (F Chassis).....	G-121	3.00
Atwater Kent 55, 55-C, 55-F, 55-FC, 60, 60-C (Late), 66.....	G-122	3.00
Atwater Kent 55, 55-C, 55-F, 55-FC, 60, 60-C (Early), 61, 61-DC.....	G-123	3.00
Atwater Kent Co. 636.....	51-122	1.50
Atwater Kent 72 (H Chassis).....	25-426	2.50
Belmont Radio Corp., 404.....	1210007	1.50
Belmont Radio Corp., 765.....	2211019	2.00
Belmont Radio Corp., 1070.....	2211022	2.00
Brunswick-Balke 10, Midget.....	55-004	2.00
Bulova Watch Co., M-501.....	55-004	2.00
Bulova Watch Co., Clock Model.....	55-010	2.00
Cadillac Motor Car 6-R, 6-S.....	9011005	2.00
Canadian G. E. M-61, M-67, M-81, M-86.....	1210006	1.50
Canadian G. E. S-42, K-62, J-85.....	1210900	1.50
Canadian G. E. K-79, K-57, K-60.....	1210901	1.50
Canadian G. E. J-125-A.....	1210902	1.50
Canadian G. E. M-125.....	1210914	1.50
Canadian G. E. M-106, M-107.....	1220002	1.50
Canadian G. E. M-51, M-52, M-55, M-56.....	2211903	2.00
Canadian G. E. K-126, K-106.....	2211904	2.00
Canadian G. E. J-125.....	4220900	2.50
Canadian G. E. M-69, M-62, K-64, K-80, K-85.....	D-256	1.50
Canadian Westinghouse W-165-A, W-165-X, W-185-X, W-84.....	1210006	1.50
Canadian Westinghouse B-634, W-73.....	1210901	1.50
Canadian Westinghouse W-122-A.....	1210902	1.50
Canadian Westinghouse W-124.....	1210914	1.50
Canadian Westinghouse W-155, W-254.....	2211903	2.00
Canadian Westinghouse W-103, W-104.....	2211904	2.00
Canadian Westinghouse W-122.....	4220900	2.50
Canadian Westinghouse W-64, W-634.....	D-256	1.50
Canadian Westinghouse B-103.....	R-102	1.50
Canadian Westinghouse 80.....	74-524	2.50
Colonial Radio S.G.-32 AC.....	25-417	2.50
Columbia Radio C-31-101.....	55-004	2.00
Columbia Screen Grid 8-10 Oxford Chromotrope.....	82-028	2.00
Columbia Radio 120-B.....	74-615	2.50
Crosley Radio Corp. 41-A, 42, 61, 602, 608, 609, 610, 704, 705, 706.....	51-037	1.50
Crosley Radio Corp. 408, 418, 428, 828, 71A.....	70-503	2.50
Crosley Radio Corp. 27, 28, 30-31, 33, 34, 40, 41, 42, 82-8 316.....	72-019	1.50
Crosley Radio Corp. 55, 126.....	72-055	1.50
Crosley Radio Corp. 75, 76DC, 77.....	72-047	1.50
Crosley 124, 125.....	2111905	2.00
Crosley Radio Corp., 804 Spec.....	1010987	1.50
Earl Radio 21, 22 AC.....	25-416	2.50
Earl Radio 271.....	76-006	2.50
Edison Radio C-1, C-2, R1, R2, SRC3, M-5-6.....	24-008	1.50
Edison Radio C-1, C-2, R1, R2, SRC3, M-5-6.....	26-021	1.50
Edison Radio C-4, R4, R5, R6, R7, R12, Abbey Jr.....	74-512	2.50
Emerson Radio & Phono. Corp., D-85, 39-69 Twin, AC & DC.....	5011910	3.00
Emerson Radio & Phono. Corp. FSD (280).....	5015001	3.00
"Eria," Electrical Research 225, 271, 271-A.....	75-506	3.00
Fada Radio & Electric Co. 30, 30A, 31, 10, 11.....	70-017	1.50
Fada Radio & Electric Co. 25, 15M, 15MZ.....	79-019	1.50
Fada Radio & Electric Co. 16, 17, 32, 18DC.....	72-001	1.50
Fada Radio & Electric Co. 35B, Wire wound.....	76-007	2.50
Federal Radio Corp. L.....	74-514	2.50
Freed-Eisemann Radio Corp., NR55, 56.....	25-416	2.50
Freshman Radio 21 AC, 32.....	25-416	2.50
Galvin Mfg. Co. 50; 100 (2 types), 110.....	E-233	2.00
Galvin Mfg. Co. 60, 70, 75, 79, 80, Golden Voice.....	E-234	2.00
Galvin Mfg. Co. 57, 62.....	E-235	2.00
Gamble-Skogmo, Inc., 06-A.....	306-002	2.00
Gamble-Skogmo, Inc. 404.....	1210007	1.50

THESE
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Example
\$1.50
LIST
IS
\$.90
NET
\$2.00
LIST
IS
\$1.20
NET
\$2.50
LIST
IS
\$1.50
NET
\$3.00
LIST
IS
\$1.80
NET

These are also listed under Centralab Special Replacements although a standard replacement will frequently answer the purpose equally well by simply cutting the shaft to proper length. Where either a special or standard replacement may be used, both are listed in Centralab's 1937 Guide.

Make and Model No.	Part No.	Price
Gamble-Skogmo, Inc. 2-ODM-578, 22-CM-576.....	5011005	\$3.00
Gamble-Skogmo, Inc. 26-FM-552, R-F Chassis.....	7011001	3.00
Gamble-Skogmo, Inc. 26-R-1, 26-S-1.....	9011005	2.00
General Electric M-61, M-65, M-67, M-69, M-81, M-85, M-86, M-89.....	1210006	1.50
General Electric K-62, KZ-62-P, J-80, K-82, J-85, S-132, JZ-835.....	1210900	1.50
General Electric K-60, K-60-P, K-63, M-63, K-65, K-65-P, C-67, K-78, K-79.....	1210901	1.50
General Electric J-125-A.....	1210902	1.50
General Electric Co. M-125.....	1210914	1.50
General Electric M-50, M-51, M-51-A, M-52, M-55, M-56, C-60, M-62, M-655.....	2211903	2.00
General Electric K-105, K-106, K-106-P, K-107, K-126, M-128, M-128-R, M-129.....	2211904	2.00
General Electric N-60.....	9011005	2.00
General Electric Co. A-64, K-64, K-64-D, M-65, K-66, K-66-M, A-67, M-68, A-70, A-75, K-80, K-80-X, K-85, K-88, K-88-X.....	D-256	1.50
General Electric Co. A-82, A-86, A-87.....	F-163	2.50
General Electric Co. A-125.....	F-164	2.50
General Electric Co. A-83, A-85.....	R-102	1.50
General Electric Co. E-61, E-62, E-68, E-71, E-72, E-76, S-81, E-86, E-91, E-96, E-101, E-105, E-106.....	S-101	2.00
General Electric Co. D-50, D-51, D-52, D-72.....	S-103	2.00
General Electric T-41.....	74-526	2.50
General Electric B-1.....	72-013	1.50
General Electric M-106, M-107.....	1220002	1.50
General Electric Co. J-125 Twin.....	4220900	2.50
General Motors A. B. 150, 160.....	74-514	2.50
General Motors A. B. 150, 160, 1001 (Tone).....	74-517	2.50
General Motors 1001, 150.....	70-019	1.50
General Motors 18, 110, 120A, 130, 140, 180, 190 Above serial 29M.....	74-535	2.50
General Motors Radio Corp., 110, 120, 130 Twin Late Series.....	74-539	2.50
General Household Utilities Co., Chassis 11-C.....	1210010	1.50
General Household 580, 581, 640, 641, 680, 681, Chassis 6C, 6C, 6C.....	2211906	2.00
General Household Utilities Co., 901, 902, 8A, 9A.....	2211905	2.00
General Household, Chassis 6A, 6C, 6F, 650, 651, 660, 661, 662.....	2211901	2.00
General Household 620, 621, 720, 721, Chassis 6HB, 7DB.....	2015900	2.00
General Household 750, 751, 752, 753, 7B, 7E.....	2211902	2.00
General Household 1241, Chassis 12A.....	1210010	1.50
Graybar Electric Co. 678.....	74-526	2.50
Graybar Electric Co. GT-8, GB-9, GC-14, GB-989.....	1210900	1.50
Grebe A. H. Early SK4, AC.....	74-515	2.50
Grigsby-Grunow—See Majestic.....		
Howard Radio Co., "M".....	72-185	1.50
Jackson Bell Jewell 547.....	55-014	2.00
Jesse French & Sons G. Jr. H-1.....	75-507	3.00
Kennedy, Colin B. 12 S.G., 10, 20.....	76-008	2.50
Kolster Radio Corp., K42 to 45.....	76-006	2.50
Majestic (Grigsby-Grunow) 70, 70-B, 71, 72.....	72-180	1.50
Majestic (Grigsby-Grunow) 90, 90-B, 91, 92, 93 Volume.....	70-063	1.50
Majestic (Grigsby-Grunow) 90, 90-B, 100, 100-B, 91, 92, 101, 103 Equalizer.....	76-007	1.50
Majestic (Grigsby-Grunow) 100-B, 102, 103.....	25-421	2.50
Majestic (Grigsby-Grunow) 130-A, 130, 131, 132.....	72-181	1.50
Majestic (Grigsby-Grunow) 50, 51, 52.....	74-523	2.50
Majestic (Grigsby-Grunow) 30, 31, 230-A.....	75-537	3.00
Majestic (Grigsby-Grunow) 20, 21, 22, 23.....	2011908	2.00
Majestic (Grigsby-Grunow) 60, 160, 61, 62, 163.....	72-073	1.50
Majestic (Grigsby-Grunow) 15-B, 150, 151, 153, 154, 155, 156.....	55-010	2.00
Majestic (Grigsby-Grunow) 15, 55, 150 Tone, 56, 57, 58.....	41-080	1.50
Majestic (Grigsby-Grunow) 25-B, 251-B, 253-B, 254-B, 35, 351, 353.....	2011910	2.00
Majestic (Grigsby-Grunow) 55, 56, 57, 58.....	55-010	2.00
Majestic (Grigsby-Grunow) 200, 201, 203, 207.....	72-156	1.50
Majestic (Grigsby-Grunow) 210, 211, 214, 215.....	72-155	1.50
Majestic (Grigsby-Grunow) 290, 300, 300-A, 310-A, 310-B, 77, 291, 293, 294, 303, 304, 307, 311, 314, 315, 321, 336.....	1010961	1.50
Majestic (Grigsby-Grunow) 370, 371, 373.....	2112901	2.00
Majestic (Grigsby-Grunow) 66, Auto.....	2011903	2.00
Majestic (Grigsby-Grunow) 440.....	2111937	2.00
Majestic (Grigsby-Grunow) 2460.....	1010982	1.50
Majestic (Grigsby-Grunow) 500.....	2012501	2.00
Majestic (Grigsby-Grunow) 118 Ford.....	1010983	1.50
Majestic 25, 251, 253, 254 Early.....	55-014	2.00
Midwest Radio Corp. 16-34.....	F-165	2.50
Montgomery-Ward & Co. AE-10.....	74-509	2.50
Montgomery Ward & Co. 62-197.....	7011001	3.00
Montgomery Ward & Co. 62-313 (Tone).....	E-240	2.00

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1100 Pine Street

St. Louis, Missouri

CENTRALAB

Make and Model No.	Part No.	Price
Montgomery Ward & Co. 62-313 (Volume)...	8-107	\$2.00
Montgomery-Ward Co. 77, 95, 62-120.....	306-102	2.00
Montgomery Ward & Co. 62-169, 62-171.....	1210007	1.50
Montgomery Ward & Co. 62-185, 62-186, 62-187, 62-190, 62-196.....	5011004	3.00
Montgomery Ward 62-179, 62-194, 62-206, 62-216, 62-218.....	5011005	3.00
Montgomery Ward & Co. 62-166, 62-202.....	9011005	2.00
Montgomery Ward & Company 2955.....	25-423	2.50
National Carbon Co. 50 Series.....	74-503	2.50
Noblitt Sparks (Arvin) 7, 17, 27, 37.....	E-241	2.00
Noblitt Sparks (Arvin) 15, 16, 25, 35, 45.....	2011087	2.00
Noblitt Sparks (Arvin) 18, 28, 33.....	R-107	1.50
Philco 14, 15 (Late), 18 (Code 124).....	1210907	1.50
Philco 16.....	2211900	2.00
Philco 14, 17, 18, 49, 118.....	2221903	2.00
Philco 19 Vol., Late.....	1210906	1.50
Philco 20, 21, 41 DC, 42 DC, 77.....	74-579	2.50
Philco 23-X.....	1010981	1.50
Philco 35, 36 (Batt.).....	4010907	2.50
Philco 30, 36, 111, 111A, 112, 112A.....	72-177	1.50
Philco 37 (Batt.).....	74-557	2.50
Philco 38, 38A (Batt.).....	1010980	1.50
Philco 34, 39.....	2025900	2.00
Philco 70 Lazy "X," 370.....	75-544	3.00
Philco 43.....	2021908	2.00
Philco 44.....	2021907	2.00
Philco 46 (D.C.).....	74-560	2.50
Philco 22-L, 47 (D.C.) 71.....	51-095	1.50
Philco 48 (D.C.) 51, 51A, 52.....	51-076	1.50
Philco 50, 50A.....	74-559	2.50
Philco 54.....	2011911	2.00
Philco 57, 59.....	2021905	2.00
Philco 60, 261.....	2021001	2.00
Philco 65.....	1010978	1.50
Philco 66.....	2021001	2.00
Philco 70, 90 (2-47's).....	1010975	1.50
Philco 70, 90 (2-45's), 470, 70A.....	74-579	2.50
Philco 76.....	1010982	1.50
Philco 80.....	2021906	2.00
Philco 81, 81A.....	1020903	1.50
Philco 37-84 (Code 122), 84, 84B.....	2021909	2.00
Philco 86, 87, 511.....	24-016	1.50
Philco 89, 19 Early.....	2011921	2.00
Philco 89 Late.....	1020904	1.50
Philco 89, with Switch Type Control.....	2021911	2.00
Philco 90 (1-47), 490.....	1010976	1.50
Philco 91.....	1010981	1.50
Philco 91 (Late).....	1210907	1.50
Philco 95.....	24-264	1.50
Philco 97, 144.....	2211900	2.00
Philco 16 (Code 125, 126, 127), 17 (Code 122), 116-B (Code 121), 116-X (Code 122), 650, 655, 660, 665.....	2221906	2.00
Philco 28, 45.....	2221901	2.00
Philco 200, 201.....	2221910	2.00
Philco CT-2 Chrysler, CT-5 De Soto, CT-5 Chrysler, C-6, FT-6 Ford, CZ Chrysler, DU Dodge, G (Code 122) Dodge, Chrysler, Hupmobile, N, FJ Plymouth	2221904	2.00
Philco "G" Dodge Car Radio.....	2011922	2.00
Philco 805 Car Radio.....	1010988	1.50
Philco 808 Car Radio.....	1210916	1.50
Philco 809, 810 Car Radio.....	1010989	1.50
Philco 610.....	2021910	2.00
Philco 611 AC-DC.....	2011923	2.00
Philco 620, 625, 630, 635.....	2221905	2.00
Philco 640, 641, 642, 645, 651.....	2221909	2.00
Philco 623 (Batt.).....	2015901	2.00
Philco 643.....	2225900	2.00
Philco 680.....	1020906	1.50
Philco MT-3 Pierce-Arrow, RT-3 Reo, AC-26 Studebaker, 800 (Code 122), 802, D Nash (Code 122), H Hupmobile (Code 122), PHD, PHXD Packard.....	2211907	2.00
Philco 808 Car Radio.....	1210915	1.50
Philco P-1421 Packard.....	1210906	1.50
Philco Radio & Telev. Co. FT-9 Ford, 816, 817, 8-1431 Studebaker.....	D-257	1.50
Philco Radio & Telev. Co. PT-14 Packard.....	D-258	1.50
Philco Radio & Telev. Co. 818, 819.....	D-259	1.50
Philco Radio & Telev. Co. 11, AC-236 Studebaker, 700, 800, H Hupmobile, J Nash, P Nash, R Car Radio, R Hupmobile.....	E-236	2.00
Philco Radio & Telev. Co. 10, AC-206 Studebaker, C Nash, D Nash, ME Pierce-Arrow.....	E-237	2.00
Philco Radio & Telev. Co. 600, 37-600.....	E-238	2.00
Philco Radio & Telev. Co. 37-10, 37-11 (Code 121), 37-15, 37-610 (Code 121-122), 37-620 (Code 121-122), 37-623, 37-630 (Code 121-122), 37-623, 37-630 (Code 121-122), 37-640 (Code 121-122), 37-650 (Code 121-122), 37-655, 37-660 (Code 121-122), 37-670, 37-675 (Code 121-122)	R-103	1.50
Philco Radio & Telev. Co. 37-116 (Expander).....	R-104	1.50
Philco Radio & Telev. Co. 37-60, 37-61, 37-89.....	R-105	1.50
Philco Radio & Telev. Co. 602, 37-602.....	R-102	2.00
Pilot Radio & Tube Corp. K-117.....	74-526	2.50
Pilot Radio & Tube Corp., Dragon-ALL WAVE.....	74-615	2.50
R.C.A. Victor R-37, R-38, R-37-P, R-38-P, 120, 124, 223, 330, 331.....	1210901	1.50
R.C.A. Victor R-78 (2nd Type), RAE-84.....	1210902	1.50
R.C.A. Victor R-78 (1st Type).....	4220900	2.50
R.C.A. Victor R-32, RE-45, 52, 75, 145.....	74-600	2.50
R.C.A. Victor 21, 22.....	72-013	1.50
R.C.A. Victor RE-57, RE-73, R-14, RE-34, 42.....	74-524	2.50
R.C.A. Victor R-17, RE-17, Rad. 42, Rad. 48.....	74-526	2.50
R.C.A. Victor Co., Inc. 5-M.....	R-100	1.50
R.C.A. Victor Co., Inc. 6-M, 6-M-2.....	R-101	1.50
R.C.A. Victor Co., Inc. R-51-B, R-53-B.....	R-102	1.50

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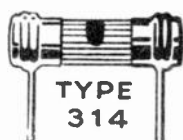
Example
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\$1.50
LIST
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\$0.90
NET
\$2.00
LIST
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\$1.20
NET
\$2.50
LIST
IS
\$1.50
NET
\$3.00
LIST
IS
\$1.80
NET

Make and Model No.	Part No.	Price
R.C.A. Victor Co., Inc. Hudson H-6 Auto.....	8-100	\$2.00
R.C.A. Victor Co., Inc. M-101, M-104, M-108, M-109.....	8-103	2.00
R.C.A. Victor R-8, R-10, R-11, R-12, RE-18, RE-18-A, RE-19, R-21, RO-23, RAE-26.....	1210900	1.50
R.C.A. Victor 128, 128-E, ACR-136, 143, 224, 224-E, M-226, 242, 243, 322, 322-E Duo, 341.....	1210006	1.50
R.C.A. Victor 262, 265.....	1220002	1.50
R.C.A. Victor Co., Inc. AVR-1, 9-Tube AW, 121, 122, 127, 140, 141, 141-E, 220, 221, 222, 240, 320, 321, 327, 340, 340-E.....	D-256	1.50
R.C.A. Victor T-5-2, M-107, 117, 118, 119, 125, 211, 214, 225.....	2211903	2.00
R.C.A. Victor R-90, R-90-P, 260, 261, 280, 380, 381.....	2211904	2.00
R.C.A. Victor 5-T, C-6-8, C-6-2, 6-T, 6-K, 6-T-2, 6-K-2, T-6-1, T-6-7, T-6-8, C-7-6, D-7-7, T-7-5, 7-T, 7-K, 7-U, 7-X, C-8-15, C-8-19, C-8-20, 8-K, 8-T, T-8-14, T-8-18, C-9-4, D-9-19, T-9-10.....	1210912	1.50
R.C.A. Victor Co., Inc. 15-K.....	D-255	1.50
R.C.A. Victor 9-K, 9-K-2, 9-T, 10-K, 10-T, T-10-1, T-10-3, C-11-1, C-11-3, D-11-2, C-13-2.....	1210913	1.50
R.C.A. Victor C-15-3, C-15-4, D-22-1, 281.....	1210914	1.50
Scott Transformer Co. Deluxe A. V. G. Super Sears, Roebuck & Company Batt. Set.....	82-045	2.00
Sears-Roebuck & Co. 1705.....	G-120	3.00
Sears-Roebuck & Co. 5-tube Auto Set (1935) Sears-Roebuck & Co. 1715, 1721, 1721-X, 1722, 1722-X, 1726-X, 1732, 1732-X.....	8-105	2.00
Sparks-Wilthington (Sparton) 750D, 870, 69, 79-A, 101, 110AC, 301, 589, 591, 593, 930, 931.....	4010943	2.50
Sparton 89-A, 111-A, 564, 570, 574, 600, 610, 620, 737, 740, 870.....	1010963	1.50
Sparton 410-20-30.....	1010944	1.50
Splitdorf—See Edison.....	75-543	3.00
Sterling Radio F-1-60, 8 Tube, G.....	75-507	3.00
Stewart-Warner Corp. 900 Series.....	28-031	1.50
Stewart-Warner Corp. R-100 Series, 950, 935, 110 Series.....	30-010	1.50
Stewart-Warner Corp. 102-D (Batt.).....	G-124	3.00
Stromberg-Carlson Tele. 635, 636.....	72-161	1.50
Stromberg-Carlson Tele. 635, 636.....	72-162	1.50
Stromberg-Carlson Tele. 641, 42, 52, 54.....	72-159	1.50
Stromberg-Carlson Tele. 641, 42, 52, 54.....	72-160	1.50
Stromberg-Carlson Tele. 846, 848.....	72-205	1.50
Stromberg-Carlson Tele. 846, 848.....	72-206	1.50
Stromberg-Carlson Tele. 638.....	72-210	1.50
Stromberg-Carlson Tele. 638.....	72-209	1.50
Stromberg-Carlson Tele. 38, 39, 40.....	75-545	3.00
Stromberg-Carlson 48, 49, 50, 51.....	74-580	2.50
Temple Corp. 8-61-81-91, 5-55.....	74-515	2.50
Transformer Corp. 40, 100, G-102.....	55-004	2.00
Transformer Corp. 300, 340.....	308-001	2.00
Transformer Corp., AC-220, 25-220.....	51-084	1.50
Wells-Gardner (Gulbransen) WG24, 291, CG, 9-in-line, Club, Late.....	74-509	2.50
Wells-Gardner (Gulbransen) 80-8 Tube.....	28-423	2.50
Wells-Gardner (Gulbransen) 95A, 5E Series.....	308-002	2.00
Wells-Gardner & Co. 2-DL Series (Tone).....	E-240	2.00
Wells-Gardner & Co. 6-K Series.....	S-106	2.00
Wells-Gardner & Co. 2-DL Series (Volume).....	S-107	2.00
Wells-Gardner & Co., 7-G, 7-G-M, 7-K, 37-G-508, 37-G-566.....	5011004	3.00
Wells-Gardner & Co. 2-C, 2-CM, OD, ODM.....	5011005	3.00
Wells-Gardner & Co. 6-F, R-F Series.....	7011001	3.00
Wells-Gardner & Co., 6N, 6R, 6S, Cadillac (Car Radio).....	9011005	2.00
Westinghouse Electric WR-4.....	74-526	2.50
Westinghouse Electric WR-2.....	72-013	1.50
Westinghouse Electric WR-15, WR-16, WR-16, WR-18.....	1210900	1.50
Westinghouse Electric WR-48, WR-48-A, WR-53.....	2211903	2.00
Westinghouse Electric WR-45, WR-45-A, WR-46, WR-46-A, WR-49, WR-50.....	1210006	1.50
Westinghouse Elec. & Mfg. Co. WR-30, WR-31, WR-37, WR-38, WR-39.....	D-256	1.50
Westinghouse Electric WR-28, WR-36.....	1210901	1.50
Westinghouse Elec. & Mfg. Co. WR-500.....	E-239	2.00
Zenith Radio Corp. 6-M-90-S, 6-M-90-D, 6-M-91-S, 6-M-91-D, 7-M-91-S, 7-M-91-D (Tone).....	1020007	1.50
Zenith Radio 50, 60, 70-1-2-3-7, 712-22-32-72, 70 Series.....	75-614	3.00
Zenith Radio 52, 53, 54, 57, 522-32-42, 70, 102, 112, 212, 11, 12.....	62-042	2.00
Zenith Radio Corp. 35, 730.....	308-002	2.00
Zenith Radio 5601-M Ford Car Radio.....	2011113	2.00
Zenith Radio Corp. 6-M-90-S, 6-M-90-D, 6-M-91-S, 6-M-91-D, 5630, 5631 Chassis.....	2011497	2.00
Zenith Radio Corp. 6-M-92, 5632 Chassis.....	2011513	2.00
Zenith Radio Corp. 980, 985, 990, 1201, 1201-A Chassis.....	2211006	2.00
Zenith Radio Corp. 7-M-91-S, 7-M-91-D; 5706 Chassis.....	2211025	2.00
Zenith Radio Corp. 6-B-107, 6-B-129, 6-B-164, 6-B-128, 6-B-137, 6-B-147, 6-B-152; 5634, 5635 Chassis.....	2211029	2.00
Zenith Radio Corp. 5619.....	2011344	2.00
Zenith Radio Corp. 9-8-30, 9-8-55, 12-L-57, 12-L-58, 16-A-61, 16-A-63; 1202, 1202-A, 1601-C, 1601-P, 5309 Chassis.....	2211017	2.00
Zenith Radio Corp., 5630, 5631, 5706 Chassis (Tone).....	1020007	1.50

See the Centralab Volume Guide for Details of these and other Replacement Controls

LOT NEXT TO STORE OR LOADING ZONE

Centralab Fixed Resistors



RATING 1 WATT

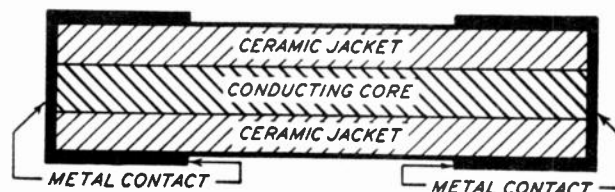
SIZE 1/4 X 1"

SIZES AVAILABLE

100	20000
200	25000
300	30000
400	50000
500	75000
750	100000
1000	150000
1500	200000
2000	250000
2500	300000
3000	500000
5000	750000
7500	1 MEG.
10000	2 MEG.
15000	3 MEG.

NET
EA.

8¢



THIS magnified cross section illustrates important and exclusive features of Centralab resistor design. These are:

1. Center core of resistance material is surrounded by a dense shock-proof ceramic providing strength and protection against humidity.
2. Core and jacket are fired together at 2500 degrees F. into a single solid unit, hard and durable as stone.
3. Pure copper covers the resistor ends for wire lead contact. Contact to the resistance material is at the extreme ends only, providing uniform resistance and load distribution over ENTIRE length. End contacts do not short circuit part of resistance as in other types.
4. Because resistance is small in diameter and uniformly distributed for entire length, Centralab's specific resistance per unit length is low. The result is low noise level and constant value over a wide range of frequency and voltage.

ALL RESISTORS HAVE
FLEXIBLE WIRE LEADS
1 1/2" LONG AND ARE
RMA COLOR CODED.

Motor Radio Spark Noise Suppressors

SUPPRESSOR design is simple enough when only radio is considered, but to design one that will permanently maintain full motor efficiency along with good radio reception is a difficult problem.

Every motor ignition spark is followed by a train of radio frequency waves. Resistances of proper value located at the plugs and the common distributor cable damp these waves so they do not radiate.

The effectiveness of any suppressor is determined by its R.F.—not its D.C. resistance, as ordinarily measured. In some designs the R.F. resistance measures as little as 25 per cent of the D.C. resistance. Naturally then, a high value must be used to obtain

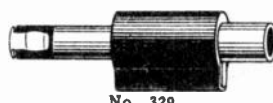
adequate noise suppression. That is when motor difficulties develop.

Motor ignition systems are carefully balanced up 10,000 volt surges of considerable current. The spark itself is a direct current surge. A suppressor of too high D.C. resistance may diminish the spark and cause hard starting, poor gas mileage and sluggish performance.

Centralab Suppressors insure top efficiency for both the radio and the motor. They are designed with long resistors and minimum capacity. They have the best possible ratio of R.F. to D.C. resistance. A resistance of only 10,000 ohms gives adequate noise suppression, and this low D.C. resistance insures full motor efficiency. Mechanically they are very strong, and will withstand high voltage, heat, vibration, and all kinds of weather.



No. 307



No. 329



No. 304



No. 305



No. 338

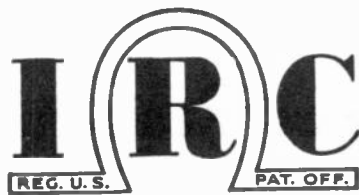
- Part No. 307—Bracket type. For older types of cars.....
 Part No. 329—Distributor type. Placed in series with center distributor cable.....
 Part No. 304—Snap on plug type. Snaps on plug at any desired angle.....
 Part No. 305—Snap on plug cable end type. Replaces regular cable end.....
 Part No. 338—Cable type. To be inserted in cable near spark plug.....

NET EA.
\$.18



SPECIAL DISTRIBUTOR SUPPRESSOR FOR ALL FORD 8 NET \$.18

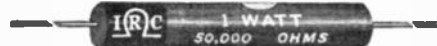
IT'S EASY TO PARK AT WALTER ASHE . . .



RESISTORS

TYPE BT RESISTOR

FULLY INSULATED—ELEMENT ENTIRELY SEALED



TYPE BT-1/2
1/2 WATT

10¢

TYPE BT-1
1 WATT

12¢

Actual size illustrations
Leads are 1 1/4" long

NET EACH

NET EACH

STOCK RESISTANCE SIZES

50 OHMS
100
150
200
250
300
350
400
450
500
600
750
800
1000
1250
1500

2000 OHMS
2250
2500
3000
3500
4000
5000
6000
7000
7500
8000
9000
10000
11000
12000
12500

15000 OHMS
17500
20000
22500
25000
30000
35000
40000
50000
60000
65000
70000
75000
100000
125000
150000

200000 OHMS
250000
300000
400000
500000
600000
750000

1 MEGHOM
1 1/2
2
3
4
5
6
7
10
20



2 WATT

Metallized



2 Watt Type BT-2

SUPPLIED IN ALL RANGES FROM
100 OHMS TO 5 MEGHOMS

NET EACH  \$.18



DUAL RESISTANCE INDICATOR



Quickly Tell the Proper
Resistance Value
for Best Results in
Any Circuit.

(FUSE PROTECTED)

Few service tools will prove so useful—and in so many ways. Enables you to check and replace even the "dead" resistors and all others—including those which may have changed in value. Also useful for measuring or determining resistance values for volume controls; as calibrated potentiometer or voltage divider or as temporary standard resistor.

Two scales permit accurate readings from 100 to 100,000 ohms. Range may be extended indefinitely by adding fixed resistors in series. Convenient fuse guards resistance strips from accidental overloads. Indicator has sturdy metal case; ball-bearing slide; convenient tapered clips. The handiest service tool of all. Get one today! List \$4.50. NET **\$2.70**

WALTER ASHE RADIO COMPANY

1100 Pine Street St. Louis, Missouri

TRADE **OHMITE** MARK
REG. U. S. PATENT OFFICE

"Brown Devil" Vitreous Enameled Resistors

10 Watt and 20 Watt Sizes

Brown Devil resistors are the same size and have the same wattage ratings as Red Devils. They have a real vitreous enamel coating instead of the high temperature cement. These resistors are used both for radio and industrial purposes and offer all of the ad-



vantages of a vitreous enameled unit. However, these units must not be run at a higher wattage than is specified as vitreous enamel will not stand the same temperature as the refractory cement which is used on the Red Devils. Brown Devils are especially recommended for applications where there is an abnormal amount of moisture present.

Low Temperature Enamel Resistors

Because of their high resistance, the units listed below will seldom be called upon to dissipate much wattage. Therefore, in order to keep the price down they have been coated with a low temperature enamel. Vitreous enameled high resistance units may be secured upon order at higher prices, if desired.

10 WATT

30,000
35,000
40,000
45,000
50,000

A/L 10 WATT SIZES

NET \$.24

20 WATT 30,000 TO 50,000 .45

20 WATT 55,000 TO 100,000 .60

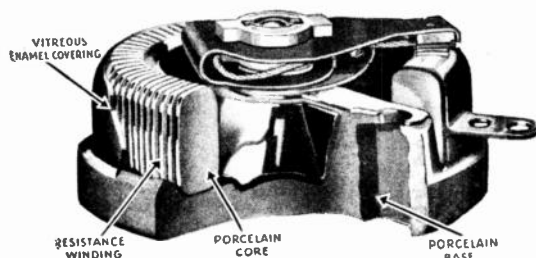
STOCK VALUES 20 Watt Size

Ohms	Max. Current Milli-amps	Max. Volts Across Unit
30,000	21	635
35,000	18	648
40,000	17	694
45,000	13	585
50,000	11	550
55,000	11	550
60,000	10	600
65,000	10	650
70,000	9	650
75,000	9	670
80,000	8	693
85,000	7	635
90,000	6.5	600
95,000	6	600
100,000	6	633

STOCK VALUES 10 Watt Size					
Ohms	Max. Cur. Milli-amps	Max. Volts Across Unit	Ohms	Max. Cur. Milli-amps	Max. Volts Across Unit
1	3,150	3	1,000	100	100
2	2,230	4.4	1,100	95	104
3	1,825	5.4	1,200	91	109
4	1,580	6.3	1,250	89	111
5	1,415	7	1,500	79	119
7.5	1,155	8.6	1,750	74	130
10	1,000	10	2,000	69	138
12	910	11	2,250	64	144
15	815	12	2,500	61	154
20	707	14	3,000	56	169
25	630	15	3,500	51	179
30	575	17	4,000	47	190
35	535	18	4,500	44	197
40	500	20	5,000	40	200
50	447	22	6,000	36	219
75	365	27	7,000	33	230
100	315	31	7,500	32	245
125	283	35	8,000	31	248
150	258	38	10,000	24	245
200	223	44	12,000	20	245
250	200	50	12,500	20	250
300	182	54	14,300	18	258
350	169	59	15,000	18	274
400	158	63	16,000	17	272
500	141	70	17,500	17	298
600	129	77	18,000	16	288
700	119	83	20,000	15	316
750	115	86	22,500	15	338
800	111	88	25,000	14	354
900	105	94			

TRADE **OHMITE** MARK
REG. U. S. PATENT OFFICE

Vitreous Enameled Rheostats



OBTAINABLE IN EITHER 25, 50, 100, 300 AND 500 WATTS. 1/2 TO 10,000 OHMS.

PHONE OR WRITE US FOR FURTHER PRICES AND INFORMATION ON THESE RHEOSTATS.

"Cordohm" Line Cord Resistor For A.C.-D.C. Radio Sets

The Cordohm resistor is made to replace the internal voltage dropping resistors in the older AC-DC radio sets. It consists of a line cord into which has been incorporated a third element, the voltage dropping resistor which reduces the line voltage to that needed for the tube filaments.



When the voltage dropping resistor is built into the set, the generated heat has no chance to escape and affects the life of the component parts, particularly the electrolytic condensers. The Cordohm entirely eliminates the heat from the set and insures more satisfactory operation.

OHMS	VOLTS DROP	OHMS	VOLTS DROP
135	69 TO 75	250	32 TO 45
160	62 TO 69	290	25 TO 32
180	53 TO 61	330	18 TO 24
220	45 TO 52	360	11 TO 18

NET PRICE EACH \$.36

IT'S EASY TO PARK AT WALTER ASHE . . .

WALTER ASHE RADIO COMPANY

1100 Pine Street

St. Louis, Missouri

17

OHMITE SEMI-VARIABLE RESISTORS---VITREOUS ENAMELED

ADJUSTABLE 10 WATT VITREOUS ENAMELED RESISTORS

1 OHM	50 OHM	600 OHM	3500 OHM
2	75	750	4000
3	100	800	5000
4	150	1000	6000
5	200	1250	7000
7.5	250	1500	7500
10	300	2000	8000
15	350	2250	8500
20	400	2500	9000
25	500	3000	10000



NET EACH \$.36



ADJUSTABLE CLIPS
NET PRICE EA. \$.06



RATING 30 WATTS
SIZE 2" X 11/16"

RATING 55 WATTS
SIZE 4" X 11/16"

RATING 75 WATTS
SIZE 6" X 11/16"

OHMS	MILLS.	NET PRICE	OHMS	MILLS.	NET PRICE	OHMS	MILLS.	NET PRICE
25	1090		25	1480		25	1730	
50	770		50	1048		50	1220	
75	630		75	850		100	865	
100	545		100	740		200	612	
200	385		200	520		300	500	
300	310		300	425		400	432	
400	272		400	360		500	387	
500	245		500	330		750	316	\$1.11
750	200		750	270		1000	274	
1000	173	\$.51	1000	234	\$.81	1500	223	
1250	155		1250	210		2000	193	
1500	141		1500	190		2500	173	
2000	122		2000	165		3000	158	
2500	109		2500	148		4000	137	
3000	100		3000	135		5000	122	
3500	92		3500	126		7500	100	1.20
4000	86		4000	117		10000	86	1.35
5000	77		5000	104		15000	70	1.50
7500	63		7500	85	.90	20000	61	1.59
10000	54		10000	74		25000	55	
12000	50	.60	12000	67	.99	30000	50	
15000	44		15000	60		40000	43	
20000	36	.69	20000	50	1.08	50000	39	1.65
25000	33		25000	45	1.11	60000	35	1.68
30000	31	.75	30000	43	1.14	80000	31	1.74
40000	26	.78	40000	37	1.17	100000	27	1.80
50000	24	.84	50000	34	1.20			

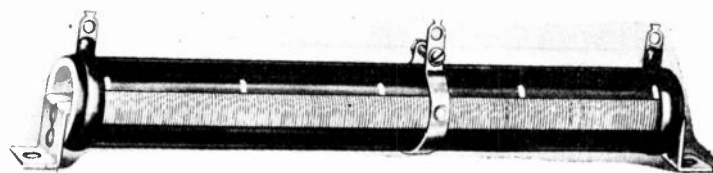
LOT NEXT TO STORE OR LOADING ZONE

WALTER ASHE RADIO COMPANY

1100 Pine Street

St. Louis, Missouri

"Dividohm" Vitreous Enameled Semi-variable Resistors



RATING-100 WATTS IN OPEN AIR
 SIZE 6 1/2" X 7/8"
 FURNISHED WITH BRACKETS

RATING-200 WATTS IN OPEN AIR
 SIZE 10 1/2" X 1 1/4"
 FURNISHED WITH BRACKETS

STOCK NO.	RESISTANCE IN OHMS	CAP. IN MILLS	YOUR COST
0960	100	1000	\$1.20
0961	500	447	1.20
0962	1000	316	1.20
0963	2500	200	1.20
0964	5000	141	1.20
0965	10,000	100	1.35
0966	15,000	81	1.35
0967	20,000	70	1.35
0968	25,000	56	1.35
0969	30,000	51	1.50
0970	40,000	38	1.50
0971	50,000	28	1.50
0972	75,000	16	1.65
0973	100,000	14	1.65

STOCK NO.	RESISTANCE IN OHMS	CAP. IN MILLS	YOUR COST
1360	100	1,414	\$1.80
1361	500	632	1.80
1362	1000	447	1.80
1363	2500	283	1.80
1364	5000	200	1.80
1365	10,000	141	1.80
1366	15,000	115	2.10
1367	20,000	100	2.10
1368	25,000	89	2.10
1369	30,000	81	2.10
1370	40,000	63	2.10
1371	50,000	49	2.10
1372	75,000	30	2.10
1373	100,000	20	2.10



ADJUSTABLE SCREW TYPE CONNECTING CLIPS FOR EITHER THE 100 WATT OR 200 WATT SIZE. YOUR COST EA. \$.09

WIREWATT

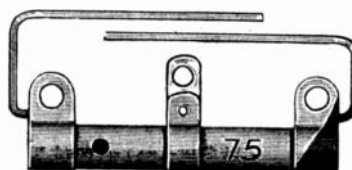
1 WATT CENTER-TAPPED RESISTORS

RESISTANCE MAX. VOLTS

10		3.15
15	NET \$.21	3.85
20		4.4
25		5.0
30		5.3
40		6.3
50		7.0
75		8.5
100		10.0

OHMITE

Center-Tapped Resistors



RED DEVIL

10 WATT CENTER-TAPPED RESISTORS

RESISTANCE MAX. VOLTS

10		10.0
15	NET \$.30	12.5
20		14.0
25		15.5
30		17.2
40		20.0
50		22.3
75		27.3
100		31.5

IT'S EASY TO PARK AT WALTER ASHE . . .

1100 Pine Street

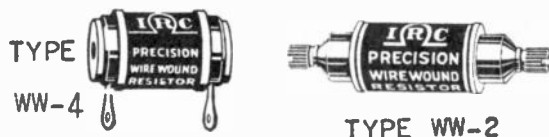
St. Louis, Missouri

IRC PRECISION

WIRE WOUND RESISTORS

Designed for Use in Radio and Electrical Equipment That Aims at Perfection

Designed to meet the most exacting demands for accuracy and durability. Especially adapted for use as meter multipliers, and shunts in increasing the range of single range volt-meters and milliameters, and for other equipment such as faders, gain control pads, etc. Normal tolerance is 1%. Closer tolerances may be obtained at slightly higher prices



TYPE WW-4

NET PRICE

.1-.5-1-10-25-50-100-200	
250-300-500 OHMS	\$.51
1000-1500-2000 OHMS	.54
2500 OHMS	.54
4000-5000-7500-10,000	.60
12,500-15,000	.66
20,000-22,500-25,000	
30,000-40,000-50,000	.81
60,000-75,000	.96
.1 MEG	1.11
.125 MEG	1.26
.15-.175-.2 MEG	1.41
.225-.25 MEG	1.56
.3 MEG	1.71
.4 MEG	1.80
.5 MEG	2.04

TYPE WW-2

.6 MEG	2.55
.75 MEG	2.70
.9 MEG	2.85
1. MEG	3.15
1.5 MEG	4.50
2. MEG	6.00
2.5 MEG	7.50



SIGNAL

PORTABLE ELECTRIC DRILLS

1/4 - inch Standard Duty



\$ **17** ¹⁵ NET

DYNATROL

Line Noise Filter and Noiseless Aerial

Highly recommended for Short Wave and All Wave to eliminate the extreme noise level so prevailing on the short wave channels. A most efficient filter of line noises — cuts out all noises caused by elevators, electric refrigerators, electric lighting systems. Provides good clear radio reception from any radio. In itself the Dynatrol is a practical indoor aerial—and as an adjunct to an outdoor antenna it greatly increases power and selectivity.



NET EACH 90¢

Quick Antenna Connector

This is the latest type of connecting terminal. It can be connected or disconnected in a jiffy. Ideal for use with all makes of automobile radio sets where a quick and easy connection is required. This Connector is made of two pieces and has a turn lock on the side. On the inside of this connection there are two fibre bushings with a strong spring for contact. Made of brass and cadmium plated.

#221 ANTENNA CONNECTOR, NET \$.05

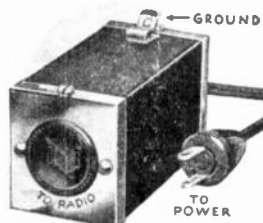


Fuse Connector

This is the latest type of fuse housing that is principally used on the automobile radio sets. It works on the same principle as the above described connector, only it is so much longer and larger. The inside of this connector has a sleeve for taking the standard type of fuse. Ideal quick changing fuse holder. Made of brass and cadmium plated, with two bushings and springs for contact purposes.

#222 FUSE CONNECTOR, NET \$.08

MILLER NO. 7818 LINE FILTER



Miller Line Filter #7818

NET \$2 40

When used in the supply cord of the radio receiver it will prevent unwanted signal pickup and direct line noise pickup from the house wiring system.

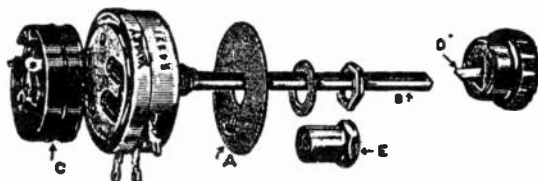
LOT NEXT TO STORE OR LOADING ZONE

WALTER ASHE RADIO COMPANY

1100 Pine Street St. Louis, Missouri

YAXLEY

YAXLEY Volume Controls



The New Yaxley replacement volume controls incorporate such exclusive features as an adjustable grid bias, universal 3-inch aluminum shaft, 4-inch long extension shaft, spiral hex shoulder nut, knob spacer, special attachable switch, and completely enclosed control. All of these features definitely determine the quality of workmanship and minimize the time spent in servicing receivers.

* Have adjustable bias feature. W.W.—Wire Wound.

UNIVERSAL Single Controls

Control No.	Type	Resistance	
		Ohms	Taper
V	W.W.	60	linear
W	W.W.	100	linear
X	W.W.	200	linear
A	W.W.	500	left
B	W.W.	1000	left
*C	W.W.	2000	right
C12	W.W.	2000	left
*D	W.W.	3000	right
*D7	W.W.	3000	left
D12	W.W.	3000	left
*E	W.W.	5000	right
E7	W.W.	5000	left
E12	carbon	5000	left
*F	W.W.	7500	right
*F7	W.W.	7500	left
F12	carbon	7500	left
*G	W.W.	10M	right
*G7	W.W.	10M	left
G12	carbon	10M	left
*H	W.W.	15M	right
H7	W.W.	15M	left
H12	carbon	15M	left
Y	carbon	20M	right
J	carbon	25M	right
K	carbon	50M	right
K12	carbon	50M	left
Z	carbon	75M	right
Z12	carbon	75M	left
L	carbon	100M	left
M	carbon	250M	left
N	carbon	500M	left
O	carbon	1 Meg.	left
P	carbon	2 Meg.	left

NET PRICE

\$.60

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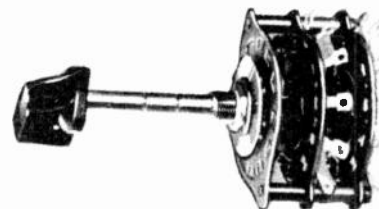
Dial Plates

Marking	For all Yaxley Switch types 1200L, 1300L and 1 1/2" base 3100J, 3200J. 30 degree spacing between numerals.	For all Yaxley Switches with 1 1/2" base. 20 degree spacing between numerals.
	Cat. No.	Cat. No.
1 to 2.	372.	453.
1 to 3.	373.	454.
1 to 4.	374.	455.
1 to 5.	375.	456.
1 to 6.	376.	457.
1 to 7.	377.	458.
1 to 8.	378.	459.
1 to 9.	379.	460.
1 to 10.	380.	461.
1 to 11.	381.	462.
1 to 12.	382.	463.
1 to 13.	383.	464.
1 to 14.	384.	465.
1 to 15.	385.	466.
1 to 16.	386.	467.
1 to 17.	387.	468.
1 to 18.	388.	469.



NET EACH
\$.09

Multi-Gang Circuit Selector and All-Wave Switches



No. of Circuits per Section or Gang	Total No. of Circuits per Switch	No. of Points or Contacts per Circuit	No. of Sections or Gangs per Switch	Non-Shorting Type Catalog No.	NET
One.	One.	6.	One.	1316L	.60
One.	One.	11.	One.	1311L	.62
Two.	Two.	5.	One.	1315L	.75
Three.	Three.	3.	One.	1313L	.81
Four.	Four.	2.	One.	1312L	.87
One.	Two.	6.	Two.	1326L	.96
One.	Two.	11.	Two.	1321L	1.05
Two.	Four.	5.	Two.	1325L	1.30
Three.	Six.	3.	Two.	1323L	1.36
Four.	Eight.	2.	Two.	1322L	1.35
One.	Three.	6.	Three.	1336L	1.32
One.	Three.	11.	Three.	1331L	1.41
Two.	Six.	5.	Three.	1335L	1.50
One.	Four.	6.	Four.	1346L	1.65
One.	Four.	11.	Four.	1341L	1.80
Two.	Eight.	5.	Four.	1345L	2.10
One.	Five.	11.	Five.	1351L	2.25
Two.	Ten.	6.	Five.	1356L	2.76
One.	Six.	11.	Six.	1361L	3.67
Two.	Twelve.	6.	Six.	1366L	3.36

Single-Gang Circuit Selector Switches



Number of Circuits	Number of Contacts per Circuit	Adjustable Stop	Non-Shorting Type Catalog No.	NET
One.	5.	No.	3215J	.45
One.	12.	No.	32112J	.45
Two.	2.	No.	3222J	.45
Two.	3.	No.	3223J	.45
Two.	6.	No.	3226J	.45
Three.	4.	No.	3234J	.54
Four.	2.	No.	*3242J	.51
Four.	3.	No.	3243J	.51
One.	17.	Yes.	32117J	.81
Two.	9.	Yes.	3229J	.81
Three.	6.	Yes.	3236J	.90
Six.	3.	Yes.	*3263J	.90

IT'S EASY TO PARK AT WALTER ASHE . . .

1100 Pine Street

St. Louis, Missouri

BURGESS RADIO BATTERIES



NO. 2308 NO. 10308



NO. 4156



NO. 5156


NO. 5308
NO. X30FL

NO. 2370
NO. 5540


NO. 5360



NO. 4FA



NO. 1&2

TYPE NO.	VOLTAGE	WEIGHT EACH	QUANTITY UNIT PKG	RETAIL PRICE	NET PRICE	
					LESS THAN UNIT PKG.	UNIT PKG.
		"A" BATTERIES				
4FA	1½ V.	1½ LB.	20	\$.40	\$.30	\$.27
NO.1	1½ V.	.8 OZ.	12	.10	.07	.065
NO.2	1½ V.	2.2 OZ	50	.10	.07	.065
		"B" BATTERIES				
10308	45 V.	12 ¾.	6	\$2.25	\$1.66	\$1.51
2308	45 V.	8 ¾.	6	1.75	1.30	1.18
5308	45 V.	3.4	5	1.50	1.10	1.00
4156	22½	1 LB.	4	.75	.55	.50
X30FL	45 V.	13 OZ		2.40	1.95	
		"C" BATTERIES				
5156	22 ½	1 ½	4	\$.85	\$.63	\$.57
2370	4 ½	1 LB.	10	.40	.30	.27
5540	7 ½	9 OZ.	4	.64	.48	.44
5360	4 ½	4½ OZ.	4	.40	.30	.27

BATTERY BUYERS

YOU MAY BE ASSURED WHEN YOU PURCHASE BURGESS BATTERIES FROM OUR STOCK THAT YOU WILL NEVER HAVE A BATTERY OVER TWO TO THREE WEEKS OLD. ONLY FAST SELLING TYPES ARE STOCKED AND CONTINUAL REORDERING FROM BURGESS IS YOUR GUARANTEE.

SPECIAL UNITS NOT LISTED CAN BE ORDERED. FAST SHIPMENT IS MADE ON ALL SPECIALS.

LOT NEXT TO STORE OR LOADING ZONE

WALTER ASHE RADIO COMPANY

1100 Pine Street St. Louis, Missouri

P.R. MALLORY & CO. Inc.
MALLORY

REPLACEMENT VIBRATOR CHART

SET	TYPE	NET	SET	TYPE	NET
AIRLINE, SEE MONT. WARD.			FAIRBANKS MORSE		
AIRMADE, SEE UNITED MOTORS.			23S7, 33S6, 1ST SERIES	312T	4.50
ALL AMERICAN MOHAWK			23S7, 33S7, 2ND SERIES	292	2.40
A-60	292	2.40	33A6	225	3.60
ARCADIA, SEE WELLS GARDNER			346, 347	297	4.50
ARVIN, SEE NOBLITT SPARKS.			66, 64, 74	294	2.70
ATWATER KENT			FIRESTONE		
666, 776	296	2.70	R1322 (R132)	289Y	3.30
816	226	3.60	R1332 (R133)	294	2.70
424, 534	222	3.45	TRAVLER (1314)	294	2.70
AUDIOLA, SEE FAIRBANKS MORSE			R1431	294SW	2.70
BELMONT			FORD MAJESTIC		
660	292	2.40	40-18805	220B	3.90
1932 MODELS	311S	4.50	GLOVE BOX POLICE	220B	3.90
566, 666, 670A, 690, 830A			FORD PHILCO		
880B, 880C,	294	2.70	ALL	500P	1.80
580, 680, 680A, 680B, 680C	296	2.70	FORD LINCOLN		
BOSCH, SEE UNITED AMER. BOSCH			296	296	4.50
B.O.P. SEE UNITED MOTORS SER.			GALVIN MFG. CO. (MOTOROLA)		
CADILLAC			MOTOROLA POLICE	282B	3.30
06W STANDARD	210	4.50	34, 50, 60, 80, 90 (G.V.)	294	2.70
06W MASTER	237	4.50	88	302S	4.50
2721 (062)	206	4.05	61	303S	4.50
2722 (072A)	211	4.50	77	230	4.50
6U2	253	2.70	77A, 44A, 66	270B	3.60
56V1	221	2.70	55	231	4.35
CHEVROLET, SEE UNITED MOTORS			55A	234	4.35
CLARION			44	235	4.35
100 AR	294	2.70	57, 62, 75, 79, 100, 110	253T	2.70
4 PRONG SOCKET	294	2.70	DUAL 6, TWIN 8	253	2.70
6 PRONG SOCKET	296	2.70	GENERAL ELECTRIC		
COLONIAL			B40, C41, B52 ARM REST	273	3.60
106B POWER SUPPLY	221	2.70	CUP ADAPTOR FOR ABOVE	---	.30
150	271	3.60	C60	253	2.70
164	220E	3.90	C61	224	4.20
164B	296	2.70	D50, D51, D52	287M	3.30
CROSLEY			D72, N60	294	2.70
78, 99, 102, 103, 5A1	223	3.60	N51	248	3.30
4A1, 6B1, 5A3	247	3.45	GOODRICH, SEE GALVIN		
DELCO, SEE UNITED MOTORS			GOODYEAR, SEE BELMONT		
DETROLA			GRAYBAR		
6A, 1100, 1100A	220C	3.90	150 CHASSIS	271	3.60
5M, 6R	294	2.70	GREBE		
1934, 1935	292	2.40	61-R	292	2.40
DEWALD			GRIGSBY GRUNOW (MAJESTIC)		
52	221	2.70	66, 116, 116A, 118	220B	3.90
61	292	2.40	40-18805 (FORD)	220B	3.90
517, 606, 607	294	2.70	GULBRANSEN, SEE WELLS GARDNER		
605	253Y	2.70	HALSON		
EMERSON			199, ROADMASTER	220B	3.90
965, 667	296	2.70	HUDSON TERRAPLANE		
5A	277S	3.60	MAJESTIC HEAD	220C	3.90
678-1	223	3.60	650HD, 651HE	292	2.40
6A	253Y	2.70	660TD, 661TE	292	2.40
ERLA SENTINEL			666, 668, 680, H-6	294	2.70
5500	294	2.70	INTERNATIONAL		
600, 602, 603	292	2.40	K-60 K-6	296	2.70
FADA			MAJESTIC, SEE GRIGSBY GRUNOW		
101, 102, 104, 104B	221	2.70	MALLORY ELIMINATOR		
166	253Y	2.70	1, 2, 3, 4,	201	4.05
266	294	2.70	5, 6,	205	4.05

IT'S EASY TO PARK AT WALTER ASHE . . .

1100 Pine Street

St. Louis, Missouri

MALLORY

REPLACEMENT VIBRATOR CHART

SET	TYPE	NET	SET	TYPE	NET
10, 11, 12, 13, 14, 19, MALLORY 236, 237	210	4.50	BOSCH		
MONTGOMERY WARD, AIRLINE			150 (ED. 2) 160, 45A, 45C	271	3.60
87,	292	2.40	189HB, 189HR, (POLICE)	249	3.30
62-166, 62-118 (6U)	253	2.70	79	253	2.70
AUTO RADIO	206	4.05	536, 636, 637, 736, 737, 738	294	2.70
62-199 (5Y)	286S	3.30	UNITED MOTORS SERVICE		
MOTOROLA, SEE GALVIN			B.O.P. 393884-393885-405045		
NOBLITT SPARKS, ARVIN			405046-405057-405062-405063		
15, 25, 35, 45 1ST SER.	296	2.70	544245-544246-544267-544268		
15, 25, 35, 45 2ND "	292	2.40	544289-544290-544291-544297		
10A, 20A, 30A	292	2.40	544298-982006-982007-982008		
20B, 30B, 16	292	2.40	983506-983507-1291344-1291345	273C	3.30
7, 17, 17A, 27, 37, 18, 28, 33	294	2.70	980393	221	2.70
PHILCO			980441-980445-980459	222	3.45
POLICE (810PB-811P)	282P	3.30	980507-980508-980509		
PRIOR TO 1936, 816	500P	1.80	980525	273D	3.30
1936, 817, 818, 819	501P	1.80	CHEVROLET 364441	221	2.70
RADIART			600153-600566-600249		
"B" ELIMINATOR	292	2.40	600565	222	3.45
MAJESTIC REPLACEMENT	292	2.40	601038-601176-601177-601525		
RCA VICTOR			601574-601586-601662-601814		
5M, 6M, 6M2	249	3.30	985400	273C	3.30
M34, M105, M116, AR4229	273	3.60	985100-985200	294	2.70
CUP ADAPTOR FOR ABOVE	---	.30	985300	273D	3.30
M103	253	2.70	DELCO 626, 627, 628, 629,		
H6 HUDSON, RS63-1, M109	294	2.70	634, 635	273C	3.30
M-123	224	4.20	631, 632, 633, 500	294	2.70
M-104, M-108, M-101	287M	3.30	2035-4036	221	2.70
SEARS ROEBUCK, SILVERTONE			4037-4038	222	3.45
4400	249	3.30	WELLS GARDNER		
3400	504	2.70	V6Z2, Z6Z1	292	2.40
7128 4 PRONG SOCKET	294	2.70	25Y1	286S	3.30
7128, 6 " "	296	2.70	062-062A	206	4.05
7117, 1859, 1859-A	271	3.60	072-072A	211	4.50
7157, 7167, 1869	294	2.70	06W 1ST SERIES, 06X	210	4.50
SENTINEL, SEE ERLA SENTINEL			06W 2ND "	237	4.50
SIMPLEX			26U1 (6U) 26S1 (6S) 6R,	253	2.70
"T"	292	2.40	6K	248	3.30
"DB" "PB"	245C	3.30	6N	294	2.70
SPARTON			WESTERN AUTO, TRUETONE		
33, 33A, 333	292	2.40	S732 (Z6Z1) S733 (V6Z2)	292	2.40
36	222	3.45	S690-(062) S691-(062A)	206	4.05
STEWART WARNER			S740-(6U) 670-6S	253	2.70
1171, 1172, 1181, 1182, 1183			S745-(25Y1)	286S	3.30
1311, 1312, 1314, 1315, 1316			S743, 1312 (R131)	294	2.70
1317, 1318, 1319, R117, R118			WESTINGHOUSE		
R133, R1332, R131	294	2.40	WR-25, WR-26		
112, 1121, 1122, 1123	292	2.40	4 PRONG SOCKET	294	2.70
R132, R1322	289Y	3.30	6 " "	296	2.70
1601, 143	294SV	2.70	WR-500, WR-501	253Y	2.70
STROMBERG CARLSON			WILCOX GAY		
33, 33A	236	4.50	4B6, ROADMATE	292	2.40
TRAV-LER			WURLITZER		
54, 64	294	2.70	460, A60	292	2.40
TROPIC-AIRE, SEE WELLS GARDNER			ZENITH		
TRUE-TONE, SEE WESTERN AUTO			7, FORD	296	2.70
UNITED AMERICAN BOSCH			460-462 (2057) 650HD, 651HE		
524A, 634, 634A	253Y	2.70	660TD, 661TE,	292	2.40
140 (ED. 2 AND 3)	271	3.60	666, 668, 680, 6M90,		
150 (ED. 1)	219	4.50	7M91S, 7M91D,	294	2.70

LOT NEXT TO STORE OR LOADING ZONE

MALLORY Grid Bias Cells

A SMALL ACORN-SHAPED, SELF CONTAINED DEVICE WITH A NO CURRENT POTENTIAL OF ONE VOLT, PLUS OR MINUS 10%. ITS PRINCIPAL USE IS FOR THE BIASING OF THE FIRST AUDIO AMPLIFIER TUBE IN MODERN HIGH GAIN RECEIVERS. ONE CELL SHOULD BE USED WITH TUBES SUCH AS THE TYPE 75, 2A6, 57, 6C6 AND 77. TWO CELLS FOR TYPE 1B5, 6F5 AND 6Q7. DIAMETER OF CELL IS APPROXIMATELY 9/16 HEIGHT 3/8.

MALLORY GRID BIAS CELL, NET EACH

\$.18

MALLORY Grid Bias Cell HoldersGB-1
NET .06GB-1B
NET .09GB-2
NET .12GB-3
NET .15GB-4
NET .21**CARRON CONE CEMENT**

FOR REPAIRING SPEAKER CONES. KIT CONSISTS OF CEMENT, THINNER AND A BRUSH. 2 OZ SIZE \$.40

ONE PINT CEMENT \$.90

**SPEAKER CENTERING SHIMS**

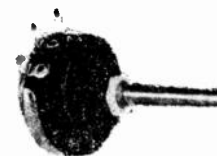
FOR ALINGING VOICE COILS IN ANY TYPE SPEAKER. COMES IN FOUR GUAGES IN FOUR DIFFERENT COLORS. COMPLETE WITH CASE \$.40

CLAROSTAT AUTOMATIC LINE VOLTAGE REGULATORS

TYPE	WATTS	NET	SET	TYPE	NET
"O"	50-60	\$1.05		MAJESTIC	
"A"	60-100	1.05		70-71-7P6	1516 \$1.50
"B"	100-150	1.05		7BP6	1508 1.50
"C"	150-200	1.05		180-181-8P6	1012 1.50
GREBE HS-5	0600	1.50		STEWART WARNER	
"M-3-4"				900	5001 1.50
HS-12 HS-6	0500	1.50		950	5002 1.50
				R-100	5003 1.50

"CLAROSTAT" WIRE WOUND VOLUME CONTROLS

TYPE	RESISTANCE	NET
W-8	1000	\$.60
W-11	2000	.60
W-19	5000	.60
W-27	10000	.60
W-32	15000	.60
W-40	25000	.78
W-44	50000	.84

**INSULATED STAPLES**

BOX OF 50,

NET PER BOX \$.10

"PANTHER" HIGH QUALITY FRICTION TAPE.

3/4 INCH WIDE, 1/2 LB.

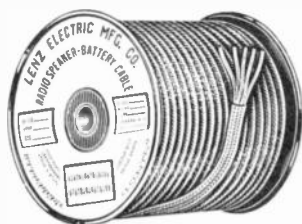
NET PER ROLL, \$.20

**IT'S EASY TO PARK AT WALTER ASHE . . .**

1100 Pine Street

St. Louis, Missouri

COIN MACHINE OPERATORS SUPPLIES



RUBBER JACKETED DYNAMIC SPEAKER EXTENSION CABLE

(Not Shielded)

Heavy Tough Rubber Jacket Applied Overall—
Suitable for Portable Public Address Systems

#1700A IS A 4 WIRE CABLE FOR EXTENSION SPEAKERS. CONSISTS OF 2 #16 AND 2 #20.

NET PER FOOT	\$.07
" " 100' ROLL	6.24
" " 500' "	30.96

COTTON OVERALL SPEAKER CABLE

SPEAKER EXTENSION CABLE BEST SUITED FOR INDOOR WORK WHERE OUTSIDE COVERING NEED BE WEATHERPROOF.

COND.	NET PER FT.	NET PER 100
4	\$.05	\$4.17
5	.06	5.00
7	.07	6.00

Upco Replacement Pickup Head

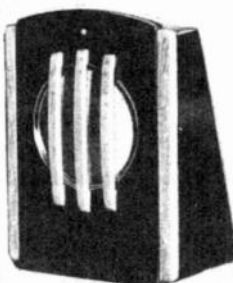
USED IN PLACE OF OLD PICKUP WHICH HAS WORN OUT. GOOD TONE



NET EACH \$4.20

EXTENSION SPEAKERS

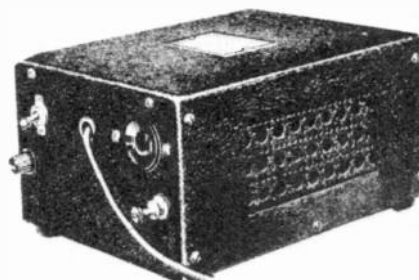
THIS HANDSOME CABINET CONTAINS A JENSEN 8" P.M. SPEAKER FOR USE WITH ANY ELECTRIC PHONOGRAPH OR USE WHEREVER AN EXTRA SPEAKER IS NEEDED. EXCELLENT TONE. CAN BE HAD WITH OR WITHOUT VOLUME CONTROL.



NET, LESS VOL. CONT.	12.45
NET, WITH " "	13.20

ELECTRONIC CONVERTERS

FOR PIN GAMES AND ELECTRIC PHONOGRAPHS

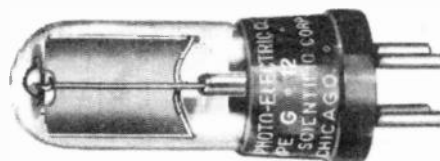


D.C. DISTRICTS ARE NO LONGER CONSIDERED A BARRIER IN THE OPERATION OF A.C. OPERATED COIN MACHINES. WITH THE MODEL "28" ANY STANDARD PIN GAME MAY BE OPERATED SUCCESSFULLY. OUTPUT OF 100 WATTS CONTINUOUS OR 125 WATTS INTERMITTENTLY. MODEL "38" MAY BE USED FOR LARGE PAYOUT MACHINES OR ELECTRIC PHONOGRAPHS. OUTPUT WATTAGE 300 CONTINUOUS, 400 WATTS INTERMITTENT.

MODEL "28" CONVERTER	NET	\$10.65
MODEL "38" "	"	13.50

FOR CONVERTING 110 VDC. TO 110 VAC.

PHOTO-ELECTRIC CELLS



Lumotron Type G-12

USED IN "EXHIBIT ELECTRIC EYE" AND OTHER SIMILAR MACHINES.

NET EACH ----- \$ 4.00

ANY OTHER TYPE OF PHOTO-ELECTRIC CELL FOR TARGET OR RIFLE RANGE AMUSEMENT MACHINES CAN BE SUPPLIED. CALL US AND GIVE THE OLD NUMBER ON CELL.

NOTICE—LET US REPAIR YOUR AMPLIFIERS

LOT NEXT TO STORE OR LOADING ZONE

WALTER ASHE RADIO COMPANY

1100 Pine Street  St. Louis, Missouri

Soldering Accessories

"JACKSON STANDARD" SOLDERING IRONS



THE "JACKSON" STANDARD SOLDERING IRONS HAVE PROOVED THEMSELVES TO BE DEPENDABLE AND STURDY. A GOOD IRON AT A FAIR PRICE. 90 DAY GUARANTEE.

TYPE NO.	WATTAGE	WEIGHT	NET
121	50	8 OZ.	\$.83
141	75	12 OZ.	1.65
142	100	16 OZ.	2.10
144	150	20 OZ.	3.30
143	200	24 OZ.	4.50

The Magic Stylus SOLDERING PENCIL

A MIDGET IN SIZE
A GIANT FOR WORK

Although it can be attached and made ready for use in less than 90 seconds, it is positively guaranteed by the manufacturer for one year against all defects. But with ordinary care the Soldering Pencil should give many years of satisfactory service without requiring adjustment or repairs of any kind.



110-VOLT AC or DC Current, the standard model for shop or household use; set is complete with genuine Bakelite handle, one tip, solder, sal-ammoniac, and six-foot heavy fabric-covered cord with standard rubber plug.

"MAGIC IRON" NET \$.93

NEW STYLE TIP AND ELEMENT, NET \$.50

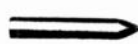
"Kester" Quality Solder

ROSIN CORE

1/4 LB. TIN	NET	\$.17
1 " ROLL	"	.66
5 " "	"	3.10

ACID CORE

1/4 LB. TIN	NET	\$.17
1 " ROLL	"	.66
5 " "	"	3.10



"AMERICAN BEAUTY" IRON TIPS

100 WATT #3138	NET	\$.50
45 " S-76	"	.45



TINNED TERMINAL LUGS



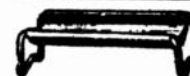
#5

#1	ANY SIZE	NET PER 100	\$.19
	HEAVY DUTY #2	" "	.70



"BURNLEY" SOLDERING PASTE

NET PER CAN, \$.12



SPECIAL SOLDERING IRON STAND

WILL TAKE ANY TYPE OR SIZE IRON
NET EACH, ----- \$.18

IT'S EASY TO PARK AT WALTER ASHE . . .

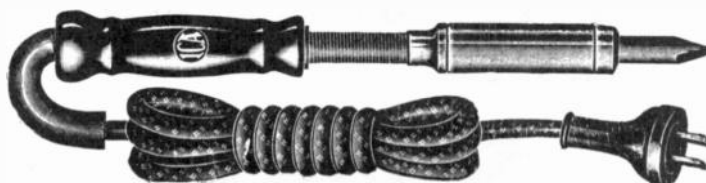
Electric Soldering Irons "American Beauty"



IF YOU WANT AN ELECTRIC SOLDERING IRON TO LAST A LIFETIME, GET ONE OF THESE "AMERICAN BEAUTY" IRONS. KNOWN THE WORLD OVER FOR THEIR DEPENDABILITY AND SATISFACTORY SERVICE. COMPLETE WITH TWIST-PROOF CORD AND STAND. REMOVABLE TIP. LIBERAL GUARANTEE.

TYPE	WATTAGE	WEIGHT	NET
3138	100	16 OZ.	\$ 5.40
S 76	45	6 OZ.	3.38

I.C.A. SOLDERING IRONS



60 WATT SERVICEMAN'S IRON

Here is an iron suitable for all general solder work for the Serviceman, Experimenter and for home use.

No. 1960-A. NET \$2.25

85 WATT GENERAL PURPOSE IRON

For the radio set manufacturer, electrical work, service shop and other industries where a good sturdy iron is required.

No. 1962-A. NET \$2.70

115 WATT HEAVY DUTY IRON

Especially designed for refrigerator work, heavy duty amplifier soldering, transmitters and auto repair work. Equipped with a 7/16" diameter heavy duty tip.

No. 1961-A. NET \$3.30

ICA REPLACEMENT TIPS FOR ICA SOLDERING IRONS

Available In All Sizes

For replacement in ICA Soldering Irons. Can also be used in American Beauty and irons of similar construction.

FOR 60 WATT IRONS		
No. 1970		NET \$.27
FOR 85 WATT IRONS		
No. 1972		NET \$.33
FOR 115 WATT IRONS		
No. 1971		NET \$.42

ICA REPLACEMENT ELEMENTS FOR ICA SOLDERING IRONS

Due to the construction of the ICA Soldering Irons, the burnt out elements can easily be removed and replaced by anyone. Diagram and Instructions supplied with each element.



TYPE IRON	NO.	NET
60 WATT	1985	\$1.05
85 "	1986	1.20
115 "	1987	1.35

WALTER ASHE RADIO COMPANY

1100 Pine Street St. Louis, Missouri

KRAEUTER PLIERS

Diagonal Cutting Pliers



A sturdy diagonal plier for close cutting. Forged from finest special steel.

NO.	LENGTH	NET
6014-1/2	4 1/2"	\$.90
6015	5"	1.05
6015-1/2	5 1/2"	1.20
6016	6"	1.30

Needle Nose Side Cutting Pliers



Slender nose; side cutting. A universal fine point tool.

NO.	LENGTH	NET
6616	6"	\$.95

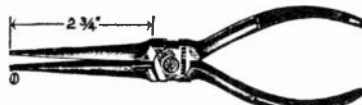
Thin Nose Combination Pliers



A long, thin nose and tapered jaws combination pliers with milled teeth and wire cutter.

NO.	LENGTH	NET
2003	5"	\$.55
2003-6	6"	.75

Long Reach Flat Nose Pliers



Long, flat nose nicely tapered and beveled. Adaptable to all the uses a flat nose plier is put to, with the added advantage of an extremely long nose.

NO.	LENGTH	NET
7817	7"	\$1.05

VIKING SCREW DRIVERS

MINIATURE NO. V620



Magnetized

WITH POCKET CLIP

BLADE LENGTH 1 1/2"
2 1/4"
3 1/4"
NET EA. \$.10

ELECTRICIANS' SIDE CUTTING PLIERS

Modified electricians' pliers with accurately fitted lap joint and hardened cutters.



NO.	LENGTH	NET
1381	7"	\$.85

Insulated Blade



TYPE	BLADE LENGTH	NET
V2201	3 1/2"	\$.18
	4 1/2"	.20
	5 1/2"	.25
	6 1/2"	.30
	8 1/2"	.35

SPIN TYPE SOCKET WRENCHES

The long shank socket wrenches are especially recommended for the radio and electrical trade. These socket wrenches are the handiest tools a serviceman or mechanic can have.

No. 48-5"	Long 3/16"	Size Spin Type
No. 50-6"	Long 1/4"	Size Spin Type
No. 51-6"	Long 5/16"	Size Spin Type
No. 46-6"	Long 11/32"	Size Spin Type
No. 52-6"	Long 3/8"	Size Spin Type
No. 53-6"	Long 7/16"	Size Spin Type
No. 49-6"	Long 1/2"	Size Spin Type



net
\$1.15

OFFSET SOCKET WRENCHES

No. 106-7"	Long 3/16"	Offset
No. 107-7"	Long 1/4"	Offset
No. 108-7"	Long 5/16"	Offset
No. 109-7"	Long 3/8"	Offset
No. 110-7"	Long 7/16"	Offset
No. 111-7"	Long 1/2"	Offset

net
\$1.18

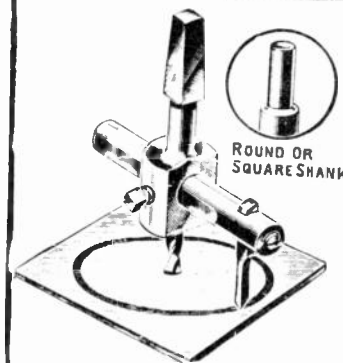


PAWOOD SHEET METAL PUNCHES



FOR SOCKET AND CONDENSER HOLES

	NET \$
3/4"	1.85
7/8"	1.85
1 3/16"	1.99
1 1/4"	1.99
1 3/8"	1.99



JUMBO No. 5
HEAVY DUTY
PAWOOD CIRCLE CUTTER

YOUR COST \$ 1.85

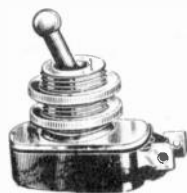
EXTRA CUTTERS .24

Cuts holes easily and quickly from 1 inch to 5 1/2 inches diameter in Steel and other metals, Bakelite, Hard Rubber, Fibre, Hard Wood, Veneers, Plywoods, Etc.

IT'S EASY TO PARK AT WALTER ASHE . . .

Switches

Plugs

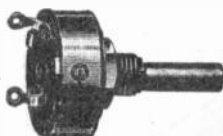


"CARLING" TOGGLE SWITCHES

TYPE	SHAFT LENGTH	NET
S.P.S.T.	1/2 "	\$.20
S.P.S.T.	7/8 "	.22
S.P.D.T.	1/2 "	.25
D.P.S.T.	1/2 "	.30
D.P.D.T.	1/2 "	.50

ROTARY SWITCHES

ICA Rotary Switches are universally used in service work, by manufacturers in set production, for amateur short wave work. Supplied in two types, S.P.S.T. and S.P.D.T.



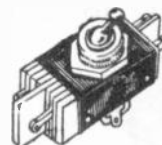
NO.	TYPE	SHAFT	NET
#397	S.P.S.T.	2"	\$.30
#398	S.P.D.T.	2"	.33

ICA BAKELITE KNIFE SWITCHES

Mechanically perfect designed and constructed under new and improved principles. Hardware of brass, heavily nickel-plated. Mounted on highly polished bases of Black BAKELITE. Firm contact assured

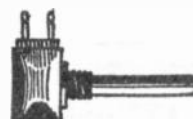


NO.	TYPE	NET
1216	SINGLE POLE SINGLE THROW	\$.33
1217	SINGLE POLE DOUBLE THROW	.39
1218	DOUBLE POLE SINGLE THROW	.45
1219	DOUBLE POLE DOUBLE THROW	.51
1220	THREE POLE DOUBLE THROW	.78
1221	FOUR POLE SINGLE THROW	.90
1222	FOUR POLE DOUBLE THROW	.96
1363	FIVE POLE SINGLE THROW	1.32
1364	FIVE POLE DOUBLE THROW	1.55



"H AND H" "HART AND HEGEMAN SWITCHES"

TYPE	NET
SINGLE POLE SINGLE THROW	\$.32
SINGLE POLE DOUBLE THROW	.47
DOUBLE POLE SINGLE THROW	.50
DOUBLE POLE DOUBLE THROW	.63



"H AND H" ROTARY

D.P.S.T.	2" SHAFT	\$.75
D.P.D.T.	" "	.90



"JONES" CABLE PLUGS AND CONNECTORS

TYPE	DESCRIPTION	NET
P4CCT	4 PR. PORT. MALE PLUG	\$.50
P6CCT	6 " " " "	.60
S4CCT	4 PR. PORT. FEM. SOCK.	.55
S6CCT	6 " " " "	.68
P4AB1/16	4 PR. PANEL MALE PLUG	.34
P6AB1/16	6 " " " "	.39
S4AB	4 PR. PANEL FEM. SOCK.	.40
S6AB	6 " " " "	.44

THE BEST PLUGS AND CABLE CONNECTORS AVAILABLE FOR PUBLIC ADDRESS WORK, SPEAKER EXTENSIONS MIKE CONNECTIONS, REMOTE CONTROL RELAYS AND OTHER USES.

WALTER ASHE RADIO COMPANY

1100 Pine Street St. Louis, Missouri

AMPHENOL

REPLACEMENT SOCKET



A socket for the service man, amateur and experimenter. Same as our regular type S, listed opposite, but comes set in a cadmium plated steel adapter plate that fits any rivet hole spacing from 1½ inch to 2 inches. The adapter plate may be removed and the socket becomes type "S" unit. Rubber washers, or grommets, under the adapter plate will generally remove tube microphonics caused by mechanical or audio vibration.

NET

Cat. No. RS4	— 4 contact	
Cat. No. RS5	— 5 contact	
Cat. No. RS6	— 6 contact	
Cat. No. RS7S	— 7 contact small	
Cat. No. RS7L	— 7 contact large	
Cat. No. RS7C	— 7 contact comb	
Cat. No. RS8	— 8 contact octal	

.07

.09

CABLE CONNECTOR

MALE FEMALE



4, 5, 6, 57, OR 8 PRONG
MALE OR FEMALE,
NET EACH - .15

CONNECTOR COVERS



FOR USE WITH CABLE CONN-
ECTORS SHOWN ABOVE,
NET PER PAIR, - .15

(CHASSIS TYPE)



NET EACH, - .15

STEATITE SOCKET



RUGGED

Breakage, a common fault in Ceramic sockets, is practically eliminated in this AMPHENOL product. The metal adapter plate takes the full strain of riveting or mounting.

UNIVERSAL MOUNTING

The steel plate can be screwed or riveted to the panel, or using the spacers, can be mounted above the panel. The best and neatest mounting is made by mounting the socket directly into the chassis.

NET

Cat. No. RSS4	— 4 contact	
Cat. No. RSS5	— 5 contact	
Cat. No. RSS6	— 6 contact	
Cat. No. RSS7S	— 7 contact small	
Cat. No. RSS7L	— 7 contact large	
Cat. No. RSS8	— 8 contact octal	

.24

.30

REPLACEMENT PLUG



NET

Cat. No. HCP4	— 4 prong	
Cat. No. RCP5	— 5 prong	
Cat. No. RCP6	— 6 prong	
Cat. No. RCP7	— 7 prong	
Cat. No. RCP8	— 8 prong octal	

.07

.09

CABLE CLAMP



FOR USE WITH CABLE CONN-
ECTORS, NET EACH, - .06

RUBBER PLUG HANDLE



FIT OVER CABLE CONNECTOR
PLUGS, NET EACH .09

OCTAL CONNECTORS



CABLE TYPE

MALE

TYPE 08M
NET .75

CABLE TYPE FEMALE

TYPE 08F
NET .75



CHASSIS TYPE FEMALE

TYPE P08F
NET .36

MICROPHONE CONNECTOR

For Single Conductor



MC1F
NET .30

MC1M
NET .24

PC1M
NET .18

CONNECTORS



MC3M NET .60 MC3F NET .60
MC4M " .66 MC4F " .66

CHASSIS TYPE



SPM3 NET .60 PC3F NET .30
SPM4 " .66 PC4F " .33

IT'S EASY TO PARK AT WALTER ASHE . . .



CONSTRUCTED OF HIGH GRADE MATERIALS. CONTACTS ARE PHOSPHOR BRONZE

PANEL MOUNT

NO. 268	4 PRONG	\$.15
NO. 269	5 PRONG	.15
NO. 270	6 PRONG	.18
NO. 271	7 PRONG (REGULAR)	.18
NO. 983	7 PRONG (SMALL)	.18
NO. 1060	5-6—SM. 7 PRONG COMB.	.21
NO. 1061	7 PRONG COMBINATION	.18
NO. 1062	4-5-6 PRONG COMBINATION	.21

OCTAL MOULDED SOCKET

NO. 1063 FOR NEW METAL TUBES  \$.18

BASE MOUNT SOCKETS

NO. 264	4 PRONG	\$.18
NO. 265	5 PRONG	.18
NO. 266	6 PRONG	.21
NO. 267	7 PRONG (REGULAR)	.24
NO. 885	7 PRONG (SMALL)	.24



BAKELITE WAFER SOCKETS



DURABLE WITH SELF-CLEANING PINCH TYPE CONTACTS



NO. 14	4 PRONG	\$.05
NO. 15	5 PRONG	.05
NO. 16	6 PRONG	.05
NO. 17	7 PRONG (SMALL)	.05
NO. 77	7 PRONG (LARGE)	.05
NO. 80	8 PRONG (FOR METAL TUBES)	.05

Eby Universal Socket

Can be mounted above or below metal, Bakelite or wood panel.



Because of their sturdy construction, they are especially recommended where sockets are subjected to exceptionally severe service, as well as wear and tear due to continual inserting and withdrawing of tubes.

TYPE		NET
4 PRONG	~~~~~	\$.18
5 "	~~~~~	.18
6 "	~~~~~	.24
7 "	~~~~~	.24

RADIO KNOBS

WILL FIT 1/4" SHAFT

WHEEL KNOB



A neat design with ribbed finger grip.

No. 731—Made of beautiful walnut bakelite. Has pointer indicator. Dia. 15/16". **\$.07**

OCTO KNOBS



A beautiful 8-sided knob moulded from bakelite.

Height 15/32"—Dia. 13/16"

No. 748—Black ----- **\$.06**
No. 751—Walnut --- **.06**

FILCO KNOB

A beautiful six-sided knob made of bakelite. A replacement for Filco midgets.



Dia. across flats 3/4"

No. 744 ----- Wal **\$.07**
No. 745 ----- Bl **.07**



No. 145 Walnut Bakelite Knob with arrow pointer. 3/4" high, 1 1/4" dia. **\$.06**



No. 1015 Bakelite Knob Made for small type Radio sets. Has arrow pointer. 3/4" high 1 1/4" dia. **\$.06**



No. 1122 Walnut Bakelite Knob Dia. 15/16" Height 17/32" **\$.07**



No. 141 Pressed Wood Knob Will match knobs on G.E. R.C.A. Westinghouse **\$.15**

HANDY KNOB



A good knob for general replacement purposes and custom built short wave equipment. Moulded black bakelite.

No. 732— 15/16" Dia. with pointer ----- **\$.07**
No. 733— 15/16" Dia. less pointer ----- **.07**

Instrument Knob



No. 804— **\$.12** Black Bakelite with pointer. Brass bushing; radius 1 1/4".

CROWN KNOB



Moulded of black bakelite.

Height 3/4" Dia. 29/32"

No. 750 **\$.06**

BAKELITE BAR KNOBS



Pointer type. Set screw mounting. 1/4 inch hole. White pin line. Two sizes furnished either black or brown bakelite.

NO.	COLOR	SIZE	PRICE
579	BLK.	1 1/2"	\$.09
581	BLK.	2 1/2"	.10
580	BRN.	1 1/2"	.09
582	BRN.	2 1/2"	.10

WALTER ASHE RADIO COMPANY

1100 Pine Street St. Louis, Missouri

UNIVERSAL ADAPTERS



This new Universal Adapter will supply plate, filament, cathode, etc., as desired. Serviceman can readily use this adapter for any required purpose by connecting or soldering to desired prongs. Prongs not required can easily be removed by hand or left in the adapter without using. Efficient and practical for all service work.

No. 2027—4 prong.....
No. 2028—5 prong.....
No. 2029—6 prong.....
No. 2030—7 prong.....

Net
ea
15¢

BLACK RUBBER GROMMETS



SIZE HOLE	EACH NET
1/8 INCH	\$.02
3/16 "	.02
1/4 "	.02
3/8 "	.02
7/16 "	.02



EBY INSULATED BINDING POSTS
FITTED WITH 6/32 HARDWARE
YOUR COST EA. \$.09



ALL METAL BINDING POSTS
YOUR COST EA. \$.06



GLOVE-TITE TUBE SHIELDS

SUPPLIED COMPLETE WITH
CLAMP RING AND MOUNTING
BASE CONNECTOR.

FOR TUBES SIMILAR TO 24A, 58'S
OR 56'S AND 27'S.
YOUR COST ALL SIZES \$.10

For 55, 57, 58 Tubes Improved Non-Rattle Type

Available in either aluminum or radio metal material. Ventilated shell has three formed ribs which press against side of tube to hold it rigidly—dampens vibration and microphonic disturbances. Three sizes mounting centers for all popular socket dimensions. Cap height 1 1/4". Shell Diameter 1 1/2". Overall height assembled 4 1/2".



Aluminum Straight Side Shields

Constructed of finest aluminum and will fit all standard screen grid tubes of the '24 variety. Also ideal for shielding of home made beat note oscillator coils with control coming through top. Diameter 2 1/4". Height 4 1/2". Has 3/8" hole in top for grid cap or control shaft.

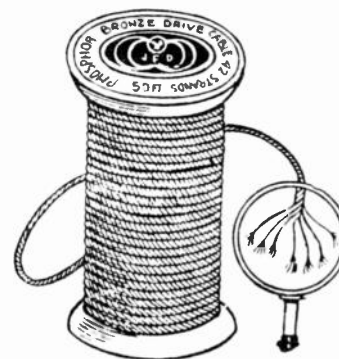
Has slotted base, fitting mounting centers of all standard wafer type sockets.



NET EA. \$.15

Dial Cable

PHOSPHOR BRONZE AND LINEN DIAL CABLE



42 STRAND PHOSPHOR BRONZE CABLE. SAME AS USED ON 95% OF ALL SETS. EASY TO SOLDER, VERY STRONG AND FLEXIBLE.

NET PER FOOT, ONE TO 10 FT. \$.05
10 TO 25 FEET, PER FT. .04
50 FOOT ROLL NET, 1.35

#3 BLACK LINEN DIAL CORD, SAME AS USED ON SILVER MARSHALL, PHILCO, BRUNSWICK AND OTHERS.

NET PER FOOT, \$.05

#4 BLACK LINEN DIAL CORD, SAME AS USED ON R.C.A., SONORA AND OTHERS. SAME TYPE AS #3 BUT SMALLER IN SIZE.

NET PER FOOT, \$.05

EXTRA HEAVY DIAL CORD SAME AS USED ON KOLSTER, GREBE AND OTHERS WHERE STRONG CABLE IS REQUIRED.

NET PER FOOT, \$.05

PHOSPHOR BRONZE DIAL BELTING SAME AS USED IN ATWATER KENT, COLONIAL AND MANY OTHERS. 3/16 WIDE X .005 THICK.

NET PER FOOT, \$.05



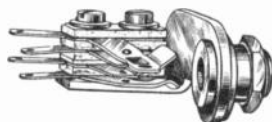
EXACT DUPLICATE DIAL CABLES MADE UP

MAJESTIC 70 SERIES,	NET \$.15
KOLSTER K-20, K-45,	" .24
KOLSTER 43, 44,	" .30
KOLSTER 6J, 6K,	" .24

IT'S EASY TO PARK AT WALTER ASHE . . .

YAXLEY

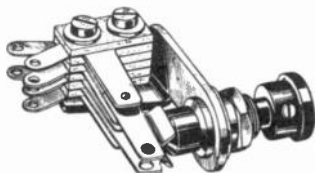
JACKS



MOUNTS IN 7/16" PANEL HOLE, EXTEND 1 1/4" BACK OF PANEL.

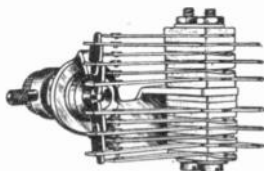
701	OPEN CIRCUIT	NET \$.24
702	CIRCUIT CLOSING	.33
702A	TWO CIRCUIT	.33
703	ONE CIRCUIT FIL. CONT.	.39
703A	CIRCUIT REVERSING	.39
703C	DOUBLE CIRCUIT	.39
704	INTERSTAGE	.45
704A	TWO CIR. FIL. CONT.	.45
705	TWO CIR. FIL. LIGHTING.	.51
706	INTERSTAGE FIL. CONT.	.57

Yaxley Push Button Switches



2001	S.P. MAKE CONTACT; NET	\$.54
2002	S.P. BREAK CONTACT	.54
2003	S.P. DOUBLE THROW	.60
2004	2 POLE MAKE 2 CONTACTS.	.72
2005	2 POLE BREAK 2 CONT.	.72
2006	2 POLE DOUBLE THROW	.90
2007	2 POLE MAKE TWO BREAK ONE	.78
2008	2 POLE D.T. MAKE B4 BREAK	.99

THREE POSITION SWITCHES



		NET
732	S.P.D.T. CENTER OFF POS.	.51
762	D.P.D.T. CENTER OFF POS.	.72
763	3.P.D.T. CENTER OFF POS.	.93
764	4.P.D.T. CENTER OFF POS.	1.17



#75 PHONE PLUG, NET \$.30



#100 EXTENSION JACK, NET \$.45



#310 PILOT LIGHT
BRACKET AND JEWELL
RED, GREEN OR AMBER.
NET EACH, \$.18



#330 PANEL LIGHT, HOOD TYPE
NET EACH LESS LAMP, \$.30



MOULDED TWIN TIP JACKS

#401 MOULDED TWIN TIP JACK,
NET EACH \$.18

#402, SAME AS ABOVE BUT
SHORTS AUTOMATICALLY WHEN
PLUGS ARE REMOVED,
NET EACH \$.18

Jack Switches



TYPE	POSITION	NET
720	S.P.S.T.	\$.42
730	S.P.D.T.	.51
740	D.P.S.T.	.57
760	D.P.D.T.	.75

WALTER ASHE RADIO COMPANY

1100 Pine Street St. Louis, Missouri

AMERICAN RADIO HARDWARE

Insulated Phone Tip Jacks



These phone tip jacks are constructed and assembled on a new principle, the springs of the jack will hold the phone tips straight and tight with a sure grip at all times. The head is 7/16" wide, made of insulated material, and comes with a shoulder washer for a complete insulation. Available in Red, Black, Blue, Green, Purple, Yellow, and White.

138
NET EACH \$.06

INSULATED BANANA PLUG JACKS



This Insulated Plug Jack is used with the Banana type Plug. The Jacks are equipped with insulated shoulder washers, a lug, and a nut. They can be mounted in a 1/4" hole on a panel up to 3/8" in thickness. Available in Red, Black, Blue, Green, Purple, Yellow, and White.

136
NET EACH \$.06

Insulated Plug Connectors



These plug connectors are ideal for connecting all types of plugs. They may also be used as wire extenders, merely by plugging in two of our No. 131, No. 134, and No. 135. This connector is 1 1/4" long and is handy to have in your kit at all times. Available in Red, Black, Blue, Green, Purple, Yellow, and White.

144
NET EACH \$.09

Insulated Needle Point Phone Tip Plugs



This type of phone tip is made sharp on the end for piercing thru insulation of the wire for a perfect contact. The body of this phone tip is standard so that it will fit all standard types phone tip jacks. The back part of this phone tip is made to fit our test prod handles. Available in Red, Black, Blue, Green, Purple, Yellow, and White.

132
NET EACH \$.06

Insulated Sr. Solderless Phone Tip Plugs



This solderless phone tip is 2" long and is especially recommended on set analyzers and tube testers. Ideal on Ohmmeter testers or testing prods. They fit all standard types jacks also our No. 138 Jacks and No. 143 Binding Posts. Ideal for temporary or permanent connections. Available in Red, Black, Blue, Green, Purple, Yellow, and White.

141
NET EACH \$.07

Insulated Banana Plugs



The Insulated Plugs are handy and useful on all types of connections for radio and electrical equipment. Ideal for short-wave assembly. They are excellent in the laboratory for quick connection. The prong has a side screw thru the insulation for a solderless connection. Available in Red, Black, Blue, Green, Purple, Yellow, and White.

131
NET EACH \$.08

ALLIGATOR TESTING CLIPS



45-AT
NET EACH \$.05

INSULATED ALLIGATOR CLIPS



129
NET EACH \$.09

PHONE TIP PIN JACKS



These Phone Tip Jacks are constructed and assembled on a new principle. The features of the Jacks are that they have strong and newly designed springs on the inside that hold the phone tips straight and firmly at all times. They mount in 1/4" holes in panels up to 3/8" in thickness.

137
NET EACH \$.05

INSULATED TEST PROD HANDLES

SOLDERLESS TEST PICK PRODS



#145 HANDLE 5 1/2" LONG, NET \$.15
#149 " 7 " " " .18

PHONO NEEDLE SOLDERLESS PROD HANDLES



#153 HANDLE 4 1/2" LONG, NET \$.15
#155 " 5 1/2" " " .18

SR. SOLDERLESS PHONE TIPS



These solderless phone tips have a hole in the side for the insertion of the wire and are made to fit all types of phone tip jacks. Ideal for set analyzers and quick connections. Made of brass and nickel plated. 1 1/4" long.

NET EACH \$.05

JR. SOLDERLESS PHONE TIPS



This solderless phone tip has a hole in the side for the insertion of wire and is made to fit the phone tip jacks. Made of brass and nickel plated. 1 1/4" long.

NET EACH \$.05

Standard Phone Tips



These phone tips are mostly used on speaker cords and sets. It has the standard type barrel for No. 18 wire. This phone tip is 1" long.

NET EACH \$.01

IT'S EASY TO PARK AT WALTER ASHE . . .

1100 Pine Street

St. Louis, Missouri

PILOT LITE SOCKETS

PLAIN DIAL SOCKETS



These Dial Sockets are without the bracket. They are so assembled that they may be soldered directly to the wires and suspended in the air or mounted into rubber grommets. They can be had with 2 or 3 terminal lugs. The center terminal lug on the 3 type, insulated

2 LUGS, NET EACH \$.04
3 " " " " .04

Up Clip Dial Sockets

These dial sockets are made so that they can be clipped over the condenser or bridge of the chassis. They have a standard type of screw shell to take all standard types of bulbs. The height of the bracket is 5/8". This dial socket is equipped with two lugs, the overall dimension is 3/4" high.



#34 SOCKET, NET \$.05

Down Clip Dial Sockets

These dial sockets are made so that they can be clipped over the condenser or bridge of the chassis. They have a standard type of screw shell to take all standard types of bulbs. This socket has the bracket mounted down so that the clip may be fastened on up or down. The height of the shell and washers is 1/2", the height of the bracket is 5/8".



#35 SOCKET, NET \$.05

BAYONET TYPE DIAL SOCKETS

These sockets are so constructed that the Bayonet type bulb can be used in the socket. The Socket part itself is eyeleted to the bracket so that a contact wire may be soldered thru the center of the dial socket. Can be had in either the straight type bracket with an oval hole or the clip type bracket.



#1535 STRAIGHT BRACKET
#1540, UP-CLIP BRACKET
NET EACH, \$.05

Mueller UNIVERSAL Clips

MUELLER ALLIGATOR CLIP With or Without Rubber Insulator



No. 85 Clip—No. 87 Insulator

No. 85—A very small clip with slender, elongated jaws for getting into tight places in radio or electrical test work. Teeth really mesh. Screw and barrel connection.

#85 CLIP, NET \$.05
#87 INSULATOR .04



No. 45 Pee-Wee 5 Ampere

No. 45 Pee-Wee. A very small test clip for radio, ignition, meter and similar work. 1 1/2" long. Jaw Spread 1/2". Steel, Cadmium plated.

#45 CLIP NET \$.03
#45C ALL COPPER .05
#47 INSULATOR .05



No. 48-B 10 Ampere

No. 48-B. A small test and battery clip for radio use and general testing purposes. 2" long. Jaw spread 3/8". Steel, Cadmium plated.

#48B CLIP, NET \$.03
#49 INSULATOR .06



No. 27 10 Ampere

No. 27. A high grade test clip with meshing teeth on three sides of jaws. For laboratory and shop test work. 2 1/4" long. Jaw spread 1/2". Steel, Cadmium plated.

#27 CLIP, NET \$.06
#29 INSULATOR .08



No. 24-A 25 Ampere

No. 24-A. A medium sized battery clip. Stands erect on battery post. Lead coated, copper shunt protects spring. 2 1/2" long. Jaw spread 1". Steel, Lead plated.

#24A CLIP, NET \$.06
#26 INSULATOR .12



No. 21-A 50 Ampere

No. 21-A. A large heavy duty battery charging clip. Lead coated copper shunt protects spring. 4" long. Jaw spread 1 1/4". Steel, Lead plated.

#21A CLIP, NET \$.10
#23 INSULATOR .21

RUBBER INSULATORS FOR MUELLER UNIVERSAL CLIPS



SEE PRICES LISTED ABOVE

MUELLER SNAPPER For Radio Work



A new kind of insulated, elongated test clip for getting into inaccessible places. Spring jaws on far end operated by push of thumb on near end. A test clip, prod and retriever all in one.

TWO COLORS

RED AND BLACK,
NET EACH ---- \$.50

WALTER ASHE RADIO COMPANY

1100 Pine Street St. Louis, Missouri

Fahnestock Spring Clips



#41 CLIP
NET EACH \$.02

Glass or Metal Tube Grid Caps

Combination Grid Caps, Tests Metal or Glass Tubes

Insulated. Small end for the New Metal tubes, large end for the old type glass tubes. Both have brass cadmium plated metal grid cap on inside. Complete with 12" lead with phone tip.



EACH 12c

Insulated Grid Caps

For standard and 866 Type Tubes.

for standard tubes with 12" plain wire lead, 7c



for 866 Type tubes, 12" wire lead with solderless phone tip and insulated handle. 18c

Metal Tube Grid Caps



Constructed so the prongs fit over cap of metal tube with a positive contact. Bead edge side wiping contact keeps tube cap clean and cadmium plated.

Each..... 1c

Screen Grid Caps



Price Each.... 1c

Easy Soldering Grid Cap

Made of brass; Cadmium plated. Fits tubes. Wires easily inserted as recommended for the screen-grid tubes.



YOUR COST... 1c

MIDGET FUSE CLIPS



These fuse clips are brass nickel plated and are made to take the standard radio type fuse. They are ideal for radio and automobile. The size is 1/4" wide, 3/8" high, takes a 1/4" fuse.

NET EACH, \$.01

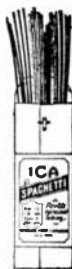
SPAGHETTI FLEXIBLE VARNISHED TUBING

An insulated covering for bus bar wire as protection against contact with other wires. Flexible and guaranteed not to crack. Furnished in 30" lengths for No. 10 to No. 18 wires,

FURNISHED IN RED, GREEN, YELLOW
AND BLACK.

PER 30" LENGTH NET \$.09

LARGE SPECIAL VARNISHED TUBING
1/4" DIAMETER RED AND BLACK
PER 30" LENGTH .21



FRICTION DRIVE DIAL RUBBERS

FOR ALL STANDARD RADIOS,
INCLUDING AK, RCA AND STEWART
WARNER.
WHEN ORDERING MAIL IN OLD PART

YOUR COST \$.05

FUSES

"INSTRUMENT LITTLEFUSES"

ESPECIALLY DESIGNED FOR PROTECTING OF DELICATE INSTRUMENTS SUCH AS GALVONOMETERS, MICRO-AMMETERS AND MILLIAMMETERS ETC.

AMPERE RATING

NET

1/100	\$.12
1/32	.12
1/16	.12
1/8	.09
1/4	.09
1/2	.09
3/4	.09
1.0	.06
2.0	.06



INSTRUMENT LITTELFUSE

RADIO RECEIVER FUSES

3 AG 250 VOLT



TYPE 3-A-G RADIO RECEIVER FUSES

1, 2, 3, 5, 10, 15, AND 20 AMP.

NET EACH \$.04

BOX OF 5, NET PER BOX .20

SINGLE AND DOUBLE FUSE MOUNTINGS



These Fuse Holders are made so that they will fit standard types of fuses on radios and automobiles. A lug is mounted under each fuse clip for soldering connection. Center hole of mountings are tapped for 8-32 screw. Available in the single and double type. Made of Ameroid material for insulating purposes.

#103 SINGLE TYPE NET \$.09
#127 DOUBLE TYPE " .15

"LITTLEFUSE" MOUNTINGS



#1010



#1062

#1010 SINGLE MOUNTING, NET \$.09

#1062 FUSIBLE BIND. POST. .45

IT'S EASY TO PARK AT WALTER ASHE . . .

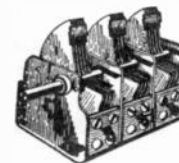
1100 Pine Street

St. Louis, Missouri

BUD RADIO, INC. .. CLEVELAND, Ohio



BUD PRECISION TUNING CONDENSERS



SINGLE GANG CONDENSERS	TWO GANG CONDENSERS	THREE GANG CONDENSERS
NO. 1048 100 MMF. \$.81		
NO. 968 140 MMF. .81	NO. 971 140 MMF. \$ 1.35	NO. 973 140 MMF. \$ 2.04
NO. 1043 350 MMF. .90	NO. 969 350 MMF. 1.41	NO. 970 350 MMF. 2.10

THREE GANG CONDENSERS FOR SUPERS

NO. 972 ONE SECTION FOR TUNING 175 K.C. OTHER TWO SECTIONS 350 MMF. EA. \$ 2.10
 NO. 964 ONE SECTION FOR TUNING 465 K.C. OTHER TWO SECTIONS 350 MMF. EA. 2.10

FOUR GANG CONDENSERS FOR SUPERS

NO. 858 ONE SECTION FOR TUNING 175 K.C. OTHER THREE SECTIONS 350 MMF. EA. \$ 3.00
 NO. 857 ONE SECTION FOR TUNING 465 K.C. OTHER THREE SECTIONS 350 MMF. EA. 3.00

NEUTRALIZING AND ALIGNMENT TOOLS

BUD NEUTRALIZING WRENCH



A NEW IDEA in a Neutralizing Tool. The entire length of the inside of tube is broached. If the end breaks all that is necessary for the serviceman to do is saw off the end and he has a new tool. Made in two lengths.

No. 254—5½" long

No. 255—8" long

NO. 254 \$.15
 NO. 255 .18

NO-METAL NEUTRALIZING TOOL



No. 235

7 inches long. No metal ends. Made of special bone fibre beveled at both ends. Will stand a fair amount of strain. Can also be inserted into No. 254 Neutralizing Wrench where it is necessary to neutralize by turning both screw and nut at the same time.

NET \$.21

BUD BALANCING TOOL AND ATTACHMENT



No. 281

NO. 281 \$.24

No. 119-M

Majestic Attachment for Bud
 4-in-1 Tool \$.12

No. 119-C

Crosley Attachment for Bud
 4-in-1 Tool \$.15

DE LUXE ADJUSTABLE NEUTRALIZING TOOL



The tool for which all servicemen have been looking for a long time. No metal parts. Screw driver slides into one end of handle. Other end is hexagon broached to balance hex top trimmers. Made of high dielectric, hard rolled fibre. Absolutely necessary in peaking I.F. transformers to greatest efficiency.

No. 236—Adjustable from 7 to 10" \$.39
 No. 237—Adjustable from 11 to 17"51



No. 286

Bud Neutralizing and Compensating Screw Driver. With Bakelite Knob

\$.27



No. 285

Bud Neutralizing Wrench and Screw Driver

\$.27



No. 118

Bud 4-in-1 Neutralizing and Alignment Tool

\$.39



No. 287

Bud Neutralizing and Compensating Screw Driver

\$.21

LOT NEXT TO STORE OR LOADING ZONE



ANTENNA SYSTEMS

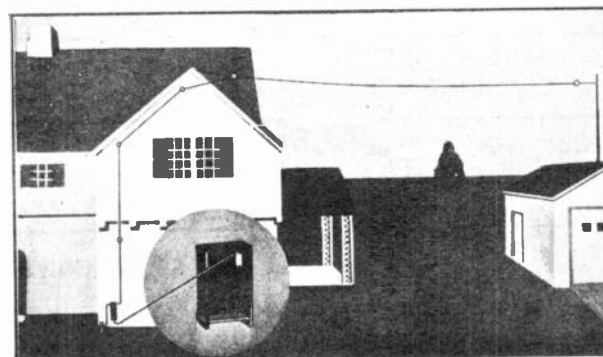
RCA MAGIC WAVE ANTENNA SYSTEM

GIVES NOISE REDUCTION ON BOTH
STANDARD BROADCAST AND
INTERNATIONAL SHORT-WAVE
BANDS (530 TO 23,000 KCS.)

CONTENTS OF KIT

(Completely assembled ready to install)

1 Antenna Coupling	60 ft. Antenna Wire
Transformer	45 ft. Transmission Cable
1 Receiver Coupling	5 ft. Ground Wire
Transformer	5 Porcelain Insulators
	1 Ground Clamp



NET \$417

RCA RK-40 ANTENNA

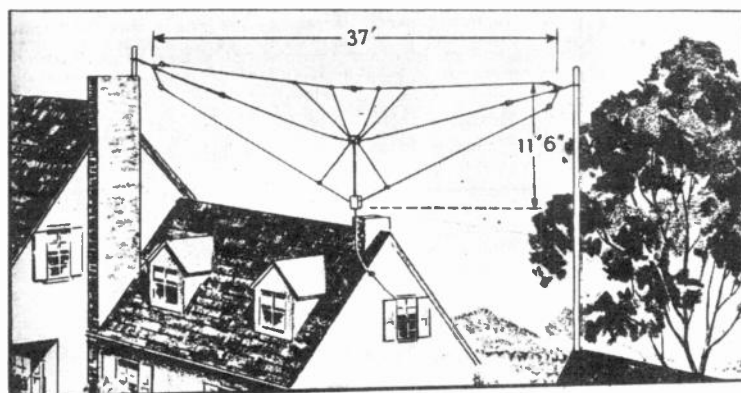
The new RCA RK-40 Antenna is a simplified antenna system designed to reduce the time and labor required for antenna installation in the most difficult of locations. It is merely necessary to attach each end to supports and make connections to the receiver. The time and money saved by installing this easily erected antenna means more business and more profits for you. The low price enables you to sell it to customers of more modest incomes. RCA design means more signals for your customers and better acceptance everywhere. Cash in on this improved RCA Antenna by recommending it to your customers.



Stock No. 9631

NET \$3.30

RCA SPIDER-WEB ANTENNA



● MORE STATIONS ● LESS NOISE

● FULL FREQUENCY COVERAGE
FROM 140 TO 23000 K.C., AND
CAN BE EXTENDED TO 70000 K.C.
WITH #9689 H.F. KIT.

- SMALL SPACE REQUIRED
- STURDY CONSTRUCTION
- FACTORY ASSEMBLED

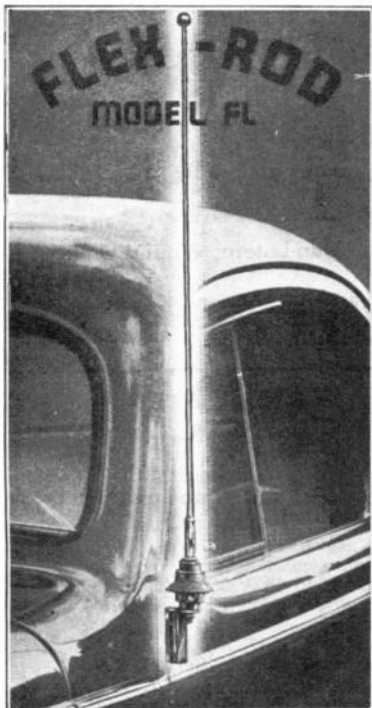
#9685 ANTENNA NET \$5.37

#9689 H.F. KIT " .90

IT'S EASY TO PARK AT WALTER ASHE . . .

1100 Pine Street

St. Louis, Missouri



THE FLEX-ROD

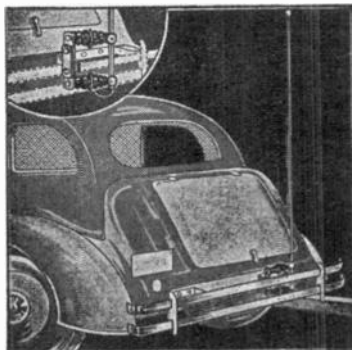
Model F. L.

THE ORIGINAL HINGE AERIAL, FITS ANY CAR. NO DRILLING OR CUTTING OF CAR. CHROME PLATED SPRING STEEL. NET EACH - - \$2.10


"Coronation"
MODEL C. O.

DOOR HINGE MOUNT, SIMILAR TO TYPE "F.L.". TELESCOPIC, EXTENDS TO 56" NET EACH \$1.47

Antennas

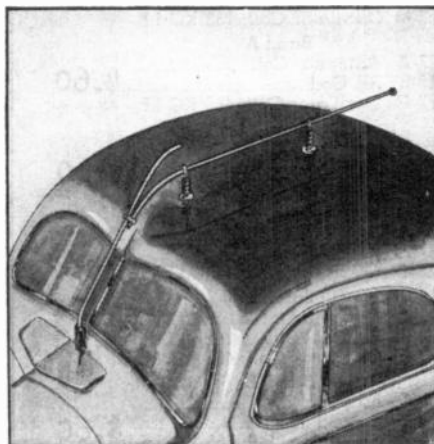


Model B. F.

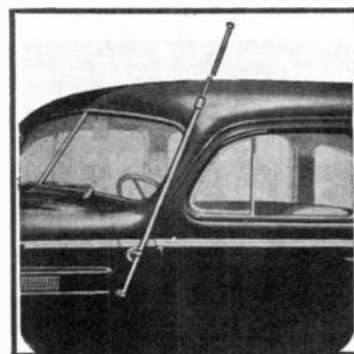
"THE FISH POLE"

TELESCOPIC, THREE SECTION, EXTENDS TO EIGHT FEET, CAN BE USED FOR TRANSMITTING OR RECEIVING, WILL BEND BUT NOT BREAK. MOUNTS ON BUMPER. NET EACH \$2.10

The "TROLLEY"


MODEL E S

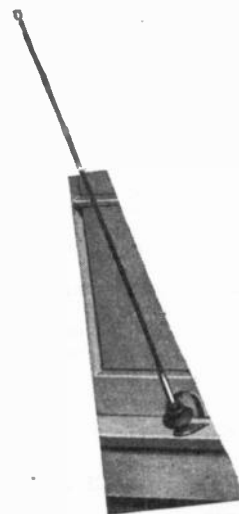
FOR CARS WITH PERMANENT OR HINGED WINDSHIELDS. WILL NOT RUST OR CORRODE. NET EACH \$2.25


"Mainliner"

★

MODEL M. L.

MOUNTS TO SIDE OF COWL. TELESCOPIC, EXTENDS TO 56" NET EACH \$1.77

"TOBE WINDO-POLE"


CAN BE USED FOR ANY HOME RECEIVER INCLUDING ALL-WAVE SETS. HIGH SENSITIVITY, EASY INSTALLATION, FASTENS TO WINDOW OR DASH. NET EACH \$1.17

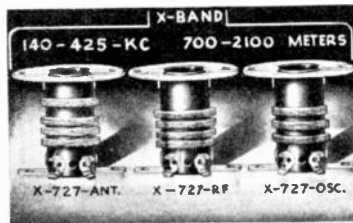
LOT NEXT TO STORE OR LOADING ZONE

WALTER ASHE RADIO COMPANY

1100 Pine Street St. Louis, Missouri

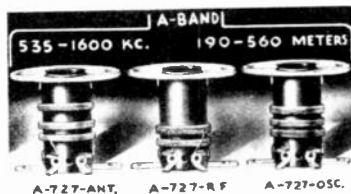
MILLER

ALL WAVE COILS



Miller "Select-Ur-Band" Coils

A new series and type of coil designed to meet the exacting demands of the experimenter and custom set builder for a high quality receiver covering one or more bands and using one or more RF stages or only a mixer stage. The Miller No. 727 "Select-Ur-Band" Coils are truly flexible in their application and may be assembled to suit your individual requirements. For a superheterodyne they are for use with a 465 KC intermediate frequency amplifier. Each coil of each band is a separate unit and all are so designed that any pair may be assembled in a single shield. All coils are wound on $\frac{7}{8}$ " dia. x $1\frac{1}{4}$ " long bakelite tubing and are of correct form factor and of proper wire size to give maximum efficiency. The primaries are of the high impedance type designed for use with pentode type RF tubes. With



the Miller "Select-Ur-Band" Coils it is possible to lay out an all-wave receiver and build it with only one or two bands to start—then add the other bands as desired. The use of the new Miller "Select-Ur-Band" Coils enables the experimenter or constructor to modernize old receivers by utilizing the 465 KC intermediate frequency amplifier and audio of the old receiver and installing an all-wave or skip-band tuner.

When using a .000365 Tuning Condenser the range of the individual bands is as follows:

Band	Cat. No.	MC	Meters	Osc. Series Pad.
X	X-727	.14 - .425	2100-700	.00012 uf.
A	A-727	.535 - 1.5	560-200	.0004 uf.
B	B-727	1.5 - 4.5	200-67	.001 uf.
C	C-727	3.75 - 11.0	80-27	.003 uf.
D	D-727	8.5 - 23.0	35-13	.01 uf.
E	E-727	12.5 - 36.0	24-8	None
S	S-727	5.8 - 19.0	51-16	.003 uf.



Any two coils may be assembled—easily, using only a screw driver—to provide the bands required in a single coil shield, and of course, groups of two bands each may be used. Coils are not furnished assembled in shields, as they may be purchased separately and easily assembled to meet your particular requirements.

For example, if it is desired to build a receiver using one RF stage and covering Bands X, A, and B, the coils required are:

For Band X

1 Each "Select-Ur-Band" Coil—X-727 Antenna, RF, and Oscillator.
1 .00012 uf. Mica Padding Condenser.

For Band A

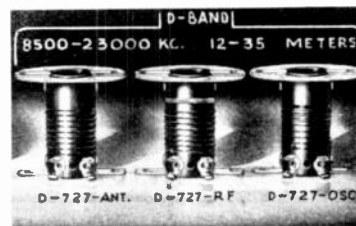
1 Each "Select-Ur-Band" Coil—A-727 Antenna, RF, and Oscillator.
1 .0004 uf. Mica Padding Condenser.

For Band B

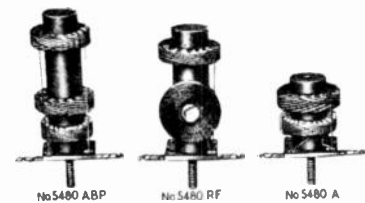
1 Each "Select-Ur-Band" Coil—B-727 Antenna, RF, and Oscillator.
1 .001 uf. Mica Padding Condenser.

Coil Shields Required

3 Each L-727 $2\frac{1}{8}$ " Dia. x 4" Long Aluminum Coil Shields.
3 Each S-727 $2\frac{1}{8}$ " Dia. x $2\frac{1}{2}$ " Long Aluminum Coil Shields.



Cat. No.	Purpose	List
Band X		
X-727-A	Antenna Coil.....	
X-727-RF	RF Coil.....	\$.75
X-727-C	Oscillator Coil, 465 KC I.F.	
X-727-M	Oscillator Coil, 132 KC I.F.	
Band A		
A-727-A	Antenna Coil.....	\$.60
A-727-RF	RF Coil.....	
A-727-C	Oscillator Coil, 465 KC I.F.	
Band B		
B-727-A	Antenna Coil.....	\$.60
B-727-RF	RF Coil.....	
B-727-C	Oscillator Coil, 465 KC I.F.	
Band C		
C-727-A	Antenna Coil.....	\$.60
C-727-RF	RF Coil.....	
C-727-C	Oscillator Coil, 465 KC I.F.	
Band D		
D-727-A	Antenna Coil.....	\$.60
D-727-RF	RF Coil.....	
D-727-C	Oscillator Coil, 465 KC I.F.	
Band E		
E-727-A	Antenna Coil.....	\$.60
E-727-RF	RF Coil.....	
E-727-C	Oscillator Coil, 465 KC I.F.	
Band S		
S-727-A	Antenna Coil.....	\$.60
S-727-RF	RF Coil.....	
S-727-C	Oscillator Coil, 465 KC I.F.	
Coil Shields and Switch		
L-727 2 1/8" Dia. x 4" Long		\$.24
Coil Shield.....		
S-727 2 1/8" Dia. x 2 1/2" Long		.15
Coil Shield.....		
No. 605 6 Pole, 5 Position Band		1.44
Switch.....		
No. 806 8 Pole, 6 Position Band		2.12
Switch.....		



Duo-Lateral Wound Coils

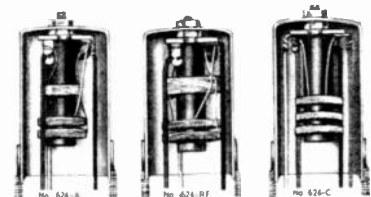
No. 5480-A	Antenna Coil	\$.42
No. 5480-ABP	Ant.-Band-Pass Coil	.60
No. 5480-RF	RF Coil	.48



No. 5480 Duo-Lateral Oscillator Coils

For use unshielded with .000365 mfd. variable condenser to cover the band from 540 to 1600 KC. Available for the following intermediate frequencies:

No. 5480-K for 175 KC	1\$.36
Requires .001 mfd. Series Pad.	
No. 5480-H for 262½ KC	.36
Requires .0006 mfd. Series Pad	
No. 5480-C for 465 KC	.36
Requires .0004 mfd. Series Pad	



No. 624 Iron Core RF Coils 540 to 1700 KC

The No. 624 Series iron core coils are especially desirable for use in auto and other receivers where a high Q coil of small physical size is required. The secondaries are wound on Miller iron cores and No. 15-41 Litz wire is used. All coils are assembled in aluminum shields $1\frac{1}{4}$ " x 2" long. Provided with spade bolts for mounting, $1\frac{1}{8}$ " centers. For use with .000365 uf variable condenser

No. 624-A	Antenna Coil	\$.90
No. 624-RF	RF Coil	
No. 624-C	Oscillator Coil	
(Requires .0004 series pad)		



RECTIFIER PLATE RF FILTER CHOKE

They are necessary for use in the plate leads of mercury vapor type rectifier tubes to prevent RF "hash" from causing interference in the high frequency circuits of sensitive all-wave receivers. Maximum safe continuous current capacity 125 MA.

Cat. No.		\$.60
80-F	Rectifier Filter Choke	

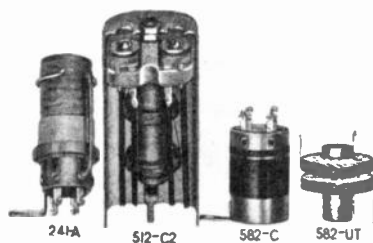
IT'S EASY TO PARK AT WALTER ASHE . . .

1100 Pine Street

St. Louis, Missouri

MILLER

MILLER HIGH FIDELITY COIL KIT AS PUBLISHED IN
FEBRUARY ISSUE "ELECTRONICS" TYPE EL-560



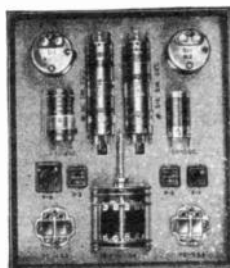
No. 582 Five Tube Economy Superheterodyne Coil Kit

540 to 1700 KC

This coil kit may be utilized to construct a very economical and efficient five tube superheterodyne using the autodyne type oscillator circuit. The standard double tuned shielded I.F. transformer for the input stage and an untuned self-resonant I.F. transformer coil for the output stage provide maximum gain and selectivity. The intermediate frequency amplifier operates at 465 KC. The coils are for use with a .000365 mfd. 2 gang variable condenser to cover the frequency range from 540 to 1700 KC. The coil kit consists of the following parts:

	List Price
1 No. 241-A Antenna Coil.....	\$.70
1 No. 582-C Oscillator Coil.....	.25
1 No. 512-C-2 Input I.F.....	1.50
1 No. 582-UT Output I.F.....	.75
1 .0004 3% Mica Padding Condenser	.25
1 No. 582 Blue Print.....	.25

Miller No. 582 Economy Super Coil
Kit, NET \$ 2.10



Model No. 511 All-Wave Superheterodyne Coil Kit

12 to 550 Meters

	List Price
1 No. 511 B.C. Antenna Coil.....	\$.80
1 No. 511 B.C. Oscillator Coil.....	.50
1 No. 511 S.W. Antenna Coil.....	1.75
1 No. 511 S.W. Oscillator Coil.....	1.75
1 No. 511-1 Input I.F. Transformer.....	1.55
1 No. 511-2 Output I.F. Transformer.....	1.55
2 No. 35 Dual Trimmers (@ .50).....	1.00
4 Oscillator Padding Condensers.....	1.35
1 Selector Switch No. 404.....	1.60
1 Blue Print.....	.25
Complete Instructions and Data.	NET
Miller No. 511 All-Wave Coil Kit.....	\$7.20
Broadcast Band-Pass Coil, if desired:	
No. 511-BP—Additional Cost.....	\$.30

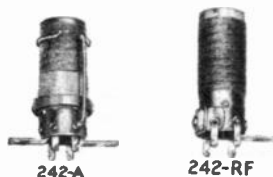
KIT CONSISTS OF	
1 #472A ANTENNA COIL	\$.85
2 472BP BAND PASS COILS	1.60
1 472RF RADIO FREQUENCY COIL	.85
1 472UT UNTUNED COIL	1.50
2 EL-56 NEGATIVE MUTUAL COILS	1.10
2 S-727 COIL SHIELDS	.50
1 2104 4 GANG VARIABLE CONDENSER	5.00

COIL KIT #EL-560

LIST \$ 11.40

YOUR COST \$6.84

RADIO FREQUENCY COILS



No. 242-A, No. 242-RF Litz Bank-Wound Coils

For the designer or custom set builder who desires to employ the finest coils available, the bank-wound series coils are admirably suited.

Supplied with shields 1 7/8" x 3". For use with a .000365 mfd. variable condenser to cover the band from 540 to 1600 KC.	
No. 242-A Antenna Coil	\$.54
No. 242-BP Band-Pass Coil	.45
No. 242-RF RF Coil	.54
No. 277 Oscillator Coil (Available for all frequencies)	.45

No. 711 All-Wave Superheterodyne Coil Kit

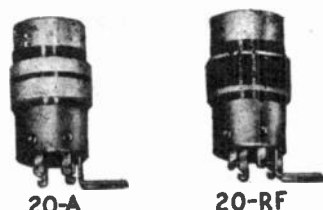
12 to 550 Meters List Price

1 B.C. Antenna Coil No. 711-Ant.....	\$.80
1 B.C. Translator Coil No. 711-A.....	1.75
1 75-200 Meter S.W. Coil No. 711-B	1.25
1 35-75 Meter S.W. Coil No. 711-C..	1.50
1 12-35 Meter S.W. Coil No. 711-D..	1.25
1 Input I.F. No. 711-1.....	1.60
1 Interstage I.F. No. 711-2.....	1.60
1 Output Stage I.F. No. 711-3.....	1.60
2 Dual Trimmers No. 35 (@ .50).....	1.00
4 Accurate Osc. Pad. Condensers..	1.35
1 Rectifier Plate Choke No. 80-F.....	1.00
1 Osc. Coup. Condenser No. C-14..	.20
1 Band Selector Switch No. 404.....	1.60
1 Blue Print	.25
Complete Instructions and Data.	

NET PRICE

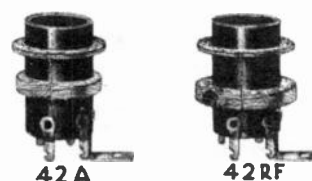
Miller No. 711 All-Wave Coil Kit
Miller No. 711-B for 2 Volt Battery \$9.60
Miller No. 711-M for Metal Tubes..

SPECIAL MIDGET REPLACEMENT COILS FOR
AC-DC AND ALL MIDGET RADIOS WHERE
SPACE IS AT A PREMIUM.



Midget Type Solenoid Coils On Cardboard Forms

No. 20-A Antenna Coil	NET
No. 20-RF RF Coil	\$.15



High-Gain Midget Coils

The coils are for use with the standard .000365 mfd. variable condenser to cover the band from 540 to 1600 KC.

No. 42-A Antenna Coil	\$.42
No. 42-RF RF Coil	.42

LOT NEXT TO STORE OR LOADING ZONE

WALTER ASHE RADIO COMPANY

1100 Pine Street St. Louis, Missouri



Solenoid Oscillator Coils
(Cathode Coupled Type)

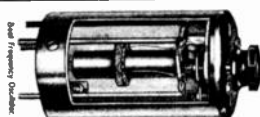
274 Series	
No. 274-K for 175 KC.....	\$.51
Requires .001 mfd. Series Pad.	
No. 274-C for 465 KC.....	\$.51
Requires .0004 mfd. Series Pad	
274 Type Coil with Shield 1 7/8" x 3"	

OSCILLATOR COILS



Solenoid Oscillator Coils

277 Series	
No. 277-K for 175 KC.....	\$.45
Requires .001 mfd. Series Pad.	
No. 277-C for 465 KC.....	\$.45
Requires .0004 mfd. Series Pad.	



Beat Frequency Oscillators

For use in superheterodyne receivers allowing the reception of CW signals or for easily locating distant stations by tuning the receiver to the "zero beat" produced between the received signal and the local beat oscillator. No. 412 Type

C5 465 KC.	NET \$1.05
K5 175 KC.	1.05

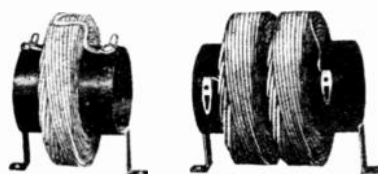


NOISE SILENCER TRANSFORMERS

The MILLER No. 712 Series I. F. Transformers are of the tight-coupled single-tuned type with a center tapped secondary and their use is necessary for proper operation of the Noise Silencer described by James Lamb in "QST." These transformers are assembled in our standard 512 type shields 1 1/2" sq. x 3 1/2" long. When ordering please specify desired intermediate frequency.

Type No.	Description	List Price
712	Noise Silencer Transformer.....	\$1.50

MILLER



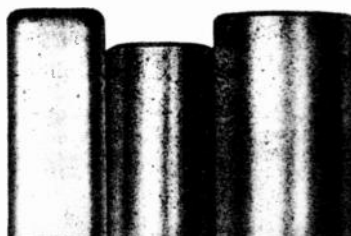
Line Filter Chokes

Single Duo-Lateral Wound Line Filter Chokes

		NET
No. 7825	Max. Current 2 Amps.	\$.60
No. 7826	Max. Current 5 Amps.	1.50
No. 7827	Max. Current 10 Amps.	1.95
No. 7828	Max. Current 20 Amps.	2.40
No. 7829	Max. Current 30 Amps.	3.00

Double Duo-Lateral Wound Line Filter Chokes

No. D7825	Max. Current 5 Amps.	2.25
No. D7827	Max. Current 10 Amps.	3.00
No. D7828	Max. Current 20 Amps.	3.60
No. D7829	Max. Current 30 Amps.	4.50



Aluminum Coil Shields

All Miller Coil Shields are of finest quality drawn aluminum with a beautiful Oakite Satin finish and are supplied with spade bolts for mounting to the chassis.

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2" Mounting Center	
No. L-727—2 1/2" Dia. x 4" Long—	.24
2" Mounting Center	



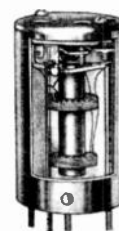
No. 812

WAVE TRAPS

		NET
812-X-1	- 425 to 525 KC.....	
812-X-2	- 225 to 375 KC.....	
812-X-3	- 150 to 225 KC.....	
812-BC-1	- 1200 to 1600 KC } Standard	
812-BC-2	- 800 to 1200 KC } Broadcast	
812-BC-3	- 500 to 800 KC } Band	
812-A	- 160 Meter Amateur Band..	\$.90
812-B	- 80 Meter Amateur Band..	
812-C	- 40 Meter Amateur Band..	
812-D	- 20 Meter Amateur Band..	
812-E	- 10 Meter Amateur Band..	

AIR CORE I.F. TRANSFORMERS

Mica Compression Type



CODE FOR ORDERING

We can supply from stock I.F. transformers in many popular intermediate frequencies and have adopted a code to facilitate ordering and identification of the various types as follows:

Factory Adjusted to	Code Letter	Frequency Range
465 KC	C	450 - 475 KC
175 KC	K	165 - 185 KC

No. 412 Type—Outside dia. 1 7/8". Length 3". Spade bolt mounting centers 1-13/16".

C-1, 2, 3, 4-465KC.	NET \$.96
K-1, 2, 3, 4-175KC.	.96

(Special frequencies can be supplied on order.)

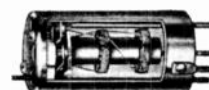
Intermediate frequency transformers require different degrees of coupling for various circuit applications, and these are coded as follows:

No. 1 Input Stage—Has coupling adjusted for maximum selectivity and is for use between the mixer and the first I.F. amplifier tube when two or more stages are used.

No. 2 Interstage—Designed to be used as the interstage transformer in a two stage amplifier or as the input stage for a single stage amplifier. Coupling is adjusted to the optimum degree. May also be used as the output transformer in an amplifier in which the second detector is a non-current consuming load, such as a bias detector of any type.

No. 3 Diode Transformer—For use as the output transformer to feed any full-wave diode detector circuit. The secondary is center tapped to provide equal voltage to both diode plates. Adjusted to provide over-coupling in order to prevent excessive selectivity, which would result in poor audio quality.

No. 4 Diode Transformer—This transformer is similar to the No. 3 type except that no center tap is provided.



No. "CF" Crystal Filter Transformers—These transformers are sold in pairs for use in crystal filter circuits of amateur and commercial receivers. They replace the regular input transformer and are of the low impedance link coupled type.

NO. 412 PER PAIR NET \$2.40

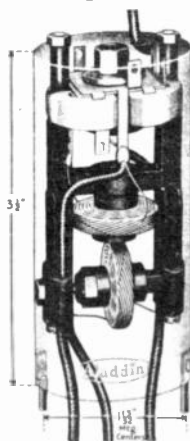
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Aladdin Radio Industries, Inc.



Polyiron

Type A, I.f. Transformers



The type A Polyiron core Aladdin transformers are inductive-coupled litz-wound coils in a special frame. A lateral adjustment is provided for the lower coil to secure the exact degree of coupling desired. This is adjusted and sealed at the factory after adjustment on the oscillograph.

The type A-100 and A-100c coils have been frequently specified in receiver designs by Frank C. Jones, of "Radio" magazine's editorial staff, and are described in the annual "Radio" Handbook for amateurs.

Specifications and List Prices

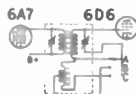
In aluminum shields, 3 1/4" high, 1 1/2" Mtg. Ct.

Type Mica	Frequency Adjustable	Gain (Approx.)	Use	Between Tubes	NET
A-100	456-465	250	Interstage	6D6 — 6D6	\$1.80
A-200	456-465	149	2nd I.f.	6D6 — Diode	
A-101	456-465	62	Converter	6A7 — 6D6	2.40
A-201	456-465	155	2nd I.f.	6D6 — Diode	
A-100c	456-465	125	X-tal input	6D6 — X-tal	1.80
A-200c	456-465	80	C-T 2nd I.f.	6D6 — Diode	
A-101a	456-465	180	Interstage	6D6 — 6D6	
A-175	165-185	364	(for CW I.f.)	6D6 — 6D6	
A-275	165-185	244	(CW I.f.)	6D6 — Diode	
A-125	360-380	60	1st stage	6A7 — 6D6	
A-225	360-380	180	2nd stage	6D6 — Diode	
A-150	250-270	55	1st stage	6A7 — 6D6	
A-250	250-270	175	2nd stage	6D6 — Diode	
A-185	105-125	65	1st stage	6A7 — 6D6	
A-285	105-125	170	2nd stage	6D6 — Diode	

High Fidelity

I.f. Band-Expansion

The purpose of band-expansion is to admit a wide range of audio frequency on a high fidelity modulated carrier wave. Publicity by leading radio broadcasters is developing a market for high-fidelity radio receivers. Custom set builders and servicemen can incorporate the high-fidelity feature in existing radio set designs.



The method of achieving high fidelity presupposes a radio frequency circuit capable of passing a 20 Kc. band. Two steps of band-expansion are made available to control pick-up of beat-frequencies from adjacent broadcast channels. The gain automatically drops to reduce interference and static encountered in some high-fidelity reception.

The Aladdin Polyiron band-expansion I.f. transformer, type H-103, is a 465 Kc. litz-wound, double mica condenser trimmed unit in an aluminum shield, 4" high by 2" square. It is provided with a special tapped winding, closely coupling the secondary to the primary for use in band-expansion circuits.

Type H-103, 465 Kc. (B-8) NET \$2.70



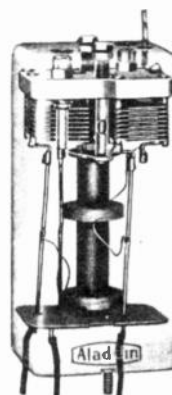
Small litz-wound Polyiron core inductively coupled coils used in the type C transformers are especially designed for use with metal tube circuits. Their small size, only 2 1/4" by 1 1/4" square, in a copper shield, make type C coils particularly suitable for auto and portable receivers. Their gain is better than leading types of air core coils, while the selectivity is distinctly superior. At 465 Kc. between 6A8 and 6K7 tubes, the band width is 84 Kc. at 100 times input voltage!

Specifications and List Prices

In copper shields 2 1/4" high, 1 1/4" square

Type Mica	Frequency	Gain (Approx.)	Use	Between Tubes	NET
C-101M	456-465	52	1st stage	6A8 — 6K7	\$1.50
C-200M	456-465	58 1/2	2nd stage	6K7 — 6H6	
C-350	456-465		Beat freq. oscillator	6C6	

Type G, I.f. Transformers

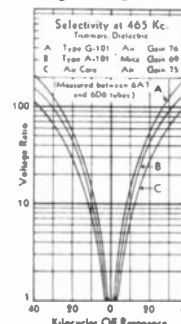


An advanced design especially intended for precision custom-built amateur and commercial high frequency communication receivers. Type G transformers are inductively coupled air-trimmed, litz wire coils on a Polyiron core and are mounted in an aluminum rectangular shield.

The purpose of this design is to provide the utmost stability of frequency calibration in communication type receivers. Normal temperature changes or variations in humidity have a negligible effect upon air dielectric trimming condensers.

The advantage of Polyiron in reducing the number of turns required for the coils and, consequently, the resistance of the coils, results in a sharper resonant curve having a higher gain than air core coils of the same physical dimensions.

The increased efficiency of the air trimmers over mica trimmers is further evident in the adjacent curves.



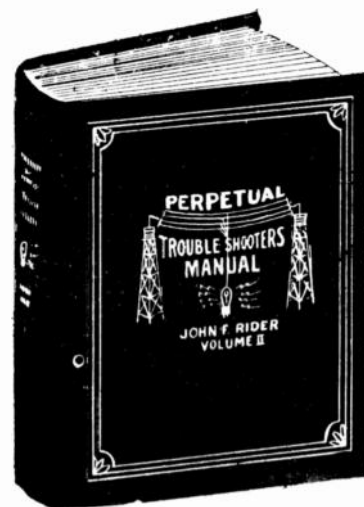
Specifications and List Prices

In aluminum shields, 4" high x 1 1/4" x 1 1/4"

Type Air Tuned	Frequency Adjustable	Gain (Approx.)	Use	Between Tubes	NET
G-101	456-465	75	Converter	6A7 — 6D6	
G-201	456-465	175	Diode input	6D6 — Diode	
G-101a	456-465	200	Interstage	6D6 — 6D6	
G-101m	456-465	65	Converter	6A8 — 6K7	
G-201m	456-465	80	Diode input	6K7 — 6H6	
G-175	170-180	70	Converter	6A7 — 6D6	
G-275	170-180	250	Diode input	6D6 — Diode	

Perpetual Trouble Shooter's Manual**"RIDERS" PERPETUAL TROUBLE SHOOTER'S MANUALS**

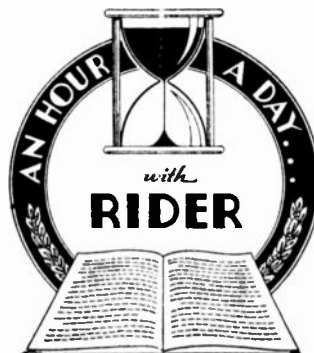
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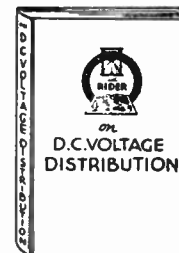
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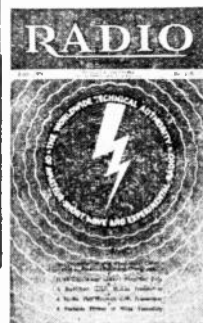
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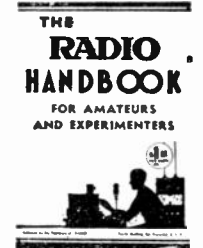
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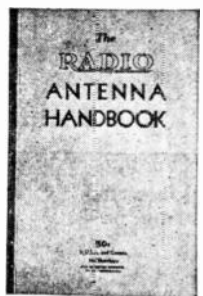
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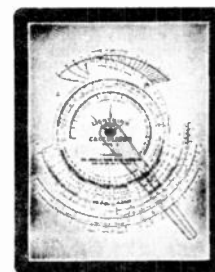
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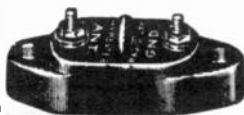


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WAXED HOOK-UP WIRE



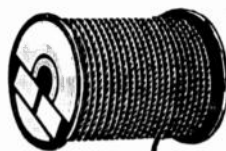
THIS HOOK-UP WIRE IS COVERED WITH NON FRAYING MOISTURE PROOFED INSULATION. COMES IN SIZES OF #18 SOLID AND #20 STRANDED. ALL PUSH BACK.

#18 SOLID TINNED COPPER WIRE, 25 FOOT ROLL. COLORS RED, BLACK, AND GREEN.

NET PER ROLL, - - - - - \$.21

#20 STRANDED TINNED COPPER WIRE, 25 FOOT ROLLS, COLORS RED, BLACK, GREEN.

NET PER ROLL, - - - - - \$.21



100 FOOT ROLLS #18 SOLID TINNED COPPER HOOK-UP WIRE ON SPOOL. RED BLACK OR GREEN, NET \$.66

100 FOOT ROLLS #20 STRANDED TINNED COPPER HOOK-UP WIRE ON SPOOLS. RED BLACK OR GREEN, NET \$.66

100 FOOT ROLLS #18 STRANDED TINNED COPPER HOOKUP WIRE ON SPOOLS. RED OR GREEN, NET PER SPOOL \$.72



HEAVY STRANDED FILAMENT WIRE

MADE ESPECIALLY FOR WIRING FILAMENTS THAT HAVE A HEAVY DRAIN. STRANDED WIRE COVERED WITH CHAMBRIC COVERING WITH MOISTURE-PROOF COVER OVERALL. EQUAL TO #10.

NET PER FOOT, - - - - - \$.02

Magnet Wire



FEET PER ROLL

SIZE	D.C.C.	P.E.	D.S.C.
#10		15	
12		20	
14	27	35	15
16	45	45	25
18	58	75	31
20	75	115	38
22	100	150	50
24	130	245	75
26	155	325	95
28	175	535	120
30	210	700	150
32	240	900	165
34	260	1200	175
36	275	1700	190
38	130	2300	155

ANY SIZE NET PER SPOOL, - \$.25



ANALYZER CABLE

WHEN MAKING UP A NEW ANALYZER YOU MUST HAVE A CABLE THAT IS PLIABLE, AND CAN STAND THE GAFF OF TURNING TWISTING AND STRAIN. CONTAINS 9 COLOR CODED WIRES.

NET PER FOOT, - - - - - \$.12



HEAVY DUTY RUBBER COVERED WIRE

#12 STRANDED HEAVY DUTY RUBBER COVERED HOOKUP WIRE. CONSISTS OF 41 STRANDS OF #28 B&S GAUGE. WILL CARRY 20 AMPERES. 13/64 RUBBER WALL. COLORS BLACK OR RED. NET PER 25 FOOT ROLL, - - - - - \$.54

TRIPLE PROTECTED HOOKUP WIRE

PROTECTED AGAINST OIL, MOISTURE AND HEAT. STRANDED TINNED COPPER CONDUCTOR. LIVE RUBBER WALL WITH LACQUERED COTTON FINISH.

NET PER 25 FOOT ROLL, - - - - - \$.27

IT'S EASY TO PARK AT WALTER ASHE . . .

WIRE

MICROPHONE CABLES



RUBBER MICROPHONE CABLE UNSHIELDED

HIGH GRADE CABLE TO BE USED WHERE IT IS UNNECESSARY TO HAVE YOUR CABLE SHIELDED.

NET PER FOOT, - - - - - \$.05
NET PER 100 FEET, - - - - - 3.84



CLOTH COVERED 3 CONDUCTOR SHIELDED MICROPHONE CABLE FOR INDOOR USE.

NET PER FOOT, \$.05
NET PER 100 FEET, 4.92



RUBBER SHIELDED MICROPHONE CABLE

THE RUBBER COVERED SHIELDED MICROPHONE CABLE LISTED BELOW IS MADE UP OF FLEXIBLE CONDUCTORS WHICH ARE COLOR CODED AND HAVE A TOUGH COATING OF RUBBER OVERALL. THEY ARE WEATHERPROOF AND WILL STAND HARD AND ROUGH USAGE.

2 WIRE SHIELDED

NET PER FOOT, - - - - - \$.06
NET PER 100 FEET, - - - - - 4.84

3 WIRE SHIELDED

NET PER FOOT, - - - - - \$.07
NET PER 100 FEET, - - - - - 5.51



BELDEN

CRYSTAL MICROPHONE CABLE

MADE ESPECIALLY FOR CRYSTAL MIKES AND HAS ALL THE NECESSARY QUALITIES THAT GO TO MAKE UP THE HIGH STANDARD OF A GOOD MIKE CABLE. WEATHERPROOF.

NET PER FOOT - - - - - \$.05
NET PER 100 FEET, - - - - - 3.84

LAMP CORD



"ZIP" CORD WILL TAKE CARE OF ALL YOUR USES FOR A LAMP CORD THAT IS EASY STRIPPING AND EASY TO USE ALL AROUND. SIMPLY SEPARATE CONDUCTORS AT ENDS AND PULL ON EACH WIRE AND "ZIP" THERE YOU ARE WITH THE RIGHT AMOUNT OF CORD TO WORK WITH.

"ZIP" CORD NET PER FOOT \$.02
" " " " 100 FT. 1.80



STANDARD TWISTED BLACK LAMP CORD FOR PRIMARY WIRING, APPLIANCES, ETC.

NET PER FOOT - - - - - \$.02
NET PER 250 FT. ROLL - - - - - 3.50

TRANSMISSION LINE



THIS TRANSMISSION CABLE IS SAME AS USED ON R.C.A. ANTENNAS AND SIMILAR JOBS. WEATHER PROOF.

NET PER FOOT, - - - - - \$.02
NET PER 100 FT. - - - - - 1.50



UNSHIELDED HIGH TENSION CABLE

"ALPHA" UNSHIELDED HIGH TENSION CABLE IS THE SAME AS USED ON AUTO SPARK PLUG WIRES AND DISTRIBUTOR. EXCELLENT FOR WIRING HIGH VOLTAGE POWER SUPPLIES AND R.F. CIRCUITS.

NET PER FOOT, - - - - - \$.02½

LOT NEXT TO STORE OR LOADING ZONE

WALTER ASHE RADIO COMPANY

1100 Pine Street St. Louis, Missouri

WIRE

SOLID ENAMELED ANTENNA WIRE

100 AND 200 FOOT ROLLS



LENGTH	SIZE	NET
100	14	\$.48
200	14	.96
100	12	.75
200	12	1.50
100	10	1.25
200	10	2.50

50 FOOT ROLLS

JUST THE THING FOR WINDING TANK COILS, WIRING. SHORT ANTENNAS ETC.



50 FOOT ROLLS SOLID ENAMELED WIRE

SIZE	NET
14	\$.25
12	.40
10	.60

50 FOOT ROLLS SOLID TINNED WIRE

SIZE	NET
16	\$.25
14	.25
12	.40
10	.70

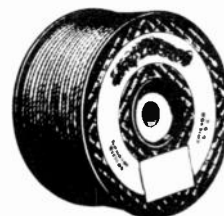


STRANDED ENAMELED ANTENNA WIRE

100 FOOT ROLL, 7X22 NET \$.62

75 FOOT ROLL PLAIN COPPER .20

RUBBER COVERED WIRE

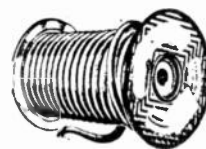


"BELDEN" RUBBER COVERED LEAD-IN WIRE

500 FOOT ROLL #18	NET	\$ 2.95
"CONSOLIDATED"		
1000 FOOT ROLL #20	"	3.80

SMALL ROLLS RUBBER COVERED WIRE

FOR USE IN WIRING POWER SUPPLIES, AND AERIAL LEAD-IN ETC.



TYPE	SIZE	LENGTH	NET
1094	18	50	\$.33
1095	18	100	.67
1097	16	50	.42
1098	16	100	.76

KINKLESS FLEXIBLE TEST LEAD WIRE



THIS IS GENUINE EXTRA FLEXIBLE TEST PROD CABLE WITH HEAVY RUBBER COVER. TWO COLORS, RED AND BLACK, WILL NOT BREAK UNDER STRAIN OR TWISTING.

NET PER FOOT, - - - - - \$.02

WE ALSO CARRY IN STOCK A CLOTH COVERED TINSEL TEST PROD WIRE AS USED IN "SUPREME" INSTRUMENTS AND OTHERS.

COLOR, BROWN - - NET PER FOOT \$.02

IT'S EASY TO PARK AT WALTER ASHE . . .

1100 Pine Street

St. Louis, Missouri

WIRE

SHIELDED CABLES



FLEXIBLE TINNED COPPER CONDUCTORS WITH GOOD GRADE OF RUBBER INSULATION. EACH CONDUCTOR BRAIDED WITH MOISTURE PROOFED COLOR CODED COTTON COVER. CLOSELY WOVEN TINNED COPPER SHIELD OVERALL.

CONDUCTORS	GAUGE	NET PER FT.
2	#18	\$.04
3	#18	.05
4	#18	.06
5	#18	.07
6	#18	.08



SHIELDED LEAD-IN AND GROUND WIRE

EASY TO STRIP #16 SHIELDED RUBBER COVERED LEAD-IN WIRE. ALWAYS FRESH STOCK ON HAND.

NET PER FOOT, -----	\$.025
NET PER 100 FT. -----	2.20
NET PER 250 FT. ROLL -----	4.17

TINNED COPPER SHIELDING



Belden

FOR USE IN SHIELDING AUTOMOTIVE WIRES IN MAKING AUTO RADIO INSTALLATIONS.

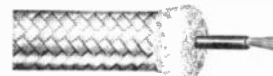
NO.	I.D.	NET PER FT.	NET 50 FT.
8930	13/64	\$.03	\$ 1.05
8931	3/8	.04	1.75
8932	25/32	.12	4.93

AC-DC ANTENNA WIRE
STRANDED, VERY FLEXIBLE



100 FT. ROLLS

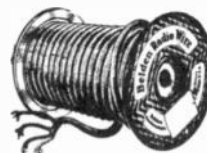
YOUR COST \$.60



AUTO RADIO SHIELDED LEAD-IN

EXTREMELY LOW CAPACITY CABLE FOR MINIMUM LOSS OF SIGNAL STRENGTH. HAS #18 STRANDED WIRE ENCASED IN JUTE FILLER AND SHIELD OVERALL. TWO SIZES.

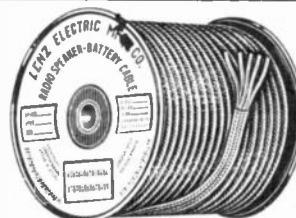
1/4" O.D.	NET PER FT.	\$.04
1/2" O.D.	" " "	.10



BATTERY OR SPEAKER EXTENSION CABLE

THIS CABLE CONSISTS OF 4, 5, OR 7 WIRES AND EACH TYPE HAS 2 HEAVY CONDUCTORS FOR FILAMENT OR SPEAKER FIELD. ALL WIRES COLOR CODED WITH DURABLE COTTON BRAID OVERALL.

NO.	COND.	NET PER FOOT	NET PER 100 FT.
8889	4	\$.05	\$ 4.17
8855	5	.06	5.01
8857	7	.095	8.18



RUBBER JACKETED DYNAMIC SPEAKER EXTENSION CABLE

Heavy Tough Rubber Jacket Applied Overall—

Suitable for Portable Public Address Systems

(Not Shielded)

WHEN IN NEED OF SPEAKER EXTENSION CABLE FOR OUTSIDE USE, MAY WE SUGGEST THIS #1700A CABLE. CONSISTS OF 2 #16 AND 2 #20 CONDUCTORS. HEAVY RUBBER COVERING OVERALL FOR WEATHERPROOF SERVICE.

NET PER FOOT	\$.07
" " 100' ROLL	6.24
" " 500' "	30.96

LOT NEXT TO STORE OR LOADING ZONE

WALTER ASHE RADIO COMPANY

1100 Pine Street St. Louis, Missouri

HEADPHONES



Brush Crystal Headphones

SUPER SENSITIVE—HIGH FIDELITY RESPONSE

Frequency response from 60 to 10,000 cycles, brings a new meaning to headphone reception. Requires only a fraction of the power necessary to operate electric-magnetic phones. High impedance and great sensitivity enable them to be used from any normal source, regardless of impedance. As in all Crystal Reproducers the motors will not carry the D. C. plate voltage but must be fed by a blocking condenser with the plate current carried by a choke or resistor. This resistance is not at all critical—from 10,000 to 100,000 ohms. Light in weight; only 6 ounces for the complete assembly, band and 5 foot cord.

YOUR COST \$ 5.40

Acme Lightweight Phones

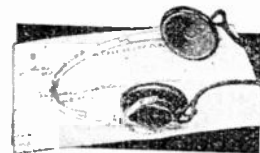
An exceptionally efficient headphone at low cost. The new lightweight type, entire headset weighing five ounces. Scientifically designed for superior performance, faithful reproduction and long life. 2000 ohms. ACME LIGHT WEIGHT PHONES



YOUR COST \$ 1.35

No. 106—Special Trimm Featherweight Phones

24000 Ohms Impedance. 36% Cobalt Steel Magnet. The one phone built specifically FOR THE HAM. Precision built. Possesses the rare combination of ultra sensitivity, sturdy construction and light weight. There is NO FINER PHONE FOR THE AMATEUR.



No. 106—SPECIAL TRIMM FEATHERWEIGHT

YOUR COST \$ 6.00



BRANDES SUPERIOR HEADPHONES

ONE OF THE FIRST ON THE MARKET. EXCEEDINGLY DURABLE AND MADE TO TAKE ABUSE. RESISTANCE 2000 OHMS ALUMINUM SHELL

YOUR COST \$ 1.80



CANNONBALL FEATHERWEIGHT

RESISTANCE 2000 OHMS
ALUMINUM CASE

YOUR COST \$1.25



HEADPHONE CORDS

MADE OF HIGH GRADE MATERIAL FREE OF NOISE AND WILL LAST INDEFINATELY. SUPPLIED IN EITHER SPADE, LOOP OR TIP ENDS. SINGLE CORDS .22
DOUBLE CORDS .30

TINNED BUS WIRE FOR HOOKING UP RECEIVERS OR TRANSMITTERS AND IS EXCEPTIONALLY VALUABLE FOR THE WINDING OF COIL FORMS.

50' NO. 16
50' NO. 14
50' NO. 12
50' NO. 10



.25
.25
.40
.70

COPPERWELD ANTENNA WIRE

COMPOSED OF A HEAVY STEEL CORE SURROUNDED BY COPPER WITH A HEAVY SKIN OF OF DURABLE ENAMEL



IN 100' ROLLS
NO. 14 \$.75
NO. 12 1.14
NO. 10 1.65

WIRE FOR TRANSMITTING ANTENNAS

SOLID COPPER ENAMELED



LENGTH	SIZE	NET PRICE
50'	14	\$.25
50	12	.40
50	10	.65
100	14	.48
100	12	.75
100	10	1.25
200	14	.96
200	12	1.50
200	10	2.50



NO. 8800

BELDEN

EO-1 TRANSMISSION LINE FEEDER CABLE

72 OHMS PER FOOT. WELL INSULATED AND DURABLE. PER FOOT 4.5¢

IT'S EASY TO PARK AT WALTER ASHE . . .

1100 Pine Street

St. Louis, Missouri



CAPACITOR-ANALYZER and RESISTANCE-BRIDGE

1. MEASURES CAPACITY:

Accurately measures the capacity of all types of electrolytic, paper, mica and air condensers by means of a built-in Wien Bridge. Also measures capacity between circuit wiring, etc. Capacity range .00001 to 70.0 mfd.

2. MEASURES POWER FACTOR:

The power factor of all types of electrolytic condensers can be read directly from a scale which is calibrated zero to 50% power factor. Thus the filtering efficiency of condensers can be determined.

3. MEASURES RESISTANCE:

Accurately measures the resistance of all types of carbon and wirewound resistors by means of a built-in bridge. Two large scales provide accurate resistance measurements from 50 to 2,000,000 ohms.

4. MEASURES INSULATION RESISTANCE:

Quickly measures leakage resistance of paper, electrolytic condensers and all types of insulation up to 1,000 megohms. This test may be made at voltages up to 450 volts D.C., provided by a built-in power supply.

5. DETECTS DEFECTIVE CONDENSERS:

Directly indicates leaky, shorted, low capacity, high capacity, and high power factor condensers of both the usual and intermittent types.



QUICK as a WINK!
write for full details

USES 6E5 AND 1V TUBES.

DEALERS NET PRICE

LESS TUBES, \$19.20

6. CONTINUITY METER:

The Solar Capacitor Analyzer may also be used as a continuity meter for testing all types of circuits.

7. COLOR-CODED SCALES:

More than 45 linear inches of accurately calibrated markings on five color-coded scales, for convenient capacity and resistance measurements.

8. DIRECT READING:

All measurements are made simply and directly and no calculations or references to complex graphs or charts are necessary. Overlapping scales eliminate "blind spots" and assure accurate readings at all times.

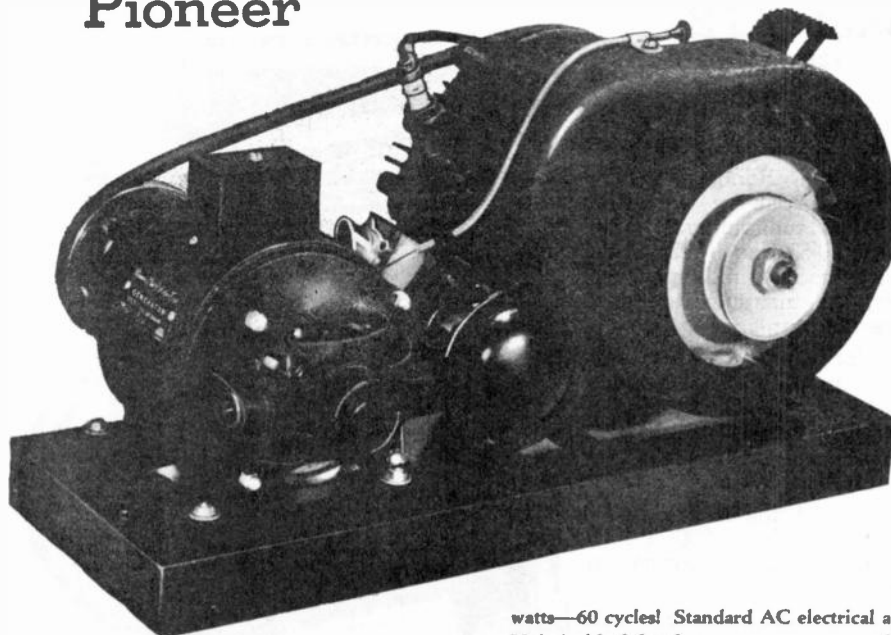
9. VISUAL BRIDGE BALANCE:

The operation of this instrument is unusually simple. A type 6E5 cathode ray tube, used as a visual bridge detector, gives a positive indication of balance on all capacity, resistance, and power factor measurements.

10. COMPLETE, COMPACT, PORTABLE:

Complete in itself and requires no external meters, standards, headphones, or similar accessories. Supplied in an attractive cabinet, with removable top and strong carrying handle.

Pioneer



Gas-Electric Plants

FEATURES

- ★ 110 volts—300 watts—60 cycles AC.
- ★ Operates standard AC "city" electrical appliances.
- ★ 50 watt DC winding for charging 6 volt batteries.
- ★ Weighs only 72 lbs. Measures 20"x11"x11".
- ★ Operates 12 hours on 1 gallon of gas.

THIS NEW PIONEER "Blue Diamond" Gas-Electric Plant furnishes "city" electricity! 110 volts—AC—300

watts—60 cycles! Standard AC electrical appliances can be used! The "Blue Diamond" Unit is ideal for farms, camps, summer homes, etc., because it will supply plenty of current for lights, as well as 50 watts DC which will keep all 6 volt batteries charged. It's a perfect power plant for mobile radio units and public address systems! AC radio equipment gives better, more powerful performance and requires less investment. Batteries are not needed, eliminating breakage and acid spilling.

The "Blue Diamond" Gas-Electric Unit will operate 12 hours on one gallon of gas—weighs only 72 pounds—is extremely compact—

IMAGINE THE POSSIBILITIES OF THIS PLANT FOR P. A. WORK!

LOT NEXT TO STORE OR LOADING ZONE

LESS FILTER, NET \$63.96
FILTER ONLY, " 5.00

WALTER ASHE RADIO COMPANY

1100 Pine Street  St. Louis, Missouri

WESTON ELECTRICAL INSTRUMENT CO

WESTON Model 771—CHECKMASTER

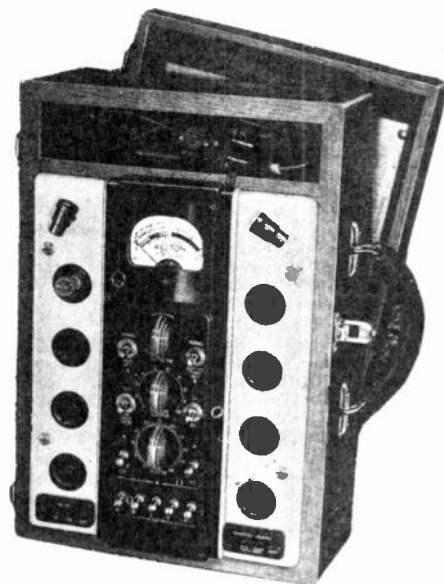
A handy device for home troubleshooting and estimating. A **real** WESTON Tube Checker, with voltage and resistance ranges for point-to-point testing. Saves carrying complete test equipment on hurried calls. Also ideal for counter or workshop use. Here are a few of the features:

Checks metal, glass, M G tubes—neon short check while tubes are

hot . . . cathode leakage test . . . individual tests on elements of diodes . . . line voltage reading directly on meter . . . voltage ranges 10-100-1000 volts . . . resistance ranges 0-20,000, 0-200,000, 0-2,000,000 ohms . . . high resistance leakage test, etc. Attractively finished in black, cream and red. See it at your jobber.

List Price \$73.50

Dealer Net \$55.13



TIME PAYMENT PLAN - - \$6.00 Down - - \$5.40 Per Month For Ten Months.

TIME PAYMENT PLAN - - \$6.00 Down - - \$5.07 Per Month For Ten Months.

WESTON Model 772

SUPER-SENSITIVE ANALYZER

Serves commercial radio receivers as well as transmitters, television receivers, P. A. systems, vacuum tube equipment, cathode ray tube equipment, telephone and telegraph sensitive relay circuits.

Equipped with two pin jacks for use with WESTON'S patented system of Selective Analysis.

Has 20,000 ohms per volt sensitivity on 5 d-c voltage ranges.

Mounts a 4 1/4" instrument with full size movement . . . sensitivity 50 microamperes.

A knife-edged pointer reads over a wide-open 100 line scale. Provides **dependable** voltage readings in circuits where the current value is limited to microamperes.

Measures R. F. microamperes in diode circuit of detector . . . measures diode currents in AVC circuits and automatic frequency control.

Ten Voltage Ranges:—0-2.5; 0-10; 0-50; 0-250; 0-1000 volts d-c at 20,000 ohms per volt con-

trolled by the Rotary Switch; 0-2.5; 0-10; 0-50; 0-250; 0-1000 volts a-c at 1,000 ohms per volt.

Six Current Ranges:—Rotary Switch positions for 0-10; 0-50 and 0-250 milliamperes. Pin jacks for 0-50 and 0-100 microamperes and 0-1 milliampere to protect the instrument against accidental burn-outs.

Ideal for Condenser Leakage Tests direct on resistance ranges of: 0-3000; 0-30,000; 0-3,000,000; and 0-30,000,000 ohms—maximum voltage on any range 15 Volts.

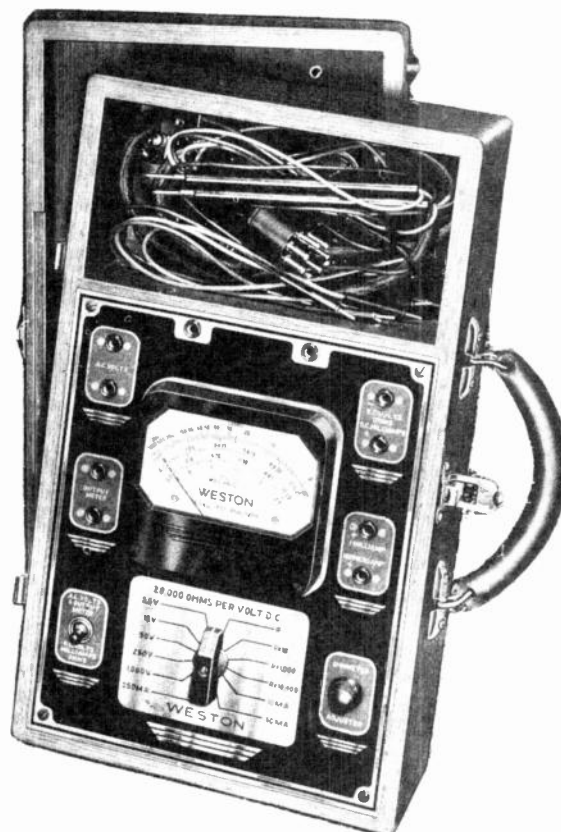
Five Output Meter Ranges:—0-2.5; 0-10; 0-50; 0-250; 0-1000 available through separate pin jacks.

Has a clearly etched black panel trimmed in red and chromium mounted in a sturdy wood carrying case.

A compartment is provided for carrying WESTON Model 666 Socket Selectors or tools.

List Price \$69.50

Dealer Net \$52.13



IT'S EASY TO PARK AT WALTER ASHE . . .

WESTON Model 775 SERUISET Models 773 and 772 in a combination carrying case

The Model 773 Tube Checker also is offered in this combination case, along with the famed Model 772 Analyzer. (Model 772 is fully described on the following page). Servicemen who already own the 772, however, can purchase the case equipped with Model 773 . . . and simply insert their 772 in the left-hand compartment. This combination case, too, is made of solid-wood, sturdily constructed; and is furnished with a leather "luggage" handle. Be "set" for better business with this complete servicing kit . . . be able to service sound movies, P. A. systems, television . . . as well as all radio receivers. Get the profit from all these sources with the 775 SERUISET.

Model 775

List Price \$139.00

Dealer Net \$104.25

TIME PAYMENT PLAN

\$10.43 Down - \$8.60 Per Month For Ten Months



PRECISION



MULTIMETER No. 830

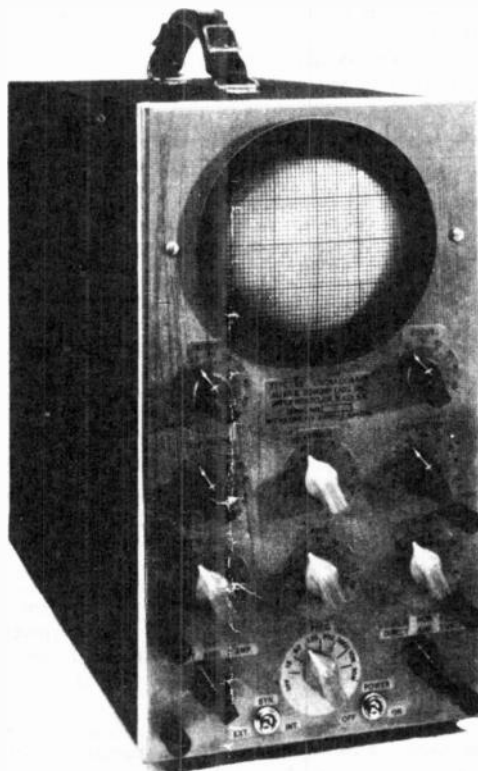
This 11 range "PRECISION" service instrument contains a large 3 inch D'Arsonval type meter of 2% accuracy. 5 D.C. voltage ranges: 0-10; 0-100; 0-250; 0-500; 0-1000 at 1000 ohms per volt. 4 D.C. current ranges: 0-1 ma; 0-10 ma; 0-100 ma; 0-250 ma. 2 resistance ranges: Low ohms shunt method. 0-500 ohms. As low as 1/2 ohm. High ohms reading. 0-300,000 ohms. Selector controlled throughout. Small in size: 4 1/2 x 7 x 2 1/2.

\$10.95

CATHODE RAY TUBES

RCA 913	1 INCH	NET	\$4.00
" 906	3 "	"	13.50
DUMONT	2 "	"	7.50
"	3 "	"	15.00
"	5 "	"	35.00

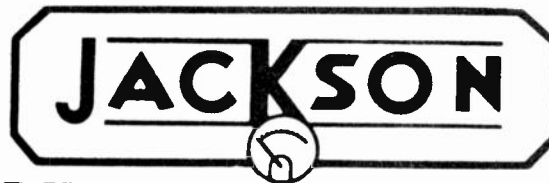
DU MONT



"DUMONT" OSCILLOGRAPHS ARE MADE IN 3 SIZES, 3", 5" AND 9" SCREEN. LATEST CIRCUIT DESIGN IN ALL. FLAT 30 TO 30,000 CYCLES. AMPLIFIED SWEEP ALLOWS OBSERVATION OF SINGLE WAVE FROM 15 TO 30,000 CY. P.S. DIRECT CONNECTION TO VER. AND HOR. PLATES OF C.R. TUBE. SEPARATE POSITIONING CONTROLS ON FRONT OF PANEL.

DUMONT	3" OSCILLOGRAPH	NET	\$64.50
"	5" "	"	116.50
"	9" "	"	250.00

LOT NEXT TO STORE OR LOADING ZONE



MODEL 635 DYNAMIC OUTPUT TUBE TESTER (With Universal AC-DC Meter Ranges)



MODEL 635

DUAL NEON TEST—A new exclusive Jackson feature for finding extremely high resistance leakages between tube elements. Push button shifts sensitivity from normal to ultra sensitive. **The New FULL-VISION Jackson Meter** is an exclusive built-in feature of this tester. This new meter measures 6 inches over flanges. It is housed in a highly polished Bakelite case. **DIAL IS ILLUMINATED.** The scale is extra long and easy to read.

FINEST CONSTRUCTION FEATURES—Cast aluminum main panel, deep etched metal escutcheon plates, sealed unit construction, full sized 2-watt neon indicator, finest silver contact switches, sturdy oak carrying case.

DIMENSIONS—14 $\frac{3}{4}$ " x 13 $\frac{3}{4}$ " x 6" overall. Weight 13 lbs.

ACCESSORIES—Furnished complete with self-contained batteries (for ohmmeter), and test prods.

MODEL 635 DYNAMIC OUTPUT TESTER—Dealer Net Price \$49.50

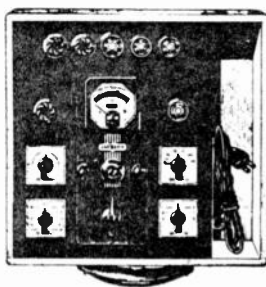
MODEL 630—Same as model 635, but does not have complete Universal Meter ranges. Identical in every other respect. Model 630 is provided with two special ohmmeter ranges giving full coverage of measurement from $\frac{1}{2}$ OHM to TEN MEGOHMS. No batteries required.

MODEL 630—DEALER NET PRICE \$39.50



MODEL 630

MODEL 627 DYNAMIC OUTPUT TUBE TESTER



MODEL 627

A low priced tester having ultra modern features. Although not expensive it compares favorably to high priced testers and gives precision results. This tester is very rugged in construction and will withstand most severe service in either portable or counter use.

FEATURES

DYNAMIC OUTPUT TEST—The most perfect method devised for accurate determination of tube condition. **TEST ALL TUBES** announced up to date. Provision for many more.

TESTS ALL BALLAST TUBES—A special feature of the tester is complete provision for testing any type of ballast tube for opens, shorts or leakages.

ALL READINGS DIRECT on "Good-Bad" Scale. No special marks for diodes, etc. Most simplified operation ever attained in a precision instrument.

PRE-SELECTOR classifies and tests tubes properly—(including gaseous such as OZ4, etc.).

DUAL NEON TEST—A new exclusive Jackson feature.

CENTER CONTROL PANEL is made of Bakelite attractively lettered. In this panel is mounted the indicating meter. This meter is a new square type in 3 inch Bakelite case, with a large easy reading scale. The neon indicator lamp is also mounted in this panel and is a standard 1-watt size.

CONSTRUCTION FEATURES—Heavy gauge steel main panel finished in grey morocco enamel, oven baked. Sub-mounted escutcheon plates are celluloid protected. Portable model is in sturdy oak carrying case—counter style is in attractive grey leatherette, sloping front cabinet.

DIMENSIONS—Portable Type 12 $\frac{3}{4}$ " x 13 $\frac{3}{4}$ " x 6"
Counter Type 11" x 12 $\frac{3}{4}$ " x 7"
Weight, either model, 13 lbs.

MODEL 627—(Net to Dealers & Servicemen) \$29.50



COUNTER STYLE

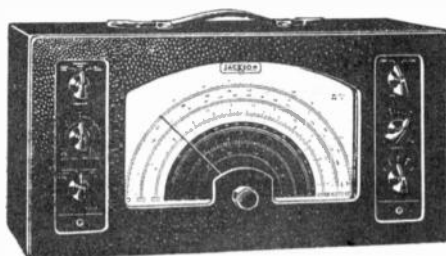
IT'S EASY TO PARK AT WALTER ASHE . . .

1100 Pine Street

St. Louis, Missouri



MODEL 420 UNIVERSAL OSCILLATOR



MODEL 420 UNIVERSAL OSCILLATOR

The most complete signal generator available at any price. Consists of three oscillators built into one simplified instrument.

1. **COMPLETE "STANDARD TYPE" OF OSCILLATOR**—This feature permits the use of the oscillator for all general purpose work. Eliminates the guess work and errors formerly created by spurious signals set up by beat frequency operation.
2. **COMPLETE "FREQUENCY MODULATED" OSCILLATOR** — Pure electronic frequency sweep provides the familiar "double image" method of alignment. Absolutely no moving parts of any kind. Perfectly balanced and easy to use.
3. **AUDIO OSCILLATOR FOR SPEAKER TESTS, ETC.**—This is the most convenient form of calibrated audio oscillator for receiver servicing. Connection is made direct to A and G posts of receiver. Audio note may be adjusted within range of 50 to 16,000 cycles. Calibration is made direct on main dial of oscillator.

FEATURES

FULL RANGE—100 kc to 34 mc. • **ALL CALIBRATIONS ARE DIRECT READING**—no calculations or charts of any kind are required. • **VARIABLE PERCENT MODULATION AT 400 cps**—A separate control provides this ultra-modern feature. • **VARIABLE BAND WIDTH FREQUENCY MODULATION**—up to 30 kc band width. • **ELECTRONIC FREQUENCY MODULATION**—positive "double image" alignment method. • **FREE FROM SPURIOUS HARMONIC SIGNALS** — when used as "straight" oscillator. • **EXTERNAL MODULATION PROVISIONS**—for connection with phono pick-up, etc. • **ALL AIR TUNED CIRCUITS**. • **POWERFUL SIGNAL OUTPUT**.

CONSTRUCTION FEATURES—BUILT IN QUALITY—Each of the six bands is separately calibrated both for correct inductance

and capacitance. Each inductance coil is wound on a specially molded bakelite form. The entire coil assembly is built in "sealed unit" part of the chassis. All compensation condensers are of the air-tuned type. The attenuator controls are enclosed in a cast aluminum shield separate from the main chassis. This cast shield makes it possible to provide ultra fine attenuation.

The dial is extra large and all ranges are direct reading. The fundamental frequency coverage is continuous from 100 KC to 34 MC. A range selector switch provides for instant use of any desired band.

DIMENSIONS—17" x 8 3/4" x 8". Weight, 20 lbs.

ACCESSORIES—Complete with shielded cable for connection to radio receiver. Also with connection cable for oscillograph.

MODEL 420—PRICE (Net to Dealers & Servicemen) **\$49.50**

Clarion Proudly Presents

A NEW ALL PURPOSE **15** WATT Amplifier and System

TECHNICAL CHARACTERISTICS

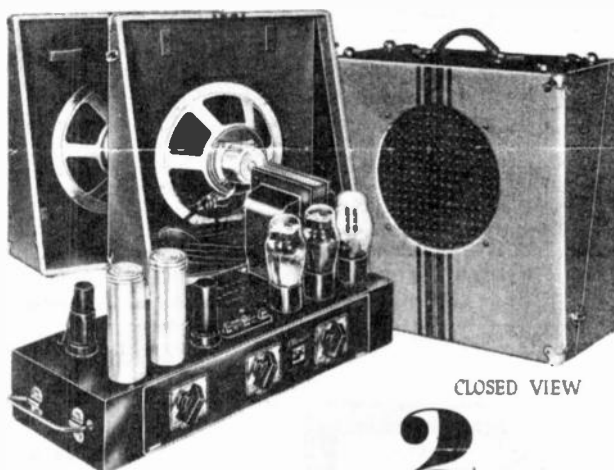
Rated Power Output (into 500 ohm line).....15 Watts
 Peak Power Output (into 500 ohm line).....21 Watts
 Frequency Response.....2 db., from 50 to 10,000 cycles
 Hum Level.....-48 db below rated output
 Input Channels.....Three; one high gain and two low gain.
 High gain for crystal, velocity or velostatic mikes (124 db). Low gain for phonographs, etc. (gain 88 db).
 Output Impedances.....Voice coils, 2 to 15 ohms; 50 to 500 ohm lines.
 Tubes.....One 6J7, one 6C5, one 6N7, two 6N6's, one 5V4G.
 Controls... One mixer gain for mike channel, one fader control for the two low gain channels Tone Control.
 Field Supply.....16 watts for one 10,000 ohm field; 8-watts for two 5000 ohm fields.
 FinishChassis in rubber black lacquer; screen in grey

Power Consumption Dimensions Weight in lbs.
 120 Watts 17"x6"x8 3/4" high Net 19; Shpg. 25

SYSTEM COMPLETE WITH AMPLIFIER AND TWO SPEAKERS IN CARRYING CASE LESS MICROPHONE AND TUBES, NET \$47.50

AMPLIFIER ONLY, WITH SCREEN BUT LESS TUBES NET \$24.55
AMPLIFIER ONLY, LESS SCREEN LESS TUBES, 22.75

SET OF TUBES FOR ABOVE SYSTEMS NET \$6.15



CLOSED VIEW

2

11-INCH
Concert Type
Dynamic Speakers

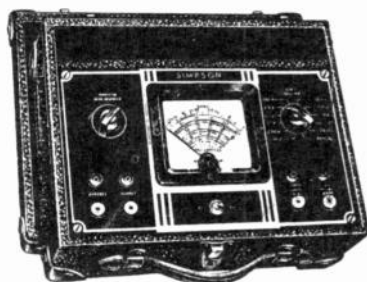
LOT NEXT TO STORE OR LOADING ZONE

WALTER ASHE RADIO COMPANY

1100 Pine Street St. Louis, Missouri



250 RADIO SET TESTERS 20,000 OHMS PER VOLT



The greatest dollar value ever offered in testing equipment of super sensitivity. Practically negligible current draw assures remarkable accuracy on all voltage ranges. All batteries are self-contained, providing resistance readings to 49 megohms. Particularly adaptable to measuring A.F.C. diode balancing circuits, bias of power detectors, high-mu triode plate voltage and many other unusual conditions which cannot be checked with ordinary servicing instruments. Large 4 1/2 inch open faced instrument. Attractive panel and serviceable carrying case.

Ranges: D.C. at 20,000 ohms per volt—A.C. at 1,000 ohms.
 VOLTS 0-2.5-5-10-50-250-1000
 MILLIAMPERES 0-1-10-100-500
 MICROAMPERES 0-50-100
 AMPERES 0-25
 DECIBELS (5 Ranges) -10 to +55.
 OHMS 4,000 (35 at center)
 100,000 (3,500 at center)
 40 Mega (350,000 at center)

Dimensions: 12" x 9" x 5 1/2"

Model 250—Dealers Net Price

Also available in 10,000 ohms per volt type.

This model is built in the same ranges and to the same high standards as the Model 250 except that resistance ranges are 2,000 ohms 200,000 ohms and 20 megohms, and the D.C. measurements are at 10,000 ohms per volt.

Model 225 Dealers' Net Price

\$42.50

\$32.50

205 DC-POCKET VOLT-OHM-MILLIAMMETER 5,000 OHMS PER VOLT

The "Baby" of them all. Smallest in size, but what a value. A modernistic ensemble incorporating the new Simpson 2 in. rectangular instrument with molded bakelite case and handsome, streamlined metal panel. The 200 microampere basic movement provides higher resistance ranges than have ever been available before in small instruments. All voltage ranges have a resistance of 5,000 ohms per volt. Slip it into your pocket and you're ready for most any emergency.

Ranges: D.C. only at 5,000 ohms per volt.
 OHMS 0-2,000 (25 at center)
 0-200,000 (2,500 at center)
 0-2 Mega (25,000 at center)

VOLTS 0-10-50-250-1000
 MILLIAMPERES 0-10-50

Furnished complete with pair of test prods.
 Dealers' Net Price

\$13.25



215 AC-DC VOLT-OHM-MILLIAMMETER 5,000 OHMS PER VOLT

Incorporates all of the essential ranges for modern servicing, both A.C. and D.C. Large 4 1/2 in. meter with its long, easy to read scale permits close reading on all ranges. The first small, low priced instrument to incorporate this large meter, heretofore available only in Simpson set testers at higher prices.

Ranges: D.C. at 5,000 ohms per volt, A.C. at 1,000 ohms per volt.

VOLTS 0-2.5-10-50-250-1000 A.C.-D.C.
 MILLIAMPERES 0-10-100-500
 MICROAMPERES 0-250
 DECIBELS (5 Ranges) 12 to +55

OHMS 0-4,000 (30 at center)
 0-400,000 (3,000 at center)
 0-4 Mega (30,000 at center)

Molded bakelite case is provided with leather handle. The rectangular meter case is also of molded bakelite. Handsome silver and black durable metal panel offers the rich contrast which is characteristic of Simpson test equipment. Supplied complete with pair of test prods.

Size: Width 5 1/2", Height 7", Depth 3"
 Dealers' Net Price

\$25.75

222 TUBE TESTER

A new tube merchandiser for quickly and accurately testing all types of receiving tubes. Tube quality is indicated on a distinctive English reading colored scale which tells you and your customers whether tubes are "GOOD" or "BAD."

The Meter Dial is ILLUMINATED from behind by 6-V dial light, adding to the beauty of the tester and greatly increasing its merchandising value. Filament return switch connects proper filament voltage to correct socket terminals, regardless of location in the socket. Two spare sockets are provided for future use. A neon tube of proper sensitivity detects inter-electrode shorts or heater-cathode leakage. Tubes are tested for shorts while hot.

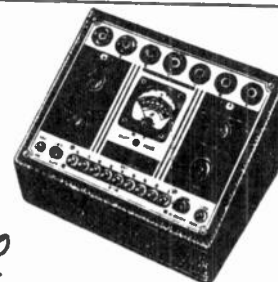
The black and silver metal panel is practically indestructible. Heavy wooden cabinet is covered with leatherette, artistically tooled. The meter has a rich red bakelite case. Operates on 110V. 60 cycle A.C.

COUNTER MODEL * Dimensions: 8 1/2" high, 13" wide, 9" deep.

PORTABLE MODEL * Dimensions: 12" long, 9" wide, 6" deep.

Model 222, Dealers Net Price (both counter and portable types)

\$43.50



28 FOUNDATION METER

20,000 OHMS PER VOLT



The same 20,000 ohms per volt instrument that is used in the Simpson Model 250, described above, with exactly the same ranges. The finest instrument available for those desiring to assemble their own testing equipment or supplement present equipment with a meter of super sensitivity. Wiring diagram with each instrument.

MODEL 28 A.C.—D.C. FOUNDATION METER—METER ONLY

Dealers' Net Price

\$15.00

Resistor and accessory kit consisting of 2 sub-panels, assembled with rectifier, output condenser, and complete set of matched resistors mounted.

Dealers' Net Price

\$10.00

MODEL 28 D.C. FOUNDATION METER—METER ONLY

Dealers' Net Price

\$15.00

Resistor sub-panel completely assembled with set of matched resistors.

Dealers' Net Price

\$5.00

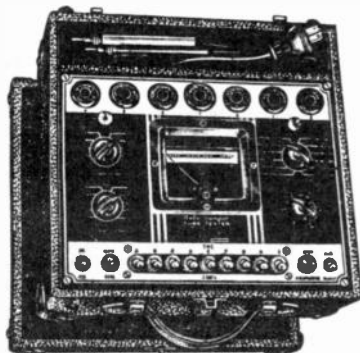
IT'S EASY TO PARK AT WALTER ASHE . . .

1100 Pine Street

St. Louis, Missouri



Roto Rangers 220 TUBE and SET TESTER



The new Simpson Roto Ranger with its ingenious patented roto-dial mechanism does away with the multiple scale with its maze of figures and the necessity of determining which range is connected into the circuit. The selector switches the scale and the circuit simultaneously, providing one scale at a time.

TUBE TESTING—The Model 220 Tube Tester utilizes the very latest circuit which has been adopted as standard by the radio industry. Three "Good" and "Bad" dials have been incorporated; one for Cathodes, one for Diodes and one for Battery Type Tubes. Design features overcome the possibilities of early obsolescence.

LINE VOLTAGE ADJUSTMENT—Upon each of the dials used in tube testing and condenser testing, line voltage may be checked without returning the selector to a fixed position. **SHORT CHECK**—Testing for "shorts" is a simple matter with the Roto Ranger. After setting the correct dial in position, toggle switches are manipulated to check each element. The meter sensitivity is correct for locating shorts especially those due to thermal expansion of the elements.

CONDENSER TESTING—Two "Good" and "Bad" dials have been incorporated in the Model 220 for testing condensers. One of these dials indicates the condition of mica and paper condensers and the other is calibrated to show the true condition of electrolytics.

RESISTANCE RANGES—The instrument is provided with three very practical and useable resistance ranges: 0-100 Ohms, 0-100,000 Ohms, and 0-100 Megohms.

VOLTAGE RANGES—Voltage ranges, three in number, include D.C. ranges of 0-8-300-1000 volts. The sensitivity of the meter movement is 400 Microamperes and all voltage ranges are furnished with resistance of 2500 ohms per volt.

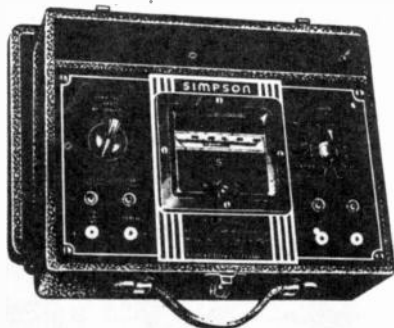
GENERAL FEATURES—The handsome metal panel is finished in black and silver by a new process. Carrying case is well built and covered with black "Shark" grained leatherette. Protective leather caps on all corners.

Dimensions, 12½ x 12½ x 6 in.; Shipping weight, 22 lbs.

Dealers' Net Price

\$62.75

275 RADIO SET TESTER


ROTO RANGER—10,000 Ohms per Volt

The same substantially built Roto Ranger mechanism found in other Simpson testers is now incorporated in this new high sensitivity set tester. Drawing current of only 100 microamperes, it does not materially effect present day receiver circuits and more accurate readings result. Also, higher resistance ranges are available. Black and silver modernistic metal panel—black leatherette carrying case and large 4½ inch Roto Ranger instrument.

Ranges: D.C. at 10,000 ohms per volt—A.C. at 1,000 ohms.

D.C. Volts 0/10/50/300/1000
A.C. Volts 0/8/150/1000

OHMS 0/2,000/200,000/20 Megohms
MILLIAMPERES—0/10/100/500
MICROAMPERES—0/100

Dimensions: 12" x 9" x 5½"

Dealers' Net Price

\$42.50

201 & 202 VOLT-OHM-MILLIAMMETERS

Another Roto Ranger design incorporating the twelve scale rotary dial. Positively the most useful and practical instrument ever offered for use in the shop or on the job. Model 201 utilizes 6 scales for resistance and covers a complete range from .1 ohm to 20 megohms. Also provides three current ranges, making available the basic range of 200 microamperes; and three voltage ranges to 1000 volts with resistance of 5000 ohms per volt.

MODEL 202—The A.C.-D.C. type is especially adaptable to "Free point" testing and is provided with ranges most suitable for general testing. All voltage ranges are on the basis of 1000 ohms per volt.

RANGES OF MODEL 201 D.C. TYPE

0-20 Ohms	200,000 Ohms to 20 Megohms
20-200 Ohms	0-200 Microamperes
200-2,000 Ohms	0-10-150 Milliamperes
2,000-20,000 Ohms	0-8-300-1000 Volts
20,000-200,000 Ohms	(5000 Ohms per Volt)

Model 201—Dealers' Net Price

\$32.50

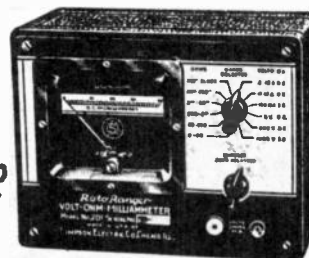
A.C.-D.C. VOLT-OHM-MILLIAMMETER MODEL 202

Design and general features identical with Model 201. Ranges:

0-8-130-1000 A.C. Volts	0-100 Ohms (Center scale 5)
0-8-300-1000 D.C. Volts	0-50,000 Ohms (Center scale 1400)
0-1-8-130 D.C. Milliamperes	0-2 Megohms (Center scale 21,000)

Model 202—Dealers' Net Price

\$35.75

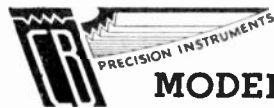


SIMPSON INSTRUMENTS ARE SOLD ON LIBERAL DEFERRED PAYMENTS

LOT NEXT TO STORE OR LOADING ZONE

WALTER ASHE RADIO COMPANY

1100 Pine Street St. Louis, Missouri



CLOUGH-BREngle 1937 Super-Service Line

MODEL OC-A PRECISION R-F SIGNAL GENERATOR



Battery-Operated Model

MODEL OD-A Battery-Operated Precision R-F Signal Generator, identical to the instrument described on the right, but operated from self-contained battery supply. Uses two Burgess type Z30P for plate and C-bias, and one Burgess type 4F2H for filaments, thus assuring ample voltage output and long battery life.

MODEL OD-A R-F Signal Generator, complete with calibration curves, output cable and all tubes, less batteries, net cash

\$29.95

Guaranteed Frequency Accuracy $\frac{1}{2}$ of 1% Over Entire Range.

Fundamental Output Continuously Variable from 100 kc to 30 mc.

Hand-Calibrated Frequency Accuracy: Each MODEL OC-A is calibrated against C-B frequency standard at 10 or more points on each tuning band. There are no trimmers or other adjustments to make this calibration track with a pre-printed dial that may shift in service.

Instead calibration curves are drawn for each band and readings for over ninety-nine commonly used test frequencies are hand lettered into a ready-reference chart which may be seen on the front of the instrument.

25-Inch Tuning Dial Scale: This micro-vernier scale can be set to an accuracy of 1-10 of 1 per cent, thus allowing a frequency guarantee of within $\frac{1}{2}$ of 1 per cent, which is impossible to substitute with the usual 6 or 8-inch dial scale.

Roto-Inductor Unit: Eliminates the losses and calibration destroying effects of band-switches with their multiplicity of leads. Instead each coil is 100 per cent shielded by metal and

25 Inches of Dial Scale Per Band.

Band-Switch Losses Eliminated. Dual-Range Stepless Attenuator for R-F and A-F Outputs.

Hand-Drawn Calibration Curves for Each Tuning Band.

rotated into the circuit, using less than four inches of lead for the entire coil circuit connections.

Output: The MODEL OC-A provides 400-cycle modulated r.f., unmodulated r.f., and 400-cycle sine wave audio outputs. Control is by a front panel switch.

Tubes and Circuit: Employs new temperature and voltage compensated circuit of improved frequency stability, with separate r-f and a-f oscillator-modulator tubes, and rectifier with triple line filter.

Power Supply: MODEL OC-A for use on 110-volt, 60-cycle line. MODEL OC-B for use on 110-volt ac-dc lines.

MODEL OC-A or OC-B R-F Signal Generator with hand-drawn calibration curves, shielded output cable and laboratory tested tubes, net cash **\$29.50**

MODEL OC-AR, same as above to mount in 19-inch rack, net. **\$32.50**

MODEL 79-B BEAT-NOTE AUDIO OSCILLATOR

A newly improved instrument offering a standard of performance not available in combination r-f and a-f oscillators. For radio receiver servicing, it has the advantage that it may be used to audio-modulate an r-f signal generator over the entire audible frequency range, especially for the extremely important frequency-characteristic test of the radio receiver. This cannot be done with the fixed a-f oscillators built into the r-f signal generators.

Continuously variable from 0 to 15,000 cycles, with accurate calibration throughout. Output is 27 volts at 5000 ohms or 150 milliwatts, several times the power

obtainable from oscillators using low power tubes.

Has built-in amplifier, type 6E5 electron-eye zero-beat indicator, and new air dielectric trimmer condensers. Distortion content less than 5%. Output essentially flat over entire frequency range. Operated directly from 110-volt, 50-60 cycle line.

MODEL 79-B Beat-Note Audio Oscillator, net cash.. **\$56.50**

Complete in metal carrying case with all tubes. (Only \$6.50 down and ten monthly payments of \$5.70.)

MODEL 79-BR, Rack Style, net cash **\$59.50**



NEW — a low cost C-B Oscillograph

MODEL 105

with Linear Sweep, Dual Amplifiers, etc.

An exact electrical duplicate, feature for feature, of the MODEL CRA Cathode-Ray Oscillograph, employing the new Type 913 Cathode-ray tube.

Experience gained in building thousands of larger oscillographs has shown that Linear Sweep Circuit—Dual Amplifiers—Automatic Synchronizing Circuit—end Beam Centering Controls are fundamental application features! Not one may be omitted without so limiting the utility of the oscillograph that any cost saving thus secured is wasted by limited performance.

COMPLETE WITH ALL TUBES.
NET PRICE **\$ 48.90**

IT'S EASY TO PARK AT WALTER ASHE . . .



CLOUGH-BREngle 1937 Super-Service Line

MODEL OM-A "CALIBRATED SWEEP"

FREQUENCY MODULATED OSCILLATOR

No Other Instrument Has Ever Offered This Combination of Vital Features:



Many Thousand Servicemen In Over Thirty-two Countries Today Are Using This Famous Instrument

The introduction of this instrument marked an important milestone in radio equipment development. Many are the instruments that have been introduced as a result of its widespread success—yet none has duplicated its complete array of performance features.

Single and Double Trace Selectivity Curves: An exclusive feature of this instrument and the MODEL 81-A Frequency Modulator. Both curve types are needed for servicing of all receiver designs. Instant changeover, by means of a single switch, from single to double trace.

Selectivity Curve Calibrated in Kilocycles: A constant sweep width or "wobble" of plus and minus 20 kc is developed by the "Inductor-Sweep" (may also be used as a constant frequency oscillator with output meter when desired) at every test frequency from 100 kc to 30 mc, thus allowing the selectivity curve, either i.f. or overall, to be accurately calibrated.

Frequency Range and Accuracy: The MODEL OM-A covers from 100 kc to 30 mc on fundamental frequency output and is guaranteed accurate within $\frac{1}{2}$ of 1 per cent at every frequency. Each instrument is individually calibrated on every band against a primary frequency standard which is itself checked daily against U. S. Government frequency signals. No other frequency modulated oscillator, regardless of price, offers equal frequency range or frequency accuracy guarantee.

Single and Double Trace Curves.

Calibrated Selectivity Curve.

Continuously Variable 100 kc to 30 mc on Fundamentals.

Accuracy Guaranteed to $\frac{1}{2}$ of 1%.

Total Dial Length of 150 Inches.

Every one has a definite need in modern Cathode-ray Servicing—only with this combination can you assure lasting value for your instrument investment.

Dial Length 25 Inches Per Band: Each of the six separate coils of the Roto-Inductor unit is tuned over 25 inches of dial length enabling the MODEL OM-A to be set to a frequency accuracy of 1-10 of 1 per cent, thus making consistent guaranteed accuracy of $\frac{1}{2}$ of 1 per cent. The claims of $\frac{1}{2}$ of 1 per cent accuracy for instruments having six and seven inch dial lengths per band cannot be substantiated even when assisted by correction charts, due to the inaccuracy of setting such cramped dials.

Use With Any Oscillograph: The MODEL OM-A is designed for direct plug-in connection to the MODELS CRA and 105 Oscillographs, and may also be used conveniently with any other standard oscillograph.

Line Operated: From any 110-volt, 60-cycle source. Special 220-volt or 25-cycle models available on order.

MODEL OM-A Frequency Modulated R-F Signal Generator, complete with hand-drawn calibration curves, five metal tubes, output cable and calibrated selectivity curve screen, net cash.....\$64.50
(Only \$7.00 down and ten monthly payments of \$6.56)

MODEL OM-AR, same as above to mount in 19-inch rack net cash \$74.50.

MODEL 81-A FREQUENCY MODULATOR—brings fixed-width frequency modulation to any i-f oscillator, modernizing it without alteration or destruction of calibration, for single and double trace selectivity curve production. Operation from 110-volt, 60-cycle lines, net cash.....\$34.25
(Only \$4.00 down and ten monthly payments of \$3.46)

MODEL CRA CATHODE-RAY OSCILLOGRAPH



This instrument offers complete facilities for countless problems of receiver circuit study and adjustment. R-f and i-f alignment, resistor, condenser, and vibrator tests are made while the receiver is under actual operation.

FLEXIBLE OPERATION: The switching system makes possible instant changeover for any desired test, greatly adding to the ease and simplicity of operation

HIGHER INPUT SENSITIVITY: Two improved input amplifiers, one for each set of plates, offer the highest sensitivity available on a Cathode-ray oscillograph, .38 rms volts per inch of deflection. This extreme sensitivity is an added advantage in servicing receivers of the latest designs.

WIDE-RANGE SWEEP: The MODEL CRA has an improved sweep

circuit with positive synchronizing control, generating fundamental sweep frequencies up to 20,000 cycles per second, allowing convenient study of wave forms at 150,000 cycles per second or higher.

These and many other features make the MODEL CRA the outstanding Cathode-ray oscillograph value, regardless of price. It has back of it the unequalled experience of the pioneer builder of Cathode-ray equipment for high-frequency applications.

MODEL CRA — Cathode-Ray Oscillograph, complete in metal carrying case with all tubes including the type 906 Cathode-ray tube, net cash.....\$79.50

MODEL CRA-R, Rack Style, net cash.....\$97.50

WALTER ASHE RADIO COMPANY

1100 Pine Street  St. Louis, Missouri

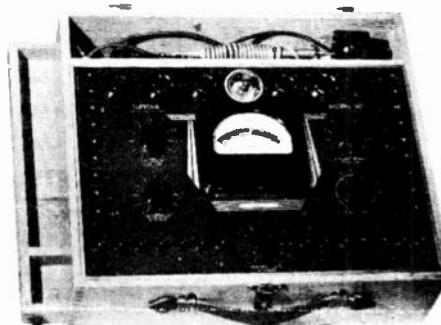
SUPREME Testing EQUIPMENT

MODEL 502 TUBE TESTER

When we say that the Supreme Model 502 is the answer to a serviceman's dream come true, we mean just that. Here is an instrument which is not only a complete tube tester, but a set tester as well! The basic tube testing circuit is the same as the Model 501. This means that the Model 502 uses the new SUPREME Electro-conductance tube test for all quality tests of separate diode and rectifier plates as well as individual tube sectional and complete tube element quality tests. It also means that the Model 502 includes inter-element leakage checks between any two elements, an open element test in each tube element and a short test between any two tube elements. The Model 502 also uses the obsolescence proof "Floating Filament" Selector and associated circuit.

Besides all this, the Model 502 offers 19 additional ranges and functions including four A. C. voltage ranges of 0/7/140/350/1400 volts, measuring as low as 0.2 volts; four D. C. voltage ranges of 0/7/140/350/1400 volts, measuring as low as 0.2 volts; three ohmmeter ranges of 0/200/2,000/20,000 ohms, measuring as low as 0.1 ohms with 3.5 ohms at center scale; two megohm ranges of 0/2 meg/20 meg., all with self-contained power supplies; an Electrostatic capacitor leakage test on a neon bulb; and an Electrolytic Filter capacitor leakage test directly on a "Good-Bad" English Reading meter scale.

Just imagine this superb instrument housed in a Golden Oak carrying case and mounted on an Antique Bronze panel. Remember, the complete instrument weighs only 16 pounds and measures overall but $10\frac{1}{2}$ " x $11\frac{1}{2}$ " x 5". Comes complete with instructions and tube list. For 100 to 133 volts, 60 cycle unless otherwise ordered at slight additional cost.



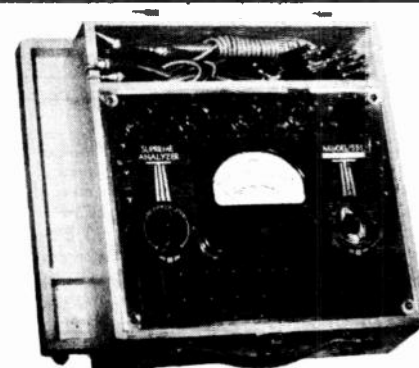
Dealer's Net Cash \$49.95
Wholesale Price
SIC Easy Payment Price — \$5.50 Cash and 10 monthly payments of \$4.95
Code — TUMUL

MODEL 551 ANALYZER

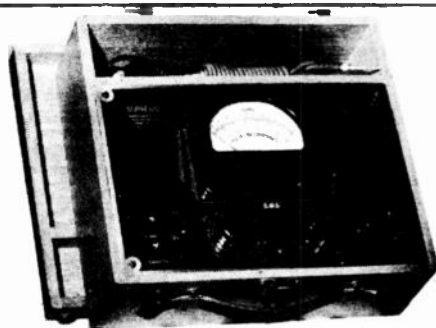
Cut the time necessary to find radio troubles — use the new Model 551 Analyzer which incorporates Supreme's exclusive "Free Reference Point System of Analysis". By this method, all resistance, voltage and current measurements may be taken between any two tube elements or between any tube element and ground or chassis without the necessity of turning over the receiver. Why "Get out and get under" a radio chassis? If you desire, you can still use the Model 551 as a multimeter, for you have all the point-to-point functions and ranges of the Model 541 Set Tester — 20 in all — including 0.2 to 1400 A. C. volts in four ranges; 0.2 to 1400 D. C. volts in four ranges; 0.2 to 140 D. C. mills in three ranges; 0.2 to 1400 A. C. volts in four output ranges (without the necessity for an external series capacitor); and 0.1 ohm to 20 megohms in five ranges (all self-contained)!

This combination of ranges and functions, together with SUPREME'S "Free Reference Point" System allows you to literally spread out the radio receiver's circuit on the analyzer panel, eliminating costly delays in physically breaking each individual circuit for current measurements, or fishing around underneath the chassis for point-to-point test.

The Model 551 comes completely equipped with accessories and operating data. It is mounted on a rich Antique Bronze panel and housed in a Golden Oak carrying case. For 110 to 125 volt—60 cycle supply unless otherwise ordered at slight additional cost.



Dealer's Net Cash \$38.95
Wholesale Price
SIC Easy Payment Price — \$4.25 Cash and 10 monthly payments of ... \$3.86
Code — ANAL



SUPREME MODEL 541 SET TESTER

Here is the sweetest and fastest little multimeter ever offered the serviceman at any price. The complete instrument measures only $7\frac{1}{4}$ " x $10\frac{1}{4}$ " x $4\frac{1}{2}$ " and actually weighs only 9 pounds. The Model 541 is so engineered as to provide fast, accurate results because its 20 ranges and functions are at your finger tips on a single selector switch.

Four D. C. voltage ranges are provided, 0/7/140/350/1400 volts with 0.2 volts as a first indication; four A. C. voltage ranges of 0/7/140/350/1400 volts measuring as low as 0.2 volts; three D. C. mill ranges of 0/7/35/140 mills with 0.2 mills as first marking; 4 output ranges of 0/7/140/350/1400 A. C. volts requiring no external capacitor; 3 ohmmeter ranges of 0/200/2,000/20,000 ohms with 0.1 ohm as first indication and 3.5 ohms center scale reading; and 2 megohm ranges of 0/2/20 megs with internal power supply. Never before has so much instrument been offered for so little money!

The Model 541, mounted on Antique Bronze panel and in Golden Oak carrying case, comes complete with instructions and accessories and is available for 110 to 125 volt—60 cycle use unless specially ordered at slight additional cost.

Dealer's Net Cash \$26.95
Wholesale Price
SIC Easy Payment Price — \$4.00 Cash and 7 monthly payments of \$3.67
Code — SETES

ANY OF THE ABOVE MODELS MAY BE HAD WITH 25,000 OHMS PER VOLT SUPER-SENSITIVE METER FOR \$5.00 ADDITIONAL.

IT'S EASY TO PARK AT WALTER ASHE . . .

RADIO TRIPLET TESTERS

VOLT-OHM-MILLIAMMETERS



Model 1200-E Unit

25,000 OHMS PER VOLT D. C. measurements and resistance readings to 40 megohms with this new super sensitive Volt-Ohm-Milliammeter. Instrument reads D. C.: 10-50-250-500-1000 volts at 25,000 ohms per volt; 0-50 microamperes; 1-10-50-250 milliamperes; low ohms, backup circuit, $\frac{1}{2}$ to 500; high, 4 and 40 megohms; A. C. 10-50-250-500-1000 volts.

Model 1200-E has two instruments, A. C. and D. C., in tilting type twin case. Switch contact error less than $\frac{1}{4}\%$ on milliamperes. No error on voltages. Ohms scale markings in straight lines. Resistance measurements have individual zero adjustments. Selector switch for all readings. Contains $2\frac{1}{2}$ and $1\frac{1}{2}$ volt batteries.

Model 1200-E Unit.
Code—TWARB. *10.
List .. \$46.75. Net .. \$31.17

MODEL 1200-A

Same as 1200-E but reads as follows: D. C. 10-50-250-500-1000 volts at 2000 ohms per volt; 1-10-50-250 M. A. low ohms, backup circuit, $\frac{1}{2}$ to 500; 1500 ohms, $1\frac{1}{2}$ and 3 megohms. A. C. 10-50-250-500-1000 volts.

1200-A Unit. Code—TRITE. *10.
List .. \$35.75. Net .. \$23.83

MODEL 1200-B

Same as 1200-A but with D. C. movement and copper oxide rectifier for A. C. readings 2-10-50-250-500-1000 volts at 1000 ohms per volt.

1200-B Unit. Code—TRRRF. *10.
List .. \$44.00. Net .. \$29.33

MODEL 1200-C

Model 1200-C, same as 1200-A but with 5000 ohms per volt D. C. suitable for AVC checking; 250 microamperes, and $7\frac{1}{2}$ megohms scales.

1200-C Unit. Code—TRFFA. *10.
List .. \$40.25. Net .. \$26.83

CONDENSER TESTER

NEW and improved Condenser Tester. Complete tests for all condensers from .0001 to 30 microfarads. Quickly and accurately checks for shorts or opens, leakages, breakdown and capacity. Breakdown tests for electrolytic and paper condensers at rated working voltages. Defects are indicated on direct reading meter with five scales. Capacity is read directly in microfarads.

D. C. voltage for paper condenser breakdown up to 1,000 volts in five steps. For electrolytics, breakdown voltage to 575 in nine steps. Scales read: A—.0001 to .01; B—.01 to .2; C—.2 to 2; D—2 to 30. Colored GOOD-BAD scale for electrolytics. Line voltage regulator for capacity tests.

Model 1241 Unit. Code—TRTYT. *10.
List .. \$41.25. Net .. \$27.50

TUBE TESTER



Model 1210-A Unit

TESTS all types of tubes. Direct reading. Colored GOOD and BAD scale. Includes rectifier tube. Large meter. Line voltage regulation. All short tests. Cathode leakage test. Individual tests on diodes and full wave rectifiers. Simple to operate. Has four sockets with one 5-6 in combination to minimize panel space. Has a new RMA approved circuit with every essential for a dependable emission test of tube values. No confusion, complications or calculations. 50-60 cycle, 100-180 volts.

1210-A Unit. Code—TRIER. *11.
List .. \$33.00. Net .. \$22.00

VACUUM TUBE VOLTMETER



Model 1250 Unit

WITH its accuracy independent of changing tube values, Model 1250 is the first self-calibrating Vacuum Tube Voltmeter. In this instrument tube characteristics are stabilized with the circuit, irrespective of what tube emission values may be. Replacing a tube does not alter accuracy. Model 1250 measures low A. C. and D. C. voltages without current drain. Has two separate D. C. movements in a tilting type case. One indicates when tube characteristics are stabilized with the circuit. The other is a three-range voltmeter with approximately linear scales reading in peak A. C. and D. C. volts. Ranges are 2.5, 10 and 50 volts. All accessories included.

1250 Unit. Code—TRPPD. *13.
List .. \$55.00. Net .. \$36.47

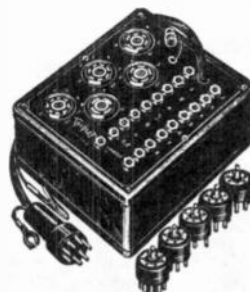
MODEL 1251

Same as the above, but with ranges of 5-15-75-300 volts. Code—THEKA.

List .. \$71.50. Net .. \$47.67

MASTER UNIT CASES

FREE POINT TESTER



Model 1220-A Unit

FOR servicing sets using metal, glass-metal or glass tubes. Has five sockets—with standard RMA markings. Panel also includes eight automatic switch type and ten single action jacks. Makes all series and parallel meter connections through the set sockets to all parts of the circuit. Automatic in operation. Used in conjunction with any Triplet Volt-Ohm-Milliammeter. Extra connections may be added, when necessary, at a very slight cost.

1220-A Unit. Code—TRICH. *3.
List .. \$16.50. Net .. \$11.00

AUDIO FREQUENCY OSCILLATOR



Model 1260 Unit

MODEL 1260 is a compact, portable Audio Frequency Oscillator that generates a pure sine wave without distortion or harmonics. Has circuit of feedback type, giving precision performance of a degree usually found only in the finest of laboratory equipment. Wide frequency range: 100-250-500-1,000-2,000-3,000-4,000-5,000-7,500-10,000 cycles. Furnishes audible frequency to test audio amplifiers, speakers, P. A. systems and is useful for a wide range of laboratory purposes. Strong signal. Attenuation is extremely accurate. Impedance matching is variable. Operating power furnished by A. C. line voltage. Necessary tubes and test leads are included.

1260 Unit. Code—TRMMA. *14.
List .. \$42.50. Net .. \$28.33

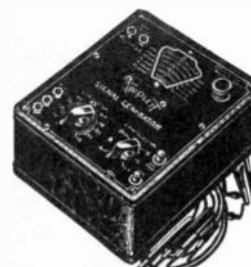
1201 Case only, for single Master Unit. Code—TRENT. *5.
List Price \$6.00. Net Price \$4.00

1202 Case only, for two Master Units. Code—TREEN. *8.
List Price .. \$7.00. Net Price .. \$4.67

1203 Case only, for three Master Units. Code—TREAD. *11.
List Price .. \$8.00. Net Price .. \$5.33

1204 Case only, for Master Test Set. Code—TRAWL. *13.
List Price .. \$9.00. Net Price .. \$6.00

SIGNAL GENERATORS



Model 1281 Unit

MODEL 1281 All-Wave Direct Reading D. C. Signal Generator now has built-in trimmer calibrated coils for accuracy of 1% on broadcast, intermediate and short wave bands. Six bands cover 120-80,000 Kc.—all fundamentals. Fully stabilized. Extra-long 12" vernier type direct reading scale. Improved band selector switch. 400 cycle audio signal available. Includes batteries and two type '30 tubes.

1281 Unit. Code—TRUTH. *13.
List .. \$88.50. Net .. \$25.67
1282 Unit. (Same as 1281, but for 110 volts—60 cycle A. C. operation.) Code—TULSA. *16.
List .. \$41.25. Net .. \$27.50

MODEL 1280

Model 1280 Unit is an All-Wave Signal Generator supplying a continuously variable signal. Frequencies controlled on six fixed positions, from 100-18,000 Kc. Batteries, tubes and six individually calibrated graphs supplied.

1280 Unit. Code—TRIBE. *14.
List .. \$25.25. Net .. \$16.83

MODULATION MONITOR



Model 1295 Unit

ACTUAL modulation percentage of radio transmitters is shown on the direct reading dial of Model 1295. Eliminates the uncertainty of depending on the ear, variation of antenna ammeter or the loop and light in determining carrier shift and percentage of modulation. Scale indicates modulation from 40 to 120 per cent. All readings are in peaks. Visual information provided on a second dial for carrier reference level for the modulation test and also to check carrier shift during modulation. Tilting twin instrument.

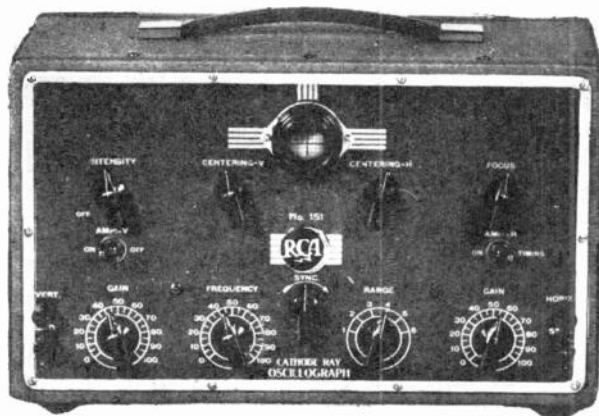
1295 Unit. Code—TRKKY. *11.
List .. \$37.25. Net .. \$24.83

WALTER ASHE RADIO COMPANY

1100 Pine Street St. Louis, Missouri

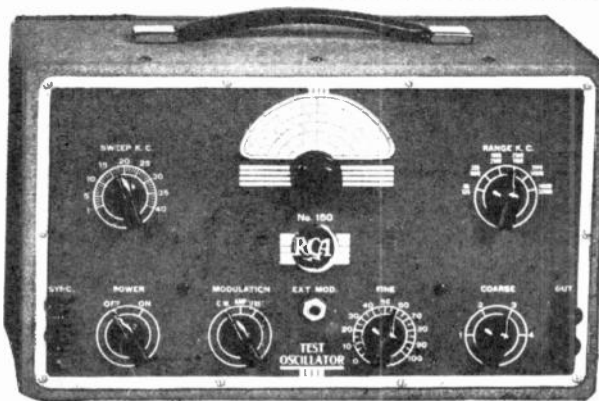
RCA

RADIO TEST EQUIPMENT



"RCA" NOW OFFERS THE ULTIMATE IN SMALL, COMPLETE CATHODE RAY OSCILLOGRAPHS AT A PRICE EVERY SERVICE ENGINEER CAN AFFORD. HIGH SENSITIVITY, 1.75 VOLTS (RMS) FOR FULL SCALE DEFLECTION. VERTICAL AND HORIZONTAL AMPLIFIERS, INDIVIDUAL CONTROLS, FLAT 30-10000 CYCLES. USES 5 TUBES, 1-913, 1-885, 2-6C6, 1-80.

NET PRICE COMPLETE WITH ALL TUBES
\$47.50



THIS NEW ELECTRONIC SWEEP TEST OSCILLATOR IS IDEAL FOR EVERY APPLICATION IN WHICH A WIDE FREQUENCY TEST OSCILLATOR IS NEEDED. IDEAL FOR USE WITH ALL TYPES OF CATHODE RAY OSCILLOGRAPHS. VARIABLE ELECTRONIC SWEEP, 1 TO 40 KC. FREQUENCY RANGE, 90 TO 32000 KC. INTERNAL 400 CY., OR EXTERNAL AMPLITUDE MODULATION. USES 5 TUBES, 1-6A7, 1-6F7, 2-6C6, 1-80.

NET PRICE COMPLETE WITH ALL TUBES
\$64.50

MODEL T.M.



Dealer's NET Price
Only..... \$

Tests ALL types of tubes including the latest OCTAL base glass types. For the EMISSION test, a large meter with an English reading "GOOD-BAD" scale indicates the exact condition of the tube under test. For the SHORT and LEAKAGE test, the NEON lamp shown leaks up to six megohms. This same LEAKAGE test is available through external jacks, for the measuring of resistance in continuity tests, shorted or leaky by-pass, or electrolytic condensers.

Operates from 100 to 130 volt, 60 cycle, A. C.

MILLION

TUBE TESTERS

Features:

- *Complete, ready to use.
- *Tests EMISSION of ALL tubes.
- *NEON shows ALL SHORTS or LEAKS up to 6 megohms between any elements with tube HOT.
- *CONTINUOUS line voltage adjustment.
- *Rotary VOLTAGE switch for filament voltages.
- *Rotary SELECTOR switch for speed on EMISSION and SHORT tests.
- *Tests BY-PASS condensers for SHORTS and LEAKAGE.
- *Tests ELECTROLYTICS for POLARITY and LEAKAGE.
- *Large 3" square D'Arsonval meter with GOOD-BAD scale.
- *Power circuit fused for your protection.
- *All test circuits insulated from power line.
- *Eight foot power cord and plug.
- *Handy Carrying Strap.
- *Meets ALL your requirements in a PORTABLE or COUNTER tester.

MODEL C.P.



Dealer's NET Price
Only.....

Tests ALL types of tubes including the latest OCTAL base glass types. For the EMISSION test, a new NEON meter principle is used. This special calibrated NEON LAMP lights for good tubes and not for bad. For the SHORT or LEAKAGE test the NEON shows leaks up to six megohms. This same leakage test can be used through external jacks provided for the measuring of resistance in circuit continuity tests, shorted or leaky by-pass, or electrolytic condensers.

Operates on 105 to 125 volts, 60 cycles, A. C.

IT'S EASY TO PARK AT WALTER ASHE . . .

WALTER ASHE RADIO COMPANY

1100 Pine Street

St. Louis, Missouri

71

TRU-TAN



EXTRA SPECIAL
DUPLICATE CARTRIDGES
FOR ALL ASTATIC PICK-
UP HEADS NET \$ 3.60

ASTATIC

MODEL B

THE NEWEST DEVELOPMENT FROM THE ASTATIC LABORATORIES IS THE "TRU-TAN" MODEL "B" PICKUP. LESSENS RECORDS WEAR AND GIVES HIGHER FIDELITY. COMPLETE HEAD TURNS FOR EASY NEEDLE LOADING. ONE OF THE FINEST CRYSTAL PICKUPS. NET \$ 10.50

THE NEW SHURE *ZEPHYR* CRYSTAL RECORD REPRODUCER

YOUR RECORDS WILL LAST LONGER WHEN PLAYED WITH A SHURE "ZEPHYR" PICK-UP. ACCURATE NEEDLE LINE-UP INSURES BETTER FIDELITY. SHOCKPROOF, STREAMLINE BEAUTY, NON-RESONANT, DOUBLE BALL-BEARINGS, MOISTURE PROOF.



- *COMPLETELY SHIELDED.
- *MOLDED BAKELITE CASE.
- *HIGH LIFT ARM.
- *BRUSH BIMORPH CRYSTAL.

NET \$ 7²⁰

ASTATIC MICROPHONES



MODEL D-104 STANDARD

NET PRICE \$13.50



MODEL L-1 LAPEL
MIKE. NET \$15.00



MODEL D-2 WATCH-
CASE TYPE MIKE.
NET \$15.00



MODEL K-2 HIGH FID-
ELITY STUDIO MIKE.
NET \$22.50

"BULLET" DYNAMIC MICROPHONES



MODEL TR-5 A RUGGED ALL
PURPOSE MIKE. FOR "HAMS"
GAIN -42 DB. NET \$16.50

MODEL TR-6 SAME AS ABOVE
BUT HAS HIGHER GAIN.
GAIN -40 DB. NET \$23.70

DESIGNED FOR THE ELIMINATION OF FEEDBACK

MODEL TR-9 HIGH FIDELITY
STUDIO OR RECORDING UNIT
GAIN -38 DB. NET \$54.00

ALL MODELS LISTED MAY BE
OBTAINED IN IMPEDANCES OF
10, 50, 200, 500, 2500, 50,000
AND 500,000 OHMS.
ALL ARE EQUIPPED WITH
SHIELDED CABLES.

LOT NEXT TO STORE OR LOADING ZONE

WALTER ASHE RADIO COMPANY

1100 Pine Street St. Louis, Missouri



Model 85A High-Fidelity Sound-Cell Crystal Microphone



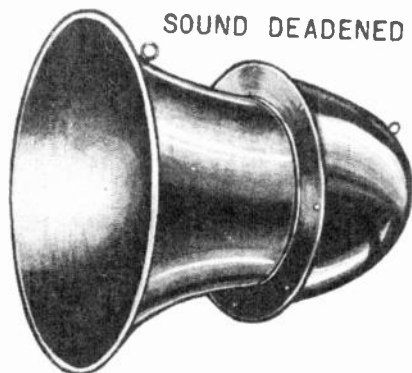
A true high-fidelity non-directional microphone with a response characteristic within a total range of only 5 db from 30 to 10,000 cycles. Meets the most critical requirements in applications calling for the very highest quality sound reproduction. Output level 68 db below one volt per bar (approximately 18 db below typical diaphragm types). Attractive "Grille-Type" case, finished in rich rubber-black with chromium plated fittings. Shipping weight, 1 lb. Complete with 7 ft. single-conductor cable.

Model 85A. Code: Ruleb.

NET \$ 27.00

ALL-ALUMINUM DEFLECTOR BAFFLES

SOUND DEADENED HOUSING



MODEL 100

Depth of housing, 10"; Speaker opening, 10" diameter; Length of horn, 10"; Bell opening, 17" diameter; Overall outside dimensions, 17"x20". This model baffle is suitable for all 10, 11, and 12 inch cone speakers, grill cloth to protect speaker is included. LIST PRICE...

NET PRICE \$ 7.20

WATERPROOF BAFFLE COVER

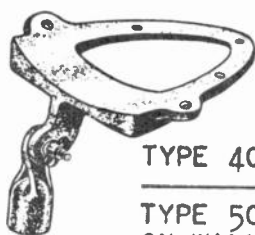
FITS TYPE 100 AND 100A DEFLECTOR BAFFLES

NET PRICE \$.60

MODEL 100-A

SAME SPECIFICATIONS OF MODEL 100 BUT SPUN OF LIGHTER ALUMINUM. HOUSING IS NOT SOUND DEADENED.

NET PRICE \$5.40



BAFFLE MOUNTING BRACKET

MODEL 400

TYPE 400 NET \$ 2.40

TYPE 500 FOR MOUNTING ON WALL NET \$ 3.60



MAGNETIC SPEAKERS

5" UNIVERSAL REPLACEMENT SPEAKER.

YOUR COST \$.98

DYNAMIC SPEAKERS

REPLACEMENT TYPE DYNAMIC SPEAKERS FOR AUTO RADIOS AND STANDARD HOUSEHOLD SETS. SUITABLE FOR AMATEURS, EXPERIMENTERS, TWO WAY INTER-COMMUNICATION SYSTEMS AND FIXED OR PORTABLE P.A. SYSTEMS

FURNISHED WITH EITHER 6 VOLT FIELD OR STANDARD 2500 OHM FIELD

TYPE NO.

OVERALL DIAMETER

YOUR COST

	WITH TRANSFORMER	LESS TRANSFORMER
DC-5	\$ 1.55	\$ 1.30
DC-6	1.75	1.35

DC-5
DC-6

5"
6"



IT'S EASY TO PARK AT WALTER ASHE . . .

1100 Pine Street

St. Louis, Missouri

Microphone Receptacles, Connectors, Plugs

CARBON GRANULES

No. 410

Carefully selected and highly polished. Acid treated to remove all trace of ash. Will stand 20% more current without burning. Highly sensitive. Vial contains enough carbon to repack four two-button microphones.



NET PER VIAL \$.45

YAXLEY



3 WAY MIKE PLUG (BAKELITE SHELL) #76 NET \$.60
 3 WAY EXTENSION JACK " " #101 .90
 3 WAY MIKE JACK (PANEL MOUNT) #702B .33

Microphone Springs

Made of the finest grade tempered steel with formed loop ends



YOUR COST, Set of 8 Springs..... 24c

OR \$.03 EACH



BUD

SHIELDED PHONE PLUG FOR CRYSTAL MIKES



No. 282—Same Construction as No. 230—Duplex Phone Plug, but has a metal handle instead of bakelite for shielding \$.51

No. 284—3 Way Microphone Plug with metal handle, construction same as No. 1057 \$.69

SHIELDED PORTABLE MICROPHONE JACK

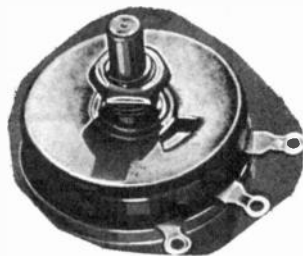


Jack is constructed same as above, but housed in a nickel plated brass jacket and thoroughly insulated.

No. 283—3 Way Microphone Jack Price \$.66
 No. 279—2 Way Microphone Jack Price \$.54

YAXLEY

Rheostats Potentiometers



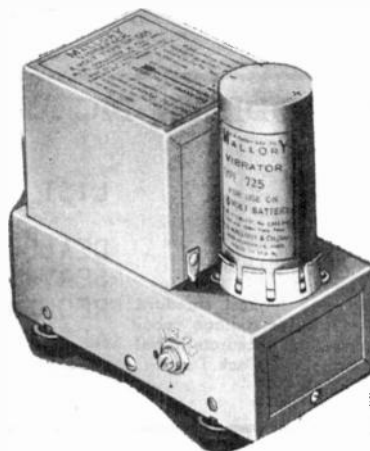
6 OHM RHEO.	NET	\$
10 " "	"	.45
15 " "	"	.45
20 " "	"	.45
30 " "	"	.45
40 " "	"	.45
50 " "	"	.45
100 " POT.	"	.60
200 " "	"	.60
400 " "	"	.60
600 " "	"	.60

Vibrapacks are supplied complete with special Mallory vibrator. Rectifier tubes are included in the interrupter type Models 553 and 554.

Mallory Vibrapacks are equipped with complete, built-in noise suppression equipment, but do not include high voltage filter.

MALLORY

"VIBRAPACK"



Cat. No.	Type	Nominal Output Voltage
VP-551	Self-Rectifying	125-150-175-200
VP-552	Self-Rectifying	225-250-275-300
VP-553*	Tube Rectifier	125-150-175-200
VP-554*	Tube Rectifier	225-250-275-300

VP-551 NET \$9.00
 VP-552 " 11.10
 VP-553 " 9.90
 VP-554 " 12.00

FOR USE WITH 6 VOLT STORAGE BATTERY.

FOR * RADIO TRANSMITTERS AND RECEIVERS

* PUBLIC ADDRESS SYSTEMS

* SCIENTIFIC APPARATUS

*Tube rectifier types required only for applications where B— cannot be at ground potential.

HERE IS THE PORTABLE POWER YOU HAVE BEEN LOOKING FOR. ASK FOR TECHNICAL SHEET ON MALLORY "VIBRAPACKS"

LOT NEXT TO STORE OR LOADING ZONE

WALTER ASHE RADIO COMPANY

1100 Pine Street St. Louis, Missouri

LOW PRICED TURNTABLE EQUIPMENT

THE PHONETTE

IN RESPONSE TO MANY REQUESTS FOR A HIGH GRADE PHONOGRAPH TURNTABLE AND PICKUP WE ARE PLEASED TO OFFER THE NEWEST "PHONETTE". MAKES ANY RADIO A HIGH CLASS COMBINATION. COMPLETE WITH ADAPTER, RADIO-PHONOGRAPH CHANGEOVER SWITCH AND MOUNTING BRACKET, SEPARATE SHIELDED ANTENNA AND GROUND LEADS AND SHIELDED GRID WIRE. EQUIPPED WITH NEW BALANCED CRYSTAL PICKUP. BEAUTIFUL WALNUT CABINET WITH LID THAT CAN BE CLOSED WHEN PLAYING 12" RECORDS.



MODEL RT-5 (STANDARD MODEL)	-----	NET \$25.13
MODEL RT-5A (WITH AUTOMATIC STOP)	-----	NET 27.34

RCA-Victor R-93-A Duo-Jr. Instantly Converts Any Radio Into a Combination Phono-Radio

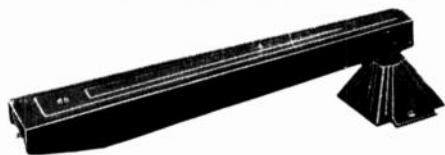
DUO-JUNIOR, the latest product of the RCA-VICTOR Corporation, consists of a SYNCHRONOUS ELECTRIC MOTOR, turn table, tone arm, electric pick-up and volume control, all mounted in a humidor-appearing cabinet. For standard 78 RPM records only. Enjoy your favorite song or dance hits, independent of time, weather or broadcasting stations, electrically reproduced through your radio by the DUO-JUNIOR.

Faithful reproduction of all 10 and 12-inch standard phonograph records without static, fading, or electrical interference. The DUO-JUNIOR is also ideal for use with public address systems for musical entertainment preceding regular program. Furnished complete ready to attach.



YOUR COST \$ 11.97

WEBSTER HI-FIDELITY PICKUP



A Hi-Fidelity magnetic pickup of the very highest standard, with an extremely flat response. Uses high percentage cobalt magnet resulting in extremely light weight. Accurately balanced for correct needle pressure. Finished in black Duco.

Model 305—5000 Ohms

LIST PRICE \$ 7.50

DEALERS AND
SERVICEMEN YOUR
REGULAR DISCOUNT
APPLIES TO THIS
ITEM



PIEZO-ASTATIC CRYSTAL PICK-UP

No finer pick-up model. Comprises a bimorph crystal element housed in a substantial arm which has steel pivots mounted on double ball bearing swivel base. A brilliance of reproduction not provided by other pick-ups. Superb bass response. Has a substantially flat curve over entire scale with as pronounced peaks. Arm counter-balanced. Only 2% os. pressure, resulting in long record life. Very high impedance—80,000 ohms. Black wrinkle finish.

ASTATIC CRYSTAL PICKUPS

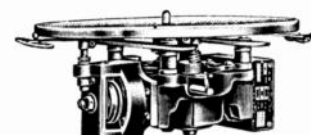
TYPE S-8 FOR 10" AND 12" RECORDS
OVERALL LENGTH IS 12"

YOUR COST \$ 6.00

TYPE S-12 FOR 16" RECORDS.
OVERALL LENGTH IS 15"

YOUR COST \$ 7.20

ASTATIC ALL PURPOSE SCRATCH FILTER
FOR EITHER CRYSTAL OR MAGNETIC'S.
TUNED TO 5000 CY. YOUR COST \$.90



GREEN FLYER 2-Speed, Governor Controlled Phono Motor

General Industries Model D. Heavy duty motor, dual speed for 33 1/3 and 78 RPM records. Lever shift from one speed to other. Induction type motor—silent operation, no radio interference. Centrifugal type governor with wide range to adjust speed to varying voltages. All gears completely enclosed, running in oil. Silent spiral-cut gears made from laminated bakelite. Long over-size bearings. Absolute uniformity of speed under severe variance of voltage and record drag. Will not overheat in closed cases and cabinets. 10-inch turn table. Equipped with stop switch. Escutcheon plate, pointers in statuary bronze finish. Overall size 8 1/2"x5 1/2", requiring cut out 8 1/2"x5 1/2", suspends 3 1/2" below baseboard: mounting bracket centers 3 1/2"x6 1/2". For 105-120 volts, 60 cycle.

MODEL "D"
NET \$ 10.80

MODEL "V" 78 RPM
MOTOR WITH 12"
TURNTABLE AND FIXED
GOVERNING METHOD.

MODEL "V"
NET \$ 7.50

AUTOMATIC RECORD
CHANGER MODEL "L"
WITH VOLUME CONTROL

FURNISHED WITH
EITHER MAGNETIC OR
CRYSTAL PICKUP.
NET PRICE \$ 32.40

Plays seven 12" or eight 10" Records automatically . . . Any Record may be repeated . . . Records may be rejected . . . Repeats last record . . . Simple change for playing manually . . . Simple change for 10" or 12" Records . . . All steel Construction . . . Finish—Statuary Bronze.

IT'S EASY TO PARK AT WALTER ASHE . . .

1100 Pine Street

St. Louis, Missouri

Webster · Chicago

Sound Equipment

Fixed 12 Watt Economy Systems

An economical system of moderate power. Utilizes latest type of tubes and newly developed circuit principles. Extremely versatile and will handle a very wide range of public address requirements.

- VARIABLE IMPEDANCE OUTPUT.
- IMPROVED VELOTRON TYPE MICROPHONE.
 - AMPLIFIER IS 4 STAGE, 7 TUBE DESIGN. HAS OUTPUT OF 12 WATTS FROM TWO BEAM TUBES, METAL OR GLASS TYPE.
 - TWO ELECTRONIC MIXERS FOR MICROPHONE OR PHONOGRAPH.
 - TWO HEAVY DUTY 10" PERMANENT MAGNET SPEAKERS.
 - TONE CONTROL INCREASES ADAPTABILITY.

APPLICATION The high gain of this amplifier makes it useful over a wide area of pickup eliminating the necessity for "talking into" the microphone. Suitable for churches, lodge halls, theaters, lecture halls, places of amusement, etc. Will handle crowds from 1500 to 2000.

EQUIPMENT System PV-712 is a complete Public Address System consisting of a well designed 7-tube, 12-watt amplifier, provided with dual input for two microphones or one microphone and one phonograph.

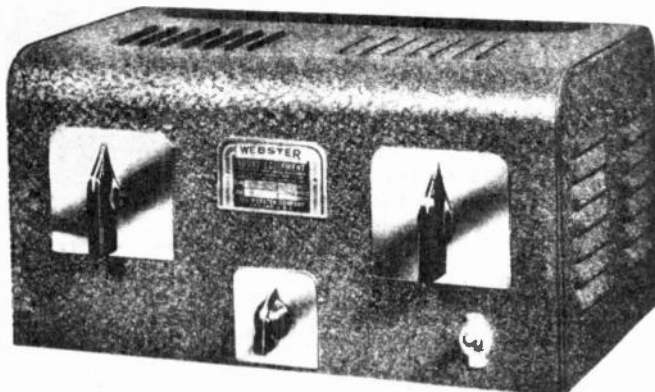
The amplifier is enclosed in extremely attractive and substantial case with baked on finish of neutral color. The output impedance is adjustable by means of a polarized plug, a variety of speaker combinations being available.

Tubes are enclosed but readily accessible. Components are of generous design and adequately ventilated.

Polarized potential is provided for two velotron microphones. Terminal connections are made through polarized plugs and 6 foot power cord is included.

Microphone is a late design velotron type furnished with 25 feet of cable and No. 1120 stand. Additional cable can be supplied permitting use of microphone as far as 500 feet from the amplifier.

Two 10" high efficiency permanent magnet speakers which have been designed for public address work and perform equal to highly energized electro dynamic types.



SPECIFICATIONS

Tube complement 2-6J7, 2-6N7, 2-6V6, 1-5Z4
 Over-all gain.....127 D B
 Current Consumption.....87 watts
 Output Impedance.....3, 6, 250 and 500 ohms
 Size of amplifier.....6½" x 8" x 13½"
 Shipping weight of complete system 62 lbs.

PRICES

System PV-712 as described, for use on 105-125 v., 50-60 cycle operation, includes: amplifier with tubes, No. 1237 velotron microphone with 25 feet of shielded rubber covered cable and polarized plug, No. 1120 floor stand, two 10" permanent magnet speakers.

\$110.50

Code: ARBOR

Model 712 Amplifier only (including tubes).

\$52.00

Code: ALIGN

Model 1237 Microphone only, with 25 feet of shielded rubber covered cable and No. 1120 floor stand.

Price \$34.00

Code: MANES

Model 2810 10" Permanent Magnet Speaker (additional).

Price \$12.25

Code: SHUNT

TIME PAYMENT PLAN**ONE THIRD DOWN AND THE BALANCE IN EASY MONTHLY INSTALLMENTS

DEALERS AND SERVICEMEN THESE PRICES ARE LIST. WRITE OR ASK FOR YOUR COST

LOT NEXT TO STORE OR LOADING ZONE

WALTER ASHE RADIO COMPANY

1100 Pine Street  St. Louis, Missouri

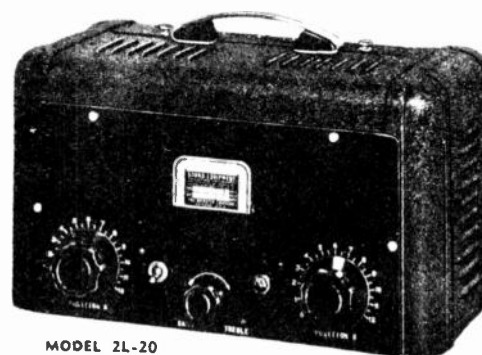
Webster-Chicago

Sound Equipment

NEW..20 WATT Beam Type AMPLIFIER

DUAL INPUT FOR CRYSTAL, VELETRON
OR RIBBON MICROPHONE

The new Webster-Chicago 2L-20 Amplifier is an outstanding example of advanced engineering as consideration of the specifications will show.



MODEL 2L-20

- A. Four stage high gain 20 watt output.
- B. Dual input mixing system for Crystal, Velocity or Velotron microphones, or by means of input attenuators, which are in the unit, high or low impedance phonograph programs can be played on either position.
- C. The amplifier gain, when using microphone input, is 131 d.b. Phonograph input gain is 65 d.b.
- D. The frequency characteristic is flat from 50 to 10,000 cycles, having a variation of not more than 1½ d.b. in this range. This, however, can be modified to suit working conditions encountered by means of the compensating control provided.
- E. Output impedance taps of 3, 6, 250 and 500 ohms are provided, which when used with speakers of the No. 2871, No. 2861, or No. 2851 type, enables a proper match of from one to eight speakers.
- F. Operation of speakers on the higher impedance

taps greatly reduces transmission loss and improves reproduction.

- G. All connections terminate in polarized receptacles, the input connections being made through a locking type.
- H. The component parts comprising this Amplifier have been designed with ample safety factors, and all internal connections are made with flame-resisting covered wire. Adequate ventilation is provided and the rating of 20 watts is extremely conservative.
- I. The Amplifier assembly is contained in a beautiful modern designed stamped steel case, with an attractive color combination that lends itself to the most exact surroundings. Tubes are in the rear of the unit, readily accessible, but protected by a perforated steel grill. Code word ARRAS.

Price with matched set of tubes \$80.00



MODEL 2A30

30 WATT DeLUXE General Purpose AMPLIFIER

A new standard of performance has been set by Webster-Chicago engineers in the design of this new 2A30 program amplification unit.

Experienced sound specialists understand that the limitations encountered due to acoustical conditions frequently prevent obtaining the desired results.

The answer to this problem is an amplification unit with a dual adjustable frequency characteristic, such as has been developed by Webster-Chicago engineers, and exemplified by the design offered herewith, as the specifications below indicate.

Two input controls permit the use of two low level microphones such as Crystal, Velotron, or Velocity. All connections terminate in polarized receptacles. The output stage is Class A triode carefully designed for low distortion, resulting in superlative reproduction.

All components are generously proportioned, and the temperature rise with continuous operation is very low.

Power output 30 watts at 2.9 per cent distortion.

Gain: 135 d.b. each input.

Power consumption: 230 watts.

Controls: Two separate input controls and one low

frequency compensation, one high frequency compensator, AC switch, and pilot light.

Output tapped: 3, 4, 6, 8, 250, and 500 ohms.

Finish: Neutral steel gray.

Dimensions: 8¾ in. x 12 in. x 15¾ in.

Weight 38 pounds.

Tubes: 4—6C6, 2—76, 4—2A3, 1—5Z3, 1—83.

Price: 115-volt, AC model \$115.00

Code word AFFIX.

220-volt, 60 cycle model \$115.00

Code word: AGENT.

TIME PAYMENT PLAN**ONE THIRD DOWN AND THE BALANCE IN EASY MONTHLY INSTALLMENTS

DEALERS AND SERVICEMEN THESE PRICES ARE LIST. WRITE OR ASK FOR YOUR COST

IT'S EASY TO PARK AT WALTER ASHE . . .

1100 Pine Street

St. Louis, Missouri

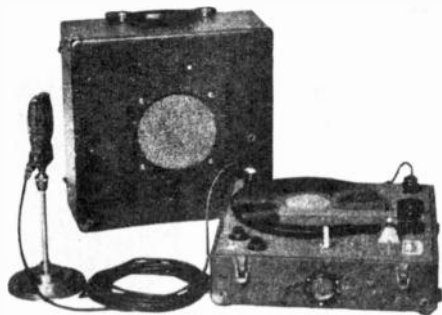
Webster - Chicago

Sound Equipment

.. 12 WATT -- PORTABLE SYSTEM ..

VELOTRON MICROPHONE ----- PHONOGRAPH REPRODUCTION

Everything In One Case :: Quickly Set Up and Taken Down :: Light Weight :: Compact :: Powerful



Model PV912 complete, includes 12-watt amplifier with tubes, velotron microphone with 25 ft. of cable and plug, speaker with 25 ft. of cable and plug, phonograph and pickup mounted in carrying case, size 16x16x10 1/4 in., for operation on 60-cycle current only. Net wt., 37 lbs., shpg. wt., 42 lbs. Code Word: PIVOT.

LIST PRICE

\$119.50

Model PX-912 - Same as PV-912, but with Crystal microphone. Code Word: PLATO

LIST PRICE

\$124.50

Webster-Chicago has designed this new PV912 system to provide an ideal portable microphone and phonograph Public Address System, all contained in one carrying case. It has been built around the new static velocity (velotron) microphone, which is extremely sensitive; latest designs of metal tubes; a high fidelity phonograph pickup; a constant speed synchronous motor; and a new type of dynamic speaker, which has exceptional tone and power handling capacity.

Combining the phonograph assembly in the same case with the public address system effects economies in both cost as well as weight, and results in a system very quickly set up and taken down. The microphone is mounted on a desk type stand and comes complete with 25 ft. of cable and plug. The speaker is also equipped with a 25-foot cable and plug, so that the microphone and speaker can be well separated for best results. The microphone and phonograph pick up "mix," that is, it is possible to fade from the microphone to the pickup, and vice versa, or you can talk over the microphone to a musical background.

The carrying case is well constructed and sturdy, finished in an attractive brown leatherette, with a large leather handle, and equipment well placed to give good balance, making it easy to carry.

Assembly includes a cup for carrying needs and an arrangement for carrying 10 in. and 12 in. records.

Model PV912B Same as PV912 except for operation on 115-volt, 25-40-50 and 60-cycle current. Net weight, 42 lbs.; shpg. wt., 47 lbs. Code Word: POISE.

LIST PRICE

\$149.50

Model PX912B, same as PX912, but for 25, 40, 50 and 60 cycle, 110-volt A.C. current. Code Word: PLEAD.

LIST PRICE

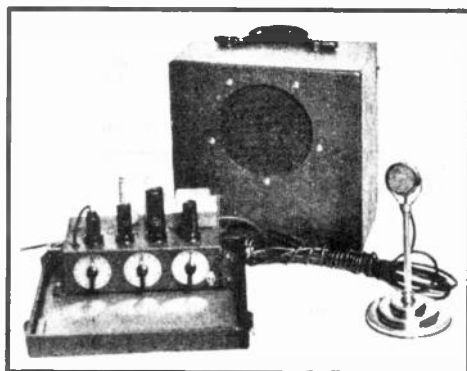
\$154.50

7 WATT PUBLIC ADDRESS SYSTEMS

For Exhibitions . . Carnivals . . Fairs . . Window Demonstrations, etc.

These two systems are designed for the demand for popular price portable amplification equipment and find great use for advertising and allied purposes. Despite the cost, care has been used in their development as is evidenced by the use of the latest type of tubes. These systems are arranged for use with an electric turntable for playing phonograph records and a tone control is provided to adjust the tone to surrounding conditions. Both systems are supplied mounted in durable reinforced carrying cases furnished with a brown walrus grained covering with a leather handle.

XL-7 CRYSTAL MICROPHONE



The XL-7 crystal microphone system utilizes the latest development in diaphragm-type crystal microphone with its consequent ruggedness, increased sensitivity, and improved tone.

Model XL-7, 7-watt system, includes swivel mounted crystal microphone and banquet stand with 25 ft. of cable and plug, 8 1/2 in. dynamic speaker with 25 ft. of cable and plug, complete set of tubes, and carrying case. Dimensions: 16x15x9 in. Shpg. wt., 29 lbs. Net wt., 212 lbs. Code: PEERS.

LIST PRICE

\$73.50

CL-7 CARBON MICROPHONE



The CL-7 combines the economy of the carbon microphone with the improved tone quality derived through the use of electron beam tubes, and is primarily a close talking model for window demonstration.

Model CL-7, 7-watt system, includes carbon microphone and desk stand with 25 ft. of cable and plug, 8 1/2 in. dynamic speaker with 25 ft. of cable and plug. Complete set of tubes, and carrying case. Dimensions: 16x15x9 in. Shpg. wt., 29 lbs. Net wt., 21 lbs. Code: PADRE.

LIST PRICE

\$55.00

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LOT NEXT TO STORE OR LOADING ZONE

TIME PAYMENT PLAN**ONE THIRD DOWN AND THE BALANCE IN EASY MONTHLY INSTALLMENTS

WALTER ASHE RADIO COMPANY

1100 Pine Street  St. Louis, Missouri

Webster · Chicago

Sound Equipment

Dual 20 Watt Portable Systems

A complete, 20 watt, two speaker system, having a twin sound cell, crystal microphone and a full length floor stand, all contained in two easily handled portable cases. Strongly recommended for general portable work, such as orchestras, lectures, chautauquas, etc.

- TWO IMPROVED PERMANENT MAGNET SPEAKERS, BIAS CUT, PORTABLE BAFFLE, CARRIED AS ONE UNIT.
- AMPLIFIER, FLOOR STAND, MICROPHONE AND ALL CABLES STOW IN ONE PORTABLE CASE.
- RUBBER COVERED CONNECTION CORD AND POLARIZED PLUGS USED THROUGHOUT.
- SPEAKER CASES ADAPTED TO STAGE OR WALL MOUNTING.
- AMPLIFIER IS 4 STAGE, 7 TUBE, 20 WATT DUAL INPUT DESIGN WITH BEAM TUBES, METAL OR GLASS TYPE.
- TWO ELECTRONIC MIXERS FOR CRYSTAL, VELOCITY OR VELOTRON MICROPHONES AND TONE COMPENSATOR. HANDLES TWO MICROPHONES OR ONE PHONOGRAPH AND ONE MICROPHONE.

APPLICATION Will provide reproduction sufficient for three to four thousand people.

EQUIPMENT System PA20-B is a complete portable public address system. It is new in design and has met most enthusiastic response from users. Extremely careful design and co-ordinated components are responsible for life-like clarity in reproduction.

Amplifier develops full 20 watts without distortion using Beam type tubes. Housed in modern steel cabinet with rounded corners. Neutral tone gray japanned finish.

Microphone is the new twin sound cell type crystal microphone. Full length demountable floor stand included—25 feet of microphone cable and plug.

Improved efficiency permanent magnet type speakers mounted in acoustically correct cases. Each speaker is equipped with 35 ft. rubber covered cable and polarized plug.

Substantially constructed attractively finished black leatherette cases with metal corners. Interiors are reinforced.



Dual Speaker Carrying Case

Carrying Case for Amplifier and Microphone



SPECIFICATIONS

Tube complement	2-6J7, 1-6N7, 1-6C5, 2-6L6, 1-83V
Over-all gain	125 D.B.
Current consumption	155 watts
Size of dual speaker case	11" x 12" x 18"
Size of amplifier	12½" x 15" x 18½"
Shipping weight	47 pounds

PRICES

System PA20-A as described above for use on 105-125 v., 50-60 cycle operation, includes: No. 2L-20 amplifier (with tubes), No. 1235 twin sound crystal microphone, No. 1121 floor stand and 25 feet of shielded rubber covered cable and plug, 2 speakers and all cases complete.

Code: PHLOX Price \$203.50

System PA20-B same as above except with one Velotron Microphone.

Code: PATCH Price \$188.00

System PA20-C same as above except with one Velocity Microphone.

Code: PLEAT Price \$210.00

ADDITIONAL EQUIPMENT

Model 1235 crystal microphone with No. 1121 floor stand and 25 feet of shielded rubber covered cable and plug.

Code: MARGO Price \$46.50

Model 1237 velotron microphone with No. 1121 floor stand and 25 feet of shielded rubber covered cable and plug.

Code: MANES Price \$34.00

Model 1223 velocity microphone with No. 1121 floor stand and 25 feet of shielded rubber covered cable and plug.

Code: MATTE Price \$56.00

DEALERS AND SERVICEMEN THESE PRICES ARE LIST. WRITE OR ASK FOR YOUR COST

IT'S EASY TO PARK AT WALTER ASHE . . .

TIME PAYMENT PLAN**ONE THIRD DOWN AND THE BALANCE IN EASY MONTHLY INSTALLMENTS

Webster · Chicago

Sound Equipment

Medium Power Portable Systems

- AMPLIFIER IS A 12-WATT, 4-STAGE, 7-TUBE HIGH GAIN, BEAM TYPE DESIGN.
- TWO ELECTRONIC HIGH GAIN (127 D.B.) INPUTS FOR CRYSTAL, VELOCITY, VELOTRON AND PHONO INPUT FOR DUAL MIXING.
- MULTIPLE OUTPUT ARRANGEMENT FOR ADDITIONAL SPEAKERS.
- ENTIRE SYSTEM IS COMPLETELY HOUSED IN ONE STURDY CARRYING CASE.
- SPEAKER CASES ADAPTABLE FOR EITHER FLOOR OR WALL MOUNTING.

APPLICATION: High gain amplification provides great pickup area and is suitable for churches, lodges, theatres, etc., seating up to 1500 people.

EQUIPMENT: The Model PA-712 system is a skillfully designed portable unit, designed for two inputs which may be mixed. Conservative output rating is 12 watts. We furnish a Velotron microphone mounted in a banquet stand, which comes with a 25 foot shielded rubber covered cable; 2 efficient permanent magnet speakers of the 10" size and provided with 25-foot rubber covered cables and plugs.

MODEL PA-712 system as described, with No. 712 amplifier for use on 105-125 volt, 50-60 cycle current velotron, No. 1237, and 25 feet of shielded rubber covered cable, two 10" permanent magnet speakers, complete in brown walrus-grain finished case.

Code: PRIMA

Price \$122.00



MODEL PA-712

Additional velotron microphone with 25 feet of shielded rubber covered cable, plug No. 1120 floor stand.

Code: MANES

Price \$34.00

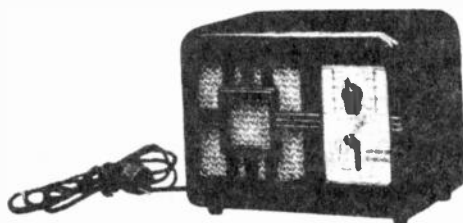
SPECIFICATIONS

Tube complement 2—6J7, 2—6N7, 2—6V6, 1—5Z4
Over-all gain 127 D. B.
Current consumption 87 watts
Shipping weight 44 pounds

Inter-Communicating Systems

SPECIAL FEATURES THAT APPLY TO ALL SYSTEMS

- NO HUM OR NOISE
- ADJUSTABLE VOLUME CONTROL
- ATTRACTIVE PLASTIC CASES, FINISHED IN LUSTROUS BLACK
- NATURAL VOICE REPRODUCTION
- SENSITIVE PICK-UP



Here is a full line of inter-communicating systems that will meet every requirement from a simple two-station installation to multiple station systems. The inter-communicating equipment offered herewith is in four models.

System A (Consisting of one OXS and one OXM units) is for 2-station installations only. This system comprises two units, utilizing one amplifier, and is strictly an inter-communicating system. Design and construction capable of meeting the ordinary 2-station requirements.

System B (Consisting of OXC master and OXM outlying stations). This is strictly an inter-communicating system, utilizing one amplifier at the central location and may be employed with as many as 10 outlying stations. One feature here to be noted is that the outlying stations cannot converse among themselves, the job being merely inter-communicating between the central location and the various outlying points. The central location is the only unit in the system supplied with a selective switch, but the outlying stations may call the central location at will.

System C (Consisting of two OC units) is an inter-communicating system for 2-station installations only. This system utilizes two amplifiers, and to this degree differs from the System A, making it possible for either station to call the other, even though the switch at the location called may be "off," a feature not available in the System A.

System D (Consisting of three or more OCM units) is an inter-communicating system being a multiple of the System C. These units differ from the System C in that a selector switch is provided to contact the stations called. As many as 10 System D units may be used in one installation.

All units are contained in attractive plastic molded cases, and are designed for 110-volt AC or DC operation.

Model OXS, with tubes per pair \$49.50
Model OXC, with tubes, master station each 38.00
Outlying stations (OXM) each 13.50
Model OC-2, with tubes per pair 66.50
Model OCM, with tubes each 38.00

Tube complement:

1—6J7; 1—25L6; 1—25Z6; 1—R3003 ballast.

DEALERS AND SERVICEMEN THESE PRICES ARE LIST. WRITE OR ASK FOR YOUR COST

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TIME PAYMENT PLAN**ONE THIRD DOWN AND THE BALANCE IN EASY MONTHLY INSTALLMENTS

WALTER ASHE RADIO COMPANY

1100 Pine Street St. Louis, Missouri

Webster-Chicago

Sound Equipment

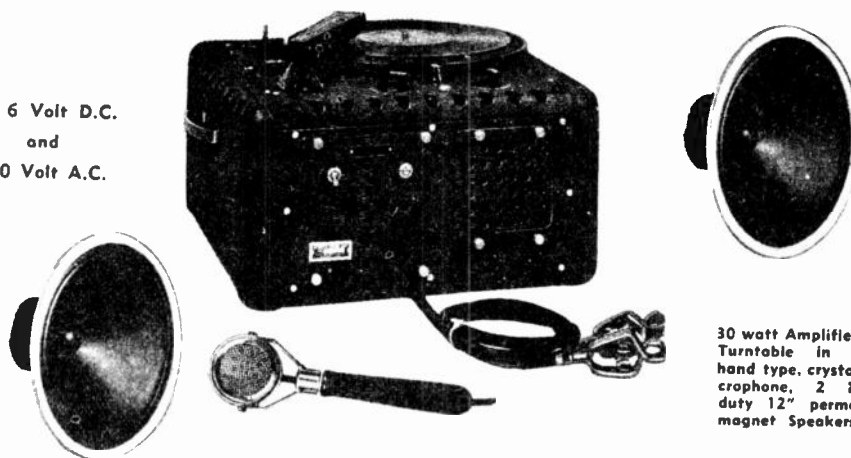
30 Watt Combination Mobile Systems

IDEAL FOR SOUND TRUCKS

10,000 people. All necessary accessories, including the phonograph turntable, are made an integral part of the amplifier.

An All-Purpose Sound System that can be used anywhere. Suitable for any size audience up to

For 6 Volt D.C.
and
110 Volt A.C.



30 watt Amplifier and Turntable in case, hand type, crystal Microphone, 2 heavy duty 12" permanent magnet Speakers.

- USES PLUG-IN TYPE POWER PACKS FOR EITHER 6 VOLT D.C. OR 110 VOLT A.C. OPERATION. NO OTHER CHANGE IS NECESSARY.
- COMPENSATED DIAPHRAGM CRYSTAL MICROPHONE.
- IMPROVED DESIGN PHONOGRAPH TURNTABLE.
- FOUR STAGE 30 WATT GAIN AMPLIFIER (TUBES FURNISHED).
- DUAL INPUT ELECTRONIC MIXING SYSTEM (MIXING MICROPHONE AND PHONOGRAPH). TONE CONTROL.
- TWO HEAVY DUTY 12" HIGH EFFICIENCY PERMANENT MAGNET SPEAKERS.

APPLICATION Being either battery or A.C. operated, the MP-530 System has the advantage of being usable under all conditions. It is particularly adapted to large dance halls, arenas, sound truck work, outdoor gatherings of all kinds. Will conservatively handle crowds of 10,000 people.

UNUSUAL FEATURES The plug-in type power pack is an exclusive Webster-Chicago development. The use of a phonograph turntable as an integral part of the system reduces bulk and cost. The increased power output and improved speakers increases the usability of this equipment greatly over all previous designs.

The use of permanent magnet speakers decreases battery drain and simplifies speaker wiring. A separate current saving switch is provided to permit keeping tube filaments only hot for instant operation.

EQUIPMENT The amplifier is a 4-stage, 6 tube, 30 watt amplifier using 5 tubes on 6 volt D.C. and 6 tubes on 110 volt A.C. The use of beam type tubes gives high output and low distortion at decreased power consumption.

Its adaptability makes it a logical selection in all cases where the system may be called upon to operate for mobile work or places remote from A.C. power. At the same time no details have been overlooked to make it highly efficient for A.C. operation.

The amplifier turntable and control assembly is contained in a modern design steel case attractively finished in durable steel gray, fitted with chromium plated handles. No sharp corners.

The turntable motor is a single speed 78 R.P.M. type with improved regulation due to the scientifically designed governor. The motor generator has ample capacity and is of ball bearing type. The model 1233A hand type crystal microphone is especially adapted

to mobile work, being particularly directional and with a very even response characteristic. It can also be mounted on a floor stand.

The 12" permanent magnet speakers have a very heavy magnetic structure and the efficiency is on a par with electro dynamic types using 12 watts field excitation.

SPECIFICATIONS

Size of amplifier, 15½" x 16½" x 8½".
Tube complement (Add 1-5T4 when using A.C. Pack.) 1-6J7, 2-6N7, 2-6L6
Over-all gain 130 D B
Current consumption from 6 v. battery 18 amp.
From 110 v., 50-60 cycle line 150 watts
Shipping weight of complete system 81 pounds

PRICES

System MP-530 as described with amplifier No. 530 (with tubes), including turntable, 6 volt power pack, 6 foot power cord, single speed turntable motor, electric pickup, hand type crystal microphone No. 1233 A, 25 feet of shielded rubber covered cable and polarized plug, and 2 permanent magnet speakers No. 2865 with 15 feet of cable and plugs.
Code: MONAD \$235.00

A.C. Power Pack for above system.

Code: MOUNT

Price \$23.50

Model 2620 Aluminum Projector Baffle for above system.

Price \$22.00

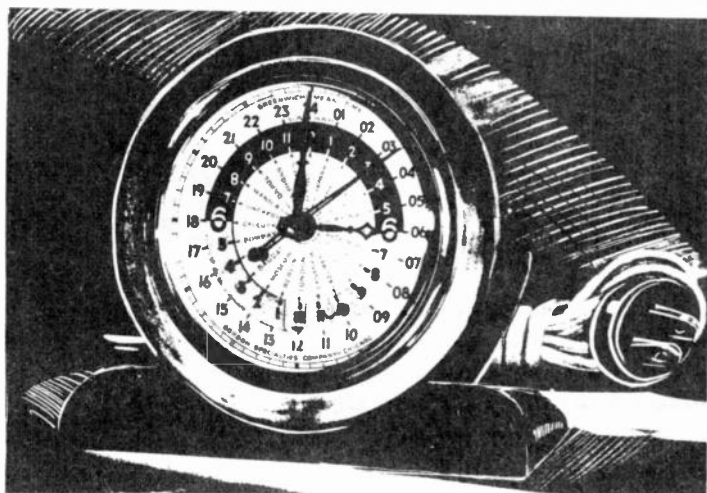
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1100 Pine Street

St. Louis, Missouri



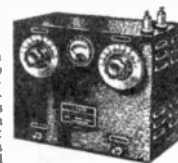
Gordon World-Wide GMT and Standard Electric Time Clock

60-Cycle self-starting genuine Waltham 24-hour movement. Base removable for panel mounting (hole size 3 1/16") List price \$15.00.

NET PRICE \$9.00

NEW UTAH BEGINNERS' TRANSMITTER KIT

Designed especially for the beginner with a limited budget. A complete kit of parts to build a new low power CW rig of true commercial appearance. Uses 1-6L6 in a regenerative crystal-controlled circuit with 20 watts power output. Uses 1-5Z4 rectifier in built-in power supply. Crystal finished drilled cabinet measures only 12x7x10". Has tuned antenna coupling link for coupling to a "Zepp" feed system. Has power off-on and send-receive switches. Etched dials with flange knobs. Requires one 2 inch. 0-100 M.A. meter. Contains all parts except crystal, meter and tubes.



YOUR NET PRICE \$15.95

LICENSE and CALIBRATION CHART OR CURVE HOLDER



SWIVEL BASE

No. 150—License frame and chart holder with heavy desk base mounting.

Net Price to Amateurs, 75c each



"OHMITE" Heavy Duty Tap Switches

For Switching High Voltage or high amperage or both.

SHORTING TYPE

No. of Contacts	Stock No.	YOUR COST
4	T504S	\$2.50
6	T506S	2.65
6	T506S	.79
7	T507S	.94
8	T508S	.09
9	T1009S	4.41
10	T10010S	4.56
11	T10011S	4.70
12	T10012S	4.85

NON-SHORTING TYPE

No. of Contacts	Stock No.	YOUR COST
4	T504	\$2.79
6	T506	2.94
6	T506	3.09
7	T507	3.24
8	T508	3.38
9	T1009	4.70
10	T10010	4.85
11	T10011	5.00
12	T10012	5.15

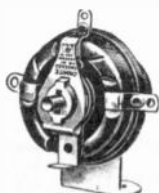
Vitreous enamel covered with special silver contact shoe of low resistance. Insulated for several thousand volts.

Ohmite Model T-503 BAND-SWITCH for all Band-Switching Circuits

Ohmite Switches

Exceptionally efficient because of their low loss, porcelain construction, low contact resistance and high current capacity. Three contacts. Mounting brackets and bakelite knob furnished.

YOUR COST \$1.80



EBY ELECTRIC EYE TYPE E-12



The EBY Electric Eye is a new type photoelectric cell designed for long life, ruggedness, and sensitivity.

Its streamlined construction with the light sensitive element hermetically sealed within moulded bakelite gives a dependability hitherto unknown.

The EBY Electric Eye is an electronic device, consisting essentially of two metal electrodes between which the surface of a light sensitive material is exposed to incident light rays.

The action of the EBY Electric Eye is electronic; that is, its operation depends upon the light sensitive surface to emit electrons which are proportional in number to the frequency and intensity of the incident light.

The EBY Electric Eye is unaffected by continuous exposure to light of strong intensity and its ability to operate satisfactorily on voltages as high as 250 volts gives a device practically free from excessive voltage damage.

The curve of spectral response covers the entire visual spectrum and extends far into the infra-red region. Its peak sensitivity is in the near infra-red.

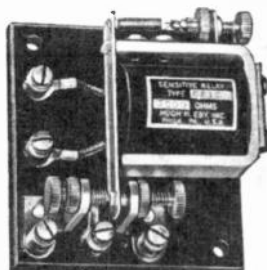
The EBY Electric Eye has no measurable time lag in its response. It will respond to frequencies as high as 9,000 cycles per second.

Its internal capacity is exceptionally low. The physical design is such that the unit is shock-proof and moisture-proof.

YOUR COST

\$3.00

EBY SENSITIVE RELAY TYPE ER-12



APPLICATION

The EBY Sensitive Relay is designed for direct current (and full or half-wave rectified current) control circuits where the available power for operation is relatively small. Its low power consumption for positive operation makes it ideal for installation in photoelectric control equipment, vacuum tube amplifier circuits and to protect delicate contacts of sensitive control instruments.

MAGNETIC CIRCUIT

The EBY Sensitive Relay, because of the advanced design of the armature, and by the use of a high quality, special steel alloy in the magnetic circuit, has outstanding features in its low power requirement for positive action and its unusually high speed of response.

COILS

The EBY Sensitive Relay can be supplied in four (4) different coil resistances, covering most of the operating current and voltages required in sensitive relay control applications. The standard values of coil resistances are: 1,000, 2,500, 5,000 and 10,000 ohms. The relay is rated at 11.25 milliwatts for positive operation. However, it may be adjusted to operate on as little as 1.25 milliwatts. All relays are tested for operation at this latter value before they are released for shipment.

CONTACTS

Mounted as an integral part of the relay, is a single-pole, double-throw switch with sterling silver contacts. These contacts are rated to carry 2.5 amperes at 115 volts, A.C. At 115 volts, D.C., 1.5 amperes.

YOUR COST \$3.90

WALTER ASHE RADIO COMPANY

1100 Pine Street  St. Louis, Missouri

Jensen

PM

Jensen Registered Trade Mark

SPEAKERS

(PERMANENT MAGNET)
SPEAKERS



New Permanent Magnet Speakers Which Eliminate the Field Coil Used in Conventional Electro-Dynamic Designs . . . The Sensitivity and Efficiency of These New Speakers is Startling . . . Power Handling Capacity is High . . . and They Have Positive Protection Against Dust and Dirt . . .

ALL SPEAKERS LISTED BELOW ARE LESS TRANSFORMERS, INPUT TO VOICE COIL, ANY TYPE TRANSFORMER AVAILABLE.

"C" TYPE SPEAKERS HAVE STANDARD SIZE MAGNET AND ARE MADE FOR AVERAGE USES. 1 INCH VOICE COILS ON ALL "C" TYPE SPEAKERS.

TYPE	SIZE	VOICE COIL RES.	NET
PM-5-C*	5"	3	\$ 2.55
PM-6-C*	6	6	4.80
PM-8-C*	8	6	5.10
PM-10-C*	10	6	6.75
PM-12-C*	12	6	8.55

"B" TYPE PERMANENT MAGNET SPEAKERS ARE AVAILABLE IN STANDARD OR HIGH FIDELITY DESIGN. "B" SPEAKERS HAVE LARGER MAGNET THAN "C" TYPES AND 1½ INCH VOICE COIL, GREATER HANDLING CAPACITY. AVAILABLE ONLY IN 12" STYLE. SPECIFY STANDARD OR HIGH FIDELITY.

PM-12-B	12	8	13.80
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"A" TYPE PERMANENT MAGNET SPEAKERS ARE THE FINEST SPEAKERS AVAILABLE TODAY. SUPER LARGE MAGNET, 1½" VOICE COIL, MAKING THEM THE EQUAL OF ANY FIELD EXCITED SPEAKER OF HIGH QUALITY. STANDARD OR HIGH FIDELITY DESIGN. AVAILABLE ONLY IN 12" SIZE.

A-12-PM	12	8	20.85
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THE SPEAKERS LISTED BELOW WILL BE FOUND TO BE THE ABSOLUTE "TOPS" IN PERMANENT MAGNET DESIGN. LARGE 15" CONE, 1½" VOICE COIL. GREAT HANDLING CAPACITY. "A-15-PM" HAS HIGHER EFFICIENCY THAN "PM-15-B". EITHER TYPE IS AVAILABLE IN EITHER HIGH FIDELITY OR STANDARD FIDELITY.

A-15-PM	15	8	24.75
PM-15-B	15	8	16.20

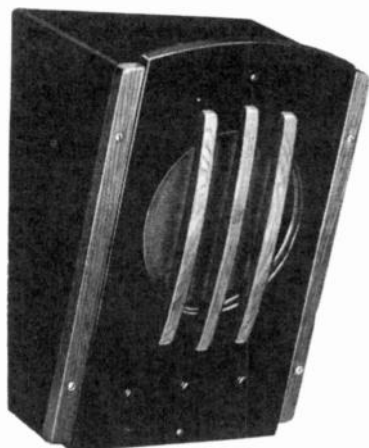
HIGH FIDELITY FREQUENCY CUTOFF APPROXIMATELY 7500 CYCLES.
STANDARD FIDELITY FREQUENCY CUTOFF APPROXIMATELY 4500 CYCLES.

* STOCK ITEM

IT'S EASY TO PARK AT WALTER ASHE . . .

1100 Pine Street

St. Louis, Missouri



Jensen

PERI-DYNAMIC REPRODUCERS . . .

MODEL 3000 PERI-DYNAMIC REPRODUCERS

These are the reproducers so widely used in centralized sound and radio program systems as they are employed in schools, hotels, hospitals, etc. They are equipped with an especially designed Jensen 8 inch PM Speaker,

the panel on these models may also be reversed so that the reproducers can be conveniently used on a desk, table or similar surface. The illustration left shows installation on a wall where the speaker beam is directed downwards at an angle of approximately 18 degrees from the vertical.

These Reproducers employ the *Peri-dynamic* principle but do not employ Jensen *Bass Reflex* System.

The dimensions are as follows: 12 1/8 inches wide; 16 1/2 inches long; 4 inches depth at bottom; 8 inches depth at top.

DESCRIBED ABOVE IS THE FINEST EXTENSION SPEAKER AVAILABLE TODAY. CAN BE USED FOR RADIO, ELECTRIC PHONOGRAPH, PUBLIC ADDRESS SYSTEMS OR ANYWHERE AN EXTRA SPEAKER IS NEEDED. COMPLETE WITH 8" JENSEN PERMANENT MAGNET SPEAKER,

NET - - \$12.45

VOLUME CONTROL FOR ABOVE SPEAKER,

NET - - - .75

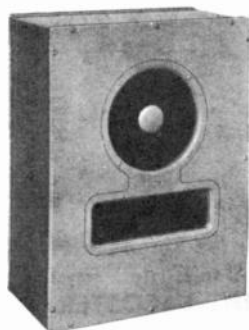
MODEL KM and KV REPRODUCERS

The Complete Loud Speaker — No Baffles Required

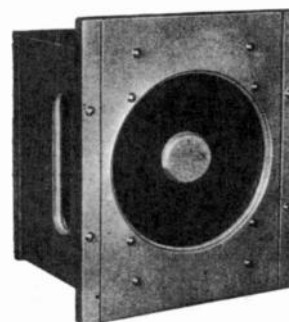
MODEL KM with BASS REFLEX

A NEW DEVELOPMENT IN SPEAKER BAFFLE DESIGN BY JENSEN. "KV" MODELS CAN BE HAD FOR SPEAKERS OF 8", 10", AND 12" SIZE. MODELS "KM" ARE AVAILABLE FOR SPEAKERS OF 8", 10", 12" AND 15" SIZES. ALL SPEAKERS ARE PARTICULARLY MATCHED FOR THESE UNITS, HENCEFORTH ONLY SPEAKERS ORDERED WITH THESE ENCLOSURES WILL MATCH PROPERLY. ALL SPEAKERS USED ARE OF THE "PERMANENT MAGNET" TYPE. MODELS "A", "B" OR "C" CAN BE FURNISHED, GIVING WIDE CHOICE OF SIZES AND QUALITY. ASK FOR COMPLETE BULLETIN ON MODELS "KV" AND "KM" REPRODUCERS.

Enclosures are not sold separately.



Model KM-12
For 12" Speaker



Model KV-12
For 12" Speaker

MODEL A-12

MODEL A-12

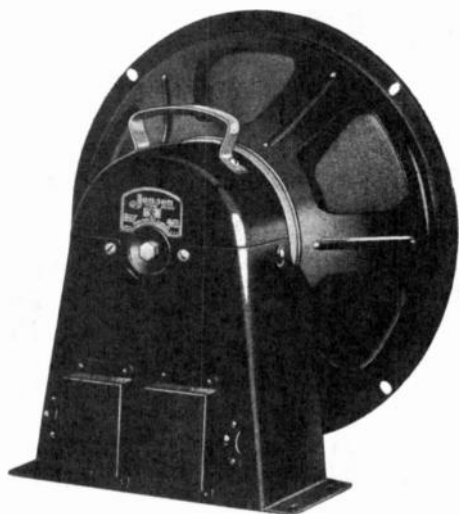
The high fidelity design is recommended where operating and listening conditions permit the reproduction of extended high frequencies. Good response maintained in this design to 7500 cycles.

The standard fidelity design has the high frequency cut off around 5000 cycles. Both designs have uniformly capable middle and low frequency range.

Power Handling capacity 12 watts continuously, 18 watts peak. The Voice Coil has 8 ohms impedance at 400 cycles. Field coil wattage, Maximum 18, Normal 14, Minimum 10.

MODEL A-12 CAN BE FURNISHED WITH 860 OR 2500 OHM FIELD. STANDARD OR HIGH FIDELITY MODELS, LESS TRANSFORMER,

NET \$11.85



LOT NEXT TO STORE OR LOADING ZONE

WALTER ASHE RADIO COMPANY

1100 Pine Street  St. Louis, Missouri

WRIGHT

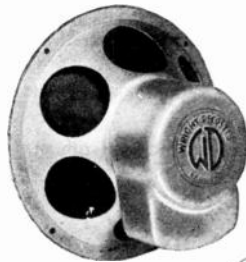


DeCOSTER

Electro-Dynamic

UNIVERSAL FIELD - OUTPUT

Reproducers



ALL $3\frac{1}{2}$ WATT
SERIES EXC-
EPT 6 VOLT
FIELDS ARE
STOCK ITEMS.



UNIVERSAL SERIES

$3\frac{1}{2}$ WATT

RADIO AND LIGHT P. A. MODELS

Recognizing the need for a truly universal speaker . . . Wright-DeCoster engineering provided fully for a completely adaptable line . . . eliminating at one stroke the need for a great number of special speakers . . . with special fields . . . and special transformers . . . now one type of speaker with a universal field . . . and universal transformer provide the perfect Electro-Dynamic Speaker.

- All models listed below (except model E500, see note) have universal field coils which furnish following field: 2500, 2200, 1800, 1800 tapped at 300, 1500, 1000, and 700 ohms.
- All models listed below (except model E500, see note) furnished with universal transformers or line matching transformers.
- All models listed below (except model E500, see note) have 1" diameter voice coils
- Voice coil impedance 5.3 ohms at 400 cycles
- Fully Dust Proof — Fully Rust Proof

MODEL	SIZE	FIELD	TRANSFORMER	NET
E500*	5"	3000	SINGLE 43	\$2.50
E700*	6"	UNIV.	UNIV.	3.50
E800*	8"	UNIV.	UNIV.	4.00
E1100	10"	UNIV.	UNIV.	5.50
E1200**	12"	UNIV.	UNIV.	6.00

Play Safe
Guarantee Satisfaction
Use Only
WRIGHT-DeCOSTER
Speakers

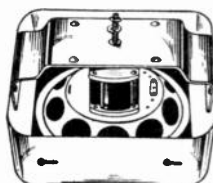
*CAN BE HAD WITH 6 VOLT FIELD AT NO EXTRA COST BY ADDING LETTERS "VC"

**PARA-CURVE DIAPHRAGM CONE.



SUEDE CABINETS

WRIGHT DECOSTER HAS ANSWERED THE DEMAND FOR AN EXTRA SPEAKER OR SPEAKER CASE WITH THESE SUEDE CABINETS. THEY CAN BE USED ANYWHERE AN EXTRA SPEAKER IS NEEDED, AUTOMOBILE, TRAILER, SCHOOLS, APARTMENTS, HOTELS, HOSPITALS, PUBLIC BUILDINGS ETC.



CABINETS ONLY				
NO.	TYPE	SIZE	DEPTH	NET
SV450	VEHICLE	8"	5"	\$2.25
SV550	"	10	5-7/8	2.75
SW400	WALL MT.	8	4-1/8	2.00
SW500	"	10	5	2.50

ANY OF THE ABOVE CABINETS CAN BE EQUIPPED WITH NOKOIL OR ELECTRO-DYNAMIC SPEAKER UNITS. ASK FOR YOUR COMPLETE "WRIGHT DECOSTER" CATALOG.

IT'S EASY TO PARK AT WALTER ASHE . . .

WRIGHT



DeCOSTER

The Nokoil Reproducer was the first small Permanent Magnet Dynamic Speaker introduced to the industry. . . . These Nokoil models eliminate a field coil as used in electro-dynamic design. . . . Through use of Bakelite Voice Coil Forms the power handling capacity is higher . . . plus moisture-proof, warp-proof, and heat resistant . . . each Nokoil Speaker is not only dust-proof but completely rust-proof. . . . The efficiency and sensitivity of the Nokoil Master Series is the direct reason for its unusual popularity.

- Voice Coil impedance 5.3 ohms at 400 cycles
- Voice coil form bakelite
- Universal line matching transformer
- Fully Cadmium plated



will handle the output of any normally operated amplifier of double the voice coil rating of the speaker.

MASTER SERIES

15 WATT

Heavy Duty

NOKOIL

PUBLIC ADDRESS MODELS

● 1½" diameter voice coil

NET

Model Number	Size Ins.	Transformer	
NM2200	6	Universal	\$11.00
NM2200A	6	500, 1000, 1500 ohms	
NM2200LT	6	Less Transformer	10.00
NM2300	8	Universal	11.50
NM2300A	8	500, 1000, 1500 ohms	
NM2300LT	8	Less Transformer	10.50
NM2500	10	Universal	12.50
NM2500A	10	500, 1000, 1500 ohms	
NM2500LT	10	Less Transformer	11.50
NM2900	12	Universal	14.50
NM2900A	12	500, 1000, 1500 ohms	
NM2900LT	12	Less Transformer	13.50

WEATHER
PROOF
CONES
MAY
BE
HAD
AT
NO
EXTRA
COST
ON
SPECIAL
ORDER.

SENIOR SERIES

8 WATT

Light Duty

NOKOIL

PUBLIC ADDRESS MODELS

● One inch diameter voice coil

NET

Model Number	Size Ins.	Transformer	
NS1200	6	Universal	\$6.00
NS1200A	6	500, 1000, 1500 ohms	
NS1200LT	6	Less Transformer	5.00
NS1300	8	Universal	6.50
NS1300A	8	500, 1000, 1500 ohms	
NS1300LT	8	Less Transformer	5.50
NS1500	10	Universal	7.50
NS1500A	10	500, 1000, 1500 ohms	
NS1500LT	10	Less Transformer	6.50
NS1800	12	Universal	9.00
NS1800A	12	500, 1000, 1500 ohms	
NS1800LT	12	Less Transformer	8.00

STANDARD SERIES

3½ WATT

NOKOIL

RADIO AND "TALK-BAK" MODELS

● ¾" diameter voice coil

NET

Model Number	Size Ins.	Transformer	
NST700	5		\$3.50
NST700A	5	500, 1000, 1500 ohms	
NST700LT	5	Less Output Transf.	3.00
NST800	6	Universal	4.00
NST800A	6	500, 1000, 1500 ohms	
NST800LT	6	Less Output Transf.	3.50
NST900	8	Universal	4.50
NST900A	8	500, 1000, 1500 ohms	
NST900LT	8	Less Output Transf.	4.00
NST1000	10	Universal	5.00
NST1000A	10	500, 1000, 1500 ohms	
NST1000LT	10	Less Output Transf.	4.50
NST1200	12	Universal	6.00
NST1200A	12	500, 1000, 1500 ohms	
NST1200LT	12	Less Output Transf.	5.50

ALL 3½ WATT SERIES STOCK ITEMS

HORNS



NET

Model No.	Diameter Bell Opening	Length	
2100	14"	14"	\$10.50
Model No.	Diameter Bell Opening	Length	
2800	20"	15"	14.00
Model No.	Diameter Bell Opening	Length	
6000	35"	34"	30.00

LOT NEXT TO STORE OR LOADING ZONE

WALTER ASHE RADIO COMPANY

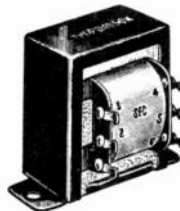
1100 Pine Street St. Louis, Missouri

THORDARSON

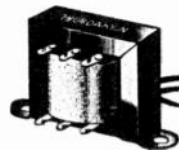
TRANSFORMERS

OUTPUT—VOLTAGE BOOSTERS—AUTO TRANSFORMERS


2W



2E



3E



2V

Power tubes require the correct plate load for maximum power output with a minimum of distortion. Thordarson output transformers will satisfy the plate requirements of tubes as used in amplifiers, radio receivers, and amateur equipment. Several secondary impedances are incorporated to accommodate various speaker combinations.

UNIVERSAL OUTPUT TRANSFORMERS

Type No.	NET PRICE	Tube Type	Class	Ohms Impedance		Pri. Sec.	M.A. Per Side	Max. Watts	Mtg. Fig.	Dimensions			Wt. Lbs.
				Pri.	Sec.					W	D	H	
T-13538	\$0.90	Univ. Single	A	4,000/7,000	Adjustable	36	8	3E	2	1 1/2	1 1/2	1 1/2	3/4
T-57501	1.20	or P-P	B	8,000/10,000	1 to 29	2E	2	2E	2	2 1/2	2 1/2	2 1/2	1 1/4
T-17557	1.35	Univ. Single	A	14,000 Ct.	500	60	10	2E	2 1/2	2	3	2 1/2	2 1/4
T-61525	2.10	Univ. P-P	B	2,500/4,000 5,000/6,000/7,000 12,000/14,000 Ct.	500	55	10	2E	2 1/2	2	3	2	2

OUTPUT TRANSFORMERS TO LINE OR SPEAKER (HIGH LEVEL)

T-13537	\$0.69	1-6F6, 42, 2A5	A	7,000	1-2-4	36	5	3E	1 1/2	1 1/2	1 1/2	1 1/2	1 1/4
T-33599	0.90	P-P 45, 43, 25A6 1-6N7, 6A6, 53	A B	8,000	6 to 12	36	10	2B	2	2	2 1/2	2 1/2	1 1/4
T-81501	0.99	1-19, 1J6G P-P 30, 49	B B	10,000	2-4-8	15	8	2B	1 1/2	1 1/2	2	2	3/4
T-68506	1.50	1-6F6, 42, 2A5	A	7,000	10 or 2,000	36	5	2F	2	1 1/2	2 1/2	2 1/2	1
T-67551	2.10	P-P 6F6, 42, 2A5 1-79	A B	14,000	4-8-15-500	40	20	2F	2 1/2	2 1/2	3	2 1/2	2 1/4
T-67548	2.10	P-P 45, 43, 25A6 1-6N7, 6A6, 53	A B	8,000	4-8-15-500	36	25	2F	2 1/2	2 1/2	3	2 1/2	2 1/4
T-67560	1.50	1-19, 1J6G P-P 30, 49	B B	10,000	4-8-15-2000	15	10	2F	2	2 1/2	2 1/2	2 1/2	1 1/2
T-67552	2.40	P-P 45, 43, 25A6 P-P Par. 6N7, 6A6, 53 P-P 42, 6F6, 2A5	B B AB2	5,800	4-8-15-500	60	30	2F	2 1/2	3	3 1/2	3 1/2	3 1/2
T-58572	2.40	P-P 2A3, 6B4G P-P 48, 25L6	AB A	3,000	4-8-15-500	60	30	2F	2 1/2	3	3 1/2	3 1/2	3 1/2
T-67554	2.40	P-P 6L6 P-P 2A3, 6B4G P-P Par. 19's	AB AB B	5,000	4-8-15-500	60	30	2F	2 1/2	3	3 1/2	3 1/2	3 1/2
T-67592	2.40	P-P Par. 2A3, 6B4G, 45 P-P Par. 48, 25L6	AB A	1,500	4-8-15-500	80	40	2F	2 1/2	3	3 1/2	3 1/2	3 1/2
T-65594	2.40	P-P 50 P-P 6F6, 42, 2A5 P-P 79	AB AB2 B	8,000	4-8-15-500	55	40	2F	2 1/2	3	3 1/2	3 1/2	3 1/2
T-75575	2.40	P-P 6F6, 42, 2A5 1-6N7, 6A6, 53 P-P 6N6G, 6B5, 2B6	AB2 B A	10,000	4-8-15-500	45	40	2F	2 1/2	3	3 1/2	3 1/2	3 1/2
T-84558	3.60	P-P 6L6	AB2	3,800	4-8-15-500	115	60	2G	3 1/2	3 1/2	4 1/2	6	6
T-89575	2.40	P-P 6L6	AB1	6,600	4-8-15-500	80	40	2F	2 1/2	3	3 1/2	3 1/2	3 1/2
T-89574	2.15	1-6L6	A	4,000	4-8-15-500	70	15	2F	2 1/2	2 1/2	3	2 1/2	2 1/4
T-89568	3.60	P-P Par. 6L6	AB1	3,300	50-125-200 250-333-500	150	75	2G	3 1/2	3 1/2	4 1/2	5 1/2	5 1/2

LINE TO SPEAKER TRANSFORMERS

Type No.	NET PRICE	Application	Pri.	Sec.	Mtg. Fig.	W	D	H	Wt. Lbs.
T-53581	\$2.70	Line to Voice Coil	500/250	4-8-15	2D	2 1/2	3	3 1/2	3 1/2
T-68548	1.80	Line to Voice Coil 1 to 6 may be con. in par. to 500 ohm line	500/1000 1500/2000 2500/3000	Pri. as 500 ohm- 06 to 8: pri. as 1000 ohm-12 to 16 etc.	2E	2 1/2	2	3	2
T-76574	1.80	Line to multiple spkrs. (auto transformer)	500	500/250/166/125 100/84	2E	2 1/2	2	3	2 1/2

VOLTAGE CHANGERS AND BOOSTERS

Primaries equipped with cord and plug. Secondaries have standard receptacles.

Type No.	NET PRICE	Primary	Secondary	Rating Watts	Mtg. Fig.	Dimensions			Wt. Lbs.
T-26V04	\$2.70	220-250 Volts	110-125 Volts	80	2V	2 1/2	6	4 1/2	5 1/2
T-50V10	3.30	220-250 Volts	110-125 Volts	125	2V	3 1/2	3 1/2	5	5 1/2
T-40V15	3.90	220-250 Volts	110-125 Volts	175	2V	3 1/2	3 1/2	5	8
T-50V11	4.50	220-250 Volts	110-125 Volts	250	2V	3 1/2	4 1/2	5	10 1/2
T-61V07	3.00	90 or 100 Volts	115 Volts	150	2V	2 1/2	6	4 1/2	5 1/2

AUTO TRANSFORMERS

For increasing or decreasing line voltage. Taps for 60, 80, 90, 100, 110, 120, and 125 volts.

Type No.	NET PRICE	Capacity V.A.	Dimensions			Mtg. Fig.	Wt. Lbs.
T-82V11	\$7.50	500	W	D	H	2W	16 1/2
T-82V12	10.50	1000	5 1/2	7 1/2	6 1/2	2W	22 1/2
T-82V13	13.50	2000	6 1/2	7 1/2	7 1/2	2M	39 1/2



The new 400A Catalog contains a detailed listing of all Thordarson transformers with a ready reference index making it easy to find any item.

ASK FOR YOUR FREE COPY

IT'S EASY TO PARK AT WALTER ASHE . . .



TRANSFORMERS—Input • Interstage

THORDARSON

PLATE TO GRID INTERSTAGE TRANSFORMERS

The first item, T-13A34, is a midget unit designed especially for replacement purposes in small radio receivers. The group of four items are larger units offered in four styles of mounting for general replacement.

The next group of three are highest quality for use in high grade receivers and amplifiers, and are listed in three mounting styles.

T-75A74 is designed to couple a super-regenerative detector to an audio stage, and incorporates a static shield between windings to reduce outside noise.

Type No.	NET \$0.81	Application	Ratio	Imped. in ohms		Pri. M.A.	Mtg. Fig.	Dimensions			Wt Lbs
				Pri.	Sec.			W	D	H	
T-13A34	1.05	10,000 ohm plate to grid	3:1	10,000	90,000	8	3B	2	1 1/4	1 1/4	3/4
T-29A99	1.05	10,000 ohm plate to grid	3.26:1	10,000	106,300	8	2B	2 1/2	2 1/2	2 1/2	1 1/4
T-86A94	1.20						3B	2 1/2	2 1/2	2 1/2	1 1/4
T-87A96	1.05						2F	2	1 1/4	2 1/4	1 1/4
T-47A25	1.05		3:1	10,000	90,000	8	2C	2	1 1/4	2 1/4	1
T-57A37	1.50						2B	2 1/4	2 1/4	3	2
T-57A38	1.65		3:1	10,000	90,000	8	2F	2 1/4	2 1/4	3	2 1/4
T-29A98	1.80						2A	2 1/4	2 1/4	3	2 1/4
T-75A74	1.50	10,000 ohm plate to grid Static Shield between primary and secondary	2:1	10,000	40,000	8	2F	2	2 1/4	2 1/4	1 1/4



2A

PUSH-PULL INPUT TRANSFORMERS

The first item is a midget unit for use where space is limited. The next four are for general replacement in four mounting styles. The next three items are larger and have better frequency response.

By connecting the primary and secondary of T-74A31 in series, it may be used as a push-pull grid impedance to secure ratios of 1 to 1, 1 to 2, or 1 to 4. It is used in this manner in Thordarson amplifiers T-75K18-M and T-75K30 listed in this catalog.

T-57A42 and T-57A43 are designed to couple power detectors to a push-pull stage, without the high frequency loss common to ordinary input transformers used in this service.

Type No.	NET \$0.90	Application	Ratio	Imped. in ohms Pri. Sec.	Pri. M.A.	Mtg. Fig.	Dimensions W D H	Wt. Lbs.
T-13A35	1.20	10,000ohm plateto P.P. grids	3:1	10,000 90,000	8	3B	1 1/2 2 1 1/4	3/4
T-31A91	1.20	10,000ohm plateto P.P. grids	3.26:1	10,000 106,300	8	2B	2 1/2 2 2 1/4	1 1/4
T-86A99	1.35					3B	2 1/2 2 2 1/4	1 1/4
T-14A29	1.35					2C	2 1/2 1 1/4 2 1/4	1 1/4
T-57A39	1.35					2F	2 2 2 1/4 2 1/4	1 1/4
T-57A40	1.65		3:1	10,000 90,000	8	2B	2 1/4 2 2 3	2
T-57A41	1.80					2F	2 1/4 2 1/4 3	2 1/4
T-43A94	1.95					2A	2 1/4 2 1/4 3	2
T-74A31	1.95	10,000ohm plateto P.P. grids	1:1	10,000 10,000	8	2F	2 1/4 2 1/4 3	2 1/4
T-57A42	2.10	10,000 ohm plate to P.P. grids	3:1	10,000 90,000	8	2B	2 1/4 2 3	2 1/4
T-57A43	1.95					2F	2 1/4 2 1/4 3	2 1/4
T-71A97**	2.10	8,000 ohm plate to P.P. grids	2.7:1	8,000 44,000	40	2D	2 1/4 3 3 1/4	3 1/4
**Single 45 to 50	3.90	845 grids						

**Single 45 to P.P. 845 grids



2C

PUSH-PULL INTERSTAGE TRANSFORMERS

T-58A70 and T-67A91 may be used for Class AB where some grid current is likely to flow on extreme peaks.

Type No.	NET \$1.05	Application	Ratio	Imped. in ohms	Pri. M.A.	Mtg. Fig.	Dimensions W D H	Wt. Lbs.
T-13A36	1.05	P.P. 10,000 ohm plates to P.P. power tube grids	1:1	20,000 20,000	8*	3B	2 2 1/4 1 1/4	1
T-67A91	1.80	P.P. 10,000 ohm plates to P.P. or P.P. par. power tube grids	1.5:1	20,000 45,000	10*	2B 2F	2 1/4 2 1/4 3 3	2 2
T-58A70	1.95							
T-75D57	3.00	P.P. 45's to 845's P.P.	2.35:1	16,000 117,000	40*	2D	2 1/4 3 3 1/4 3 1/4	3 1/4

*Per side.

LOW IMPEDANCE SOURCE (MICROPHONE, LINE, MIXER) TO GRID TRANSFORMERS

A complete line of low level input, microphone, line, and mixer transformers to fit all applications. Special winding methods result in low leakage reactance so essential to good frequency response. Several styles of mountings are offered for the most popular types.

For tube vacuum tube types										
T-65A73	\$1.65	DB mike to grid	1:22.2	200 Ct.	100,000	2F	2 1/4	2 1/4	3	2 1/4
T-65A72	1.50					2B	2 1/4	2 1/4	3	2 1/4
T-38A29	1.80					2A	2 1/4	2 1/4	3	2 1/4
T-58A37	1.35					2F	2 1/4	2 1/4	2 1/4	1 1/4
T-63A78	1.35	Single button mike to grid	1:64	100	400,000	2F	2	1 1/4	2 1/4	1 1/4
T-86A92	1.20					2B	2	1 1/4	2 1/4	1 1/4
T-22A57	1.05					2A	2	1 1/4	2 1/4	1 1/4
T-55A16	1.35	Dyn. miks. line or mixer to single or P.P. grids	1:22.2	200/50	100,000 Ct.	2F	2	2 1/4	2 1/4	1 1/4
T-63A72	1.65	1, 2, 3 or 4 circuit mixer to grid	1:22.2	50, 100, 150, 200	100,000	2F	2 1/4	2 1/4	3	2 1/4
T-63A71	2.10	1, 2, 3 or 4 circuit mixer to grid	1:11	200, 400, 600, 800	100,000	2F	2 1/4	2 1/4	3	2 1/4
T-61A94	2.10	Line to single or P.P. grids, Class A	1:14.1	500/125	100,000 Ct.	2F	2 1/4	2 1/4	3	2 1/4
T-62D65	1.95	Line to P.P. grids of 800, 830B, RK18, RK31, 203A, Class B, or 845 tubes Class AB	1:3.8	500	7,220	2D	3 1/4	3 1/4	4	5
T-63A12	3.60	Line to P.P. Class A grids	1:9.85	500	50,000 Ct.	2D	3 1/4	3 1/4	4	4 1/4
T-63D21	2.25	Line to P.P. grids of 46, 210, Class B, etc., 6L6 AB	1:3.2 1:5	500	5,100 12,500	2F	2 1/4	2 1/4	3	2 1/4
T-67D34	4.50	Line to P.P. Par. 203A, 838, 211 grids, Class B	1:1.34	500	900	2D	3 1/4	3 1/4	4	5
T-64D29	10.80	Line to P.P. 204A, 849 grids, Class B	1:2	500	2,000	2L	4 1/4	4 1/4	6 1/4	11 1/4

MICROPHONE OR PICKUP TO LINE OR MIXER TRANSFORMERS

T-63A73	\$1.95	DB or dynamic mike to line or mixer	200 Ct.	200/50	2F	2 1/4	2 1/4	3	2 1/4
T-67A45	2.10				2A	2 1/4	2 1/4	3	2 1/4
T-70A92	2.10	DB mike to line	200 Ct.	500/125	2F	2 1/4	2 1/4	3	2 1/4
T-70A93	2.10	Crystal mike to line or mixer	100,000	200/50	2F	2 1/4	2 1/4	3	2 1/4
T-61A96	2.10	Pickup or line to line or mixer	500/125	200/50	2F	2 1/4	2 1/4	3	2 1/4
T-63A74	1.50	Pickup to line or mixer	5000/2000	200/50	2F	2	2 1/4	2 1/4	1 1/4

TUBE TO LINE OR MIXER TRANSFORMERS (LOW LEVEL)

TYPE T PLATE OR MIXER TRANSFORMERS (Continued)										
T-55A15	\$1.35	Plate to line or mixer	15,000/10,000	200/50	8	2F	2	2 1/4	2 1/4	1 1/4
T-62A26	1.35	Plate to line or mixer	15,000/10,000	500/125	8	2F	2	2 1/4	2 1/4	1 1/4
T-72A11	1.50	P.P. plates to line	20,000	500/125	8**	2F	2	2 1/4	2 1/4	1 1/4
T-75A73	1.50	P.P. plates to line or mixer	20,000	200/50	8**	2F	2	2 1/4	2 1/4	1 1/4

**Per side.



2D



3B



TRANSFORMERS—Driver • Modulation

THORDARSON

DRIVER TRANSFORMERS

The driver transformer is an important link in a Class AB or Class B amplifier system. The flow of current in the power tube grid circuit requires exceedingly good regulation of the driver tubes and coupling transformer. Thordarson driver transformers have the correct primary to secondary ratio for the tubes specified, insuring minimum driver distortion on the positive grid peaks. Full specifications are given in the table to facilitate selecting the proper driver transformer for other tube combinations.

Type No.	NET PRICE	Driver Tubes	Output Tubes	Class	Ratio Pri. to Sec.	Ohms Impedance		Pri. M.A.	Mtg. Fig.	Dimensions			Wt. Lbs.
						Pri.	Sec.			W.	D.	H.	
T-78D46	\$0.90	1-30	1-1J6G, 19	B	2.4:1	20,000	3,500	7	2H	1 3/8	1 3/8	2	1 1/4
T-54D63	1.50	1-30 1-49 1-6C5	1-1J6G, 19 2-49 2-6V6	B B AB2	2.4:1	20,000	3,500	7	2F	2	1 3/8	2 3/8	1 1/4
T-67D50	1.65	1-89 Triode	1-79	H	2:1	12,000	3,000	32	2F	2	2 1/8	2 1/8	1 1/4
T-67D89	1.95	1-89 Triode	2-79	B	3:1	12,000	1,330	32	2F	2 1/8	2 1/8	3	2 1/4
T-67D47	1.65	1-6N7, 6A6, 53	1-6N7, 6A6, 53	H	5.25:1	27,000	1,000	10	2F	2	2 1/8	2 3/8	1 1/4
T-81D52	2.10	1-6C5, 76 1-56	2-6F6 Triode 2-42, 2A5 Triode	AB AB	1.82:1 1.67:1	35,000 38,000	11,500 13,500	8	2F	2 1/8	2 1/8	3	2 1/4
T-84D59	2.10	2-6C5, 6N7 2-6A6, 53	2-6L6, 6V6 2-6N7, 6A6, 53	AB2 B	5:1	70,000	2,800	10	2F	2 1/8	2 1/8	3	2 1/4
T-72D01	2.25	2-6C5, 76, 56	2-45	AB	2.7:1	70,000	9,500	10	2F	2 1/8	2 1/8	3	2 1/4
T-74D32	2.10	2-6C5, 76, 56	2-6F6, 42, 2A5 4-2A3, 6H4G	AB2 AB	3:1	70,000	7,700	10	2F	2 1/8	2 1/8	3	2 1/4
T-65D78	2.40	1-6F6 Triode 1-42 Triode 1-2A5 Triode	2-6F6 Triode 2-42 Triode 2-2A5 Triode	AB2 AB2 AB2	2:1	25,000	6,250	40	2F	2 1/8	3	3 1/8	3 1/4
T-81D42	2.10	1-6F6 Triode 1-42 Triode 1-2A5 Triode	2-6F6 Triode 2-42 or 2-2A5 Pentode	AB2 AB2 AB2	1.7:1 1.5:1 1.3:1	10,000 10,000 10,000	3,300 4,500 5,800	31	2F	2 1/8	2 1/8	3	2 1/4
T-67D78	2.10	1-46, 59	2-46, 59	B	2.2:1	13,000	2,700	32	2F	2 1/8	2 1/8	3	2 1/4
T-52D89	2.25								2A	2 1/8	2 1/8	3	2 1/4
T-66D98	3.15	2-46 P-P 2-59 P-P Triodes	4-46 4-59	B B	4:1	21,600	1,350	32	2R	2 1/8	4 1/8	3 1/8	4 1/4
T-83D83	2.25	2-45 P-P	2-250	AB2	1.6:1	8,000	3,140	40	2F	2 1/8	2 1/8	3	2 1/4
T-51D88	2.70	2-45 P-P	2-210, 801, 35T	B	2:1	25,000	6,250	40	2A	2 1/8	3	3 1/8	3 1/4
T-64D22	3.00	2-45, 2A3	2-800, 830B, etc.	B	1.55:1	8,000	3,300	40	2T	2 1/8	3 1/8	4 1/8	4 1/4
T-80D54	3.30	2-6F6 P-P Triodes 2-42 P-P Triodes	2-838 2-830 B, 800	B B	4:1	8,000	500	40	2G	3 1/8	3 1/8	4 1/8	5 1/4
T-83D86	2.25	2-2A3 P-P	4-250	AB2	1.47:1	5,000	2,300	40	2F	2 1/8	2 1/8	3	3 1/4
T-61D48	3.30	2-6L6 P-P 2-2A3 P-P	2-50T, 150T 2-203-A, 801	B B	1.67:1	5,000	1,785	130	2D	3 1/8	3 1/8	4	5
T-75D10	3.30	2-6L6 P-P 2-2A3 P-P	2-838 2-805, etc.	B B	3.2:1	5,000	500	130	2D	3 1/8	3 1/8	4	5

MODULATION TRANSFORMERS

This series of modulation transformers meets the need for efficient, quiet, long life units at reasonable costs. Engineered and constructed for specific tube types, their efficiency is high and the frequency characteristics are good.

Type No.	NET PRICE	Tube Type	Class	Ohms Pri.	Impedance Sec.	Max. D.C. Sec. M.A.	Max. Audio Pwr. Watts	Mtg. Fig.	Dimensions			Wt. Lbs.
									W.	D.	H.	
T-67M69	\$1.65	1-19	H	10,000	2,700	50	10	2F	2	2	2 1/8	1 1/4
T-67M59	1.80	1-53	B	10,000	3,000	100	20	2F	2 1/8	2 1/8	3	2
T-84M70	6.00	2-6L6 2-35T 4-210	AB B H	3,800 5,000 7,500	2,500 200 150	250	75	2D	4 1/8	5 1/8	6 1/8	14 1/4
T-72M82	3.60	2-2A3	AB	5,000	3,000, 5,000	125	50	2D	4 1/8	4 1/8	5	5
T-64M26	3.60	2-46for 59 2-250	B AB	5,800 10,000	5,000 10,000	100	40	2D	3 1/8	3 1/8	4	5
T-64M25	4.50	2-210	B	8,000	5,000, 10,000	200	40	2D	3 1/8	4 1/8	4 1/8	8
T-64M24	13.20	2-203-A 2-T-55	B B	8,000 10,000	2,500 200	400 200	300	2Q	5	8 1/8	7 1/8	30 1/4
T-70M84	9.00	2-801 2-210 2-35-T	B B B	10,000 6,250 12,500	4,500 200 150	200	150	2Q	5 1/8	8	6 1/8	20 1/4
T-75M11	13.20	2-838 2-T-55	B B	10,000 10,000	2,500 200	400 200	300	2Q	5 1/8	8 1/8	7 1/8	30
T-82M08	9.00	2-50-T	B	6,000	5,000 20,000	200 100	150	2Q	5 1/8	8	6 1/8	20 1/4
T-82M09	14.40	2-50-T	B	20,000	2,500 10,000	400 200	300	2Q	5 1/8	9 1/8	7 1/8	29 1/4
T-82M10	24.00	2-150-T	B	11,000	4,000 9,000	500 330	650	2Q	7 1/8	7 1/8	9 1/8	45
T-82M25	24.00	2-805-A 2-HD203-A 2-822	B B B	8,000 4,000 6,000 8,000	4,000 200 200	500 330	650	2K	8	6 1/8	8	48 1/4

GRID MODULATION TRANSFORMERS

T-67M73	\$2.10	1-46 or 59	A	6,300	5,400	32	10	2D	2 1/8	2 1/8	3	2 1/4
T-67M74	2.70	P.P. 45-2A3	AB	5,000	5,000	60	20	2D	2 1/8	3	3 1/8	3 1/4

TRANSCEIVER TRANSFORMERS

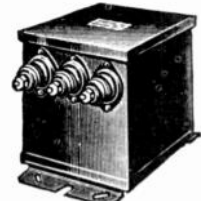
Smallest practical size. Lightweight. Easy to mount. Efficient.

Type No.	NET PRICE	Description	Ohms Impedance		Max. D.C. Pri.	Max. Power Watts	Mtg. Fig.	Dimensions			Wt. Lbs.
			Pri.	Sec.				W.	D.	H.	
T-72A59	\$0.99	Plate and single button microphone to grid	5,000	100,000	10	5	2B	1 1/8	1 1/8	2	1/4
T-72558	\$0.99	Pentode plate to low or high impedance phones or oscillator	10,000	2,000	30	5	2B	1 1/8	1 1/8	2	1/4

MODULATION TRANSFORMERS FOR MATCHING LINES TO R. F. LOADS

Primaries of these transformers may be connected directly to the 500 ohm output terminals of any amplifier or receiver. Type T-83M22 is equipped with a tap at 200 ohms for use with "Breting 14" receivers.

Type No.	NET PRICE	Pri. Ohms	Secondary Ohms Load	Max. D.C. Sec. M.A.	Max. Watts	Mtg. Fig.	Dimensions			Wt. Lbs.
							W.	D.	H.	
T-73M52	\$9.60	500	5000-6000-7000-8000-9000-10000	215	80	2Q	5 1/8	8	6 1/8	21
T-83M22	4.20	500-200	5000-6000-7000-8000-9000-10000	150	30	2N	3 1/8	4 1/8	4 1/8	8



2Q



2N



2R



2T

IT'S EASY TO PARK AT WALTER ASHE...

THORDARSON

TRANSFORMERS—Power • Audio



GENERAL PURPOSE POWER TRANSFORMERS

High quality transformers constructed to give trouble-free, continuous service in receivers and amplifiers.



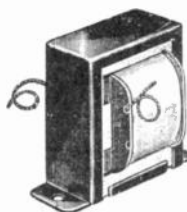
2G

Type No.	NET PRICE	Pr. V.A.	A.C. Volts	D.C. M.A.	Rect. Fil.	Fl. No. 1	Fl. No. 2	Fl. No. 3	Mtg. Flg.	Dimensions W D H	Wt. Lbs.
T-60R49	\$1.20	30	560 Ct.	30	5V-2A	2.5V-3.5A Ct.			2H	3 2 1/2	2 1/2
T-50R02	1.65	40	600 Ct.	40	5V-2A	2.5V-5A Ct.			2H	3 1/2 3 3/4	3 1/4
T-49R00	1.95	65	700 Ct.	70	5V-2A	2.5V-8.5A Ct.			2H	3 1/2 3 1/2 3 1/2	4 1/2
T-63R62	2.10	65	700 Ct.	70	5V-2A	2.5V-7A Ct.	2.5V-1.5A Ct.		2H	3 1/2 3 1/2 3 1/2	4 1/2
T-50R03	2.25	75	700 Ct.	80	5V-2A	2.5V-12A Ct.			2H	3 1/2 3 1/2 3 1/2	5 1/2
T-63R62	2.40	75	700 Ct.	80	5V-2A	2.5V-9A Ct.	2.5V-3A Ct.		2H	3 1/2 3 1/2 3 1/2	5 1/2
T-70R21	2.10	70	700 Ct.	70	5V-2A	2.5V-4A Ct.	6.3V-3A Ct.		2H	3 1/2 3 1/2 3 1/2	4 1/2
T-70R20	1.65	45	600 Ct.	50	5V-2A	6.3V-2A Ct.			2H	3 1/2 2 1/2 3	3
T-70R70	1.80	50	680 Ct.	55	5V-2A	6.3V-1.5A Ct.			2G	3 1/2 3 1/2 4 1/2	4
T-70R61	2.40	60	770 Ct.	70	5V-2A	6.3V-2.5A Ct.			2G	3 1/2 3 1/2 4 1/2	4 1/2
T-56R02	2.55	70	700 Ct.	70	5V-2A	2.5V-9A Ct.	2.5V-1.5A Ct.		2G	3 1/2 3 1/2 4 1/2	6
T-56R01*	2.70	60	650 Ct.	70	5V-2A	2.5V-3A Ct.	1.5V-1A 1.5V-4A	5V-.5A Ct.	2G	3 1/2 3 1/2 4 1/2	5 1/2
T-56R03	3.30	85	700 Ct.	105	5V-3A	2.5V-3A Ct.	2.5V-1.75A Ct.	1.5V-5A 1.5V-1A	2G	3 1/2 3 1/2 5	7 1/2
T-56R04*	3.15	90	700 Ct.	105	5V-3A	2.5V-12A Ct.			2G	3 1/2 3 1/2 5	7 1/2
T-70R62	3.30	110	745 Ct.	145	5V-3A	6.3V-4.5A Ct.			2G	3 1/2 3 1/2 5	8 1/2
T-56R05	3.45	115	700 Ct.	110	5V-3A	2.5V-9A Ct.	2.5V-3A Ct.	2.5V-3A Ct.	2G	3 1/2 3 1/2 5	7 1/2
T-37R70-C	3.60	95	700 Ct.	80	5V-2A Ct.	3V-10A Ct.	5V-2.5A Ct.		2G	4 3 1/2 4 1/2	6 1/2
T-92R21	4.50	150	800 Ct.	200	5V-3A	6.3V-5A Ct.			2G	4 1/2 3 1/2 4 1/2	9

*Primary 110 volts—all others 115 volts.

AMPLIFIER POWER TRANSFORMERS

For continuous duty in P. A. amplifiers where dependable performance is of utmost importance.



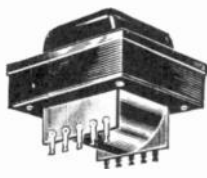
2B

Type No.	NET PRICE	Pr. V.A.	Secondary A.C. Volts	D.C. M.A.	Bias Tap	Rect. Fil.	Fl. No. 1	Fl. No. 2	Mtg. Flg.	Dimensions W D H	Wt. Lbs.
T-75R47*	\$2.25	75	610 Ct.	125		5V-2A	6.3V-2A Ct.		2H	3 1/2 3 1/2 3 1/2	6
T-74R28	3.90	105	880 Ct.	125	58V	5V-3A 2.5V-3A	6.3V-3.3A Ct.		2G	3 1/2 3 1/2 5	8
T-87R05†	3.90	105	660 Ct.	160	77V	5V-3A 5V-2A	6.3V-2A Ct.	2.5V-5A Ct.	2G	3 1/2 3 1/2 5	8 1/2
T-68R26	3.90	160	1100 Ct.	150		5V-3A	7.5V-2.5A Ct.	2.5V-5A Ct.	2G	3 1/2 4 1/2 5	10 1/2
T-69R35	4.20	135	775 Ct.	200		5V-3A	6.3V-3A Ct.		2G	3 1/2 4 1/2 5	9 1/2
T-67R93	4.80	135	700 Ct.	200		5V-3A	2.5V-15A Ct.	5V-2A	2G	3 1/2 4 1/2 5	10
T-75R50	4.80	160	870 Ct.	250	80V	5V-3A 2.5V-3A	6.3V-1.5A Ct.	2.5V-10A Ct.	2G	3 1/2 4 1/2 5	10 1/2
T-83R02	6.00	200	1480 Ct.	140	150V	5V-3A 2.5V-3A	7.5V-2.5A Ct.		2G	3 1/2 4 1/2 5	11 1/2
T-83R05	7.20	290	1480 Ct.	200	150V	5V-3A 2.5V-3A	7.5V-5A Ct.		2G	3 1/2 5 1/2 5	13 1/2
T-89R28	7.20	250	1100 Ct. 650 Ct.	225 75		5V-3A 5V-2A	6.3V-8A Ct.		2G	3 1/2 5 1/2 5	15

†Electrostatic shield

POWER TRANSFORMERS FOR CATHODE RAY TUBES

Specially constructed with large cores for low flux density.



2H

Type No.	NET PRICE	Volts D.C.	M.A.	Rect. Fil.	Fl. No. 1	Fl. No. 2	Mtg. Flg.	Dimensions W D H	Wt. Lbs.
T-92R25	\$1.35	500	3	6.3V-.9A†			2F	2 2 1/2 2 1/2	1 1/2
For 913 tube		tap-430							
T-92R33	2.40	400	15	6.3V-.9A	6.3V-.6A	6.3V-.6A	2G	3 1/2 4 1/2 3 1/2	3 1/2
For 913 tube		**500	3		No. 3 (2.5V-1.4A)				
T-14R32	3.30	350	15	5V-2A 5V-2A Ct.	6.3V-.6A No. 3 (6.3V-.6A)	2.5V-2A	2G	2 1/2 3 1/2 3 1/2	3 1/2

**With half wave rectification.
†For 6x5 rectifier and 913 filament.

NET PRICE

SPEAKER-FIELD SUPPLY

T-67R97	\$2.55	55	115	50 to 250	5V-3A		2G	3 1/2 3 1/2 3 1/2	4 1/2
T-92R53	3.60	120	300	200	5V-3A		2G	3 1/2 3 1/2 3 1/2	6 1/2

AUDIO REACTORS

For use in interstage coupling systems where the voltage drop caused by resistor coupling is objectionable, also for isolating plate current from transformer primaries. Types T-81C15 and T-93C20 are for use in tuned circuits to accentuate a pre-determined band of frequencies, as described in the Thordarson Amplifier Guide, No. 346-B.



2F

Type No.	NET PRICE	Application	Type Tubes	Induct. Henries	At M.A.	Max. M.A.	D.C. Ohms	Mtg. Flg.	Dimensions W D H	Wt. Lbs.
T-37C36	\$1.35	Plate Impedance	56-30-76-8C5-55-85, etc.	510	5	10	6470	2F	2 2 1/2 2 1/2	1 1/2
T-67C46	1.20							2B	2 2 2 1/2	1 1/2
T-52C98	1.05	Plate Impedance for detector tubes or grid impedance	24-57-56-76-6C5-6F5-6J7	1080	.5	8	6150	2F	2 1 1/2 2 1/2	1 1/2
T-29C27	0.90							2B	2 1/2 1 1/2 2	1
T-68C08	1.20	Plate Impedance or Filter	45-46-10, etc.	22	35	35	405	2F	2 2 1/2 2 1/2	1 1/2
T-18C92	1.05							2B	2 1/2 2 1/2 2 1/2	1 1/2
T-81C15	1.50	Tuned Audio Circuits		.75	5	100	30	2B	1 1/2 1 1/2 2	1
T-93C20	1.80	Tuned Audio Circuits		250	.5	8.0	6400	2B	2 2 2 1/2 1 1/2	1 1/2
T-74C30	0.90	Tuned Audio Circuits or Filter		42	15	15	2100	2B	1 1/2 2 1/2 2	1

WALTER ASHE RADIO COMPANY

1100 Pine Street St. Louis, Missouri



TRANSFORMERS—Power • Vibrator • Chokes



UNIVERSAL DUPLICATE POWER TRANSFORMERS

R.M.A. Color Coded Leads—Electrostatic Shields

New design and universal mounting features permit mounting in either of the three positions shown. Electrical characteristics are the result of careful research to determine values most often needed. They are truly the last word in universally adaptable transformers for service use.

Type No.	NET PRICE	Pri. V.A.	Secondary		Filament Windings			Mtg. Fig.	Dimensions			Wt. Lbs.
			Volts	M.A.	Rect.	Fil. No. 1	Fil. No. 2		W	D	H	
T-13R01	\$1.41	60	650 Ct.	40	5V-3A	2.5V-4A Ct.		3A	2 1/2	2 1/2	3	3 1/2
T-13R02	1.80	60	700 Ct.	50	5V-3A	2.5V-7.25A Ct.		3A	2 1/2	2 1/2	3	3 1/2
T-13R03	1.95	75	700 Ct.	70	5V-3A	2.5V-9A Ct.		3A	2 1/2	3 1/2	3 1/2	3 1/2
T-13R04	2.40	115	700 Ct.	90	5V-3A	2.5V-12.5A Ct.		3A	3 1/2	3 1/2	3 1/2	5 1/2
T-13R05	2.40	110	700 Ct.	70	5V-3A	2.5V-9A Ct.	2.5V-3.5A Ct.	3A	3 1/2	3 1/2	3 1/2	5 1/2
T-13R06	3.00	130	700 Ct.	120	5V-3A	2.5V-12.5A Ct.	2.5V-3.5A Ct.	3A	3 1/2	3 1/2	4 1/2	5 1/2
T-13R07	3.00	140	800 Ct.	110	5V-3A	2.5V-15A Ct.	2.5V-3.5A Ct.	3A	3 1/2	3 1/2	4 1/2	6 1/2
T-13R08	2.55	105	700 Ct.	90	5V-3A	6.3V-3.3A Ct.	2.5V-6A Ct.	3A	3 1/2	3 1/2	3 1/2	5 1/2
T-13R09	3.60	160	750 Ct.	180	5V-3A	6.3V-3.3A Ct.	2.5V-6A Ct.	3A	3 1/2	3 1/2	4 1/2	6 1/2
T-13R00	2.10	70	550 Ct.	70	5V-3A	5V-5A Ct.	2.5V-10.5A Ct.	3A	2 1/2	3 1/2	3 1/2	3 1/2
T-13R11	1.50	60	650 Ct.	40	5V-3A	6.3V-2A Ct.		3A	2 1/2	2 1/2	3	3 1/2
T-13R12	1.80	65	700 Ct.	70	5V-3A	6.3V-2.5A Ct.		3A	2 1/2	3	3	3 1/2
T-13R13	2.25	90	700 Ct.	90	5V-3A	6.3V-3.5A Ct.		3A	3 1/2	3 1/2	3 1/2	5 1/2
T-13R14	2.55	115	700 Ct.	120	5V-3A	6.3V-4.7A Ct.		3A	3 1/2	3 1/2	3 1/2	5 1/2
T-13R15	3.45	140	750 Ct.	150	5V-3A	6.3V-5A Ct.		3A	3 1/2	3 1/2	4 1/2	5 1/2
T-13R16	3.90	180	800 Ct.	200	5V-3A	6.3V-5.14A Ct.		3A	3 1/2	3 1/2	4 1/2	6 1/2
T-13R17	2.10	85	600 Ct.	60	5V-3A	6.3V-2.5A Ct.	2.5V-7.5A Ct.	3A	2 1/2	3 1/2	3 1/2	4
T-13R18	2.70	115	700 Ct.	90	5V-3A	6.3 & 2.5V-3.5A Ct.	2.5V-9A Ct.	3A	3 1/2	3 1/2	3 1/2	5 1/2

Filter Chokes

Inductance ratings are ACTUAL at rated current

Type No.	NET PRICE	Current Rating M.A.	Inductance Henries	D.C. Res. Ohms	Volts Ins.	Mtg. Fig.	Dimensions			Wt. Lbs.
							W	D	H	
T-13C26	\$0.54	40	7	530	1600	3B	1 1/2	1 1/2	1 1/2	1/2
T-13C27	0.63	40	10	475	1600	3B	2	1 1/2	1 1/2	3/4
T-13C28	0.72	65	10	480	1600	3B	2 1/2	1 1/2	2	1
T-43C92	1.05	75	10	266	1600	2C	1 1/2	2 1/2	2 1/2	1 1/2
T-47C07	1.05	75	12	290	1600	3B	2	2 1/2	2 1/2	1 1/2
T-44C02	0.90	80	12	405	1600	3B	1 1/2	2 1/2	2	1 1/2
T-57C51	0.90	80	5	138	1600	2B	2	2	2 1/2	1 1/2
T-57C52	1.05	80	5	138	1600	2F	2	2	2 1/2	1 1/2
T-13C29	0.96	85	9	250	1600	3B	2 1/2	2	2	1 1/2
T-48C07	1.20	85	15	375	1600	2B	2	2 1/2	3	2
T-16C07	1.35	85	15	375	1600	2F	3 1/2	2 1/2	3	2 1/2
T-14C31	\$1.50	110	9.5	200	1600	2A	2 1/2	2 1/2	3	2 1/2
T-57C53	1.20	110	9.5	200	1600	2B	2	2 1/2	3	2 1/2
T-57C54	1.35	110	9.5	200	1600	2F	2 1/2	2 1/2	3	2 1/2
T-49C91	0.90	120	4.2	160	1600	2F	2	2	2 1/2	1
T-75C49	0.90	120	7.2	290	1600	3B	2	2 1/2	2	1 1/2
T-53C19	0.90	120	7.2	290	1600	2B	2	2	2 1/2	1 1/2
T-17C06-B	1.65	130	12	231	1600	2F	2 1/2	3	3 1/2	3 1/2
T-17C00	1.80	130	12	231	1600	2D	3	3 1/2	3 1/2	3 1/2
T-13C30	1.20	150	8	200	1600	2B	2 1/2	2	2 1/2	1 1/2
T-74C29	2.25	150	10	200	2000	2G	3 1/2	3 1/2	4 1/2	5 1/2
T-67C49	1.65	200	5	80	1600	2F	3	2 1/2	3 1/2	3
T-23C53-A	1.80	200	5	80	1600	2D	3	2 1/2	3 1/2	3
T-54C50	3.00	250	12.9	121	1600	2B	3	3 1/2	4 1/2	7 1/2
T-75C51	3.30	250	12.9	121	1600	2G	3 1/2	3 1/2	5	7 1/2

SIX VOLT VIBRATOR TRANSFORMERS

Furnished with mounting feet or may be used with original mounting brackets

Type No.	NET PRICE	Secondary		Mtg. Fig.	Dimensions			Wt. Lbs.
		D.C. Volts	M.A.		W	D	H	
T-14R33	\$1.50	225	40	3C	2 1/2	2 1/2	3 1/2	2 1/2
T-14R34	1.80	250	50	3C	2 1/2	2 1/2	3 1/2	2 3/8
T-14R35	2.10	260	60	3C	2 1/2	2 1/2	3 1/2	2 3/8
T-14R36	2.40	285	75	3C	2 1/2	2 1/2	3 1/2	3 1/2
T-14R37	2.85	350	75	3C	2 1/2	3 1/2	3 1/2	4 1/2

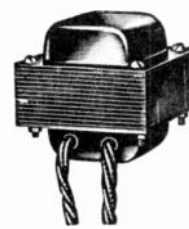


REPLACEMENT TRANSFORMER ENCYCLOPEDIA—No. 243...15 OR FREE FROM YOUR JOBBY BY REGISTRATION

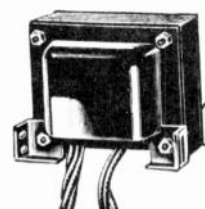
A complete listing of power transformers, audio transformers and filter chokes required by home sets listed in Riders Manuals. Based on actual electrical data.

SERVICING GUIDE—No. 342...09

This Guide contains many valuable articles on problems that daily confront the serviceman: auto installation hints; how to make a direct reading voltmeter; how to make and use output indicators and align receivers; tube data—altogether 32 pages of tested ideas and suggestions.



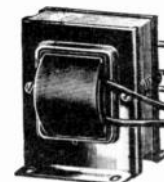
3A



3A



3A

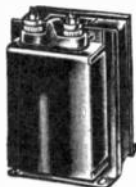


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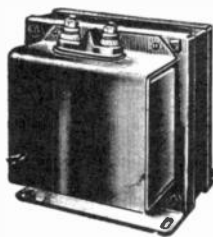
IT'S EASY TO PARK AT WALTER ASHE...

THORDARSON

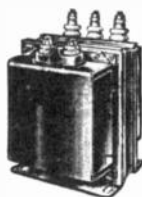
TRANSFORMERS—Plate • Filament • Chokes



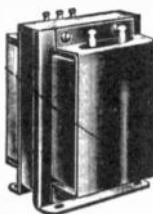
2J



2K



2M



2L



2S

PLATE SUPPLY TRANSFORMERS

These ratings are for CONTINUOUS SERVICE and may be safely exceeded by as much as 20% in amateur installations where the service is intermittent. All plate transformers rated at 1000 volts D. C. or higher have electrostatic shield between primary and secondary. All transformers for 50-60 cycle supply.

Type No.	NET PRICE	Sec. A.C. Load Volts	D.C. Volts	D.C. M.A.†	Pri. Volts	Pri. V.A.	Mfg. Fig.	Dimensions W D H	Wt. Lbs.
T-62P80	\$4.65	725-0-725	525	150	110	125	2L	4 1/2 4 1/2 6 1/2	11 1/2
T-70P41	5.40	725-0-725	525	250	110	210	2L	4 1/2 5 6 1/2	15 1/2
T-53P03	3.30	465-0-465	400	150	115	90	2G	3 1/2 4 1/2 5	7 1/2
T-64P68	4.65	515-0-515	400 1/2	250	115	190	2G	4 1/2 5 3 1/2	11 1/2
T-62P57	5.40	750-0-750	625	200	115	180	2E	4 1/2 3 1/2 6 1/2	12 1/2
T-54P48	4.05	800-0-800	680	150	115	130	2E	4 1/2 3 1/2 6 1/2	10 1/2
T-71P27	6.00	800-0-800	600	250	110	240	2L	4 1/2 4 1/2 6 1/2	14 1/2
T-64P12	9.90	980-0-980	750	350	110	400	2M	6 1/2 6 1/2 8	32 1/2
T-64P11*	12.60	1600-0-1600	1250	280	110	520	2M	6 1/2 7 1/2 8	36 1/2
		1290-0-1290	1000						
T-70P33*	18.00	1620-0-1620	1250	500	110	900	2S	6 1/2 6 1/2 11	43
		1330-0-1330	1000						
T-54P89	11.10	1270-0-1270	1000	400	115	600	2M	6 1/2 6 1/2 8	33
T-62P82	19.20	1335-0-1335	1000	500	110	750	2S	6 1/2 6 1/2 11	42 1/2
T-73P51*	27.00	2275-0-2275	1750	500	110	1300	2S	6 1/2 7 1/2 11	61 1/2
		1950-0-1950	1500						
T-62P83	19.70	2350-0-2350	2000	250	110-220†	740	2S	6 1/2 6 1/2 11	42 1/2
T-62P84	30.00	2420-0-2420	2000	500	110-220†	1500	2S	6 1/2 8 1/2 11	84
T-62P85	36.00	3630-0-3630	3000	380	110-220†	1750	2S	6 1/2 10 11	87

*Bias tap at 30 volts.

†Variation in secondary voltages obtained by changing primary taps.

‡Primary for 110 or 220 volts, or 220 volt tap may be used on 110 volts to reduce sec. voltage 50%.

§D. C. volts measured out of filter with choke input. If transformer is used with bridge rectifier (choke input) current should be reduced to 50% of this rating.

FILTER CHOKES

All Thordarson filter chokes are listed at measured inductances at rated currents. All are adequately insulated for recommended service. Input chokes indicated by two inductance ratings.

Type No.	NET PRICE	Cap. D.C. M.A.	Inductance Henries	D.C. Res. Ohms	Volts Insulation	Mfg. Fig.	Dimensions W D H	Wt. Lbs.
T-64C85	\$2.55	150	10-30	200	2000	2D	3 1/2 3 1/2 4 1/2	5
T-63C18	5 10	280	12-38	156	5000	2J	4 4 1/2 6 1/2	11 1/2
T-64C86	7.20	380	10-19	93	5000	2J	4 1/2 5 6 1/2	18 1/2
T-63C16	8 40	500	8-17	70	5000	2J	5 5 1/2 6 1/2	22 1/2
T-72C16	9.60	650	8-22	55	5000	2K	6 1/2 6 1/2 7 1/2	27 1/2
T-64C89	3.30	150	19.7	275	2000	2D	3 1/2 4 4 1/2	7
T-64C88	6.00	280	23.6	190	5000	2J	4 1/2 4 1/2 6 1/2	14
T-64C87	9.60	380	20	160	5000	2K	6 1/2 6 1/2 7 1/2	25
T-64C10	10.20	500	16.5	110	5000	2K	6 1/2 6 1/2 7 1/2	27 1/2
T-72C15	14.40	650	17	70	5000	2K	6 1/2 8 1/2 7 1/2	40 1/2

FILAMENT TRANSFORMERS

Many types are furnished with primary taps to compensate for low line voltage or voltage drop in filament leads. This feature also permits the use of primary rheostat for voltage control. All units are rated for continuous operation at full load.

All primaries 115 volts 50-60 cycles. Those marked with * have primary taps for 105, 110 and 115 volts.

One Secondary									
Type No.	NET PRICE	Sec. Volts	Sec. Amps.	Mfg. Fig.	W	D	H	Volts Insulation	Wt. Lbs.
T-50F61	\$0.90	2.5 Ct.	3.5	2B	2	1 1/2	2 1/2	1600	1
T-64F69	1.05	2.5 Ct.	5.0	2E	2	2	2 1/2	1600	1 1/2
T-64F66	1.50	2.5 Ct.	10	2B	3	2 1/2	3 1/2	1600	3
T-64F33*	2.70	2.5 Ct.	10	2D	3 1/2	3 1/2	4	7600	4 1/2
T-63F99	1.95	5 Ct.	4	2D	8	2 1/2	3 1/2	1600	2 1/2
T-74F23*	8.00	5.25 Ct.	12	2D	3 1/2	3 1/2	4	1600	4 1/2
T-74F24*	4.20	5.25 Ct.	20	2D	3 1/2	3 1/2	4 1/2	1600	6 1/2
T-61F85	-1.20	6.3, 5, 2.5	2.5	2E	2 1/2	2	2 1/2	1600	1 1/2
T-73F60*	2.25	6.3 Ct.	5	2D	3	2 1/2	3 1/2	1600	3 1/2
T-64F13*	1.95	7.5 Ct.	2.5	2D	3	2 1/2	3 1/2	1600	2 1/2
T-75F25	3.60	7.5 Ct.	2.5	2D	3 1/2	2 1/2	4	5000	4 1/2
T-64F35	2.70	7.5 Ct.	6.5	2D	3 1/2	3 1/2	4	1600	4 1/2
T-92F20	3.30	7.5 Ct.	8	2D	3 1/2	3 1/2	4	1600	5
T-64F14*	3.00	10 Ct.	8	2D	3 1/2	3 1/2	4	1600	5
T-64F15*	4.50	11 Ct.	10	2D	4 1/2	3 1/2	4 1/2	1600	8
T-64F19	5.40	11 Ct.	15.5	2L	4 1/2	4 1/2	6 1/2	1600	13
Two Secondaries									
T-64F21	3.30	2.5, 5 Ct.	10, 3	2N	3 1/2	3 1/2	4	3000	4 1/2
T-75F65	3.30	5, 5 Ct.	3, 3	2D	3	2 1/2	3 1/2	3000	3 1/2
T-64F66	1.95	7.5, 7.5 Ct.	2.5, 2.5	2E	3	2 1/2	3 1/2	1600	3 1/2
Three Secondaries									
T-79F84	2.85	2.5, 5, 6.3 Ct.	3.5, 3, 3	2G	3 1/2	3 1/2	4 1/2	1600	4 1/2
T-60F94	3.60	2.5, 2.5, 5 Ct.	3.5, 14, 6	2G	3 1/2	3 1/2	4 1/2	1600	5 1/2
T-85F14*	10.50	2.5, 2.5, 2.5 Ct.	5, 5, 10	2Q	7 1/2	5 1/2	5 1/2	10,000	17
T-70F46	4.65	5, 5, 5 Ct.	2, 3, 6	2N	4	3 1/2	4	5000	5 1/2
T-64F17*	5.40	2.5, 7.5, 7.5 Ct.	4, 4.5, 6.5	2N	4 1/2	3 1/2	4 1/2	1600	8
Four Secondaries									
T-64F18*	6.90	2.5, 7.5, 10, 10 Ct.	5, 1.25, 3.25, 6.5	2N	4 1/2	4 1/2	6 1/2	1600	13 1/2

WALTER ASHE RADIO COMPANY

1100 Pine Street St. Louis, Missouri

THORDARSON

TRANSFORMERS—"C. H. T." Series



MULTI-MATCH MODULATION TRANSFORMERS

Plug-in-Jack-Terminal Board, the only Modulation Transformer built with this unique feature.

Type No.	NET PRICE	Cap. Watts	Pri. M.A. Per Side	Sec. M.A. Series Par.	Mtg. Fig.	W	D	H
T-11M74	\$4.80	40	100	80 160	3G	4 1/4	4 1/2	4 1/2
T-11M75	7.50	75	145	145 290	3G	4 1/4	4 1/2	4 1/2
T-11M76	11.70	125	210	160 320	3G	5 1/2	5 1/2	6
T-11M77	18.00	300	250	250 500	3G	6 3/4	6 3/4	7 1/4
T-11M78	36.00	500	320	320 640	3G	7 1/4	7 3/4	8 1/4



3G

MULTI-MATCH DRIVER TRANSFORMERS

Plug-in Connectors and recessed sub-base lugs permit single hole sub-panel wiring.

Type No.	NET PRICE	Cap. Watts	Max. Pri. M.A. Per Side	Ratio Pri. to 1/2 Sec.	Mtg. Fig.	W	D	H
T-15D76	\$4.95	15	60	1:1, 1.2:1, 1.4:1, 1.6:1, 1.8:1	3H	4 1/4	4 1/2	4 1/2
T-15D77	4.95	15	60	2:1, 2.2:1, 2.4:1, 2.6:1, 2.8:1	3H	4 1/4	4 1/2	4 1/2
T-15D78	4.95	15	60	3:1, 3.2:1, 3.4:1, 3.6:1, 3.8:1	3H	4 1/4	4 1/2	4 1/2
T-15D79	4.95	15	60	4:1, 4.5:1, 5:1, 5.5:1, 6:1	3H	4 1/4	4 1/2	4 1/2
T-15D80	6.90	30	120	1:1, 1.25:1, 1.5:1, 1.75:1, 2:1	3H	4 1/4	4 1/2	5
T-15D81	6.90	30	120	2.25:1, 2.5:1, 2.75:1, 3:1, 3.25:1	3H	4 1/4	4 1/2	5



3H

MULTI-VOLT PLATE TRANSFORMERS

These units, engineered for continuous operation, provide extreme flexibility, excellent regulation and quiet operation.

Type No.	NET PRICE	Pri. Volts	D.C. Volts	M.A. Current	Mtg. Fig.
T-15P11	\$7.50	115 - 230	500 or 400	200	3K
T-15P12	9.00	115 - 230	650 or 500	200	3K
T-15P13	10.80	115 - 230	750 or 600	300	3J
T-15P14	13.50	115 - 230	1000 or 750	300	3J
T-15P15	15.60	115 - 230	1250 or 1000	300	3J
T-15P16	21.00	115 - 230	1250 or 1000	500	3J
T-15P17	18.00	115 - 230	1500 or 1250	300	3J
T-15P18	28.80	115 - 230	1750 or 1500	500	3J
T-15P19	24.00	115 - 230	2500 or 2000	300	3J
T-15P20	42.00	115 - 230	2500 or 2000	650	3J
T-15P21	37.50	115 - 230	3000 or 2500	500	3J
T-15P22	22.80	115 - 230	1750 or 1500	300	3J



3J

MULTI-VOLT POWER TRANSFORMERS

Combination plate and filament transformers for tubes of medium power. (6L6, 807, T-20, RK-23, RK-39, etc.)

Type No.	NET PRICE	Pri. Volts	A.C. Volts	Current	Mtg. Fig.
T-15R00	\$6.30	115	1000 Ct. 7.5 tap—6.3 Ct. 5	150 M.A. 5 A. 3 A.	3K
T-15R01	9.00	115	1000 Ct. 6.3 Ct. 5	400 M.A. 6 A. 6 A.	3K
T-15R02	7.95	115	1500 Ct. 2.5 Ct. 7.5 tap—6.3 Ct.	200 M.A. 10 A. 3 A.	3K
T-15R03	8.25	115	800 Ct. 2.5 Ct. 6.3 Ct. 5	200 M.A. 4 A. 5 A. 3 A.	3K

MULTI-VOLT BIAS TRANSFORMERS

Rectifier plate and filament terminals on recessed base. Six secondary taps are brought out to plug-in jacks for convenient change of voltage.

Type No.	NET PRICE	Pri. Volts	D. C. Volts	M. A.	Filament	Mtg. Fig.
T-15R60	\$5.70	115	150; 135; 120; 110; 105; 90	200	5 3	3N
T-15R61	6.30	115	275; 250; 225; 200; 175; 150	200	5 3	3N
T-15R62	7.50	115	500; 450; 400; 350; 300; 275	200	5 3	3N



3N

INPUT AND SMOOTHING CHOKES

Companion units to the C. H. T. Multi-Volt Plate Transformers, these chokes are accurately rated and the inductance shown is obtained with full rated D. C. applied. Most commercial choke ratings are obtained by tests not comparable to operating values. Thordarson test methods give the ACTUAL inductance as obtained in filter circuits. Inputs are indicated by two inductance ratings.

Type No.	NET PRICE	Inductance Henries	Current M.A.	Volts Insulation	D. C. Res.	Mtg. Fig.
T-15C36	\$3.60	5 - 25	200-20	4,000	105	3L
T-15C37	3.40	5 - 25	300-30	4,000	90	3L
T-15C38	7.20	5 - 25	400-30	4,000	100	3L
T-15C39	10.20	5 - 25	500-30	10,000	90	3L
T-15C41	12.00	5 - 25	650-50	10,000	70	3L
T-15C45	3.60	12	200	4,000	105	3L
T-15C46	5.40	12	300	4,000	90	3L
T-15C47	7.20	12	400	4,000	100	3L
T-15C48	10.20	12	500	10,000	90	3L
T-15C50	12.00	15	650	10,000	70	3L

IT'S EASY TO PARK AT WALTER ASHE . . .



TRANSFORMERS and Tru-Fidelity

"C. H. T." Series Continued



MULTI-VOLT FILAMENT TRANSFORMERS

Thordarson Multi-Volt Filament Transformers represent a decided departure from generally accepted transformer construction practice. They incorporate a number of new and novel ideas that result in a saving of space and cost. The terminals are brought out to rugged solder lugs on a recessed base. This permits of mounting on chassis with one hole for lead wiring. Side knock-out holes for bread board wiring.

Type No.	NET PRICE	Tapped Secondary Transformers				
		Primary Volts	Secondary Volts	Amps.	Volts Insulation	Mtg. Flg.
T-11F50	\$3.60	105-115	7.5 tap at 6.3, 5* & 2.5 Ct.	6.5	1600	3K
T-11F51	3.90	105-115	10 tap at 7.5 & 6.3 Ct.	8	1600	3K
T-11F52	4.50	105-115	11 tap at 10 & 7.5 Ct.	10	1600	3K
*Not center tapped.						
Type No.	NET PRICE	Multiple Secondary Transformers				
		Primary Volts	Secondary Volts	Amps.	Volts Insulation	Mtg. Flg.
T-11F56	3.30	105-115	6.3, 2.5, 5 Ct.	3, 3.5, 3	1600	3K
T-11F57	7.05	105-115	10, 10, 6.3, 5 Ct.	8, 4, 3, 3	1600	3K
T-11F58	5.70	105-115	7.5, 7.5, 6.3, 5 Ct.	6.5, 3.25, 3, 3	1600	3K
Type No.	NET PRICE	Single Secondary Transformers				
		Primary Volts	Secondary Volts	Amps.	Volts Insulation	Mtg. Flg.
T-11F53	3.15	105-115	2.5 Ct.	10	7,500	3K
T-11F54	6.36	105-115	5 Ct.	20	10,000	3K
T-11F55	5.25	105-115	5.25 Ct.	22	1600	3K

AUDIO COUPLING TRANSFORMERS

Ultra modern design, balanced windings, hum bucking coil construction and moisture-proof compound-filled cases. Frequency response variation $\pm 1\frac{1}{2}$ db 60 to 8,000 C. P. S.

Type No.	NET PRICE	Low Impedance Source to Grid					Dimensions		
		Primary Ohms	Secondary Ohms	Mtg. Flg.	W	D	H		
T-15A66	\$4.35	500, 333, 250 200, 125, 50	60,000 15,000 Single Grid	3M	3 1/4	2 1/4	3 1/4		
T-15A67	4.80	500, 333, 250 200, 125, 50	120,000/30,000 P. P. Grids	3M	3 1/4	2 1/4	3 1/4		
T-15A68	4.35	60, 38, 30, 22 15, 10, 5.5, 2.5	60,000/15,000 Single Grid	3M	3 1/4	2 1/4	3 1/4		
Type No.	NET PRICE	Low Impedance Source to Line or Mixer					Dimensions		
		Primary Ohms	Secondary Ohms	Mtg. Flg.	W	D	H		
T-15A69	3.75	500, 333, 250 200, 125, 50	500, 333, 250 200, 125, 50	3M	3 1/4	2 1/4	3 1/4		
T-15A70	3.75	60, 38, 30, 22 15, 10, 5.5, 2.5	500, 333, 250 200, 125, 50	3M	3 1/4	2 1/4	3 1/4		
Type No.	NET PRICE	Tube to Line (Low Level)					Dimensions		
		Primary Ohms	Secondary Ohms	Mtg. Flg.	W	D	H		
T-15A71	4.35	20,000/5,000 Single Plate	500, 333, 250 200, 125, 50	3M	3 1/4	2 1/4	3 1/4		
T-15A72	4.35	20,000/5,000 P. P. Plates	500, 333, 250 200, 125, 50	3M	3 1/4	2 1/4	3 1/4		
Type No.	NET PRICE	Interstage Coupling Transformers (Class A)					Dimensions		
		Primary Ohms	Secondary Ohms	Mtg. Flg.	W	D	H		
T-15A73	3.00	10,000/2,500 Single Plate	40,000 10,000 Single Grid	3M	3 1/4	2 1/4	3 1/4		
T-15A74	3.45	10,000/2,500 Single Plate	40,000/10,000 P. P. Grids	3M	3 1/4	2 1/4	3 1/4		
T-15A75	3.75	20,000/5,000 P. P. Plates	45,000 11,250 P. P. Grids	3M	3 1/4	2 1/4	3 1/4		

TRU-FIDELITY AUDIO TRANSFORMERS

Crystal Microphone or Photo Cell to Line

Type No.	NET PRICE	Pri. Ohms		Sec. Ohms		Max. D.C. per Side (M.A.)	Max. D.C. Unbalance (M.A.)	Max. Sig. Level (db)	Mtg. Flg.
		Pri. Ohms	Sec. Ohms	Pri. Ohms	Sec. Ohms	Max. D.C. per Side (M.A.)	Max. D.C. Unbalance (M.A.)	Max. Sig. Level (db)	Mtg. Flg.
T-90A06	\$9.30	250,000/62,500	500* 333 250 200* 125 50			0	0	+10	3T
Type No.	NET PRICE	Plate to Line (Low Level)		Mixer		Line to Grid		Interstage	
		Pri. Ohms	Sec. Ohms	Pri. Ohms	Sec. Ohms	Pri. Ohms	Sec. Ohms	Pri. Ohms	Sec. Ohms
T-90A02	8.70	20,000/5000 Single or P-P Plates	500*/333 250 200*/125/50			8	8	+15	3T
T-90A01	8.70	20,000/5000 Single or P-P Plates	500*/333 250 200*/125/50			10	0	+20	3T
T-90A10	7.50	500*/333/250 200*/125/50	500*/333/250 200*/125/50			100	.5	+10	3T
T-90A08	8.70	500*/333/250 200*/125/50	75,000/18,750 Single Grid			100	.5	+10	3T
T-90A11	11.10	500*/333/250 200*/125 50	150,000/37,500 P-P Grids			100	.5	+20	3T
T-90A03	6.00	10,000 2500 Single Plate	Ratio-overall 1 to 2 40,000/10,000 Single Grid			0	0	+15	3T
T-90A04	6.90	10,000 2500 Single Plate	Ratio-overall 1 to 2 40,000 10,000 P-P Grids			0	0	+15	3T
T-90A05	7.50	20,000/5000 P-P Plates	Ratio-overall 1 to 1 1/2 45,000/11,250 P-P Grids			10	0	+20	3T
Type No.	NET PRICE	Output		Line to Grid		Interstage		Output	
		Pri. Ohms	Sec. Ohms	Pri. Ohms	Sec. Ohms	Pri. Ohms	Sec. Ohms	Pri. Ohms	Sec. Ohms
T-90S07	\$8.70	5000/3000, 1250/750 P-P 2A3, etc.	500*/333 250 200* 125 50			60	5	+32	3T
T-90S08	\$8.70	5000/3000/1250/750 P-P 2A3, etc.	15 10/7 5 5/3 75 1 25			60	5	+32	3T
T-90S13	12.00	5000/3000/1250/750 P-P 2A3, etc.	500*/333 250 or 15/10 7.5 200* 125 50 5/3 75 1 25			60	5	+34	3S†

†High permeability cant case same as style 3T except without single hole swivel mounting.

Line to Voice Coil													
T-90S12	\$8.70	500*/333/250 200*/125/50	15/10/7.5 5 3.75/1 25	0	0	+32	3T						
Plate Reactor													
Type No.		Connection	Henries	M.A.	D.C. Ohms	Flg.							
T-90C09	6.00	Series Parallel	300 75	8 16	4,000 1,000	3T							

*Indicates inductive and capacitive balance to center tap for use on balanced transmission lines.



3K



3L



3M



3T

WALTER ASHE RADIO COMPANY

1100 Pine Street  St. Louis, Missouri



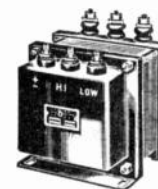
TRANSFORMERS—Amateur Special

THORDARSON

This series of transformers satisfies the demand for a line of transformers for amateur use and will more than meet the demands imposed in this type of service. Where the best in performance, appearance and flexibility is desired, our C. H. T. and Standard types are recommended.

PLATE TRANSFORMERS

Type No.	NET PRICE	Sec. A.C. Load Volts	D.C. Volts	D.C. M.A.	Mtg. Fig.	Wt. Lbs.	Dimensions		
							W	D	H
T-16P00	\$3.96	830/830 660/660	650 500	200	3F	7½	3¾	4	5
T-16P01	7.80	1560/1560 1250/1250	1250 1000	300	3D	25.5	5 7/8	7	7½
T-16P02	12.60	1565/1565 1265/1265	1250 1000	500	3D	36	6¾	7¼	8
T-16P03	11.40	2180/2180 1760/1760	1800 1450	300	3D	31¼	6¾	6¾	8
T-16P04	13.95	2920/2920 2420/2420	2500 2000	300	3D	41	6¾	8	8



3D



3F

FILTER CHOKES

Input chokes indicated by two inductance ratings.

Type No.	NET PRICE	D.C. M.A.	Inductance Henry's	D.C. Res. Ohms	Volts Ins.	Mtg. Fig.	Wt. Lbs.	Dimensions		
								W	D	H
T-16C20	\$2.25	200	5-20	130	2000	3C	5	3¾	2¾	4
T-16C21	3.00	300	5-20	105	3000	3C	7	3 7/8	3¼	4 5/8
T-16C22	5.40	500	5-20	70	3000	2J	25	5¼	6	7½
T-16C25	2.25	200	12	130	2000	3C	5	3¾	2¾	4
T-16C26	3.00	300	12	105	3000	3C	7	3 7/8	3¼	4 5/8
T-16C27	5.40	500	12	70	3000	2J	25	5¼	6	7½

FILAMENT TRANSFORMERS

Type No.	NET PRICE	Sec. Voltage	Sec. Amps.	Volts Insulation	Mtg. Fig.	Wt. Lbs.	Dimensions		
							W	D	H
T-16F08	\$0.90	2.5 Ct.	5.25	2000	3C	1¼	2	2	2 3/8
T-16F09	1.05	2.5 Ct.	10	2000	3C	3	2½	2	3
T-16F10	1.65	2.5 Ct.	10	7500	3C	2½	2½	2¾	3¼
T-16F11	1.20	5.25 Ct.	4	2000	3C	2¼	2½	2¾	3¼
T-16F12	2.10	5.25 Ct.	13	2000	3C	4	3¾	2½	4
T-16F17	1.05	6.3 Ct.	3	200J	3C	1½	2	2	2 3/8
T-16F13	1.20	7.5 Ct.	4	2000	3C	2¼	2½	2¼	3¼
T-16F14	1.95	7.5 Ct.	8	2000	3C	4	3	2¾	3¾
T-16F15	1.80	10 Ct.	4	2000	3C	3	2¾	2¾	3¼
T-16F16	2.40	10 Ct.	8	2000	3C	4	3	2¾	3¾

All Primaries 115 V. 60 Cycles.



SOUND AMPLIFIER GUIDE—No. 346..... .09

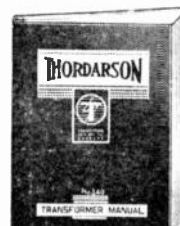
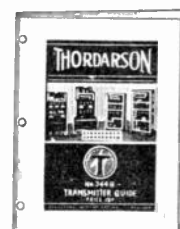
Here is a book every sound man needs. It has circuit diagrams, details and parts lists for amplifiers ranging up to 100 watts output; also information on speaker placement, microphones, and a useful db table.

TRANSMITTER GUIDE—No. 344..... .09

Circuit diagrams, details, and parts lists for transmitters ranging from 25 watts to 1,000 watts are shown in this Guide. Also modulation material, coil table, receivers and many other subjects and data, which are of great importance to the amateur.

COMPLETE TRANSFORMER MANUAL—No. 340..... .30

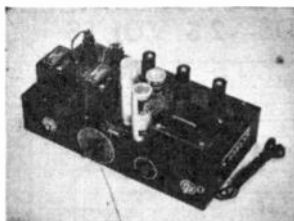
The Thordarson Transformer Manual is a complete book, containing the Radio Servicing Guide, the Transmitter Guide, and the Sound Amplifier Guide, plus Thordarson catalogs and prices. It is bound in an attractive blue and orange cover with looseleaf arrangement, giving the user opportunity to keep the Manual up-to-date by adding the latest Thordarson releases.



IT'S EASY TO PARK AT WALTER ASHE . . .

THORDARSON

AMPLIFIERS

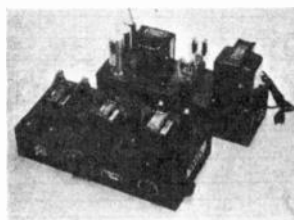


6 WATT PUSH-PULL 6F6 AMPLIFIER

Four input circuits accommodate either a crystal or carbon microphone, high impedance pick-up, and 200 ohm pick-up or line. The power supply furnishes 10 watts field power for one or two speakers. A compact unit with plenty of power for small installations.

Tubes used: 2-6J7, 2-6F6, 1-6Z4.

FACTORY WIRED AND TESTED (less tubes)..... T-11W06-M \$35.50

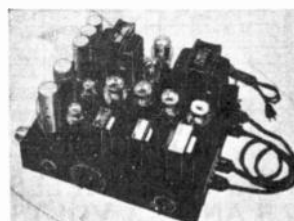


18 WATT PUSH-PULL 6F6 AMPLIFIER

The output capacity of this unit is sufficient for a great percentage of P.A. installations. Two 6F6 power tubes operate in an efficient fixed bias Class AB₁ circuit. Field power is available for one to four speakers (25 watts). High and low gain inputs accommodate low level microphones and phono pick-up.

Tubes used: 2-6J7, 2-6C5, 2-6F6, 1-83, 1-82.

FACTORY WIRED AND TESTED (less tubes)..... T-11W18-M \$48.54

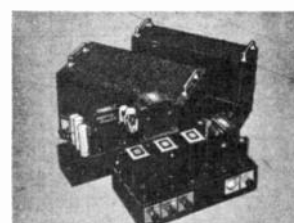


30 WATT PUSH-PULL PARALLEL 2A3 AMPLIFIER

This four stage high gain amplifier uses 4-2A3 output tubes operating in Class AB with fixed bias. Crystal, Velocity or Carbon microphones may be used without circuit changes. 30 watts field power is available for speaker excitation.

Tubes used: 2-6C6, 2-76, 4-2A3, 1-83, 1-82.

FACTORY WIRED AND TESTED (less tubes)..... T-10W30 \$55.95

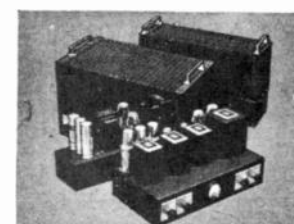


60 WATT PUSH-PULL PARALLEL 6L6 AMPLIFIER

Class AB₁ operation insures full 60 watts of distortionless output. High gain; inputs accommodate two high impedance crystal or velocity microphones, phono pickup and low impedance line. All inputs may be mixed and faded.

Tubes used: 2-6F5, 5-6C5, 4-6L6, 1-83, 1-80.

FACTORY WIRED AND TESTED (less tubes and covers)..... T-10W61 \$93.00
 Amplifier metal screen cover (less handles)..... **T-10K20 \$3.30**
 Power Supply metal screen cover (less handles)..... **T-10K21 \$2.85**
 Chromium plated handles (One pair required for each cover)..... Per Pair..... **T-10K50 \$1.14**



TRU-FIDELITY 2A3 AMPLIFIER

Conservatively rated, this unit delivers 10 watts of truly undistorted audio power. The over-all frequency response is superior to High Fidelity standards, being $\pm 1\frac{1}{2}$ db from 20 to 15,000 c. p. s. It is especially designed for broadcasting, recording, and high quality public address. High gain for low level microphones, with mixer and fader incorporated.

Tubes used: 3-6C6, 2-76, 2-2A3, 1-5Z5, 1-80.

FACTORY WIRED AND TESTED (less tubes and covers)..... T-10W11 \$96.00
 Amplifier metal screen cover (less handles)..... **T-10K20 \$3.30**
 Power supply metal screen cover (less handles)..... **T-10K21 \$2.85**
 Chromium plated handles (One pair required for each cover)..... Per Pair..... **T-10K50 \$1.14**

"BUILD-IT-YOURSELF"

The above amplifiers are available in "Build-it-Yourself" Foundation Units. Includes punched chassis with sockets mounted, photos, diagrams, instructions and list of nationally distributed component parts.

NET
 6 Watt push-pull 6F6 amplifier Foundation Unit..... **T-75K06-M \$2.70**
 18 Watt push-pull 6F6 amplifier Foundation Unit..... **T-75K18-M \$3.60**
 30 Watt push-pull parallel 2A3 amplifier Foundation Unit..... **T-75K30 \$4.80**
 60 Watt push-pull parallel 6L6 amplifier Foundation Unit..... **T-10K60 \$7.20**
 Tru-Fidelity 2A3 amplifier Foundation Unit..... **T-10K10 \$6.00**

NOTE: Accessories for 60 watt (T-10K60) and Tru-Fidelity (T-10K10) Foundation Units are the same as listed with equivalent factory wired amplifiers.

"Build-It-Yourself" Oscilloscope Foundation Unit

An accurately planned foundation unit with explicit wiring instructions enables the builder to complete a perfectly engineered instrument at reasonable cost. Small overall size makes it ideal for relay rack or servicemen. Magnifying lens gives clear two-inch image.



Type No.	NET PRICE	Description	Dimensions		
			W	D	H
T-11K16	\$1.80	Punched chassis, panel, light shield and instructions	10 $\frac{1}{2}$	6	5 $\frac{1}{2}$
T-11K17	\$1.20	Etched panel	10 $\frac{1}{2}$		5 $\frac{1}{2}$
T-11K19	\$1.35	Cover for T-11K16	10 $\frac{1}{2}$	6 $\frac{1}{2}$	5 $\frac{1}{2}$
T-11K20	\$1.20	2 in. lens with retainer ring			
T-92R33	\$2.40	Power transformer			
T-74C30	\$0.90	Filter choke			

Circuit diagram, description and parts list given in catalog bulletin SD266

Individual instruction sheets are available at 25c each. A more detailed description of each amplifier given in catalog bulletin SD-269

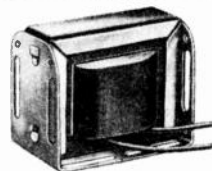
LOT NEXT TO STORE OR LOADING ZONE

WALTER ASHE RADIO COMPANY

1100 Pine Street St. Louis, Missouri



Most Complete Transformer Line in the World!



UNIVERSAL REPLACEMENTS INPUTS AND OUTPUTS

UR-1 Interstage, 1 plate to 1 grid, 3:1 ratio, List Price \$1.75. **Your Cost \$1.05**
UR-2 One plate to two grids, 2:1 ratio, List Price \$1.85. **Your Cost \$1.11**
USO Universal output single and push pull triodes and pentodes Class A, push pull triodes Class B to voice coils from .1 to 30 ohms. List Price \$1.75.

Your Cost \$1.05
 Horizontal Mounting Centers, 2 3/4" L., 2 1/4" W., 1 3/4" H., 1-11/16"

MA-1 Single power pentode to voice coil, List Price \$1.25. **Your Cost 75c**
MA-2 Push pull power pentodes to voice coil, List Price \$1.35. **Your Cost 81c**

ALL-PURPOSE REPLACEMENT OUTPUT TRANSFORMERS

Due to their ingenious mounting arrangement, these transformers will easily fit a Rola, Wright De Coster Jensen, Utah, Magnavox, and other small dynamic speakers.

These units are compact. The mounting centers are from 3/4" to 2 1/4"; the height 1 3/4". A fine grade of silicon core material is used and each unit has a high degree of efficiency. A tapped secondary winding will match voice coils from two to eight ohms. A top lug terminal bracket is supplied so that field coil leads may be soldered directly to each unit.

US-47 Single power pentode like 18, 20, 33, 41, 42, 57, 2A5 to single voice coil, List Price \$1.50. **Your Cost 90c**

UPP-47 Push pull power pentodes like 18, 20, 33, 41, 42, 47, 2A5 to single voice coil, List Price \$1.50. **Your Cost 90c**

US-45 Single power triode like 71, 45, or 59 to single voice coil, List Price \$1.50. **Your Cost 90c**

UPP-45 Push pull power triodes like 71, 45, or 59 to single voice coil, List Price \$1.50. **Your Cost 90c**

UPPO Compact type Universal output for single and push pull triodes or pentodes to any voice coil, List Price \$1.50. **Your Cost 90c**

FLYWEIGHT UNIVERSAL OUTPUT

Overall Size 1 3/4" x 1 3/4"; Horizontal Mtg. Centers, 2-1/16"

FUO For single or push pull power tubes to voice coils from 1/10 to 30 ohms. List Price \$1.25. **Your Cost 75c**

MIXING AND MATCHING UNITS

U-21 Mixing 50 or 200 ohm line to 50 or 200 ohm line. List Price \$1.60. **Your Cost 96c**

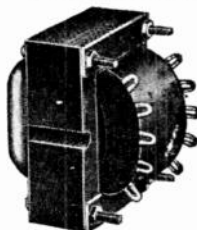
ULM Line matching to voice coil 250, 500 or 2000 ohms to 15, 8, 4, or 2 ohms. Will handle 15 watts audio. List Price \$2.75. **Your Cost \$1.65**

UNCASED MIGHTY MITE AUDIO TRANSFORMERS

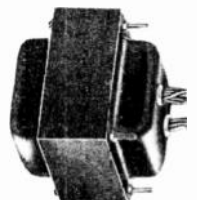
S-41 Interstage audio 4:1 ratio. List Price \$1.50. **Your Cost 90c**

S-51 Single plate to two grids 2 1/2:1 ratio. List Price \$1.55. **Your Cost 93c**

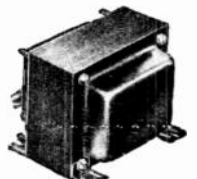
USMG Head phone or single button mike 75 or 100 ohms to single grid. List Price \$1.60. **Your Cost 96c**



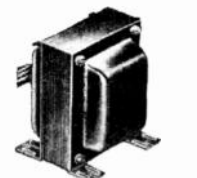
UM MOUNTING



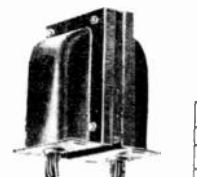
DF MOUNTING



DF MOUNTING



DF MOUNTING



VE MOUNTING



UNIVERSAL MTG. BRACKETS

DF MOUNTING—DOUBLE SHELLS WITH LEADS—2.5 VOLTS

Type No.	No. of Tubes	AC Plate Voltage C.T.	SV. FH	2.5V. FH	Overall Dim.	Mtg. Centers	List Price	Your Cost
DFX	4	500-40 MA	2A	1 1/2 A.C.T.	2 1/2 x 3	2 1/2 x 2	2.00	1.20
DFO	4	600-45 MA	2A	1 1/2 A.C.T.	2 1/2 x 3	2 1/2 x 2	2.25	1.35
DF-1	5	650-55 MA	2A	7 A.C.T.	2-12/16 x 3 1/2	2 1/2 x 2-12/16	2.50	1.50
DF-2	6	680-60 MA	2A	9 A.C.T.	2-12/16 x 3 1/2	2 1/2 x 2-12/16	2.75	1.65
DF-3	7	700-75 MA	2A	10 1/2 A.C.T.	2-12/16 x 3 1/2	2 1/2 x 2-12/16	3.25	1.95
DF-4	7	700-75 MA	2A	9 A.C.T.	3 1/2 x 3 1/2	2 1/2 x 3 1/2	3.50	2.10
DF-4X	8	650-100 MA	2A	12 A.C.T.	3 1/2 x 3 1/2	2 1/2 x 3 1/2	4.00	2.40
DF-5	8-10	750-100 MA	3A	3 A.C.T.	3 1/2 x 3 1/2	2 1/2 x 3 1/2	4.50	2.70
DF-6	10-12	800-125 MA	3A	12 A.C.T.	3 1/2 x 4 1/2	3 x 3 1/2	5.50	3.30
DF-7	10-15	850-250 MA	3A	5 A.C.T.	3 1/2 x 4 1/2	3 x 3 1/2	7.50	4.50
DF-8	10-12	1100-175 MA	3A	5 A.C.T.	3 1/2 x 4 1/2	3 x 3 1/2	8.75	5.25

UM MOUNTING — HALF SHELL WITH LUGS—2.5 VOLTS

Type No.	No. of Tubes	AC Plate Voltage C.T.	SV. FH	2.5V. FH	Overall Dim.	Mtg. Centers	List Price	Your Cost
UMX	4	500-40 MA	2A	1 1/2 A.C.T.	2 1/2 x 3	2 1/2 x 2	2.00	1.20
UMO	4	600-45 MA	2A	1 1/2 A.C.T.	2 1/2 x 3	2 1/2 x 2	2.25	1.35
UM-1	5	650-55 MA	2A	7 A.C.T.	2-12/16 x 3 1/2	2 1/2 x 2-12/16	2.50	1.50
UM-2	6	680-60 MA	2A	9 A.C.T.	2-12/16 x 3 1/2	2 1/2 x 2-12/16	2.75	1.65
UM-3	7	700-75 MA	2A	10 1/2 A.C.T.	2 1/2 x 3 1/2	2 1/2 x 3 1/2	3.25	1.95
UM-4	7	700-75 MA	2A	9 A.C.T.	3 1/2 x 3 1/2	2 1/2 x 3 1/2	3.50	2.10
UM-4X	8	650-100 MA	2A	12 A.C.T.	3 1/2 x 3 1/2	2 1/2 x 3 1/2	4.00	2.40
UM-5	8-10	750-100 MA	3A	3 A.C.T.	3 1/2 x 3 1/2	2 1/2 x 3 1/2	4.50	2.70
UM-6	10-12	800-125 MA	3A	12 A.C.T.	3 1/2 x 4 1/2	3 x 3 1/2	5.50	3.30
UM-7	10-15	850-250 MA	3A	5 A.C.T.	3 1/2 x 4 1/2	3 x 3 1/2	7.50	4.50
UM-8	10-12	1100-175 MA	3A	5 A.C.T.	3 1/2 x 4 1/2	3 x 3 1/2	8.75	5.25

DF MOUNTING—DOUBLE SHELLS WITH LEADS—2.5 AND 6.3 VOLTS

Type No.	No. of Tubes	AC Plate Voltage C.T.	SV. FH	2.5V. FH	6.3V. FH	Overall Dim.	Mtg. Centers	List Price	Net Price
DH-1	4-5	600-50 MA	2A	(1) 6.3-2A. C.T.	(1) 2.5-3A. C.T.	2 1/2 x 3	2 x 2 1/2	2.50	1.50
DH-2	6-7	700-75 MA	2A	(1) 6.3-3A. C.T.	(1) 2.5-3A. C.T.	2 1/2 x 3 1/2	2 1/2 x 2 1/2	4.00	2.40
DH-3	8-10	700-100 MA	3A	(1) 6.3-4A. C.T.	(1) 2.5-4A. C.T.	3 1/2 x 3 1/2	2 1/2 x 3 1/2	5.00	3.00
DH-4	10-12	800-125 MA	3A	(1) 6.3-5A. C.T.	(1) 2.5-5A. C.T.	3 1/2 x 4 1/2	3 x 3 1/2	6.00	3.60
DH-5	10-14	800-200 MA	3A	(1) 6.3-3A. C.T.	(1) 2.5-3A. C.T.	3 1/2 x 4 1/2	3 x 3 1/2	8.00	4.80
DH-6	10-14	750-200 MA	3A	(1) 6.3-4A. C.T.	(1) 2.5-4A. C.T.	3 1/2 x 4 1/2	3 x 3 1/2	7.50	4.50
DH-7	10-15	850-250 MA	3A	(1) 6.3-4A. C.T.	(1) 2.5-4A. C.T.	3 1/2 x 4 1/2	3 x 3 1/2	10.50	6.30

UM MOUNTING — HALF SHELL WITH LUGS — 2.5 AND 6.3 VOLTS

Type No.	No. of Tubes	AC Plate Voltage C.T.	SV. FH	2.5V. FH	6.3V. FH	Overall Dim.	Mtg. Centers	List Price	Net Price
UH-1	4-5	600-50 MA	2A	(1) 6.3-2A. C.T.	(1) 2.5-3A. C.T.	2 1/2 x 3	2 x 2 1/2	2.50	1.50
UH-2	6-7	700-75 MA	2A	(1) 6.3-3A. C.T.	(1) 2.5-3A. C.T.	2 1/2 x 3 1/2	2 1/2 x 2 1/2	4.00	2.40
UH-3	8-10	700-100 MA	3A	(1) 6.3-4A. C.T.	(1) 2.5-4A. C.T.	3 1/2 x 3 1/2	2 1/2 x 3 1/2	5.00	3.00
UH-4	10-12	800-125 MA	3A	(1) 6.3-5A. C.T.	(1) 2.5-5A. C.T.	3 1/2 x 4 1/2	3 x 3 1/2	6.00	3.60
UH-5	10-14	800-200 MA	3A	(1) 6.3-3A. C.T.	(1) 2.5-3A. C.T.	3 1/2 x 4 1/2	3 x 3 1/2	8.00	4.80
UH-6	10-14	750-200 MA	3A	(1) 6.3-4A. C.T.	(1) 2.5-4A. C.T.	3 1/2 x 4 1/2	3 x 3 1/2	7.50	4.50
UH-7	10-15	850-250 MA	3A	(1) 6.3-4A. C.T.	(1) 2.5-4A. C.T.	3 1/2 x 4 1/2	3 x 3 1/2	10.50	6.30

VE MOUNTING—FULLY SHIELDED WITH LEADS—2.5 AND 6.3 VOLTS

Type No.	No. of Tubes	AC Plate Voltage C.T.	SV. FH	2.5V. FH	6.3V. FH	Overall Dim.	Mtg. Centers	List Price	Net Price
VE-3	7	700-75 MA	2A	(1) 2.5-10A. C.T.	(1) 2.5-3A. C.T.	3 1/2 x 3 1/2	2 1/2 x 2 1/2	3.75	2.25
VE-4	7	700-75 MA	2A	(1) 2.5-3A. C.T.	(2) 2.5-9A. C.T.	3 1/2 x 3 1/2	2 1/2 x 2 1/2	4.00	2.40
VE-4X	8	800-100 MA	2A	(1) 2.5-12A. C.T.	(1) 2.5-3A. C.T.	3 1/2 x 3 1/2	2 1/2 x 2 1/2	4.50	2.70
VE-5	8-10	700-100 MA	3A	(1) 2.5-3A. C.T.	(1) 2.5-12A. C.T.	3 1/2 x 4 1/2	2 1/2 x 2 1/2	5.00	3.00
VE-12	7	700-75 MA	2A	(1) 6.3-3A. C.T.	(1) 2.5-3A. C.T.	3 1/2 x 3 1/2	2 1/2 x 2 1/2	4.50	2.70
VE-13	8-10	700-100 MA		(1) 6.3-4A. C.T.	(1) 2.5-4A. C.T.	3 1/2 x 4 1/2	2 1/2 x 2 1/2	5.00	3.00

* note- types "DF" "DH" and "VE" transformers are not stocked

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1100 Pine Street

St. Louis, Missouri



Most Complete Transformer Line in the World!

PLATE TRANSFORMERS

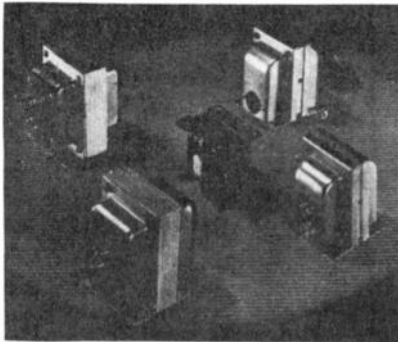
CS-200 450 each side of center at 150 MA.; 5V-3A; 2 1/2 V-10A. CV mtg. L 5 1/2 x W 3 1/4 x H 4 1/2. Mtg. Dim. 3 1/2 x 2 1/2. List Price \$6.50. **Your Cost \$3.90**

CS-201 500 each side of center at 200 MA.; 2 1/2 V.C.T. 14 A; 5 V.C.T. 3 A; CD mtg. L 5 x W 3 1/4 x H 4 1/2. Mtg. Dim. 2 1/2 x 3. List Price \$8.00. **Your Cost \$4.80**

CS-202 600 each side of center at 200 MA.; 2 1/2 V-10A; 7 1/2 V-3A; 5V-3A. CD mtg. L 6 x W 3 1/4 x H 4 1/2. Mtg. Dim. 2 3/4 x 3. List Price \$10.00. **Your Cost \$6.00**

CS-203 800 each side of center at 150 MA.; 600 V. D.C. CD mtg. L 4 1/2 x W 3 1/4 x H 4 1/2. Mtg. Dim. 2 1/2 x 2 1/2. List Price \$7.50. **Your Cost \$4.50**

CS-204 800 each side of center at 250 MA.; 650 V. D.C. CD mtg. L 6 x W 3 1/4 x H 4 1/2. Mtg. Dim. 3 1/4 x 2 1/2. List Price \$11.00. **Your Cost \$6.60**



FILAMENT TRANSFORMERS

CS-401 2 1/2 V.C.T. 20 A; 5 V.C.T. 3 A; 7 1/2 V.C.T. 6 1/2 A. 2500 V. insulation. L 5 x W 3 1/4 x H 4 1/2. Mtg. Dim. 2 1/4 x 2 1/4. List Price \$8.50. **Your Cost \$5.10**

CS-402 10 V.C.T. 6 1/2 A; 10 V.C.T. 6 1/2 A; 7 1/2 V.C.T. 2 1/2 A; 2 1/2 V.C.T. 5 A; 2500 V. insulation. CD mtg. L 6 x W 3 1/4 x H 4 1/2. Mtg. Dim. 3 1/4 x 2 1/2. List Price \$11.50. **Your Cost \$6.90**

CS-403 11 V.C.T. tapped at 12 and 14 volts at 10 A. 5000 V. insulation. CD mtg. L 5 1/4 x W 3 1/4 x H 4 1/2. Mtg. Dim. 2 1/4 x 3. List Price \$8.50. **Your Cost \$5.10**

CS-404 2 1/2 V.C.T. 12 A; 5000 V. insulation; 10 V.C.T. 6 1/2 A. CD mtg. L 4 1/4 x W 3 1/4 x H 4 1/2. Mtg. Dim. 2 1/4 x 2 1/4. List Price \$8.00. **Your Cost \$4.80**

CS-405 5-5 1/2 V.C.T. 20-22 A; 7000 V. insulation. CD mtg. L 5 1/4 x W 3 1/4 x H 4 1/2. Mtg. Dim. 2 1/4 x 3. List Price \$7.50. **Your Cost \$4.50**

CS-406 5 V.C.T. 20 A; 10,000 V. insulation. CD mtg. L 5 1/4 x W 3 1/4 x H 4 1/2. Mtg. Dim. 2 1/4 x 3. List Price \$10.00. **Your Cost \$6.00**

CS-407 2 1/2 V.C.T. 12 A; 7000 V. insulation. CV mtg. L 4 1/2 x W 3 1/4 x H 4 1/2. Mtg. Dim. 2 1/4 x 2 1/2. List Price \$4.50. **Your Cost \$2.70**

CS-408 7 1/2 V.C.T. 6 1/2 A; 5000 V. insulation. CV mtg. L 4 x W 3 1/4 x H 4 1/2. Mtg. Dim. 2 1/4 x 2 1/2. List Price \$4.50. **Your Cost \$2.70**

CS-409 10 V.C.T. 6 1/2 A; 5000 V. insulation. CV mtg. L 4 x W 3 1/4 x H 4 1/2. Mtg. Dim. 2 1/4 x 2 1/2. List Price \$5.00. **Your Cost \$3.00**

CS-410 5 V.C.T. 3 A; 5 V.C.T. 3 A; 5 V.C.T. 6 A; 5000 V. insulation. CV mtg. L 4 x W 3 1/4 x H 4 1/2. Mtg. Dim. 2 1/4 x 2 1/2. List Price \$5.00. **Your Cost \$3.00**

CS-411 2 1/2 V.C.T. 6 A; 2 1/2 V.C.T. 6 A; 2 1/2 V.C.T. 12 A; 10,000 V. insulation. CD mtg. L 6 x W 3 1/4 x H 4 1/2. Mtg. Dim. 3 1/4 x 2 1/2. List Price \$10.00. **Your Cost \$6.00**

CS-412 6.3 V.C.T. 5 A; 5 V.C.T. 8 A. CV mtg. L 4 1/4 x W 3 1/4 x H 4 1/2. Mtg. Dim. 2 1/4 x 2 1/4. List Price \$5.00. **Your Cost \$3.00**

SILCHROME REPLACEMENT AUDIO, FILAMENT AND FILTER COMPONENTS

are built to highest standards ever set for material of this type. All coils are accurately machine wound, vacuum impregnated and sealed, and finished with a beautiful silver coil wrapper bearing the lead code. The laminations used are of high grade silicon steel annealed for maximum permeability. The entire lamination structure is housed in a chromium plated channel frame bearing the UTC medalion. . . the mark of quality and reliability.



SMOOTHING CHOKES

CS-301 12 henry, 200 MA.; D.C. resistance 140 ohms. CV mtg. L 4 x W 3 1/4 x H 4 1/2. Mtg. Dim. 2 1/4 x 2 1/4. List Price \$5.00. **Your Cost \$3.00**

CS-302 12 henry, 300 MA.; D.C. resistance 105 ohms. CD mtg. L 4 1/4 x W 3 1/4 x H 4 1/2. Mtg. Dim. 2 1/4 x 3. List Price \$7.50. **Your Cost \$4.50**

CS-303 12 henry, 500 MA.; D.C. resistance 70 ohms. CD mtg. L 6 x W 3 1/4 x H 4 1/2. Mtg. Dim. 4 1/2 x 3. List Price \$13.00. **Your Cost \$7.80**

INPUT SWINGING CHOKES

CS-304 5/25 henry, 200 MA.; D.C. resistance 140 ohms. CV mtg. L 4 x W 3 1/4 x H 4 1/2. Mtg. Dim. 2 1/4 x 2 1/4. List Price \$5.00. **Your Cost \$3.00**

CS-305 5/25 henry, 300 MA.; D.C. resistance 105 ohms. CD mtg. L 4 1/4 x W 3 1/4 x H 4 1/2. Mtg. Dim. 2 1/4 x 3. List Price \$7.50. **Your Cost \$4.50**

CS-306 5/25 henry, 500 MA.; D.C. resistance 70 ohms. CD mtg. L 6 x W 3 1/4 x H 4 1/2. Mtg. Dim. 4 1/2 x 3. List Price \$13.00. **Your Cost \$7.80**

OPEN CHANNEL FRAME AUDIO TRANSFORMERS

Horizontal Mounting Centers, 2-13/16" L., 3-5/16" W., 1 1/4" H., 2"

U-31 1 plate to 1 grid 3:1 ratio. List Price \$1.75. **Your Cost \$1.05**

U-32 1 plate to 2 grids 2:1 ratio. List Price \$1.85. **Your Cost \$1.11**

U-32X 1 plate to 2 grids 2:1 ratio. Split secondary. List Price \$1.90. **Your Cost \$1.14**

U-33 2 plates to 2 grids 1.75:1 ratio. List Price \$2.00. **Your Cost \$1.20**

U-47 Single power pentode to single voice coil. List Price \$1.50. **Your Cost \$0.90c**

U-45 Single power triode to single voice coil. List Price \$1.50. **Your Cost \$0.90c**

U-245 Push Pull power triodes to single voice coil. List Price \$1.60. **Your Cost \$0.96c**

UNCASED MIGHTY MITE AUDIO TRANSFORMERS

For Transceivers—For Compact Head Amplifiers—For Pee Wee and Aerophone Receivers

Horizontal Mounting Centers, 2 3/4" L., 2 1/4" W., 1 1/4" H., 1-11/16"

U-41 Interstate audio 4:1 ratio. List Price \$1.50. **Your Cost \$0.90c**

U-15 Single plate to two grids 2 1/2:1 ratio. List Price \$1.55. **Your Cost \$0.93c**

UPM Single pentode 18, 20, 33, 41, 42, 2A5 plate to 4000 and 2000 ohms. List Price \$1.75. **Your Cost \$1.05**

UMG Double button mike to 1 grid. List Price \$1.60. **Your Cost \$0.96c**

UTC Single plate and carbon mike to single grid. List Price \$1.65. **Your Cost \$0.99c**

UHO Single 56, 27, or 864 plate to 500 and 200 ohms. List Price \$2.02. **Your Cost \$1.21**

U30B Driver 30 plate to Class B 19, 49, 79, 89 grids. List Price \$1.75. **Your Cost \$1.05**

U19B Class B 19, 49, 79 or 89 plates to 5000 or 3500 ohms. List Price \$1.75. **Your Cost \$1.05**

all of the above items are in stock at all times

LOT NEXT TO STORE OR LOADING ZONE

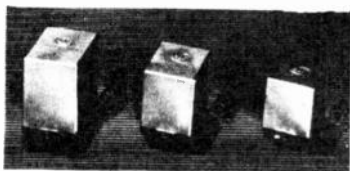
WALTER ASHE RADIO COMPANY

1100 Pine Street St. Louis, Missouri



Most Complete Transformer Line in the World!

UTC CHROMSHIELD TRANSFORMERS



Gleaming chromium plate! Welded cases! Vacuum treated and humidity proof. Transformers fully clamped internally. All outputs with a variety of impedances! Trim professional units all physically symmetrical and with uniform mounting arrangements.

Seven Chromshield Cases

Type	L	W	H	Mounting Dimen.
C-1	3	1 1/4	1-11/16	2-7/16
C-2	3 3/4	1 3/4	2-1/16	2 3/4
C-3	3 3/4	2	2 3/4	3 3/4
C-4	4 1/4	2 3/4	2 3/4	3 3/4
C-5	5	2 3/4	3 3/4	1-15/16x4 1/4
C-6	6	3 3/4	4 1/4	1 1/2x5 1/4
C-7	4 1/4	4 1/4	4 1/4	3-7/16x4-3/16

CLASS A INPUT TRANSFORMERS

CS-1 1 plate to 1 grid. 3 3/4:1 ratio. C-2 mtg. List Price \$2.35. **Your Cost \$1.41**
CS-2 1 plate to 2 grids, split secondary. 2:1 ratio. C-2 mtg. List Price \$2.50. **Your Cost \$1.50**
CS-3 Push pull plates to push pull grids. 1.6:1 ratio. C-3 mtg. List Price \$2.75. **Your Cost \$1.65**
CS-4 Low or high impedance pickup to grid. Pri. 500, 1000, 2000 ohms. C-2 mtg. List Price \$3.00. **Your Cost \$1.80**
CS-5 Single or double button mike to 1 grid. C-2 mtg. List Price \$2.50. **Your Cost \$1.50**
CS-6 Single or double button mike to 2 grids. C-2 mtg. List Price \$3.00. **Your Cost \$1.80**
CS-10 Single plate and carbon mike to one or two grids. C-2 mtg. List Price \$3.50. **Your Cost \$2.10**
CS-2W Single plate to push pull grids. Wide range response, 1:1 ratio. C-3 mtg. List Price \$3.50. **Your Cost \$2.10**
The new chromshield VARIMATCH modulation transformer incorporates a modified VARIMATCH coil structure making possible universal matching from all the popular modulator tubes to a 5,000 or 3,500 ohm rf load. It will handle 20 watts of audio.
CS-R designed for class A, AB and B tubes like the 45, 50, 2A3, 42, 59, 46, 47, 2A5, 6F6, 6V6, 6B5, 6A6, 53, 79 and similar tubes to an rf load of 5000 and 3500 ohms. C-4 case. List Price \$3.50. **Your Cost \$2.10**
CS-L will match same tubes as above but to a 500, 15, 8, 4 or 2 ohm line. C-4 case. List Price \$3.75. **Your Cost \$2.25**
CS-V will match same tubes as CS-R but to a 15, 8, 4 and 2 ohm line. C-4 Case. List Price \$3.25. **Your Cost \$1.95**

MATCHING TRANSFORMERS

CS-9 Mixing carbon mike, 500 or 200 ohm line. C-3 mtg. List Price \$3.50. **Your Cost \$2.10**
CS-26 Single 26, 56, 27, 55, 77, 6C5 triode or 864 plate to 500 or 200 ohms. C-2 mtg. List Price \$3.00. **Your Cost \$1.80**
CS-27 Push pull 26, 56, 27, 55, 77, 6C5 triodes or 864 plates to 500 to 200 ohms. C-3 mtg. List Price \$3.50. **Your Cost \$2.10**

CS-28 Line to speaker matching transformer. Input 4000 ohms and 500 ohms. G. put 15, 8, 4, and 2 ohms. Will handle up to 15 watts. C-4 mtg. List Price \$4.50. **Your Cost \$2.70**

A PRIME AND CLASS B INPUT TRANSFORMERS

CS-29 Driver plate to 53, 6A6, 49, 79 or 89 grids. C-4 mtg. List Price \$2.75. **Your Cost \$1.65**
CS-30 Driver 46 or 59 plate to 46 or 59 grids. C-4 mtg. List Price \$2.75. **Your Cost \$1.65**
CS-291 Single 2A3, 45, 42, 2A5, 6F6, 6D5 triode plate to push pull A prime 2A3, 45, 42, 2A5, 6F6, 6D5 grids. C-3 mtg. List Price \$3.75. **Your Cost \$2.25**
CS-292 Push pull 53 or 6A6 triode plates to two or four class B 53 or 6A6 grids. C-3 mtg. List Price \$3.25. **Your Cost \$1.95**
CS-293 Push pull triode 56, 37, 57, 77, 6C6, 6C5 plates to two or four A prime 45, 2A3, 42, 2A5, 6F6, 6D5, 6L6 grids. C-3 mtg. List Price \$3.50. **Your Cost \$2.10**
CS-456 Push pull self bias 6L6's AB to 500, 15, 8, 4, 2 ohms. C-5 mtg. List Price \$7.50. **Your Cost \$4.50**
CS-457 Push pull fixed bias or four self biased 6L6's, AB to 500, 15, 8, 4, 2 ohms. List Price \$10.00. **Your Cost \$6.00**

HUMIDITY PROOF CHROMSHIELD TRANSCEIVER AUDIO UNITS

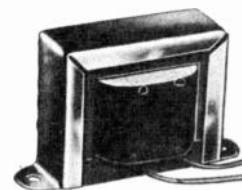
All Chromshield Transceiver Units Fit in the C-I Case
CS-101 Interstage audio 4:1 ratio. List Price \$1.95. **Your Cost \$1.17**
CS-102 Single plate to 2 grids, 2 1/2:1 ratio. List Price \$2.00. **Your Cost \$1.20**
CS-103 Single or double button mike to 1 grid. List Price \$2.00. **Your Cost \$1.20**
CS-104 Single plate and carbon mike to 1 grid. List Price \$2.25. **Your Cost \$1.35**
CS-105 Velocity mike to 500 to 200 ohms. List Price \$2.25. **Your Cost \$1.35**
CS-106 Single 56, 6C6, 6C5, 864 plate to 500 or 200 ohms. List Price \$2.25. **Your Cost \$1.35**
CS-107 Driver plate to 19, 49, 79, 89 grids. List Price \$2.25. **Your Cost \$1.35**
CS-108 Class B 19, 49, 79, 89 plates to 5000 or 3500 ohms. List Price \$2.75. **Your Cost \$1.65**

FILTER AND AUDIO CHOKES, FILAMENT TRANSFORMERS

CS-37 Filter choke, 25 henrys 30 MA.; resistance 900 ohms. C-2 mtg. List Price \$2.00. **Your Cost \$1.20**
CS-38 Filter choke, 15 henrys 60 MA.; resistance 240 ohms. C-2 mtg. List Price \$2.00. **Your Cost \$1.20**
CS-39 Filter choke, 20 henrys 90 MA.; resistance 400 ohms. C-4 mtg. List Price \$2.50. **Your Cost \$1.50**
CS-40 Filter choke, 30 henrys 75 MA.; resistance 350 ohms. C-4 mtg. List Price \$3.00. **Your Cost \$1.80**
CS-41 Filter choke, 10 henrys 75 MA.; 95 ohms. C-4 mtg. List Price \$3.00. **Your Cost \$1.80**
CS-42 Class B input choke, Max. D.C. 175 MA.; C-4 mtg. List Price \$3.00. **Your Cost \$1.80**
CS-43 Center tapped audio choke for push pull triode plates. Resistance 12,000 ohms. C-3 mtg. List Price \$3.50. **Your Cost \$2.10**
CS-44 Detector plate shunt choke. Max. D.C. 3 MA.; C-2 mtg. List Price \$2.25. **Your Cost \$1.35**

CS-45 Pri. 115 A.C. Sec. 2 1/2 V.C.T. 6 A. C-2 mtg. List Price \$1.75. **Your Cost \$1.05**
CS-46 Pri. 115 A.C. Sec. 6.3 V.C.T. 3A. C-2 mtg. List Price \$2.25. **Your Cost \$1.35**
CS-47 Pri. 115 A.C. Sec. 2 1/2 V.C.T. 12 A. C-3 mtg. List Price \$2.25. **Your Cost \$1.35**
CS-48 Pri. 115 A.C. Sec. 5 V. 4 A. C-3 mtg. List Price \$2.25. **Your Cost \$1.35**
CS-49 Pri. 115 A.C. Sec. 7 1/2 V.C.T. 3 A. C-3 mtg. List Price \$2.25. **Your Cost \$1.35**

UNCASED FILTER, CHOKES AND FILAMENT TRANSFORMERS



PC-1 10 henrys, 40 MA.; 200 ohms D.C. List Price 95c. **Your Cost 57c**
PC-2 15 henrys, 35 MA.; 300 ohms D.C. List Price 95c. **Your Cost 57c**
PC-3 16 henrys, 30 MA.; 450 ohms D.C. List Price 95c. **Your Cost 57c**
PC-4 20 henrys, 25 MA.; 600 ohms D.C. List Price \$1.10. **Your Cost 66c**
PC-5 25 henrys, 25 MA.; 1000 ohms D.C. List Price \$1.25. **Your Cost 75c**
PC-5X 5 henrys, 125 MA.; 150 ohms D.C. List Price \$1.25. **Your Cost 75c**
PC-6 10 henrys, 75 MA.; 265 ohms D.C. List Price \$1.25. **Your Cost 75c**
PC-7 15 henrys, 100 MA.; 450 ohms D.C. List Price \$2.00. **Your Cost \$1.20**
PC-8 1 henry, 250 MA.; 40 ohms D.C. List Price \$2.50. **Your Cost \$1.50**
PC-9 8 henrys, 150 MA.; 105 ohms D.C. List Price \$2.50. **Your Cost \$1.50**
PC-10 Class B input choke. 165 MA.; D.C. List Price \$2.50. **Your Cost \$1.50**
PC-11 Parallel feed choke. Max. D.C., 3 MA. List Price \$1.75. **Your Cost \$1.05**
PC-12 15 henrys, 250 MA.; 120 ohms D.C. List Price \$5.50. **Your Cost \$3.30**
PC-13 Class B input choke. Max. D.C. 350 MA. List Price \$5.50. **Your Cost \$3.30**
FT-1 Pri. 115 A.C. Secondary 2 1/2 V.C.T. 3 A. List Price \$1.25. **Your Cost 75c**
FT-2 Pri. 115 A.C. Secondary 6.3 V.C.T. 1.2 A. List Price \$1.25. **Your Cost 75c**
FT-3 Pri. 115 A.C. Secondary 2 1/2 V.C.T. 6 A. List Price \$1.50. **Your Cost 90c**
FT-4 Pri. 115 A.C. Secondary 6.3 V.C.T. 2 1/2 A. List Price \$1.75. **Your Cost \$1.05**
FT-5 Pri. 115 A.C. Secondary 2 1/2 V.C.T. 10 A. List Price \$1.75. **Your Cost \$1.05**
FT-6 Pri. 115 A.C. Secondary 5 V. 3 A. List Price \$1.75. **Your Cost \$1.05**
FT-7 Pri. 115 A.C. Secondary 7 1/2 V.C.T. 3 A. List Price \$1.75. **Your Cost 90c**

all of the above items are in stock at all times

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St. Louis, Missouri

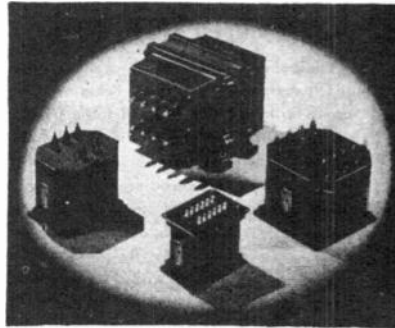


Most Complete Transformer Line in the World!

UTC TRANSMITTING COMPONENTS

The transmitting type of UTC Class B audio filter and power components have been developed for and are now widely used by Commercial Telephone, Telegraph, Communication and Broadcast systems. They are particularly well adapted for use in AMATEUR TRANSMITTER applications.

All audio, filter and power units are fully shielded in symmetrically housed cases and present a thoroughly professional appearance when grouped in finished equipment. PA type cases may be mounted with terminals on top or below the chassis. All units are fully



impregnated and then sealed in their cases with a special heat dissipating compound.

Mounting Dimensions

PA-1	1-15/16x2-7/16
PA-2	2-7/16x3 3/4
PA-3	3-1/16x4-3/16
PA-4	3 3/4x5-7/32
PA-5	4 3/4x6 3/8
PA-6	7x7

Overall Dimensions

	L	W	H
PA-1	2 1/2	3	3
PA-2	3-1/16	4 1/2	3
PA-3	3 3/4	4 3/4	4 1/2
PA-4	6	4 1/2	4 3/4
PA-5	7	5 3/4	5 1/2
PA-6	7 3/4	7 3/4	7 3/4

PLATE TRANSFORMERS

Primary 105, 115, 220, 230 Volts A. C. 50-60 Cycles

PA-110 515 or 625 each side of center at 300 M.A., 400 V.D.C. or 500 V.D.C. PA-3, List Price \$10.00. **Your Cost**\$6.00
PA-111 750 or 950 each side of center at 350 M.A., D.C. voltage 600 or 750. PA-4, List Price \$17.00. **Your Cost**\$10.20
PA-112 1250 or 1500 each side of center at 500 M.A.; D.C. voltage 1050 or 1250. PA-6, List Price \$32.00. **Your Cost**\$19.20
PA-113 1750 or 2100 each side of center at 500 M.A.; D.C. voltage 1500 or 1750. PA-6, List Price \$43.50. **Your Cost**\$26.10
PA-114 1750, 2350, 3000 or 3500 each side of center at 500 M.A.; D.C. voltage 1500, 2000, 2500 or 3000. UTS mtg. List Price \$76.00. **Your Cost**\$45.60
PA-154 3500, 4000 each side of center at 500 M.A.; 3050 V.D.C. or 3500 V.D.C. UTS Case. List Price \$100.00. **Your Cost**\$60.00
PA-155 1250 or 1500 each side of center at 750 M.A.; D.C. voltage 1050 or 1250 U.T.S. case. List Price \$50.00. **Your Cost**\$30.00
PA-115 C bias plate transformer for class B 203A's, 830 B's, 800's, or 210's using one or two 82 rectifiers. PA-3, List Price \$10.00. **Your Cost**\$6.00
PA-116 1250 or 1500 each side of center at 300 M.A.; D.C. voltage 1050 or 1250. PA-5, List Price \$23.00. **Your Cost**\$13.80
PA-117 3500 or 3000 each side of center at 1 ampere, 2620 V.D.C. or 3050 V.D.C. UTS case. List Price \$115.00. **Your Cost**\$69.00
PA-118 1750 or 2400 each side of center at 325 M.A.; D.C. voltage 1500 or 2000. PA-6 mtg. List Price \$35.00. **Your Cost**\$21.00
PA-119 1500 or 1750 each side of center at 1 amp. D.C. voltage 1250 or 1500. UTS case, List Price \$76.00. **Your Cost**\$45.60

Note: Operating the above transformers on 115 volt line the D.C. output voltage can be reduced to half of normal value, for reduced power operation, by switching to the 220 volt tap.

CLASS B INPUT SWINGING CHOKES

PA-101 Swinging action 5 to 25 henrys, current range 15 to 150 M.A., ohmic resistance 115. PA-2 case. List Price \$5.00. **Your Cost**\$3.00
PA-103 Swinging action 5 to 25 henrys, current range 20 to 200 M.A., ohmic resistance 110. PA-3 case. List Price \$8.00. **Your Cost**\$4.80
PA-105 Swinging action 6 to 30 henrys, current range 25 to 250 M.A., ohmic resistance 80. PA-4 case. List Price \$12.00. **Your Cost**\$7.20

PA-109 Swinging action 5 to 25 henrys, current range 75 to 500 M.A., ohmic resistance 60. PA-5 case. List Price \$20.00. **Your Cost**\$12.00
PA-10 Swinging action 5 to 25 henrys, current range 100 to 1000 M.A., ohmic resistance 50. UTS case. List Price \$35.00. **Your Cost**\$21.00

TRAP RESONANT SMOOTHING CHOKES

Smoothing Chokes Have an Off Center Tap for Hum Bucking Arrangements

PA-100 Inductance 8 henrys, D.C. output 150 M.A., ohmic resistance 115. PA-2 case. List Price \$5.00. **Your Cost**\$3.00
PA-102 Inductance 10 henrys, D.C. output 200 M.A., ohmic resistance 110. PA 3 case. List Price \$8.00. **Your Cost**\$4.80
PA-104 Inductance 12 henrys, D.C. output 250 M.A., ohmic resistance 90. PA 4 case. List Price \$12.00. **Your Cost**\$7.20
PA-108 Inductance 10 henrys, D.C. output 500 M.A., ohmic resistance 60. PA 5 case. List Price \$20.00. **Your Cost**\$12.00
PA-15 Inductance 10 henrys, D.C. output 1000 M.A., ohmic resistance 50. UTS case. List Price \$35.00. **Your Cost**\$21.00

FILAMENT TRANSFORMERS

Types PA-34 to PA-127 Tapped at 105-115, 220, 230 Volts A.C., 50-60 Cycles

PA-34 2 1/2 V.C.T. 10 amps. for 2-866's—5000 V. insulation. PA-2 List Price \$7.50. **Your Cost**\$4.50
PA-120 2 1/2 V.C.T. 10 amps. for 2-866's—10,000 V. insulation. PA-3. List price \$9.00. **Your Cost**\$5.40
PA-121 5 V.C.T. 20 amps. for 2-872's—10,000 V. insulation PA-3. List Price \$14.00. **Your Cost**\$8.40
PA-122 7 1/2 V.C.T. at 6.5 amps. for 2-800's, RK-88's, 825's, 210's 5000 Volt insulation. PA-3. List Price \$11.00. **Your Cost**\$6.60
PA-124 10 V.C.T. 7 amps. for 2-203 A's, 342 A's, 211's, 845's, 852's, 860's, 217 C's, 10,000 V. insulation. PA-3. List Price \$12.00. **Your Cost**\$7.20
PA-126 2-14 V.C.T. 12.5 amp. windings tapped at 11 or 10 volts, 5000 V. insulation — for 04 A's, 49's, HF-200's, HF-300's or F100 A's. PA-4. List Price \$20.00. **Your Cost**\$12.00
PA-128 5 V.C.T. 12 amps. for 3-351's, 2-50T's or 1-150 T. 7000 V. insulation PA-3. List Price \$10.00. **Your Cost**\$6.00
PA-29 Secondaries. 2 1/2 V.C.T. 5 A., 2 1/2 V.C.T. 5 A., 5 V. C. T. 3 A. PA-2. List Price \$6.25. **Your Cost**\$3.75
PA-30 Secondaries. 2 1/2 V.C.T. 5 A., 7 1/2 V.C.T. 2.5 A., 7 1/2 V.C.T. 2.5 A., PA-2. List Price \$6.75. **Your Cost**\$4.05

PA-31 Secondaries. 2 1/2 V.C.T. 5 A., 5 V.C.T. 3 A., 7 1/2 V.C.T. 2 1/2 A. PA-2. List Price \$6.75. **Your Cost**\$4.05
PA-32 Secondaries. 5 V.C.T. 3 A., 5 V.C.T. 3 A., 5 V.C.T. 3 A. PA-2. List Price \$6.75. **Your Cost**\$4.05
PA-33X Secondaries. 5 V.C.T. 3 A., C.T. 2 1/2 A., 6.3 V.C.T. 3 A., 6.3 V.C.T. 3 A. PA-2. List Price \$6.75. **Your Cost**\$4.05
Note: Types PA-29, 30, 31, 32, 33 are insulated for 2800 volts. Primaries designed only for 115 volts A.C., 50-60 cycles.

VARIPOWER AUTOFORMERS

These units are designed to serve three functions, namely, to effect reduced power for transmitter operation, to take care of line voltage variations from 95 to 130 volts, and to permit minor voltage variation from other transformers. Taps are provided at 55, 75, 95, 100, 105, 110, 115, 120, 125, and 130 volts. Output voltages from 0 to 130 volts in 5V. steps can be obtained.

VA-1 150 watt output rating. List Price \$6.00. **Your Cost**\$3.60
VA-2 250 watt output rating. List Price \$7.50. **Your Cost**\$4.50
VA-3 500 watt output rating. List Price \$10.00. **Your Cost**\$6.00
VA-4 1000 watt output rating. List Price \$15.00. **Your Cost**\$9.00
VA-5 3000 watt output rating. List Price \$20.00. **Your Cost**\$12.00



CHROMSHIELD STEP DOWN TRANSFORMERS

220-240 to 110-120 Volts, 50-60 Cycles

CS-120 85 Watt capacity. List Price \$4.50. **Your Cost**\$2.70
CS-121 125 Watt capacity. List Price \$5.50. **Your Cost**\$3.30
CS-122 175 Watt capacity. List Price \$6.50. **Your Cost**\$3.90
CS-123 250 Watt capacity. List Price \$7.50. **Your Cost**\$4.50

none of the above items stocked. on special order only

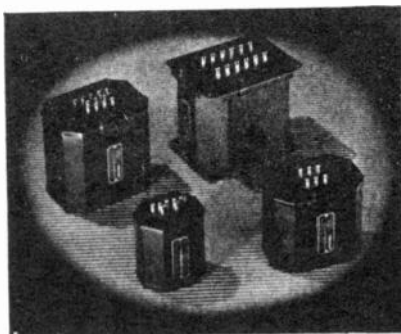
LOT NEXT TO STORE OR LOADING ZONE

WALTER ASHE RADIO COMPANY

1100 Pine Street St. Louis, Missouri



Most Complete Transformer Line in the World!



PUBLIC ADDRESS COMPONENTS

The Public Address series of audio, filter and power units described below are designed to satisfy the demand for a popular priced quality line having the many exclusive and Universal features associated with 'UTC' products. All cases are finished in a black eggshell enamel to suit exacting commercial requirements as to appearance. Each transformer may be fastened to chassis or rack panel with lugs either at top or bottom. The housings are physically symmetrical and similar in construction and when grouped in finished equipment present a thoroughly professional appearance. Transformers PA-134, 135 and 136, are now manufactured in the hum-bucking type of construction. In consequence they have an extremely low hum pickup and are excellent for low level work.

MOUNTING DIMENSIONS

(With Flange)		(Without Flange)	
PA-1	1-15/16 x 2-7/16	PA-1	1-13/16
PA-2	2-7/16 x 3-7/16	PA-2	1-5/8 x 3-1/16
PA-3	3-1/16 x 4-5/16	PA-3	1-13/16 x 3-7/8

OVERALL DIMENSIONS

	L	W	H
PA-1	2 3/4	3	3
PA-2	3-1/6	4 1/4	4 1/4
PA-3	3 3/4	4 1/4	4 1/4

INPUT TRANSFORMERS CLASS A

PA-131 Transformer from 1 plate to 1 grid. 3:1 ratio. PA-1. List Price \$4.50.
Your Cost\$2.70
PA-132 From 1 plate to 2 grids. 2:1 ratio each side. Split sec. PA-1. List Price \$5.00. **Your Cost**\$3.00
PA-133 From 2 plates to 2 grids. 1:75 ratio each side. Primary and secondary each in two sections. PA-1. List Price \$6.00. **Your Cost**\$3.60
PA-233 From two 56, 6C6 triode, 6C5, or similar tubes to push pull 45's, 2A3's or 6L6's self or fixed bias. PA-1. List Price \$6.00. **Your Cost**\$3.60
PA-333 This input transformer is designed to operate from 6C5's, or similar driver tubes to two 6L6's fixed bias. PA-1. List Price \$6.00. **Your Cost**\$3.60
PA-433 From 45 or 2A3 plates to two or four fixed bias 6L6 grids. PA-2. List Price \$6.50. **Your Cost**\$3.90
PA-134 500, 200, or 50 ohm line to single grid. PA-1. List Price \$6.50. **Your Cost**\$3.90
PA-135 500, 200, or 50 ohm line to push pull grids. PA-1. List Price \$7.50. **Your Cost**\$4.50
PA-136 Single plate or pickup and carbon mike or low impedance pickup to one or two grids. PA-1. List Price \$7.50. **Your Cost**\$4.50

MIXING, MATCHING TRANSFORMERS

PA-137 Mixing 500, 200, or 50 ohm line to 500, 200 or 50 ohm line. PA-1. List Price \$5.50. **Your Cost**\$3.30
PA-138 Audio line matching. Will handle 20 watts audio power. Input 500 or 200 ohm line. Output 16, 8, 5, 3 and 1.5 ohms. PA-2. List Price \$7.50. **Your Cost**\$4.50
PA-139 Audio line matching. Will handle 30 watts audio power. Input 500 or 200 ohm line. Output 16, 8, 5, 3, 1.5 ohms. PA-3. List Price \$12.50. **Your Cost**\$7.50

REACTORS

PA-40 Filter choke. 12 henrys. Max. D.C. 200 MA. Resistance 110 ohms. PA-2. List Price \$4.50. **Your Cost**\$2.70
PA-41 Class B input filter choke for 46, 53, and 59 tubes. Max. D.C. 200 MA. Resistance 100 ohms. PA-2. List Price \$4.50. **Your Cost**\$2.70

PA-43 Filter choke. 15 henrys. Max. D.C. 165 MA. Resistance 375 ohms. PA-2. List Price \$4.50. **Your Cost**\$2.70
PA-44 Filter choke. 30 henrys. Max. D.C. 100 MA. Resistance 375 ohms. PA-2. List Price \$4.00. **Your Cost**\$2.40
PA-45 Parallel feed audio choke. 250 henrys. Max. D.C. 15 MA. Resistance 4500 ohms. PA-1. List Price \$4.50. **Your Cost**\$2.70
PA-48C High inductance filter choke 100 hys, maximum D.C. 50 MA., resistance 2500 ohms. PA-1. List Price \$4.50. **Your Cost**\$2.70
PA-35 Cathode ray transformer for 906 tube. Pri. 115-50/60 cy. Sec. 1000 volts A.C. at 15 MA.; 80 volts A. C. at 20 MA. for sweep circuit. 2 1/2 V.C.T. at 3A. 5V-3A. PA-2. List Price \$8.00. **Your Cost**\$4.80
PA-913 Cathode ray transformer for 913 tube. Pri. 115-50/60 cy. Sec. 950 V.C.T. at 10 MA. 6.3 volts at 1.2 A. 2 1/2 volts at 1.5 A. 5 volts at 3 A. PA-2. List Price \$4.00. **Your Cost**\$2.40
PA-430 Low voltage high current power transformer. Pri. 115 V.50/60 cy. Secondaries 165-100-0-100-165 at 250 MA. 5 V-3A. 6.3 V.C.T. at 2A. PA-2. List Price \$6.00. **Your Cost**\$3.60

CLASS A OUTPUT TRANSFORMERS

PA-140 From a triode plate like 864, 27, 112A, 55, 30 to 500, 200 or 50 ohms. List Price \$6.50. **Your Cost**\$3.90
PA-141 From push pull triode plates like 864's, 27's, 112A's, 30's to 500, 200 or 50 ohms. List Price \$7.50. **Your Cost**\$4.50

POWER AND FILAMENT TRANSFORMERS

PA-21 Plate transformer for single 45, 47, 59 or class B 79 tubes. Primary 115 V. A.C. 60 cycles. Secondaries: 300-0-300 at 75 MA.; 2 1/2 V.C.T. 3 A., 6.3 V.C.T. 2.5 A., 2 1/2 V.C.T. 6A. PA-3. List Price \$8.00. **Your Cost**\$4.80
PA-22 Plate transformer for push pull 45, 59, 47, 2A3 tubes, or class B 53's. Pri. 115 V. A.C. 60 cycles. Secondaries: 400-0-400 at 125 MA.; 2 1/2 V.C.T. 5 A., 2 1/2 V.C.T. 10 A., 5 V.C.T. 3 A. PA-3. List Price \$10.00. **Your Cost**\$6.00

PA-425 Plate transformer for parallel push pull 45A prime tubes. Pri. 115 V. A.C. 60 cycles. Secondaries 400-0-400 at 200 MA.; 2 1/2 V.C.T. 6A.; 2 1/2 V. C. T. 10A. 5V.C.T. 3A., 6.3 V.C.T. 3A. PA-3. List Price \$12.50. **Your Cost**\$7.50
PA-426 Plate transformer for class B 6A6 and A prime 42 tubes Pri. 115 V.A.C. 60 cycles. Secondaries 400-0-400 at 125 MA.; 2 1/2 V.C.T. 6 A., 6.3 V.C.T. 4 A. 5 V.C.T. 3 A. PA-3. List Price \$10.00. **Your Cost**\$6.00
PA-428 Power transformer for push pull 6L6 tubes self or fixed bias primary 115 V. A.C., 60 cycles. Secondaries 450-0-450 at 250 MA.; 6.3 V.C.T.-4A, 6.3 V.C.T.-3A also tapped for 2 1/2 V-3A; 2 1/2 V.C.T.-3A; 5 V.C.T. 3A. Taps on high voltage winding for bias supply rectifier. PA-4 List Price \$14.00. **Your Cost**\$8.40
PA-431 Plate and filament supply for 4-6L6's in fixed bias. Pri. 115, 50/60 cy. Secondaries: 500-425-0-425-500 at 500 MA. fixed bias winding for 6L6's, 5V-6A; 5V-3A; 6.3 V.C.T.-5A; 6.3 V.C.T.-3A; PA-5. List Price \$22.50. **Your Cost**\$13.50

CLASS A AND CLASS B OUTPUTS

PA-14 For 4-25L6's in push pull parallel 1000 ohms plate to plate. Secondary 500, 200, 16, 8, 5, 3, 1 1/2 ohms. PA-2. List Price \$7.00. **Your Cost**\$4.20
PA-15 8000 ohms plate to plate for class A, in push pull: 250's, 245's, 43's, single: 211, 843, 842, 205D, 47, to 500, 200, 16, 8, 5, 3, 1.5 ohms. PA-2 case. List Price \$7.00. **Your Cost**\$4.20
PA-16 5000 ohms plate to plate or 3000 ohms plate to plate, for 5000 ohms in push pull; self bias 2A3's, W.E. 275A's; single: 59 triode or 71A; for 3000 ohms in push pull; fixed bias 2A3's, single W.E. 52A, to 500, 200, 16, 8, 5, 3, 1.5 ohms. PA-2 case. List Price \$7.00. **Your Cost**\$4.20
PA-19 10,000 ohms plate to plate or 6000 ohms plate to plate, for 10,000 ohms, class A push pull 59 triodes, 71A's, 6B5's, single 210, 41, 268A, 2A3. Class B push pull 49's, 53's, 79's, 89's; for 6000 ohms, class A push pull 52A's, single 31, 46, 59 pentode. Class B push pull 46's, 59's, to 500, 200, 16, 8, 5, 3, 1.5 ohms. PA-2 case. List Price \$7.00. **Your Cost**\$4.20
PA-710 20,000 ohms plate to plate or 14,000 ohms plate to plate, for 20,000 ohms, push pull 210's; for 14,000 ohms, push pull 47's, 2A5's, 42's used as pentodes, to 500, 200, 16, 8, 5, 3, 1.5 ohms. PA-2 case. List Price \$7.00. **Your Cost**\$4.20
PA-245 6000 ohms plate to plate and 3500 ohms plate to plate, for 6000 ohms, class A prime 45's self bias. Class B 46's and 59's. Class A W.E. 252A's; for 3500 ohms, class A prime 45's fixed bias, to 500, 200, 16, 8, 5, 3, 1.5 ohms. PA-2 case. List Price \$7.00. **Your Cost**\$4.20
PA-445 3000 ohms plate to plate and 1750 ohms plate to plate, for 3000 ohms four 45's in push pull parallel A prime self bias. Four W.E. 252A's in push pull parallel class A. Four 46's or 59's in push pull parallel class B; for 1750 ohms, four 45's in push pull parallel A prime fixed bias, to 500, 200, 16, 8, 5, 3, 1.5 ohms. PA-3 case. List Price \$12.50. **Your Cost**\$7.50
PA-216 6600 ohms plate to plate for push pull 6L6's self bias, 35-40 watts output, to 500, 200, 16, 8, 5, 3, 1.5 ohms. PA-3 case. List Price \$10.00. **Your Cost**\$6.00
PA-416 3800 and 3300 ohms plate to plate, for 3800 ohms, two 6L6's fixed bias, 60 watts output; for 3300 ohms, four 6L6's self bias, 60-80 watts output, to 500, 200, 16, 8, 5, 3, 1.5 ohms. PA-4 case. List Price \$15.00. **Your Cost**\$9.00
 *These transformers incorporate the new 'UTC' Feedback Winding, which reduces harmonic distortion, increases available power and reduces resistance tremendously. No resistors or condensers are necessary.

all the above items are in stock at all times

IT'S EASY TO PARK AT WALTER ASHE...

1100 Pine Street

St. Louis, Missouri



Most Complete Transformer Line in the World!

LINEAR STANDARD

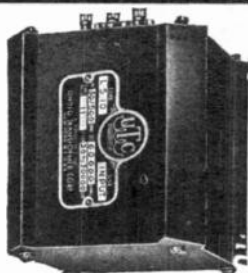
- **High Permeability Cast Shield** maximum shielding from inductive pickup.
- **True Hum Balancing Coil Structure** maximum neutralization of stray fields.
- **Balanced Variable Impedance Line** permits highest fidelity on every tap of a universal unit no line reflections or transverse coupling.
- **Reversible Mounting** permits above chassis or subchassis wiring.
- **Full Electrostatic Shielding Between Windings** brought out to separate terminal.
- **Multiple Coil, Semi-Toroidal Coil Structure** minimum distributed capacity and leakage reactance.
- **Precision Winding** accuracy of windings .1%, perfect balance of inductance and capacity; exact impedance reflection.
- **Hiperm-Alloy** a Stable high permeability nickel-iron core material.
- **High Fidelity** UTC Linear Standard transformers are the only audio units with a guaranteed uniform response, from 30 to 20,000 cycles ± 1 db.

LOW IMPEDANCE TO GRID TRANSFORMERS

Type No.	Application	Primary Impedance	Secondary Impedance	Shielding and hum reduction	Case No. List Price	Your Cost
LS-10	Low impedance mike, pick-up, or multiple line to grid	30, 125, 200, 250, 333, 500 ohms	60,000 ohms in two sections	Dual alloy shield—74dB	LS-1 13.00	\$9.00
LS-10X	As above	As above	30,000 ohms	Quadruple alloy shield—92dB	LS-1 20.00	\$12.00
LS-12	Low impedance mike, pick-up, or multiple line to push pull grids	50, 125, 200, 250, 333, 500 ohms	120,000 ohms overall, in two sections	Dual alloy shield—74dB	LS-1 20.00	\$12.00
LS-12X	As above	As above	80,000 ohms overall, in two sections	Quadruple alloy shield—92dB	LS-1 25.00	\$15.00
LS-14	Low impedance mike, pick-up, or parallel mixer to grid	2.5, 5.5, 10, 15, 22, 30, 38, 60 ohms	60,000 ohms in 2 sections	Dual alloy shield—74dB	LS-1 20.00	\$12.00
LS-14X	As above	As above	50,000 ohms	Quadruple alloy shield—92dB	LS-1 25.00	\$15.00
LS-15	Three isolated lines or pads to one or two grids	30, 50, 200, 250 ohms each primary	60,000 ohms overall, in two sections	Dual alloy shield—74dB	LS-1 20.00	\$12.00
LS-15X	As above	As above	As above	Quadruple alloy shield—92dB	LS-1 23.00	\$15.00
LS-18	High level multiple line to push pull grids	30, 125, 200, 250, 333, 500 ohms	50,000 ohms overall, in two sections	Alloy casting—90dB	LS-2 27.00	\$13.20

PLATE, CRYSTAL, PHOTOCCELL AND BRIDGING TO LINE TRANSFORMERS

Type No.	Application	Primary Impedance	Secondary Impedance	Shielding and hum reduction	Case No. List Price	Your Cost
LS-50	Single plate to multiple line	8,000 to 15,000 ohms	50, 125, 200, 250, 333, 500 ohms	Dual alloy shield—74dB	LS-1 15.00	\$9.00
LS-51	Push pull low level plates to multiple line	8,000 to 15,000 ohms each side	50, 125, 200, 250, 333, 500 ohms	Dual alloy shield—74dB	LS-1 15.00	\$9.00
LS-37	Crystal microphone or pick-up to multiple line	100,000 ohms	50, 125, 200, 250, 333, 500 ohms	Dual alloy shield—74dB	LS-1 16.00	\$9.00
LS-38	Crystal microphone or pick-up to multiple line, with internal equalizer	100,000 ohms	50, 125, 200, 250, 333, 500 ohms	Dual alloy shield—74dB	LS-1 20.00	\$12.00
LS-39	Photocell, high-mu triode, diode or over-biased detector to multiple line	100,000 ohms	50, 125, 200, 250, 333, 500 ohms	Dual alloy shield—74dB	LS-1 15.00	\$9.00
LS-150	Bridging transformer from 50 to 500 ohm line to multiple line	4,000 ohms, bridging	50, 125, 200, 250, 333, 500 ohms	Dual alloy shield—74dB	LS-1 13.00	\$9.00
LS-151	Bridging transformer from 50 to 500 ohm line to multiple line	16,000 ohms, bridging	50, 125, 200, 250, 333, 500 ohms	Dual alloy shield—74dB	LS-1 15.00	\$9.00



OVERALL DIMENSIONS

Type	L	W	H
LS-1	1-15/16x2-7/16		
LS-2	2-11/16x3-11/16		
LS-3	4-3/16x3-1/2		
LS-4	5-3/4x5-3/4		
LS-5	7-1/4x7-1/4		
Mtg. Dimensions			
LS-1	2-9/16	3-3/16	3-11/16
LS-2	3-1/2	4-3/8	4-5/8
LS-3	5	5-3/4	5-3/8
LS-4	6-7/16	6-7/16	5-3/8
LS-5	8	8	6-1/3

TRANSFORMERS

UTC LINEAR STANDARD Component's represent the closest approach to the ideal transformer from the standpoint of uniform response, low wave form distortion, high efficiency, thorough shielding and dependability.

The multiple tap windings used on input to grid, plate to line, mixing and output audio transformers make possible a wide combination of impedance connections without impairing the audio range or efficiency of each unit.

UTC engineers have spent considerable time studying the many annoying hum pickup difficulties which are prevalent in high gain A.C. operated amplifying equipment. As a result, a special grade of high permeability cast iron has been developed to house all UTC Linear Standard units.

In addition low level input transformers use the new UTC dual and quadruple alloy shields thus making possible a transformer with the lowest hum pickup of any available commercially.

MIXING TRANSFORMERS

Type No.	Application	Primary Impedance	Secondary Impedance	Shielding and hum reduction	Case No. List Price	Your Cost
LS-30	Mixing, low impedance mike, pickup, or multiple line to multiple line	30, 125, 200, 250, 333, 500 ohms	50, 125, 200, 250, 333, 500 ohms	Dual alloy shield—74dB	LS-1 15.00	\$9.00
LS-30X	As above	As above	As above	Quadruple alloy shield—92dB	LS-1 20.00	\$12.00
LS-31	Three isolated lines or pads to multiple line	30, 50, 200, 250 ohms each primary	50, 125, 200, 250, 333, 500 ohms	Dual alloy shield—74dB	LS-1 20.00	\$12.00
LS-31X	As above	As above	As above	Quadruple alloy shield—92dB	LS-1 23.00	\$15.00
LS-32	Mixing, low impedance mike, pickup, or parallel mixer to multiple line	2.5, 5.5, 10, 15, 22, 30, 38, 60 ohms	50, 125, 200, 250, 333, 500 ohms	Dual alloy shield—74dB	LS-1 20.00	\$12.00

INTERSTAGE AUDIO TRANSFORMERS

Type No.	Application	Primary Impedance	Secondary Impedance	Shielding and hum reduction	Case No. List Price	Your Cost
LS-20	Single plate to single grid	8,000 to 15,000 ohms. Also for bridging 50-500 ohm line	60,000 ohms: 2:1 turn ratio	Dual alloy shield—74dB	LS-1 10.00	\$6.00
LS-21	Single plate to push pull grids	8,000 to 15,000 ohms. Also for bridging 50-500 ohm line	133,000 ohms: turn ratio 1.5:1 each side. Primary and secondary each in two sections	Dual alloy shield—74dB	LS-1 13.00	\$7.80
LS-22	Push pull plates to push pull grids	8,000 to 15,000 ohms	34,000 ohms each secondary, turn ratio 1.6:1 each side of center. Primary and secondary each in two sections	Alloy casting—74dB	LS-2 22.00	\$13.20
LS-24	Single plate or multiple line to one or two grids	High impedance primary 8,000 to 15,000 ohms. Low impedance primary 50, 125, 200, 250, 333, 500 ohms	60,000 ohms, 2:1 turn ratio. Secondary impedance 60,000 ohms overall	Dual alloy shield—74dB	LS-1 20.00	\$12.00

OUTPUT TRANSFORMERS TO HIGH IMPEDANCE (RF) LOAD

Type No.	Primary will match the following tubes	Primary Impedance	Secondary Impedance	Case No. List Price	Your Cost
LS-56	Push pull 2A3's, 6ASG's, 300A's, 275A's, 6A3's, +36dB	5,000 ohms plate to plate and 3,000 ohms plate to plate	6000, 5000, 4000, 1800, 1500, 1000, 30, 20, 15, 10, 7.5, 5, 2.5, 1.2	LS-2 20.00	\$12.00
LS-845M	845 tubes Class AB +42dB	8,000 ohms plate to plate	5000, 3500, 2500, 2100, 1250, 600	LS-5 30.00	\$30.00
LS-66	Class B 203A, 838, 2B120, 805 +46dB	9,000 ohms plate to plate	5000, 3500, 2500, 2100, 1250, 600	LS-5 70.00	\$42.00
LS-67	Class B 203A, 838, 2B 120, 805 +46dB	9,000 ohms plate to plate	10000, 2500	LS-5 70.00	\$42.00
LS-69	Class B 849, 204A +52dB	10,500 ohms plate to plate	6000, 5000, 4000, 1800, 1500, 1000	LS-6* 200.00	\$120.00
LS-169	Push pull parallel 849's Class B or six push pull parallel 204A's +55dB	5,250 ohms plate to plate	5000, 4700, 3500, 1500, 1250, 850	LS-5F 400.00	\$240.00

*Special oil filled casting

** note the above items so marked ** are in stock at all times

LOT NEXT TO STORE OR LOADING ZONE



Most Complete Transformer Line in the World!

PLATE TRANSFORMERS

Type No.	Primary Voltage 50/60 Cycles	High Voltage	DC Current	List Price	Your Cost
LS-181	100, 110, 120, 220, 230, 240	1500-1250-0-1250-1500	200 MA	45.00	\$27.00
LS-182	100, 110, 120, 220, 230, 240	1500-1250-0-1250-1500	350 MA	60.00	\$36.00
LS-183	100, 110, 120, 220, 230, 240	1750-1500-0-1500-1750	400 MA	75.00	\$45.00
LS-184	100, 110, 120, 220, 230, 240	3500-3000-2500-0-2500-3000-3500	500 MA	110.00	\$66.00
LS-185	100, 110, 120, 220, 230, 240	3500-3000-2500-0-2500-3000-3500	1.2 amp.	250.00	\$150.00

COMBINED PLATE AND FILAMENT TRANSFORMERS

Type No.	Primary Voltage 50/60 cycles	High Voltage	Filament Windings	Case No. List Price	Your Cost
LS-180	110	225-0-225 15 MA	6.3 V.C.T.-2A 6.3 V.C.T.-5A	LS-1 10.00	\$6.00
LS-190	100, 105, 110, 115, 120, 125	350-300-0-300-350 125 MA	5 V.C.T.-3A 2.5 V.C.T.-6A 6.3 V.C.T.-3A	LS-3 18.00	\$10.80
LS-191	100, 105, 110, 115, 120, 125	325-250-0-250-325 35 MA	5 V.C.T.-3A 2.5 V.C.T.-2A 6.3 V.C.T.-2A	LS-2 15.00	\$9.00
LS-70	100, 105, 110, 115, 120, 125	425-375-0-375-425 200 MA	5 V.C.T.-3A 2.5 V.C.T.-3A 2.5 V.C.T.-10A 6.3 V.C.T.-1A 6.3 V.C.T.-3A	LS-4 25.00	\$15.00
LS-72	100, 105, 110, 115, 120, 125	525-450-0-450-525 250 MA 70-0-70 50 MA	5 V.C.T.-3A 2.5 V.C.T.-3A 2.5 V.C.T.-3A 6.3 V.C.T.-1A 6.3 V.C.T.-3A tapped at 5 V.C.T.-6A	LS-4 25.00	\$15.00
LS-73	100, 105, 110, 115, 120, 125	500-400-0-400-500 500 MA 70-0-70 50 MA	5 V.C.T.-6A 2.5 V.C.T.-10A 2.5 V.C.T.-3A 6.3 V.C.T.-4A 6.3 V.C.T.-6A tapped at 5 V.C.T.-6A	LS-5 35.00	\$21.00

OUTPUT TRANSFORMERS TO LINE AND VOICE COIL

Type No.	Primary will match following tubes	Primary Impedance	Secondary Impedance	Case No. List Price	Your Cost
LS-52	Push pull 2A5, 250, 6V6, 42 or 2A3 A prime	8,000 ohms	500, 333, 250, 200, 125, 50, 30, 20, 15, 10, 7.5, 5, 2.5, 1.2	LS-2 20.00	\$12.00
LS-54	Same as above	8,000 ohms	30, 20, 15, 10, 7.5, 5, 2.5, 1.2	LS-2 14.00	\$8.40
LS-55	Push pull 2A3's, 6ASG's, 300A's, 275A's, 6A3's	5,000 ohms plate to plate and 3,000 ohms plate to plate	500, 333, 250, 200, 125, 50, 30, 20, 15, 10, 7.5, 5, 2.5, 1.2	LS-2 20.00	\$12.00
LS-57	Same as above	5,000 ohms plate to plate and 3,000 ohms plate to plate	30, 20, 15, 10, 7.5, 5, 2.5, 1.2	LS-2 14.00	\$8.40
LS-58	Push pull parallel 2A3's, 6ASG's, 300A's, 6A3's	2,500 ohms plate to plate and 1,500 ohms plate to plate	500, 333, 250, 200, 125, 50, 30, 20, 15, 10, 7.5, 5, 2.5, 1.2	LS-4 30.00	\$18.00
LS-61	Push pull 6B5, 6A6, 53, 6B6, 71A, 59, 79, 69, Class B66, 59's	10,000 ohms plate to plate and 6,000 ohms plate to plate	500, 333, 250, 200, 125, 50, 30, 20, 15, 10, 7.5, 5, 2.5, 1.2	LS-2 20.00	\$12.00
LS-63	Same as above	10,000 ohms plate to plate and 6,000 ohms plate to plate	30, 20, 15, 10, 7.5, 5, 2.5, 1.2	LS-2 14.00	\$8.40
LS-64	Push pull 845's Class A	18,000 ohms plate to plate	500, 333, 250, 200, 125, 50, 30, 20, 15, 10, 7.5, 5, 2.5, 1.2	LS-4 35.00	\$21.00
LS-2451	Push pull 45's A prime, class B 40's-59's, 40's, 25L6's	6,000 ohms plate to plate and 3,500 ohms plate to plate	500, 333, 250, 200, 125, 50, 30, 20, 15, 10, 7.5, 5, 2.5, 1.2	LS-2 20.00	\$12.00
LS-6L1	Push pull 6L6's self bias, incorporates tertiary winding for stabilized feedback	6,600 ohms plate to plate	500, 333, 250, 200, 125, 50, 30, 20, 15, 10, 7.5, 5, 2.5, 1.2	LS-3 30.00	\$18.00
LS-6L3	Same as above	6,600 ohms plate to plate	30, 20, 15, 10, 7.5, 5, 2.5, 1.2	LS-3 20.00	\$12.00
LS-6L4	Push pull 6L6's fixed bias or push pull parallel 6L6's self bias with tertiary winding for stabilized feed back	3,800 ohms plate to plate and 3,300 ohms plate to plate	500, 333, 250, 200, 125, 50, 30, 20, 15, 10, 7.5, 5, 2.5, 1.2	LS-4 35.00	\$21.00
LS-845	845 tubes class AB	8,800 ohms plate to plate	500, 333, 250, 200, 125, 50, 30, 20, 15, 10, 7.5, 5, 2.5, 1.2	LS-5 50.00	\$30.00

HIGH LEVEL MATCHING TRANSFORMERS

Type No.	Application	Primary Impedance	Secondary Impedance	Case No. List Price	Your Cost
LS-33	High level line matching, 15 watts	50, 125, 200, 250, 333, 500 ohms	1.2, 2.5, 5, 7.5, 10, 15, 20, 30, 50, 125, 200, 250, 333, 500 ohms	LS-2 15.00	\$9.00
LS-34	High level line matching 30 watts	50, 125, 200, 250, 333, 500 ohms	1.2, 2.5, 5, 7.5, 10, 15, 20, 30, 50, 125, 200, 250, 333, 500 ohms	LS-3 20.00	\$12.00

DRIVER TRANSFORMERS

Type No.	Application	Primary Impedance	Reflected Secondary Impedance	Case No. List Price	Your Cost
LS-5	Driver, multiple line to class B 838's, 805's, ZB-120's, 203A's and similar tubes	50, 125, 200, 250, 333, 500 ohms	2,000 ohms; 1:2 overall turns ratio	LS-4 30.00	\$18.00
LS-6	Driver, push pull 45's, 59's, 2A3's, 6A5's, etc. to push pull 845 or 211D grids.	800 to 2,000 ohms	11 primary impedance turns ratio 1:3 overall	LS-4 22.00	\$13.20
LS-7	Push pull 56, 6C5 or similar plates to A prime 45's, 42's, 6F6's, 2A3's	8,000 to 15,000 ohms	43 primary impedance turns ratio 1:5.1 overall	LS-2 22.00	\$13.20
LS-47X	Driver from push pull 2A3's, 6ASG's, or 300A's to Class B 838's, 203A's, 805's, or ZB120's	800 to 1,000 ohms	1 pri. impedance turns ratio, Pri./1/4 Sec. 3:2:1	LS-2 22.00	\$13.20
LS-48	Driver transformer push pull 845's to 204 or 849 grids in class B	1,000 to 2,000 ohms	.038 pri. impedance turns ratio, Pri./1/4 Sec. 5:1:1	LS-2 35.00	\$21.00
LS-49	Push pull parallel 2A3, 6ASG, or 300A tubes to four 838, 203A, 805, or ZB120 tubes.	800 to 2,000 ohms	.028 pri. impedance turns ratio, Pri./1/4 Sec. 6:0:1	LS-2 30.00	\$18.00

FILAMENT TRANSFORMERS

Type No.	Application	Primary Voltage 50/60 Cycles	Secondary Voltage	Insulation Voltage	Case No. List Price	Your Cost
LS-80	866A rectifiers	100, 110, 120, 220, 230, 240	2.5 V.C.T.-10A	12,000	LS-3 15.00	\$9.00
LS-82	872 rectifiers	100, 110, 120, 220, 230, 240	5 V.C.T.-20A	12,000	LS-3 20.00	\$12.00
LS-84	203A, 845, etc. HF200, HF300	100, 110, 120, 220, 230, 240	10 V.C.T.-8A	12,000	LS-3 15.00	\$9.00
LS-85	Combined filament transformer for 866 rectifiers and 845 or 203A audio tubes	100, 110, 120, 220, 230, 240	2.5 V.C.T.-10A 10 V.C.T.-8A	10,000	LS-3 25.00	\$15.00
LS-88	6.3 volt tubes	105, 115, 125	6.3 V.C.T.-2A	2,500	LS-1 7.50	\$4.50
LS-87A	7.5 volt tubes	105, 115, 125	7.5 V.C.T.-9A	2,500	LS-3 7.50	\$4.50
LS-118	849, 204A, HF300	100, 110, 120, 220, 230, 240	11 V.C.T.-10A	2,500	LS-3 20.00	\$12.00
LS-120	866 bridge rectifier	100, 110, 120, 220, 230, 240	2.5 V.C.F.-10A 2.5 V.C.T.-5A 2.5 V.C.T.-5A	12,000	LS-3 25.00	\$15.00
LS-121	872 bridge rectifier	100, 110, 120, 220, 230, 240	5 V.C.T.-20A 5 V.C.T.-10A 5 V.C.T.-10A	12,000	LS-4 35.00	\$21.00
LS-83	872A, 575 or 869 rectifiers	100, 110, 120, 220, 230, 240	5 V.C.T.-20A	35,000	Spec. 40.00	\$24.00
LS-89A	Three 869 rectifiers	100, 110, 120, 220, 230, 240	5 V.C.T.-60A	35,000	Spec. 50.00	\$30.00

FILTER, SWINGING, AND AUDIO CHOKES

Type No.	Application	Inductance	DC Current	DC Resistance	Case No. List Price	Your Cost
LS-90	Filter choke, hum bucking tap	Series-50 hy Parallel-12.5 hy	50 MA 100 MA	510 ohms 128 ohms	LS-2 8.50	\$5.10
LS-91	Filter choke, hum bucking tap	Series-14 hy Parallel-3.5 hy	125 MA 250 MA	200 ohms 50 ohms	LS-2 8.50	\$5.10
LS-92	Filter choke, hum bucking tap	Series-18 hy Parallel-4 hy	175 MA 350 MA	95 ohms 24 ohms	LS-3 15.00	\$9.00
LS-93	Filter choke, hum bucking tap	Series-26 hy Parallel-6.25 hy	300 MA 400 MA	112 ohms 28 ohms	LS-4 25.00	\$15.00
LS-96	Filter choke, hum bucking tap	Series-20 hy Parallel-5 hy	300 MA 1 amp	90 ohms 22.5 ohms	LS-5 40.00	\$24.00
LS-94	Parallel feed and filter choke	Series-320 hy Parallel-80 hy	3 MA 6 MA	6400 ohms 1600 ohms	LS-1 10.00	\$6.00
LS-95	Parallel feed and filter choke	Series-720 hy Parallel-180 hy	5 MA 10 MA	3600 ohms 900 ohms	LS-2 20.00	\$12.00
LS-99	Filter choke with hum bucking tap	Series-20 hy Parallel-5 hy	1 amp 2 amp	50 ohms 12.5 ohms	Spec. 60.00	\$36.00
LS-105	Swinging choke	8-40 hy	1 amp	50 ohms	Spec. 60.00	\$36.00
LS-102	Modulation reactor	50 hy	350 MA	250 ohms	LS-3 10.00	\$24.00
LS-103	Modulation reactor	50 hy	500 MA	175 ohms	Spec. 60.00	\$36.00

** note the above items so marked ** are in stock at all times

IT'S EASY TO PARK AT WALTER ASHE...

1100 Pine Street

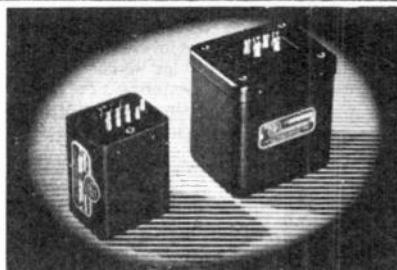
St. Louis, Missouri



Most Complete Transformer Line in the World!

HIPERM ALLOY

The UTC Hiperm alloy audio and power transformers are specifically designed for portable and compact service. While light in weight and small in dimensions, neither dependability nor fidelity has been sacrificed. The frequency characteristic of the Hiperm alloy audio units is uniform from 30 to 20,000 cycles. These units are similar in general design and characteristics to the Linear Standard audio units, and



OVERALL DIMENSIONS
H1 Case 1 1/4 x 2 3/8 x 3
H2 Case 2 3/8 x 3 x 3 3/4
MOUNTING DIMENSIONS
H1 1 3/8
H2 1-11/16 x 2 3/8

INTERSTAGE AUDIO TRANSFORMERS

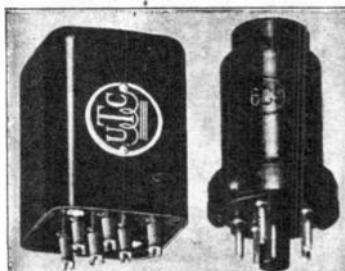
Type No.	Application	Primary Impedance	Secondary Impedance	Case No. List Price	Your Cost
HA-105	Single plate to single grid	8,000 to 15,000 ohms	60,000 ohms 2:1 turn ratio	H-1 9.00	\$5.40
HA-106	Single plate to push pull grids	8,000 to 15,000 ohms	135,000 ohms 1.5:1 ratio, each side	H-1 11.00	\$6.60
HA-107	Push pull plates to push pull grids	8,000 to 15,000 ohms	35,000 ohms each secondary 1.5:1 turn ratio overall	H-2 15.00	\$9.00

LOW IMPEDANCE TO GRID AND MIXING TRANSFORMERS

Type No.	Application	Primary Impedance	Secondary Impedance	Case No. List Price	Your Cost
HA-100	Low impedance mike, pickup, or multiple line to grid	50, 125, 200, 250, 333, 500 ohms	60,000 ohms in two sections	H-1 12.50	\$7.50
HA-100X	Same as above but with tri-alloy internal shield to effect very low hum pickup			H-1 17.50	\$10.50
HA-101	Low impedance mike, pickup, or multiple line to push pull grids	50, 125, 200, 250, 333, 500 ohms	120,000 ohms overall, in two sections	H-1 15.00	\$9.00
HA-101X	Same as above but with tri-alloy internal shield to effect very low hum pickup			H-1 20.00	\$12.00
HA-103A	Low impedance mike, pickup, or parallel mixer to grid	2.5, 5.5, 10, 15, 22, 30, 38, 60 ohms	60,000 ohms in two sections	H-1 15.00	\$9.00
HA-108	Mixing, low impedance mike, pickup, or multiple line	50, 125, 200, 250, 333, 500 ohms	50, 125, 200, 250, 333, 500 ohms	H-1 12.50	\$7.50
HA-108X	Same as above but with tri-alloy internal shield to effect very low hum pickup			H-1 17.50	\$10.50
HA-130X	Three isolated lines or pads to one or two grids with tri-alloy internal shield	50, 50, 200, 250 ohms each primary	60,000 ohms overall, in two sections	H-1 20.00	\$12.00

ULTRA COMPACT

The UTC Ultra compact audio units represent the acme in small, light-weight units where portability or size is of paramount importance. Through the use of new design methods, high fidelity is obtainable in all individual units, the frequency response being ± 2 DB from 30 to 20,000 cycles on all units. There is no need to resonate one unit in an amplifier to compensate for the droop of another unit.



Type No.	Application	Primary Impedance	Secondary Impedance	List Price	Your Cost
A-10	Low impedance mike, pickup, or multiple line to grid	50, 125, 200, 250, 333, 500 ohms	50,000 ohms	10.00	\$6.00
A-12	Low impedance mike, pickup, or multiple line to push pull grids	50, 125, 250, 250, 333, 500 ohms	80,000 ohms overall, in two sections	10.00	\$6.00
A-14	Dynamic microphone to one or two grids	30 ohms	50,000 ohms overall, in two sections	9.00	\$5.40
A-16	Single plate to single grid	8,000 to 15,000 ohms	60,000 ohms, 2:1 turn ratio	8.00	\$4.80
A-18	Single plate to two grids	8,000 to 15,000 ohms	80,000 ohms overall, 2.3:1 turn ratio overall	9.00	\$5.40

TRANSFORMERS

incorporate a Hiperm alloy nickel iron core. The outer case is of high conductivity alloy finished in high polish black enamel. Through the use of tapped metallic inserts, these transformers can be mounted with the terminals either up or down, and with no waste space. A hum balanced coil structure is used on all audio units to insure minimum pickup. The electrostatic shields are brought out to separate terminals on the terminal strip.

POWER TRANSFORMERS

Type No.	Primary Voltage 50 60 cycles	High Voltage	Filament Windings	Case No. List Price	Your Cost
HP-122	115	220-0-200 15 MA	6.3 V.C.T.-.5A 6.3 V.C.T.-1.2A	H-2 10.00	\$6.00
HP-123	115	275-0-275 35 MA	6.3 V.C.T.-.5A 6.3 V.C.T.-2A	H-3 15.00	\$9.00

PLATE, CRYSTAL AND PHOTOCELL TO LINE TRANSFORMERS

Type No.	Application	Primary Impedance	Secondary Impedance	Case No. List Price	Your Cost
HA-III	Crystal microphone or pickup, to multiple line	100,000 ohms	50, 125, 200, 250, 333, 500 ohms	H-1 12.50	\$7.50
HA-III-E	Crystal microphone or pickup, to multiple line, with internal equalizer	100,000 ohms	50, 125, 200, 250, 333, 500 ohms	H-1 17.50	\$10.50
HA-III-2	Photocell, high-mu triode, diode or overbiased detector to multiple line	100,000 ohms	50, 125, 200, 250, 333, 500 ohms	H-1 12.50	\$7.50
HA-III-3	Single plate to multiple line	8,000 to 15,000 ohms	50, 125, 200, 250, 333, 500 ohms	H-1 12.50	\$7.50
HA-III-4	Push pull low level plates to multiple line	8,000 to 15,000 ohms	50, 125, 200, 250, 333, 500 ohms	H-1 12.50	\$7.50

FILTER AND AUDIO CHOKES

Type No.	Inductance	DC Current	DC Resistance	Case No. List Price	Your Cost
HC-115	Series-400 hy Parallel-100 hy	2.5 MA 5 MA	7000 ohms 1750 ohms	H-1 8.50	\$5.10
HC-116	Series-600 hy Parallel-150 hy	8 MA 16 MA	4000 ohms 1000 ohms	H-2 15.00	\$9.00
HC-117	60 hy	15 MA	3000 ohms	H-1 8.50	\$5.10
HC-127	60 hy	40 MA	1000 ohms	H-2 15.00	\$9.00

AUDIO UNITS

All units employ true hum balancing coil structure, which combined with a high conductivity outer case, afford a maximum of inductive shieldings.

Ultra compact audio units weigh only 5 1/2 ounces and have overall dimensions of 1 7/16" x 1 7/16" x 1 15/16". Mounting dimensions are 1 1/8" between centers.

Type No.	Application	Primary Impedance	Secondary Impedance	List Price	Your Cost
A-20	Mixing, low impedance mike, pickup, or multiple line to multiple line	50, 125, 200, 250, 333, 500 ohms	50, 125, 200, 250, 333, 500 ohms	10.00	\$6.00
A-24	Single plate to multiple line	8,000 to 15,000 ohms	50, 125, 200, 250, 333, 500 ohms	10.00	\$6.00
A-26	Push pull low level plates to multiple line	8,000 to 15,000 ohms each side	50, 125, 200, 250, 333, 500 ohms	10.00	\$6.00
A-27	Crystal microphone to multiple line	100,000 ohms	50, 125, 200, 250, 333, 500 ohms	10.00	\$6.00
A-30	Audio choke, 300 henrys @ 2 MA 6000 ohms D.C., 75 henrys @ 4 MA 1500 ohms D.C., inductance with no D.C. 450 henrys			7.00	\$4.20

none of the above items are stocked. obtainable on special order only

LOT NEXT TO STORE OR LOADING ZONE

WALTER ASHE RADIO COMPANY

1100 Pine Street St. Louis, Missouri

UTC CATHODE RAY OSCILLOSCOPE FOR THE SERVICE ENGINEER, AMATEUR, EXPERIMENTER, MANUFACTURER, AND RADIO DEALER



The UTC OSCILLOSCOPE incorporating the new 2" cathode ray tube has every feature required for application in the radio field. It includes linear sweep, audio amplification, brilliance, focus, beam centering and amplitude controls. Grouping of the controls on the simple control panel is such that rapid and simple adjustment is possible.

The entire unit is housed in a black crystal finished carrying case with etched aluminum front panel. The size of this unit is extremely small considering the 2" cathode ray tube and multiplicity of applications.

NET PRICE

Complete, less tubes,
\$30.00

TYPICAL FEATURES ARE

Large Tube	2" screen
Linear sweep	15 to 25,000 cycles
Amplifier response	30 to 20,000 cycles
High sensitivity	2 volts per inch (amplified)
All controls including beam centering on main panel	
Small size	6½ x 10 x 9½ inches overall
A C. Power Supply	115 volts — 60 cycles
Tubes used	885, 80, 6J7, 6K7, 24-XH
Low hum pickup	choke filtered plate supply

UTC VARITRAN VOLTAGE CONTROL UNIT

The UTC VARITRAN makes possible continuously variable output voltage, using a sliding contact riding over the turns of an auto-transformer.

Standard units are designed for 115 volt input, 0-130 volts continuously variable output.

FEATURES

- Smooth control
- High efficiency
- Excellent regulation
- Low cost

APPLICATIONS

- Motor control
- Heat control
- Rectifier control
- Light control
- Line voltage control



Model V-1, 570 Watts—5 amp. maximum rating, complete with cord, plug and switch, net **\$10.00**

Model V-2, Same as V-1, but uncased, with terminal strip for rack or panel mounting, net **\$9.00**

Model V-3, 850 Watts maximum rating 7.5 amps., uncased, with terminal board and provisions for mounting, net **\$14.00**

Model V-4, 1250 Watts—11 amps. maximum rating, uncased, net..... **\$20.00**

Model V-5, 2000 Watts maximum rating, 17.5 amps., uncased, net..... **\$32.00**

Automatic VARITRANS are available to maintain line voltage constant. Details and prices on request.

VARITONE

The UTC Varitone is a revolutionary audio device which permits full control of the frequency response of any audio amplifier or receiver. Using this device, tone correction can be effected for defects in acoustic conditions or overall audio response. It is also possible to produce new tonal effects from phonograph recordings or radio reception and to bring back notes which would otherwise be lost completely. Due to the high equalization obtainable with the Varitone, some loss in gain is effected. If the amplifier or receiver does not have gain to spare, it may be necessary to add an additional stage of audio frequency amplification. The Varitone is made in five types, as follows:

VT-1 This Varitone is incorporated with a universal audio transformer. Two primaries are provided. One is suitable for working from a single or double button microphone a low impedance pickup, or a line; the other primary is designed to work out of the plate of a tube or from a high impedance pickup. The secondary winding is center-tapped and is equally suitable for working into one or two grids. List Price \$8.50.

Your Cost **\$5.10**

VT-2 The VT-2 is a varitone control unit, incorporated with an impedance matching device so that it can be connected directly across a 200 or 500 ohm line, or low impedance pickup or mike, or in shunt with the plate circuit of any triode or a high impedance pickup. The circuit is not changed in any other way. The VT-2 is solely an addition for tone correction. The original audio circuits are not disturbed. List Price \$6.00.

Your Cost **\$3.60**

VT-3 The VT-3 is a complete self-contained unit which does not use external control. The components are adjusted so that 10 db. equalization is effected at 80 and 7000 cycles. This unit is connected directly from plate to B plus of first audio triode. No other alteration is made. List Price \$5.00.

Your Cost **\$3.00**

VT-4 The VT-4 is a complete self-contained wired unit including a variable control so arranged that with the control at one end high fidelity performance is effected by the increase of low and high frequencies, and with the control at the other end the high response is reduced to diminish static, line noises, and heterodyne whistles. The unit is connected directly from plate to B plus of first audio triode. This unit is designed to work in the plate circuit of low impedance tubes such as 01A, 12A, 30, 31, 26, 27, 37, 55, 65, 262A, 864, 57 triode, 6C6 triode, 77 triode, etc. List Price \$6.00. **Your Cost** **\$3.60**

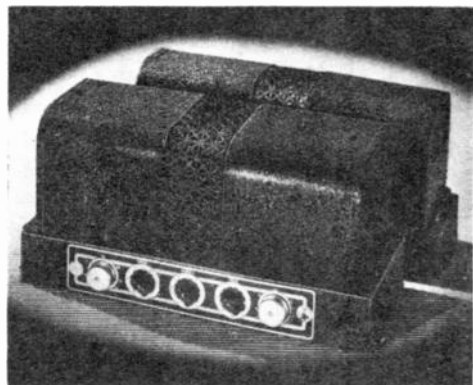
VT-5 The VT-5 is similar to the VT-4 except that it is designed to work out of high impedance tubes such as all screen grid tubes, all pentodes, 2A6, 40, 75, other hi mu triodes, etc. List Price \$6.00. **Your Cost** **\$3.60**

none of the above items stocked. on special order only

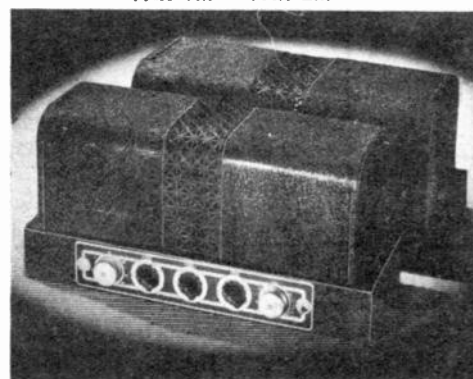
IT'S EASY TO PARK AT WALTER ASHE . . .



Most Complete Transformer Line in the World!



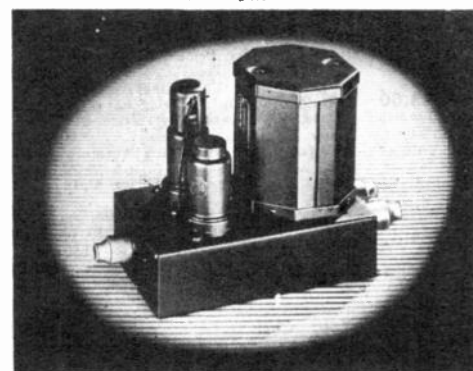
PAK-1M PAK-2M



PAK-3M PAK-3XM



PAK-5M



PAK-7A

BEAM POWER AMPLIFIERS

The UTC PAK kits are now acknowledged by the PA field as ideal Universal amplifiers. PAK power amplifier kits are available with outputs of 8, 15, 35, 55, 70, 110 and 250 watts. Stabilized feedback can be used in the PAK-1, PAK-2, PAK-3 and the PA output transformers have special feedback windings for this purpose. There is provision for mixing of two high impedance inputs. An etched panel providing a dual gain, two position mixer with gain links for high or low gain on each position and a VARITONE equalizer control are now standard equipment on these kits.

PAK-1M Self bias 35 watt output. Audio and power on separate chassis for rack or cabinet mounting. High impedance input 110 to 120 DB gain. Provision for immediate switchover to 95 DB gain with connections either for triode plate or 500-200 ohm input line. Output transformer impedances 500, 200, 16, 8, 5, 3, 1.5 ohms. Includes all components and accessories such as resistors, condensers, sockets, calibration plates, etched mixer panel, controls and accessories for a dual gain, two position high impedance mixer, chassis, dust covers with handles, hardware—except tubes—all fully mounted. List Price \$80.00.

Your Cost\$48.00

PAK-1XM Same as PAK-1M but with VARIMATCH modulation output transformer. Impedances available are 220, 408, 1180, 2350, 2400, 3000, 4000, 4670, 5560, 7000, 9150, 9470 ohms. List Price \$80.00.

Your Cost\$48.00

PAK-2M Same chassis layout as PAK-1M but has output of 55 watts in fixed bias. List Price \$85.00. **Your Cost**\$51.00

PAK-2XM Same as PAK-2M but has VARIMATCH modulation output. Impedances on 3800 ohms plate to plate 380, 660, 2050, 3740, 4100, 7000, 7500, 8200, 12,000, 15,000, 16400, 21500, 29800. On 4000 ohm plate to plate 237, 1300, 1750, 2200, 3270, 5200. List Price \$85.00 **Your Cost** \$51.00
Tubes required for PAK-1M and PAK-2M kits are 1-6J7, 3-6C5's, 2-6L6's, 1-83.

PAK-3M Uses 4-6L6's—70 watts self bias—100 watts fixed bias, total gain 110 DB. High impedance input. Separate chassis for power and audio for rack or cabinet mounting. Tubes are 1-6J7, 1-6C5, 2-6A5G's, 4-6L6's, 3-83's, 1-80. Output transformer impedances 500, 200, 16, 8, 5, 3, 1.5 ohms. Includes all accessories such as resistors, condensers, sockets, calibration plates, etched mixer panel, controls and accessories for a dual gain, two position high impedance mixer, chassis, dust covers, handles, hardware—except tubes—all fully mounted. List Price \$130.00. **Your Cost**\$78.00

PAK-3XM Same as PAK-3M but with VARIMATCH modulation output transformer. Impedances available for fixed bias are 200, 350, 1070, 1950, 2150, 3620, 3920, 4300, 6350, 6550, 2900, 8600, 11400, 15700. For self bias 330, 580, 1800, 3250, 3550, 6100, 6500, 7100, 10400, 11000, 13000, 186000. List Price \$130.00. **Your Cost**\$78.00

PAK-5M 15 watt compact power amplifier. Uses two 6V6 Beam Power tubes. Power supply and audio amplifier on one chassis 6 x 9 x 17 inches. Tubes are 6J7, 6C5, 2-6V6's—120 DB gain. High impedance input, 500, 200, 16, 8, 5, 3, 1 1/2 ohms output. Kit includes all accessories and pre-wired resistor-condenser strip, mixer panel, controls and accessories for a dual gain, two position mixer and VARITONE equalizer control, less tubes. List Price \$55.00. **Your Cost**\$33.00

PAK-5XM Same as PAK-5M but with VARIMATCH modulation output. List Price \$55.00. **Your Cost**\$33.00

PAK-6X 250 watts output stage. This amplifier is designed to operate from the 500 ohm output of any audio amplifier using 42's 45's, 59's, 2A3's, 61L6's, 6ASG's, 6V6's or other similar tubes in the output stage. 805's 838's or 7B-120's can be used in the class B output stage of this amplifier. The circuit consists of a 500 ohm line to grid transformer of the VARIMATCH type and an output transformer also of the VARIMATCH type. Separate power and audio decks are provided. Output impedances to match any RF requirements are available. Kit completely mounted with all accessories less tubes. List Price \$150.00. **Your Cost**\$90.00

PAK-7A Pre-amplifier. High gain well filtered pre-amplifier designed to operate from power supply in main amplifier. High impedance input. 6F5 resistance coupled to 6C5—50, 200, 500 ohm output. Gain 60 DB. amplifier kit only including all accessories, less tubes. List Price \$15.00. **Your Cost**\$9.00
PAK-7P Power supply—components and accessories for 7A pre-amplifier. List Price \$15.00 **Your Cost**\$9.00

none of the above items stocked. on special order only

LOT NEXT TO STORE OR LOADING ZONE



Most Complete Transformer Line in the World!

UTC VARIMATCH TRANSFORMERS



Prim. Ohms P to P	SECONDARY RF LOAD IMPEDANCES AVAILABLE										AUDIO LOAD IMPEDANCE
2000	1070	1950	2150	3620	3920	4,000	6350	6550	7900	8600	11400
3000	1620	2950	3240	5500	5890	6500	9400	10000	11800	13000	17000
4000	1380	1850	2160	2850	3450	4300	5500	7300	8050	12500	17400
5000	1730	2300	2700	3500	4300	5100	7000	9150	10800	15700	21600
6000	1070	2140	2180	2750	3020	4250	4300	5150	6350	8300	8600
7000	1250	2400	2500	3200	4290	5000	5000	6000	7300	9700	10000
8000	1440	2760	2900	3700	4900	5,500	5800	6900	8400	10000	12000
9000	1620	2950	3100	3240	3900	4150	6200	6500	7750	9400	12500
10000	1800	2300	3500	4300	4600	4100	8900	7100	8600	10500	14000
12000	2070	2150	2750	4250	4320	4150	7250	8300	8700	12500	17400
14000	2440	3200	1900	1000	9700						
16000	2780	3700	5600	6900	11000						
18000	3140	4150	6300	7750	12500						
500*	1070	1950	2150	3620	3920	4,000	6350	6550	7900	8600	11400

* In some cases it is desired to match an RF lead to the 500 Ohm output of a PA amplifier. The terminal arrangement noted will take care of this application.

† These impedances are suitable for PA applications. If a monitor-speaker is desired, proper distribution of power is obtained by operating this low impedance into the high impedance primary of the speaker transformer.

Intermediate P.P. primary impedance values available in addition to those shown.

VARIMATCH MODULATION TRANSFORMERS

VM-0 Will handle any power tubes to modulate a 10 to 25 watt Class C stage. PA-1. List Price \$5.00. **Your Cost \$3.00**

VM-1 Will handle any power tubes to modulate a 20 to 60 watt Class C stage. Maximum audio output 30 watts. List Price \$8.00. **Your Cost \$4.80**

VM-2 Will handle any power tubes to modulate a 40 to 120 watt Class C stage. Maximum audio output 60 watts. List Price \$12.50. **Your Cost \$7.50**

VM-3 Will handle any power tubes to modulate a 100 to 250 watt Class C stage. Maximum audio output 125 watts. List Price \$20.00. **Your Cost \$12.00**

VM-4 Will handle any power tubes to modulate a 200 to 600 watt Class C stage. Maximum audio output 300 watts. List Price \$32.50. **Your Cost \$19.50**

VM-5 Will handle any power tubes to modulate a 450 watt to 1 KW plus. Class C. Maximum audio output 600 watts. List Price \$70.00. **Your Cost \$42.00**

The secondaries of all Varimatch transformers are designed to carry the Class C plate current.

VARIMATCH INPUT TRANSFORMERS

PA-50AX Single 53, 56, 6C5, 6C6 triode, 6A6 to Class B 53, 6A6 or 6E6 grids or single 89 to Class B 89 grids. PA-1. List Price \$5.50. **Your Cost \$3.30**

PA-51AX Single 46 or 6L6 to Class B 46 or 59 grids. Single 45, 59, 2A3 or 6L6 to Class B 46 or 59 grids. Single 49 to Class B 49 grids. Single 37, 76, 6C6 or 6C5 triode to Class B 19 or 79 grids. Single 30 to Class B 19 or 79 grids. Single 89 to Class B 19 or 79 grids. Single 2A5, 42, 45 triode plate to A prime 45's, 2A5's or 42's. PA-1. List Price \$5.50. **Your Cost \$3.30**

PA-52AX Push pull, 45, 59, 2A3 or 6L6 plates to 2-46 Class B grids. Push pull 45, 59, 2A3 or 6L6 plates to 4-46 or 59 Class B grids. Push pull 2A3's to 2-841 Class B grids. PA-2. List Price \$6.50. **Your Cost \$3.90**

PA-53AX Push pull 42, 45, 50, 59, 2A3 or 6L6 plates to two 210, 801, RK-18, 35T or 800 Class B grids. Push pull 2A3 plates to two 838, 203A, 50T, 35T, 211A, 242A, 830B, 800, RK-18, 801 or 210 Class B grids. PA-2. List Price \$7.50. **Your Cost \$4.50**

PA-59AX 500, 200 or 50 ohm line to two 805, 838, 203A, 830 B, 800, RK-18, 801 or 210 Class B grids. PA-2. List Price \$7.50. **Your Cost \$4.50**

PA-238AX Push pull parallel 2A3, 45, 50, 59 or 6L6 to four 805, 838, or 203A Class B grids. Push pull parallel 2A3, 45, 50, 59, 6L6 or two 211A, 845 plates to Class B 204A, HF-300 or 849 grids. Push pull parallel 2A3, 45, 50 or two 50T, 211A, 845 plates to Class B 150T or HF-200 Class B grids. PA-3. List Price \$17.50. **Your Cost \$10.50**

PA-512 500, 200 or 50 ohm line to two 150T, HF-300, HF-200, 204A or 849 Class B grids. PA-3. List Price \$20.00. **Your Cost \$12.00**

PA VARIMATCH TRANSFORMERS

PVM-1 For all audio tubes up to 12 watts audio. Output 500, 200, 15, 8, 5, 3, 1 1/2 ohms. Some typical tubes single or push pull: 19, 31, 33, 41, 42, 43, 45, 47, 48, 49, 53, 59, 71A, 79, 89, 2A3, 2A5, 6A6, 6F6, 6V6, 25A6, 25L6. PA-1. List price \$5.00. **Your Cost \$3.00**

PVM-2 For all audio tubes up to 30 watts audio. Output 500, 200, 16, 8, 5, 3 1/2 ohms. Some typical tubes for single, push pull, or push pull parallel: 19, 31, 33, 41, 42, 43, 45, 46, 47, 48, 49, 50, 52A, 300A, 53, 59, 71A, 79, 89, 841, 843, 1602, 2A3, 2A5, 6A6, 6F6, 6L6, 6V6, 25A6, 25L6. PA-2. List Price \$8.00. **Your Cost \$4.80**

PVM-3 For all audio tubes up to 60 watts audio. Output 500, 200, 16, 8, 5, 3, 1 1/2 ohms. Some typical tubes in push pull parallel: 42's, 45's, 46's, 50's, 52's, 300A's, 59's, 2A3's, 2A5's, 6F6's. In push pull self or fixed bias: 6L6's, 10's, 807's, 801's. PA-3. List Price \$12.50. **Your Cost \$7.50**

PVM-4 For all audio tubes up to 125 watts audio. Output 500, 200, 16, 8, 5, 3, 1 1/2 ohms.

The Varimatch transformer will not only match PRESENT available modulator tubes, but any tube that may be released at a FUTURE date. All you have to decide is the DC input to your RF stage. Then just pick the VARIMATCH output transformer that will handle the maximum audio power required. These transformers will also match the line impedance output of PA or similar amplifiers direct to the Class C tubes.

THE VARIMATCH TRANSFORMER NEVER BECOMES OBSOLETE

Some typical tubes push pull parallel: 6L6's, 10's, 807's, 801's, push pull 845's, 800's, etc. PA-4. List Price \$20.00. **Your Cost \$12.00**

PVM-5 For all audio tubes up to 300 watts audio. Output 500, 200, 16, 8, 5, 3, 1 1/2 ohms. Typical tubes: 211, 242A, 203A, 830B, 852, 838, 4-800's, 4-845's, ZB 120, etc. PA-6. List Price \$32.50. **Your Cost \$19.50**

LINE VARIMATCH TRANSFORMERS

The UTC Line Varimatch Units will match any voice coil or group of voice coils to a 500 ohm line. Impedance range is from .2 to 75 ohms in 50 combinations. UTC Line Varimatch Autoformers will match one to ten 500 ohm lines or LVM 500 ohm windings to the 500 ohm output of an audio amplifier.

LVM-1 15 Watt Line Varimatch unit. 500 ohms to a variable voice coil winding .2 to 75 ohms. PA-1 case. List Price \$4.50. **Your Cost \$2.70**

LVM-2 40 Watt Line Varimatch unit. 500 ohms to voice coil winding of .2 to 75 ohms. PA-2 case. List Price \$7.00. **Your Cost \$4.20**

LVM-3 75 Watt Line Varimatch unit. 500 ohms to voice coil winding of .2 to 75 ohms. PA-3 case. List Price \$10.00. **Your Cost \$6.00**

LVM-10 Line Varimatch Autoformer. 500, 250, 167, 125, 100, 83, 71, 62, 50 ohms. 15 Watts. PA-1 case. List Price \$4.50. **Your Cost \$2.70**

LVM-11 Line Varimatch Autoformer. 500, 250, 167, 125, 100, 83, 71, 62, 50 ohms. 30 Watts. PA-2 case. List Price \$7.00. **Your Cost \$4.20**

LVM-12 Line Varimatch Autoformer. 500, 250, 167, 125, 100, 83, 71, 62, 50 ohms. 60 Watts. PA-3 case. List Price \$10.00. **Your Cost \$6.00**

LVM-13 Line Varimatch Autoformer. 500, 250, 167, 125, 100, 83, 71, 62, 50 ohms. 125 Watts. PA-4 case. List Price \$18.00. **Your Cost \$10.80**

LVM-14 Line Varimatch Autoformer. 500, 250, 167, 125, 100, 83, 71, 62, 50 ohms. 300 Watts. PA-5 case. List Price \$25.00. **Your Cost \$15.00**

all the above items are in stock at all times

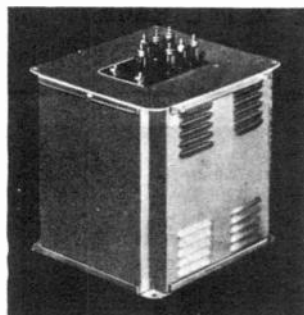
1100 Pine Street

St. Louis, Missouri

NEW LOW PRICES on UTC amateur "specials" TRANSMITTING PLATE TRANSFORMERS AND REACTORS

These units are doing legion duty for thousands of experimenters and have been in use for more than a year. Increased production and expanded plant facilities now make possible further reductions in price which UTC is glad to pass on to its satisfied customers.

- ★ HUSKY
- ★ WELL VENTILATED
- ★ HIGH VOLTAGE STANDOFF BUSHINGS
- ★ RIGIDLY MOUNTED
- ★ A UTC PRODUCT



PLATE

20462A — 1000-750-0-750-1000 AC at 300 MA. DC. In full wave DC output is 850 volts at 300 MA., or 640 volts at 340 MA. In a bridge rectifier DC output is 1700 volts at 180 MA., or 1300 volts at 200 MA. Using duplex rectifier DC output available is 1300 volts 125 MA. and 640 volts 100 MA. 1700 volts 125 MA. and 850 volts 75 MA.

Net Price \$5.20

20462B — 1500-1250-1000-0-1000-1250-1500 AC at 300 MA. DC. In full wave DC output is 850 volts, 340 MA., 1060V., 310 MA., or 1275V., 300 MA. In a bridge rectifier DC outputs are 1700V., 200 MA., 1700V., 190 MA., or 2600V., 180 MA. Using duplex rectifier DC outputs available are: 1700V., 130 MA. and 850V., 100 MA., 2130V., 125 MA. and 1060V., 90 MA., 2600V., 125 MA. and 1275V., 75 MA.

Net Price \$6.75

20462C — 2500-2000-1500-0-1500-2000-2500 AC at 300 MA. DC. In full wave rectifier DC output is 1275V., 340 MA., 1700V., 320 MA., or 2120V., 300 MA. In a bridge rectifier DC output on 1500 volt taps is 2600V., 200 MA. on the 2000 volt taps 3420V., 180 MA. Using duplex rectifier DC outputs available are: 2600V., 130 MA. and 1275V., 100 MA., 3420V., 125 MA. and 1700V., 90 MA.

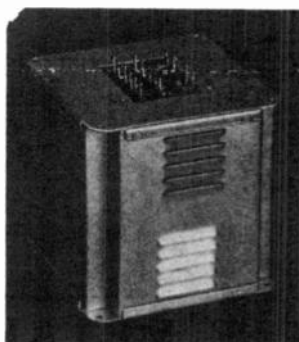
Net Price \$10.95

20462D — 1500-1250-1000-0-1000-1250-1500 AC at 500 MA. DC. In full wave rectifier DC outputs are 850V., 570 MA., 1060V., 520 MA., or 1275V., 500 MA. Using bridge rectifier DC outputs are 1700V., 330 MA., 2130V., 315 MA., or 2600V., 300 MA. respectively. Using duplex rectifier DC outputs are: 1700V., 220 MA. and 850V., 170 MA., 2130V., 210 MA. and 1060V., 150 MA., 2600V., 200 MA. and 1275V., 140 MA.

Net Price \$10.95

20462E — 575-525-0-525-575 AC at 500 MA. DC. In full wave rectifier DC outputs are 425 Volts-550 MA., or 495 Volts-500 MA. In full wave rectifier condenser input, DC outputs are 660 volts 360 MA., or 760 Volts-340 MA. In a bridge rectifier DC outputs 850 Volts-350 MA., or 100 Volts-330 MA. Using duplex rectifier DC outputs are 850 Volts-250 MA. and 425 Volts-125 MA., or 1000 Volts-225 MA. and 500 Volts-125 MA.

Net Price \$5.20



FILAMENT

22283 — Primary 115 volts-50-60 cycles AC. Secondary 2½ V.C.T. at 10 amps, 5000 volts insulation for 2-866's.

Net Price \$1.65

22284 — Primary 105-115 volts-50-60 cycles. Secondary 5½ volts C.T. at 13 amps, 2500 volts insulation.

Net Price \$2.00

22285 — Primary 105-115 volts-50-60 cycles AC. Secondary 7½ volts C.T. at 8 amps, 2500 volts insulation.

Net Price \$1.90

22286 — Primary 105-115 volts 50-60 cycles AC. Secondary 10 volts C.T. at 8 amps, 2500 volts insulation.

Net Price \$2.30

PLATE & FIL.

23160 Primary 115 V., 50-60 cycles AC. (1) Secondaries: 600-525-0-525-600 at 300 MA. (2) 5 V., 3 amps., (3) 7.5 tapped at 6.3 volts at 3 amps., (4) 6.3 V., 5 amps. also tapped for 2½ V. at 10 amps.

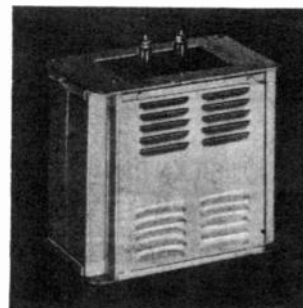
Net Price \$5.50

21467 Primary 115-50-60 cycles AC. (1) Secondaries: 500-425-0-425-500 at 250 MA., (2) 5 V., 3 Amps., (3) 6.3 V.C.T. 3 Amps., (4) 6.3 V.C.T. 3 Amps.

Net Price \$2.95

20757 — Primary 115-50-60 cycles AC. (1) Secondaries: 600-0-600 at 200 MA., (2) 5 V., 3 Amps., (3) 7.5 tapped at 6.3 volts at 3 amps., (4) 2½ volts at 10 amps.

Net Price \$2.95



SMOOTHING AND SWINGING CHOKES

20462F — Smoothing Choke—20 Hy., 200 MA., 115 ohms DC Resistance, 2500 Volts Insulation.

Net Price \$1.45

20462FS — Swinging Choke—5.25 Hy., 200 MA., 115 ohms DC Resistance, 2500 Volts Insulation.

Net Price \$1.45

20462G — Smoothing Choke—20 Hy., 300 MA., 95 ohms DC Resistance, 3500 Volts insulation.

Net Price \$2.85

20462GS — Swinging Choke—5.25 Hy., 300 MA., 95 ohms DC Resistance, 3500 Volts insulation.

Net Price \$2.85

20462H — Smoothing Choke—20 Hy., 400 MA., 85 ohms DC Resistance, 5000 Volts Insulation.

Net Price \$3.45

20462HS — Swinging Choke—5.25 Hy., 400 MA., 85 ohms DC Resistance, 5000 Volts Insulation.

Net Price \$3.45

20462I — Smoothing Choke—20 Hy., 550 MA., 55 ohms DC Resistance, 6000 Volts Insulation.

Net Price \$4.95

20462IS — Swinging Choke—5.25 Hy., 550 MA., 55 ohms DC Resistance, 6000 Volts Insulation.

Net Price \$4.95

LOT NEXT TO STORE OR LOADING ZONE

WALTER ASHE RADIO COMPANY

1100 Pine Street  St. Louis, Missouri



CHANNEL RELAY RACKS

THESE RELAY RACKS ARE IDEAL FOR USE ON ALL TYPES OF TRANSMITTERS AND PUBLIC ADDRESS SYSTEMS EITHER COMMERCIAL OR OTHERWISE. MADE OF 1-8" PRESSED STEEL SECURELY WELDED AND DRILLED AND TAPPED 1 $\frac{3}{4}$ " CENTER TO CENTER FOR 10-32 SCREWS. BLACK CRYSTALLINE FINISH.

NO. RR-193		NO. RR-195	
OVERALL DIMENSIONS:	37 $\frac{1}{4}$ " X 20" X 16"	72 $\frac{1}{4}$ " X 20" X 16"	
AVAILABLE PANEL SPACE:	36 $\frac{3}{4}$ " X 19"	71 $\frac{1}{4}$ " X 19"	
YOUR COST	\$ 8.75	YOUR COST	\$ 10.77

FREE DELIVERY SERVICE DOES NOT APPLY TO THE ABOVE METAL RACKS

Table Type Relay Racks

A SUBSTANTIAL TABLE RACK THAT WILL NOT BEND OR SAG WHEN FULLY LOADED WITH TRANSFORMERS, ETC..

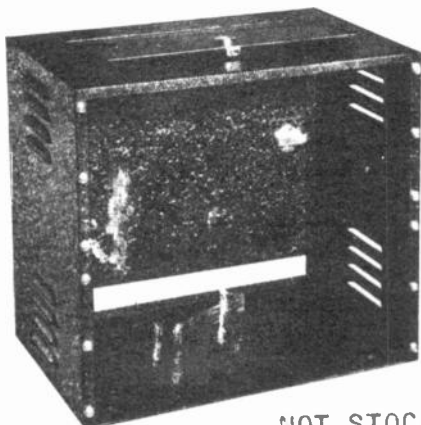
IDEAL FOR TRANSMITTERS, PUBLIC ADDRESS SYSTEMS, POWER SUPPLIES, RECEIVERS AND MANY OTHER ITEMS.

	H.	W.	H.	PANEL SPACE	NET	
NO. TR252C	25	X	20	X 12"	21" X 19"	\$ 3.90
NO. TR3220	32	X	20	X 12"	28" X 19"	5.10



ALL PURPOSE METAL CABINETS

FOR STANDARD 19" RACK PANELS



NOT STOCKED

			SINGLE UNIT
NO. SC-128	8 $\frac{3}{4}$ " X 19" X 12"	DOOR IN TOP ONLY	NET \$ 5.28
NO. SC-1210	10 $\frac{1}{2}$ " X 19" X 12"	DOOR IN TOP ONLY	\$ 6.45
			DOUBLE UNIT
NO. SC-1713	17 $\frac{1}{2}$ " X 19" X 13"	DOOR IN BACK AND TOP	\$ 9.30
			TRIPLE UNIT
NO. SC-2613	26 $\frac{1}{4}$ " X 19" X 13"	DOOR IN BACK ONLY	\$ 9.90

CHASSIS MOUNTING BRACKETS

FOR ANY PANEL OVER 7" HIGH. MADE OF HEAVY GAUGE METAL AND COMES DRILLED..

NO.	SIZE	NET	PER PAIR
SB - 78	FOR 8" BASES	\$.60	
SB - 711	11	.84	
SB - 713	13	1.05	

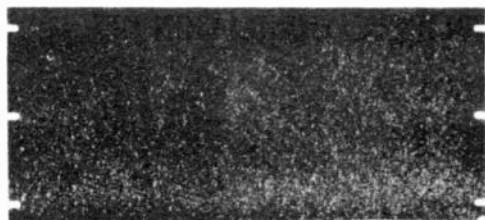


IT'S EASY TO PARK  AT WALTER ASHE . . .

1100 Pine Street

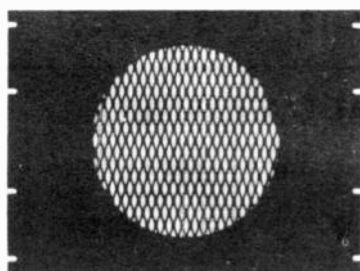
St. Louis, Missouri

STEEL RACK PANELS - 19" WIDE



BLACK CRYSTALLINE FINISH
BLANK PANELS.
STANDARD SIZES TO FIT ANY
19" RELAY RACK OR CABINET
MADE OF 1/8" STEEL AND
UNIFORMLY SLOTTED.

NO.	WIDTH	YOUR COST
3600	1 3/4"	\$.54
3601	3 3/8"	.60
3602	5 1/4"	.69
3603	7"	.72
3604	8 3/4"	.96
3605	10 3/8"	1.17
3606	12 1/4"	1.38
3607	14"	1.59
3608	15 3/4"	1.77
3609	17 3/8"	1.98
3610	19 1/4"	2.16
3611	21"	2.40



SPEAKER PANELS

NO.	PANEL SIZE	SPEAKER SIZE	YOUR COST
SP-875	8 3/4" X 19"	6"	\$ 1.50
SP-1050	10 3/8" X 19"	8"	1.80
SP-1225	12 1/4" X 19"	10"	2.40
SP-1400	14" X 19"	12"	2.70



METER PANELS



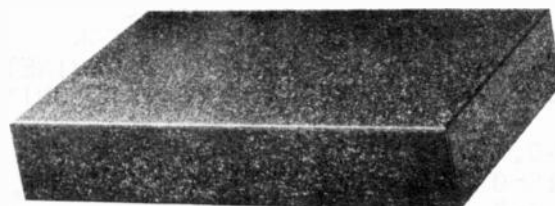
ALL METER PANELS ARE 5 1/4" HIGH. FOR EITHER 2" OR 3" METERS

CATALOG NO.	NO. OF HOLES	METER SIZE	NET
MP-32	3	2"	\$.99
MP-42	4	2"	1.23
MP-52	5	2"	1.47
MT-33	3	3"	.99
MP-43	4	3"	1.23
MT-53	5	3"	1.47

BLANK STEEL CHASSIS BASES

NO.	SIZE	YOUR COST
15280	8" X 17" X 2"	\$ 1.62
15281	8 X 17 X 3	1.80
15282	11 X 17 X 2	1.80
15210	11 X 17 X 3	1.95
15212	13 X 17 X 2	2.10
15213	13 X 17 X 3	2.31

MADE OF 1/16" STEEL WITH WELDED
CORNERS AND REINFORCING FLANGES AT
BOTTOM. BLACK CRACKLE FINISH.



ALL CHASSIS COME COMPLETE WITH
BOTTOMS AND MOUNTING SCREWS.

LOT NEXT TO STORE OR LOADING ZONE

WALTER ASHE RADIO COMPANY

1100 Pine Street

St. Louis, Missouri

Cabinets and Cans



ICA CRYSTALLIZED FINISHED CABINETS

*With Hinged Lids
Made of Finest Grade
Auto-Body Steel*

These cabinets are finished with finest black crystallized lacquer baked under high temperature for extreme permanence. Supplied with hinge lids.

The cabinet is so arranged that the front panel, back panel, or bottom can be removed by taking out the self-tapping screws, and although supplied in Knocked-Down Form, it can be assembled in a few moments by simply inserting the self-tapping screws.

	L	W	H	NET
3825	9	X 5	X 6	\$1.65
3826	10	X 8	X 7	2.10
3827	10	X 8	X 10	2.31
3828	12	X 8	X 7	2.46
3829	12	X 11	X 8	2.82
3830	14	X 8	X 7	3.00
3831	18	X 12	X 9	3.90

ICA CRACKLE FINISHED CABINETS

*With Removable Top and Bottom
Made of Steel*



Finished in black, crystallized lacquer for various radio uses such as in-put stages, mixers, transceivers, amplifiers, etc.

Has spot welded corners with snugly fitted tops and bottoms. The tops and bottoms are removable and fastened on with self-tapping machine screws. Available in the following sizes:

NO.	L	W	H	NET
3800	6	X 6	X 6"	\$.90
3801	9	X 5	X 6"	1.29
3802	10	X 8	X 7"	1.71
3803	10	X 8	X 10"	1.86
3804	12	X 11	X 8"	2.40

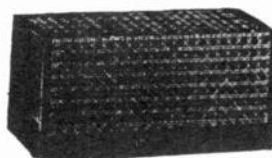
CHASSIS FOR ICA CABINETS

CADMIUM PLATED STEEL
ARE PRIMARILY DESIGNED FOR
SEVERAL OF THE ABOVE ICA CABINETS
BUT MAY BE USED AS SEPARATE UNITS

NO.	L	W	H	
1560	8 $\frac{1}{2}$	X 4 $\frac{3}{4}$	X 1 $\frac{3}{8}$ "	\$.42
1562	11	X 10	X 2 $\frac{1}{2}$ "	.99

AMPLIFIER FOUNDATION KIT

BUD



MADE OF HEAVY GAUGE
COLD ROLLED STEEL.
CORNERS ROLLED OVER
AND WELDED.
TOP IS CANE DESIGN.

NO.	W	L	H	NET
1125	5	X 13 $\frac{1}{2}$	X 8 $\frac{1}{4}$ "	\$1.77
1126	7	X 17	X 8 $\frac{1}{4}$ "	2.31
1127	10	X 17	X 8 $\frac{1}{4}$ "	2.70
1128	10	X 12	X 8 $\frac{1}{4}$ "	2.31

BUD METAL BOX CABINETS

NO. 1124



W	L	H	NET
6X	7X	12"	\$1.50

NO. 525 CHASSIS BASE
DESIGNED TO FIT
THE NO. 1124 CAN
NET \$.30

BUD INTER-STAGE SHIELDS



These shields are ideal for use on receiver and transmitter chassis for eliminating inter-stage coupling and isolating component parts. Made of 20 gauge electro zinc coated steel. Folded on front and bottom for fastening to panel or chassis.

NO. 1246---	5 $\frac{1}{2}$ " HIGH, 7" LONG	\$.21
NO. 1245---	6 $\frac{1}{2}$ " " 10" "	.30

RACK MOUNTING BRACKETS



For mounting shelves and chassis to rack panels. Are triangular in shape, so that they may be used in numerous ways. Made from heavy gauge cold rolled steel. Finished in black crackle enamel.

NO. 1266---	5" BRACKETS PER PR.	\$.42
NO. 1267---	7" " " "	.54

IT'S EASY TO PARK  AT WALTER ASHE . . .

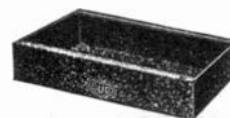
WALTER ASHE RADIO COMPANY

1100 Pine Street

St. Louis, Missouri

BUD STEEL CHASSIS BASES SOLID, ONE PIECE CONSTRUCTION

Build your Receiver, Transmitter, Amplifier, or Test Equipment on a BUD Chassis Base. These bases are made of heavy gauge steel and are folded over on the bottom for additional strength. Bottom plate can be fastened to chassis if desired.



All corners are spot welded.

NO.	788	5" X 9 1/2" X 1 1/2"	NET EA.	\$	.45
	790	7" X 9" X 2"			.60
	791	7" X 11" X 2"			.66
	646	7" X 13" X 2"			.72
	649	7" X 15" X 3"			.96
	648	7" X 17" X 2 1/2"			.87
	652	10" X 12" X 3"			.96
	650	8" X 17" X 2"			.96
	651	8" X 17" X 3"			1.02
	654	10" X 17" X 2"			1.02
	655	10" X 17" X 3"			1.08
	656	10" X 23" X 3"			1.44
	660	13" X 17" X 3"			1.65

METAL PANELS

Heavy gauge, cold rolled sheet steel, finished on both sides in beautiful black crackle.

NO.	1200	7" X 8"	NET \$	.27	NO.	1204	8" X 14"	NET \$	.48
	1201	7" X 10"		.33		1187	8" X 18"		.60
	1202	7" X 12"		.39		1188	8" X 19"		.78
	1203	7" X 14"		.45		700	9" X 15"		.51

COTO RF TRANSMITTING CHOKE



A compact heavy-duty choke for the high power stage. Particularly suited to the 160 Meter band. Wound with five continuous universal tapered pies on a one-half inch core, three inches long. The effective impedance is high enough to make parallel plate feed practical. The current carrying capacity is conservatively rated at .6 amp. continuous and .8 amp. intermittent service.

Inductance, 3.6 mh.; D. C. resistance, 11 ohms; Size 3 3/8 in. x 1 3/8 in.

TYPE CI-20 NET \$.75

COTO RF TRANSMITTING CHOKE



Designed especially to offer maximum impedance at frequencies in the 80, 40, and 20 Meter bands. The pies are universal HONEY-COMB wound for low distributed capacity. This feature together with a unique winding method for obtaining a balanced distributed capacity between pies has resulted in a choke unparalleled in efficiency. Steatite core and current ratings similar to the CI-20.

Inductance, 1.1 mh.; D. C. resistance, 6 ohms; Size 3 3/8 in. x 1 1/4 in.

TYPE CI-21 NET \$.75



COTO 5 METER CHOKE
TYPE CI-13 NET \$.24



100 MILL. LAMP FOR INDICATION
OF CRYSTAL GRID CURRENT. \$.10

- ATTENTION -

WE STILL MAINTAIN OUR FREE DRILLING SERVICE TO PURCHASERS OF METAL CHASSIS AND CANS. WE WILL BE GLAD TO MAKE ANY HELPFUL SUGGESTIONS AS TO THE PROPER LAYOUT OF PARTS ON CHASSIS. THIS SERVICE DOES NOT INCLUDE THE PUNCHING OF SQUARE HOLES.

NEON GLOW LAMPS

GENUINE MAZDA HIGHEST GRADE



	1/4 WATT	\$	.40
	1/2 "		.40
	1 "		.40
	2 "		.50

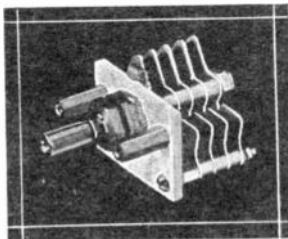
LOT NEXT TO STORE OR LOADING ZONE

WALTER ASHE RADIO COMPANY

1100 Pine Street St. Louis, Missouri

CARDWELL Quality

"TRIM-AIR" MIDGET CONDENSERS



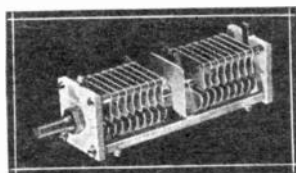
ZT-15-AS

Complete line of single units with New Dual Trim-Air series to match. Universally used for high frequency portable equipment, exciter units and low power transmitters. Detachable shafts on singles leaves screw driver slot and lock provides permanent adjustment for fixed tune. Singles require 1 5/16" x 1 13/32" panel mount space and duals 1 45/64" x 1 13/32" condenser open. All Duals double bearing, shaft extended at rear for coupling and have removable intersection shield except "ganged neutralizer" types. All Trim-Airs have Isolantite insulation, 1/4" nickel plated brass shaft; aluminum plates. All Trim-Air Accessories fit both single and dual units.

★ SINGLE "TRIM-AIRS"

Type	Max. Cap.	Min. Cap.	Nr. Plates	Air Gap	Depth Back Panel	List Price	Dealers Price
* ZU-75-AS	75	2.7	15	.020"	1 5/16"	\$1.70	\$1.02
* ZU-100AS	100	3	19	.020"	1 7/16"	1.75	1.05
* ZU-140-AS*	140	5	27	.020"	1 5/16"	3.15	1.89
* ZR-10-AS	10	1.2	3	.030"	15/16"	1.25	.75
* ZR-15-AS	15	1.5	5	.030"	15/16"	1.25	.75
* ZR-25-AS	25	2	7	.030"	1"	1.40	.84
* ZR-35-AS	35	2.5	11	.030"	1 5/16"	1.50	.90
* ZR-50-AS	50	2.8	13	.030"	1 5/16"	1.60	.96
* ZV-5-TS†	5	1.0	3	.061"	15/16"	1.25	.75
* ZT-15-AS	15	3	9	.070"	1 7/16"	1.55	.93
ZT-30-AS	30	4	17	.070"	2 1/8"	1.85	1.11
ZS-4-SS	4	1.5	5	.140"	1 5/16"	1.85	1.11

* Double bearing; two end plates.
† Supplied with 2 segment stator for 5 meter circuits. Extra plate also supplied; easily installed; makes it 3 plates as listed.



ET-30-AD

★ DUAL "TRIM-AIRS"

Type	Max. Cap.	Min. Cap.	Nr. Plates	Air Gap	Depth Back Panel	List Price	Dealers Price
* EU-75-AD	75	2.7	15	.020"	3 5/8"	\$3.30	\$1.94
* EU-100-AD	100	3	19	.020"	3 5/8"	3.40	2.04
* EU-140-AD	140	5	27	.020"	4 9/32"	6.00	3.60
* ER-10-AD	10	1.2	3	.030"	2 25/32"	2.60	1.56
* ER-15-AD	15	1.5	5	.030"	2 25/32"	2.60	1.56
* ER-25-AD	25	2	7	.030"	2 25/32"	2.70	1.62
* ER-35-AD	35	2.5	11	.030"	3 5/8"	2.90	1.74
* ER-50-AD	50	2.8	13	.030"	3 5/8"	3.10	1.86
* ET-15-AD	15	3	9	.070"	3 5/8"	3.00	1.80
* ET-30-AD	30	4	17	.070"	5 3/32"	3.60	2.16
* ET-30-ADI	With insulated coupling			5 21/32"	4.10	2.46	2.46
* ES-4-SD	4	1.5	5	.140"	3 5/8"	3.60	2.16
* ES-4-SDI	With insulated coupling			4 3/16"	4.10	2.46	2.46

★ BALANCING TRIM-AIRS

(Same size end plate as Duals) available in 5 sizes 25 to 140 mmids.

★ FIXED TRIM-AIRS

(Dual type end plates) available with airgaps to .100" capacities to 200 mmid with .050" gap. Write for information and prices.

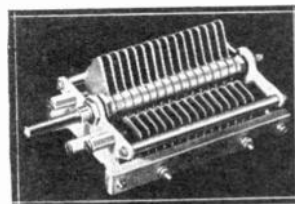
Items marked (*) not generally carried in stock.

MIDWAY FEATHERWEIGHT CONDENSERS

For low and medium power transmitters and receivers, where light weight and small space are factors. Ideal for portable and aircraft equipment. Panel mounting space only 2 1/8" x 3" condenser open. 1/4" steel shaft; aluminum frame; brass bearings; plates buffed, rounded on all airgaps .070" or over. Supplied with aluminum mounting feet. G. E. Mycalex insulation.

★ SINGLE RECEIVING MIDWAYS ALSO FOR LOW POWER TRANSMITTERS

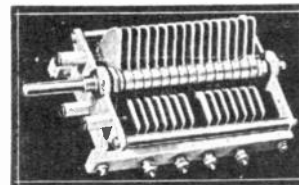
Type	Max. Cap.	Min. Cap.	Nr. Plates	Air Gap	Depth Back Panel	List Price	Dealers Price
MR-25-BS	25	5	3	.030"	2 17/32"	\$2.70	\$1.62
MR-50-BS	50	6	5	.030"	2 17/32"	2.80	1.68
MR-70-BS	70	7	7	.030"	2 17/32"	2.95	1.77
MR-105-BS	105	8	11	.030"	2 17/32"	3.05	1.83
MR-150-BS	150	10	15	.030"	2 17/32"	3.15	1.89
MR-260-BS	260	11	25	.030"	3 17/32"	3.30	1.98
MR-365-BS	365	14	35	.030"	3 17/32"	3.80	2.28
MO-165-BS	165	15	25	.050"	3 17/32"	3.30	1.98



MT-150-GS

★ SINGLE TRANSMITTING MIDWAYS

Type	Max. Cap.	Min. Cap.	Nr. Plates	Air Gap	Depth Back Panel	List Price	Dealers Price
MT-20-GS	20	5	5	.070"	2 17/32"	\$3.25	\$1.95
MT-35-GS	35	6	7	.070"	2 17/32"	3.50	2.10
MT-50-GS	50	8	11	.070"	2 17/32"	3.90	2.34
MT-70-GS	70	10	15	.070"	3 17/32"	4.45	2.67
MT-100-GS	100	12	21	.070"	3 17/32"	4.90	2.94
MT-150-GS	150	16	31	.070"	4 15/32"	6.00	3.60
MG-35-NS	35	12	15	.171"	4 15/32"	6.00	3.60



MT-70-GD

★ DUAL MIDWAY CONDENSERS

Type	Max. Cap.	Min. Cap.	Nr. Plates	Air Gap	Depth Back Panel	List Price	Dealers Price
MR-25-BD	25	5	3	.030"	2 17/32"	\$4.35	\$2.61
MR-50-BD	50	6	5	.030"	3 17/32"	4.70	2.82
MR-70-BD	70	7	7	.030"	3 17/32"	4.90	2.94
MR-100-BD	100	8	11	.030"	3 17/32"	5.10	3.06
MR-150-BD	150	9	15	.030"	3 17/32"	5.30	3.18
MR-260-BD	260	11	25	.030"	4 15/32"	5.50	3.30
MO-180-BD	180	15	29	.050"	6 5/32"	8.00	4.80
MT-20-GD	20	6	5	.070"	3 17/32"	5.55	3.33
MT-35-GD	35	7	7	.070"	3 17/32"	6.00	3.60
MT-50-GD	50	9	11	.070"	3 17/32"	6.35	3.81
MT-70-GD	70	10	15	.070"	4 15/32"	7.00	4.20
MT-100-GD	100	13	21	.070"	6 5/32"	8.00	4.80

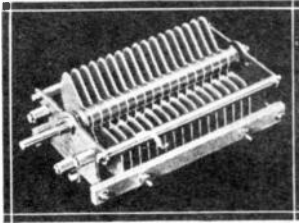
NOTE—Capacities and number plates are per section.

IT'S EASY TO PARK AT WALTER ASHE . . .

1100 Pine Street

St. Louis, Missouri

"X" TYPE TRANSMITTING

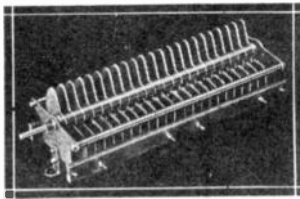


XE-240-KS

STANDARD OF COMPARISON FOR YEARS. Heavy aluminum rounded plates; frames and tie rods nickled brass; ball thrust type rotor bearing; phosphor bronze rotor contact; nickled brass bushings; steel shaft supports rotor plates and spacers. General Electric Mycalex insulation. Frame measures 3 3/4" x 4". Supplied with mounting feet. Shafts 1/4".

★ "X" TYPE STANDARD SINGLES

Type	Max. Cap.	Min. Cap.	Nr. Plates	Air Gap	Depth Back Panel	List Price	Dealers Price
XT-220-PS	220	20	21	.070"	4"	\$4.50	\$2.70
XT-440-PS	440	40	43	.070"	5 13/16"	7.70	4.62
XP-90-KS	90	16	11	.084"	2 7/8"	4.50	2.70
* XP-165-KS	165	22	19	.084"	4"	6.50	3.90
* XP-290-KS	290	35	33	.084"	5 13/16"	9.50	5.70
XP-330-KS	330	37	37	.084"	6 3/8"	10.80	6.48
XE-240-KS	240	30	33	.100"	6 3/8"	10.80	6.48
XG-25-KS	25	8	5	.171"	2 13/16"	3.50	2.10
XG-50-KS	50	15	11	.171"	3 15/16"	6.50	3.90
XG-110-KS	110	26	23	.171"	6 7/16"	9.70	5.92
* XC-18-XS	19	8	5	.200"	2 7/8"	5.50	3.30
* XC-40-XS	40	15	11	.200"	4"	7.50	4.50
* XC-65-XS	65	20	17	.200"	5 13/16"	9.50	5.70
* XC-100-XS	100	28	25	.200"	7 7/16"	11.50	6.90
XK-55-KS	55	20	15	.230"	5 13/16"	10.00	6.00

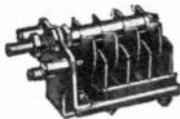


XG-110-KD

★ "X" TYPE STANDARD DUALS

Type	Max. Cap.	Min. Cap.	Nr. Plates	Air Gap	Depth Back Panel	List Price	Dealers Price
XR-500-PD	500	18	21	.030"	4"	\$6.50	\$3.90
XT-80-PD	80	11	9	.070"	4"	5.50	3.30
XT-210-PD	210	22	21	.070"	5 13/16"	8.70	5.22
* XP-90-KD	95	15	11	.084"	4 1/2"	7.50	4.50
* XP-165-KD	165	23	19	.084"	6 1/2"	11.00	6.60
* XP-325-KD	325	38	37	.084"	11 1/16"	22.00	13.20
* XE-240-KD	240	32	33	.100"	11 1/16"	21.00	12.60
XG-50-KD	50	14	11	.171"	6 7/16"	10.70	6.42
XG-110-KD	110	27	23	.171"	11 1/16"	18.00	10.90
XC-40-KD	40	14	11	.200"	7 7/16"	13.00	7.90
* XC-75-KD	75	21	19	.200"	11 1/16"	17.00	10.20

H. F. NEUTRALIZING CONDENSERS



NA-16-NS

High frequency neutralizers for low capacity tubes. Mycalex insulation; heavy buffed plates with rounded edges. Preferable to circular type account of 180 degree rotation, permitting calibration and reset.

Type	Max. Cap.	Min. Cap.	Nr. Plates	Air Gap	Depth Back Panel	List Price	Dealers Price
NA-4-NS	4	2.5	2	adj.	1 3/8"	\$3.60	\$2.16
NA-6NS	6	4	3	.218"	1 3/16"	3.60	2.16
NA-10-NS	11	6	6	.218"	2 1/8"	4.50	2.70
NA-16-NS	16	7	8	.218"	2 9/16"	5.00	3.00
* NA-12-ND*	12	6	7	.218"	5 25/32	15.00	9.00
* VZ-9-RS	9	7	2	adj.	1 1/16"	14.00	8.40
* VZ-12-RS	12	7	3	.500"	1 3/8"	15.25	9.15

* Ganged neutralizer with insulated coupling; information given is per section.

Items marked (*) not generally carried in stock.

"T" TYPE TRANSMITTING

Heavier construction throughout than "X" type. 3/8" non-magnetic steel shafts; mounting feet part of 1/8" thick nickled brass end plates; corona shields protect insulating bars which are G. E. Mycalex. Measures 5 3/8" high x 6 1/4" wide. Condenser open.

★ "T" TYPE STANDARD SINGLES

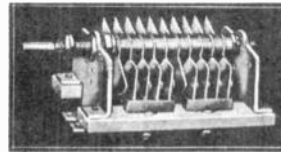
Type	Max. Cap.	Min. Cap.	Nr. Plates	Air Gap	Depth Back Panel	List Price	Dealers Price
* TJ-150-US	150	28	15	.168"	5 27/32"	\$23.00	\$13.80
* TJ-315-US	315	31	31	.168"	9 9/32"	32.00	19.20
* TC-160-US	160	38	16	.200"	7 1/4"	24.00	14.40
* TC-200-US	200	40	23	.200"	8 1/4"	28.00	16.80
* TC-300-US	300	42	35	.200"	11 1/4"	32.00	19.20
* TL-60-US	60	18	7	.294"	4 13/16"	16.50	9.90
* TL-80-US	80	29	13	.294"	6 7/8"	22.00	13.20
* TL-100-US	100	26	15	.294"	7 9/16"	22.00	13.20
* TL-160-US	160	40	25	.294"	11"	30.00	18.00
* TL-200-US	200	46	31	.294"	13 1/16"	33.00	19.80
* TZ-40-RS	40	15	11	.500"	8 1/4"	28.00	16.40
* TZ-80-RS	80	26	21	.500"	13 3/4"	39.50	23.70

★ "T" TYPE STANDARD DUALS

Type	Max. Cap.	Min. Cap.	Nr. Plates	Air Gap	Depth Back Panel	List Price	Dealers Price
* TJ-150-UD	150	18	15	.168"	9 9/32"	\$32.00	\$19.20
* TJ-200-UD	200	30	21	.168"	12"	36.00	21.60
* TC-100-UD	100	18	13	.200"	9 9/32"	31.00	18.60
* TC-160-UD	160	38	19	.200"	12 1/4"	34.00	20.40
* TC-200-UD	200	40	23	.200"	14 1/4"	38.00	22.80
* TC-250-UD	250	41	29	.200"	17 1/4"	42.00	25.20
* TL-50-UD	45	13	7	.294"	7 9/16"	25.00	15.00
* TL-70-UD	70	19	11	.294"	10 1/4"	29.00	17.40
* TL-100-UD	94	26	15	.294"	13 1/16"	34.50	20.70
* TL-160-UD	160	36	25	.294"	20"	44.00	26.40
* TKD-100-UD	110	30	21	.350"	20 1/8"	44.00	26.40
* TZ-40-RD	40	15	11	.500"	14 13/16"	43.00	25.80

ULTRA HIGH FREQUENCY DUALS

FOR 5 AND 10 METER TRANSMITTERS AND DIATHERMY MACHINES

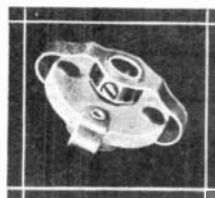


NP-35-ND

Widely used for ultra H. F. power oscillators and amplifiers; 5 and 2 1/2 meter radiotransmitters, and 6 meter diathermy sets. No closed metallic loops — lowest losses. Insulation Isolantite-Mycalex.

Type	Max. Cap.	Min. Cap.	Nr. Plates	Air Gap	Insulation	Depth Back Panel	List Price	Dealers Price
NP-35-ND	35	5	9	.084"	Isolantite and Mycalex	4 1/8"	\$6.00	\$3.60
* JP-48-ND	48	6	13	.084"	Isolantite and Mycalex	6 1/16"	16.25	9.75
* JD-28-ND	28	5	11	.125"	Isolantite and Mycalex	6 1/16"	16.25	9.75

CARDWELL FLEXIBLE COUPLING



TYPE A—Fits all 1/4" shafts. Has isolantite insulation with new type nickel plated phosphor bronze springs and reversed brass hubs. Minimum space required. Maximum flexibility with no back lash. A real improvement over existing types. Overall diameter 1 1/4". Overall width outside hub-to-hub 3/4". Packed in standard cartons of one dozen. List Price \$6.00 each Dealers Price \$3.60 each

CARDWELL TRIM-AIR CONDENSER ACCESSORIES may be purchased separately as follows:

MOUNTING BRACKET, with two screws and nuts 10c list Dealers Price 6c
MOUNTING POSTS, (one pair required per condenser) with screws and locking washers—per pair 13c list Dealers Price 8c

EXTRA EXTENSION SHAFTS with setting nut 07c list Dealers Price 4c

LOT NEXT TO STORE OR LOADING ZONE

WALTER ASHE RADIO COMPANY

1100 Pine Street St. Louis, Missouri

E·F·JOHNSON·COMPANY

MANUFACTURERS OF *Radio Transmitting Equipment*



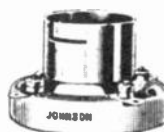
Type "Q" ANTENNA SYSTEM

The Johnson Type "Q" has achieved outstanding success in high-frequency transmitters throughout the world because of its high efficiency. The special quarter-wave tubing transformer accurately matches line and antenna impedances, and power is transferred with practically no losses even with very long lines. Due to these factors, the Type "Q" will radiate TWICE as much power as the common non-matched antenna-leader system. The "Q" may be installed on long-wire harmonic radiators as well as on the suggested half-wave doublet. Complete technical data will be sent on request.

Each complete Type "Q" System includes the following material: one No. 34 Suspension Insulator, one length No. 350 Enamelled Copperweld Antenna Wire (1/2 wavelength long), two lengths of No. 375 Aluminum Tubing for the quarter-wave line section, a supply of No. 23 Spacing Bars for clamping the tubes in position, one Spacing Template, and complete instructions. No antenna insulators or main transmission line materials are included (open-wire lines with 6" Feeder Spreaders or No. 31 Transposition Insulators are specified). See listings below for individual parts. Type numbers indicate the amateur band in meters.

TYPE 10Q	ANTENNA SYSTEM	NET \$	4.71
TYPE 20Q	ANTENNA SYSTEM		7.35
TYPE 40Q	ANTENNA SYSTEM		13.56
TYPE 80Q	ANTENNA SYSTEM		25.20

TRANSMITTING TUBE SOCKETS



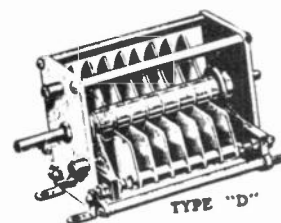
210-211-216

TYPE 210	FOR TUBES SUCH AS 825'S 210'S 866'S
NET PRICE	\$.51

TYPE 211	FOR ANY TUBE HAVING A 50 WATT BASE
NET PRICE	\$.75

TRANSMITTING

CONDENSERS



TYPE "D"

GENERAL SPECIFICATIONS

Material: Aluminum. Plates .051" thick, with edges rounded; ends 1/8" thick; tie rods 3/8" diameter.

Finish: Rotor and stator plates polished, remainder satin etched finish.

Shaft: Steel, cadmium plated, 1/4" diameter, extended 1 1/2" in front, 3/4" in rear.

Voltage Ratings (Approximate peak values)***

Spacing .060" .080" .175" .250" .350" .500"

Voltage 2500 3500 7000 9000 11,000 13,000

Insulation: Mycalex and Alsimag 196 on Type "D"; Alsimag 196 on Type "D" Mycalex available for \$2.00 list additional.

The superlative quality of MYCALEX insulation is so well known it needs no description. ALSIMAG 196 is a newly developed Steatite type ceramic, having radio frequency dielectric qualities far superior to other commercially available materials.

TYPE NO.	PLATE SPACING	CAPACITY MIN. MAX.		NO. PLATES	FRAME LENGTH	NET PRICE
TYPE "C" SINGLE SECTION						
50C110	.350"	30	50	7	4 3/4"	\$5.40
100C110	.350"	40	100	15	8 3/8"	7.08
50C130	.500"	35	50	9	6 7/8"	5.94
TYPE "C" DUAL SECTION						
100CD110	.350"	30	100	15	15 7/8"	\$12.90
50CD130	.500"	29	50	9	12 7/8"	10.05
TYPE "D" DUAL SECTION						
100DD70	.175"	30	100	13	8 3/8"	\$ 7.50
150DD70	.175"	38	150	21	12"	9.60
100DD90	.250	39	100	18	14"	9.90

SENCO NEON TUNING WAND



IDEAL FOR USE IN NEUTRALIZING TRANSMITTERS,
CHECKING THE RF. CURRENTS,
OBTAINING MODULATION EFFECTS

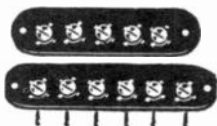
TUNING WAND IS APPROXIMATELY 12" LONG AND
HAS HEAVY BAKELITE ENDS YOUR COST \$ 1.50

IT'S EASY TO PARK AT WALTER ASHE . . .

1100 Pine Street

St. Louis, Missouri

BAKELITE TERMINAL STRIPS AND TERMINALS



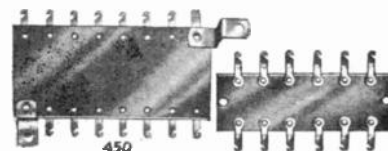
No. 23

NO.	TERM.	MARKED	1, 2	\$.
1501	2	PLAIN		.11
1502	2	MARKED A&G		.09
1503	2	" OUTPUT		.11
1504	2	" INPUT		.11
1505	3	PLAIN		.12
1506	3	MARKED 1-3		.15
1507	4	" 1-4		.21
1508	4	PLAIN		.18
1509	5	MARKED 1-5		.24
1510	5	PLAIN		.21
1511	6	PLAIN		.24
1512	6	MARKED 1-6		.27
1513	7	PLAIN		.30
1514	7	MARKED 1-7		.36
1515	8	PLAIN		.36
1516	8	MARKED 1-8		.42
1517	9	PLAIN		.42
1518	9	MARKED 1-9		.48
1519	10	PLAIN		.48
1520	10	MARKED 1-10		.54
NO. 23	TERMINAL LUG			.02



Tie Points

NO.	PT.	\$.
1510	1	.02
1520	2	.02
1530	3	.03
1540	4	.04
1550	5	.05



Bakelite Terminal Plates

No. 420—Has six terminal lugs on each side for 1/2 watt resistors, spaced 1/8" apart. Made of 1/8" bakelite 1" x 3".

No. 430—Has four terminal lugs on each side for 1 watt resistors and midjet condensers, spaced 1/8" apart. Made of 1/8" bakelite 2" x 2 1/2".

No. 440—Has fourteen terminal lugs on each side for 1/2 watt resistors, spaced 1/8" apart. Made of 1/8" bakelite 1" x 5 3/4".

No. 450—Has seven terminal lugs on each side for 1 watt resistors and midjet condensers, spaced 1/8" apart. Supplied with "7" brackets for 3/4" stand-off from chassis. Made of 1/8" bakelite 1 3/4" x 3 3/4".

NO.	NET EA.	\$.
420		.12
430		.15
440		.21
450		.18

BRASS TUBULAR SPACERS FOR GENERAL USE



NO.	BRASS	1/4"	NET	\$.
NO. 70	"	3/8"		.02
NO. 71	"	1/2"		.02
NO. 72	"	3/4"		.02
NO. 73	"	1"		.03

ABOVE SPACERS ARE FOR 6/32 SCREWS

NO.	STEEL	3/4"	TWO FOR	\$.
NO. A1	"	1"		.05

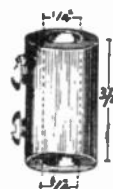
ABOVE SPACER FOR SCREWS UP TO 8/32

BUD CRYSTAL-LAC



This is a real air drying lacquer which is applied with a soft brush and puts a beautiful black crystalline finish on any metal part, such as panels, chassis, etc. Absolutely no baking necessary.

BRASS COUPLINGS, EXTENSIONS



No. 250



No. 5050



No. 2575

.09	.09	.04
-----	-----	-----

NO. 75-50 (1/4-3/8")	\$.	.09
NO. 375 (3/8")		.09

NO.	2 OZ. SIZE	NET	\$.
533	1/4 PT. SIZE		.42
534	1/2 PT. SIZE		.75
535	1 PT. SIZE		1.35

LOT NEXT TO STORE OR LOADING ZONE

WALTER ASHE RADIO COMPANY

1100 Pine Street St. Louis, Missouri



Copper
Tubing

SOFT DRAWN		
1/8" OD.	PER FOOT	\$
1/8"		.05
3/16"		.06
1/4"		.07
5/16"		.08



SOLID TINNED BUS BAR IN 30"
LENGTHS.

NO.	PER LENGTH	\$
NO. 10		.025
NO. 12		.025
NO. 14		.025

Bakelite
Tubing

Genuine Hi-Fre-
quency natural color
Bakelite with 1/8"
wall. Smooth Finish.



SIZE	PER INCH
1/2" TO 1 1/2"	.04
1 1/2 TO 1 3/4	.06
2 TO 2 1/4	.07
2 1/4 TO 2 3/4	.08
3 TO 3 1/4	.09
3 1/2 TO 3 3/4	.10

BAKELITE ROD
1/4" DIAMETER PER FOOT \$.36

ICA "INSULOID" RODS

FLEXIBLE
DURABLE



INSULOID ROD 1/4" DIAMETER
IS IDEAL FOR EXTENSION
SHAFTS AND SIMILAR USES.

SOLD IN ONE AND TWO FOOT
LENGTHS ONLY.

12"	NET \$.15
24"	.30

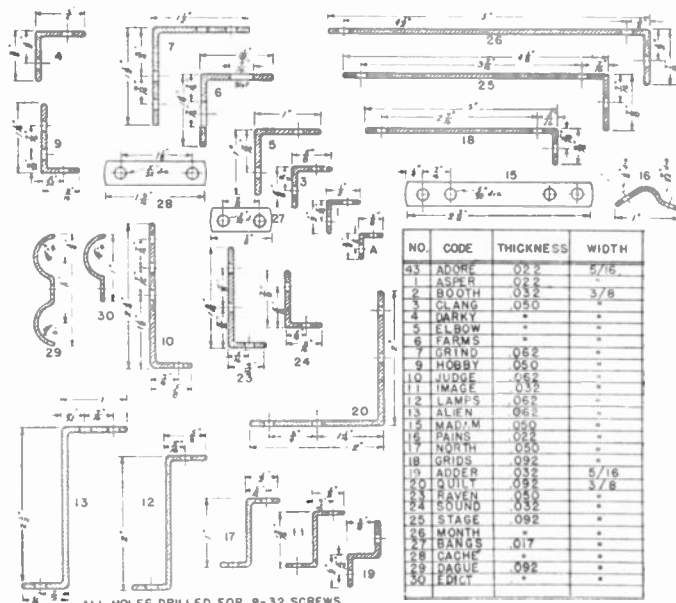
FIBRE INSULATING WASHERS



FOR JACKS
FOR BINDING POSTS

EA. \$.01
.01

ANGLES AND BRACKETS BRASS NICKEL PLATED



ALL HOLES DRILLED FOR 8-32 SCREWS

NO.	1	NET EA.	\$.01	NO.	16	NET EA.	\$.02
	2		.01		17		.03
	3		.02		18		.05
	4		.02		19		.02
	5		.03		20		.05
	6		.03		23		.02
	7		.03		24		.02
	9		.03		25		.07
	10		.03		26		.08
	11		.02		27		.02
	12		.03		28		.02
	15		.03		29		.03
					30		.03

ICA SHIELDED R.F. CHOKES INSULEX FORMS

NO.	2.5	MILLIHENRIES	NET
275	2.5	"	.39
274	3.5	"	.39
276	5.5	"	.39
273	10	"	.42
271	30	"	.48
272	60	"	.51
270	80	"	.54



ICA R.F. CHOKES ON INSULEX FORMS

No.	1777—2 1/2 m. h.	NET
1776—3 1/2 m. h.		.27
1775—5 1/2 m. h.		.30
1774—10 m. h.		.33
1772—30 m. h.		.39
1773—60 m. h.		.45
1771—80 m. h.		.48



IT'S EASY TO PARK AT WALTER ASHE . . .

1100 Pine Street

St. Louis, Missouri

NAME PLATES

FOR TRANSMITTERS AND SOUND EQUIPMENT



Standard Plate

(Size 1 1/2 x 3/4")
Standard.

YOUR COST, EACH 6c



DeLuxe Plate

(Size 2 1/2 x 3/4")
DeLuxe.

YOUR COST, EACH 10c

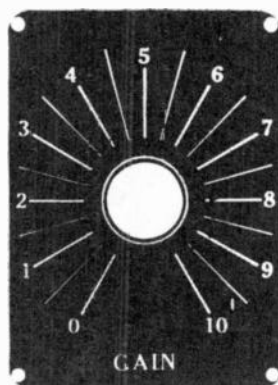
Made of brass with characters and borders chromium-plated. Back-grounds etched dull black. Available in two sizes—2 1/2 x 3/4" (especially recommended for transmitting apparatus) and 1 1/2 x 3/4" (especially recommended for sound and test equipment.) Both sizes are furnished complete with self-tapping machine screws for mounting on wood, aluminum, steel, or bakelite panels.

Oscillator
Oscillator Tank
Crystal
Crystal Osc. Plate
Crystal Osc. Grid
Tritet Osc.
Tripler Plate
Tripler Grid
Cathode Tun. Cond.
Transmitter
Buffer
1st Buffer Plate
1st Buf. Pl. Tank
1st Buffer Grid
1st Buf. Gr. Tank
2nd Buffer Plate
2nd Buf. Pl. Tank
2nd Buffer Grid
2nd Buf. Gr. Tank
3rd Buffer Plate
3rd Buf. Pl. Tank
3rd Buffer Grid
3rd Buf. Gr. Tank
1st Buf. Dblr. Plate
1st Buf. Dblr. Pl. Tank
1st Buf. Dblr. Grid
1st Buf. Dblr. Gr. Tank
2nd Buf. Dblr. Plate
2nd Buf. Dblr. Pl. Tank
2nd Buf. Dblr. Grid
2nd Buf. Dblr. Gr. Tank
3rd Buf. Dblr. Plate
3rd Buf. Dblr. Pl. Tank
3rd Buf. Dblr. Grid
3rd Buf. Dblr. Gr. Tank

Doubler
Amplifier
Power Amp. Plate
P. A. Plate Tank
Power Amp. Grid
P. A. Grid Tank
Antenna
Antenna Tuning
Ground
Neut. Condenser
Plate Voltage
Filament Voltage
Key
Screen Current
Phone — CW
Off — On
Rectifier
Send
Receive
Send-Receive
Telegraph or CW
Telephone
Speech Amplifier
Modulator Plate
Modulator Grid
Class B Modulator
Class A Modulator
Sp. Amp. Dvr. Plate
Microphone
Microphone Cur.
Gain Control
Volume
Per Cent Modulation
Transceiver
Monitor

Heater Voltage
Generator
Battery Charge
Battery Discharge
Beat Oscillator
Plate No. 1
Plate No. 2
Coupling
D.C. Input
D.C. Output
A.C. Input
A.C. Output
Regeneration
Pre-Selector
Mixer No. 1
Mixer No. 2
Mixer No. 3
Fader
Power
Field
Speaker
Radio
Record
Tone
Input
Output
200 Ohm Input
200 Ohm Output
500 Ohm Input
500 Ohm Output
50 Ohm Input
50 Ohm Output
125 Ohm Input
125 Ohm Output

MARKED METAL DIAL PLATES


SIZE
1 5/8" X 2 1/8"

AVAILABLE TYPES

0--10
MICROPHONE
MASTER GAIN
RECORD
TONE
GAIN
NET EA. \$.12



UNCALIBRATED PLATES
SIZE 1 5/8" DIA.
SUPPLIED
IN THE FOLLOWING

TONE CONTROL
BEAT OSC.
VOLUME

YOUR COST EA. \$.07

BLACK ETCHED DIAL PLATES



NO.	DEGREES	DIA.	CALIBRATION	PRICE
2230	325	3 1/2"	0-100	\$.21
2231	180	3 1/2"	100-0	.21
2232	180	3 1/2"	0-100	.21
2233	180	2 "	100-0	.15
2234	325	2 "	0-100	.15
2235	325	2 "	100-0	.15
2236	180	2 "	0-100	.15

ETCHED CHROME SILVER DIAL PLATES



NO.	DEGREES	DIA.	CALIBRATION	PRICE
2294	180	2"	0-100	\$.30
2295	325	2"	0-100	.30
2296	180	3 1/2"	0-100	.51
2297	325	3 1/2"	0-100	.51
2298	180	4 "	0-100	.60
2299	325	4 "	0-100	.60



TYPES AVAILABLE

ON--OFF
GRID CURRENT
MICROPHONE
MICROPHONE CUR.
PLATE CURRENT
PHONES
PHONOGRAPH
PRICE EA. \$.06



PRICE EA. \$.06



PRICE EA. \$.06

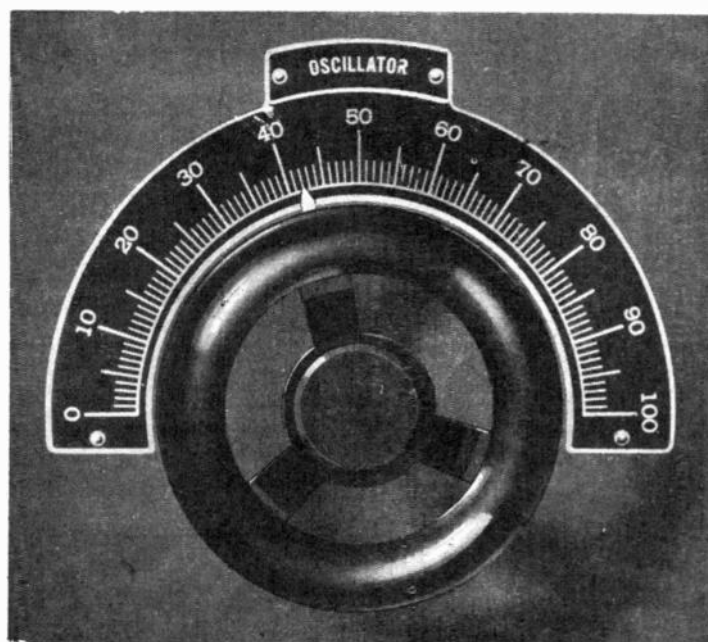
LOT NEXT TO STORE OR LOADING ZONE

WALTER ASHE RADIO COMPANY

1100 Pine Street

St. Louis, Missouri

COTO CONTROL WHEEL



INDICATOR PLATES (for scale or meters)

- | | |
|---------------------|---------------------|
| 1. OSCILLATOR | 12. PWR. AMP. GRID |
| 2. OSC. PLATE | 13. PWR. AMP. PLATE |
| 3. BUFFER | 14. MOD. GRID |
| 4. BUFFER PLATE | 15. MOD. PLATE |
| 5. DOUBLER | 16. CLASS B MOD. |
| 6. DOUBLER PLATE | 17. SP. AMP. PLATE |
| 7. BUF. DBLR. PLATE | 18. FIL. VOLTAGE |
| 8. GRID | 19. PLATE VOLTAGE |
| 9. PLATE | 20. % MODULATION |
| 10. TANK | 21. GAIN CONTROL |
| 11. NEUTRALIZE | 22. ANTENNA |

YOUR COST

EA. \$.09

EACH COTO WHEEL WHEN BOUGHT COMPLETE WITH SCALE IS FURNISHED WITH ONE OF THE ABOVE NAME PLATES, YOUR CHOICE.

- | | |
|----------------------------------|--------|
| 3 1/2" WHEEL COMPLETE WITH SCALE | \$1.50 |
| 3 1/4" WHEEL ONLY LESS SCALE | 1.20 |
| 2 1/4" WHEEL COMPLETE WITH SCALE | 1.20 |



NEW VERNIER KNOBS

A new and exclusive development in Indicator Knobs. Can be used with all standard Dial Plates. Especially suited to ICA Nos. 2296, 2297, 2298, 2299 dial plates.

A micrometric vernier arrangement permits extremely fine calibration for Receivers, Transmitters, Test and Laboratory equipment, etc.

- | | |
|---|--|
| No. 1260—1 1/4" Knob for use with 3 1/2" Dial 180 Degrees | |
| No. 1261—1 1/4" Knob for use with 3 1/2" Dial 325 Degrees | |
| No. 1262—2 1/4" Knob for use with 4 " Dial 180 Degrees | |
| No. 1263—2 1/4" Knob for use with 4 " Dial 325 Degrees | |

NET

\$.39

.54



CHROME SILVER TRANSMITTING DIALS (WITH DIAL MARKER)

NO.	DEGREES	DIA.	CALIBRATION	PRICE
2171	180	2 1/4"	0-100	NET \$.84
2169	180	4 "	0-100	1.20

FINGER GRIP KNOBS

NO.	DIA.	PRICE
1165	1 1/8"	.21
1167	1 5/8"	.27
1169	2 3/8"	.33



FLANGE KNOBS

NO. 1171	2 1/16"	NET \$.33
NO. 1172	3"	.42



DIAL MARKERS
EA. \$.18



ICA KNOBS WITH POINTERS

IDEAL FOR RECEIVERS,
TRANSMITTERS, ETC.

NO. 1166	1 1/8"	NET \$.27
1168	1 5/8"	.33
1170	2 3/8"	.39



BUD BAKELITE VERNIER TUNING DIAL

3" DIAMETER

NO. 144 B	BLACK	NET \$.45
NO. 144 W	WALNUT	.48

IT'S EASY TO PARK AT WALTER ASHE . . .

1100 Pine Street

St. Louis, Missouri

VICTRON "G"

THE MAGIC INSULATOR OF RADIO



Size	Net Price Each
3/8" x 3/16" x 12"	\$.35
1/2" x 1/4" x 12"	.60

APPLICATIONS AND METHOD OF FABRICATING VICTRON

Victron cannot always be used interchangeably with other insulators which have a high temperature softening point. In this respect Victron G is in a class with hard rubber, having a softening temperature between 40 degrees and 60 degrees F. above that of the latter. This limitation may eventually yield to active laboratory studies now in progress.

For the present, however, many simple and none too inconvenient expedients may be resorted to in surmounting this difficulty. In general, it is recommended that the user of Victron follow the general design and assembly coordination principles which are successfully applied to hard rubber.

Q-MAX No. 3 R. F. LACQUER

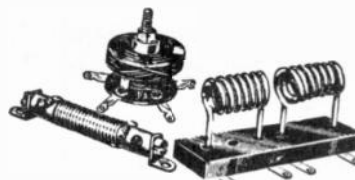


Ordinary household or industrial products, such as cement, shellac, lacquers or varnishes, should never be employed for finishing or treating communication frequency devices. Such compositions may seriously impair circuit performance owing to their high dielectric absorption at radio frequencies

and to the effects of water upon their properties. Q-Max No. 3 is prepared from a new Victron resin, the loss factor of which is remarkably low. Therefore, it may be applied freely without appreciably affecting circuit constants. As a protecting, sealing or surfacing agent it is unsurpassed by any of its type.

Price—1/8 pt. can \$.25 net
Shipping Weight—6 oz.

ICA COILS FOR 5 METER RECEIVERS



These coils have been developed to the specifications published in Q.S.T. Magazine. When connected according to instructions supplied will give excellent results. Can also be used for 5 Meter, 56 MC. Transceivers.

No.	Description	
1652	— Interruption Frequency Oscillator with 4 lugs.....	.60
1653	— 5 Meter RF Choke with two mounting feet.....	.36
1654	— 5 Meter Dual Tuning Coils and Mounting Base.....	.45
COMPLETE 5 METER COIL KIT—COMPRISES THE THREE Described Above Together with Blue Print		1.20

FEDERAL Anti-Capacity Switches

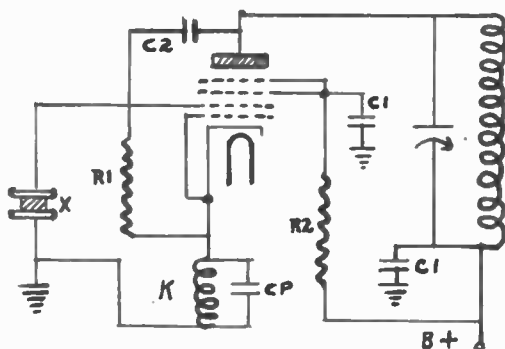


NO. 1424	4 P.D.T.	\$1.90
NO. 1425	D.P.D.T.	\$1.65

Utility Coil Assembly

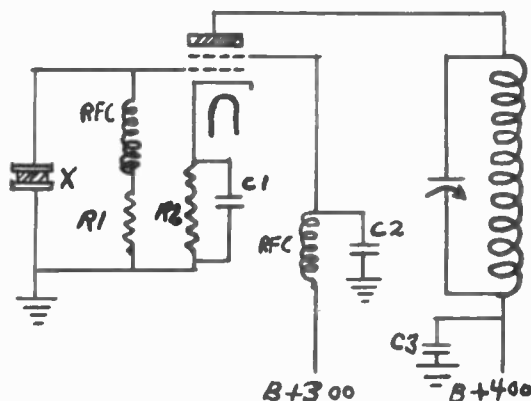
This convenient coil form consists of an unglazed Vitrolex tube dipped in Q-Max No. 3. Outside diameter 1", 3 1/4" long, with six holes drilled in line. The coil form is supplied with two banana plugs mounted in place at the ends. Additional plugs may be added. The base provided with the coil assembly is also of Vitrolex and is supplied with two standard jacks spaced on the same centers as the plugs on the tube. Additional jacks may be added, thus providing for a complete, six-terminal plug-in unit. Length of jack strip, 4 1/2". Shpg. wt. of set, 2 lbs.

as above.	
Your Cost	50¢
— CP-18 complete assembly described.	
Your Cost	95¢



802 CRYSTAL OSCILLATOR A FULL 30 WATTS OUTPUT, SAFELY PARTS LIST

R-1	5000 OHM WIREWOUND RESISTOR
R-2	40,000 " " "
C-1	.001 MICA CONDENSER
C-2	.000003MMF. TWO WIRES IN PARL
C-P	.0001 MICA CONDENSER
K	40 TURNS #24 DCC ON 1 1/2" DIA.



6L6 CRYSTAL OSCILLATOR APPROXIMATELY 30 WATTS OUTPUT PARTS LIST

R-1	10,000 OHM 1 WATT IRC
R-2	400 OHM 10 WATT
C-1	.01 TUBULAR CONDENSER
C-2	.01 MICA CONDENSER
C-3	.01 MICA CONDENSER

WALTER ASHE RADIO COMPANY

1100 Pine Street St. Louis, Missouri

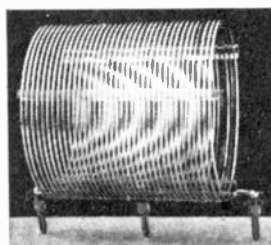
RADIO



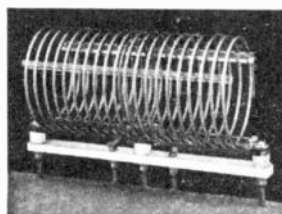
PRODUCTS

LO-LOSS TRANSMITTING INDUCTORS

COTO offers a very complete line of highly efficient inductors for All-Band operation. These inductors are wound with bright copper wire, protected from oxidation by a coating of colorless baked enamel and cemented in SLOTS in narrow strips of Cellulose Acetate, (not celluloid). The use of clear enamel, allows the skinning of the wire for taps without marring the appearance of the inductor. Note the "Q" data of each inductor, indicating its high efficiency.



TYPE 160BT

Mounting
CentersT, TL, &
TVL
7 1/2"B, BT,
BTL,
BTVL
5 1/4"

TYPE 40TL

"Maximum"
Condenser
Capacity
Recommended
160M
types
75 Mmf.
All others
35 Mmf.

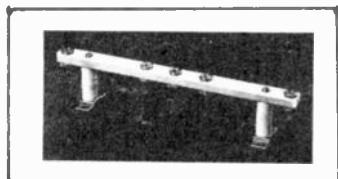


TYPE 80TVL

TO THOSE WHO WISH THE BEST IN PERFORMANCE AND QUALITY WE SUGGEST YOU USE COTO INDUCTORS IN ALL TRANSMITTER STAGES OF 50 WATTS OR MORE INPUT POWER. THIS REASONABLE EXPENDITURE WILL BE MORE THAN JUSTIFIED.

1000 WATT TYPE						300 WATT TYPE					
TYPE	WIRE SIZE	NO. TURNS	DIA.	"Q"	NET	TYPE	WIRE SIZE	NO. TURNS	DIA.	"Q"	NET
10T	10	6	2 3/4"	210	\$1.32	10BT	14	6	2 3/4"	180	\$1.17
20T	10	10	3"	175	1.38	20BT	14	10	2 3/4"	200	1.23
40T	10	20	3"	300	1.74	40BT	14	22	2 3/4"	270	1.44
80T	10	30	4"	500	1.98	80BT	14	34	2 3/4"	390	1.71
160T	12	42	5"	480	2.34	160BT	14	36	4"	400	1.80
WITH FIXED LINK						WITH FIXED LINK					
10TL	10	6	2 3/4"	210	\$2.28	10BTL	14	6	2 3/4"	180	\$2.13
20TL	10	10	3"	175	2.34	20BTL	14	10	2 3/4"	200	2.19
40TL	10	20	3"	300	2.70	40BTL	14	22	2 3/4"	270	2.40
80TL	10	30	4"	500	2.94	80BTL	14	34	2 3/4"	390	2.67
160TL	12	42	5"	480	3.30	160BTL	14	36	4"	400	2.76
WITH VARIABLE LINK						WITH VARIABLE LINK					
10TVL	10	6	2 3/4"	210	\$2.88	10BTVL	14	6	2 3/4"	180	\$2.73
20TVL	10	10	3"	175	2.94	20BTVL	14	10	2 3/4"	200	2.79
40TVL	10	20	3"	300	3.30	40BTVL	14	22	2 3/4"	270	3.00
80TVL	10	30	4"	500	3.54	80BTVL	14	34	2 3/4"	390	3.27
160TVL	12	42	5"	480	3.90	160BTVL	14	36	4"	400	3.36

STEATITE MOUNTING BASES FOR THE ABOVE COILS



TYPE	FOR COIL TYPE	JACKS	NET
CI-8TM	T	3	\$1.14
CI-8TLM	TL., TVL.,	5	1.20
CI-6BTM	BT	3	1.14
CI-6BTLM	BTL., BTVL.,	5	1.20

IT'S EASY TO PARK AT WALTER ASHE . . .

1100 Pine Street

St. Louis, Missouri

BLILEY QUARTZ CRYSTALS

Bliley LD2 Crystal

Operates with unbelievable efficiency; result of new manufacturing principle. Oven equipment not necessary as frequency drift is guaranteed less than 8 cycles/megacycle/°C 2/3 less than an X-cut.

ADVANTAGES—

- Choice of 40, 80 and 160 meter bands
- Mounted in improved sealed holder—
- Guaranteed 0.03% accurate calibration—
- Frequency engraved on each name plate—
- Greater activity—excellent for triet.

LD2 crystal, choice of 40, 80 or 160—
Within 5 k.c. or Exact \$4.80 Frequency \$5.90



Bliley BC3 Crystal

A mounted X-cut crystal proportioned in size to give maximum efficiency. It is unusual in its ability to oscillate readily and to handle relatively large loads.

Frequency drift is approximately 23 cycles per megacycle per degree Centigrade. The cover plate which also serves as one electrode acts to dissipate the heat developed, resulting in a cooler running crystal and reducing the drift. Plugs into any standard 5 prong tube socket and works in any position.

CHOICE OF 40 OR 80 METER

BC3 within 5 k.c. or choice of stock \$3.35
YOUR COST
Exact frequency, integral k.c. \$4.95
YOUR COST



VARIABLE Control Crystal

With The BLILEY TYPE VF1

DODGE QRM:

How many times would a few kilocycles shift in your frequency clear up QRM which ruined a QSO? Now with a mere twist of the control knob mounted on the holder you can vary your frequency up to 6 k.c. at the 80 meter fundamental, 12 k.c. when doubling and 24 k.c. when quadrupling to 20 meters. Frequency specified is minimum frequency.

WITHIN
1 K.C. OF
DESIRED
FREQUENCY

\$7.50



EXACT
FREQUENCY
"ON THE
NOSE"

\$10.00

In size it is the same as the popular LD2 Bliley and has the same frequency stability, drift less than 4 C./M.C./°C. It can be mounted in any position and is ideal for front of panel control. Maximum decrease in oscillator output due to frequency adjustment, 20%.

Bliley BC2 Crystal Holder

Molded bakelite quartz crystal holder. Threaded cover protects crystal from dust and moisture. Electrodes plane ground, stainless steel. For 80 and 160 meter, or 40 and 20 meter.

Either type \$.95



Bliley 20 Meter Crystal Unit

A mounted special cut crystal designed for oscillation at high frequencies. May be used for direct control on 20 meters or doubling to 10 and 5 meters. Frequency drift only 20 cycles per megacycle per degree Centigrade. Exceptionally low loss holder made of Victrol G. Plugs into any standard 5 prong tube socket. Furnished within .2% of your specified frequency or choice from stock, in the 20 meter band (14.0 to 14.4 MC) or between 14.4 and 15.0 MC for doubling to the higher end of the 10 and 5 meter bands.



HF2—14000 to 14400 within 15 k.c. \$5.75
or choice of stock
14000 to 14400 within 5 k.c. \$10.00
14400 to 15000 on special order \$5.75
within 30 k.c.
14400 to 15000 on special order \$15.00
within 5 k.c.

Bliley Single Signal Filter

Your shortwave receiver is not complete unless it is equipped with a crystal filter. For best results use Bliley filters. They are scientifically designed and rigidly tested, thereby, assuring maximum efficiency. Supplied for intermediate frequencies of 456, 465, 500 or 525 k.c. BC3-888 SINGLE SIGNAL FILTER.

YOUR COST \$5.50

CRYSTAL OVEN

TYPE CO-6 NET \$3.25
WORKS ON 6-7½ V.A.C.

LOW PRICED UNMOUNTED "X" CUT CRYSTALS

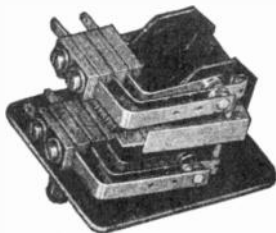
"PR" 40 METER CRYSTALS. FREE OSCILLATORS AND HIGH POWER OUTPUT NET EA. \$1.85
"WA" 80, 160 METER UNITS. A LARGE ASSORTMENT IS STOCKED AT ALL TIMES 1.50

GUARDIAN Transmitter RELAYS

Guardian Break-In Relay

MODEL B-100 RELAY is essentially a double pole, double throw switch that is actuated by opening or closing a switch in the 110 volt AC line supplying power to its magnet coil. A frequently employed installation is to have the B-100 connect the antenna and plate voltage to the receiver when open. Closing a toggle switch in the 110 volt circuit to the relay magnet, placed near the key, disconnects the receiver antenna and plate voltage and at the same time connects the antenna to the transmitter and closes the 110 volt primary of the plate transformers. Many other desirable applications can be made.

MODEL B-100 GUARDIAN BREAK-IN RELAY. YOUR COST \$4.50



Guardian Keying-Relay

The exceptional speed of this "Guardian" Keying Relay, combined with its strong magnet coil and return spring, assures a clean make and break that will give the very best C.W. note and make copying easy.

MODEL K-100

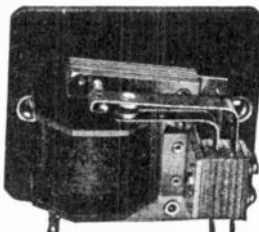
GUARDIAN

KEYING RELAY

Contacts will

handle up to 5,000 volts. Operates on

5 to 15 volts AC. YOUR COST \$3.30



MODEL B-100 BREAK-IN RELAY



Adjustable Overload Relay

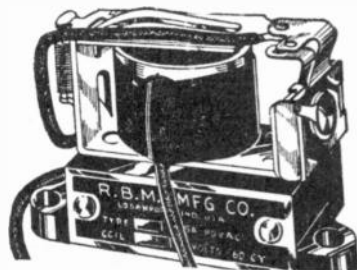
Easily set to open 110 V. input when plate currents exceed any value from 150 to 500 m.a. When current exceeds desired value relay armature closes, opening contacts which are usually placed in plate power transformer primary. Pushing reset button on panel restores circuit only if overload has been removed.

MODEL X-100 GUARDIAN ADJUSTABLE OVERLOAD RELAY.

YOUR COST \$7.20

Fixed Overload Relays

MODEL L-250—Similar to X-100 but break at 250 M.A. \$4.50
MODEL L-500—Same but breaks at 500 M.A.
YOUR COST \$4.50



SPDT

MARVEL RELAYS

TYPE	OPERATING VOLTAGE	RESISTANCE	CURRENT	NET
"Q"	90 TO 135 V.A.C.	1400	75 MILLS	\$2.75
"N"	8 TO 12 V.	75	.8 AMPS.	2.75

LOT NEXT TO STORE OR LOADING ZONE

WALTER ASHE RADIO COMPANY

1100 Pine Street  St. Louis, Missouri

SANGAMO MICA CONDENSERS

Type A-10 1000 V. DC Test

Capacity, mfd.

00005	\$.24
0001	.24
00015	.24
0002	.24
00025	.24
0005	.24
001	.30
0015	.30
002	.30
003	.36
004	.36
005	.42
006	.51
008	.60
01	.69
012	.72
015	.75



TYPE A-25 2500 V. DC Test

Capacity, mfd.

00005	\$.42
0001	.42
00025	.42
0005	.42
001	.54
002	.81

HIGH QUALITY
HIGH VOLTAGE
PERMANENT

TYPE A-50 5000 V. DC Test

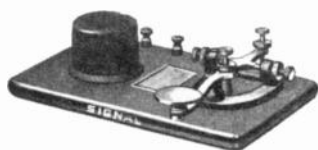
Capacity, mfd.

00005	\$.54
0001	.54
00025	.63
0005	.75
001	.90
002	1.35

WIRELESS



INSTRUMENTS



R-68

R-68 A FINE PRACTICE SET CONSISTING OF A KEY, BUZZER AND CODE CHART MOUNTED ON A WOOD BASE. IDEAL FOR ALL BEGINNERS IN ANY CLASS.

\$2.04



112-K KEY

NO. 112K KEY MOUNTED ON A ATTRACTIVE WOOD BASE \$1.35

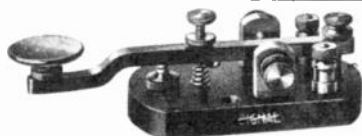
NO. R 50 KEY NEWEST TYPE, ALL METAL. BLACK CRACKLE .90



R-48 KEY

R-48 KEY IS THE ORIGINAL OLD TIME TELEGRAPH TYPE THAT HAS BEEN APPROVED FOR USE FOR THOSE WHO HAVE TROUBLE WITH BAD ARM SENDING. ALL BRASS

\$1.68



NO. R-62 HEAVY BRASS. CONTACTS 3/16" SOLID SILVER \$2.31
NO. R-63 " " " 1/4" " " 2.40
NO. R-64 " " " 3/8" " " 2.55

THE ABOVE MODELS ARE EQUIPPED WITH NAVY KNOBS



NAVY KNOBS \$.12

STANDARD
KNOBS .08



R-60

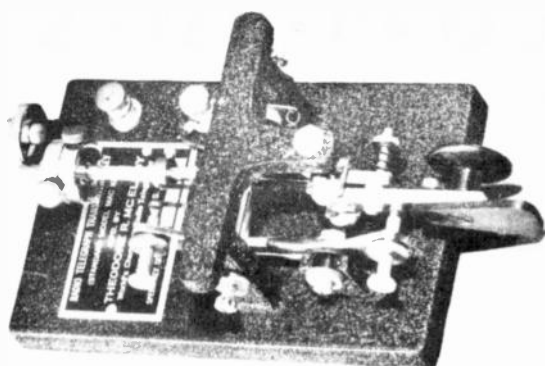
SIGNAL HIGH FREQUENCY
BUZZERS

ADJUSTABLE PITCH
RESISTANCE 2 OHMS
YOUR COST \$.84

IT'S EASY TO PARK AT WALTER ASHE . . .

1100 Pine Street

St. Louis, Missouri



MFGD. BY

T. R. McELROY
World's Champion Radio Telegrapher

NEW 1938 MODEL "DELUXE" MAC KEY.
NEW DUST PROOF FINISH WITH EXTRA HEAVY
BASE. SUPER CONTACT POINTS THAT WILL
HANDLE PLENTY OF POWER.
HEAVY CAST PARTS INSURE EASE OF MECHANICAL
SMOOTHNESS. WITH TWO WEIGHTS AND SWITCH
YOUR COST PRICE \$ 9.50

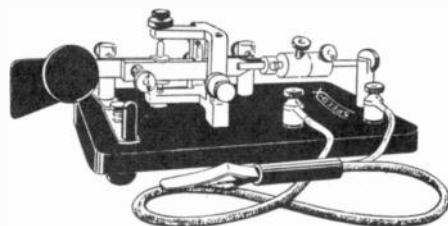
Practice Sets
Buzzers

SPEED-X

Transmitting Keys
Hi-Speed Keys.

STANDARD MODEL No. 500

YOUR COST \$ 8.10

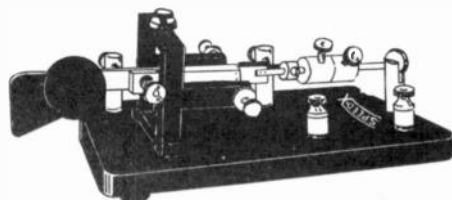


Base 3 1/2" x 6 1/4" x 1 1/2" Weight 3 1/2 lbs.

Satisfied users all over the world and is rapidly becoming the universal Hi-Speed Key, used by amateurs and professionals alike. Adjustable from 8 words per minute to as high a rate as is desired. It has standard construction used throughout. Solid coin silver contacts. Heavy construction will hold adjustment at all speeds. Black wrinkled base and casting. All machine parts nickel plated. Complete with switch, cord and plug.

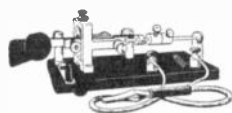
AMATEUR MODEL No. 515

YOUR COST \$ 5.55



Base 3" x 6 1/4" x 3/4" Weight 2 1/2 lbs.

The Speed-X Model 515 was designed for the amateur who demands a durable, heavy-duty Speed Key. The parts are finished in statuary bronze and the brown wrinkle on the base and casting make this an outstanding key in appearance. The same standard construction used on all of our speed keys is one of the features of this key. No switch or plug.

JUNIOR MODEL No. 510


YOUR COST

\$ 6.45

Base 2 1/2" x 6 1/4" x 1 1/2" Weight 2 3/4 lbs.

A small model Hi-Speed Key — adjustable to give plenty of pep and life. Black wrinkle base and casting — all machine parts nickel plated. Complete with switch, cord and plug. This key is the favorite of the Amateur who prizes his clean cut sending. It will increase the speed of any operator after he has used it a short while.

No. 400 - YOUR COST \$.75

CONSTANT FREQUENCY BUZZER

Entirely new, improved design, durable construction with Moulded base and top. Will hold adjustment under all conditions. Ideal for practice sets—Resistance 2 Ohms, requiring two dry cells 2 to 6 volts.

REPLACEMENT PARTS

NET
\$.45

NET
\$.15

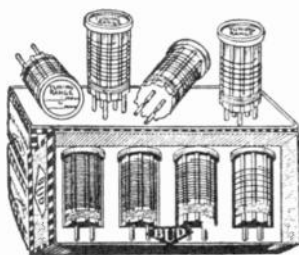
LOT NEXT TO STORE OR LOADING ZONE

WALTER ASHE RADIO COMPANY

1100 Pine Street  St. Louis, Missouri

BUD SUPER-HET LO-COIL KIT

- NO. 397-SET OF 8 COILS. DETECTOR COILS HAVE 4 PRONGS AND OSCILLATOR COILS HAVE 5 PRONGS. \$ 3.30
- NO. 395-SET OF 4 R.F. COILS TO MATCH DETECTOR COILS WHEN ADDITIONAL STAGE OF R.F. IS ADDED 1.65



SUPER-HET BROADCAST COILS

2 Coils to Set

- NO. 398-185-360 METERS \$ 1.05
- NO. 399-350-560 METERS 1.05

BUD SENIOR LO-COIL KITS



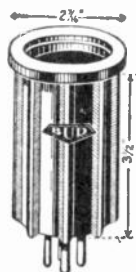
- NO. 222-4 PRONG SENIOR LO-COIL KIT.
SUITABLE FOR ANY CIRCUIT SPECIFYING 4 PRONG COILS NET \$ 1.65
- NO. 915-5 PRONG SENIOR LO-COIL KIT.
SUITABLE FOR ANY CIRCUIT SPECIFYING 5 PRONG COILS 1.98
- NO. 918-6 PRONG SENIOR LO-COIL KIT.
SUITABLE FOR ANY CIRCUIT SPECIFYING 6 PRONG COILS 2.10
- NO. 917- IS AN 8 COIL KIT CONSISTING OF 4, FOUR PRONG R.F. COILS AND 4, FIVE PRONG DETECTOR COILS FOR ELECTRON COUPLED. 3.60



BROADCAST COILS TO MATCH ABOVE KITS



- | | | | |
|-----------------|-----------------------|----------------------|--------|
| NO. 224-4 PRONG | SENIOR BROADCAST COIL | RANGE-185-360 METERS | \$.54 |
| NO. 223-" | " | " " 350-565 | .54 |
| NO. 960 6 | " | " " 185-360 | .66 |
| NO. 961 " | " | " " 350-565 | .66 |



BUD GIANT TRANSMITTER PLUG-IN COIL FORMS

- | PLAIN FORMS
2 7/16" DIA. | | GROOVED FORMS
2 7/16" DIA. | |
|-----------------------------|------------|-------------------------------|------------|
| NO. 734 4 PRONG | NET \$.39 | NO. 1221 4 PRONG | NET \$.54 |
| NO. 735 5 PRONG | .42 | NO. 1222 5 PRONG | .57 |
| NO. 736 6 PRONG | .45 | NO. 1223 6 PRONG | .60 |

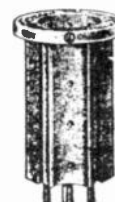


JUNIOR FORMS 1 1/4" DIA.

- 4 PRONG NET \$.15
- 5 PRONG .18
- 6 PRONG .18

SENIOR FORMS 1 1/2" DIA.

- 4 PRONG NET \$.21
- 5 PRONG .21
- 6 PRONG .24



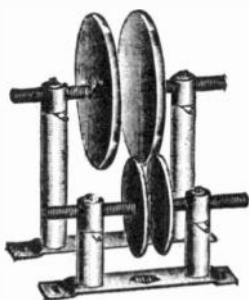
Insulex Coil Forms Diameter 1 9/16 Inches Efficient Ribbed Type

- 4 PRONG NET \$.36
- 5 PRONG .39
- 6 PRONG .42
- 7 PRONG .45

IT'S EASY TO PARK  AT WALTER ASHE . . .

1100 Pine Street

St. Louis, Missouri



BUD HIGH VOLTAGE NEUTRALIZING CONDENSERS

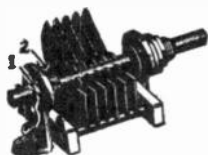
These condensers are ideally suited for neutralizing all low C tubes that are on the market at the present time. Plates are highly polished aluminum with perfectly rounded edges, solidly mounted on Isolantite pillars with convenient mounting feet. A small set screw in threaded bushing enables plates to be locked permanently at any setting. Threaded shaft slotted for screw driver adjustment. Both plates are variable, giving an exceptionally wide range of capacity variation.

No. 892—Mounting 1 1/2" high. Plates 3/16" thick. Diameter 1 27/32". For 35T, T-55, RK 35, etc.

NET \$ 1.50

No. 893—Mounting 3" high. Plates 3/16" thick. Diameter 2 13/16". For 150 T, HK 354, HF 300, RK 36, etc.

NET \$ 2.25



"BUD" HIGH FREQUENCY NEUTRALIZING CONDENSERS

No. 565—Max. Cap. 15 mmfd.—Air gap .060"

Recommended for No. 245, 10, 841, 801, and similar tubes.

NO. 565 _____ NET \$ 1.02

SPECIAL LOW PRICE HIGH VOLTAGE POWER SUPPLY KITS

YOU CAN NOW ASSEMBLE AND WIRE YOUR OWN TRANSMITTER POWER SUPPLY USING LOW PRICE EQUIPMENT. BASES FOR EACH TYPE SUPPLY ARE STANDARD RELAY RACK MOUNT UNITS, COMPLETELY DRILLED TO ACCOMMODATE UTC PLATE, FILAMENT TRANSFORMERS AND CHOKES, AMPHENOL STEATITE SOCKETS FOR 866'S, OHMITE BLEEDER RESISTOR AND ALL NECESSARY FEEDTHRU INSULATORS. CONCEALED WIRING BELOW THE CHASSIS BASE IS ONE OF THE FEATURES.

1000 OR 750 VOLT SUPPLY AT 300 MILLS.

1-UTC 866 FILAMENT TRANSFORMER	\$1.65
1-UTC TYPE "A" PLATE TRANSFORMER	5.20
1-UTC TYPE "G" FILTER CHOKE	2.85
1-UTC TYPE "GS" SWING CHOKE	2.85
2-TAYLOR 866'S	3.30
2-866 CLIPS	.12
2-AMPHENOL STEATITE SOCKETS	.48
4-FEEDTHRU INSULATORS	.60
1-OHMITE 100 WATT 40M. BLEEDER	1.50
1-11X17X2" PARMETAL CHASSIS	1.80
2-XP-1502 FILTER CONDENSERS	3.90
TOTAL	\$24.25

2500 OR 2000 VOLT SUPPLY AT 300 MILLS

1-UTC 866 FILAMENT TRANSFORMER	\$1.65
1-UTC TYPE "C" PLATE TRANSFORMER	10.95
1-UTC TYPE "G" FILTER CHOKE	2.85
1-UTC TYPE "GS" SWING CHOKE	2.85
2-TAYLOR 866'S	3.30
2-866 CLIPS	.12
2-AMPHENOL STEATITE SOCKETS	.48
4-FEEDTHRU INSULATORS	.60
1-OHMITE 200 WATT 75M. BLEEDER	2.10
1-11X17X2" PARMETAL CHASSIS	1.80
2-XP-3002 FILTER CONDENSERS	9.90
TOTAL	\$36.60

OTHER SUPPLIES ARE AVAILABLE SUCH AS 575 OR 525 VOLTS AT 500 MILLS

" " " " " " 1500 OR 1250 VOLTS AT 300 MILLS

" " " " " " 1500 OR 1250 VOLTS AT 500 MILLS

LOT NEXT TO STORE OR LOADING ZONE

Birnbach



~~~~~ SPECIAL NOTICE ~~~~~

WE ARE GLAD TO ANNOUNCE THAT, TO THE ADVANTAGE OF THE AMATEUR WE HAVE COMPLETELY RE-VAMPED OUR COMPLETE STOCK OF INSULATORS. ALL BIRNBACH PRODUCTS ARE NOW EQUIPPED WITH BRASS HARDWARE AND ALL FEED THRU TYPES ARE EQUIPPED WITH INDIVIDUAL CORK WASHERS.

### FEED THRU INSULATOR

| NO.  | HEIGHT | HARDWARE | YOUR COST |
|------|--------|----------|-----------|
| 4234 | 2 3/4" | 1/4-20   | \$ .33    |
| 4125 | 1 1/4" | 10/32    | .15       |
| 478  | 7/8"   | 10/32    | .12       |
| 458  | 5/8"   | 6/32     | .07       |



**AIRPLANE INSULATOR**  
LENGTH 1 1/4"  
NET EA. \$ .04

### Antenna Insulators



Wet-process smooth glaze porcelain. All sizes are 1" in diameter and will withstand strain of 1500 tensile pounds. White glaze.

7" LONG NET \$ .30  
20" " .90



### JACK TYPE FEED THRU INSULATORS

| NO.   | HEIGHT | HARDWARE | YOUR COST |
|-------|--------|----------|-----------|
| 4234J | 2 3/4" | JACK     | \$ .48    |
| 4125J | 1 1/4" | JACK     | .18       |
| 478J  | 7/8"   | JACK     | .15       |



**GUY WIRE INSULATOR**  
NO. 14 HEIGHT 4"  
NET EA. \$ .15

### STANDOFF INSULATOR

| NO.  | HEIGHT  | HARDWARE | YOUR COST |
|------|---------|----------|-----------|
| 4450 | 4 1/2"  | 1/4-20   | \$ .30    |
| 4275 | 2 3/4"  | 1/4-20   | .18       |
| 866  | 1 5/16" | 8/32     | .07       |
| 966  | 1"      | 8/32     | .05       |
| 405  | 5/8"    | 6/32     | .04       |



### Johnson

### Transposition Block

Type 31 ideal for low-loss transmission line. Particularly suitable for use with Johnson "Q" antenna. Made of white glazed porcelain.

Your Cost..Each.... \$ .09



### JACK TYPE STANDOFF INSULATORS

| NO.    | HEIGHT  | HARDWARE   | YOUR COST |
|--------|---------|------------|-----------|
| 4450J  | 4 1/2"  | JACK       | \$ .45    |
| 4275J  | 2 3/4"  | JACK       | .33       |
| 866J   | 1 5/16" | JACK       | .09       |
| 966J   | 1"      | JACK       | .06       |
| 866-SJ | 1 1/2"  | JUMBO JACK | .21       |



**BIRNBACH 5 METER ANTENNA ROD**  
ADJUSTABLE 9 FT.  
NET EA. \$1.20  
LESS INSULATOR



### JOHNSON PORCELAIN FEEDER SPREADERS

#### Feeder Spreaders



Accurately molded from high-quality, low-absorption porcelain, with end grooves for line conductors and holes for tie-wires. Cross-section of all sizes is 3/4" by 3/4". White glaze overall.

6" LONG YOUR COST \$ .15  
2" " .09



**BIRNBACH LEAD IN INSULATORS**  
NO. 4235 HAS TWO 2 3/4" BOWLS WITH 10" ROD NET \$ .55  
NO. 4236 SAME AS ABOVE BUT HAS A 15" ROD \$ .60

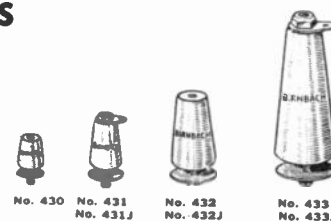
1100 Pine Street

St. Louis, Missouri

## STANDOFF INSULATORS and TRANSMITTER PARTS BIRNBACH

### STEATITE CONE STANDOFF INSULATORS

Improved physical and electrical qualities of Steatite over other ceramics make it admirably suited for use in the construction of these Cone Standoff Insulators. A complete range of heights having threaded holes and jacks is available. Condenser, coils, tube sockets and high frequency apparatus can be mounted on them with a minimum of labor and expense. The No. 430 Cone which is  $\frac{5}{8}$ " high is supplied only with the 6-32 threaded hole on each end. All other heights are available with a Jack top or a threaded hole top. There are four heights,  $\frac{5}{8}$ ", 1", 1 $\frac{1}{2}$ " and 2 $\frac{3}{4}$ " and the range of sizes are adequate for all needs. They are available only in a white glaze Steatite.



| A     | B     | C    | D      | E      | Threaded Holes | Mounting Hole | Cat. No. | Std. Pkg. | NET    |
|-------|-------|------|--------|--------|----------------|---------------|----------|-----------|--------|
| 5/8   | 5/8   | 7/16 | 6-32   | 6-32   | 5/32"          | No. 430       | 100      | ea.       | \$ .06 |
| 1     | 11/16 | 1/2  | 8-32   | 8-32   | 3/16"          | No. 431       | 50       | ea.       | .09    |
| 1     | 11/16 | 1/2  | 8-32   | 1/4-28 | 3/16"          | No. 431J      | 50       | ea.       | .12    |
| 1-1/2 | 7/8   | 5/8  | 10-32  | 10-32  | 7/32"          | No. 432       | 50       | ea.       | .12    |
| 1-1/2 | 7/8   | 5/8  | 10-32  | 1/4-28 | 7/32"          | No. 432J      | 50       | ea.       | .15    |
| 2-3/4 | 1-1/4 | 3/4  | 1/4-20 | 1/4-20 | 9/32"          | No. 433       | 25       | ea.       | .15    |
| 2-3/4 | 1-1/4 | 3/4  | 1/4-20 | 3/8-24 | 7/32"          | No. 433J      | 25       | ea.       | .30    |



## JOHNSON

INSULATORS



### METAL BASE STANDOFF INSULATORS

| NO. | HEIGHT | HARDWARE | YOUR COST |
|-----|--------|----------|-----------|
| 66  | 2 3/4" | 1/4-20   | \$ .21    |
| 66J | 2 3/4" | JACK     | .30       |
| 67  | 4 1/2" | 1/4-20   | .33       |
| 67J | 4 1/2" | JACK     | .42       |

### JOHNSON FEED THRU INSULATORS

|     |        |        |        |
|-----|--------|--------|--------|
| 46  | 2 3/4" | 1/4-20 | \$ .33 |
| 46J | 2 3/4" | JACK   | .48    |



JUMBO SIZE

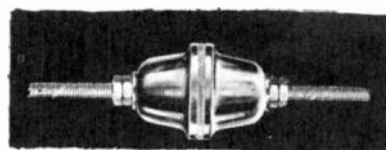


### JOHNSON PLUGS AND JACKS

|              |        |
|--------------|--------|
| NO. 76 JACK  | \$ .15 |
| NO. 77A PLUG | .15    |

THESE PLUGS AND JACKS ARE FOR USE WITH NATIONAL COIL FORMS AND THE JUMBO SIZE BIRNBACH AND JOHNSON STANDOFF AND FEED THRU INSULATORS.

### GENUINE PYREX LEAD IN BOWLS



TYPE 67104 LENGTH 15" NET \$ 1.50

TYPE 67105 LENGTH 20" 1.65

### HEAVY DUTY TYPE STRAIN INSULATORS



TYPE 67007 LENGTH 3" NET \$ .18

TYPE 67017 LENGTH 7 1/4" .68



NEW 400 SERIES BIRNBACH PLUGS  
SAME AS G.R.  
YOUR COST \$ .05



GENERAL RADIO CO. JACKS

JACKS YOUR COST \$ .07

## LOT NEXT TO STORE OR LOADING ZONE

# WALTER ASHE RADIO COMPANY

1100 Pine Street St. Louis, Missouri

## EIMAC TUBES

### EIMAC 250TH

Filament voltage ..... 5 to 5.1  
 Filament current ..... 10.5 amperes  
 Amplification factor ..... 32  
 Maximum plate current ..... 350 milli-  
 amperes  
 Plate dissipation (normal) ..... 250 watts  
 Maximum plate voltage ..... 3000

### EIMAC 250TL

Filament voltage ..... 5 to 5.1  
 Filament current ..... 10.5 amperes  
 Amplification factor ..... 13  
 Maximum plate current ..... 350 milli-  
 amperes  
 Plate dissipation (normal) ..... 250 watts  
 Maximum plate voltage ..... 3000

**Net Price \$24.50**

### EIMAC 100TH

Filament voltage ..... 5 to 5.1  
 Filament current ..... 6.5 amperes  
 Amplification Factor ..... 30  
 Maximum plate current ..... 225 milli-  
 amperes  
 Plate dissipation (normal) 100 watts  
 Maximum plate voltage 2000

### EIMAC 100TL

Filament voltage ..... 5 to 5.1  
 Filament current ..... 6.5 amperes  
 Amplification factor ..... 12  
 Maximum plate current ..... 225 milliamperes  
 Plate dissipation (normal) 100 watts  
 Maximum plate voltage ..... 3000

**Net Price \$13.50**

### EIMAC 35T

Filament voltage ..... 5 to 5.1  
 Filament current ..... 4 amperes  
 Amplification factor ..... 30  
 Maximum plate current ..... 150 milliamperes  
 Maximum plate dissipation ..... 70 watts  
 Normal plate dissipation ..... 35 watts  
 Maximum plate voltage ..... 2000

**Net Price \$8.00**

## GAMMATRON

### HK-354

## GAMMATRON

HK-354  
**\$24.50**

#### GENERAL CHARACTERISTICS:

Grid and plate ..... Tantalum  
 Filament ..... Thoriated Tungsten  
 Base ..... Standard 50 watt

Filament voltage ..... 5.0 volts  
 Filament current ..... 10. amps.  
 Plate dissipation ..... 150. watts  
 Maximum plate voltage ..... 4000. volts  
 Maximum plate current ..... 300. ma.  
 Average amplification constant ..... 14.  
 Average plate impedance ..... 2800. ohms

#### Class "C" Radio Performance (Single Tube):

Plate voltage ..... 1500 to 4000 volts  
 Plate current ..... 255 ma.  
 Grid bias ..... -300 to -700 volts  
 Power output ..... 270 to 840 watts.

**HK-354-C GAMMATRON**—A modification of the HK-354 specially adapted to high frequency use. Has identical electrical characteristics except for slightly lower G-P capacitance. Mechanical arrangement altered to permit grid connection at side of envelope. Grid and plate caps are welded. This tube is particularly suited to diathermy use. Appreciable outputs may be secured at frequencies as high as 100 megacycles.

**HK-354-C**

**\$24.50**

## GAMMATRON HK-154

#### GENERAL CHARACTERISTICS:

Grid and plate ..... Tantalum  
 Filament ..... Thoriated Tungsten  
 Base ..... Medium 4 Pin

Filament voltage ..... 5.0 volts  
 Filament current ..... 6.5 amps.  
 Plate dissipation ..... 50. watts  
 Maximum plate voltage ..... 1500. volts  
 Maximum plate current ..... 175. ma.  
 Average amplification constant ..... 6.7  
 Average plate impedance ..... 1750. ohms

#### Class "C" Radio Performance (Single Tube):

Plate voltage ..... 750 to 1500 volts  
 Plate current ..... 167 to 175  
 Grid bias ..... -260 to -590 volts  
 Power output ..... 85 to 200 watts.

No. 154 GAMMATRON—  
 YOUR COST

**\$12.50**

## RAYTHEON

### RK-23 RK-25

RK-23 low power RF pentode. Fil. 2.5 volts at 2 amp. Plate, 500 volts. Driving power, .8 watt. Ideal Osc., RF Amp., Supp. Modulated phone and 5 meter oscillator.

RK-23.

**YOUR COST, EACH.....\$4.50**

RK-25. Same as the RK-23 except filament 6.3 volts at .8 amp.

RK-25.

**NET, EACH.....\$4.50**

IT'S EASY TO PARK AT WALTER ASHE . . .

1100 Pine Street

St. Louis, Missouri

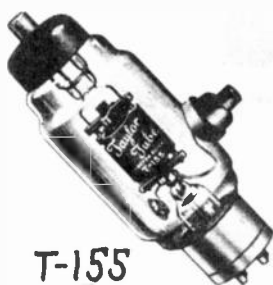
"More Watts  
per Dollar"

## Taylor Tubes

Heavy Duty  
Custom Built



814



T-155



T-200

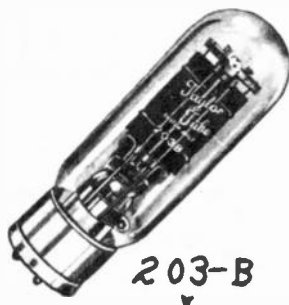


822

| TYPE  | NET<br>PRICE | DESCRIPTION                                                               | PLATE<br>DISS.<br>WATTS | PLATE<br>VOLTS | FIL.<br>VOLTS |
|-------|--------------|---------------------------------------------------------------------------|-------------------------|----------------|---------------|
| T-20  | \$2.45       | R-F AMPLIFIER, MODULATOR, OSCILLATOR                                      | 20                      | 750            | 7.5           |
| TZ-20 | 2.45         | ( 0-BIAS ) SAME AS ABOVE                                                  | 20                      | 750            | 7.5           |
| T-55  | 8.00         | R-F POWER AMPLIFIER AND OSCILLATOR                                        | 55                      | 1500           | 7.5           |
| T-125 | 13.50        | R-F POWER AMPLIFIER AND OSCILLATOR                                        | 125                     | 2000           | 10            |
| T-155 | 19.50        | R-F POWER AMPLIFIER AND OSCILLATOR                                        | 155                     | 3000           | 10            |
| T-200 | 21.50        | R-F POWER AMPLIFIER AND OSCILLATOR                                        | 200                     | 2500           | 10-11         |
| 822   | 18.50        | R-F POWER AMPLIFIER, OSCILLATOR AND<br>CLASS B A-F MODULATOR              | 200                     | 2500           | 10            |
| 814   | 18.50        | R-F POWER AMPLIFIER (REC. FOR CLASS<br>B LINEAR AND GRID MODULATED STAGES | 200                     | 2500           | 10            |
| 203-A | 12.50        | R-F AMPLIFIER, OSCILLATOR, MODULATOR                                      | 100                     | 1500           | 10            |
| 203-B | 7.50         | CLASS B MODULATOR ONLY                                                    | 65                      | 1000           | 10            |
| 203-Z | 8.50         | CLASS B MODULATOR ONLY                                                    | 65                      | 1250           | 10            |
| 211   | 12.50        | R-F , A-F AMPLIFIER AND OSCILLATOR                                        | 100                     | 1500           | 10            |
| 211-C | 12.50        | " " " LOW INTLCT. CAPACITY                                                | 100                     | 1500           | 10            |
| 845   | 12.50        | CLASS A A-F AMP. AND MODULATOR                                            | 75                      | 1250           | 10            |
| 756   | 4.95         | R-F AMPLIFIER AND CLASS B AUDIO                                           | 40                      | 800            | 7.5           |
| 825   | 4.95         | R-F AMPLIFIER AND OSCILLATOR                                              | 40                      | 850            | 7.5           |
| 841-A | 7.00         | R-F AMPLIFIER AND OSCILLATOR                                              | 50                      | 1250           | 10            |

### RECTIFIERS

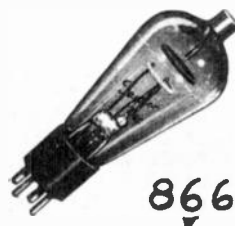
|         |      |                         | INVS.<br>PEAK |     |
|---------|------|-------------------------|---------------|-----|
| 866     | 1.50 | HALF-WAVE MERCURY VAPOR | 7500          | 2.5 |
| 866-JR. | 1.00 | HALF-WAVE MERCURY VAPOR | 1250 R.M.S    | 2.5 |
| 866-B   | 3.00 | HALF-WAVE MERCURY VAPOR | 8500          | 5.0 |
| 872     | 9.00 | HALF-WAVE MERCURY VAPOR | 10,000        | 5.0 |



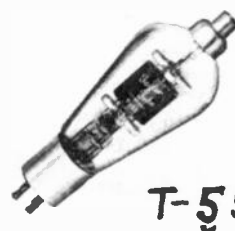
203-B



756



866



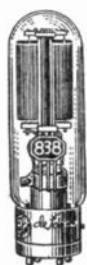
T-55

LOT NEXT TO STORE OR LOADING ZONE

# WALTER ASHE RADIO COMPANY

1100 Pine Street

St. Louis, Missouri



AMATEUR  
RADIO TUBES



## R.C.A. Transmitting Tubes

| TYPE  | NET PRICE | DESCRIPTION                                                       | ELEC-<br>TRODES | MAX. PLATE<br>DISSIPATION<br>WATTS | CATHODE<br>TYPE | CATHODE<br>VOLTS |
|-------|-----------|-------------------------------------------------------------------|-----------------|------------------------------------|-----------------|------------------|
| 203-A | \$15.00   | R-F POWER AMPLIFIER, OSCILLATOR<br>CLASS B MODULATOR              | 3               | 100                                | FIL.            | 10.0             |
| 211   | 15.00     | R-F POWER AMPLIFIER, OSCILLATOR<br>A-F POWER AMPLIFIER, MODULATOR | 3               | 100                                | FIL.            | 10               |
| 800   | 10.00     | R-F POWER AMPLIFIER, OSCILLATOR<br>CLASS B MODULATOR              | 3               | 35                                 | FIL.            | 7.5              |
| 801   | 3.45      | R-F AND A-F POWER AMPLIFIER<br>OSCILLATOR, MODULATOR              | 3               | 20                                 | FIL.            | 7.5              |
| 802   | 3.50      | R-F POWER AMPLIFIER PENTODE                                       | 5               | 10                                 | HTR.            | 6.3              |
| 803   | 34.50     | R-F POWER AMPLIFIER PENTODE                                       | 5               | 125                                | FIL.            | 10               |
| 804   | 15.00     | R-F POWER AMPLIFIER PENTODE                                       | 5               | 40                                 | FIL.            | 7.5              |
| 805   | 13.50     | R-F POWER AMPLIFIER, OSCILLATOR,<br>CLASS B MODULATOR             | 3               | 125                                | FIL.            | 10               |
| 806   | 22.00     | R-F POWER AMPLIFIER, OSCILLATOR,<br>CLASS B MODULATOR             | 3               | 150                                | FIL.            | 5                |
| 807   | 3.50      | TRANSMITTING BEAM POWER AMPLIFIER                                 | 4               | 21                                 | HTR.            | 6.3              |
| 808   | 7.75      | R-F POWER AMPLIFIER, OSCILLATOR,<br>CLASS B MODULATOR             | 3               | 50                                 | FIL.            | 7.5              |
| 830-B | 10.00     | CLASS B MODULATOR, OSCILLATOR,<br>R-F POWER AMPLIFIER             | 3               | 60                                 | FIL.            | 10               |
| 834   | 12.50     | R-F POWER AMPLIFIER AND OSCILLATOR                                | 3               | 50                                 | FIL.            | 7.5              |
| 837   | 8.50      | R-F POWER AMPLIFIER PENTODE                                       | 5               | 12                                 | HTR.            | 12.6             |
| 838   | 16.00     | CLASS B MODULATOR, OSCILLATOR,<br>R-F POWER AMPLIFIER             | 3               | 100                                | FIL.            | 10               |
| 840   | 6.00      | R-F PENTODE                                                       | 5               |                                    | FIL.            | 2                |
| 841   | 3.25      | R-F POWER AMPLIFIER, OSCILLATOR,<br>A-F VOLTAGE AMPLIFIER         | 3               | 15                                 | FIL.            | 7.5              |
| 842   | 3.25      | A-F POWER AMPLIFIER, MODULATOR                                    | 3               | 12                                 | FIL.            | 7.5              |
| 843   | 12.50     | POWER AMPLIFIER, OSCILLATOR                                       | 3               | 15                                 | HTR.            | 2.5              |
| 844   | 18.00     | SCREEN-GRID R-F POWER AMPLIFIER                                   | 4               | 15                                 | HTR.            | 2.5              |
| 845   | 15.00     | MODULATOR, A-F POWER AMPLIFIER                                    | 3               | 75                                 | FIL.            | 10               |
| 850   | 37.50     | SCREEN-GRID R-F POWER AMPLIFIER                                   | 4               | 100                                | FIL.            | 10               |
| 852   | 16.40     | OSCILLATOR, R-F POWER AMPLIFIER                                   | 3               | 100                                | FIL.            | 10               |
| 860   | 32.50     | SCREEN-GRID R-F POWER AMPLIFIER                                   | 4               | 100                                | FIL.            | 10               |
| 864   | 1.00      | AMPLIFIER (LOW MICROPHONIC DESIGN)                                | 3               |                                    | FIL.            | 1.1              |
| 865   | 12.75     | SCREEN-GRID R-F POWER AMPLIFIER                                   | 4               | 15                                 | FIL.            | 7.5              |
| 954   | 5.00      | DETECTOR-AMPLIFIER PENTODE (ACORN)                                | 5               |                                    | HTR.            | 6.3              |
| 955   | 3.00      | AMPLIFIER, DETECTOR, OSCILLATOR (ACORN)                           | 3               |                                    | HTR.            | 6.3              |
| 956   | 5.00      | SUPER-CONTROL R-F AMPLIFIER PENTODE<br>(ACORN TYPE)               | 5               |                                    | HTR.            | 6.3              |
| 991   | .90       | VOLTAGE REGULATOR                                                 | 2               |                                    |                 |                  |
| 1602  | 2.75      | AMPLIFIER TRIODE (LOW MICROPHONIC)                                | 3               | 15                                 | FIL.            | 7.5              |
| 1603  | 3.25      | AMPLIFIER PENTODE (LOW MICROPHONIC)                               | 5               |                                    | HTR.            | 6.3              |

### RECTIFIERS

| RECTIFIERS |         |                          | MAX. PEAK<br>INVERSE V. |        |          |
|------------|---------|--------------------------|-------------------------|--------|----------|
| 217-A      | \$20.00 | HALF-WAVE, HIGH VACUUM   | 2                       | 3,500  | FIL. 10  |
| 217-C      | 20.00   | HALF-WAVE, HIGH VACUUM   | 2                       | 7,500  | FIL. 10  |
| 836        | 11.50   | HALF-WAVE, HIGH VACUUM   | 2                       | 5,000  | HTR. 2.5 |
| 866        | 1.50    | HALF-WAVE, MERCURY VAPOR | 2                       | 7,500  | FIL. 2.5 |
| 866-A      | 4.00    | HALF-WAVE, MERCURY VAPOR | 2                       | 10,000 | FIL. 2.5 |
| 872        | 14.00   | HALF-WAVE, MERCURY VAPOR | 2                       | 7,500  | FIL. 5   |
| 872-A      | 16.50   | HALF-WAVE, MERCURY VAPOR | 2                       | 10,000 | FIL. 5   |

### HIGH POWER TRANSMITTING TYPES

| HIGH POWER TRANSMITTING TYPES |          |                                                                  | WATTS<br>DISS. |     |         |
|-------------------------------|----------|------------------------------------------------------------------|----------------|-----|---------|
| 204-A                         | \$ 97.50 | OSCILLATOR,R-F POWER AMPLIFIER,<br>CLASS B MODULATOR             | 3              | 250 | FIL. 11 |
| 831                           | 265.00   | OSCILLATOR,R-F POWER AMPLIFIER                                   | 3              | 400 | FIL. 11 |
| 849                           | 160.00   | MODULATOR,A-F POWER AMPLIFIER,<br>R-F POWER AMPLIFIER,OSCILLATOR | 3              | 400 | FIL. 11 |
| 851                           | 350.00   | MODULATOR,A-F POWER AMPLIFIER,<br>R-F POWER AMPLIFIER,OSCILLATOR | 3              | 750 | FIL. 11 |
| 861                           | 295.00   | SCREEN-GRID R-F POWER AMPLIFIER                                  | 4              | 400 | FIL. 11 |

IT'S EASY TO PARK AT WALTER ASHE . . .

## CORNELL-DUBILIER TRANSMITTING FILTER CONDENSERS



### FOR TRANSMITTERS AND POWER AMPLIFIERS

#### TYPES TJ AND TB

Introduced to the broadcast field only three years ago, this Dykanol "A" series of high voltage transmitting capacitors has won wide popularity throughout the industry. Their extreme compactness, sturdy construction and proven dependability has made them the most popular line of transmitting condensers available today.

High Voltage Mica  
Blocking Condensers



TYPE 21-C-86

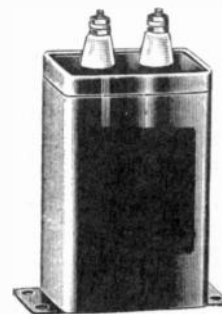
.001 MFD.  
7000 V.D.C.  
NET \$ 2.55

| CAP.<br>MFD.                                     | TYPE<br>NO. | NET<br>PRICE | H       | DIMENSIONS<br>L | W       |
|--------------------------------------------------|-------------|--------------|---------|-----------------|---------|
| WORKING VOLTAGE 600 V.D.C. 440 R.M.S.RECT.A.C.   |             |              |         |                 |         |
| 1                                                | TJ-6010     | \$ 1.65      | 2 1/8"  | 1 13/16"        | 1 1/16" |
| 2                                                | TJ-6020     | 2.10         | 2 7/8   | 1 13/16         | 1 1/16  |
| 4                                                | TJ-6040     | 2.70         | 3 7/16  | 2 1/2           | 1 3/16  |
| WORKING VOLTAGE 1000 V.D.C. 660 R.M.S.RECT.A.C.  |             |              |         |                 |         |
| 1                                                | TJ-10010    | \$ 1.80      | 2 1/8"  | 1 13/16"        | 1 1/16" |
| 2                                                | TJ-10020    | 2.70         | 4       | 1 13/16         | 1 1/16  |
| 4                                                | TJ-10040    | 4.20         | 4 13/16 | 2 1/2           | 1 3/16  |
| WORKING VOLTAGE 1500 V.D.C. 1000 R.M.S.RECT.A.C. |             |              |         |                 |         |
| 1                                                | TJ-15010    | \$ 2.25      | 4"      | 1 13/16"        | 1 1/16" |
| 2                                                | TJ-15020    | 3.75         | 4 5/16  | 2 1/12          | 1 3/16  |
| 4                                                | TJ-15040    | 5.40         | 4 13/16 | 3 3/4           | 1 1/4   |
| WORKING VOLTAGE 2000 V.D.C. 1500 R.M.S.RECT.A.C. |             |              |         |                 |         |
| 1                                                | TJ-20010    | \$ 3.15      | 3 7/16" | 2 1/2"          | 1 3/16" |
| 2                                                | TJ-20020    | 4.80         | 4 1/16  | 3 3/4           | 1 1/4   |
| 4                                                | TJ-20040    | 6.60         | 4 1/16  | 3 3/4           | 1 1/4   |

### TENSION-OIL TRANSMITTING FILTER CONDENSERS

MADE BY THE LARGEST MANUFACTURERS OF TRANSMITTING FILTER CONDENSERS FOR ALL PURPOSES INCLUDING COMMERCIAL BROADCAST AND AMATEUR USE.

| CAP.<br>MFD. | TYPE<br>NO. | WORKING<br>VOLTAGE | NET<br>PRICE |
|--------------|-------------|--------------------|--------------|
| 1            | XP-1001     | 1000 DC            | \$ 1.10      |
| 2            | XP-1002     | 1000 DC            | 1.50         |
| 1            | XP-1501     | 1500 DC            | 1.45         |
| 2            | XP-1502     | 1500 DC            | 1.95         |
| 1            | XP-2001     | 2000 DC            | 1.75         |
| 2            | XP-2002     | 2000 DC            | 2.45         |
| 1            | XP-3001     | 3000 DC            | 2.50         |
| 2            | XP-3002     | 3000 DC            | 4.95         |



LOT NEXT TO STORE OR LOADING ZONE

# WALTER ASHE RADIO COMPANY

1100 Pine Street

St. Louis, Missouri

## HAMMARLUND

### MICS Type

Single type of Isolantite base trimmers. Available in four standard sizes. Size of the base is 1"x1 1/2". Mounting centers 1 1/4".



|                                 |     |
|---------------------------------|-----|
| —Code MICS-70 (10-70 mmf.)      |     |
| List, 50c.                      |     |
| NET PRICE.....                  | 30¢ |
| —Code MICS-140 (70-140 mmf.)    |     |
| List, 60c.                      |     |
| NET PRICE.....                  | 36¢ |
| —Code MICS-220 (140-220 mmf.)   |     |
| List, 70c.                      |     |
| NET PRICE.....                  | 42¢ |
| —Code MICS-1000 (600-1000 mmf.) |     |
| List, \$1.00.                   |     |
| NET PRICE.....                  | 60¢ |

### Midget Equalizers

Extremely small low loss unit expressly designed for trimming RF coils, but useful for many other purposes. Light in weight to permit being self supported in wiring. Isolantite base, dielectric is mica and spring plates of phosphor bronze. Size of base 5/8"x3/4".



—Code MEX (3-30 mmf.)

List, each, 30c. NET PRICE..... 18¢

### Equalizers



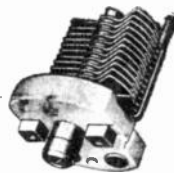
Very small condenser for neutralizing, balancing and trimming purposes. Center screw adjustment. May be attached directly to binding post of socket or condenser. Mica dielectric, phosphor bronze flexible plate and bakelite base. Size of base is 1 1/4"x3/4".

—Code EC-35 (3-35 mmf.) List, ea. 30c. NET PRICE.. 18¢

—Code EC-80 (25-80 mmf.) List, ea. 40c. NET PRICE.. 24¢

### New Air Padding Condensers

High quality air dielectric condensers for use wherever space is at a premium. Will maintain constant capacity under any conditions of temperature, humidity or vibration. Ideal for short wave and ultra short wave work. Overall dimensions of 180 mmf. size only 1-7/32"x1 1/8"x1 1/4" high. Isolantite base. Soldered brass rotors and stators.



| MODEL   | CAP.  | NET    |
|---------|-------|--------|
| APC 25  | 25MMF | \$ .78 |
| APC 50  | 50    | .90    |
| APC 75  | 75    | 1.02   |
| APC 100 | 100   | 1.14   |
| APC 140 | 140   | 1.35   |

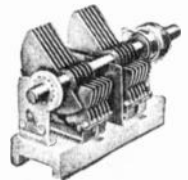
### HAMMARLUND "STAR" Midget Condensers



| MODEL           | CAP. | NET    |
|-----------------|------|--------|
| SM-15           | 15   | \$ .51 |
| SM-25           | 25   | .51    |
| SM-50           | 50   | .54    |
| SM-100          | 100  | .60    |
| SM-140          | 140  | .75    |
| —DOUBLE SPACED— |      |        |
| SM-35-X         | 35   | .60    |

### Split Stator Midget Condensers

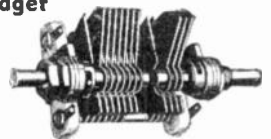
Hammarlund dual midget condensers built on Strong Isolantite base with shield plate between stators. Single hole mount with 1/4" shafts. Overall length behind panel is 3/4". Plates .0225" brass with .0245" air gap. Tested for 500 volts AC breakdown.



| MODEL     | CAP.  | EA. | SECT. | NET     |
|-----------|-------|-----|-------|---------|
| MCD-140-S | 140MF |     |       | \$ 2.40 |
| MCD-140-M | 140   |     |       | 2.40    |
| MCD-100-S | 100   |     |       | 2.10    |
| MCD-100-M | 100   |     |       | 2.10    |
| MCD-50-S  | 50    |     |       | 1.80    |
| MCD-50-M  | 50    |     |       | 1.80    |

### Band Spread Midget Condensers

Designed for use as "band spread" tuning condensers for short wave receivers and for use in amateur band frequency meters. The "tank" section can be set and locked at any desired capacity permitting the tuning section to spread narrow frequency ranges over the entire dial, regardless of the range of the band or the coils used.



| MODEL   | CAP. 1 | CAP. 2 | NET     |
|---------|--------|--------|---------|
| MC-120B | 100    | 20     | \$ 1.80 |
| MC-150B | 100    | 50     | 1.95    |

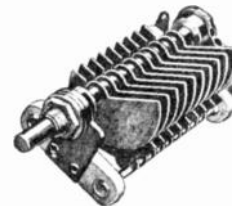
### "HF" MICRO CONDENSERS

|                       |         |             |
|-----------------------|---------|-------------|
| HF-30-X DOUBLE SPACED | 30 MMF. | NET \$ 1.10 |
| HFD-30-X " " "        | 28.5"   | 1.95        |
| HFD-100 SINGLE SPACED | 100 "   | 1.95        |



### Hammarlund Midget Variable Condensers

| MODEL    | PLATES | MIN. CAP. | MAX. CAP. | NET    |
|----------|--------|-----------|-----------|--------|
| MC-20-S  | 3      | 3MMF      | 20MMF.    | \$ .84 |
| MC-35-S  | 5      | 4         | 35        | .90    |
| MC-50-S  | 7      | 5         | 50        | .96    |
| MC-75-S  | 11     | 6         | 80        | 1.20   |
| MC-75-M  | 11     | 6         | 80        | 1.20   |
| MC-100-S | 14     | 6         | 100       | 1.35   |
| MC-100-M | 14     | 6         | 100       | 1.35   |
| MC-140-S | 19     | 8         | 140       | 1.50   |
| MC-140-M | 19     | 7         | 140       | 1.50   |
| MC-200-M | 27     | 10        | 200       | 1.65   |
| MC-250-M | 34     | 10        | 260       | 1.80   |
| MC-325-M | 43     | 12        | 320       | 2.10   |

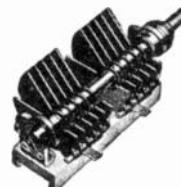


### Double Spaced Condensers

Wide spacing, special bearings and Isolantite afford exceptional efficiency in ultra short wave receivers and transmitters. Air gap between plates .0715". Small size adapts them to compact types of transmitters now so much in vogue. For tuning amplifier stages in crystal controlled transmitters and for neutralizers up to 210's and 50 watters. Also as tuners for 5 meter master oscillator power amplifiers.

| MODEL    | CAP. | NET     |
|----------|------|---------|
| MC-20-MX | 25   | \$ 1.20 |
| MC-20-SX | 25   | 1.20    |
| MC-35-MX | 35   | 1.35    |
| MC-35-SX | 35   | 1.35    |
| MC-50-MX | 50   | 1.65    |
| MC-50-SX | 50   | 1.65    |

### Double Spaced Split Stator Condensers



Specially designed for efficiency at ultra high frequencies in either receiving or transmitting. Wide spacing between plates materially aids frequency stability. Isolantite insulation assures low loss factor so necessary in 5 meter work. An ideal condenser for compact 5 meter transmitters using up to 245's or 210's in push-pull. Actual air-gap between adjacent rotor and stator plates is .0715". Midline plates and special bearings provide easy and accurate tuning. Other specifications standard except for omission of shield plate.

.0715 AIRGAP

| MODEL     | CAP. | EA. | SECT. | NET     |
|-----------|------|-----|-------|---------|
| MCD-35-MX | 35   |     |       | \$ 2.10 |
| MCD-35-SX | 35   |     |       | 2.10    |

IT'S EASY TO PARK AT WALTER ASHE . . .

1100 Pine Street

St. Louis, Missouri

## HAMMARLUND

### Variable Coupling Air-Tuned Transformers

Designed to permit continuous variation of the mutual inductance between primary and secondary through-out a wide range of values and without otherwise affecting circuit constants. The approximate range of variation is from one-third critical coupling to over three times critical coupling. Continuous variation between these limits may be controlled from the receiver panel by means of suitable mechanical arrangements, or where continuous variation is not necessary the coupling may be adjusted to the desired value and locked at that point by means of a collar and set screw provided for that purpose. For panel control of selectivity several transformers can be mounted in line and their coupling varied simultaneously.

Both primary and secondary are thoroughly impregnated three-ply Lits windings having the exceptionally high "Q" of 150 (power factor less than .008). The transformers may be used with any screen grid tubes normally used as I.F. amplifiers. Both tuning adjustments are on one side of the aluminum shield which measures 2 1/2" x 2 1/2".

—Code VT-465 (465 k.c.)  
List, each, \$5.50.  
NET PRICE..... \$ 3.30

—Code VT-175 (175 k.c.)  
List, each, \$5.50.  
NET PRICE..... \$ 3.30

—Code VTC (Variable coupling mechanism for panel control of up to four transformers). List, each, \$2.50. NET PRICE..... \$ 1.50



### Hammarlund Standard and Midget IF TRANSFORMERS

Designed for experimental and replacement purposes, in superheterodynes employing either one or two stages of I.F. in connection with any type of second detector. Made in four special types for broadcast and short wave receivers. There is also a 465 k.c. beat oscillator unit to match. All transformers are of tuned grid, tuned plate type, with lattice wound coils impregnated to prevent moisture effects. Lits windings are used in the 465 k.c. short wave units. Tuning condensers are of the highest grade mica compression type, mounted on Isolantite bases and adjustable from the top of the shield can. Leads are RMA color coded, and tagged for easy installation. Secondaries are either plain for standard screen grid tubes or center tapped for tubes requiring split input circuits such as 55's, 75's, 2A6's, etc. Aluminum shield can measures 3 1/4" outside diameter by 3 1/4" high. Mounting is by means of threaded lugs on 3" centers. Screen grid cap and mounting nuts.

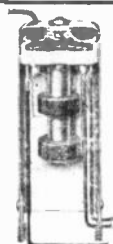
—Code T-465 (465 k.c.)  
—Code T-175 (175 k.c.)  
—Code T-465-CT (Center-tapped 465 k.c.)  
—Code T-175-CT (Center-tapped 175 k.c.)  
List, each, \$1.65.  
NET PRICE..... \$ .99

—Code TBO-465 (465 k.c. Beat Oscillator).  
List, each \$2.00. NET PRICE..... \$1.20

### Midget Type

For use as original equipment and for replacement purposes in midget sets, automobile sets and wherever space saving is important. These units are identical electrically to the type "T" transformers described above. They differ only in shape and size. Aluminum shield can measures 2 1/4" high by 1 1/4" square. Threaded mounting studs are on 1 1/2" centers. Screen grid cap and mounting nuts.

—Code ST-465 No. A1273—Code ST-465-CT (465 k.c. center tapped)  
—Code ST-175 No. A1274—Code ST-175-CT (175 k.c. center tapped)  
List, each, \$1.65.  
NET PRICE..... \$ .99



### ISOLANTITE SOCKETS

Made of Isolantite for lowest losses and highest surface resistivity. Glazed top and sides, rust-proof side gripping contacts. Constant resistivity and perfect contact eliminate noise. Sub-panel or base mounting. Four, five, six and seven prong types. 2 1/4" long by 1 1/4" wide, standard 1 1/2"/32" mounting centers.

—Code S-4 (4 prongs) List, each, 60c  
—Code S-5 (5 prongs)  
—Code S-6 (6 prongs) NET PRICE  
—Code S-7 (7 prongs)  
—Code S-7B (for small base, 7 prong tubes) \$ .36  
—8-PRONG OCTAL— \$ .45

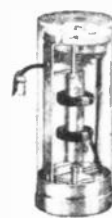
### High Impedance R. F. Chokes

A special process of helical winding and impregnating enables the forming of a very large inductance with a very low distributed capacity, making them very effective in both broadcast and short wave receivers.



Ideally suited for detector plate circuits, R-plus and grid return leads and for R.F. filtering in general. Current carrying capacity of both sizes, 60 milliamperes. Bakelite case 1 1/2" high by 1 1/4" diameter. Mounting feet and terminals extending from base portion.  
—Code RFC-85, Inductance 85 millihenries, capacity 3 mmf., D.C. resistance 215 ohms. List, \$2.00. NET PRICE..... \$ 1.20  
—Code RFC-250, Inductance 250 millihenries, capacity 2 mmf., D.C. resistance 420 ohms. List, \$2.25. NET PRICE..... \$ 1.35

### "Air Tuned" IF Transformers



Precision IF transformers of the tuned primary, tuned secondary type with both plate and grid coils of Lits wire. Tuned to resonance by means of air dielectric variable condensers of special design. The coils have the exceptional "Q" of 115, a coupling co-efficient of 0.77%, the transformers providing a gain in excess of 300 per stage.

The beat frequency oscillator also employs air dielectric condensers and is tunable by means of a vernier condenser to which is attached a lever. By moving the lever one way or the other, a 1000 or 1500 cycle beat note (assuming the carrier is tuned precisely on the peak of the IF amplifier) is produced. When so adjusted a receiver will provide a remarkable degree of "single signal" selectivity for CW reception.

Standard transformers are designed for 55's and other tubes of this type such as 24's and 35's. Center tapped units are available for tubes requiring split input circuits such as 55's, 75's, 85's, 2A6's, etc. The shield can is 2 3/32" diameter by 5" high, mounted through bottom.

—Code ATT-175 (175 k.c.) List, each, \$4.50  
—Code ATT-465 (465 k.c.)  
—Code ATT-175-CT (Center-tapped 175 k.c.)  
—Code ATT-465-CT (Center-tapped 465 k.c.)  
NET PRICE..... \$ 2.70

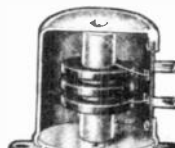
### FLEXIBLE COUPLING

Permits tandem operation of any number of independent units without requiring exact shaft alignment. The sides of the condenser are insulated from each other, allowing instruments in gang to be operated as independent electrical units. Made of Bakelite canvas, with brass bushings and for 1/4" shafts. Four rust-proof and hardened steel set screws provide against shafts slipping. Overall diameter is 1 1/4".

—Code FC.  
NET PRICE..... \$ .36



### Shielded R.F. Chokes

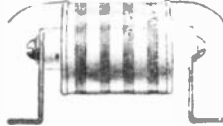


A new and improved shielded choke for general use in high gain circuits. The coil unit is completely shielded in an aluminum shell, resulting in minimum external field and permitting compact receiver design without stray coupling to cause instability or feedback. The multiplicity of plate provides high inductance and low distributed capacity, resulting in extremely high impedances to all frequencies within the short wave and broadcast bands. Mounting legs on 1 1/2" centers. When space is limited, legs can be removed and the choke mounted by means of two tapped holes on 1" centers, in the bottom plate. Shield measures 1 1/4" high by 1 1/4" diameter. Connections to terminals on side of can. Inductance 10 m.h. DC resistance 65 ohms; current carrying capacity 100 milliamperes.  
—Code CH-10-S. List, \$1.00. NET PRICE..... \$ .60

### HAMMARLUND Isolantite R. F. Chokes

Low-loss RF choke designed particularly for short wave and ultra short wave receivers and transmitters, but is equally effective over the broadcast band. Its compactness permits mounting in isolated positions well removed from stray RF fields, which, together with its load characteristics, specially recommend it as a grid choke for multi-stage transmitters. A sectionalized Isolantite spool carries the four windings, which are moisture proofed and protected by lacquer and a covering of Cellophane. Flexible leads and removable brackets permit any desired style of mounting. No metal screw passes through the choke to increase losses and distributed capacity. The choke measures 1 1/4" x 1 1/4", has an inductance of 8 millihenries, a DC resistance of 70 ohms, a distributed capacity of 3 mmf., and a current carrying capacity of 125 milliamperes.

—Code CH-8. List \$1.10. NET PRICE..... \$ .66

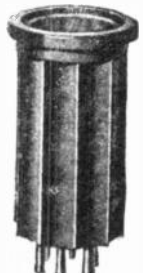


### Isolantite Coil Forms

The low losses and stability of these forms provide for efficient high-frequency reception under all conditions, being made of extruded Isolantite, a material closely approximating the ideal qualities of fused quartz. Equipped with convenient black enameled wooden handle. Surface is "non-skid," eliminating trouble encountered in winding on slippery surfaces. The numerous holes provided in the form make drilling unnecessary. Form is 1 1/2 in. in diameter and 2 1/2 in. long, exclusive of knob and prongs. Made in four, five and six-prong types to fit standard sockets.



NET  
4 PRONG CF4 \$ .75  
5 PRONG CF5 .75  
6 PRONG CF6 .75



### Heavy Duty Transmitting Chokes



Specially designed for parallel feed in high power transmitters operating in the 20, 40, 80 and 160 meter amateur bands. Throughout these bands it has the exceptionally high equivalent impedance of more than 500,000 ohms, and consequently introduces negligible losses. Equally effective from 1,500 to 15,000 kc. with the exception of frequencies between 5300 and 6400 and between 8900 and 9300 kc. Its use in these frequencies is not recommended. Inductance 2.5 mh. Distributed capacity less than 1.5 mmf. DC resistance 8 ohms. Maximum recommended DC (continuous) 500 milliamperes. The six thin universal wound pies are mounted on an Isolantite core with a tapped hole in each end. Insulated mounting brackets are secured to the Isolantite core with short machine screws. Brackets may be removed and the choke mounted by means of a single machine screw. Overall size (without brackets) 1 1/4" diameter by 2 1/4" long.  
—Code CH-500.  
List \$1.75. NET PRICE..... \$ 1.05

### New Low Loss Forms

Type SWF, 4-prong. 21c  
Type SWF, 5-prong. 21c  
Type SWF, 6-prong. 24c

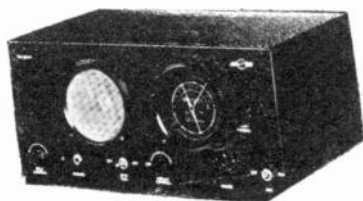
## LOT NEXT TO STORE OR LOADING ZONE

# h a l l i c r a f t e r s

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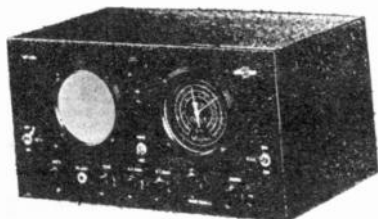
## SKY BUDDY

A REAL junior model communication receiver that's hard to beat in sensitivity and selectivity even when it's compared with higher priced sets! Look at these features—and then look at this price! Tuning from 554 KC to 18.1 MC (16.6 to 555 meters) in three bands. Band 1—545 KC to 1680 KC; Band 2—1680 to 5500 KC; Band 3—5500 to 18,100 KC. Single iron core I.F. stage and improved mechanical band spread (36 to 1). Direct calibration tuning eliminates complicated charts and tables. Illuminated main dial. Automatic volume control. Beat Frequency oscillator. Headphone jack. Hum-free self contained power supply. Built-in speaker. 5 tubes: 6A7—1st Detector-Oscillator; 6F7—Intermediate Amplifier and Beat Frequency Oscillator; 75—End Detector, AVC and 1st Audio Amplifier; 42—Power Output Stage; 80—Rectifier. Size: 17 by 7½ by 8½ inches deep. Shipping wt. 20 lbs. For use on 110-120 volt, 50-60 cycle. A.C. current only.

- 18 TO 555 METERS IN 3 BANDS
- 5 TUBES DO THE WORK OF 8
- COMBINED I.F. AND BEAT FREQUENCY OSCILLATOR
- BUILT-IN SPEAKER AND POWER SUPPLY
- SINGLE TUNING CONTROL
- IRON CORE I.F. (HIGH GAIN AND SELECTIVITY)
- MECHANICAL BAND SPREAD
- BEAT FREQUENCY OSCILLATOR

The Sky Buddy

Net Price \$29.50



## SKY CHIEF

- SINGLE STAGE 465 K.C. IRON CORE I.F.
- 17.6 TO 540 K.C. IN 3 BANDS
- VARIABLE BEAT OSCILLATOR
- MECHANICAL BAND SPREAD
- AUTOMATIC VOLUME CONTROL
- BUILT-IN SPEAKER AND POWER PACK

A COMPLETE communication receiver with every control needed for efficient reception. Remarkable sensitivity and selectivity made possible with a high gain iron core I.F. transformer, equal in performance to two conventional air core stages and specially designed preamplifier. Added selectivity and image frequency rejection given by preselector ahead of the first detector. Variable beat frequency oscillator for CW and weak signal reception. R.F. and audio gain control. Automatic volume control and send-receive switch. Signal strength indicator. Illuminated main and band spread dial. Hum-free power supply affords quiet headphone operation. Rigid construction assures steady signals. Mechanical band spread—direct calibration tuning, no charts, no tables, and tone control. Built-in speaker. Headphone jack. Three bands, from 17.6 MC to 540 MC: Band 1—540 to 1700 KC; Band 2—1600 to 5400 KC; Band 3—5300 to 18,000 KC. Seven tubes: 4 metal and 3 glass 78—R.F. Preamplifier; 6A7—Detector-Oscillator; 6F7—L.F. Amplifier and Beat Frequency Oscillator; 75—2nd Detector, AVC and A.F. Amplifier; 42—Power Output Stage. Size: 8¾ by 7¼ by 10 inches deep. Ship. wt. 29 lbs. For 110-120 volt, 50-60 cycle A.C. operation only.

ALL HALLICRAFTER PRODUCTS CAN BE PURCHASED ON A CONVENIENT LONG-TERM TIME PAYMENT PLAN. INEXPENSIVE AND LOW COST.

The Sky Chief (complete with seven tested Raytheon tubes)

Net Price \$44.50

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1100 Pine Street

St. Louis, Missouri

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1938

SKY

### CHALLENGER

### AMERICA'S GREATEST RECEIVER VALUE

**T**HE most talked about communications receiver in amateur radio! The SKY CHALLENGER has everything that present day practice demands for efficient high frequency reception. It will out-perform any receiver in its price class and many costing much more. Extreme tuning range—38 MC to 535 KC (7.9 to 450 meters). Covers all the active amateur bands including the increasingly popular 10-meter band and regular broadcast; short wave broadcast, police and aviation. Tuning is made remarkably easy with a smooth electrical band spread and 5 band 338 degree dial. Solid mechanical construction for steadier signals. Sensitivity and selectivity better than many higher priced communications receivers.

#### Just Check These Many Technical Features:

Iron core I.F. transformer (2 stages). Air trimmed R.F. Preamplifier. Direct calibration tuning—no charts—no tables. Automatic Volume Control. Beat Frequency Oscillator (variable input). Tone Control. Send-Receive (Standby) Switch. Headphone Jack. Hum Free Power Supply. Undistorted power output—4 watts. 9 tubes: 3 metal, 3 glass; 6K7—RF-Preamplifier; 6L7—Mixer; 6C5—Oscillator; 6K7—1st RF Stage; 6K7—2nd RF Stage; 6Q7C—2nd Detector, AVC and 1st AF Stage; 6F6C—Power Output Stage; 80—Rectifier; 6K7—Beat Frequency Oscillator. Size: 8½ by 18½ by 10¼ in. deep. Ship. wt. 37 lbs. For 110-120 volt, 60 cycle A.C.

- ⑨ 9 TUBES—6 METAL—3 GLASS
- ③ 38 M.C. TO 535 K.C. (7.9 TO 540 METERS)
- ⑤ 5 BAND 338 DEGREE MAIN TUNING DIAL
- ⑨ ELECTRICAL BAND SPREAD
- ⑨ IRON CORE I.F. TRANSFORMERS
- ⑨ DIRECT CALIBRATION TUNING —NO CHARTS OR TABLES
- ⑨ AUTOMATIC VOLUME CONTROL
- ⑨ SINGLE SIGNAL CRYSTAL CONTROL
- ⑨ BEAT FREQUENCY OSCILLATOR

ALL HALLICRAFTER PRODUCTS CAN BE PURCHASED ON A CONVENIENT LONG-TERM TIME PAYMENT PLAN. INEXPENSIVE AND LOW COST.

NET PRICE

|                            |          |
|----------------------------|----------|
| MODEL SX-15 (with Crystal) | \$ 79.50 |
| MODEL S-15 (less Crystal)  | 69.50    |
| 8-Inch PM SPEAKER in Case  | 9.50     |

## LOT NEXT TO STORE OR LOADING ZONE

# WALTER ASHE RADIO COMPANY

1100 Pine Street St. Louis, Missouri

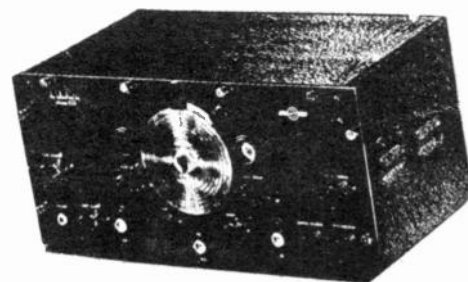
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### BUILT

### RADIOS

## SKY RIDER COMMERCIAL



- Micro-Vernier Band Spread
- Direct Calibration Tuning—No Charts or Tables
- 1600 K.C. Iron Core I.F. System
- 338 Degree Dial
- 14 Watts Undistorted Output
- Field Strength Indicator
- All Metal Tubes
- Illuminated Band Spread & Main Tuning Dial

5 Bands: Band 1—100 to 280 KC; Band 2—250 to 610 KC; Band 3—500 to 1530 KC; Band 4—1715 to 4300 KC; Band 5—1300 to 11,500 KC. Size: 8 3/4 by 19 by 10 inches deep. Ship. wt. 48 lbs. For 110-120 volt, 50-60 cycle A.C.

A SPECIAL receiver covering in 5 bands the frequencies of 100 KC to 11.5 MC (3000 to 26.1 meters). Splendid sensitivity and selectivity characteristics. Improved image frequency rejection at the high frequencies is achieved by the use of highly efficient iron core I.F. transformers tuned to 1600 KC. Calibrated 338 degree main tuning dial eliminates all complicated charts and tables.

Illuminated dial. Preamplifier, iron core I.F. transformers (two stages) tuned to 1600 KC. Air trimmers. Automatic volume control, and tone control. Signal strength indicator. Single signal crystal control. Beat frequency oscillator (variable input control). Send-receive (standby) switch. Headphone jack. Hum free power supply. Undistorted power output of 14 watts. 11 tubes: 10 metal and 1 glass. 6K7—R.F. Preamplifier; 6L7—1st Detector-mixer; 6C5—Oscillator; 6K7—1st I.F. Stage; 6K7—2nd I.F. Stage; 6R7—2nd Detector, AVC and 1st A.F.; 6K7—Electron coupled Beat Frequency Oscillator; two 6L6's—Push-pull Power Output Stage; 5Z4—Rectifier; 6C5—Signal Strength Indicator.

MODEL SX-12 (with Crystal)

Net Price \$ 114.50

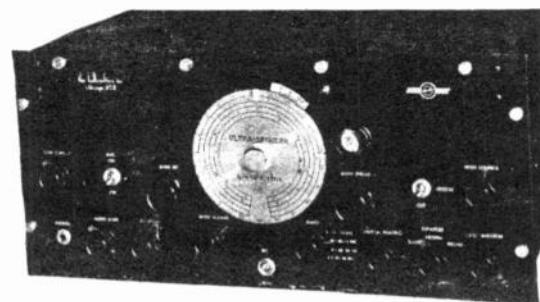
MODEL S-12 (less Crystal)

Net Price 99.50

## ULTRA SKY RIDER

TUNE in 5 meter stations with the same ease as signals on the lower frequencies. Direct dial calibration—no charts or tables. Unique electro-mechanical band spread system. Image frequency rejection achieved by choosing an I. F. of 1600 KC. Band-expander circuit can be cut in to receive badly "wobulated" signals typical of most ultra high frequency transmissions. The I. F. expander broadens the selectivity of the amplifier sufficiently to allow transmitter carrier-shift without attenuation.

Frequency range: 5.65 to 79.5 MC (3.75 to 53 meters). 4 Band 338 degree calibrated illuminated dial. Band 1—5.65 to 11.45 MC; Band 2—10.5 to 21.35 MC; Band 3—19.6 to 38.3 MC; Band 4—36.4 to 79.5 MC. A. V. C. and tone control. Send-receive (stand-by) switch. Headphone jack. Preamplifier, 1600 KC Iron core I. F. transformers—two stages expanded in three steps. Air trimmers. Single signal crystal control, beat frequency oscillator (variable input control). Undistorted power output of 3.5 watts, 10 metal tubes; 6K7—R. F. preamplifier; 6K7—1st Detector-Mixer; 6C5—Oscillator; 6K7—1st I.F. amplifier; 6L7—2nd I.F. amplifier; 6R7—2nd Detector, AVC and Beat Frequency Oscillator; 6J7—Noise Silencer Amplifier; 6Q7—1st Audio, Noise Silencer Rectifier; 6F6—Power Output Stage; 5Z4—Rectifier.



- No Plug-in Coils
- Individual Coil for Each Band
- 10 All-Metal Tubes
- Generous Isolantite and Steatite Insulation
- Continuous Electro-Mechanical Band Spread
- Iron Core Expanding I.F. Transformer
- Built-in Power Pack
- Frequency Calibrated Micro-Vernier 4-Band Dial
- Antenna Compensator
- Moderate Price

Size: 8 3/4 by 19 by 10 inches deep. Ship. wt. 45 lbs. For 110-120 volt, 50-60 cycle A.C.

ALL HALLICRAFTER PRODUCTS CAN BE PURCHASED ON A CONVENIENT LONG-TERM TIME PAYMENT PLAN. INEXPENSIVE AND LOW COST.

MODEL SX-10 (with Crystal)

Net Price \$ 114.50

MODEL S-10 (less Crystal)

Net Price 99.50

IT'S EASY TO PARK AT WALTER ASHE . . .

1100 Pine Street

St. Louis, Missouri

## h a l l i c r a f t e r s

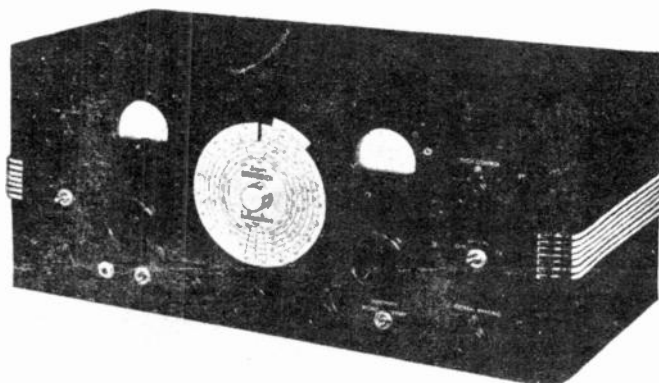
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1938

### SUPER SKY RIDER



#### AMERICA'S LEADING COMMUNICATIONS RECEIVER

**H**ERE is a receiver tuning from 5 meters to the top of the broadcast band, with high sensitivity on all amateur bands (not merely the 20 or 10 meter band); wide range, variable selectivity (single signal razor sharpness to broad high fidelity); an effective, efficient band spread that would equal or better the standards set by the A.R.R.L. Handbook; improved image and signal to noise ratio, and finally, an "S" meter that would work on weak signals.

The 1938 Super Sky Rider incorporates a frequency range of 62,000 to 545 KC. Six bands cover everything of "air" interest—5 meters, 7 meters (2-way police), all broadcast frequencies, foreign short wave, aircraft, relay broadcasting, etc. Band 1—Frequency 545 KC to 1550 KC; Band 2—1550 KC to 4.3 MC; Band 3—4.2 MC to 10.2 MC; Band 4—9.8 MC to 20.5 MC; Band 5—19 MC to 36 MC; Band 6—35 MC to 62 MC. Remember, in tuning all these frequencies, no charts or graphs are needed! Directly calibrated dial. A Band Pointer is unique tuning aid, found only on the Super Sky Rider. THE AVERAGE OVER-ALL SENSITIVITY OF THE RECEIVER IS BETTER THAN 1 MICROVOLT.

**SELECTIVITY:** There is a wide range of variable selectivity, from single signal razor-edge sharpness to broad high fidelity. New and improved iron core I.F. transformer circuits allow this "Wide Range Selectivity" control. (7.5 KC to 25.5 KC band width at 100 times signal frequency.) With crystal in circuits, selectivity better than one KC, giving a total ratio of variable selectivity of over 30 to 1.

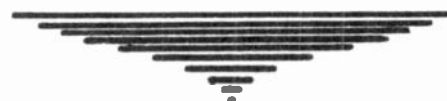
**BAND SPREAD:** The Super Sky Rider not only satisfies the most exacting band spread qualifications, but betters them. Band spread is accomplished in a unique electro-mechanical manner, highly efficient electrically; simple and smooth mechanically. A special high frequency condenser (see illustration on page 8) with double rotors and single stator units makes a tuning unit with the band spread section an integral part of the main condenser. This simple and sensible design feature, by eliminating extra wiring and parallel inductor losses in the tuned circuits, achieves worthwhile improvements, particularly at the higher frequencies. The added mechanical rigidity gained by such a system makes for steadier signals and smoother tuning ability. The new dynamic balanced tuning and the large controls represents a new and exclusive concept in band spread technique. Over 1000 degrees of band spread calibration better than 5 KC per division on the 20 meter band, and 25 KC per complete turn of the knob.

**Other Outstanding Super Sky Rider Features:** 11 tubes: 4 metal, 7 glass; 6K7—R.F.; 6L7—1st Detector; 6J5G—Oscillator; 6K7—I.F.; 6K7—I.F.; 6R7G—2nd Detector, AVC, and 1st Audio; two 6V6G—Power Output; 6J7G—Beat Oscillator; 6J7G—Signal Indicator Amplifier; 5Z3—Full Wave Rectifier. Improved antenna circuits give greater signal to noise ratio. Illuminated band spread and Signal meter dial. Air trimmed R.F. circuits. Ceramic insulation in tuning tank circuits and R.F. sockets. Undistorted power output of 13 watts. Maximum power output of 18 watts. Size: 11" deep by 9 1/4" high by 21" long. Controls include Tone Control, AVC (on-off), BFO injector, Rec. Send Switch, AF Gain, Band Switch, RF Gain, Selectivity (Broad-Sharp), Pitch Control, Crystal (out-in) and Crystal Phasing. Ship. wt. 50 lbs. For 110 volt, 50 to 60 cycle A.C. operation only.



LARGE MATCHING HALLCRAFTERS  
SPEAKER

12-Inch PM Dynamic Speaker. Impedance matches receiver output to produce high fidelity audio. Metal cabinet acoustically treated with wood baffle front to eliminate vibration. Customary high quality Hallcrafters construction; sleek modern lines match the modern design of the 1938 SUPER SKY RIDER cabinet.



ALL HALLCRAFTERS PRODUCTS  
CAN BE PURCHASED ON A  
CONVENIENT LONG-TERM TIME  
PAYMENT PLAN.

INEXPENSIVE AND LOW COST



THE ONLY TUNING DIAL OF ITS KIND:

There's one physical feature alone that distinguishes the Super Sky Rider from all other receivers—the central tuning dial. Accurately, directly calibrated for all six bands . . . no charts or graphs needed to read this dial. Automatic band pointer . . . always indicates the frequency band on which you are tuning.

|                                       | NET PRICE |
|---------------------------------------|-----------|
| MODEL SX-16 (with Crystal)            | \$ 111.00 |
| MODEL S-16 (less Crystal)             | 99.00     |
| 12-Inch PM DYNAMIC SPEAKER in Cabinet | 12.00     |

LOT NEXT TO STORE OR LOADING ZONE

**WALTER ASHE RADIO COMPANY**  
 1100 Pine Street St. Louis, Missouri



**Wreting**

"14"

**Communications Receiver**

"Precision Built"



CUSTOM  
BUILT

**RADIO**

**F E A T U R E S**

- |                                 |                                                |
|---------------------------------|------------------------------------------------|
| 1 Band Switch                   | 11 Accurate Calibration                        |
| 2 Individual Coils              | 12 Low Frequency Drift                         |
| 3 Band Pass Intermediate System | 13 Noise Silencing Circuit                     |
| 4 Trouble proof Filter System   | 14 Metal & Glass Tubes for Highest Efficiency  |
| 5 Negative lead Terminals       | 15 Automatic Two Speed Dial Control (No Shift) |
| 6 Audio for Speech Equipment    | 16 Calibrated "R" Meter                        |
| 7 Will Modulate 100 Watts       | 17 Really Hi-Fidelity Audio                    |
| 8 New type Band Spread Dial     | 18 Efficient Crystal Circuit                   |
| 9 Continuous Band Spread        | 19 Superior 10 Meter Operation                 |
| 10 Large clear vision Dial      | 20 Two Stages Pre-Selection                    |

**SPECIFICATIONS**

**FREQUENCY COVERAGE:** 34,000 to 550 Kilocycles in five bands as follows:

34,000 KC to 14,500 KC

15,500 KC to 6,800 KC

1,600 KC to 500 KC

7,000 KC to 3,500 KC

3,500 KC to 1,600 KC

Wave length coverage, 9 to 550 meters, and has continuous mechanical band spread

*Net Price*  
**\$108<sup>00</sup>**

COME IN AND SEE THIS NEW RECEIVER

WE STOCK THEM AT ALL TIMES AND

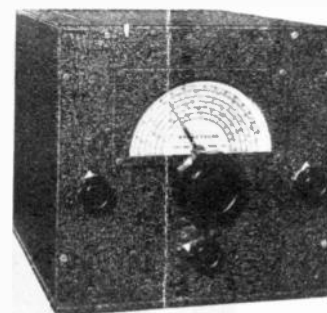
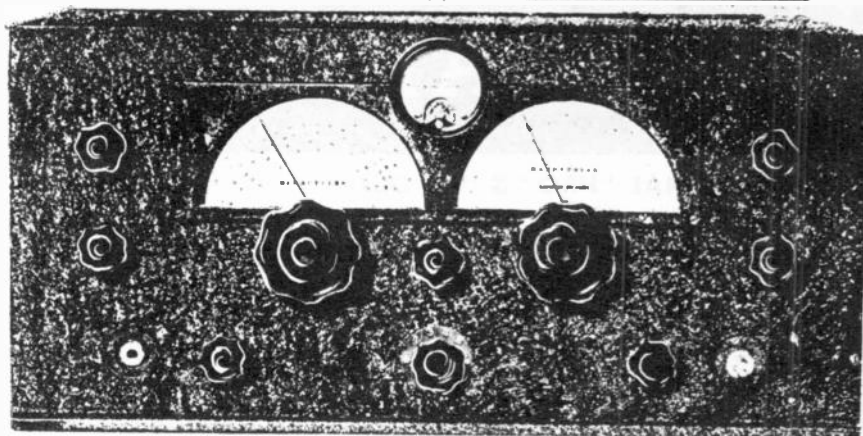
WILL BE GLAD TO GIVE A DEMONSTRATION

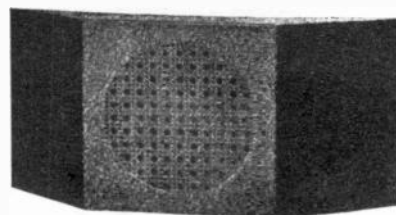
TIME PAYMENT PLAN AVAILABLE ON ALL RECEIVERS. ASK US FOR INFORMATION

IT'S EASY TO PARK AT WALTER ASHE . . .

1100 Pine Street

St. Louis, Missouri

**SINGLE SIGNAL SUPERHET**
**RME-69**

The DB-20 PRESELECTOR  
and IMAGE REJECTOR

THE SPEAKER, mounted in the Acoustic Chamber,  
finished in black or gray crinkle.


## FEATURES FOUND IN EVERY RME-69

### FIXED COUPLING I.F. TRANSFORMERS

... set for optimum coupling value consistent with the desired sensitivity and highest gain. Any lowering in the degree of sensitivity which is available in the variable IF coupling units is not in keeping with progress in superheterodyne design, especially in amateur receivers.

### SIX VOLT TUBES

... of known and established characteristics, and stable in operation. There is no reason why glass tubes should be replaced by the new metal tubes at the present time. The RME organization does not believe it advisable to make amateur stations experimental shops for the manufacturer. The RME-69 will have the metal tubes whenever they have reached the state of perfection desired in communication receivers.

### UNIT DESIGN AND CONSTRUCTION

... found in the RME-69 which is fully contained in a crinkle finished steel cabinet measuring 19" long by 10½" deep by 9" high. All connections are made to the rear apron of the chassis.

### CRYSTAL FILTER CIRCUIT

... to cope with the interference problem to the maximum degree. We believe that no superheterodyne receiver of modern design should be without such a filter. You will be surprised at the effectiveness of this circuit in the RME-69.

### QUALITY AND WORKMANSHIP

... very rugged construction throughout, solid cast aluminum chassis base, improved design, and high quality workmanship are to be found in this new RME-69 Single Signal Super.

### PLANETARY VERNIER DIAL DRIVE

... giving one of the smoothest and easiest tuning devices ever placed on an all-band communication receiver. With the large tuning knob employed, rotation of the indicator is possible by mere finger touch. Every operator will welcome this innovation in tuning, especially since hours of operation will not mean hand fatigue.

### FULL ELECTRICAL BAND-SPREAD

... maintaining a separate and distinct band-spread scale. This more expensive method of tuning is adopted because it is far more practical and flexible.

### INDIVIDUAL DIAL OPERATION

... two dials, a megacycle and a band-spread, are featured on the new RME-69. These are each five inches in diameter and give adequate spacing on all divisions. They present a very attractive appearance.

### SIX BAND TUNING RANGE

... having a continuous frequency range from 550 KC to 32,000 KC (9 to 550 meters). Calibration held to exceedingly close limits. Amateur bands grouped for a minimum amount of tuning.

### CALIBRATED DECIBEL-R METER

... always in the circuit giving a continuous indication of incoming signal strength. Serving also as an output meter in checking IF frequency alignment. Calibrated in decibels and also in the customary R values.

### BUILT-IN MONITOR CIRCUIT

... serving as send-receive switch. Used primarily to monitor phone and CW quality when transmitter is on the air.

Either gray finish or black crackle is standard on RME-69 and DB-20 at no extra cost.

RME-69 Single Signal Super Receiver. Housed in black crinkle steel cabinet, with 485 KC crystal, set of tubes, and 8" PM dynamic speaker in black crinkle finished baffle. 110 volt, 80 cycle model.  
Net \$251.20

RME-69 Single Signal Super Receiver only. In black crinkle steel cabinet with 485 KC crystal, 110 volt, 60 cycle model.  
Net 134.40

RME-69 Single Signal Super Receiver only. In black crinkle steel cabinet, with 485 KC crystal, 25 to 60 cycle, 110 or 220 volt model.  
Net 141.00

RME-69 Single Signal Super Receiver only. In black crinkle steel cabinet, with 485 KC crystal, combination 110 volt, 60 cycle and battery model.  
Net 144.00

RME-69 Single Signal Super Receiver only. In black crinkle steel cabinet, with 485 KC crystal. Battery model.  
Net 134.40

LS-1 noise silencer unit built into RME-69 Single Signal Super Receiver, any model, including one each 8L7, 6J7, 6K7, 6HG tubes.  
ADD Net 11.40

Complete set of nine tubes. Eveready-Sylvania. Five 6D6; one 6C6; one 6B7; one 42; one 80.  
Net 4.95

Permanent magnet dynamic speaker. Eight inch diameter, dust proof model, speaker cord attached, housed in black crinkle steel cabinet.  
Net 11.85

Permanent magnet dynamic speaker only. Eight inch diameter, dust proof model. No housing. Speaker cord attached.  
Net 7.80

RME-69 Super equipped with extra pair of binding posts on rear of chassis apron and wired to open B-supply circuit when working break-in.  
Net 1.20

RME-69 Super equipped with extra pair of binding posts on rear of chassis apron and special relay control contacts provided on monitor switch for special break-in operation to control transmitter.  
Net 2.70

Special color finish made to order on above cabinet, rack, or baffle.  
Net 3.60

DB 20 Preselector in black crinkle finish cabinet—overall dimensions 9½" high, 9½" wide, 10½" deep, including 2-6K7 tested tube, interconnecting plug and cord.  
Net \$42.60

DB 20 Preselector mounted on relay rack; aluminum panel 8½" x 19" x 3½" high, either black or gray crinkle finish including 2-6K7 tested tubes.  
Net \$52.20

OA-1 Oscilloscope Amplifier, providing means whereby a standard cathode ray oscilloscope may be connected to the RME-69 for visual monitoring of signals. Either gray or black crinkle finish cabinet. Including 6D6 tube.

8.10

TIME PAYMENT PLAN AVAILABLE ON ALL RECEIVERS. ASK US FOR INFORMATION

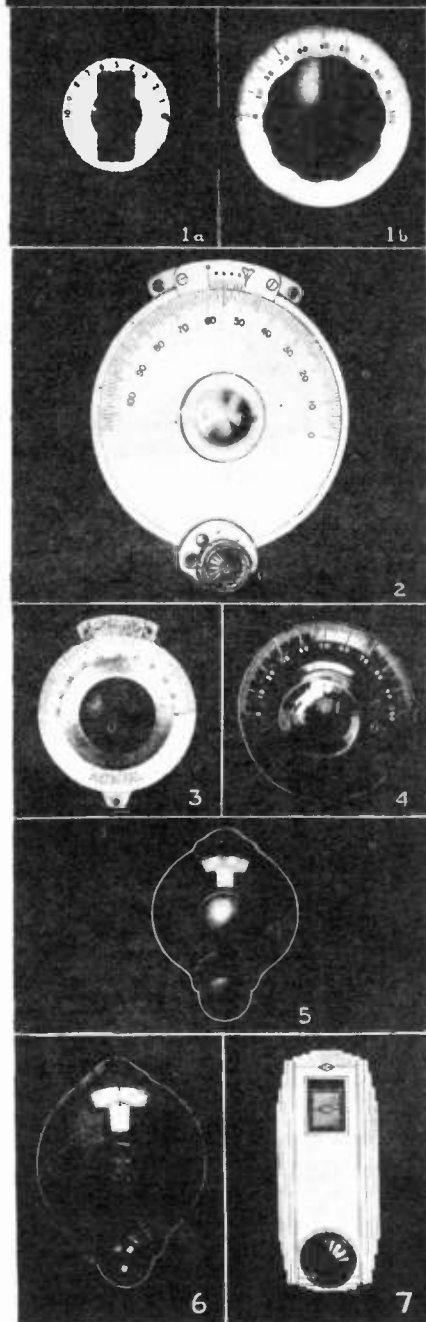
## LOT NEXT TO STORE OR LOADING ZONE

# WALTER ASHE RADIO COMPANY

1100 Pine Street St. Louis, Missouri



## DIALS



**DIAL SCALES**

| Scale | Divisions | Rotation | Direction of Condenser Rotation for increase of dial reading |
|-------|-----------|----------|--------------------------------------------------------------|
| 1     | 0-100-0   | 180°     | Either                                                       |
| 2     | 0-100     | 180°     | Counter Clockwise                                            |
| 3     | 100-0     | 180°     | Clockwise                                                    |
| 4     | 150-0     | 270°     | Clockwise                                                    |
| 5     | 200-0     | 360°     | Clockwise                                                    |
| 6     | 0-150     | 270°     | Counter Clockwise                                            |

### NATIONAL "HRO" & "O" DIALS

FIGS. 1a & 1b

The 1½" dia. HRO dial (Fig. 1a) is etched nickel silver and fits ¼" shafts. Reads from 0 to 10 over 180°.

The insulated 3½" dia. O dial (Fig. 1b) is circular-grained German Silver and fits ¼" shafts. Available with No. 2 scale.

The type HRK Knob used on the O dial is also available alone. Fits ¼" shafts.

The type ODL locking device with thumbscrew control is available for use with the type "O" dial. Ideal for transmitter applications.

Net Price, each \$3.51

Net Price, each \$3.30

### NATIONAL "N" & "NW" DIALS

FIGS. 2 & 3

Precision Dials, Type N, have engine divided scales and verniers of solid German Silver. The Verniers are flush, eliminating errors from parallax.

The four-inch Type N dial (Fig. 3) employs a smooth and powerful planetary mechanism with a 5 to 1 ratio. No. 2, 3, 4 or 5 scale.

Net Price, each \$4.05

The six-inch Type NW dial (Fig. 2) has a variable ratio drive that is unusually powerful at all settings. It is recommended for use on large transmitters and precision instruments. No. 2, 3, 4 or 5 scale.

Net Price, each \$9.00

### NATIONAL "A" DIAL

FIG. 4

The original "Velvet Vernier" Dial, Type A, is still an unchallenged favorite for general purpose use. It is exceptionally smooth and entirely free from backlash. The mechanism is contained within the bakelite knob and shell. Ratio 5 to 1. No. 2, 4 or 5 scale in 4" diameter. No. 2 scale in 3½" diameter.

Net Price, each \$1.80

### NATIONAL "B" & "BM" DIALS

FIGS. 5, 6

"Velvet Vernier" Dial, Type B (Fig. 6) provides a compact variable-ratio drive that is smooth and trouble free. The mechanism is inclosed in a black bakelite case, the dial being read through a window. No. 1 or 5 scale.

Net Price, each \$1.65. Illuminator \$3.30 extra

The Type BM Dial (Fig. 5) is a smaller version of the Type B Dial for use where space is limited. It is similar to the Type B Dial in appearance and mechanism, but does not have the variable-ratio device. No. 1 or 5 scale.

Net Price, each \$1.50

### NATIONAL "H" DIAL

FIG. 7

Projection Drum Dial, Type H, employs the proved and popular non-conducting cord drive with spring take up. The dial scale is optically projected in illuminated figures on a ground-glass screen, considerably enlarged. Parallax is entirely absent. Condenser shaft must be parallel to panel. No. 2, 3 or 4 scale.

Net Price, each \$3.30

### NATIONAL MICROMETER DIAL AND PRECISION CONDENSER

The Micrometer dial reads direct to one part in 500. Division lines are approximately ¼" apart. The dial revolves ten times in covering the tuning range, and the numbers visible through the small windows change every revolution to give consecutive numbering by tens from 0 to 500. The condenser is of extremely rigid construction, with four bearings on the rotor shaft. The drive, at the mid-point of the rotor, is through an enclosed preloaded worm gear with 20 to 1 ratio. Each rotor is individually insulated from the frame, and each has its own individual rotor contact, of the multi-fingered brush type. Stator insulation is Steatite.

PW Ganged Condensers are available in 2, 3 or 4 sections, in either 160 or 295 mmf per section. Larger capacities cannot be supplied. The single section PW condenser is supplied in capacities of 150, 200, 350 and 500 mmf, single spaced. Capacities up to 125 mmf can be supplied double spaced. The rotor is not insulated on the single section model. Plate shape is straight-line frequency when the frequency range is 2:1.

PW-1. Single Section.

Net Price, \$9.00

PW-2. Two Section.

Net Price, \$12.00

PW-3. Three Section.

Net Price, \$14.40

PW-4. Four Section.

Net Price, \$16.50

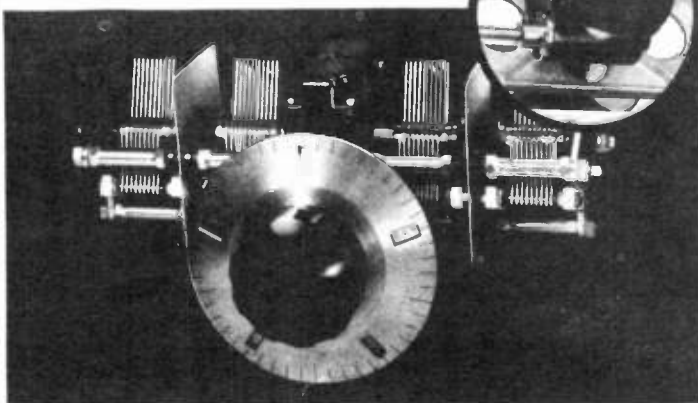
PW-0. Dial and Worm Drive, only, with

Net Price, \$8.10

TX-9 Coupling.

PWL. Worm Drive Unit in special hous-

Net Price, \$5.70



IT'S EASY TO PARK AT WALTER ASHE . . .



## DIELECTRICS

### NATIONAL STRAIN INSULATORS

The antenna insulator illustrated at the left is particularly suited to general use. It has a long leakage path, ample strength for all but the heaviest loads, and high efficiency. Made of Steatite. Type AA-6, Net Price, \$.21. The small aircraft-type insulator at the right is ideal where compactness is desirable. Type AA-5, Net Price, \$.18

### NATIONAL SPREADERS

The Steatite spreaders at the right provide a six-inch line spacing, and when used with No. 12 wire will give feeders having a surge impedance of 600 ohms. Type AA-3, Net Price, \$.18. The Isolantite insulators at the left when used to space  $\frac{3}{4}$ " tubes 2" apart will give a "Q" transformer matching a 72 ohm center-fed half-wave antenna to a 600 ohm line. Type QB, Net Price, \$.21

### NATIONAL STAND-OFFS

|                                                            |                                             |
|------------------------------------------------------------|---------------------------------------------|
| With metal base and cap                                    | Cone type, with internal thread at each end |
| Type GS-1 ( $\frac{1}{2}$ " x $1\frac{3}{8}$ ") Net, \$.15 | Type GS-5 ( $1\frac{1}{4}$ ") Net, \$.15    |
| Type GS-2 ( $\frac{1}{2}$ " x $2\frac{7}{8}$ ") Net, \$.21 | Type GS-6 (2") Net, \$.27                   |
| Type GS-3 ( $\frac{3}{4}$ " x $2\frac{7}{8}$ ") Net, \$.54 | Type GS-7 (3") Net, \$.45                   |
| Type GS-4 ( $\frac{3}{4}$ " x $4\frac{7}{8}$ ") Net, \$.66 |                                             |

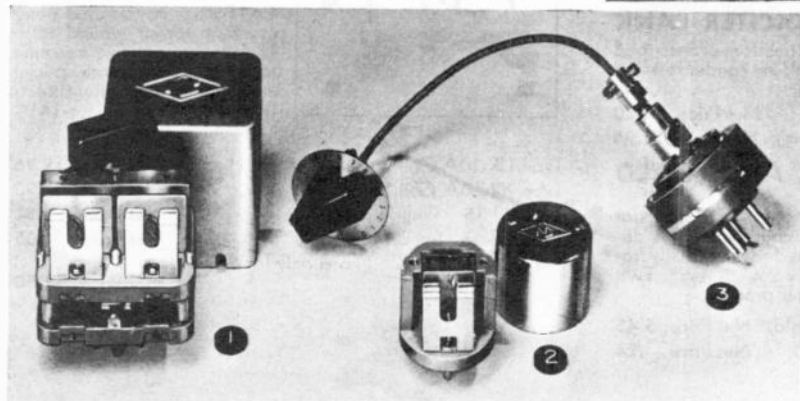
### NATIONAL LEAD-THROUGHS

The combination lead-through bushing and stand-off insulator pictured at the right is available either plain (Type GS-8, Net Price \$.21) or with a jack (Type GS-9, Net Price \$.30). The bushings shown at the left are made in two sizes and are sold in pairs with the necessary metal fittings. Type XS-1 (Fits 1" Hole) Net Price, per pair, \$.45. Type XS-2 (Fits  $1\frac{1}{2}$ " Hole) Net Price, per pair, \$.54

### NATIONAL BOWLS

Larger in size than the bushings listed above, these Steatite bowls are suitable for lead-in purposes and high voltages. Type XS-3 (Fits  $2\frac{3}{4}$ " Hole) Net Price, per pair, \$3.00. Type XS-4 (Fits  $3\frac{3}{4}$ " Hole) Net Price, per pair, \$3.90. Type XS-5 (with flange for bolting down,  $5\frac{1}{4}$ " Dia.) Net Price, each, \$4.50, per pair with metal fittings, \$9.30

### NATIONAL CRYSTAL HOLDERS



These crystal holders are moulded of low-loss R-39 and have prongs moulded in for easy plug-in mounting.

1 is a new type holder that will accommodate 4 crystals and has a built-in low-capacity switch for selecting frequencies. It accommodates crystals up to 1" square and is very convenient when an immediate choice of frequencies is desirable.

Type 4 in 1 — pressure type. Net Price \$4.50

2 is a holder for a single crystal in which crystals may be changed readily.

Type CHR — for use in receivers, resonator type.

Type CHS — for use in transmitters, Pressure, Constant Air-Gap, type.

Type CHT — for use in transmitters, Pressure type, no air gap.

Net Price, less crystal, of \$1.50 each

3 is a novel holder permitting front-of-panel tuning of the crystal over a range of one part in 600 without loss in output. Only specially selected crystals should be used.

Type CHV (less crystal) Net Price, \$5.70

Type CHV (with 80 meter Hollister crystal that will double into the 20 meter phone band)

Net Price, \$19.30

# WALTER ASHE RADIO COMPANY

1100 Pine Street St. Louis, Missouri

## PARTS



### NATIONAL R. F. CHOKES

**R-100.** Isolantite mounting, continuous universal winding in four sections. For pig-tail connections or standard resistor mountings. Inductance  $2\frac{1}{2}$  m.h.; distributed capacity, 1 mmf.; D.C. resistance 50 ohms; Current rating, 125 M.A. For low powered transmitters and high frequency receivers.



### R-152, R-154, R-154U.

These transmitter chokes have honeycomb coils (0.6 amps. rating) wound on Isolantite cores. The R-152 is designed for the 80 and 160 meter bands; inductance 4 m.h., D.C. resistance 10 ohms. The R-154 and R-154U give maximum impedance on the 20, 40 and 80 meter bands; inductance 1 m.h., D.C. resistance 6 ohms. The R-152 and R-154 are as illustrated. The R-154U does not have the small insulating pillar and the third mounting foot.

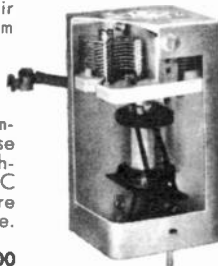


R-152 or R-154. **Net Price, \$1.35**  
R-154U. **Net Price, \$1.05**

**R-201.** A two-section honeycomb-wound choke in R-39 case, suitable for output circuit of second detector in H.F. receivers (475 KC Intermediate Frequency). Inductance, approximately 12 m.h., D.C. resistance approximately 120 ohms. **Net Price, \$75**

### NATIONAL I. F. TRANSFORMERS

This new I.F. Transformer has air dielectric condensers (isolated from each other by an aluminum shield) and Litz wound coils mounted on an Isolantite base which is treated against moisture absorption. The aluminum shield can, housing the assembly, measures  $4\frac{1}{8}'' \times 2\frac{3}{8}'' \times 2''$ . These transformers are available with or without Iron Cores in the 450-550 KC model; the 175 KC model is air core only. For iron core add \$.30 to price. Type IFC Transformer (air core)



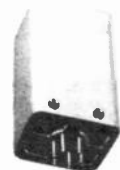
**Net Price, \$3.00**  
Type IFCO Oscillator (air core only)  
**Net Price, \$3.00**

### NATIONAL FIXED TUNED EXCITER TANK

Similar in general construction to the I. F. transformer described above, this unit has two 25 mmf, 2000 volt air condensers and an unwound XR-2 coil form.

Type FXT, without plug-in base. **Net Price, \$2.70**  
Type FXTB, with base (either 5- or 6-prong). **Net Price, \$2.94**

### NATIONAL PLUG-IN BASE AND SHIELD



The low-loss R-39 base is ideal for mounting condensers and coils when it is desirable to have them shielded and easily removable. Shield can is  $2'' \times 2\frac{3}{8}'' \times 4\frac{1}{8}''$ . Two models are available; 5- or 6-prong.

Type PB-10, (Base and Shield). **Net Price, \$4.45**  
Type PB-10A, (Base only). **Net Price, .24**

### NATIONAL COIL FORMS

**RECEIVER COIL FORM.** These well-known R-39 forms (illustrated at right) are machinable, permitting the experimenter to groove and drill them to suit individual requirements. They are available in 4-, 5- and 6-prong types. Length,  $2\frac{1}{4}''$ . Dia.  $1\frac{1}{2}''$ .



XR-4, XR-5, or XR-6. **Net Price, \$.45**

Also R-39, these small coil forms are designed with excellent form factor, contributing to high efficiency in H. F. circuits. Diameter,  $1''$ ; Length,  $1\frac{1}{2}''$ ; Wall thickness,  $1,16''$ . Type XR-1 has four prongs, others are plain. Type XR-1, four prongs. **Net Price, \$.30**  
Type XR-2, without prongs. **Net Price, \$.21**

Type XR-3,  $9/16''$  dia.  $\times 3/4''$  long. **Net Price, \$.18**

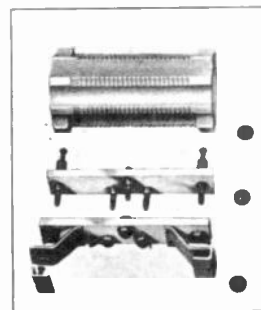
### BUFFER COIL FORM & SOCKET.

The Isolantite Coil Form (drilled for leads) is  $1\frac{3}{4}''$  diameter  $\times 3\frac{1}{2}''$  long and may be used as shown or mounted on stand-offs. The Coil Plug may be used separately as a base for air-wound plug-in coils, the tube prongs serving as coil anchoring points. The molded R-39 Socket employs five sturdy side-wipe contacts,



three on one side and two on the other for symmetrical wiring of the buffer circuit.

Type UR 13 Buffer Coil Form Assembly. **Net Price, \$1.50**  
Type XR 13 Coil Form only. **Net Price, .66**  
Type PB 5 Plug only. **Net Price, .45**  
Type XB 5 Socket only. **Net Price, .45**



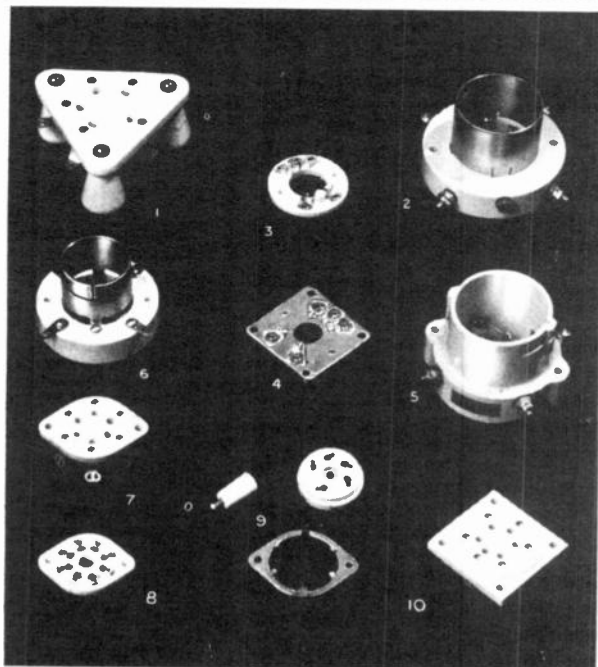
### TRANSMITTER COIL FORM AND SOCKET.

The new UR-10A Assembly consists of the XR-10A coil form (figure 3) for 20 and 40 meters and the new Isolantite Plug-in Base and Socket (figures 2 and 1 respectively). The Plug has five prongs and is easily attached by two screws to the Coil Form or may be used alone as a base for air wound coils. The socket, with five matching jacks, is supplied with special attachments for mounting directly on the tie bars of our TMA Transmitting Condenser.

Type UR-10A Coil Form Assembly. **Net Price, \$2.76**  
Type XR-10A Coil Form only. **Net Price, .90**  
Type PB-15 Plug-in Base only. **Net Price, .81**  
Type XB-15 Socket only. **Net Price, 1.05**  
Type XR-12A. Coil Form only for 160 meters. **Net Price, \$1.50**

IT'S EASY TO PARK AT WALTER ASHE . . .

## PARTS



### NATIONAL LOW-LOSS SOCKETS

1 is a wafer type Isolantite socket for power Pentodes such as the RK-28 and the RCA-803.  
Type JX-100S, as illustrated.  
Type JX-100, same but without stand-off insulators.

**Net Price, \$2.16**  
**Net Price, \$1.80**

2 is a fifty watt socket with sturdy side wipe contacts employing the conventional bayonet-lock metal shell.  
Type XM-50.

**Net Price, \$1.05**

3 is an Isolantite socket for the Triode Acorn tube. The socket contacts are of improved design.  
Type XCA.

**Net Price, \$.90**

4 is for the Pentode Acorn tube and is made with the same type of contacts as the XCA, or a square copper base with built-in by-pass condensers.  
Type XMA.

**Net Price, \$1.20**

5 is another 50 watt socket made entirely of low-loss Steatite and is for higher frequencies and voltages than the XM-50.  
Type XC-50.

**Net Price, \$2.10**

6 is a socket, similar in construction to the XM-50, designed for those tubes using the type LUX base.  
Type XM-10.

**Net Price, \$.75**

7 is one of the complete line of National Isolantite Receiving Sockets that fit all standard receiving tubes.

**Net Price, \$.36**

8 is an Isolantite wafer socket for the Octal (metal) tubes.

**Net Price, \$.36**

9 is a new socket of Isolantite with a contact that grips the tube prong for its full length and a metal ring for six-position mounting. All sockets except Octals are supplied with a stand-off insulator that allows center mounting for bread board layouts. Octals are supplied with two metal stand-offs.  
CIR Series.

**Net Price, each \$.24**

10 is a square Isolantite coil socket designed to fit National 6 pin coils. A wafer type socket, similar to figure 6, is also available to fit these same coil forms.

**List Price, \$.45**  
**List Price, \$.36**



### BOOKS

"Notes on Amateur Radio Transmitter Design" by James Millen is a source book of ideas, rich in suggestions for the construction of modern and efficient transmitters. The six chapters cover equipment from exciter to antenna, and are an invaluable supplement to such treatises as the ARRL Handbook.

**Net Price \$.50**

"A 500-watt Amateur Phone Transmitter" is a reprint in booklet form of two articles which appeared in the May and June issues of "QST" Magazine, and which have aroused much interest. Copies of this booklet are free while they last. All of the parts necessary for the construction of the transmitter, including the special panels and chassis, are regularly listed items.

### NATIONAL SHAFT COUPLINGS

1 is a small coupling of Steatite, providing high electrical efficiency when used to isolate circuits.  
Type TX-9.

**Net Price, \$.66**

2 is a popular small coupling, free from backlash. Insulation is canvas bakelite.  
Type TX-10.

**Net Price, \$.33**

3 is a coupling providing high insulation with compact size. Insulation is glazed Isolantite.  
Type TX-1 (leakage path 1").  
Type TX-2 (leakage path 2 1/2").

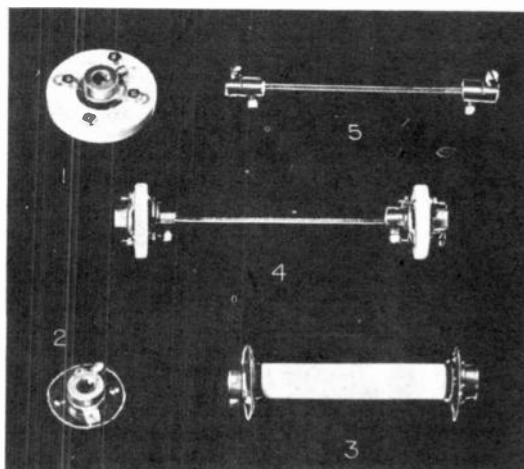
**Net Price, \$.60**  
**Net Price, .66**

4 is a flexible shaft which provides a driving means between offset shafts, or shafts at angles up to 90 degrees, and virtually eliminates mis-alignment problems. Isolantite insulators are provided at each end.  
Type TX-12.

**Net Price, \$.75**

5 is a flexible shaft without the insulation of the TX-12, but otherwise the same.  
Type TX-11.

**Net Price, \$.36**



# WALTER ASHE RADIO COMPANY

1100 Pine Street  St. Louis, Missouri

## RECEIVING CONDENSERS



### NATIONAL Type ST and SS

The ST Condenser has 180° Straight-Line-Wavelength plates. General construction is the same as the SE Condenser although its overall height is less. For minimum overall length, a single bearing model — the STHS — is offered. All other models are double bearing. Two split-stator models are available.

The SS Condenser has 180° Straight-Line-Capacity plates and except for this detail is the same in all other respects as the ST Condenser. When ordering, substitute SS for ST under the catalog symbol column in the listing at the right.

### NATIONAL Type SE

The SE Condenser has 270° Straight-Line-Frequency plates. Insulation is Isolantite. All models have two rotor bearings, the front bearing being insulated to prevent noise. The rotor contact is through a constant impedance pigtail. The SEU models are suitable for high voltages as their plates are thick polished aluminum with rounded edges. The other SE models do not have this feature.

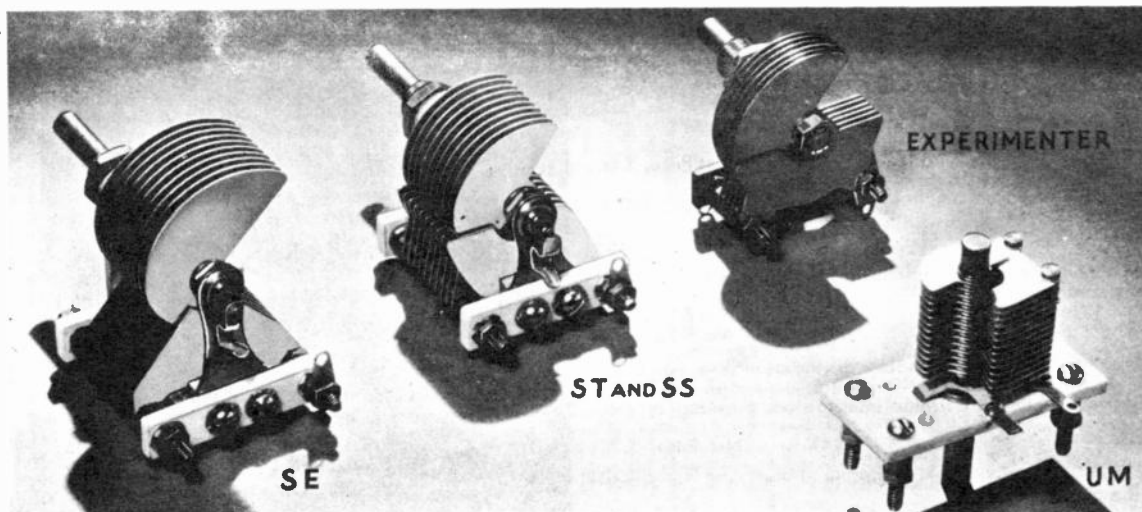
### NATIONAL Type UM

The UM Condenser is designed for ultra high frequency use and is small enough for convenient mounting in our square shield cans. They are particularly useful for tuning receivers, transmitters and exciters. Shaft extensions at each end of the rotor permit easy ganging when used with one of our flexible couplings. The UMB-25 Condenser is a balanced stator model, two stators act on a single rotor. The UM can be mounted by the angle foot supplied or by bolts and spacers.

### NATIONAL "Experimenter" Models

The National "Experimenter" Type Condensers are low-priced models suitable for general experimental work. They are of all-brass construction, except for the Bakelite insulation. The rotor has only one bearing. Plates can be removed without difficulty if desired.

| Capacity | Air Gap | Plates | Cat. Symbol | Net Price |
|----------|---------|--------|-------------|-----------|
| 15 Mmf.  | .018"   | 3      | STHS- 15    | \$ .84    |
| 25       | .018"   | 4      | STHS- 25    | .90       |
| 50       | .018"   | 7      | STHS- 50    | .96       |
| 35       | .026"   | 8      | ST- 35      | .90       |
| 50       | .026"   | 11     | ST- 50      | 1.08      |
| 75       | .026"   | 15     | ST- 75      | 1.20      |
| 100      | .026"   | 20     | ST-100      | 1.35      |
| 140      | .026"   | 28     | ST-140      | 1.50      |
| 150      | .026"   | 29     | ST-150      | 1.50      |
| 200      | .018"   | 27     | STH-200     | 1.65      |
| 250      | .018"   | 32     | STH-250     | 1.80      |
| 300      | .018"   | 39     | STH-300     | 1.95      |
| 335      | .018"   | 43     | STH-335     | 2.10      |
| 50-50    | .026"   | 11-11  | STD- 50     | 2.10      |
| 100-100  | .018"   | 14-14  | STHD-100    | 2.70      |
| 15 Mmf.  | .055"   | 6      | SEU- 15     | \$1.50    |
| 20       | .055"   | 7      | SEU- 20     | 1.65      |
| 25       | .055"   | 9      | SEU- 25     | 1.65      |
| 50       | .026"   | 11     | SE- 50      | 1.80      |
| 75       | .026"   | 15     | SE- 75      | 1.95      |
| 100      | .026"   | 20     | SE-100      | 2.10      |
| 150      | .026"   | 29     | SE-150      | 2.25      |
| 200      | .018"   | 7      | SEH-200     | 2.25      |
| 250      | .018"   | 32     | SEH-250     | 2.40      |
| 300      | .018"   | 39     | SEH-300     | 2.40      |
| 335      | .018"   | 43     | SEH-335     | 2.55      |
| 15 Mmf.  | .017"   | 6      | UM- 15      | \$ .75    |
| 35       | .017"   | 12     | UM- 35      | .90       |
| 50       | .017"   | 16     | UM- 50      | .96       |
| 75       | .017"   | 22     | UM- 75      | 1.02      |
| 100      | .017"   | 28     | UM-100      | 1.14      |
| 25       | .050"   | 14     | UMA - 25    | 1.11      |
| 25       | .017"   | 4-4-4  | UMB- 25     | 1.11      |
| 15 Mmf.  | .045"   | 5      | EX- 15      | \$ .51    |
| 25       | .045"   | 7      | EX- 25      | .51       |
| 35       | .045"   | 10     | EX- 35      | .60       |
| 50       | .017"   | 6      | EX- 50      | .54       |
| 100      | .017"   | 12     | EX-100      | .60       |
| 140      | .017"   | 15     | EX-140      | .75       |



IT'S EASY TO PARK AT WALTER ASHE . . .



## TRANSMITTING CONDENSERS

| Capacity | Peak V. | Plates | Cat. Symbol | Net Price |
|----------|---------|--------|-------------|-----------|
| 100 Mmf. | 1,000   | 10     | TMS-100     | \$1.50    |
| 150      | 1,000   | 14     | TMS-150     | 1.65      |
| 250      | 1,000   | 23     | TMS-250     | 1.80      |
| 300      | 1,000   | 27     | TMS-300     | 2.16      |
| 50-50    | 1,000   | 5-5    | TMS-50D     | 2.25      |
| 100-100  | 1,000   | 9-9    | TMS-100D    | 2.70      |
| 35       | 2,000   | 8      | TMSA-35     | 1.80      |
| 50       | 2,000   | 11     | TMSA-50     | 1.95      |
| 50-50    | 2,000   | 11-11  | TMSA-50D    | 2.40      |
| 50 Mmf.  | 3,000   | 7      | TMC-50      | \$2.40    |
| 100      | 3,000   | 13     | TMC-100     | 2.70      |
| 150      | 3,000   | 21     | TMC-150     | 3.15      |
| 300      | 3,000   | 39     | TMC-300     | 3.90      |
| 100-100  | 3,000   | 13-13  | TMC-100D    | 4.50      |
| 300 Mmf. | 3,000   | 23     | TMA-300     | \$7.20    |
| 200-200  | 3,000   | 16-16  | TMA-200D    | 9.00      |
| 50       | 6,000   | 8      | TMA-50A     | 3.90      |
| 100      | 6,000   | 17     | TMA-100A    | 6.00      |
| 150      | 6,000   | 23     | TMA-150A    | 7.20      |
| 230      | 6,000   | 35     | TMA-230A    | 9.60      |
| 50-50    | 6,000   | 9-9    | TMA-50DA    | 6.60      |
| 100-100  | 6,000   | 15-15  | TMA-100DA   | 10.50     |
| 100      | 9,000   | 23     | TMA-100B    | 8.10      |
| 150      | 9,000   | 35     | TMA-150B    | 10.20     |
| 60-60    | 9,000   | 15-15  | TMA-60DB    | 11.10     |
| 50       | 12,000  | 13     | TMA-50C     | 4.80      |
| 100      | 12,000  | 27     | TMA-100C    | 8.70      |
| 40-40    | 12,000  | 11-11  | TMA-40DC    | 8.10      |
| 75 Mmf.  | 20,000  | 17     | TML-75E     | \$15.60   |
| 150      | 15,000  | 27     | TML-150D    | 15.90     |
| 100      | 15,000  | 19     | TML-100D    | 14.10     |
| 50       | 15,000  | 9      | TML-50D     | 9.90      |
| 245      | 10,000  | 35     | TML-245B +  | 17.10     |
| 150      | 10,000  | 21     | TML-150B +  | 15.60     |
| 100      | 10,000  | 15     | TML-100B +  | 15.00     |
| 75       | 10,000  | 11     | TML-75B +   | 10.80     |
| 500      | 7,500   | 49     | TML-500A +  | 21.00     |
| 350      | 7,500   | 33     | TML-350A +  | 16.80     |
| 250      | 7,500   | 25     | TML-250A +  | 15.60     |
| 30-30    | 20,000  | 7-7    | TML-30DE    | 15.90     |
| 60-60    | 15,000  | 11-11  | TML-60DD    | 17.10     |
| 100-100  | 10,000  | 15-15  | TML-100DB + | 18.90     |
| 60-60    | 10,000  | 9-9    | TML-60DB +  | 16.50     |
| 200-200  | 7,500   | 21-21  | TML-200DA + | 21.00     |
| 100-100  | 7,500   | 11 11  | TML-100DA + | 17.10     |

### NATIONAL Type TMS

Type TMS is a condenser designed for transmitter use in low power stages. It is compact, rigid, and dependable. Provision has been made for mounting either on the panel, on the chassis, or on two stand-off insulators.

Insulation is Isolantite. Voltage ratings listed are conservative.

### NATIONAL Type TMC

The TMC is designed for use in the power stages of transmitters, where peak voltages do not exceed 3000. The frame is extremely rigid and arranged for mounting on panel, chassis or standoff insulators. The plates are aluminum, with buffed edges. Insulation is Isolantite, located outside of the concentrated electrostatic field. The stator in the split stator model is supported at both ends.

### NATIONAL Type TMA

The TMA is a larger model of the popular TMC. The frame is extremely rigid and arranged for mounting on panel, chassis or standoff insulators. The plates are of heavy aluminum with rounded and buffed edges. Insulation is Isolantite, located outside of the concentrated field.

### NATIONAL Type TML

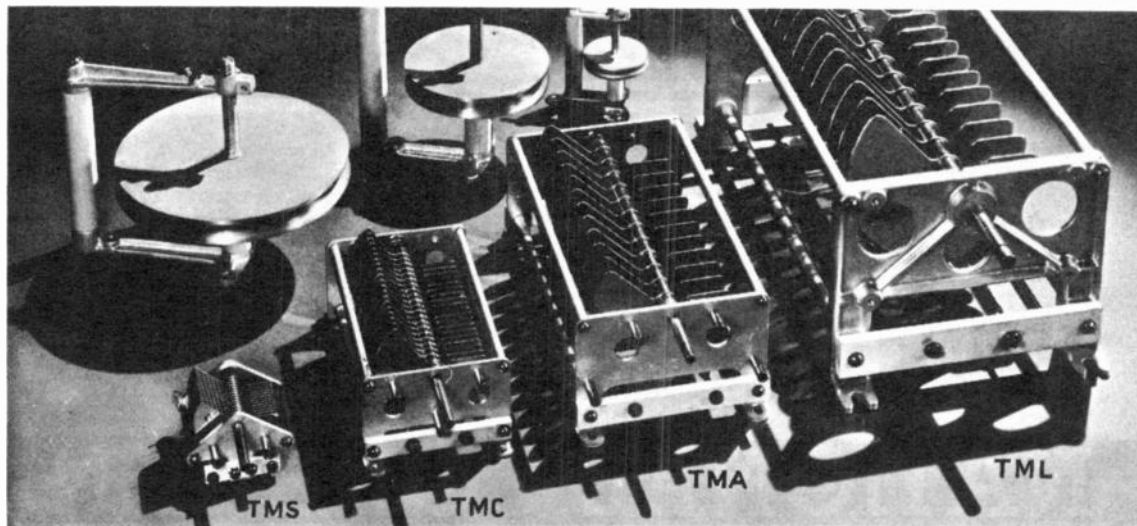
The TML condenser is a 1 KW job throughout. Isolantite insulators, specially treated against moisture absorption, prevent flashovers. A large self-cleaning rotor contact provides high current capacity. Thick capacitor plates, with accurately rounded and polished edges, provide high voltage ratings. Sturdy cast aluminum end frames and dural tie bars permit an unusually rigid structure. Precision end bearings insure smooth turning and permanent alignment of the rotor. End frames are arranged for panel, chassis or standoff mounting.

### NATIONAL Neutralizing Condensers

For neutralizing 10, 45, 47 or similar tubes in amplifier or buffer stages, Type STN is similar to ST receiving models but is spaced for 3000 volts and has a maximum capacity of 18 Mmf. Net Price, \$1.20.

For use with 203A, 852, 204A, etc., the Type TCN is similar to the TMC above. It has a rating of 6000 volts. Max. cap. 25 Mmf. Net Price \$2.40.

The smallest disk-type neutralizing condenser illustrated below is suitable for the RCA-800, etc. (Type NC-800, Net Price \$1.80.) The medium-sized model is suitable for the HK-345, RK-36, 300-T, and 852. (Type NC-150, Net Price \$3.90.) The largest model is for the WE-251A and similar tubes. (Type NC-500, Net Price \$7.50.)



# WALTER ASHE RADIO COMPANY

1100 Pine Street St. Louis, Missouri

## RECEIVERS



This inexpensive receiver has exceptional operating characteristics. Ten tubes are used in a high gain superheterodyne circuit. The IF amplifier is of entirely new design, operating at a frequency of 1560 KC, and providing a high order of image suppression, better, in fact, than that obtainable in many receivers having elaborate preselectors. The crystal filter (2nd IF stage) has continuously variable selectivity from 400 cycles to 5 KC. The range of the phasing circuit (heterodyne elimination) has been similarly extended. The crystal filter remains in the circuit at all times. The 25L6G beam power tube delivers an undistorted output of 2 watts when using either AC or DC, 115 volt supply.

The tuning system, likewise entirely new, employs a multiple scale dial of the full-vision type accurately calibrated in megacycles. Several unusual features are incorporated, such as the mirror for overcoming parallax, and the adjustable frequency markers, by means of which any particular stations, or frequencies, such as band limits, may be "logged" on the dial itself. Two vernier reduction ratios are available, 16 and 80 to 1, with a separate knob for each.

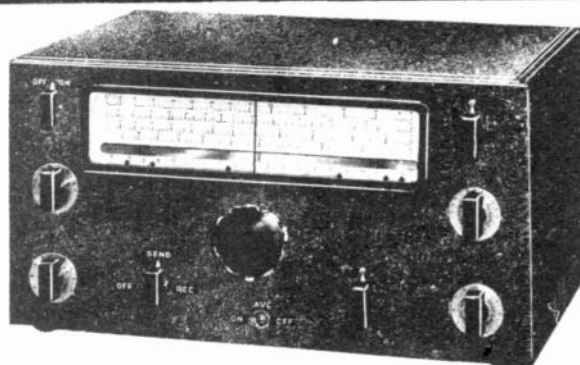
Automatic plug-in coils are used, controlled by a knob on the front panel, as in the NC-100. The frequency coverage is continuous, except for a small gap at 1560 kc. from 550 kc. to 30 mc., in four ranges.

The NC 81X is a special amateur model covering the following bands only: 1.7-2.0 mc., 3.5-4.0 mc., 7.0-7.3 mc., 14.0-14.4 mc. and 28-30 mc. The dial is calibrated in megacycles.

**\$88.00**

**NC-80**

Net, complete  
with tubes,  
coils, speaker



NC-80X — complete with tubes, crystal filter, 8" PM speaker chassis, etc. for 115v. AC or DC. **Net Price, \$88.00**

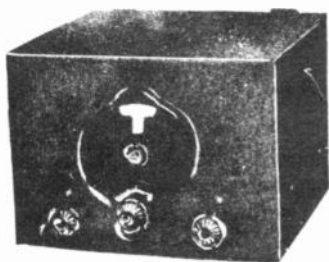
NC-81X — Amateur Model, complete with tubes, crystal filter, 8" PM speaker chassis, etc. for 115v. AC or DC. **Net Price, \$88.00**

Note: Either of the above receivers can be supplied modified for Battery Operation 6v heater, 135v. B-supply. To order, add "B" to symbol number. List prices are the same as the corresponding AC-DC model.

Type DC5-8 Metal Cabinet for 8" speaker, same finish as receiver. **Net Price, \$4.80**  
Larger speakers or cabinets cannot be supplied for these receivers.

## NATIONAL

## NC-80X



AVAILABLE IN THREE MODELS — ACSW 3 for AC operation — 6DCSW3 for 6 volt DC operation — 2DCSW3 for 2 volt DC operation. AC Models use "60" Series Coils. DC Models use "10" Series Coils.

The SW-3 Receivers employ a circuit consisting of one R.F. stage transformer coupled to a regenerative detector and one stage of impedance coupled audio. This circuit provides maximum sensitivity and flexibility with the smallest number of tubes and the least auxiliary equipment. The single tuning dial operates a precisely adjusted two gang condenser; the regeneration control is smooth and noiseless, with no backlash or fringe howl; the volume control is calibrated from one to nine in steps corresponding to the R scale.

Tubes required — 2 Volt AC Model; two 58, one 27 — 6 Volt DC Model; two 36, one 37 — 2 Volt DC; two 32, one 30.

SW-3, any model, without coils, phones, tubes or power supply. **Net Price, \$21.00**

5880-AB Power Supply, 115 V, 60 cycle, without 80 Rectifier. **Net Price, \$17.70**

### General Coverage Coils

| Catalog Number | Range        | Net Price Per Pair |
|----------------|--------------|--------------------|
| 10 or 60       | 9. to 15.    | \$3.00             |
| 11 or 61       | 13.5 to 25.  | 3.00               |
| 12 or 62       | 23. to 41.   | 3.00               |
| 13 or 63       | 40. to 70.   | 3.00               |
| 14 or 64       | 65. to 115.  | 3.00               |
| 15 or 65       | 115. to 200. | 3.00               |
| 16 or 66       | 200. to 360. | 3.30               |
| 17 or 67       | 350. to 550. | 3.30               |

Five additional sets of coils are available to cover up to 3000 meters.

### Band Spread Coils

|            |           |        |
|------------|-----------|--------|
| 10A or 60A | 10 meter  | \$3.00 |
| 11A or 61A | 20 meter  | 3.00   |
| 13A or 63A | 40 meter  | 3.00   |
| 14A or 64A | 80 meter  | 3.00   |
| 15A or 65A | 160 meter | 3.00   |

## NATIONAL

## SW-3

Designed chiefly for the experimenter, the One-Ten Receiver fulfills the need of the experimenter for an adequate receiver to cover the field between one and ten meters.

A four tube circuit is used, composed of one tuned R.F. stage, a self-quenching super-regenerative detector, transformer coupled to a first stage of audio which is a resistance coupled to a power output stage. Tubes required: 954-R.F.; 955-Detector; 6C5-1st Audio; 6F6-2nd Audio.

Type 110 Receiver and 6 sets of coils, without tubes, speaker or power supply. **Net Price, \$51.00**

Type 5886 Power Supply for above receiver, less tube. **Net Price, \$17.70**

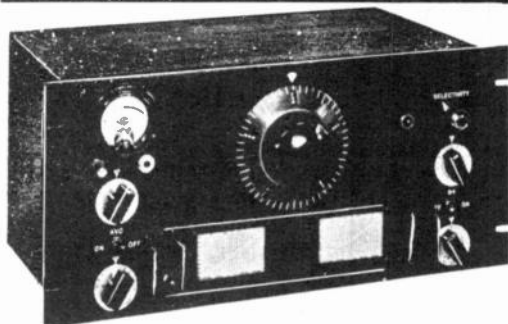


## NATIONAL ONE-TEN

IT'S EASY TO PARK AT WALTER ASHE . . .



## RECEIVERS



**\$209.70**

**HRO**  
(TABLE MODEL)  
Net, complete  
with tubes, coils,  
speaker  
and power unit

The two preslector stages give remarkable image frequency suppression, weak signal response and high Signal-to-Noise

Ratio. The two high gain I.F. stages employ Litz-wound coils and are tuned with air condensers. The useable sensitivity and selectivity are exceptional. Other circuit details are automatic and manual volume control, a vacuum tube voltmeter calibrated in "S" units for carrier intensities, a phone jack, a Send-Receive switch and a Lamb Single-Signal crystal filter. This filter makes selectivity adjustable over a wide range and the circuits are so precisely balanced that heterodyning signals may be completely phased out.

When Standard HRO coils are used for general coverage, each of the 4 coils includes two amateur bands and the spectrum between. A simple switching device is provided which makes these same coils band-spread their respective amateur bands (except 160) over a span of 400 divisions on the dial.

For those who require the high performance of the Standard HRO but do not need its extreme versatility, the HRO Junior is offered. The circuit and mechanical details of both receivers are identical in every respect, but the lower priced model has been greatly simplified by omitting the Lamb Single-Signal crystal filter, the "S" meter, and by designing coils for continuous band spread only.

### NET PRICES

STANDARD HRO Receiver, table model, complete with tubes and four sets of coils covering range 1.7 MC to 30 MC, but no speaker or power supply — 2½ volt A.C. or 6 volt battery model. (Not illustrated) **Net Price, \$179.70**

STANDARD HRO Receiver, relay rack model — 2½ volt A.C. or 6 volt battery model. (As illustrated) **Net Price, \$192.00**  
Specify Grey or Black finish.

Additional sets of coils are available only as listed below.

|             |                           |
|-------------|---------------------------|
| 50-100 KC   | <b>Net Price, \$22.50</b> |
| 100-200 KC  | <b>Net Price, 18.00</b>   |
| 175-400 KC  | <b>Net Price, 16.50</b>   |
| 500-1000 KC | <b>Net Price, 12.00</b>   |
| 900-2000 KC | <b>Net Price, 12.00</b>   |

HRO JUNIOR RECEIVER table model, complete with tubes and one set of coils, 10 to 20 meters (2 amateur bands) but no speaker or power supply — 2½ volt A.C. or 6 volt battery model. **Net Price, \$108.00**

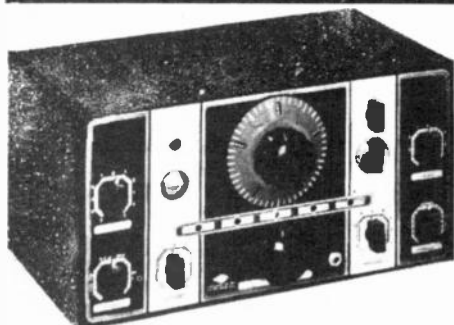
Additional HRO Junior Coils (2 amateur bands per coil). **Net Price, \$9.90**

MCS Table-model Metal Cabinet and 8" Dynamic Speaker (P.M. type — requires no power supply) with impedance matching transformer for a single Class A Pentode (7000 ohms). **Net Price, \$14.10**

5897 AB Power Supply — less tube — for above receivers. **Net Price, \$15.90**

## NATIONAL

## HRO



**\$120.00**

**NC-100**

Net, complete with  
tubes, speaker

These 12 tube super-heterodynes except for the speaker are self-contained in a table model cabinet which is readily adaptable to relay rack mounting.

One stage of R.F. and two stages of I.F. are used. Low-loss insulation and high-Q coils give ample sensitivity and selectivity. Separate R.F. and Audio Gain Controls permit complete control of the receiver. A 6E5 tuning indicator tube, with provision for signal strength measurement, provides an added convenience. Other controls are Tone, C.W. Oscillator, AVC with amplified and delayed action, a B+ switch, and a phone jack. A self-contained power supply provides all necessary voltages including speaker field excitation.

The range changing system is unique in that it combines the mechanical convenience of a coil switch with the electrical efficiency of plug-in coils. The PW Dial and Drive, direct reading to one part in 500. Station logging is consistent and calibration permanent.

The NC-100 covers the range of 540 KC to 30 MC and is available with or without a crystal filter. The NC-101X is built and designed strictly for the amateur bands and covers the ranges: 1.7-2.0 MC, 3.5-4.0 MC, 7.0-7.3 MC, 14.0-14.4 MC, and 28.0-30.0 MC. The Lamb Single-Signal Crystal Filter, with separate controls for phasing and selectivity, is standard equipment on the NC-101X.

The battery models use 10 tubes. Power output of A.C. model — 10 watts; Battery model — 2 watts.

### NET PRICES

NC-100 — complete with tubes  
AC model — 10" speaker chassis. **Net Price, \$120.00**

Battery model — 8" speaker chassis **Net Price, \$110.50**

NC-100X — complete with tubes and crystal filter.  
AC model — 10" speaker chassis **Net Price, \$142.50**

Battery model — 8" speaker chassis **Net Price, \$133.00**

NC-100S — complete with tubes.  
AC model — 12" Rola G-12 Speaker. **Net Price, \$133.50**

NC-100XS — complete with tubes and crystal filter.  
AC model — 12" Rola G-12 Speaker. **Net Price, \$156.00**

NC-101X — complete with tubes.  
AC model — 10" speaker chassis **Net Price, \$129.00**

Battery model — 8" speaker chassis. **Net Price, \$120.00**

DCS-10 — Metal Cabinet for 10" speaker, same finish as receiver. **Net Price, \$5.10**

DCS-8 — Metal Cabinet for 8" speaker, same finish as receiver. **Net Price, \$4.80**

Note: Cabinets for 12" speaker chassis cannot be supplied.

RRA Relay Rack Adapters, designed for mounting any of the above receivers in a standard relay rack. **Net Price, per pair, \$1.50**

Note: 230 volt 50 cycle and 115 volt 25 cycle models of above receivers available at slightly higher price.

## NATIONAL

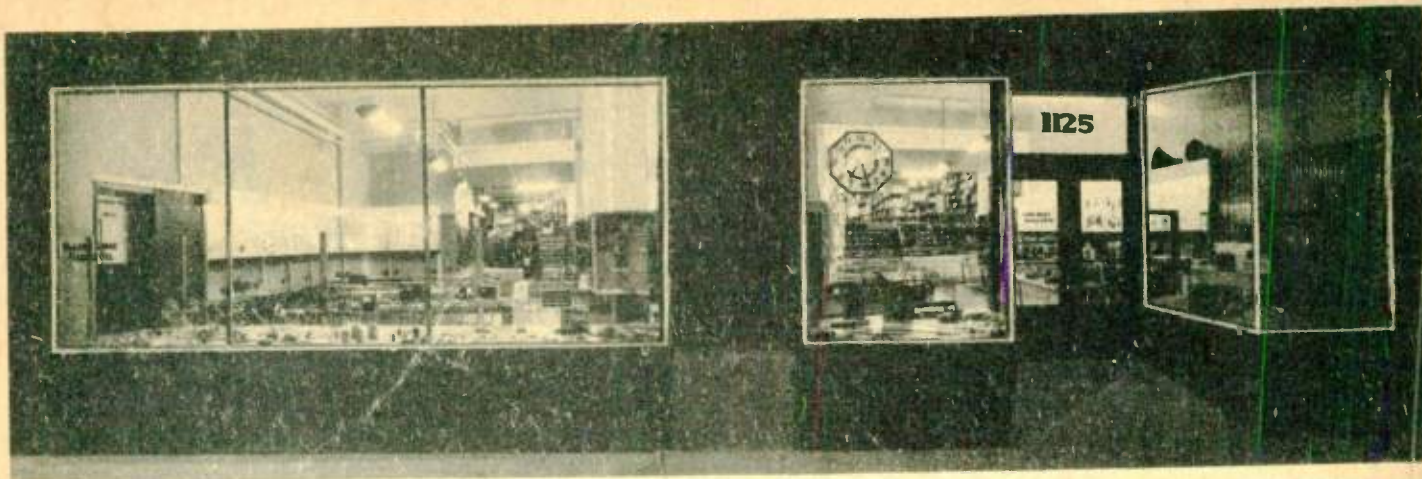
## NC-100X

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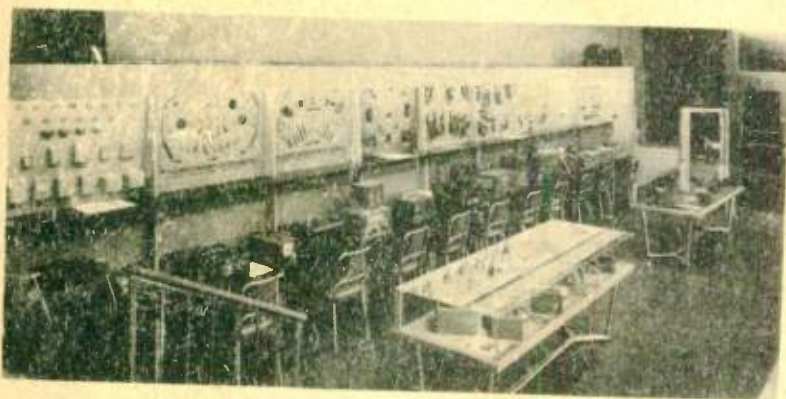
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