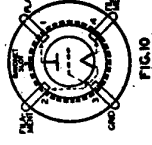
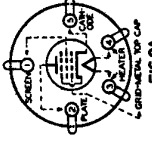
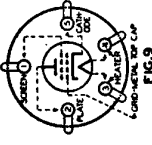
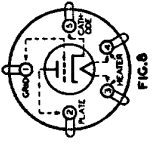
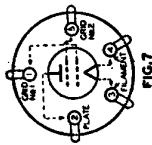
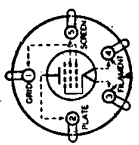


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Detectors
Amplifiers

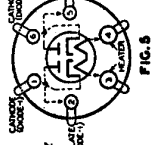
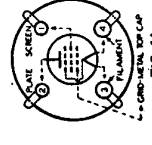
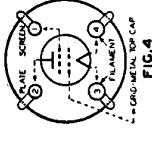
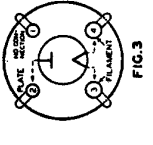
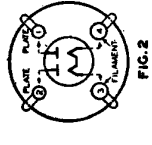
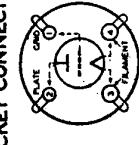
TUBE SYMBOLS
AND BOTTOM VIEWS OF
SOCKET CONNECTIONS



DETECTORS AND AMPLIFIERS

TYPE	PURPOSE	BASE	SOCKET CONNECTIONS	DIMENSIONS MAX. OVERALL	CATHODE TYPE	RATING		PLATE SUPPLY VOLTS	NEGATIVE GRID BIAS VOLTS	SCREEN VOLTS	PLATE CURR. RENT MILLI- AMPS	SCREEN CURR. RENT MILLI- AMPS	A.C. PLATE REACT- ANCE OHMS	MUTUAL CON- STANCE MHO	VOLTAGE GAIN FACTOR	OHMS LOAD FOR POT MILLI- WATTS
						FILAMENT VOLTS	AMPLIFIED VOLTS									
RCA-247	BAND PASS CONVERTER	SMALL 7-PIN	PKC 20	4 1/2" x 1 1/2"	HEATER	2.5	0.8	150	3.0	100	4.0	2.0	300000	1000	100	100
RCA-287	AMPLIFIER	SMALL 7-PIN	FR 21	4 1/2" x 1 1/2"	HEATER	2.5	0.8	150	3.0	100	3.5	1.7	300000	500	100	100
RCA-287	AMPLIFIER	SMALL 7-PIN	FR 21	4 1/2" x 1 1/2"	HEATER	2.5	0.8	150	3.0	100	3.5	1.7	300000	500	100	100
RCA-647	BAND PASS CONVERTER	SMALL 7-PIN	FR 20	4 1/2" x 1 1/2"	HEATER	6.3	0.3	250	3.0	100	4.0	2.0	300000	1000	100	100
RCA-687	AMPLIFIER	SMALL 7-PIN	FR 21	4 1/2" x 1 1/2"	HEATER	6.3	0.3	250	3.0	100	5.8	1.7	300000	1000	100	100
UX-501-A	DETECTOR	SMALL 4-PIN	FR 1	4 1/2" x 1 1/2"	FILAMENT	5.0	0.35	90	4.5	50	0.65	0.15	10000	100	100	100
UX-119-A	DETECTOR	SMALL 4-PIN	FR 1	4 1/2" x 1 1/2"	FILAMENT	5.0	0.35	90	4.5	50	0.65	0.15	10000	100	100	100
RCA-24	BAND PASS CONVERTER	SMALL 4-PIN	FR 9	5 1/2" x 1 1/2"	HEATER	2.5	1.75	180	3.0	100	4.0	2.0	300000	1000	100	100
RCA-24-A	BAND PASS CONVERTER	SMALL 4-PIN	FR 9	5 1/2" x 1 1/2"	HEATER	2.5	1.75	180	3.0	100	4.0	2.0	300000	1000	100	100
RCA-26	AMPLIFIER	SMALL 4-PIN	FR 1	4 1/2" x 1 1/2"	FILAMENT	2.5	1.75	180	3.0	100	4.0	2.0	300000	1000	100	100
UY-527	AMPLIFIER	SMALL 4-PIN	FR 1	4 1/2" x 1 1/2"	FILAMENT	2.5	1.75	180	3.0	100	4.0	2.0	300000	1000	100	100
UY-527	AMPLIFIER	SMALL 4-PIN	FR 1	4 1/2" x 1 1/2"	FILAMENT	2.5	1.75	180	3.0	100	4.0	2.0	300000	1000	100	100
RCA-32	AMPLIFIER	SMALL 4-PIN	FR 4	5 1/2" x 1 1/2"	FILAMENT	2.0	0.06	180	3.0	100	4.0	2.0	300000	1000	100	100
RCA-32	AMPLIFIER	SMALL 4-PIN	FR 4	5 1/2" x 1 1/2"	FILAMENT	2.0	0.06	180	3.0	100	4.0	2.0	300000	1000	100	100
RCA-35	AMPLIFIER	SMALL 4-PIN	FR 4	5 1/2" x 1 1/2"	FILAMENT	2.0	0.06	180	3.0	100	4.0	2.0	300000	1000	100	100
RCA-36	AMPLIFIER	SMALL 4-PIN	FR 4	5 1/2" x 1 1/2"	FILAMENT	2.0	0.06	180	3.0	100	4.0	2.0	300000	1000	100	100
RCA-36	AMPLIFIER	SMALL 4-PIN	FR 4	5 1/2" x 1 1/2"	FILAMENT	2.0	0.06	180	3.0	100	4.0	2.0	300000	1000	100	100
RCA-37	AMPLIFIER	SMALL 4-PIN	FR 4	5 1/2" x 1 1/2"	FILAMENT	2.0	0.06	180	3.0	100	4.0	2.0	300000	1000	100	100
RCA-37	AMPLIFIER	SMALL 4-PIN	FR 4	5 1/2" x 1 1/2"	FILAMENT	2.0	0.06	180	3.0	100	4.0	2.0	300000	1000	100	100
RCA-39	AMPLIFIER	SMALL 4-PIN	FR 4	5 1/2" x 1 1/2"	FILAMENT	2.0	0.06	180	3.0	100	4.0	2.0	300000	1000	100	100
RCA-44	AMPLIFIER	SMALL 4-PIN	FR 4	5 1/2" x 1 1/2"	FILAMENT	2.0	0.06	180	3.0	100	4.0	2.0	300000	1000	100	100
RCA-44	AMPLIFIER	SMALL 4-PIN	FR 4	5 1/2" x 1 1/2"	FILAMENT	2.0	0.06	180	3.0	100	4.0	2.0	300000	1000	100	100
RCA-55	AMPLIFIER	SMALL 4-PIN	FR 4	5 1/2" x 1 1/2"	FILAMENT	2.0	0.06	180	3.0	100	4.0	2.0	300000	1000	100	100
RCA-55	AMPLIFIER	SMALL 4-PIN	FR 4	5 1/2" x 1 1/2"	FILAMENT	2.0	0.06	180	3.0	100	4.0	2.0	300000	1000	100	100
RCA-56	AMPLIFIER	SMALL 4-PIN	FR 4	5 1/2" x 1 1/2"	FILAMENT	2.0	0.06	180	3.0	100	4.0	2.0	300000	1000	100	100
RCA-56	AMPLIFIER	SMALL 4-PIN	FR 4	5 1/2" x 1 1/2"	FILAMENT	2.0	0.06	180	3.0	100	4.0	2.0	300000	1000	100	100
RCA-57	AMPLIFIER	SMALL 4-PIN	FR 4	5 1/2" x 1 1/2"	FILAMENT	2.0	0.06	180	3.0	100	4.0	2.0	300000	1000	100	100
RCA-57	AMPLIFIER	SMALL 4-PIN	FR 4	5 1/2" x 1 1/2"	FILAMENT	2.0	0.06	180	3.0	100	4.0	2.0	300000	1000	100	100
RCA-58	AMPLIFIER	SMALL 4-PIN	FR 4	5 1/2" x 1 1/2"	FILAMENT	2.0	0.06	180	3.0	100	4.0	2.0	300000	1000	100	100
RCA-58	AMPLIFIER	SMALL 4-PIN	FR 4	5 1/2" x 1 1/2"	FILAMENT	2.0	0.06	180	3.0	100	4.0	2.0	300000	1000	100	100
RCA-75	AMPLIFIER	SMALL 4-PIN	FR 11	4 1/2" x 1 1/2"	FILAMENT	6.3	0.3	250	3.0	100	4.0	2.0	300000	1000	100	100
RCA-75	AMPLIFIER	SMALL 4-PIN	FR 11	4 1/2" x 1 1/2"	FILAMENT	6.3	0.3	250	3.0	100	4.0	2.0	300000	1000	100	100
RCA-77	AMPLIFIER	SMALL 4-PIN	FR 11	4 1/2" x 1 1/2"	FILAMENT	6.3	0.3	250	3.0	100	4.0	2.0	300000	1000	100	100
RCA-77	AMPLIFIER	SMALL 4-PIN	FR 11	4 1/2" x 1 1/2"	FILAMENT	6.3	0.3	250	3.0	100	4.0	2.0	300000	1000	100	100
RCA-78	AMPLIFIER	SMALL 4-PIN	FR 11	4 1/2" x 1 1/2"	FILAMENT	6.3	0.3	250	3.0	100	4.0	2.0	300000	1000	100	100
RCA-78	AMPLIFIER	SMALL 4-PIN	FR 11	4 1/2" x 1 1/2"	FILAMENT	6.3	0.3	250	3.0	100	4.0	2.0	300000	1000	100	100
RCA-85	AMPLIFIER	SMALL 4-PIN	FR 18	4 1/2" x 1 1/2"	FILAMENT	6.3	0.3	250	3.0	100	4.0	2.0	300000	1000	100	100
RCA-85	AMPLIFIER	SMALL 4-PIN	FR 18	4 1/2" x 1 1/2"	FILAMENT	6.3	0.3	250	3.0	100	4.0	2.0	300000	1000	100	100
UY-100	AMPLIFIER	SMALL 4-PIN	FR 1	4 1/2" x 1 1/2"	FILAMENT	3.3	0.03	90	4.5	50	0.65	0.15	10000	100	100	100
UY-100	AMPLIFIER	SMALL 4-PIN	FR 1	4 1/2" x 1 1/2"	FILAMENT	3.3	0.03	90	4.5	50	0.65	0.15	10000	100	100	100
RCA-88A	AMPLIFIER	SMALL 4-PIN	FR 1	4 1/2" x 1 1/2"	FILAMENT	3.3	0.03	90	4.5	50	0.65	0.15	10000	100	100	100
RCA-88A	AMPLIFIER	SMALL 4-PIN	FR 1	4 1/2" x 1 1/2"	FILAMENT	3.3	0.03	90	4.5	50	0.65	0.15	10000	100	100	100

TUBE SYMBOLS
AND BOTTOM VIEWS OF
SOCKET CONNECTIONS



* For Grid-leak Detectors—plate volts 45, grid returns to + filament or to cathode.
† Applied through plate coupling resistor of 250000 ohms.
‡ Grids #3 and #5 are screen. Grid #4 is signal-input control grid.
§ Dimensions are for Pin-to-Pin only.

‡ Applied through plate coupling resistor of 50000 ohms or 500 lamp filament for 250000 ohms.
§ Dimensions are for Pin-to-Pin only.

‡ Applied through plate coupling resistor of 50000 ohms.
§ Dimensions are for Pin-to-Pin only.

* For Grid-leak Detectors—plate volts 45, grid returns to + filament or to cathode.
† Applied through plate coupling resistor of 250000 ohms.
‡ Grids #3 and #5 are screen. Grid #4 is signal-input control grid.
§ Dimensions are for Pin-to-Pin only.

**Power Amplifiers
Rectifiers
Photo Tubes**

R.C.A. RADIOTRON CO.

TUBE SYMBOLS AND BOTTOM VIEWS OF SOCKET CONNECTIONS

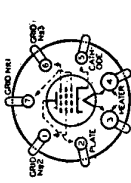


FIG. 18

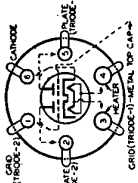


FIG. 19

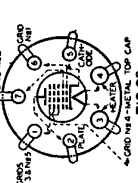


FIG. 20

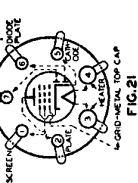


FIG. 21

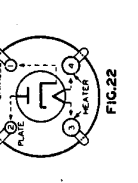


FIG. 22

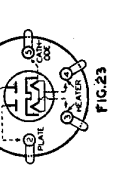


FIG. 23

TYPE	PURPOSE	BASE	SOCKET CONNECTIONS	DIMENSIONS MAX. OVERALL		CATHODE TYPE	BATHING		PLATE SUPPLY VOLTS	NEGATIVE GRID BIAS VOLTS	SCREEN VOLTS	SCREEN CURR. MILLI-AMPS	PLATE CURR. MILLI-AMPS	SCREEN CURR. MILLI-AMPS	A-C PLATE RESISTANCE OHMS	MUTUAL INDUCTIVE REACTANCE MICROHMS	VOLTAGE AMPLIFYING FACTOR	RMS LOAD POWER OUTPUT WATTS
				LENGTH	DIA.		FILAMENT OR HEATER VOLTS	WATER										
RCA-243	POWER AMPLIFIER	MEDIUM 4-PIN	FIG. 1	5 1/2"	2 1/2"	FILAMENT	2.5	2.5	250	43.0	45.0	60.0	60.0	300	1500	4.2	2500	3500
RCA-245	POWER AMPLIFIER	MEDIUM 4-PIN	FIG. 1A	4 1/2"	1 1/2"	HEATER	2.5	1.75	250	16.5	25.0	34.0	34.0	6.5	100000	220	7000	3000
RCA-10	POWER AMPLIFIER	MEDIUM 4-PIN	FIG. 1	5 1/2"	2 1/2"	FILAMENT	2.5	2.5	350	37.0	31.0	16.0	16.0	3.0	5150	8.0	11000	500
UX-20	POWER AMPLIFIER	SMALL 4-PIN	FIG. 1	4 1/2"	1 1/2"	FILAMENT	2.5	1.25	435	39.0	39.0	9.0	9.0	6.00	415	3.3	9600	45
RCA-31	POWER AMPLIFIER	SMALL 4-PIN	FIG. 1	4 1/2"	1 1/2"	FILAMENT	2.0	0.130	180	22.5	22.5	6.5	6.5	4.00	925	3.8	7000	375
RCA-33	POWER AMPLIFIER	MEDIUM 4-PIN	FIG. 1	4 1/2"	1 1/2"	FILAMENT	2.0	0.26	180	30.0	30.0	12.2	12.2	4.00	1050	3.8	7000	375
RCA-38	POWER AMPLIFIER	SMALL 4-PIN	FIG. 1A	4 1/2"	1 1/2"	HEATER	6.3	0.3	135	13.5	13.5	3.0	3.0	4.000	1450	5.0	6500	700
RCA-41	POWER AMPLIFIER	SMALL 4-PIN	FIG. 1A	4 1/2"	1 1/2"	HEATER	6.3	0.4	135	13.5	13.5	3.0	3.0	4.000	1450	5.0	6500	700
RCA-42	POWER AMPLIFIER	SMALL 4-PIN	FIG. 1A	4 1/2"	1 1/2"	HEATER	6.3	0.7	180	18.0	18.0	3.0	3.0	4.000	1450	5.0	6500	700
RCA-43	POWER AMPLIFIER	MEDIUM 4-PIN	FIG. 1A	4 1/2"	1 1/2"	HEATER	25.0	0.3	135	13.5	13.5	3.0	3.0	4.000	1450	5.0	6500	700
RCA-45	POWER AMPLIFIER	MEDIUM 4-PIN	FIG. 1	5 1/2"	2 1/2"	FILAMENT	2.5	1.5	275	30.0	31.5	34.0	34.0	7.0	35000	80	4000	2000
RCA-46	POWER AMPLIFIER	MEDIUM 4-PIN	FIG. 1	5 1/2"	2 1/2"	FILAMENT	2.5	1.75	250	31.5	33.0	22.0	22.0	230	2350	5.6	6400	1250
RCA-47	POWER AMPLIFIER	MEDIUM 4-PIN	FIG. 1	5 1/2"	2 1/2"	FILAMENT	2.5	1.75	400	30.0	0	0	0	0	0	0	0	0
RCA-48	POWER AMPLIFIER	MEDIUM 4-PIN	FIG. 1A	5 1/2"	2 1/2"	FILAMENT	2.5	1.75	250	15.0	16.5	25.0	25.0	6.0	60000	250	900	3700
RCA-49	POWER AMPLIFIER	MEDIUM 4-PIN	FIG. 1A	5 1/2"	2 1/2"	HEATER	30.0	0.4	135	21.5	21.5	10.0	10.0	9.0	10000	280	2000	1500
UX-50	POWER AMPLIFIER	MEDIUM 4-PIN	FIG. 1	4 1/2"	1 1/2"	FILAMENT	2.0	0.12	180	20.0	0	5.7	5.7	4000	1125	4.5	6000	170
RCA-59	POWER AMPLIFIER	MEDIUM 4-PIN	FIG. 1B	5 1/2"	2 1/2"	HEATER	2.5	2.0	250	18.0	18.0	25.0	25.0	9.0	40000	250	6000	3000
RCA-59	POWER AMPLIFIER	MEDIUM 4-PIN	FIG. 1B	5 1/2"	2 1/2"	HEATER	2.5	2.0	250	18.0	18.0	25.0	25.0	9.0	40000	250	6000	3000
RCA-59	POWER AMPLIFIER	MEDIUM 4-PIN	FIG. 1B	5 1/2"	2 1/2"	HEATER	2.5	2.0	400	40.0	0	0	0	0	0	0	0	0
RCA-71A	POWER AMPLIFIER	MEDIUM 4-PIN	FIG. 1	4 1/2"	1 1/2"	FILAMENT	5.0	0.25	180	35.0	39.5	17.3	17.3	1840	1650	3.0	4800	400
RCA-70	POWER AMPLIFIER	SMALL 4-PIN	FIG. 1A	4 1/2"	1 1/2"	HEATER	6.3	0.6	180	40.5	43.0	20.0	20.0	1750	1700	3.0	4800	750
RCA-89	POWER AMPLIFIER	SMALL 4-PIN	FIG. 1A	4 1/2"	1 1/2"	HEATER	6.3	0.4	180	20.0	20.0	17.0	17.0	3000	1570	4.7	7000	300
RCA-89	POWER AMPLIFIER	SMALL 4-PIN	FIG. 1A	4 1/2"	1 1/2"	HEATER	6.3	0.4	180	22.5	22.5	15.5	15.5	2750	1790	5.7	6000	500
RCA-89	POWER AMPLIFIER	SMALL 4-PIN	FIG. 1A	4 1/2"	1 1/2"	HEATER	6.3	0.4	180	18.0	18.0	12.0	12.0	4250	1635	135	8000	1500
RCA-89	POWER AMPLIFIER	SMALL 4-PIN	FIG. 1A	4 1/2"	1 1/2"	HEATER	6.3	0.4	180	0	0	0	0	0	0	0	0	0

*Grid #1 is control grid. Grid #2 and #3 tied to plate.
*Grid #1 and #2 connected together. Grid #3 tied to plate.

RECTIFIERS

TYPE	PURPOSE	BASE	SOCKET CONNECTIONS	MAX. OVERALL LENGTH	MAX. OVERALL DIA.	CATHODE TYPE	FILAMENT OR HEATER VOLTS	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
RCA-523	FULL-WAVE RECTIFIER	MEDIUM 4-PIN	FIG. 2	5 1/2"	2 1/2"	FILAMENT	5.0	3.0	AC	0	0	0	0	0	0	0	0	0	0
RCA-523	FULL-WAVE RECTIFIER	SMALL 4-PIN	FIG. 2	4 1/2"	1 1/2"	HEATER	25.0	0.3	AC	0	0	0	0	0	0	0	0	0	0
RCA-1	FULL-WAVE RECTIFIER	SMALL 4-PIN	FIG. 2	4 1/2"	1 1/2"	HEATER	6.3	0.3	AC	0	0	0	0	0	0	0	0	0	0
RCA-80	FULL-WAVE RECTIFIER	MEDIUM 4-PIN	FIG. 2	5 1/2"	2 1/2"	FILAMENT	5.0	3.0	AC	0	0	0	0	0	0	0	0	0	0
UX-81	FULL-WAVE RECTIFIER	MEDIUM 4-PIN	FIG. 2	5 1/2"	2 1/2"	FILAMENT	7.5	1.25	AC	0	0	0	0	0	0	0	0	0	0
RCA-82	FULL-WAVE RECTIFIER	MEDIUM 4-PIN	FIG. 2	4 1/2"	1 1/2"	FILAMENT	2.5	3.0	AC	0	0	0	0	0	0	0	0	0	0
RCA-83	FULL-WAVE RECTIFIER	MEDIUM 4-PIN	FIG. 2	5 1/2"	2 1/2"	FILAMENT	5.0	3.0	AC	0	0	0	0	0	0	0	0	0	0
RCA-84	FULL-WAVE RECTIFIER	SMALL 4-PIN	FIG. 2	4 1/2"	1 1/2"	HEATER	6.3	0.5	AC	0	0	0	0	0	0	0	0	0	0
RCA-880	FULL-WAVE RECTIFIER	MEDIUM 4-PIN	FIG. 1A	6 1/2"	2 1/2"	FILAMENT	2.5	5.0	AC	0	0	0	0	0	0	0	0	0	0

*Two grids tied together. *Grid #2 tied to plate.
*Grid #1 and #2 connected together. Grid #3 tied to plate.

PHOTO TUBES

TYPE	PURPOSE	BASE	SOCKET CONNECTIONS	MAX. OVERALL LENGTH	MAX. OVERALL DIA.	CATHODE TYPE	FILAMENT OR HEATER VOLTS	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
RCA-988	PHOTOTUBE	SMALL 4-PIN	FIG. 1	4 1/2"	1 1/2"	FILAMENT	2.5	1.75	50 Volts	0	0	0	0	0	0	0	0	0	0

*Mercury Vapor Type. Tube Voltage Drop is 15 volts, approx.
*Max. Anode Supply Voltage... 50 Volts
*Max. Anode Current... 20 Microamperes
*Sat. Sensitivity... 55 Microamperes per Lumen.
*Dynamic Sensitivity... 50 and 48 Microamperes per Lumen at 1000 and 10000 Hz, respectively.
*Near Pin #1 and #2 - No Connection. Pin #3 - Cathode. Pin #4 - Control. Pin #5 - Plate. Pin #6 - No Connection.
*The first digits of many type numbers have been dropped. These types are identified now by the last two digits only.

TUBE SYMBOLS AND BOTTOM VIEWS OF SOCKET CONNECTIONS

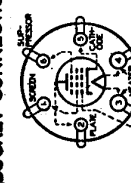


FIG. 11

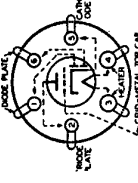


FIG. 13

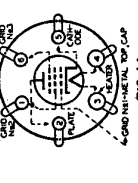


FIG. 14

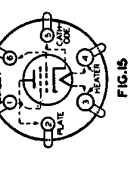


FIG. 15

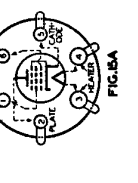


FIG. 16

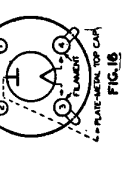


FIG. 18