

**TERMINAL  
ARRANGEMENTS**

**UNITED TRANSFORMER COMPANY**

150 Varick Street, New York 13, N. Y.

1-212-255-3500



## OUTPUT COMBINATIONS TYPE LS, HA, and A TRANSFORMERS

**LS-10, LS-10X, LS-12, LS-12X, LS-14, LS-14X, LS-15, LS-15X, HA-100, HA-100X, HA-101, HA-101X, HA-103A, HA-130, HA-130X, LS-26, A10.**

For single grid join 8 and 9 connect 7 to grid, 10 to grid return.

For pushpull grids join 8 and 9 for grid return and connect 7 and 10 to grids.

**LS-30, LS-30X, LS-31, LS-31X, LS-32, LS-33, LS-34, LS-52, LS-55, LS-58, LS-61, LS-64, LS-845, LS-2451, HA-108, HA-108X, A-20, HA-134, LS-6L1, LS-6L4.**

500 ohms connect to 7 and 12, join 9 and 10  
333 ohms connect to 7 and 11, join 9 and 10  
250 ohms connect to 7 and 12, join 8 to 9 (Approx.)  
200 ohms connect to 8 and 11, join 9 and 10  
125 ohms connect to 7 and 10, join 7 to 9 and 10 to 12  
50 ohms connect to 8 and 10, join 8 to 9 and 10 to 11

**LS-37, LS-38, LS-39, LS-50, LS-51, LS-150, LS-151, HA-111, HA-111E, HA-112, HA-113, HA-114, A-24, A-26, A-27, LS-27, HA-133, A-25.**

500 ohms connect to 1 and 6, join 3 to 4  
333 ohms connect to 1 and 5, join 3 to 4  
250 ohms connect to 1 and 6, join 2 to 3 (Approx.)  
200 ohms connect to 2 and 5, join 3 to 4  
125 ohms connect to 1 and 4, join 1 to 3 and 4 to 6  
50 ohms connect to 2 and 4, join 2 to 3 and 4 to 5

**A-21.**

500 ohms, connect to 4 and 6  
200 ohms, connect to 4 and 5  
50 ohms, connect to 5 and 6

**A-11.**

Connect grids to 6 and 8; grid return to 7

**LS-800A**

3,500 ohms connect to 8 and 11, join 8 to 9 and 10 to 11  
5,000 ohms connect to 7 and 12, join 7 to 9 and 10 to 12  
6,000 ohms connect to 7 and 12, join 8 to 9  
13,000 ohms connect to 8 and 11, join 9 to 10  
16,500 ohms connect to 8 and 12, join 9 to 10  
20,000 ohms connect to 7 and 12, join 9 to 10

**VOICE COIL COMBINATIONS:**

1.2 ohms connect to 13 and 18, join 14 to 18 and 13 to 17  
2.5 ohms connect to 14 and 17, join 14 to 15 and 16 to 17  
5 ohms connect to 13 and 18, join 14 to 17  
7.5 ohms connect to 13 and 18, join 16 to 18 and 13 to 15  
10 ohms connect to 14 and 17, join 15 to 16  
15 ohms connect to 13 and 18, join 16 to 17  
20 ohms connect to 14 and 18, join 15 to 16  
30 ohms connect to 13 and 18, join 15 to 16

**LS-53, LS-56, LS-59, LS-62, LS-69, LS-6L2, LS-6L5.**

1000 ohms connect to 8 and 11, join 8 to 9 and 10 to 11  
1500 ohms connect to 7 and 12, join 7 to 9 and 10 to 12  
1800 ohms connect to 7 and 12, join 8 to 9  
4000 ohms connect to 8 and 11, join 9 to 10  
5000 ohms connect to 8 and 12, join 9 to 10  
6000 ohms connect to 7 and 12, join 9 to 10

**LS-845M.**

5,000 ohms connect to 1 and 6, join 3 to 4  
3,500 ohms connect to 1 and 5, join 3 to 4  
2,500 ohms connect to 1 and 6, join 2 to 3  
2,100 ohms connect to 2 and 5, join 3 to 4  
1,250 ohms connect to 1 and 4, join 1 to 3 and 4 to 6  
600 ohms connect to 2 and 4, join 2 to 3 and 4 to 5

**LS-66.**

For 5,000 ohms join 4 to 5, connect to 1 and 8  
For 3,500 ohms join 4 to 5, connect to 2 and 7  
For 2,500 ohms join 3 to 5, connect to 2 and 7  
For 2,100 ohms join 3 to 6, connect to 2 and 7  
For 1,250 ohms join 1 to 5 and 4 to 8, connect to 1 and 4  
For 600 ohms join 2 to 6 and 3 to 7, connect to 2 and 3

**LS-67.**

For 2,500 ohms join 1 to 3, 2 to 4, connect to 1 and 4  
For 10,000 ohms join 2 to 3, connect to 1 and 4

**LS-140.**

For 500-600 ohms join 6 to 7, connect to 5 and 8

## INPUT COMBINATIONS TYPE LS, HA, and A, TRANSFORMERS

**HA-134.**

5,000 ohms overall: connect to 2 and 5  
10,000 ohms overall: connect to 1 and 6

**HA-135.**

3,000 ohms overall: connect to P'-P'  
5,000 ohms overall: connect to P-P

**HA-136.**

For pushpull 53's, connect plates to 1 and 4, plate return to 2.  
For single 6F6, connect plate to 1 and plate return to 3.

**LS-140.**

For 500-600 ohms, connect to 1 and 4, join 2 to 3

**A-21.**

500 ohms, connect to 1 and 3  
200 ohms, connect to 1 and 2  
50 ohms, connect to 2 and 3

**A-11.**

500 ohms connect to 1 and 5  
200 ohms connect to 2 and 4  
(3 is center tap for either of above)  
50 ohms connect to 3 and 4



## INPUT COMBINATIONS

### TYPE LS, HA, MC and A, TRANSFORMERS

LS-5, LS-10, LS-10X, LS-12, LS-12X, LS-18, LS-24, LS-30, LS-30X, LS-33, LS-34, HA-100, HA-100X, HA-101, HA-101X, HA-108X, A-10, A-12, A-20.

500 ohms connect to 1 and 6, join 3 to 4  
333 ohms connect to 1 and 5, join 3 to 4  
250 ohms connect to 1 and 6, join 2 to 3 (Approx.)  
200 ohms connect to 2 and 5, join 3 to 4  
125 ohms connect to 1 and 4, join 1 to 3 and 4 to 6  
50 ohms connect to 2 and 4, join 2 to 3 and 4 to 5

LS-14, LS-14X, LS-32, HA-103A.

For 60 ohms join 3 to 4, connect to 1 and 6  
For 38 ohms join 3 to 4, connect to 2 and 6  
For 30 ohms join 1 to 6, connect to 4 and 5  
For 22 ohms join 3 to 4, connect to 2 and 5  
For 15 ohms join 1 to 3 and 4 to 6, connect to 1 and 4  
For 10 ohms join 1 to 6, connect to 2 and 5  
For 5.5 ohms join 2 to 3 and 4 to 5, connect to 2 and 4  
For 2.5 ohms join 1 to 5 and 2 to 6, connect to 1 and 2

LS-50, HA-113, A-24, LS-27, HA-133.

For single plate (15,000 ohms), join 8 to 9, connect 7 to plate, and 10 to plate return.

LS-51, HA-114, A-26.

For pushpull plates, (30,000 ohms over all), join 8 and 9 for plate return, connect 7 and 10 to plates.

LS-37, HA-111, HA-111E, A-27.

Connect X-C to crystal device.

LS-39, HA-112.

Connect PEC to photocell or grid of tube.

LS-15, LS-15X, LS-31, LS-31-X, HA-130, HA-130X, MC

Three separate and distinct primaries 30 or 50 ohms connect to 1 and 4; join 1 to 2, 3 to 4. 200 or 250 ohms connect to land 4; join 2 to 3.

LS-52, LS-54.

8000 ohms overall:

For pushpull 245's or 250's connect plates to P and P, connect B+ to B and B.

For single 89 pentode, 205D, 211, 842, or 843, connect plate to P, connect B+ to other P and join B-B.

2000 ohms overall:

For single 48, connect plate to P, connect B+ to other P and join adjacent P and B terminals.

LS-55, LS-56, LS-57.

5000 ohms overall:

For self bias 2A3's or pushpull 275A's, connect plates to 1 and 6, join 3 and 4 for B+.

For single 71A, 2B6, or 59 triode, connect plate to 1, B+ to 6, join 3 and 4.

3000 ohms overall:

For fixed bias 2A3's, connect plates to 2 and 5, join 3 and 4 for B+.

For single 52A, connect plate to 2, B+ to 5, join 3 and 4.

LS-58.

2500 ohms overall:

For pushpull parallel 2A3's self bias, connect plates to 1 and 6, join 3 and 4 for B+.

1500 ohms overall:

For pushpull parallel 2A3's fixed bias or pushpull parallel 48's, connect plates to 2 and 5, join 3 and 4 for B+.

LS-61, LS-63.

10000 ohms overall:

For pushpull 59 triodes, 2B6's, 71A's, or class B 53, 79, 49's, 89's, connect plates to 1 and 6, join 3 and 4 for B+.

For single 210, 41, or 268A, connect plate to 1, B+ to 6, join 3 and 4.

6000 ohms overall:

For pushpull 52A's or class B 46's or 59's, connect plates to 2 and 5, join 3 and 4 for B+.

For single 20, 31, 46, or 59 pentode, connect plate to 2, B+ to 5, join 3 and 4.

2500 ohms overall:

For single 2A3 self biased, connect plate to 1, B+ to 6, join 1 to 3 and 4 to 6.

LS-67.

For 838's connect plates to P-P.

For 203A's connect plates to P'-P'.

LS-245I.

6000 ohms overall:

For self bias A prime 45's, Class A WE 252A's, Class B46's or 59's, connect plates to 1 and 6, join 3 and 4 for B+.

3500 ohms overall:

For fixed bias A prime 45's, connect plates to 2 and 5, join 3 and 4 for B+.

LS-800A.

12,500 ohms, connect plates to 1 and 6; join 3 and 4 for B+.

8000 ohms, connect plates to 2 and 5; join 3 and 4 for B+.



## TERMINAL CONNECTIONS TYPE 'O' TRANSFORMERS

### INPUT COMBINATIONS

- O-1, O-2, O-12, P-1, P-2, P-12.**  
500 ohms connect to 1 and 5. (3 is center tap).  
200 ohms connect to 2 and 4. (3 is center tap).  
50 ohms connect to 3 and 4.
- O-3, P-3.**  
30 ohms connect to 1 and 4; join 2 to 3.  
3 is center tap.
- 7.5 ohms connect to 2 and 4, join 3 to 4 and 1 to 2.
- O-4, O-5, O-6, O-7, O-15, P-4, P-5, P-6, P-7, P-15.**  
Connect plate to 1; plate return to 2.
- O-14, P-14.**  
200 ohms, connect to 1 and 2.
- O-8, O-9, P-8, P-9.**  
Connect plate to 6; plate return to 7.
- O-10, P-10.**  
Connect plates to 6 and 8; plate return to 7.
- O-11, P-11.**  
Connect high impedance source to 6 and 7.
- P-13.**  
Use connection 1 and 2.

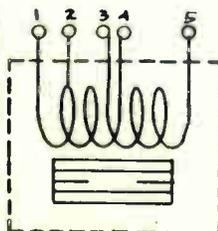
### OUTPUT COMBINATIONS

- O-1, O-3, P-1, P-3.**  
Connect grid to 7; grid return to 6.
- O-2, O-6, O-7, P-2, P-6, P-7.**  
Connect grids to 6 and 8; grid return to 7.
- O-4, O-5, O-14, P-4, P-5, P-14.**  
Connect grid to 4; grid return to 3.
- O-8, O-9, O-10, O-11, P-8, P-9, P-10, P-11.**  
500 ohms, connect to 1 and 5. (3 is center tap).  
200 ohms, connect to 2 and 4. (3 is center tap).  
50 ohms, connect to 3 and 4.
- O-12, P-12.**  
200 ohms, connect to 6 and 8; 7 is center tap.  
50 ohms, connect to 6 and 7.
- O-15, P-15.**  
Connect grid to 3, grid return to 4.

### LS-SPLIT TAPPED REACTORS

LS-90, LS-91, LS-92, LS-93, LS-96,  
LS-99, LS-950, LS-980, LS-1110,  
LS-1120.

- For parallel use, connect to 1 and 5, join 1 to 3 and 4 to 5.
- For series use, connect to 1 and 5, join 3 to 4.



## PRIMARY CONNECTIONS LS PLATE TRANSFORMERS

- For 100 volts connect to 1 and 2, join 1 to 5 and 4 to 6.  
For 110 volts connect to 1 and 3, join 1 to 5 and 4 to 6.  
For 120 volts connect to 1 and 4, join 1 to 5 and 4 to 6.  
For 220 volts connect to 2 and 5, join 1 to 6.  
For 230 volts connect to 3 and 5, join 1 to 6.  
For 240 volts connect to 4 and 5, join 1 to 6.

LS-80, LS-82, LS-83, LS-84, LS-85, LS-89A, LS-118,  
LS-120, LS-121, LS-181, LS-182, LS-183, LS-184, LS-185.

- For 100 volts connect to 1 and 2, join 1 to 5 and 2 to 6.  
For 110 volts connect to 1 and 3, join 1 to 5 and 3 to 7.  
For 120 volts connect to 1 and 4, join 1 to 5 and 4 to 8.  
For 200 volts connect to 1 and 6, join 2 to 5.  
For 210 volts connect to 1 and 6, join 3 to 5.  
For 220 volts connect to 1 and 6, join 4 to 5.  
For 230 volts connect to 1 and 7, join 4 to 5.  
For 240 volts connect to 1 and 8, join 4 to 5.

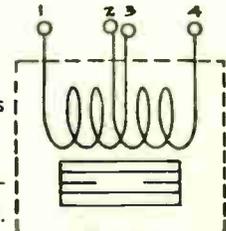
LS-187, LS-188.

Secondary Terminals	Primary Terminals 115 V. 50/60 cycles	LS-187		LS-188	
		A.C. Volts each side	D.C. Volts	A.C. Volts each side	D.C. Volts
8-10-11-13	1-2	155	100	490	400
	1-3	141	87	445	360
	1-4	129	76	406	326
	1-5	119	67	376	298
	1-6	111	60	350	275
	1-7	106	55	326	254
	8-9-12-13	1-2	94	45	300
1-3		86	37	273	206
1-4		78	30	249	184
1-5		72	25	230	167
1-6		67	20	214	152
1-7		63	17	200	140
9-10-11-12		1-2	61	15	190
	1-3	55	10	173	117
	1-4	51	6	159	103
	1-5	47	3	147	92
	1-6	44	—	137	83
	1-7	41	—	127	74

### AUDIO FILTER AND MODULATION REACTORS

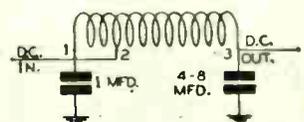
LS-94, LS-95, LS-1130, A-30,  
HC-115, HC-116, HC-128.

- For series use, connect to terminals 1 and 4, join 2 and 3.
- For parallel use, connect to terminals 1 and 4, join 1 to 2 and 3 to 4.



### FILTER CHOKES

HC-117, HC-127, PA-100, PA-102, PA-104, PA-106, PA-108, PA-1-S.





# TERMINAL ARRANGEMENTS

This terminal arrangement listing is a ready reference for all units in the Linear Standard, Hipermalloy, Ultra Compact, Ouncer, and Plug In lines of UTC transformer components.

To use this reference, look up the type number of the unit in the first column. The number in the corresponding second column, when looked up on the following pages, will indicate the primary terminal connections. The number in the third column, when found in the following pages, will indicate the secondary terminal connections. The letter in the fourth column is indicated on page four above a schematic diagram, showing the actual winding-terminal arrangement.

LS

Where no type number or no pri. and sec. numbers are shown, the transformer terminal board markings are self explanatory. Transformer terminals marked  $\frac{1}{2}$  are grounded to case.

UNITED TRANSFORMER COMPANY • 150 VARICK ST., NEW YORK 13, N. Y.

TYPE	PRI.	SEC.	SCHEM.	TYPE	PRI.	SEC.	SCHEM.
A-10	6	31	F	LS-34	6	1, 7	N
A-11	9	32	AA	LS-38	25	6	O
A-12	6	31	F	LS-39	28	6	K
A-14	5	31	J	LS-40	—	—	P
A-16	—	—	I	LS-47	—	—	B
A-17	—	—	I	LS-48	—	—	B
A-18	—	—	H	LS-49	—	—	Q
A-19	—	—	P	LS-50	28	6	K
A-20	6	7	L	LS-51	33	6	K
A-21	10	11	Y	LS-52	—	1, 7	C
A-24	28	6	K	LS-54	—	1	D
A-25	—	6	AB	LS-55	—	1, 7	E
A-26	33	6	K	LS-56	—	22, 1	E
A-27	28	6	K	LS-57	—	1	R
A-30	43	—	—	LS-58	—	1, 7	E
A-32	43	—	—	LS-60A	—	2	D
HA-100	6	31	F	LS-61	—	1, 7	E
HA-100X	6	31	FF	LS-62A	—	13	S
HA-101	6	31	FF	LS-63	—	1	R
HA-101X	6	31	FF	LS-66	—	23	U
HA-103A	3	31	FF	LS-67	—	21	U
HA-104	—	—	H	LS-74	44	44	—
HA-105	—	—	I	LS-80	35	—	—
HA-106	—	—	H	LS-82	35	—	—
HA-107	—	—	B	LS-83	35	—	—
HA-108	6	7	L	LS-84	35	—	—
HA-108X	6	7	L	LS-89	26	—	—
HA-111	28	6	K	LS-89A	36	—	—
HA-113	28	6	K	LS-90	42	—	—
HA-114	33	6	K	LS-91	42	—	—
HA-130X	12	31	G	LS-92	42	—	—
HA-133	28	6	K	LS-93	42	—	—
HA-134	24	7	L	LS-94	43	—	—
HA-135	—	1	R	LS-96	42	—	—
HA-137	—	—	B	LS-99	42	—	—
HC-115	43	—	—	LS-120	35	—	—
HC-116	43	—	—	LS-121Y	35	—	—
HC-117	43	—	—	LS-140	19	20	V
HP-122	40	40	—	LS-141	8	8	W
HP-123	41	41	—	LS-142	14	—	X
LS-5	6	—	A	LS-143	17	18	Y
LS-6	—	—	B	LS-150	25	6	Z
LS-6L1	—	1, 7	C	LS-151	25	6	Z
LS-6L3	—	1	D	LS-180	37	37	—
LS-6L4	—	1, 7	E	LS-180H	37	37	—
LS-7	—	—	B	LS-181	35	—	—
LS-10	6	31	F	LS-182	35	—	—
LS-10X	6	31	FF	LS-183	35	—	—
LS-12	6	31	FF	LS-184	35	—	—
LS-12X	6	31	FF	LS-185	35	—	—
LS-14	3	31	FF	LS-190	38	38	—
LS-14X	3	31	FF	LS-192	39	39	—
LS-15	12	31	G	LS-950	42	—	—
LS-15X	12	31	GA	LS-980	42	—	—
LS-18	6	—	H	O-1	9	29	AC
LS-19	—	—	I	O-2	9	32	AA
LS-20	—	—	H	O-3	4	29	AD
LS-21	—	—	I	O-4	26	30	AE
LS-22	—	—	B	O-5	26	30	AE
LS-25	—	—	B	O-6	26	32	AF
LS-26	26	31	B	O-7	26	32	AF
LS-27	28	6	K	O-8	27	9	AG
LS-30	6	7	L	O-9	27	9	AG
LS-30X	6	7	L	O-10	34	9	AH
LS-31	12	7	M	O-11	27	9	AG
LS-31X	12	7	M	O-12	16	9	AH
LS-32	3	7	L	O-14	15	30	AE
LS-33	6	1, 7	N	O-15	26	30	AE

P-1 through P-15 same as O-1, etc.



Impedance	Connect To	Join
	<b>1</b>	
1.2 ohms	13 and 18	14 & 18, 13 & 17
2.5	14 and 17	14 & 15, 16 & 17
5	13 and 18	14 and 17
7.5	13 and 18	16 & 18, 13 & 15
10	14 and 17	15 and 16
15	13 and 18	16 and 17
20	14 and 18	15 and 16
30	13 and 18	15 and 16
	<b>2</b>	
1.2 ohms	14 and 17	14 & 15, 16 & 17
2.5	13 and 18	14 and 17
3.75	13 and 18	16 & 18, 13 & 15
5	14 and 17	15 and 16
7.5	13 and 18	16 and 17
10	14 and 18	15 and 16
15	13 and 18	15 and 16
	<b>3</b>	
2.5 ohms	1 and 2	1 & 5, 2 & 6
5.5	2 and 4	2 & 3, 4 & 5
10	2 and 5	1 and 6
15	1 and 4	1 & 3, 4 & 6
22	2 and 5	3 and 4
30	4 and 5	1 and 6
38	2 and 6	3 and 4
60	1 and 6	3 and 4
	<b>4</b>	
7.5 ohms	2 and 4	3 & 4, 1 & 2
30	1 and 4	2 and 3
	<b>5</b>	
30 ohms	1 and 2	
	<b>6</b>	
50 ohms	2 and 4	2 & 3, 4 & 5
125 (or 150)	1 and 4	1 & 3, 4 & 6
200 (or 250)	2 and 5	3 and 4
333	1 and 5	3 and 4
500 (or 600)	1 and 6	3 and 4
	<b>7</b>	
50 ohms	8 and 10	8 & 9, 10 & 11
125 (or 150)	7 and 10	7 & 9, 10 & 12
200 (or 250)	8 and 11	9 and 10
333	7 and 11	9 and 10
500 (or 600)	7 and 12	9 and 10
	<b>8</b>	
500 ohms	1 and 3	2-C.T.
500	4 and 6	5-C.T.
500	7 and 9	8-C.T.
	<b>9</b>	
50 ohms	3 and 4	
200	2 and 4	3-C.T.
500	1 and 5	3-C.T.
	<b>10</b>	
50 ohms	2 and 3	
250	1 and 2	
500	1 and 3	

Impedance	Connect To	Join
	<b>11</b>	
50 ohms	5 and 6	
200	4 and 5	
500	4 and 6	
	<b>12</b>	
Three separate primaries each marked 1, 2, 3, 4.		
30-50 ohms	1 and 4	1 & 2, 3 & 4
150-200-250	1 and 4	2 and 3
	<b>13</b>	
125 ohms	1 and 3	1 & 2, 3 & 4
500	1 and 4	2 and 3
	<b>14</b>	
500 ohms	1 and 3	2-C.T.
500	4 and 6	5-C.T.
	<b>15</b>	
200 ohms	1 and 2	
	<b>16</b>	
50 ohms	6 and 7	7-C.T.
200	6 and 8	
	<b>17</b>	
500 ohms	1 and 3	2-C.T.
	<b>18</b>	
500 ohms	4 and 6	5-C.T.
	<b>19</b>	
500/600 ohm	1 and 4	2 and 3
	<b>20</b>	
500/600 ohm	5 and 8	6 and 7
	<b>21</b>	
2500 ohms	1 and 4	1 & 3, 2 & 4
10,000	1 and 4	2 and 3
	<b>22</b>	
1000 ohms	8 and 11	8 & 9, 10 & 11
1500	7 and 12	7 & 9, 10 & 12
1800	7 and 12	8 and 9
4000	8 and 11	9 and 10
5000	8 and 12	9 and 10
6000	7 and 12	9 and 10
	<b>23</b>	
600 ohms	2 and 3	2 & 6, 3 & 7
1250	1 and 4	1 & 5, 4 & 8
2100	2 and 7	3 and 6
2500	2 and 7	3 and 5
2650	2 and 8	3 and 6
3300	1 and 8	3 and 6
3500	2 and 7	4 and 5
4100	1 and 8	4 and 6
4200	2 and 8	4 and 5
5000	1 and 8	4 and 5



Impedance	Connect To	Join
	<b>24</b>	
5000 ohms 9400	2 and 5 1 and 6	3 and 4 3 and 4
	<b>25</b>	
Primary	7 and 8	
	<b>26</b>	
Primary No. 1 to Plate	1 and 2	
	<b>27</b>	
Primary No. 7 to Plate	7 and 6	
	<b>28</b>	
Primary No. 7 to Plate	7 and 10	8 and 9
	<b>29</b>	
Secondary No. 7 to grid	6 and 7	
	<b>30</b>	
Secondary No. 4 to grid	3 and 4	
	<b>31</b>	
Single grid	7 to grid 10-return	8 and 9
Two grids	7 and 10 to grids	8 & 9-C.T.
	<b>32</b>	
Two grids	6 and 8	7-C.T.
	<b>33</b>	
Two plates	7 and 10	8 & 9-C.T.
	<b>34</b>	
Two plates	6 and 8	7-C.T.
	<b>35</b>	
100 V. 110 120 200 210 220 230 240	1 and 2 1 and 3 1 and 4 1 and 6 1 and 6 1 and 6 1 and 7 1 and 8	1 & 5, 2 & 6 1 & 5, 3 & 7 1 & 5, 4 & 8 2 and 5 3 and 5 4 and 5 4 and 5 4 and 5
	<b>36</b>	
105 V. 115 125	1 and 2 1 and 3 1 and 4	
	<b>37</b>	
Pri. H.V. 6.3V, .6A. 6.3V, 2A.	1 and 2 3 and 5 6 and 8 9 and 11	4-C.T. 7-C.T. 10-C.T.

Impedance	Connect To	Join
	<b>38</b>	
100 V. 105 110 115 120 125 700 } 600 } 6.3 5 2.5	1 and 2 1 and 3 1 and 4 1 and 5 1 and 6 1 and 7 8 and 12 9 and 11 13 and 15 19 and 21 16 and 18	10-C.T. 10-C.T. 14-C.T. 20-C.T. 17-C.T.
	<b>39</b>	
105 V. 115 125 670 } 120 } 5 6.3V, .75A. 6.3V, 5.25A.	1 and 2 1 and 3 1 and 4 5 and 9 6 and 8 10 and 11 12 and 14 15 and 17	7-C.T. 7-C.T. 13-C.T. 16-C.T.
	<b>40</b>	
Pri. H.V. 6.3V, 1.2A. 6.3V, .5A.	1 and 2 3 and 5 6 and 8 9 and 11	4-C.T. 7-C.T. 10-C.T.
	<b>41</b>	
Pri. H.V. 6.3V, 2A. 6.3V, .6A.	1 and 2 3 and 5 6 and 8 9 and 11	4-C.T. 7-C.T. 10-C.T.
	<b>42</b>	
Parallel Series Hum-Bucking	1 and 5 1 and 5 Circuit below	1 & 3, 4 & 5 3 and 4
<p style="text-align: center;"><b>HUM BUCKING CONNECTION</b></p>		
	<b>43</b>	
Parallel Series	1 and 4 1 and 4	1 & 2, 3 & 4 2 and 3
	<b>44</b>	
115 V. Pri. 415 } 415 } 395 } 395 } 6.3V, 5A 5V, 6A	1 and 2 3 and 7 4 and 6 8 and 10 11 and 12	5-C.T. 5-C.T. 9-C.T.

# AUDIO TRANSFORMER SCHEMATICS

