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JEFFERSON RADIO TRANSFORMERS AND CHOKES

JEFFERSON RADIO TRANSFORMERS

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JEFFERSON ELECTRIC COMPANY
BELLWOOD, ILLINOIS

JEFFERSON ELECTRIC COMPANY
Bellwood ~ Illinois

Fig. 7A

Fig. 7B

Fig. 7C

Fig. 7D

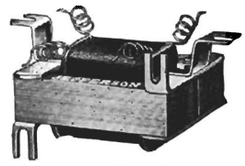


Fig. 7E

Fig. 7F

Fig. 7G

Fig. 7H

Fig. 7J

Fig. 7K

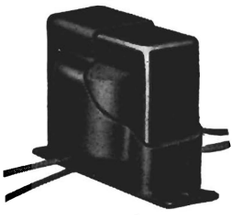


Fig. 7L

Fig. 7M

Fig. 7N

Fig. 7P

Fig. 7Q

Fig. 7R

Fig. 7S

Fig. 7T

Fig. 7U

Fig. 7W

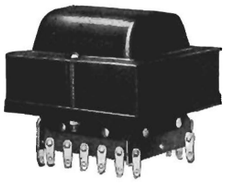


Fig. 7X

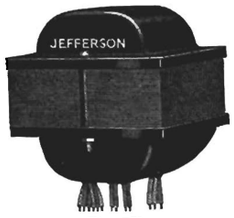


Fig. 7Y

Fig. 7Z

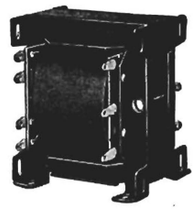


Fig. 7AA

Fig. 7BB

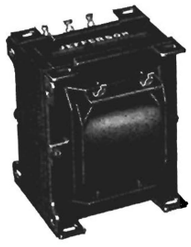


Fig. 7CC

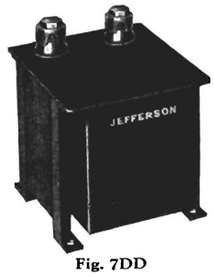


Fig. 7DD

Fig. 7EE

MICROPHONE TRANSFORMERS

A complete line of single, double button, and ribbon (or velocity) type microphone transformers. They are constructed of the highest quality parts and designed for practically any requirement. The "7A" series is bracket mounted and suitable for use in tranceivers or other places where space and weight are limited. The "7D" and "7G" series are of superior quality, completely shielded and compound filled, making them impervious to moisture and deterioration. These units are designed to have a flat frequency response over the normal audio frequency range.

The "ENCASED" type double button and matching transformer is constructed with an alloy core and balanced "hum-bucking" windings. With careful placement this unit may be mounted on or near a high gain amplifier with virtually no hum or extraneous noise pickup. The frequency response characteristic is virtually flat in all of its applications.

SINGLE BUTTON MICROPHONE TRANSFORMERS

Catalog No.	Series	Style Mtg.	For Coupling	Size	Weight, Lbs.	List Price
467-439	Open	7A	Telephone Mike (75 ohms) to Grid	3¼"x1⅞"x2"	1	$1.60
467-413	Open	7A	Single Button (200 ohms) to Grid	3¼"x1⅞"x2"	1	1.60
467-261	Shielded	7D	Single Button (200 ohms) to Grid	2⅞"x3"x2½"	1½	2.25

DOUBLE BUTTON MICROPHONE TRANSFORMERS

467-414	Open	7A	Double Button (200-0-200) to Grid	3¼"x1⅞"x2"	1	$1.75
467-263	Shielded	7D	Double Button (200-0-200) to Grid	2⅞"x3"x2½"	1½	2.50
467-262	Shielded	7K	Double Button (200-0-200) to Grid	2¾"x3⅛"x3⅛"	2½	3.50
467-421	Encased	7T	Double Button (200-0-200) to Grid	2¾"x2⅜"x4⅛"	2½	8.00
467-430	Shielded	7D*	Double Button to Line 50/200/500 ohms	2⅞"x2¾"x2½"	1¼	2.65
467-432	Shielded	7J	Double Button to Line 50/200/500 ohms	3¾"x3⅜"x3⅛"	2¾	4.00

VELOCITY MIKE TRANSFORMERS

467-429	Open	7A	Velocity (Ribbon) to 50/200 ohms	2⅞"x1⅝"x1¾"	½	$1.40
467-431	Shielded	7D	Velocity (Ribbon) to 50/200 ohms	2⅞"x3"x2½"	1⅓	2.50

LINE AND MIXING TRANSFORMERS

Jefferson line and mixing transformers are designed to couple and mix with very little loss or attenuation, numerous ypes of sound sources to the input of an amplifier. The complete set consists of line to grid, line to line, and pickup to grid transformers. These units are furnished in four size ranges and types of mountings.

Each unit has a frequency response correspondingly flat in accordance with the "SERIES" listing of "7A," "7D," "7J," and "7T." The 467-421 is the same unit as listed in microphone transformers. It may be used not only as microphone transformer but to couple various lines to a single grid as listed below.

LINE TO GRID TRANSFORMERS (Low Level)

467-433	Open	7A	50/200 ohms to Grid	2⅞"x1⅝"x1¾"	½	$1.60
467-178	Shielded	7D*	200/500 ohms to Single or P.P. Grids	2⅞"x3"x2½"	1½	2.50
467-436	Shielded	7J	50/200/500 ohms to S. or P.P. Grids	2¾"x3"x3⅛"	2⅓	4.00
467-181	Shielded	7D	Low Impedance Pickup to Single Grid	2⅞"x2⅝"x2½"	1	2.00
467-421	Encased	7T	50/100/200/400 ohms to Single Grid	2¾"x2⅜"x4⅛"	2½	8.00

LINE TO LINE TRANSFORMERS (Low Level)

467-434	Open	7A	50/200 ohms to 50/200 ohms	2⅞"x1⅝"x1¾"	½	$1.60
467-435	Shielded	7D*	50/200/500 ohms to 50/200/500 ohms	2⅞"x2¾"x2½"	1¼	2.50
467-437	Shielded	7J	50/200/500 ohms to 50/200/500 ohms	2⅞"x2¾"x3⅛"	2½	4.00

*Solder lugs in place of terminals.

Audio and Push Pull Input Transformers

Jefferson audio and coupling transformers are available in several sizes, ratios, and mountings at corresponding price ranges to provide the best results in all sound fields and to meet all popular requirements. The "7C," "7D," "7F," "7G," and "7K" series are completely shielded and the cases are filled with a sealing compound to protect the windings from moisture and deterioration.

Primaries are designed for working out of tubes having approximately 10,000 ohms plate resistance.

AUDIO TRANSFORMERS (INTERSTAGE)

A complete line of audio transformers for coupling ONE plate to ONE grid (Class A) suitable for coupling the plate of a 26, 27, 30, 37, 55, 56 (76), 75, 85, 199, 2B7, 201A, 6B7, 6C5, and similar type tubes to the grid of a 26, 27, 30, 37, 55, 56 (76), 85, 199, 201A, 2B7, 6B7, 45, 71A, 47, 50, 10, 41, 42, 43, 48, 2A5, 31, 33, 38 and Class A 46, 59, 89, etc. tube.

Catalog No.	Series	Style Mtg.	Overall Ratio	Response at 100 Cycles	Size	Weight, Lbs.	List Price
467-164	Universal	7E	1 to 2	Down 5 D.B.	3 5/16"x1 9/16"x2 5/16"	3/4	$1.25
467-401	Open	7A	1 to 2	Down 5 D.B.	2 7/8"x1 5/8"x1 3/4"	1/2	1.35
467-403	Open	7A	1 to 3	Down 3 D.B.	3 1/4"x1 7/8"x2"	1	1.60
467-405	Open	7A	1 to 4	Down 3.5 D.B.	3 1/4"x2 1/8"x2"	1 1/4	1.75
467-407	Open	7A	1 to 2	Down 2 D.B.	4"x2 1/8"x2 1/2"	2	2.25
467-113	Shielded	7D	1 to 3	Down 3 D.B.	2 7/8"x2 7/8"x2 1/2	1 1/4	2.25
467-116	Shielded	7D	1 to 5	Down 4 D.B.	2 7/8"x2 7/8"x2 1/2"	1 1/4	2.25
467-427	Shielded	7C	1 to 4	Down 3.5 D.B.	2 7/8"x2 1/8"x2 15/16"	1 1/8	2.25
467-103	Shielded	7G	1 to 3	Down 2 D.B.	2 3/4"x3 1/8"x3 1/8"	2 1/2	3.00

AUDIO TRANSFORMERS (INTERSTAGE)—SEALED IN PLASTIC

A Plastic Coating of high melting point, black, moisture-proof compound permanently adheres to and seals all exposed surfaces and assures positive protection from adverse climatic conditions. This coating is not brittle and, therefore, will not crack to allow absorption and condensation of moisture to endanger the useful life of the windings.

467-501	Pla. Sld.	7L	1 to 2	Down 5 D.B.	2 7/8"x1 5/8"x1 7/8"	3/4	$1.55
467-507	Pla. Sld.	7L	1 to 2	Down 2 D.B.	4"x2 1/8"x2 5/8"	2 1/3	2.45
467-503	Pla. Sld.	7L	1 to 3	Down 3 D.B.	3 1/4"x1 7/8"x2 1/8"	1 1/4	1.80
467-505	Pla. Sld.	7L	1 to 4	Down 3.5 D.B.	3 1/4"x2 1/8"x2 1/8"	1 5/8	1.95

PUSH PULL INPUT TRANSFORMERS

For coupling ONE plate to Push Pull grids (Class A) suitable for use with the same types of tubes listed for audio transformers above. Included are three universal types, two sizes in different mountings. These are particularly well adapted to service use permitting a choice of winding ratios as well as mountings.

467-402	Open	7A	1 to 2	Down 5 D.B.	2 7/8"x1 5/8"x1 3/4"	1/2	$1.50
467-404	Open	7A	1 to 3	Down 3 D.B.	3 1/4"x1 7/8"x2"	1	1.75
467-406	Open	7A	1 to 4	Down 3.5 D.B.	3 1/4"x2 1/8"x2"	1 1/4	2.00
467-408	Open	7A	1 to 4	Down 2 D.B.	4"x2 1/8"x2 1/2"	2	2.50
467-117	Shielded	7D*	1 to 3	Down 3 D.B.	2 7/8"x2 7/8"x2 1/2"	1	2.35
467-118	Shielded	7C	1 to 3	Down 3 D.B.	2 7/8"x2 1/8"x2 1/2"	1 1/4	2.50
467-418	Shielded	7D*	1 to 3	Down 2 D.B.	2 7/8"x3"x2 1/2"	1 1/2	2.50
467-106	Shielded	7F	1 to 4	Down 2 D.B.	2 3/4"x2 5/8"x3 1/8"	2 1/3	3.00
467-550	Shielded	7H	1 to 4	Down 2 D.B.	2 3/4"x3"x3 1/8"	2 1/2	3.00
467-105	Shielded	7K	1 to 4	Down 2 D.B.	2 3/4"x3"x3 1/8"	2 1/2	3.00

*Solder lug terminals.

PUSH PULL INPUT TRANSFORMERS—SEALED IN PLASTIC

467-502	Pla. Sld.	7L	1 to 2	Down 5 D.B.	2 7/8"x1 5/8"x1 7/8"	3/4	$1.70
467-504	Pla. Sld.	7L	1 to 3	Down 3 D.B.	3 1/4"x1 7/8"x2 1/8"	1 1/4	1.95
467-506	Pla. Sld.	7L	1 to 4	Down 3.5 D.B.	3 1/4"x2 1/8"x2 1/8"	1 1/2	2.20
467-508	Pla. Sld.	7L	1 to 4	Down 2 D.B.	4"x2 1/8"x2 5/8"	2 1/3	2.70

UNIVERSAL TAPPED INPUTS

Catalog No.	Series	Style Mtg.	Overall Ratio	Frequency Response	Size	Weight, Lbs.	List Price
467-168	Universal	7B	1 to 3	−3 D.B. at 100 cycles	2⅜"x2⅛"x2"	1	$2.00
467-175	Universal	7B	1 to 3	−2.7 D.B. at 100 cycles	2⅜"x2¼"x2"	1⅓	2.25
467-424	Universal	7A	1 to 3	−2.7 D.B. at 100 cycles	2⅞"x2¼"x2⅜"	1⅓	2.20

PUSH-PULL INTERSTAGE TRANSFORMERS

467-420	Shielded	7F	1 to 2	−3 D.B. at 100 cycles	2¾"x2½"x3¾"	2⅓	$3.25
467-454	Humless	7U	1 to 4	±2 D.B. 30 to 10,000 cycles	2¾"x2⅜"x3¾"	2¾	5.00
467-551	Humless	7U	1 to 2	±2 D.B. 30 to 10,000 cycles	2¾"x2⅜"x3¾"	2¾	5.00

DRIVER TRANSFORMERS

Liberally designed transformers to efficiently couple Class "A" driver stage to Class "AB" or Class "B" stage. Designed to give maximum regulation when the input resistance of the driven stage varies from a few hundred ohms to thousands of ohms.

CLASS "AB" DRIVERS

Transformers designed to couple Class "A" tubes to Class "AB" tubes which present a load to the driver stage during a small portion of the positive excursions of the signal voltage.

Catalog No.	Style Mtg.	FOR COUPLING		Size	Weight, Lbs.	List Price
		Pri. Class "A"	Sec. Class "AB"			
467-415	7J	P.P. 56's (76's)	P.P. 2A3's	2¾"x2⅞"x3⅛"	2½	$3.00
467-455	7H	P.P. 56's (76's)	P.P. 2A3's	2¾"x2⅞"x3⅛"	2½	3.00
467-422	7F	Single 59	P.P.P. 45's	2¾"x2½"x3⅛"	2½	4.50
467-528	7Z	P.P. 6F6's or 42's	P.P. or P.P.P. Cl. AB_2 6L6's	2¾"x2½"x3⅛"	2½	3.50
467-461	7F	Single 6F6	P.P. 6F6's	2¾"x2 11/16"x3⅛"	2½	3.00

CLASS "B" DRIVERS

Transformers designed to efficiently couple a Class "A" or Class "AB" driver stage to Class "B" output tubes. Class "B" tubes present a load to the driver stage during the greater portion of the positive excursions of the input voltage and, therefore, consume more power than tubes operated Class "AB."

Catalog No.	Style Mtg.	FOR COUPLING		Size	Weight, Lbs.	List Price
		Pri. Class "A"	Sec. Class "B"			
467-458	7A	Single 30 (56)	Single 19	2⅞"x1⅝"x1¾"	½	$1.50
467-449	7A	Single 30 (56)	Single 19	3¼ x1⅞"x2"	1	2.25
467-448	7A	Single 56 (6A6, 53)	Single 53 (6A6)	3¼"x2⅛"x2"	1¼	2.35
467-428	7M	P.P. 76's (56's)	P.P. 53's (6A6's)	2⅞"x2 1/16"x2½"	1½	2.35
467-271	7M	Single or P.P. 59 (46)	P.P. or P.P. Par. 59's (46's)	2¾"x3⅛"x3⅛"	2½	3.00
467-462	7Z	P.P. 2A3's	Four 46's P.P. Par.	2 11/16"x2½"x3⅝"	2½	3.00
467-441	7M	P.P. 2A3's (45's)	P.P. 210's	2¾"x2⅞"x3⅝"	2	3.50
467-450	7M	P.P. 2A3's (45's)	P.P. 800's, RK 18's	2¾"x3⅝"x3⅝"	3	5.00
467-451	7M	P.P. 2A3's (Fixed Bias)	P.P. 203A's, 203B's, 211's	2¾"x3¾"x3⅝"	3½	6.00
467-444	7M	P.P. 50	P.P. 203A's, 203B's, 211's	2¾"x3¾"x3⅝"	3¾	6.00
467-540	7Z	500 ohm. line	P.P. 203A's, or 203B's	2¾"x3¾"x3⅝"	3½	6.00
467-539	7H	500 ohm line	P.P. or P.P.P. Cl. AB_2 6L6's	2¾"x2½"x3⅛"	2½	3.50
467-1315	7Z	500 ohm line	P.P. 830B's	2¾"x2¾x3⅛"	3	6.00

AUTOMATIC BIAS DRIVER TRANSFORMERS

The idea of Automatic Bias for Class "B" tubes was first conceived and developed in the Jefferson laboratories. These transformers are designed and properly tapped to efficiently drive both the Class "B" stage and the Bias attachment.

467-537	7Z	P.P. 2A3's (Fixed Bias)	P.P. 210's and Bias Tubes	2¾"x2½"x3⅝"	2½	$4.50
467-529	7Z	P.P. 2A3's (Fixed Bias)	P.P. 800's and Bias Tubes	2¾"x3¼"x3⅝"	3	5.00

Write for Bulletin PA-14 for complete discussion of Class "B" Automatic Bias.

OUTPUT TRANSFORMERS

Jefferson Output Transformers are supplied in a full range of sizes, in strap and universal mountings for coupling either single or push pull power tubes to the dynamic voice coil. Jefferson Universal Outputs are designed with a center tapped primary and multi-tapped secondary to match any combination of power tubes (except 2A3's and 250's), single or push pull, to the dynamic voice coil. They employ the principle of adjusting the ratio by the proper selection of taps.

UNIVERSAL OUTPUTS

Catalog No.	Style Mtg.	Watts	Impedance Ratio Pri.—Sec.	Tubes S.—Single P.P.—Push Pull	Size	Wt. Lbs.	List Price
467-177	7D		25,000 ohm pri. to 200/500 ohms. low level		2 7/8"x2 13/16"x2 1/2"	1 1/2	$2.50
467-459	7A	2	7000 to 2, 3, 6, 9	S. or P.P.—42's to Voice Coil	2 9/16"x1 5/8"x1 15/16"	1/2	1.50
467-438	7A	12	250/500/1000 ohms to 3, 6, 9, 15 ohms		4"x2 1/8"x2 1/2	2 1/4	3.00
467-170	7B	4	Primary	Single and P.P. 71A,	2 3/8"x2 5/16"x2 "	1	2.00
467-425	7A	4	2000, to 20,000	45, 47, 89A, 42, 43, 46A, 12A	2 7/8"x2 5/16"x2 3/8"	1	1.75
467-176	7B	6	Ohms	S. and P.P.—71A, 45, 89, 42, 43, 46A, 12A,	2 3/8"x2 1/2"x2"	1 1/3	2.25
467-426	7A	6	Secondary	2A5, 6A4, 31, 33, 38, 47, 48, etc.	2 7/8"x2 1/2"x2 3/8"	1 1/3	2.00
467-171*	7J	6	3 to 15 ohms	S.&P.P.—71A,45,50,47,89A,31,33,42,43,etc.	2 3/4"x2 7/8"x3 1/8"	2 1/4	4.00

*Sec. also for 500 or 2000 ohms.

STANDARD OUTPUTS

Catalog No.	Style Mtg.	Watts	Primary Impedance	Sec. Imp.	Tubes S.—Single P.P.—Push Pull	Size	Wt. Lbs.	List Price
467-545	7A	1.5	7000	4-6	S. or P.P.—6F6 or 6K6G	2 1/2"x1 3/8"x1 1/2"	1/2	$0.90
467-409	7A	2	7000	4-6	P.P.—71A, 45, etc. S-33, 42, 47, etc.	2 7/8"x1 5/8"x1 3/4"	1/2	1.15
467-410	7A	3 1/2	7000	6-8	P.P.—71A, 45, etc. S-33, 42, 47, etc.	3 1/4"x1 7/8"x2"	1	1.40
467-411	7A	6	14000	10-15	P.P. Pentodes, 41, 42, 47, etc.	3 1/4"x2 1/8"x2"	1 1/4	1.60
467-412	7A	10	6000	10-15	P.P.—45, 50, 2A3, S-50	4"x2 1/8"x2 1/2"	2 1/4	1.90
467-543	7A	2	10000	.8-1.2	P.P.—1J6G and 19	3 1/4"x1 7/8"x2"	1	1.50
467-544	7H	15	8000	3-6-9-15 and 500	P.P.—6V6	2 3/4"x2 7/8"x3 5/8"	3 1/4	4.00

OUTPUTS—SEALED IN PLASTIC

467-509	7L	2	7000	4-6	P.P.—71A, 45, etc. S-33, 42, 47, etc.	2 7/8"x1 5/8"x1 7/8"	3/4	1.35
467-510	7L	3 1/2	7000	6-8	P.P.—71A, 45, etc. S-33, 42, 47, etc.	3 1/4"x1 7/8"x2 1/8"	1 1/4	1.60

SPECIAL OUTPUTS FOR JEFFERSON AMPLIFIERS

Each unit is designed specifically for its application in order to give the finest results in frequency response and undistorted output. These units are incorporated in the Jefferson Amplifier Circuits which have proven to be very popular for both amateur and public address applications.

Catalog No.	Style Mtg.	Watts	Primary and Secondary Specifications	Size	Wt. Lbs.	List Price
467-416	7J	15	P.P. 2A3's Cl. "AB" (Fixed Bias) 3000 ohm Primary to 3, 6, 9, 15 ohms or 500 ohms	2 3/4"x3 1/2"x3 5/8"	3 1/4	$4.00
467-456	7H	15	Same as 467-416 except type mounting	2 3/4"x2 7/8"x3 5/8"	3 1/4	4.00
467-417	7J	15	P.P. 2B6's Primary 10,000 ohms to Sec. 3, 6, 9, 15 ohms or 500 ohms	2 3/4"x3 5/16"x3 5/8"	2 3/4	3.50
467-423	7J	38	P.P.P. 45's Cl. "AB" (Fixed Bias) 1500 ohm Primary to 3, 6, 9, 15 ohms or 500 ohms	3 3/4"x3 5/8"x4"	5 1/4	6.00
467-491	7J	15-25	P.P. Cl. "B" 46's, 6A6's, 59's, 6000 ohms to 3, 6, 9, 15 ohms or 500 ohms	2 3/4"x3 1/2"x3 5/8"	3 1/4	4.00
467-460	7Z	20	P.P. 6F6's Cl. "AB" (Pent.) or 6B5's 10,000 ohms to 3, 6, 9, 15 ohms or 500 ohms	2 5/8"x2 7/8"x3 5/8"	3 1/4	4.00
467-525	7Z	60	P.P. 6L6's "AB_2" 3800 ohm Primary to 3, 6, 9, 15 ohms or 500 ohms	3 5/16"x4 1/4"x4 7/16"	7	7.50
467-535	7Z	120	P.P.P. 6L6's "AB_2" 1900 ohm Primary to 500/200/125/50ohms	3 15/16"x3 3/4"x5 13/32"	10	9.50
467-538	7H	2	P.P. 6F6's Cl. "A" (Triode) to 500 ohm line (Pri. 8000 ohms)	2 3/4"x2 1/2"x3 5/8"	2 1/2	3.50
467-541	7Z	10	P.P. Par. 25L6's 2500 ohms CT. to 3, 6, 9, 15 or 500 ohms	2 3/4"x2 1/2"x3"	2 3/4	4.00
467-542	7Z	35	P.P. 6L6's AB_1 to 3, 6, 9, 15 or 500 ohms	3 3/8"x3 1/2"x4 1/2"	5 1/4	6.00

MODULATION TRANSFORMERS

Jefferson Modulation Transformers are liberally designed to withstand much hard usage and abuse. The secondaries are designed to carry the Class "C" Amplifier plate current as listed in the table, and will have a frequency response of minus 3 D.B. at 100 cycles with the D.C. saturation as stated.

Each transformer is adequately insulated to withstand the peak voltage surges developed at audio frequencies.

Catalog No.	Style Mtg.	Primary		Secondary		Size	Wt. Lbs.	List Price
		Impedance Ohms	Tubes	Impedance Ohms	D.C.-M.A. in Sec.			
467-445	7D	10,000	19	2,700	50	2⅞"x2 13/16"x2½"	1½	$4.00
467-446	7N	10,000	53, 6A6, 6N7, RK34	3,000	100	2¾"x3"x3⅛"	2½	5.00
467-457	7N	3,000	2A3's, 45's	10,000 Tap 8,300	60	2¾"x3½"x3⅝"	3¾	6.00
467-440	7N	6,000	46's, 59's, 250's	10,000 Tap 5,000	100	2¾"x3½"x3⅝"	3¾	6.50
467-442	7N	8,000	210's	5,000 Tap 3,000	120	3⅛"x4⅛"x4½"	5½	9.00
467-453	7Q	1,500	4-45's, P.P.P. Class "AB"	14,000	80	3 15/16"x5⅜"x5⅜"	7½	12.00
467-526	7Z	3,800	6L6's AB_2	7,200 Tap 3,000	200	4"x4"x5 7/16"	8½	9.00
467-536	7Z	1,900	4-6L6's AB_2	11,000 Tap 7,500	175	3 15/16"x5 23/32"x5 13/32"	12	12.50
467-452	7Q	2,500	4-46's, 4-59's, 4-250's P.P.P.	7,200 Tap 2,900	140	3 15/16"x4¼"x5⅜"	9	15.00
467-447	7Q	12,000	800's, RK18's, RK30's, RK31's	10,000 Tap 7,000	140	3 15/16"x7½"x5½"	16	16.00
467-443	7EE	8,000	203A's, 203B's, 211's, T-55's, 830B's	6,600 Tap 3,300	300	6¼"x6½"x8"	22	24.00
467-527	7EE	8,000	805's, 822's, HD 203A's	10,000 Tap 6,000 4000, 3000	500	7¾"x6¾"x10¾"	46	40.00

PLATE SUPPLY TRANSFORMERS

Jefferson Plate Supply Transformers combine the finest of materials and workmanship together with conservative ratings and oversize construction to give the Amateur the heart of an ideal plate supply unit. All transformers are subjected to an insulation test as indicated in the table.

Catalog No.	Style Mtg.	Input Volt Amps.	Pri. Volts at 60 Cycles	SECONDARY (CHOKE INPUT)		Insulation Test	Size	Wt. Lbs.	List Price
				A.C. Voltage	D.C. Ratings*				
465-151	7M	80	115	425-0-425	350 V.-125 M.A.	1500 V.	3⅜"x4"x4¼"	6	$5.00
465-261	7Z	210	120/110	498-0-498 380-0-380	410 V.-340 M.A. 305 V.-130 M.A.	1500 V. 1500 V.	3 15/16"x5⅝"x5 13/32"	17	12.50
465-161	7CC	145	115	750-0-750	650 V.-150 M.A.	2500 V.	3⅞"x4"x4⅝"	9	9.00
465-221 (d)	7Z	195	120/110	600-0-600	1000 V.-150 M.A. 500 V.-300 M.A.	3000 V. 3000 V.	4"x4½"x5 7/16"	12½	11.00
465-171	7M	230	115	885-0-885	750 V.-200 M.A.	3000 V.	4"x5¾"x5 7/16"	15	12.00
465-181	7EE	420 500	115	1265-0-1265 1520-0-1520	1000 V.-300 M.A. 1250 V.-300 M.A.	4000 V. 4000 V.	6¼"x6½"x8⅛"	30	23.00
465-291 (b)	7EE	650	115(b)	1770-0-1770 2050-0-2050	1500 V.-300 M.A. 1750 V.-300 M.A.	5000 V. 5000 V.	7¾"x7"x10⅜"	45	30.00
465-211 (c)	7EE	500	115(c)	Two sections each 1150 V.	1000 V.-400 M.A. 2000 V.-200 M.A.	5000 V. 5000 V.	6¼"x6¾"x7⅞"	28	25.00
465-191(a)	7EE	700 850	115(a)	1500-0-1500 3000-0-3000	1250 V.-500 M.A. 2500 V.-250 M.A.	7000 V. 7000 V.	8¾"x8½"x11¾"	60	40.00
465-201(b)	7EE	1300	115(b)	2260-0-2260 2400-0-2400	1800 V.-500 M.A. 2000 V.-500 M.A.	7000 V. 7000 V.	8¾"x7½"x13½"	85	56.00

(a) Sec. arranged for series or parallel operation. Has tap for reducing voltages 25%. (b) Sec. voltages obtained by Pri. Taps. (c) Sec. arranged for series or parallel connections and Bridge type rectification.(d) 1000 V. D.C. Bridge Rectifier. 500 V. D.C. Conventional Rectifier.

*D.C. rating at output of appropriate filter.

CHOKES

Jefferson chokes are constructed of the finest materials and designed properly for their particular operation whether it be Filter Chokes, Swinging Chokes, or Plate Chokes. Jefferson chokes are supplied in a full range of inductance values in suitable mountings. Each item is conservatively rated as to inductance with a given D.C. flowing in the winding.

FILTER CHOKES

The day of the "30 Henry Choke Rating" regardless of operation is past, and in its place has come the actual inductance value at a specified D.C. saturation. Jefferson chokes are conservatively rated at their actual inductance with rated D.C. flowing in the winding.

Catalog No.	Style Mtg.	Rating		D.C. Resistance	Size	Wt. Lbs.	List Price
		Henries	M.A.-D.C.				
466-420	7A	15	30	515	2⅝"x1⅜"x1⅝"	½	$ 0.90
466-490	7A	7	40	360	2½"x1⅜"x1½"	½	.70
466-390	7A	20	50	425	3¼"x1⅞"x2"	1	1.30
466-590	Same as 466-390 but Sealed in Plastic				3¼"x1⅞"x2⅛"	1¼	1.50
466-230	7A	50	60	1400	4"x2⅛"x2½"	2	1.50
466-290	7K	50	60	1400	2⅞"x2⅝"x3⅛"	2½	1.75
466-510	7H	50	60	1400	2⅞"x2⅝"x3⅛"	2½	1.75
466-400	7A	8	80	245	3¼"x1⅞"x2"	1	1.20
466-135	7B	8	80	245	2⅜"x2"x2"	1	1.25
466-410	7A	10	100	275	3¼"x2⅛"x2"	1¼	1.45
466-125	7B	10	100	275	2⅜"x2¼"x2"	1¼	1.50
466-260	7A	5	120	150	2⅞"x1⅝"x2⅜"	1	1.00
466-430	7H	10	150	200	2¾"x2⅝"x3⅛"	2¾	2.25
466-220	7A	10	150	200	4"x2⅛"x2½"	2¼	1.75
466-210	7W	15	150	425	3"x2 5/16"x4¼"	3½	1.75
466-330	7P	12	200	150	3⅜"x4½"x4½"	6	5.00
466-520	7H	6	250	160	2¾"x2⅝"x3⅛"	2¾	2.25
466-350	7P	15	300	145	4"x5⅛"x5⅜"	10	10.00
466-370	7DD	15	500	100	6¼"x6¼"x8¼"	26	17.00

SWINGING CHOKES

The Swinging Choke is used as an input filter in networks which supply a varying current to its load; namely Class "B" and "AB" audio circuits. Its purpose is to improve the voltage regulation of the complete power supply circuit. In the ratings shown below the inductance is given as a maximum at minimum D.C. saturation and as a minimum at maximum D.C. saturation. The inductance at any place between these two points is approximately proportional to the amount of D.C. saturation.

466-310	7K	20 to 7	20 to 70	250	2⅞"x1⅞"x2⅜"	1¼	$ 1.75
466-190	7K	8 to 2.7	50 to 150	80	2⅞"x2⅝"x3⅛"	2½	2.25
466-300	7H	6 to 3	120 to 200	75	2¾"x2⅝"x3⅛"	2¾	2.50
466-470	7Z	6 to 3.5	200 to 350	40	3 5/16"x4⅜"x4 7/16"	7	6.50
466-320	7P	15 to 5	70 to 200	95	3⅜"x4¼"x4½"	5½	5.00
466-340	7P	15 to 5	100 to 300	105	3⅜"x4½"x4½"	6½	8.50
466-360	7DD	15 to 5	170 to 500	60	6¼"x5¾"x8¼"	21	15.00

PLATE CHOKES

Jefferson Plate Chokes serve in those applications of parallel feed where it is desired to isolate the D.C. tube current from the transformer primary. They can be used as the secondary or smoothing choke in filter circuits requiring a high value of inductance when the current drain is less than 15 M.A.

466-250	7A	150 H. CT.	15	10,000	2⅞"x1⅞"x2⅜"	1	$ 1.40
466-240	7A	200 H.	18	5,000	2⅞"x2"x2⅜"	1¼	1.10
466-540	Same as 466-240 but Sealed in Plastic				2⅞"x2"x2½"	1⅓	1.30
466-280	7D*	250 H.	18	5,000	2⅞"x2⅝"x2½"	1½	1.25
466-380	7C**	250 H.	18	5,000	2⅞"x2⅝"x2½"	1½	1.25

*Lugs on shield. **Leads bottom.

JEFFERSON ELECTRIC COMPANY
Bellwood ~ Illinois

VIBRATOR TRANSFORMERS

Sturdy, husky, Vibrator Transformers for replacement service in automobile receivers and for use in AMATEUR mobile transmitters and receivers.

Catalog No.	Style Mfg.	Primary Volts	D.C. Voltage With 8 MFD. Input Condenser	Size	Wt. Lbs.	List Price
465-271	7R	6 V. D.C.	245 @ 40 M.A.	2½"x2⅛"x3⅛"	2	$2.50
465-281	7R	6 V. D.C.	295 @ 45 M.A. or 270 @ 67 M.A.	2½"x2⅝"x3⅛"	2¾	3.00
465-301	7Z	6V. D.C. or 115V.-60 Cy.	310V. D.C. @ 100 M.A.	3⅜"x3½"x4½"	5¼	5.50

FILAMENT TRANSFORMERS

Jefferson filament supply transformers are designed for amateur radio receivers and transmitters. A high quality line with ample factor of safety for use at the high voltages encountered in this service.

Catalog No.	Style Mfg.	Pri. Volts 60 Cycles	V.A. Rating	SECONDARY Volts	Amps.	Insulation Test	Size	Wt. Lbs.	List Price
464-211	7A	115	13	2.5 C.T.	5.25	1500	3¼"x1⅞"x2"	1	$1.60
464-221	7A	115	25	6.3 or 5 C.T.	4.0	1500	4"x2⅜"x2½"	2	2.25
464-201	7A	115	30	2.5 C.T.	12.0	7500	4"x2¼"x2½"	2	2.50
464-281	7Q	115	30	2.5 C.T.	12.0	7500	3¼"x5⅜"x4½"	4	5.50
464-321	7A	115	49	7.5 C.T.	6.5	2000	3¼"x2½"x4"	3¼	3.00
464-271	7Q	115	49	7.5 C.T.	6.5	2000	3¼"x5⅜"x4½"	4¼	5.50
464-461	7R	115	60	5.0 C.T.	12.0	3000	2 13/16"x2⅝"x3⅜"	3	3.50
464-441	7R	115	40	10.0 C.T.	4.0	2500	2½"x2½"x3⅛"	2½	3.00
464-241	7R	115	80	10.0 C.T.	8.0	5000	3¼"x3⅛"x4"	4½	4.00
464-291	7Q	115	80	10.0 C.T.	8.0	5000	3⅜"x5¾"x4½"	5½	6.00
464-451	7R	120/110	100	5.0 C.T.	20.0	3000	3¼"x3½"x4"	5	6.00
464-261	7BB	120/110	100	5.0 C.T.	20.0	8000	4⅞"x8¾"x4¾"	13½	16.00

COMBINATION TYPES

464-491	7AA	120/110	70	6.3 C.T. 5.0 C.T. 2.5 C.T.	4 3 7	1500	3⅜"x2¾"x2⅜"	3½	4.50
464-191	7M	120/110	64	2.5 C.T. 2.5 C.T. 5.0 C.T. 2.5 C.T.	14 1.75 3 3.5	1500	3⅜"x3⅝"x4½"	4½	$4.00
464-231	7R	115	38	7.5 C.T. 7.5 C.T.	2.5 2.5	2000	3¼"x2⅜"x4"	3	3.50
464-311	7R	115	60	5.0 C.T. 5.0 C.T. 5.0 C.T.	3.0 3.0 6.0	3000	3¼"x2½x"4"	3½	5.00
464-301	7M	115	50	2.5 C.T. 2.5 C.T. 2.5 C.T.	5.0 5.0 10.0	5000	3¾"x5⅜"x4"	6	9.50
464-251	7M	120/110	74	7.5 C.T. 2.5 C.T.	6.5 10.0	3000 6000	2⅜"x3¾"x4½"	5	8.00
464-431	7Z	120/110	91	6.3 C.T. 5.0 C.T. 5.0 5.0	6.1 2.0 6.0 3.0	1500	3 5/16"x4 3/16"x4 7/16"	6	7.00
464-471	7R	115	68	6.3 C.T. 5.0 C.T.	6.0 6.0	1500	2¾"x4"3¼"	5	4.50

POWER TRANSFORMERS FOR JEFFERSON AMPLIFIERS

Power Transformers designed specifically for use in the Jefferson Amplifiers can be relied upon to deliver rated current and voltages with a temperature rise low enough to insure long life and trouble-free service.

Catalog No.	Style Mtg.	Pri. Volts 60 Cycles	Input Volt Amps.	Rect. Fil No. 1	Secondary Ratings *High Voltage Tapped for Bias Voltage	Filament No. 2	Filament No. 3	List Price
463-581	7C**	120	19		350 V. D.C.—11 M.A.	6.3 V.- 1.6 A.		$1.75
463-391	7N	120/110	98	5 V.-3 A.	*320 V. D.C.—100 M.A.	2.5 V.- 9 A. C.T.	1.5 V.-1 A.	5.00
463-401	7Z	120/110	150	5 V.-3 A.	*300 V. D.C.—160 M.A.	2.5 V.-10 A. C.T.	2.5 V.-1.5. A.	7.50
463-481	7Z	120/110	98	5 V.-3 A.	*320 V. D.C.—100 M.A.	2.5 V.-9 A. C.T.	1.5 V.-1 A.	5.00
463-491	7Z	120/110	91	5 V.-3 A.	330 V. D.C.—100 M.A.	6.3 V.-4 A. C.T.		5.00
463-501	7Z	120/110	98	5 V.-3 A.	400 V. D.C.—100 M.A.	6.3 V.-3 A. C.T.		5.00
463-541	7Z	120/110	210	5 V.-3 A.	410 V. D.C.—175 M.A. 325 V. D.C.—115 M.A.	5 V.-3 A.	6.3 V.-5.5 A.C.T.	9.00

**Leads bottom.

Radio Replacement Power Transformers

JEFFERSON power transformers are built to meet every need for the servicing of radio receiving sets and for the construction of high grade amplifier equipment. The liberal use of materials and the conservative ratings are positive assurance of satisfactory performance. Every transformer combines all the skill and knowledge that JEFFERSON experience can provide.

REPLACEMENT TRANSFORMERS

DIMENSIONS AND WEIGHTS

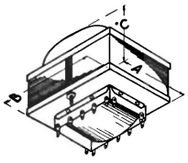


Fig. 7X

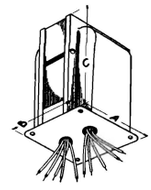


Fig. 7Z

Catalog No.	Style Mtg.	"A"	"B"	"C"	Mtg. Screw Centers	Opening Required	Weight, Lbs.
463-561	7X	2 9/16	3	1 3/4	2 1/4	2 x2 1/4	2
463-451	7X	2 9/16	3	1 3/4	2 1/4	2 x2 1/4	2 1/2
463-551	7X	2 9/16	3	1 3/4	2 1/4	2 x2 1/4	2 1/2
463-281	7X	2 9/16	3	2 1/4	2 1/4	2 x2 1/4	3 1/2
463-421	7X	3 1/4	3 7/8	2 1/8	2 27/32	2 1/2x3	4
463-271	7X	3 1/4	3 7/8	2 9/16	2 27/32	2 1/2x3	5 1/4
463-411	7Y	3 1/4	3 7/8	2	2 27/32	2 1/2x3	4
463-441	7Y	3 1/4	3 7/8	2 5/8	2 27/32	2 1/2x3	5 1/2
463-371	7Y	3 1/4	3 7/8	2 5/8	2 27/32	2 1/2x3	5 1/2
463-461	7Y	3 15/16	4 11/16	2 5/8	3 1/2	2 7/8x3 1/2	7 3/4
463-341	7Z	3 9/32	3 1/2	4 15/32	2 11/16x2 3/4		5 1/2
463-381	7Z	2 19/32	3 1/16	3 9/16	2 3/16x2 1/2		3 1/2
463-431	7Z	3 3/8	3 3/4	4 1/2	3x2 11/16		6
463-351	7Z	3 9/32	3 3/4	4 15/32	2 11/16x3		5 1/2
463-571	7Z	3 15/16	3 7/8	5 13/32	3 1/8x3 1/8		8
463-361	7Z	3 15/16	3 27/32	5 13/32	3 1/8x3 1/8		8
463-241	7AA	3 5/8	4	3 15/64	2 1/16x3 1/8x2 1/2		4 1/2
463-251	7AA	3 7/8	4	3 15/64	2 5/16x3 1/8x2 1/2		5 1/4
463-261	7AA	3 7/8	4 21/32	3 7/8	2 1/8x3 3/4x3		7 3/4
463-471	7AA	3 1/2	4	3 15/64	2x3 1/8x2 1/2		4 1/2

POWER TRANSFORMERS FOR JEFFERSON AMPLIFIERS

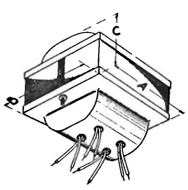


Fig. 7Y

463-391	7Z*	3 15/16	3 13/32	5 13/32	2 11/16x3 1/8		6
463-401	7Z	3 15/16	3 27/32	5 13/32	3 1/8x3 1/8		8 1/4
463-481	7Z	3 15/16	3 13/32	5 13/32	2 11/16x3 1/8		6 1/4
463-491	7Z	3 9/32	3 3/4	4 15/32	2 11/16x3		5 3/4
463-501	7Z	3 15/16	3 13/32	5 13/32	3 1/8x2 3/4		6
463-541	7Z	3 15/16	4 5/8	5 13/32	3 1/8x4 1/8		12

*Has Lug Terminals on shields.

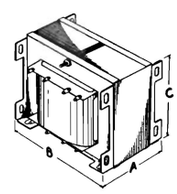


Fig. 7AA

COMPLETE TABLE OF RATINGS GIVEN ON NEXT PAGE.

The characteristics of the individual units can be determined from the chart on the next page. This clearly shows the number of windings and the rating of each. In order to assist in the application of these transformers the rating of each filament is given in terms of tubes. Listed with the rating of each filament winding is a symbol to denote the maximum number and type tube filament which may be applied to that winding. THE UNIVERSAL FILAMENT winding is an important EXCLUSIVE JEFFERSON FEATURE. Taps provide 6.3, 5 or 2.5 volts on the one winding making the transformer equally adaptable to the use of 6.3, 5 or 2.5 volt tubes.

AUTO TRANSFORMERS

Jefferson Auto Transformers reduce 220 volts A.C. to 110 volts A.C. to permit operations of 110 volt devices in communities served with 220 volts A.C.

These models are designed especially for radio use, they are small and compact, and are equipped with receptacle on the secondary and 9 feet of cord with plug on primary.

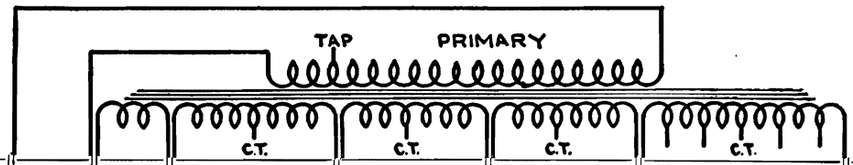
Catalog No.	Style Mtg.	Capacity Watts	Voltage	Cycles	DIMENSIONS			Weight, Lbs.	List Price
					Length	Width	Height		
233-213	7S	125	220 to 110	50 to 133	3 3/4"	3 5/8"	3 1/8"	4	$5.60
233-323	7S	250	220 to 110	50 to 133	4"	4"	5 3/8"	6 1/2	9.40

JEFFERSON ELECTRIC COMPANY
Bellwood ~ Illinois

Radio Replacement Power Transformers

A SIZE AND MOUNTING FOR EVERY REQUIREMENT
A COMPLETE TABLE OF RATINGS

Primary 50-60 Cycles



	Catalog Number	Style Mtg.	Input. Volt Amps.	Primary Volts	Rectifier Fil. No. 1	High Voltage Plate	Fil. No. 2	Fil. No. 3	Fil. No. 4	Price
HALF SHELL	463-561	7X	40	115	5V-2A	300V DC- 35 MA	⬡3 + △1 6.3V-1.6 A.	——	——	$2.25
HALF SHELL	463-451	7X	40	115	5V-2A	360V DC- 40 MA	①1 or □2 + ◇1 2.5V-4 A. Ct.	——	——	2.50
HALF SHELL	463-551	7X	40	115	5V-2A	360V DC- 40 MA	⬡3 + △1 6.3V-1.6 A. Ct.	——	——	2.50
HALF SHELL	463-281	7X	57	115	5V-2A	340V DC- 60 MA	——	——	③3 or □5 or ④4 + ◇1 6.3V-2A or 2.5V-7A	3.00
HALF SHELL	463-421	7X	65	115	5V-2A	350V DC- 70 MA	③3 or □5 + ◇2 2.5V-8.5 A. Ct.	——	——	3.50
HALF SHELL	463-271	7X	85	120/110	5V-2A	350V DC- 85 MA	⑤5 or □8 2.5V-8.75 A. Ct.	◇2 2.5V-3.5 A. Ct.	——	4.50
DOUBLE HALF SHELL	463-411	7Y	60	115	5V-2A	320V DC- 65 MA	⬡6 + △1 6.3V-2.5 A. Ct.	——	——	3.00
DOUBLE HALF SHELL	463-441	7Y	100	115	5V-2A	350V DC-100 MA	⬡10 + △2 6.3V-4 A. Ct.	——	——	4.00
DOUBLE HALF SHELL	463-371	7Y	90	120/110	5V-3A	350V DC- 85 MA	——	⑤5 or □9 2.5V-9 A. Ct.	◇2 or ⬡9 + △2 6.3V Tap @ 5V Tap @ 2.5V-3.5 A. Ct.	4.50
DOUBLE HALF SHELL	463-461	7Y	140	120/110	5V-3A	360V DC-125 MA	①1 or □1 or ◇1 2.5V-1.75 A. Ct.	⑦7 or □10 2.5V-12.2 A. Ct.	◇2 or ⬡9 + △2 6.3V Tap @ 5V Tap @ 2.5V-4 A. Ct.	5.00
UPRIGHT SHIELDED	463-341	7Z	66	120/110	5V-2A	320V DC- 75 MA	②2 or □3 or ◇2 2.5V-3.5 A. Ct.	(2—71 A's) 5V-0.6 A. Ct.	No. 4—1.5V-4.3A (4-'26) No. 5—1.5V-1.2A Ct.(26)	4.50
UPRIGHT SHIELDED	463-381	7Z	57	115	5V-2A	340V DC- 60 MA	——	——	③3 or □5 or ④4 + ◇2 6.3V-2A or 2.5V-7 A. Ct.	3.00
UPRIGHT SHIELDED	463-431	7Z	100	115	5V-2A	350V DC-100 MA	⬡10 + △2 6.3V-4 A. Ct.	——	——	4.00
UPRIGHT SHIELDED	463-351	7Z	90	120/110	5V-3A	350V DC- 85 MA	——	⑤5 or □9 2.5V-9 A. Ct.	◇2 or ⬡9 + △2 6.3V Tap @ 5V Tap @ 2.5V-3.5 A. Ct.	4.50
UPRIGHT SHIELDED	463-571	7Z	150	120/110	5V-3A	350V DC-150 MA	⬡12 + △3 6.3V-6A.	——	——	5.00
UPRIGHT SHIELDED	463-361	7Z	140	120/110	5V-3A	360V DC-125 MA	①1 or □1 or ◇1 2.5V-1.75 A. Ct.	⑦7 or □10 2.5V-12.2 A. Ct.	◇2 or ⬡9 + △2 6.3V Tap @ 5V Tap @ 2.5V-4A. Ct.	5.00
UNIVERSAL	463-241	7AA	66	120/110	5V-2A	320V DC- 75 MA	②2 or □3 or ◇2 2.5V-3.5 A. Ct.	(2—71 A) 5V-0.6 A. Ct.	No. 4—1.5V-4.3 A (4-26) No. 5—1.5V-1.2A.Ct.(26)	4.50
UNIVERSAL	463-251	7AA	86	120/110	5V-2A	350V DC- 85 MA	——	⑤5 or □9 2.5V-8.75 A. Ct.	◇2 or ⬡9 + △2 6.3V Tap @ 5V Tap @ 2.5V-3.5 A. Ct.	4.50
UNIVERSAL	463-261	7AA	140	120/110	5V-3A	360V DC-125 MA	①1 or □1 or ◇1 2.5V-1.75 A. Ct.	⑦7 or □10 2.5V-12.2 A. Ct.	◇2 or ⬡9 + △2 6.3V Tap @ 5V Tap @ 2.5V-4 A. Ct.	5.00
UNIVERSAL	463-471	7AA	75	115	5V-3A	240V DC-150 MA	SPEAKER FIELD SUPPLY DELIVERING 36 WATTS OF DC USING 80, 523, or 83 RECTIFIER			3.50

D.C. Ratings measured with 8 MFD input condenser to filter and an 80 Rectifier Tube.

POWER TRANSFORMER WINDING CAPACITIES: ◇ = 1.75 ampere (or less) power tubes (45, 47, etc.) at 2½ volts
○ = 1.75 ampere heaters (24, 27, etc.) at 2½ volts ⬡ = 0.3 ampere heaters (75, 77, etc.) at 6.3 volts
□ = 1.0 ampere heaters (56, 57, etc.) at 2½ volts △ = 0.7 ampere heaters (42, 79, etc.) at 6.3 volts

JEFFERSON
Television Components

Rapid strides in the development of television receivers and the establishment of regular television programs have stimulated a demand for components for the amateur or experimenter desirous of constructing his own receiving apparatus. To satisfy this demand Jefferson engineers, for a considerable length of time, have been working in this field with the idea of offering essential components for this purpose.

The new units illustrated and described on this and the following page represent items which are particularly adapted for use with present day circuits and cathode ray tubes. The latest engineering features and methods of construction developed in the manufacture of radio transformers since the very beginning of commercial broadcast are incorporated in these new Jefferson items. These features include the use of the highest grade silicon cores, re-annealed after punching to insure greater permeability, machine wound coils for accuracy and uniformity and the latest and best methods of impregnating and compounding. Transformers are assembled in cases of attractive gun metal finish with leads out of the bottom for neat installation and ease of connection.

Two high-voltage power transformers are offered; No. 463-591 for use with the electrically deflected 5″ tube, and No. 463-601 for the magnetically deflected 9″ and 12″ tubes. A filter choke (No. 466-500) for use with the above items is intended to be used in the negative line so that it does not have to be insulated for the high-voltage.

The items for magnetic deflection, Nos. 467-546 to 549 and 465-311, are suitable for standard deflecting circuits, such as are shown, for example, in the Bulletins issued by cathode ray tube manufacturers.

No. 463-591 POWER TRANSFORMER

No. 463-591

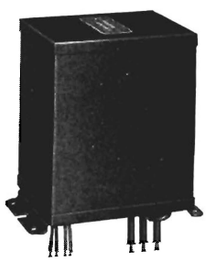
This high-voltage power transformer is designed for cathode ray tubes, such as the 5″ No. 1802 and the No. 1899 monoscope. It is free from corona disturbance. Completely enclosed and compound protected against moisture for long, trouble-free life.

Specifications: Primary 117-volts, 60-cycles
Secondary 2000-volts DC at 1.5 M.A.
6.3-volt—0.6 A
2.5-volt—2.1 A

Dimensions: 2¾″x2½″x3⅛″; weight—2½ pounds.

List Price each.....$6.00

No. 463-601 POWER TRANSFORMER


No. 463-601

High-voltage power transformer No. 463-601 is recommended for use with No. 1800, 1803, and 1804 picture tubes; designed to be free from corona disturbance. Like No. 463-591 it is completely enclosed and compound protected against moisture for long, trouble-free life.

Specifications: Primary 117-volts, 60-cycles
Secondary 7000-volts DC at 1.5 M.A.
2.5-volt—2.1 A
2.5-volt— 5 A

Dimensions: 5¼″x3⅝″x5 7/16″; weight—7 pounds.

List Price each.....$12.00

No. 463-611 POWER TRANSFORMER

(FOR ILLUSTRATION SEE FIG. 7Z, PAGE 2)

This power transformer is designed to supply filament and plate voltage for all tubes except the cathode ray tube.

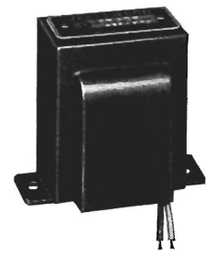
Specifications: Primary 117-volts, 60 cycles.
Secondary 800-volts CT, 400-volts DC.
.25-amps. 8 M. F.
6.3-volt—7 A
5. -volt—3 A
2.5-volt—2.1 A

Dimensions: 3 15/16″x5½″x5 13/32″; weight—16 pounds.

List Price each $12.50

(Choke No. 466-520 for use with power transformer No. 463-611 is listed on Page 8)

No. 466-500 FILTER CHOKE

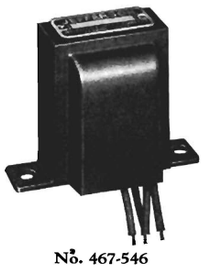

No. 466-500

Filter Choke No. 466-500 is for High-Voltage Supply, to be used in the negative lead; completely enclosed and compound protected.

Specifications: 1800 henries at 1.5 M.A. DC.
Resistance 8600 ohms

Dimensions: 2⅞"x2"x2⅜"; weight—1½ pounds.

List Price each.....$4.50


No. 467-546

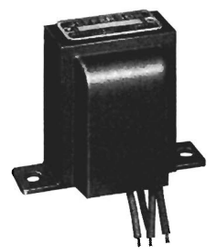
No. 467-546 HORIZONTAL OSCILLATION TRANSFORMER

This horizontal oscillation transformer is for the conventional blocking oscillator circuits, designed for 13,230-cycles. It is completely enclosed, with compound protected windings.

Dimensions: 1⅝"x2⅝"x2"; weight—½ pound.

List Price each.....$2.50

No. 467-547 VERTICAL OSCILLATION TRANSFORMER


No. 467-547

Designed for the conventional blocking oscillator 60-cycle circuits. This transformer is also completely enclosed, with compound protected windings.

Dimensions: 1⅝"x2⅝"x2"; weight—½ pound.

List Price each.....$2.75

No. 467-548

No. 467-548 HORIZONTAL OUTPUT TRANSFORMER

No. 467-548 horizontal output transformer is to be used in conjunction with scanning yoke 465-311, or its equivalent. Designed to work out of pentodes, such as the 42 or 6L6 at 13,230-cycles. Completely enclosed and compound protected.

Dimensions: 2¾"x2⅜"x3¾"; weight—2 pounds.

List Price each.....$6.00

No. 467-549 VERTICAL OUTPUT TRANSFORMER

No. 467-549

Recommended for use in conjunction with scanning yoke 465-311, or its equivalent. Designed for high efficiency at 60-cycles, to work out of triodes, such as the 6C5.

Dimensions: 2¾"x2½"x3⅛"; weight—2¼ pounds.

List Price each.....$3.25

No. 465-311

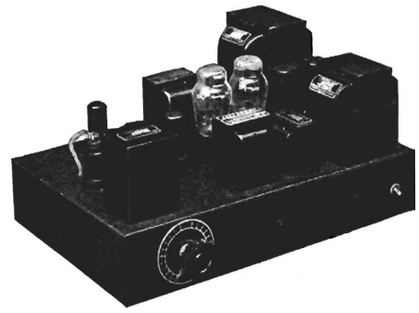
No. 465-311 DEFLECTING YOKE

Deflecting yoke No. 465-311 for use with magnetically deflected picture tubes, such as the No. 1800, 1801, 1803 and 1804. It supplies horizontal and vertical deflection in conjunction with output transformers 467-548 and 467-549. Designed for high scanning efficiency and freedom from picture distortions and defocusing. The inside diameter fits all standard picture tubes.

Dimensions: 2⅝" O.D. x 3 13/16"; weight—1¼ pounds.

List Price each.....$10.00

JEFFERSON AMPLIFIER CIRCUITS



Periodically complete circuit diagrams are published on powerful public address amplifiers which have been developed in the JEFFERSON laboratory using various combinations of popular tubes. JEFFERSON engineers are well qualified through years of specialization in the radio transformer field to assume leadership in the promotion of custom built amplifiers among radio service men and experimenters. Careful study is given to the development of these special circuits—each is of proven performance—exclusive features abound and they are presented in simple and complete form. A wealth of testimonials declare to their popular acceptance.

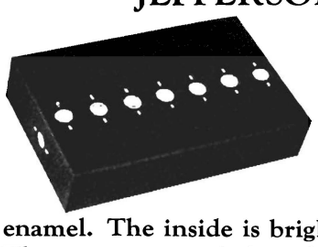
When newly developed amplifier tubes are presented to the market their characteristics are carefully studied by Jefferson engineers and if found suitable a circuit is developed using them which is then published in bulletin form and distributed to the trade. In this way latest combinations are immediately made available.

It is customary to apply listed stock transformers and chokes to all new circuits wherever possible. A transformer or choke may have application to several circuits.

The components manufactured by JEFFERSON are listed at moderate prices in spite of their superior quality. Quantity production under careful control and rigid inspection makes this possible.

Copies of all amplifier circuits are available upon request.

JEFFERSON AMPLIFIER FOUNDATION UNIT

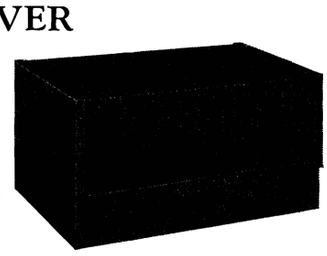


A popular size one piece chassis around which all the JEFFERSON amplifier circuits are constructed. It enables the service man to build powerful amplifiers of finished appearance and superior performance. A simple yet effective foundation on which to economically build an amplifier of real quality.

It is a practically constructed base of heavy gauge (.050″) sheet metal attractively finished on the outside in black baked crystal enamel. The inside is bright electro-galvanized to insure perfect grounding and easy soldering. The corners are reinforced and spot welded to form a unit of rigidity and strength. Each of the foundation units is provided with a series of socket holes, die punched along the central line, in which standard wafer sockets can be mounted. Sockets with mounting holes on 1½″ to 1 29/32″ centers can be fastened in the slots provided. With each foundation unit a template is supplied which gives the correct location of all the necessary parts and the holes for mounting them. The specific amplifier circuit for which the chassis is ordered determines which template shall be included.

Size 11″ x 17″ x 3⅜″ high. Weight 6 lbs.

JEFFERSON AMPLIFIER COVER



To protect the parts of the custom built JEFFERSON amplifier from breakage and pilferage and to improve its appearance, an attractive cover is provided which fits snugly over any of the above listed bases. It is made from heavy gauge perforated metal and is finished with the same black enamel that is applied to the bases. Provision is made for fastening it at the ends leaving the sides of the chassis clear for any controls that are necessary.

Size 11¼″ x 17⅜″ x 6⅜″ high. Shipping weight 8 lbs. Cat. No. 469-201.

JEFFERSON AMPLIFIER CIRCUITS

CLASS B "59" AMPLIFIER—BULLETIN PA-2

Power Output: 15 to 20 watts Gain: 80 DB
Frequency Response: ±2 DB 50 to 10,000 Wycles
Hum Level: 40 DB below zero level (.006 watts)

For tonal quality, fidelity of reproduction and exceptional volume this class "B" "59" amplifier is unsurpassed. A resistance coupled stage consisting of a "57" tube is employed to provide high gain.

2B6 AMPLIFIER—BULLETIN PA-4

Power Output: 10 to 15 watts Gain: 67 DB
Frequency Response: ±1 DB 30 to 10,000 cycles
Hum Level: 45 DB below zero level (.006 watts)

A circuit which realizes all the advantages of the 2B6 tube has been designed by Jefferson engineers to deliver 10 watts of audio power with an extremely flat frequency response.

2A3 AMPLIFIER—BULLETIN PA-5

Power Output: 15 to 25 watts Gain: 72 DB
Frequency Response: ±2 DB 40 to 10,000 cycles
Hum Level: 20 DB below zero level (.006 watts)

The amplifier is a development of the Jefferson laboratory and is designed to and actually develops the full listed output of the 2A3 tubes.

P.P.P. "45" AMPLIFIER—BULLETIN PA-6

Power Output: 38 watts Gain: 83 DB
Frequency Response: ±2 DB 50 to 10,000 cycles
Hum Level: 24 DB below zero level (.006 watts)

Simple to construct and highly efficient in operation, this Jefferson foundation kit provides an economical and very suitable amplifier for use in large halls, schools, auditoriums, and for small outdoor installations for amusement parks, baseball parks, dance pavilions, etc.

HIGH GAIN 2A3 AMPLIFIER—BULLETIN PA-8

Power Output: 15 to 25 watts Gain: 120 DB
Frequency Response: ±2 DB 40 to 10,000 cycles
Hum Level: 39 DB below zero level (.006 watts)

This modern amplifier circuit is a modification of the earlier "2A3" amplifier. The full power output of 15 watts normal is secured through the use of "56" drivers and the special Jefferson driver transformer.

6A6 CONVERTIBLE AMPLIFIER—BULLETIN PA-9

Power Output: 20 watts Gain: 80 DB
Frequency Response: ±2 DB 40 to 10,000 cycles
Hum Level: 19 DB below zero level (.006 watts)

This powerful convertible amplifier of practical construction is particularly well suited for public address work where the amplifier is to be adaptable for mobile duty operating from a 6 volt direct current source and as an AC amplifier using the 110 volts 60 cycle line as a source.

6F6 AMPLIFIER—BULLETIN PA-10

Power Output: 18 watts Gain: 114 DB
Frequency Response: ±1 DB 60 to 10,000 cycles
Hum Level: 25 DB below zero level (.006 watts)

This powerful amplifier uses the modern metal tubes—6J7, 6C5, 5Z4, and 6F6—in a circuit which gives a full 18 watts output with either a high or moderate gain input.

6B5 AMPLIFIER—BULLETIN PA-11

Power Output: 20 watts Gain: 130 DB
Frequency Response: ±1 DB 40 to 12,000 cycles
Hum Level: 45 DB below zero level (.006 watts)

A circuit employing the popular 6B5 tubes in push pull to give a powerful 20 watt amplifier. The tremendous gain is secured by cascading triode connected 6C6's and a 6A6.

6L6 AMPLIFIER—BULLETIN PA-12

Power Output: 60 watts Gain: 120 DB
Frequency Response: ±2 DB 30 to 10,000 cycles
Hum Level: 22 DB below zero level (.006 watts)

This Jefferson amplifier circuit employs the new 6L6 BEAM POWER tubes in push pull Class AB_2 to give a powerful 60 watt output with high power sensitivity and high efficiency.

P.P.P. 6L6 AMPLIFIER—PA-13

Power Output: 120 watts Gain: 125 DB
Frequency Response: ±2 DB 30 to 10,000 cycles
Hum Level: 25 DB below zero level (.006 watts)

A circuit, the output stage of which, consists of four 6L6 BEAM POWER tubes in push pull parallel Class AB_2 has been designed to utilize to the fullest extent the capabilities of these new tubes.

CLASS "B" AUTOMATIC BIAS—BULLETIN PA-14

Automatic Bias for Class B Tubes is a development of the Jefferson laboratories. A reprint of the fundamental concept of this type of bias as printed in the April issue of "Radio" and circuit diagrams for Class B 210's and Class B 800's are included in this bulletin.

25L6 AMPLIFIER—BULLETIN PA-15

Power Output: 10 watts Gain: 139 DB
Frequency Response: ±2 DB 60 to 10,000 cycles.
Sensitivity: .001 volts input for 10 watts output

Operated directly from 110-V DC power source this Jefferson 25L6 amplifier will deliver 10 watts of audio power.

THREE CHANNEL ELECTRONIC MIXER—BULLETIN PA-16

Gain: 9 DB
Erequency Response: ± 1 DB 60-10,000 cycles
Hum Level: Practically Nil.

Capable of electronically mixing three separate audio circuits with excellent fidelity.

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467-461	Cl. "AB" Driver	5
467-462	Cl. "B" Driver	5
467-491	Spcl. Output	6
467-501	(Pl.S.) Audio Int.	4
467-502	(Pl.S.) P.P. Input	4
467-503	(Pl.S.) Audio Int.	4
467-504	(Pl.S.) P.P. Input	4
467-505	(Pl.S.) Audio Int.	4
467-506	(Pl.S.) P.P. Input	4
467-507	(Pl.S.) Audio Int.	4
467-508	(Pl.S.) P.P. Input	4
467-509	(Pl.S.) Output	6
467-510	(Pl.S.) Output	6
467-525	Spcl. Output	6
467-526	Mod.	7
467-527	Mod.	7
467-528	Cl. "AB" Driver	5
467-529	Auto. Bias Driver	5
467-535	Spcl. Output	6
467-536	Mod.	7
467-537	Auto. Bias Driver	5
467-538	Spcl. Output	6
467-539	Cl. "B" Driver	5
467-540	Cl. "B" Driver	5
467-541	Spcl. Output	6
467-542	Spcl. Output	6
467-543	Output	6
467-544	Output	6
467-545	Output	6
467-546	Horizontal Oscil.	13
467-547	Vertical Oscil.	13
467-548	Horizontal Output	13
467-549	Vertical Output	13
467-550	P. P. Input	4
467-551	P. P. Int.	5
467-1315	Cl. "B" Driver	5

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