

# PHILCO

REG. U.S. PAT. OFF.

## Essential Service Data on All Models

Model No.	Power Input (Watts)	I.F. (K.C.)	Tubes Used	†Tube Socket Voltages																																																																																																																					
				Circuit	R.F.	Det. Osc.	I.F.	A.V.C. 2nd Det.	1st A.F.	Driver (2nd A.F.)	Output (Class "A")		Rectifier																																																																																																												
<b>14</b> (Code 126 & 226) See Model 91				<table border="1"> <thead> <tr> <th>Type Tube</th> <th>78</th> <th>6A7</th> <th>78</th> <th>37</th> <th>77</th> <th>42</th> <th>42</th> <th>42</th> <th>80</th> </tr> </thead> <tbody> <tr> <td>Filament Volts—F to F</td> <td>6.3</td> <td>6.3</td> <td>6.3</td> <td>6.3</td> <td>6.3</td> <td>6.3</td> <td>6.3</td> <td>6.3</td> <td>6.3</td> <td>5.0</td> </tr> <tr> <td>Plate Volts—P to K</td> <td>210</td> <td>210</td> <td>220</td> <td>...</td> <td>80</td> <td>205</td> <td>275</td> <td>275</td> <td>...</td> <td>340</td> </tr> <tr> <td>Screen Grid Volts—SG to K (Type 6A7—G3-5 to K)</td> <td>90</td> <td>90</td> <td>90</td> <td>...</td> <td>40</td> <td>205</td> <td>280</td> <td>280</td> <td>...</td> <td>...</td> </tr> <tr> <td>Control Grid Volts—CG to K (Type 6A7—G4 to K)</td> <td>.4</td> <td>.1</td> <td>3.2</td> <td>...</td> <td>4</td> <td>5</td> <td>4</td> <td>28</td> <td>28</td> <td>...</td> </tr> <tr> <td>Cathode Volts—K to F</td> <td>2.7</td> <td>2.7</td> <td>3.2</td> <td>...</td> <td>...</td> <td>...</td> <td>...</td> <td>...</td> <td>...</td> <td>...</td> </tr> <tr> <td>Type 6A7—G1 to K</td> <td>...</td> <td>30</td> <td>...</td> <td>...</td> <td>...</td> <td>...</td> <td>...</td> <td>...</td> <td>...</td> <td>...</td> </tr> <tr> <td>Type 6A7—G2 to K</td> <td>...</td> <td>170</td> <td>...</td> <td>...</td> <td>...</td> <td>...</td> <td>...</td> <td>...</td> <td>...</td> <td>...</td> </tr> </tbody> </table>										Type Tube	78	6A7	78	37	77	42	42	42	80	Filament Volts—F to F	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	5.0	Plate Volts—P to K	210	210	220	...	80	205	275	275	...	340	Screen Grid Volts—SG to K (Type 6A7—G3-5 to K)	90	90	90	...	40	205	280	280	...	...	Control Grid Volts—CG to K (Type 6A7—G4 to K)	.4	.1	3.2	...	4	5	4	28	28	...	Cathode Volts—K to F	2.7	2.7	3.2	...	...	...	...	...	...	...	Type 6A7—G1 to K	...	30	...	...	...	...	...	...	...	...	Type 6A7—G2 to K	...	170	...	...	...	...	...	...	...	...																					
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<b>14</b> (Code 122)	110	175	2-78, 1-6A7, 1-37, 1-77, 3-42, 1-80																																																																																																																						
<b>15</b>	115	175	4-37, 3-44, 2-42, 1-80	<table border="1"> <thead> <tr> <th>Tube</th> <th>Filament Volts F to F</th> <th>Plate Volts P to K</th> <th>Screen Grid Volts SG to K</th> <th>Control Grid Volts CG to K</th> <th>Cathode Volts K to F</th> </tr> </thead> <tbody> <tr> <td>44 R. F.</td> <td>6.3</td> <td>165</td> <td>55</td> <td>15.</td> <td>30</td> </tr> <tr> <td>44 1st Det.</td> <td>6.3</td> <td>250</td> <td>90</td> <td>85</td> <td>10</td> </tr> <tr> <td>37 Osc.</td> <td>6.3</td> <td>80</td> <td>...</td> <td>15.</td> <td>10</td> </tr> <tr> <td>44 1st I. F.</td> <td>6.3</td> <td>250</td> <td>90</td> <td>85</td> <td>10</td> </tr> <tr> <td>44 2nd I. F.</td> <td>6.3</td> <td>275</td> <td>90</td> <td>3.3</td> <td>10</td> </tr> <tr> <td>37 Det.-Rect.</td> <td>6.3</td> <td>0</td> <td>...</td> <td>.2</td> <td>10</td> </tr> <tr> <td>37 1st Audio</td> <td>6.3</td> <td>75</td> <td>...</td> <td>.4</td> <td>10</td> </tr> <tr> <td>37 2nd Audio</td> <td>6.3</td> <td>100</td> <td>...</td> <td>.2</td> <td>10</td> </tr> <tr> <td>42 P. P. Output</td> <td>6.3</td> <td>255</td> <td>270</td> <td>15</td> <td>15</td> </tr> <tr> <td>42 P. P. Output</td> <td>6.3</td> <td>255</td> <td>270</td> <td>15</td> <td>15</td> </tr> <tr> <td>80 Rectifier</td> <td>5.0</td> <td>320/Plate</td> <td>...</td> <td>...</td> <td>15</td> </tr> </tbody> </table>										Tube	Filament Volts F to F	Plate Volts P to K	Screen Grid Volts SG to K	Control Grid Volts CG to K	Cathode Volts K to F	44 R. F.	6.3	165	55	15.	30	44 1st Det.	6.3	250	90	85	10	37 Osc.	6.3	80	...	15.	10	44 1st I. F.	6.3	250	90	85	10	44 2nd I. F.	6.3	275	90	3.3	10	37 Det.-Rect.	6.3	0	...	.2	10	37 1st Audio	6.3	75	...	.4	10	37 2nd Audio	6.3	100	...	.2	10	42 P. P. Output	6.3	255	270	15	15	42 P. P. Output	6.3	255	270	15	15	80 Rectifier	5.0	320/Plate	...	...	15																																				
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<b>16</b> All-Wave (& 500-501 Phonos) 540 K.C.—23 M.C.	130 (Code 122) 120 (Code 121)	460	1-76, 2-77, 3-78, 3-42, 1-37, 1-5Z3 (1-80 replaces 1-5Z3 in Code 121, 16-B)	<table border="1"> <thead> <tr> <th>Circuit</th> <th>1st Det.</th> <th>Osc.</th> <th>1st I.F.</th> <th>2nd I.F.</th> <th>2nd Det.</th> <th>Inter-Station Noise Suppr. Circuit</th> <th>1st A.F.</th> <th>2nd A.F. (Driver)</th> <th colspan="2">Output</th> <th>Rectifier</th> </tr> </thead> <tbody> <tr> <td>Type Tube</td> <td>77</td> <td>78</td> <td>78</td> <td>78</td> <td>37</td> <td>78</td> <td>77</td> <td>42</td> <td>42</td> <td>42</td> <td>5-2-3</td> </tr> <tr> <td>Filament Volts—F to F</td> <td>6.3</td> <td>6.3</td> <td>6.3</td> <td>6.3</td> <td>6.3</td> <td>6.3</td> <td>6.3</td> <td>6.3</td> <td>6.3</td> <td>6.3</td> <td>4.7</td> </tr> <tr> <td>Plate Volts—P to K</td> <td>220</td> <td>53</td> <td>225</td> <td>230</td> <td>0</td> <td>1.8</td> <td>130</td> <td>220</td> <td>340</td> <td>340</td> <td>400</td> </tr> <tr> <td>Screen Grid Volts—SG to K</td> <td>80</td> <td>...</td> <td>80</td> <td>80</td> <td>...</td> <td>1.8</td> <td>1.8</td> <td>220</td> <td>340</td> <td>340</td> <td>...</td> </tr> <tr> <td>Control Grid Volts—CG to K</td> <td>1.6</td> <td>6.4</td> <td>0</td> <td>0</td> <td>.2</td> <td>1.6</td> <td>.4</td> <td>.6</td> <td>34</td> <td>34</td> <td>...</td> </tr> <tr> <td>Cathode Volts—K to F</td> <td>4.2</td> <td>1.9</td> <td>2.2</td> <td>2.5</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>...</td> </tr> </tbody> </table>										Circuit	1st Det.	Osc.	1st I.F.	2nd I.F.	2nd Det.	Inter-Station Noise Suppr. Circuit	1st A.F.	2nd A.F. (Driver)	Output		Rectifier	Type Tube	77	78	78	78	37	78	77	42	42	42	5-2-3	Filament Volts—F to F	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	4.7	Plate Volts—P to K	220	53	225	230	0	1.8	130	220	340	340	400	Screen Grid Volts—SG to K	80	...	80	80	...	1.8	1.8	220	340	340	...	Control Grid Volts—CG to K	1.6	6.4	0	0	.2	1.6	.4	.6	34	34	...	Cathode Volts—K to F	4.2	1.9	2.2	2.5	0	0	0	0	0	0	...																								
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<b>16</b> (Code 125) 540 K.C.—22.5 M.C.	120	460	3-78, 2-77, 1-76, 1-37, 3-42, 1-80	<table border="1"> <thead> <tr> <th>Tube Function</th> <th>78 R.F.</th> <th>77 1st Det.</th> <th>76 Osc.</th> <th>78 1st I.F.</th> <th>78 2nd I.F.</th> <th>37 2nd Det.</th> <th>77 1st Aud.</th> <th>42 Driver</th> <th>42 Output</th> <th>80 Rect.</th> </tr> </thead> <tbody> <tr> <td>F to F</td> <td>6.3</td> <td>6.3</td> <td>6.3</td> <td>6.3</td> <td>6.3</td> <td>6.3</td> <td>6.3</td> <td>6.3</td> <td>6.3</td> <td>5.0</td> </tr> <tr> <td>P to K</td> <td>175</td> <td>185</td> <td>70</td> <td>180</td> <td>180</td> <td>0</td> <td>60</td> <td>190</td> <td>275 ea.</td> <td>...</td> </tr> <tr> <td>SG to K</td> <td>65</td> <td>62</td> <td>...</td> <td>65</td> <td>65</td> <td>...</td> <td>48</td> <td>190</td> <td>275 ea.</td> <td>...</td> </tr> <tr> <td>K to Gnd.</td> <td>2.4</td> <td>4.8</td> <td>5.4</td> <td>2.3</td> <td>2.5</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>...</td> </tr> </tbody> </table>										Tube Function	78 R.F.	77 1st Det.	76 Osc.	78 1st I.F.	78 2nd I.F.	37 2nd Det.	77 1st Aud.	42 Driver	42 Output	80 Rect.	F to F	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	5.0	P to K	175	185	70	180	180	0	60	190	275 ea.	...	SG to K	65	62	...	65	65	...	48	190	275 ea.	...	K to Gnd.	2.4	4.8	5.4	2.3	2.5	0	0	0	0	...																																																					
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K to Gnd.	2.8	5.8	6.1	2.8	3.3	0	0	0	0	...																																																																																																															
<b>17</b>	130 (Code 122) 120 (Code 121)	175	1-6A7, 3-78, 2-37, 1-77, 3-42, 1-5Z3 (1-80 replaces 1-5Z3 in Code 121, 17B)	<table border="1"> <thead> <tr> <th>Circuit</th> <th>R.F.</th> <th>1st Det. Osc.</th> <th>I.F.</th> <th>2nd Det.</th> <th>A. V. C.</th> <th>Inter-Station Noise Suppr. Cr.</th> <th>1st A.F.</th> <th>Driver (2nd A.F.)</th> <th colspan="2">Output (Class A)</th> <th>Rectifier</th> </tr> </thead> <tbody> <tr> <td>Type Tube</td> <td>78</td> <td>6A7</td> <td>78</td> <td>37</td> <td>37</td> <td>78</td> <td>77</td> <td>42</td> <td>42</td> <td>42</td> <td>5Z3</td> </tr> <tr> <td>Filament Volts—F to F</td> <td>6.3</td> <td>6.3</td> <td>6.3</td> <td>6.3</td> <td>6.3</td> <td>6.3</td> <td>6.3</td> <td>6.3</td> <td>6.3</td> <td>6.3</td> <td>4.7</td> </tr> <tr> <td>Plate Volts—P to K</td> <td>220</td> <td>220</td> <td>225</td> <td>0</td> <td>0</td> <td>45</td> <td>45</td> <td>230</td> <td>340</td> <td>340</td> <td>400</td> </tr> <tr> <td>Screen Grid Volts—SG to K (6A7-G3-5 to K)</td> <td>75</td> <td>58</td> <td>75</td> <td>—</td> <td>—</td> <td>50</td> <td>50</td> <td>230</td> <td>340</td> <td>340</td> <td>...</td> </tr> <tr> <td>Control Grid Volts—CG to K (6A7-G4 to K)</td> <td>Negligible</td> <td>Negligible</td> <td>3.7</td> <td>.25</td> <td>.25</td> <td>.24</td> <td>.24</td> <td>.24</td> <td>34</td> <td>34</td> <td>...</td> </tr> <tr> <td>Cathode Volts—K to F</td> <td>0</td> <td>0</td> <td>3.7</td> <td>0</td> <td>11.</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>...</td> </tr> <tr> <td>Type 6A7-G1 to K</td> <td>22</td> <td>...</td> <td>...</td> <td>...</td> <td>...</td> <td>...</td> <td>...</td> <td>...</td> <td>...</td> <td>...</td> <td>...</td> </tr> <tr> <td>Type 6A7-G2 to K</td> <td>140</td> <td>...</td> <td>...</td> <td>...</td> <td>...</td> <td>...</td> <td>...</td> <td>...</td> <td>...</td> <td>...</td> <td>...</td> </tr> </tbody> </table>										Circuit	R.F.	1st Det. Osc.	I.F.	2nd Det.	A. V. C.	Inter-Station Noise Suppr. Cr.	1st A.F.	Driver (2nd A.F.)	Output (Class A)		Rectifier	Type Tube	78	6A7	78	37	37	78	77	42	42	42	5Z3	Filament Volts—F to F	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	4.7	Plate Volts—P to K	220	220	225	0	0	45	45	230	340	340	400	Screen Grid Volts—SG to K (6A7-G3-5 to K)	75	58	75	—	—	50	50	230	340	340	...	Control Grid Volts—CG to K (6A7-G4 to K)	Negligible	Negligible	3.7	.25	.25	.24	.24	.24	34	34	...	Cathode Volts—K to F	0	0	3.7	0	11.	0	0	0	0	0	...	Type 6A7-G1 to K	22	...	...	...	...	...	...	...	...	...	...	Type 6A7-G2 to K	140	...	...	...	...	...	...	...	...	...	...
				Circuit	R.F.	1st Det. Osc.	I.F.	2nd Det.	A. V. C.	Inter-Station Noise Suppr. Cr.	1st A.F.	Driver (2nd A.F.)	Output (Class A)		Rectifier																																																																																																										
Type Tube	78	6A7	78	37	37	78	77	42	42	42	5Z3																																																																																																														
Filament Volts—F to F	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	4.7																																																																																																														
Plate Volts—P to K	220	220	225	0	0	45	45	230	340	340	400																																																																																																														
Screen Grid Volts—SG to K (6A7-G3-5 to K)	75	58	75	—	—	50	50	230	340	340	...																																																																																																														
Control Grid Volts—CG to K (6A7-G4 to K)	Negligible	Negligible	3.7	.25	.25	.24	.24	.24	34	34	...																																																																																																														
Cathode Volts—K to F	0	0	3.7	0	11.	0	0	0	0	0	...																																																																																																														
Type 6A7-G1 to K	22	...	...	...	...	...	...	...	...	...	...																																																																																																														
Type 6A7-G2 to K	140	...	...	...	...	...	...	...	...	...	...																																																																																																														

†Line Voltage 120. Readings made direct from tube sockets on underside of chassis, using test prods, and high resistance D. C. voltmeter for D. C. voltages; A. C. voltmeter for A. C. voltages. Volume control of set at maximum.

Model No.	Power Input (Watts)	I.F. (K.C.)	Tubes Used	†Tube Socket Voltages								
				Circuit	R.F.	Det. Osc.	I.F.	2nd Det. & 1st A.F.	Driver (2nd A.F.)	Output (Class "A")	Rectifier	
<b>18</b> (Codes 121-2-3-4) (& 503 Phono.)	110	260	1-6A7, 2-78, 1-75, 3-42, 1-80	Type Tube	78	6A7	78	75	42	42	42	80
				Filament Volts—F to F.	6.3	6.3	6.3	6.3	6.3	6.3	6.3	5.0
				Plate Volts—P to K.	210	210	210	120	205	280	280	350
				Screen Grid Volts—SG to K (Type 6A7—G3-5 to K)	80	80	80	...	200	300	300	...
				Control Grid Volts—CG to K (Type 6A7—G4 to K)	.3	.15	5.3	.3	.35	28.	28.	...
<b>19</b> (Codes 121-126) (& 27 Phono.)	60	260	2-44, 1-36, 1-75, 1-42, 1-80	Circuit	R.F.	Det. Osc.	I.F.	2nd Det.	Output	Rectifier		
				Type Tube	44	36	44	75	42	80		
				Filament Volts—F to F.	6.3	6.3	6.3	6.3	6.3	5.0		
				Plate Volts—P to K.	235	230	240	175	235	350/Plate		
				Screen Grid Volts—SG to K.	90	90	90	...	245	...		
<b>19</b> (Code 128)	70	260	2-44, 1-36, 1-75, 1-42, 1-80	Circuit	R.F.	Det. Osc.	I.F.	2nd Det.	Output	Rectifier		
				Type Tube	44	36	44	75	42	80		
				Filament Volts—F to F.	6.3	6.3	6.3	6.3	6.3	5.0		
				Plate Volts—P to K.	225	225	225	150	270	350/Plate		
				Screen Grid Volts—SG to K.	100	100	100	...	290	...		
<b>20</b>	75	1400 (Adj. Freq.)	3-24, 1-27, 2-71A, 1-80	Type	Circuit	Filament Voltage	Plate Voltage	Grid Voltage	Screen Grid Voltage	Cathode Voltage	Plate Milli-amperes	
				24	1st R.F.	2.2	225	2.8	82.0	10	3.0	
				24	2d R.F.	2.2	130	2.8	82.0	10	3.0	
				24	Detector	2.2	30	1.0	2.0	8	...	
				27	1st Audio	2.3	115	...	...	7	3.0	
<b>28</b> A.C.—D.C. Two-band: 540-1720 K.C. 4.2-13. M.C.	50	460	1-6A7, 2-39/44, 1-75, 1-43, 1-25Z5	ON LINE VOLTAGE 120 A.C.								
				Type Tube	6A7	39-44	39-44	75	43	25Z5		
				Plate (P to K)	100	100	98	45	95	120		
				Screen Grid (SG to K)	(G1 = 8) (G2 = 80) (G3&5 = 60)	100	100	..	100	...		
				Total Filament Voltage—75.	ON LINE VOLTAGE 120 D.C.							
Type Tube	6A7	39-44	39-44	75	43	25Z5						
Plate (P to K)	95	95	85	40	90	...						
Screen Grid (SG to K)	(G1 = 10) (G2 = 80) (G3&5 = 60)	95	95	..	95	...						
Total Filament Voltage—83.	ON LINE VOLTAGE 83.											
Type Tube	6A7	39-44	39-44	75	43	25Z5						
Plate (P to K)	95	95	85	40	90	...						
Screen Grid (SG to K)	(G1 = 10) (G2 = 80) (G3&5 = 60)	95	95	..	95	...						
Total Filament Voltage—83.	ON LINE VOLTAGE 83.											
Type Tube	6A7	39-44	39-44	75	43	25Z5						
Plate (P to K)	95	95	85	40	90	...						
Screen Grid (SG to K)	(G1 = 10) (G2 = 80) (G3&5 = 60)	95	95	..	95	...						
Total Filament Voltage—83.	ON LINE VOLTAGE 83.											
<b>29</b> Two-band: 540-1720 K.C. 4.2-13. M.C.	70	460	1-6A7, 2-39/44, 1-75, 1-42, 1-80	Function	Det. Osc.	1st I.F.	2nd I.F.	2nd Det.	Output	Rectifier		
				Type	6A7	33/44	39/44	75	42	80		
				Filament (F to F)	6.3	6.3	6.3	6.3	6.3	5.0		
				Plate (P to K)	210	200	200	200	300	310		
				Screen (SG to K)	80	80	80	...	315	...		
<b>30</b> (Battery Operated)	See Table for Plate Current	Tuned R.F. 1200-1400 Adj. Freq.	3-32, 3-30, 2-31	Tube	Circuit	Filament Volts	Plate Volts	Grid Volts	Plate Current Milliamperes	Screen Grid Volts		
				32	1st R.F.	2.0	150	..	.0015	60		
				32	2nd R.F.	2.0	150	..	.0015	58		
				32	3rd R.F.	2.0	150	..	.0015	58		
				30	Detector Rectifier	2.0	..	..	..	..		
<b>32</b> (32-volt D.C.)	50-70	260	1-36, 2-44, 1-75, 1-42, 1-84	LINE VOLTAGE 34 VOLTS								
				Circuit	R.F.	Det. Osc.	I.F.	A.F.	Output	Rect.		
				Type Tube	39/44	36	39/44	75	42	84		
				Filament Volts	6.8	6.8	6.8	6.8	6.8	6.8		
				Plate Volts	205	200	235	155	220	300		

†Line Voltage 120. Readings made direct from tube sockets on underside of chassis, using test prods, and high resistance D. C. voltmeter for D. C. voltages; A. C. voltmeter for A. C. voltages. Volume control of set at maximum. \*4 Volts with Volume Control "off".

Model No. Power Input (Watts) I.F. (K.C.) Tubes Used

34	Filament Current 750 M.A. Total Plate Current is from 16-19 M.A.	460	2-34, 2-30, 1-1C6, 1-32, 1-19 (34A uses also 1-1C1)	Type Tubes		Circuit	
				1C8	1C8	1st I.F. 2nd I.F.	1st A.F. Driver Output

35	Plate Current 23 M.A.	260	3-30, 3-32, 1-33	Type Tubes		Circuit	
				1C8	1C8	1st I.F. 2nd I.F. 1st A.F.	1st A.F. Milliamperes Plate Current Screen Grid Volts

37	Current 720 M.A. Plate 8-12 M.A.	175	1-15, 2-32, 1-30, 1-19, 1-19, 1-No. 6 (ballast)	Type Tubes		Circuit	
				1C8	1C8	1st I.F. 2nd I.F. 1st A.F.	1st A.F. Output

38	Fil. Cur. 720 M.A. Plate Cur. 8-12 M.A.	460	1-15, 2-32, 1-30, 1-19 (38A uses also 1-No. 6, ballast)	Type Tubes		Circuit	
				1C8	1C8	1st I.F. 2nd I.F. 1st A.F.	1st A.F. Output

38	Fil. Cur. 720 M.A. Plate Cur. 8-12 M.A.	460	1-1A6, 2-32, 1-30, 1-19 (38A uses 1-1A1 ballast)	Type Tubes		Circuit	
				1C8	1C8	1st I.F. 2nd I.F. 1st A.F.	1st A.F. Output

39	Fil. Cur. 670 M.A. Plate Cur. 19 M.A.	460	1-1C6, 1-34, 2-30, 1-32, 1-19 (Model 39-A uses also 1 type 6 bal- last)	Type Tubes		Circuit	
				1C8	1C8	1st I.F. 2nd I.F. 1st A.F.	1st A.F. Output

40, 41 & 42	Tuned R.F. Adj. Freq. 1200-1400	210	3-24, 1-27, 2-71A	Type Tubes		Circuit	
				1C8	1C8	1st I.F. 2nd I.F. 1st A.F.	1st A.F. Output

43	All-Wave (and 25) Phone, 550 K.C.- 20 M.C.	Code 221 65 88	4-44, 2-37, 1-42, 1-80	Type Tubes		Circuit	
				1C8	1C8	1st I.F. 2nd I.F. 1st A.F.	1st A.F. Output

44	All-Wave (and 504 Phone.) 530 K.C.- 23 M.C.	65	1-6A7, 2-78, 1-75, 1-42, 1-80	Type Tubes		Circuit	
				1C8	1C8	1st I.F. 2nd I.F. 1st A.F.	1st A.F. Output

Line Voltage 120. Readings made direct from tube sockets on underside of chassis, using test probe, and high resistance D. C. voltmeter for D. C. voltages; A. C. voltmeter for A. C. voltages. Volume control of set at maximum.

Model No.	Power Input (Watts)	I.F. (K.C.)	Tubes Used	†Tube Socket Voltages						
				Circuit	Det.-Osc.	1st I.F.	2d I.F.	2d Det.	Output	Rect.
<b>45</b> Two-band: 540-1720 K.C. 4.2-13 M.C.	65	460	1-6A7, 2-39/44, 1-75, 1-42, 1-80	Type Tube	6A7	39/44	39/44	75	42	80
				Filament (F to F).....	6.3	6.3	6.3	6.3	6.3	5.0
				Plate (P to K).....	260	255	255	175	250	335
				Screen Grid (SG to K)...	{G1-35 G2-135 G3&5-85}	75	75	...	260	...
				Cathode (K to F).....	4.2	3.8	3.8	0	0	...
<b>46</b> D.C.	42	Tuned R.F. Adj. Freq. 1200-1400	3-14, 1-17, 2-71A, 1 No. 2 (ballast)	Tubes		Filament Volts	Plate Volts	Grid Volts	Screen Grid Volts	Cathode Volts
				Type	Circuit					
				14	R.F.	13.5	100	1.5	60	2.5
				14	Det.	13.5	30	1.0	25	2.5
				17	1st A.F.	13.5	100	.25	...	4.5
71-A	Output	4.5	90	15.5	...	...				
2	Ballast	8.0	...	...	...	...				
<b>47</b> (D.C.)	45	260	1-36, 2-44, 3-37, 2-43	Tubes		Filament Volts	Plate Volts	Screen Grid Volts	Control Grid Volts	Cathode Volts
				Type	Circuit	F to F	P to K	SG to K	CG to K	K to F
				44	R.F.	6.3	100	100	.4	40
				36	Det.-Osc.	6.3	100	65	5.0	30
				44	I.F.	6.3	100	100	.4	25
				37	Det.-Rect.	6.3	0	...	.2	22
				37	1st Audio	6.3	75	...	.4	2
				37	2nd Audio	6.3	90	...	.4	10
				43	Push-Pull	25	110	112	10	80
				43	Output	25	110	112	10	80
4	Ballast (221) 230 Volts	110	...	...	...	...				
5	Ballast (221) 230 Volts	110	...	...	...	...				
<b>48</b> (D.C.)	40	175	1-44, 2-36, 1-43, 1-No. 9 (ballast)	Tubes		Filament Volts	Plate Volts	Screen Grid Volts	Control Grid Volts	Cathode Volts
				Type	Circuit	F to F	P to K	SG to K	CG to K	K to F
				36	Det.-Osc.	6.3	100	55	3.0	.5
				44	I.F.	6.3	70	75	4.5	10
				36	2nd Det.	6.3	37	35	3.0	.5
				43	Output	25.0	100	105	.4	.4
9	Ballast	50	...	...	...	...				
<b>49</b> (D.C.) Two-band 540-1720 K.C. 4.2-12 M.C.	50	260	1-6A7, 2-78, 1-85, 1-76, 2-43	Tubes		Filament	Plate	Screen Grid	Cathode	
				Type	Circuit	F to F	P to K	SG to K	K to F	
				78	R.F.	5.8	85	100	30	
				6A7	Det.-Osc.	5.7	90	{G3&5-K:65 G2 -K:80 G1 -K:12}	22	
				78	I.F.	6.3	90	100	15	
				85	2d Det.—1st A.F.	6.3	40	...	15	
				76	Driver	6.3	100	...	20	
				43	Output	2.6	100	105	60	
43	Output	2.6	100	105	60					
<b>50</b>	60	Tuned R.F. Adj. Freq. 1400	3-24, 1-47, 1-80	Tubes		Filament Volts	Plate Volts	Screen Grid Volts	Control Grid Volts	Cathode Volts
				Type	Circuit					
				24	1st R.F.	2.4	245	90	2.5	3.0
				24	2nd R.F.	2.4	250	90	2.5	3.0
				24	Det.	2.4	100	42	8.0	8.0
				47	Output	2.4	175	190	1.0	...
80	Rect.	5.0	...	...	...	...				
<b>51 &amp; 52</b> (& 24 Phono.)	60	175	2-24, 1-35, 1-47, 1-80	Tubes		Filament Volts	Plate Volts	Screen Grid Volts	Control Grid Volts	Cathode Volts
				Type	Circuit					
				24	Osc. & 1st Det.	2.2	220	85	9.0	9.0
				35	I.F.	2.2	210	85	3.0	3.0
				24	2nd Det.	2.2	75	54	5.2	5.2
				47	Output	2.2	210	240	0.2	...
80	Rect.	5.0	240/Plate	...	...	...				
<b>53</b> A.C.-D.C.	45	460	2-77, 1-43, 1-12Z3	115 VOLTS A.C.						
				Circuit	Det. Osc.	2nd Det.	Output	Rectifier		
				Type Tube	77	77	43	12Z3		
				Filament—Total 49.9 Volts A. C. ...	95	15	94	112		
				Plate Volts—P to K.....	94	34	102	...		
				Screen Grid Volts—SG to K.....	7	4	4	...		
				Control Grid Volts—CG to K.....	18	12	10	112		
				Cathode Volts—K to F.....	18	12	10	112		
				120 VOLTS D.C.						
				Circuit	Det. Osc.	2nd Det.	Output	Rectifier		
				Type Tube	77	77	43	12Z3		
				Filament—Total 51 Volts D. C. ...	95	14	94	10		
				Plate Volts—P to K.....	93	34	100	...		
				Screen Grid Volts—SG to K.....	8	3	4	...		
Control Grid Volts—CG to K.....	7-14	6-12	3-26	58-73						
Cathode Volts—K to F.....	7-14	6-12	3-26	58-73						

†Line Voltage 120. Readings made direct from tube sockets on underside of chassis, using test prods, and high resistance D. C. voltmeter for D. C. voltages; A. C. voltmeter for A. C. voltages. Volume control of set at maximum. \*4 Volts with Volume Control "off".

Model No. Power Input (Watts) I.F. (K.C.) Tubes Used

54	A.C.-D.C.	50	460	1-6A7, 1-78, 1-75, 1-43, 1-25Z-5	115 VOLTS A.C.		120 VOLTS D.C.		
					Det. Osc. 6A7	L.F. 78	2nd Det. 75	Output 43	25Z5
Plate Volts—Total 88		K to K 84		Screen Grid Volts—SG to K 65		Control Grid Volts—CG to K 15		Cathode Volts—K to F 12	
Type Tube		6A7		Det. Osc.		L.F.		2nd Det.	
Circuit		6A7		Det. Osc.		L.F.		2nd Det.	
Type Tube		6A7		Det. Osc.		L.F.		2nd Det.	
Circuit		6A7		Det. Osc.		L.F.		2nd Det.	
Type Tube		6A7		Det. Osc.		L.F.		2nd Det.	
Circuit		6A7		Det. Osc.		L.F.		2nd Det.	

57, 58 & 59	A.C.-D.C.	57 & 58: 46, 59, 52	460	2-77, 1-42, 1-80	115 VOLTS A.C.		120 VOLTS D.C.		
					Det. Osc. 77	L.F. 77	2nd Det. 77	Output 42	Rectifier 80
Plate Volts—Total 70		K to K 90		Screen Grid Volts—SG to K 70		Control Grid Volts—CG to K 15		Cathode Volts—K to F 7.5	
Type Tube		6A7		Det. Osc.		L.F.		2nd Det.	
Circuit		6A7		Det. Osc.		L.F.		2nd Det.	
Type Tube		6A7		Det. Osc.		L.F.		2nd Det.	
Circuit		6A7		Det. Osc.		L.F.		2nd Det.	
Type Tube		6A7		Det. Osc.		L.F.		2nd Det.	
Circuit		6A7		Det. Osc.		L.F.		2nd Det.	

60	(and 505 Phono.)	60	460	1-6A7, 1-78, 1-75, 1-42, 1-80	115 VOLTS A.C.		120 VOLTS D.C.		
					Det. Osc. 6A7	L.F. 78	2nd Det. 75	Output 42	Rectifier 80
Plate Volts—Total 70		K to K 90		Screen Grid Volts—SG to K 70		Control Grid Volts—CG to K 15		Cathode Volts—K to F 7.5	
Type Tube		6A7		Det. Osc.		L.F.		2nd Det.	
Circuit		6A7		Det. Osc.		L.F.		2nd Det.	
Type Tube		6A7		Det. Osc.		L.F.		2nd Det.	
Circuit		6A7		Det. Osc.		L.F.		2nd Det.	
Type Tube		6A7		Det. Osc.		L.F.		2nd Det.	
Circuit		6A7		Det. Osc.		L.F.		2nd Det.	

65	A.C.-D.C.	95	460	2-24, 1-27, 2-45, 1-80	115 VOLTS A.C.		120 VOLTS D.C.		
					Det. Osc. 6A7	L.F. 78	2nd Det. 75	Output 42	Rectifier 80
Plate Volts—Total 70		K to K 90		Screen Grid Volts—SG to K 70		Control Grid Volts—CG to K 15		Cathode Volts—K to F 7.5	
Type Tube		6A7		Det. Osc.		L.F.		2nd Det.	
Circuit		6A7		Det. Osc.		L.F.		2nd Det.	
Type Tube		6A7		Det. Osc.		L.F.		2nd Det.	
Circuit		6A7		Det. Osc.		L.F.		2nd Det.	
Type Tube		6A7		Det. Osc.		L.F.		2nd Det.	
Circuit		6A7		Det. Osc.		L.F.		2nd Det.	

66	(Two-band) 540-1720 K.C. 5.5-15.5 M.C.	60	460	1-6A7, 1-78, 1-75, 1-42, 1-80	115 VOLTS A.C.		120 VOLTS D.C.		
					Det. Osc. 6A7	L.F. 78	2nd Det. 75	Output 42	Rectifier 80
Plate Volts—Total 70		K to K 90		Screen Grid Volts—SG to K 70		Control Grid Volts—CG to K 15		Cathode Volts—K to F 7.5	
Type Tube		6A7		Det. Osc.		L.F.		2nd Det.	
Circuit		6A7		Det. Osc.		L.F.		2nd Det.	
Type Tube		6A7		Det. Osc.		L.F.		2nd Det.	
Circuit		6A7		Det. Osc.		L.F.		2nd Det.	
Type Tube		6A7		Det. Osc.		L.F.		2nd Det.	
Circuit		6A7		Det. Osc.		L.F.		2nd Det.	

70	(A.V.C.)	80	260	3-35, 1-24, 1-27, 1-47, 1-80	115 VOLTS A.C.		120 VOLTS D.C.		
					Det. Osc. 35	L.F. 24	2nd Det. 25	Output 20	Rectifier 15
Plate Volts—Total 70		K to K 90		Screen Grid Volts—SG to K 70		Control Grid Volts—CG to K 15		Cathode Volts—K to F 7.5	
Type Tube		6A7		Det. Osc.		L.F.		2nd Det.	
Circuit		6A7		Det. Osc.		L.F.		2nd Det.	
Type Tube		6A7		Det. Osc.		L.F.		2nd Det.	
Circuit		6A7		Det. Osc.		L.F.		2nd Det.	
Type Tube		6A7		Det. Osc.		L.F.		2nd Det.	
Circuit		6A7		Det. Osc.		L.F.		2nd Det.	

Line Voltage 120. Readings made direct from tube sockets on underside of chassis, using te. prods, and high resistance D. C. voltmeter for D. C. voltages; A. C. voltmeter for A. C. voltages. Volume control of set at maximum.

Model No.	Power Input (Watts)	I.F. (K.C.)	Tubes Used	†Tube Socket Voltages						
				Tube		Filament Volts	Plate Volts	Screen Grid Volts	Control Grid Volts	Cathode Volts
Type	Circuit	F to F	P to K	SG to K	CG to K					
<b>76</b> <b>77</b>	105	Tuned R.F. Adj. Freq. 1400	3-24, 1-27, 2-45, 1-80	24	1st R.F.	2.3	145	90	3	13
				24	2d R.F.	2.3	145	90	3	13
				24	Detector	2.3	36	30	1.4	12
				27	1st A.F.	2.3	140	..	1	10
				45	2d A.F.	2.2	230	..	46	..
				45	2d A.F.	2.2	230	..	46	..
				80	Rectifier	4.5	...	..	..	..
<b>80</b>	46	460	2-36, 1-42, 1-80	Tube		Filament Volts F to F	Plats Volts P to K	Screen Grid Volts SG to K	Control Grid Volts CG to K	Cathode Volts K to F
				Type	Circuit					
				36	Det.-Osc.	6.3	245	165	6.4	8.4
				42	2nd Det.	6.3	40	15	4	0
				80	Output Rectifier	5.0	340/Plate	255	4	0
<b>81</b>	46	460	2-77, 1-42, 1-80	Circuit		Det. Osc.	2nd Det.	Output	Rectifier	
				Type Tube		77	77	42	80	
				Filament Volts—F to K.....		6.3	6.3	6.3	5.0	
				Plate Volts—P to K.....		240	75	240	425	
				Screen Grid Volts—SG to K.....		85	40	250	..	
				Cathode Volts—K to F.....		5.6	.6	2.3	..	
<b>84</b>	43	460	2-77, 1-42, 1-80	Circuit		Det. Osc.	2nd Det.	2nd A.F. (Output)	Rectifier.	
				Type Tube		77	77	42	80	
				Filament Volts—F to F.....		6.3	6.3	6.3	5.0	
				Plate Volts—P to K.....		240	70	225	340	
				Screen Grid Volts—SG to K.....		95	23	225	..	
				<b>86</b>	70	"Neutrodyne Plus" Adj. Freq. 1200-1400	4-26, 1-27, 2-71A, 1-80	Tube		Filament Volts
Type	Circuit									
26	R.F. & 1st A.F.	1.4	85					5.5		
27	Det.	2.2	30					..		
71-A	2d A.F.	4.6	172					41		
80	Rect.	4.6	..	..						
<b>87</b>	95	"Neutrodyne Plus" Adj. Freq. 1200-1400	4-26, 1-27, 2-45, 1-80	Tube		Filament Volts	Plate Volts	Grid Volts		
				Type	Circuit					
				26	R.F. & 1st A.F.	1.5	90	6.0		
				27	Det.	2.5	30	..		
				45	2d A.F.	2.5	245	45		
80	Rect.	5.0	..	..						
<b>89</b> (and 26 Phono.)	60	260	1-36, 2-44, 1-75, 1-42, 1-80	Same as Model 19 (First Type)						
<b>89</b> (Code 123)	60	260	2-44, 1-77, 1-75, 1-42, 1-80	Tube	44 R.F.	77 Det. Osc.	44 I.F.	75 A.F.	42 Output	80
				Point P	235	230	240	175	235	350 A.C.
				SG	90	90	90	..	245	..
				K	3.5	7.8	3.5	0	0	..
<b>90</b> (1st type)	95	175	4-24, 2-27, 2-45, 1-80	Tube		Filament Volts	Plate Volts	Grid Volts	Screen Grid Volts	Cathode Volts
				Type	Circuit					
				24	1st R.F.	2.1	250	3.3	83	15
				27	Osc.	2.1	60	1	..	15
				24	1st Det.	2.1	250	5.5	23	15
				24	1st I.F.	2.1	250	3.8	80	15
				24	2nd Det.	2.1	48	3.7	42	15
				27	1st Audio	2.1	140	.25	..	10
				45	Audio	2.2	243	46	..	..
				45	Audio	2.2	243	46	..	..
80	Rect.	4.5	..	..	..	..				
<b>90</b> Above Serial No. 237,001	95	175	3-24, 4-27, 1-47, 1-80	Tube		Filament Volts	Plate Volts	Screen Grid Volts	Control Grid Volts	Cathode Volts
				Type	Circuit					
				24	R.F.	2.0	255	60	.25	20
				27	Osc.	2.0	65	..	.6	20
				24	1st Det.	2.0	250	64	6.0	24
				24	I.F.	2.0	270	76	.25	18
				27	Det. Rect.	2.0	0	..	0	17
				27	Det. Amp.	2.0	140	..	.4	18
				27	1st A.F.	2.0	45	..	.4	20
				47	Output	2.0	220	240	1.0	..
80	Rectifier	4.5	..	..	..	..				

†Line Voltage 120. Readings made direct from tube sockets on underside of chassis, using test prods, and high resistance D. C. voltmeter for D. C. voltages; A. C. voltmeter for A. C. voltages. Volume control of set at maximum.

Volume control of set at maximum. Readings made direct from tube sockets on underside of chassis, using test prods, and high resistance D. C. voltmeter for D. C. voltages; A. C. voltmeter for A. C. voltages.

Model No.	Power Input (Watts)	I.F. (K.C.)	Tubes Used	† Tube Socket Voltages																		
90 Serial B32001-B35000 and above B53100	95	260	2-35, 1-24, 3-27, 2-47, 1-80	<table border="1"> <tr><th colspan="2">Tube</th></tr> <tr><td>Type</td><td>35</td></tr> <tr><td>Circuit</td><td>R.F.</td></tr> <tr><td>Filament</td><td>2.5</td></tr> <tr><td>Plate</td><td>225</td></tr> <tr><td>Screen</td><td>210</td></tr> <tr><td>Grid</td><td>210</td></tr> <tr><td>Control</td><td>10</td></tr> <tr><td>Cathode</td><td>10</td></tr> </table>	Tube		Type	35	Circuit	R.F.	Filament	2.5	Plate	225	Screen	210	Grid	210	Control	10	Cathode	10
Tube																						
Type	35																					
Circuit	R.F.																					
Filament	2.5																					
Plate	225																					
Screen	210																					
Grid	210																					
Control	10																					
Cathode	10																					
91 (and 23 Phono.) Also 14 (Code 126 & 226)	Code 126 90 Code 226 95	260	2-44, 1-36, 3-37, 2-42, 1-80	<table border="1"> <tr><th colspan="2">Tube</th></tr> <tr><td>Type</td><td>44</td></tr> <tr><td>Circuit</td><td>R.F.</td></tr> <tr><td>Filament</td><td>6.3</td></tr> <tr><td>Plate</td><td>250</td></tr> <tr><td>Screen</td><td>250</td></tr> <tr><td>Grid</td><td>250</td></tr> <tr><td>Control</td><td>10</td></tr> <tr><td>Cathode</td><td>25</td></tr> </table>	Tube		Type	44	Circuit	R.F.	Filament	6.3	Plate	250	Screen	250	Grid	250	Control	10	Cathode	25
Tube																						
Type	44																					
Circuit	R.F.																					
Filament	6.3																					
Plate	250																					
Screen	250																					
Grid	250																					
Control	10																					
Cathode	25																					
95 and 96	115	Tuned R.F. 1400 Adj. Freq.	3-24, 3-27, 2-45, 1-80	<table border="1"> <tr><th colspan="2">Tube</th></tr> <tr><td>Type</td><td>24</td></tr> <tr><td>Circuit</td><td>R.F.</td></tr> <tr><td>Filament</td><td>2.15</td></tr> <tr><td>Plate</td><td>155</td></tr> <tr><td>Screen</td><td>95</td></tr> <tr><td>Grid</td><td>0.5</td></tr> <tr><td>Control</td><td>0.5</td></tr> <tr><td>Cathode</td><td>5.3</td></tr> </table>	Tube		Type	24	Circuit	R.F.	Filament	2.15	Plate	155	Screen	95	Grid	0.5	Control	0.5	Cathode	5.3
Tube																						
Type	24																					
Circuit	R.F.																					
Filament	2.15																					
Plate	155																					
Screen	95																					
Grid	0.5																					
Control	0.5																					
Cathode	5.3																					
97 550-1750 K.C. 1.75-5.8 M.C. 5.8-18.0 M.C.	90	460	2-78, 1-6A7, 1-85, 2-42, 1-80	<table border="1"> <tr><th colspan="2">Tube</th></tr> <tr><td>Type</td><td>Point P SG K</td></tr> <tr><td>Circuit</td><td>R.F.</td></tr> <tr><td>Filament</td><td>2.3</td></tr> <tr><td>Plate</td><td>257</td></tr> <tr><td>Screen</td><td>257</td></tr> <tr><td>Grid</td><td>97</td></tr> <tr><td>Control</td><td>260</td></tr> <tr><td>Cathode</td><td>270</td></tr> </table>	Tube		Type	Point P SG K	Circuit	R.F.	Filament	2.3	Plate	257	Screen	257	Grid	97	Control	260	Cathode	270
Tube																						
Type	Point P SG K																					
Circuit	R.F.																					
Filament	2.3																					
Plate	257																					
Screen	257																					
Grid	97																					
Control	260																					
Cathode	270																					
111 and 112 (Below Serial 174000)	105	175	4-24, 4-27, 2-45, 1-80	<table border="1"> <tr><th colspan="2">Tube</th></tr> <tr><td>Type</td><td>24</td></tr> <tr><td>Circuit</td><td>1st R.F.</td></tr> <tr><td>Filament</td><td>2.1</td></tr> <tr><td>Plate</td><td>190</td></tr> <tr><td>Screen</td><td>60</td></tr> <tr><td>Grid</td><td>7</td></tr> <tr><td>Control</td><td>5</td></tr> <tr><td>Cathode</td><td>5</td></tr> </table>	Tube		Type	24	Circuit	1st R.F.	Filament	2.1	Plate	190	Screen	60	Grid	7	Control	5	Cathode	5
Tube																						
Type	24																					
Circuit	1st R.F.																					
Filament	2.1																					
Plate	190																					
Screen	60																					
Grid	7																					
Control	5																					
Cathode	5																					
112 (Above Serial 174001)	105	175	4-24, 4-27, 2-47, 1-80	<table border="1"> <tr><th colspan="2">Tube</th></tr> <tr><td>Type</td><td>24</td></tr> <tr><td>Circuit</td><td>1st R.F.</td></tr> <tr><td>Filament</td><td>2.25</td></tr> <tr><td>Plate</td><td>160</td></tr> <tr><td>Screen</td><td>75</td></tr> <tr><td>Grid</td><td>2</td></tr> <tr><td>Control</td><td>5.0</td></tr> <tr><td>Cathode</td><td>5.0</td></tr> </table>	Tube		Type	24	Circuit	1st R.F.	Filament	2.25	Plate	160	Screen	75	Grid	2	Control	5.0	Cathode	5.0
Tube																						
Type	24																					
Circuit	1st R.F.																					
Filament	2.25																					
Plate	160																					
Screen	75																					
Grid	2																					
Control	5.0																					
Cathode	5.0																					
116-B High Fidelity All-wave	100	460	3-78, 2-77, 1-76, 1-37, 3-42, 1-80	<table border="1"> <tr><th colspan="2">Tube</th></tr> <tr><td>Type</td><td>78</td></tr> <tr><td>Circuit</td><td>R.F.</td></tr> <tr><td>Filament</td><td>78</td></tr> <tr><td>Plate</td><td>1st</td></tr> <tr><td>Screen</td><td>2nd</td></tr> <tr><td>Grid</td><td>2nd</td></tr> <tr><td>Control</td><td>37</td></tr> <tr><td>Cathode</td><td>42</td></tr> </table>	Tube		Type	78	Circuit	R.F.	Filament	78	Plate	1st	Screen	2nd	Grid	2nd	Control	37	Cathode	42
Tube																						
Type	78																					
Circuit	R.F.																					
Filament	78																					
Plate	1st																					
Screen	2nd																					
Grid	2nd																					
Control	37																					
Cathode	42																					
116-X High Fidelity All-wave	135	460	3-78, 2-77, 1-76, 1-37, 1-42, 2-6A3, 1-5Z3	<table border="1"> <tr><th colspan="2">Tube</th></tr> <tr><td>Type</td><td>78</td></tr> <tr><td>Circuit</td><td>R.F.</td></tr> <tr><td>Filament</td><td>78</td></tr> <tr><td>Plate</td><td>1st</td></tr> <tr><td>Screen</td><td>2nd</td></tr> <tr><td>Grid</td><td>2nd</td></tr> <tr><td>Control</td><td>42</td></tr> <tr><td>Cathode</td><td>320</td></tr> </table>	Tube		Type	78	Circuit	R.F.	Filament	78	Plate	1st	Screen	2nd	Grid	2nd	Control	42	Cathode	320
Tube																						
Type	78																					
Circuit	R.F.																					
Filament	78																					
Plate	1st																					
Screen	2nd																					
Grid	2nd																					
Control	42																					
Cathode	320																					
118 Two-band (and 507 Phono.) 540-1720 K.C. 4.2-12 M.C.	110	260	1-6A7, 2-78, 1-75, 3-42, 1-80	<table border="1"> <tr><th colspan="2">Tube</th></tr> <tr><td>Type</td><td>78</td></tr> <tr><td>Circuit</td><td>R.F.</td></tr> <tr><td>Filament</td><td>6.3</td></tr> <tr><td>Plate</td><td>6.3</td></tr> <tr><td>Screen</td><td>80</td></tr> <tr><td>Grid</td><td>175</td></tr> <tr><td>Control</td><td>195</td></tr> <tr><td>Cathode</td><td>280</td></tr> </table>	Tube		Type	78	Circuit	R.F.	Filament	6.3	Plate	6.3	Screen	80	Grid	175	Control	195	Cathode	280
Tube																						
Type	78																					
Circuit	R.F.																					
Filament	6.3																					
Plate	6.3																					
Screen	80																					
Grid	175																					
Control	195																					
Cathode	280																					

† Tube Socket Voltages

Model No.	Power Input (Watts)	I.F. (K.C.)	Tubes Used	†Tube Socket Voltages																
				Circuit	Det.-Osc.	1st I.F.	2nd I.F.	A.F.	Output	Rectifier										
<b>144</b> All-Wave (and 506 Phono.) 540 K.C.- 23 M.C.	70	460	1-6A7, 2-78, 1-75, 1-42, 1-80	Tube	6A7	78	78	75	42	80										
				Filament Volts (F-F).....	6.3	6.3	6.3	6.3	6.3	5.0										
				Plate Volts (P-K).....	250	230	230	185	300	350										
				Screen Grid Volts (SG-K)...	60	75	75	...	310	...										
				Cathode Volts (K-Gnd).....	1.4	2	2	0	0	...										
				6A7-G2 to K.....	160	...	...	...	...	...										
				6A7-G1 to K.....	20	...	...	...	...	...										
<b>200</b> High Fidelity	130	175	1-6A7, 3-78, 1-76, 1-37, 3-42, 1-5Z3	Circuit	R.F.	Det. Osc.	1st I.F.	2d I.F.	Shadow-meter Control	A.F.	Driver	Out-put	Rect.							
				Type Tube	78	6A7	78	78	37	75	42	42	42	5Z3						
				Test Points																
				F to F.....	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	5.0						
				P to K.....	225	210	210	220	63	110	225	225	335	350						
				SG to K.....	80	73	73	76	...	...	225	335	335	to Gnd.						
				K to Gnd.....	3	8	8	4	0	0	0	0	0	...						
				CG to K.....	0.2	0	0.2	4	0	...	0.2	35	35	...						
				6A7-G1 to K.....	22.0															
				6A7-G2 to K.....	90.0															
<b>201</b> High Fidelity Two-Band: 540-1720 K.C. 4.2-12.0 M.C.	130	260	3-78, 1-6A7, 1-37, 1-75, 3-42, 1-5Z3	R.F.	78	Det.-Osc.	6A7	1st I.F.	78	2nd I.F.	78	Shadow-meter	37	2nd Det.	1st A.F.	75	Driver	42	Out-put	42
				P-K	210	205	205	210	65	115	215	345								
				SG-K	120	(G1-K = 17) (G2-K = 145)	115	115	...	...	215	345								
				K-Gnd.	4.2	3.8	7.8	7.8	0	0	0	0								
<b>470</b> All-Wave 550 K.C. 19 M.C.	110	260	5-24, 2-27, 1-47, 1-80	Tube		Filament Volts	Plate Volts	Screen Grid Volts	Control Grid Volts	Cathode Volts										
				Type	Circuit															
				SHORT WAVE UNIT																
				27	Osc.	2.2	110	24	24	3.3	0									
				24	Det.	2.2	24	24	5.	0										
				BROADCAST UNIT																
				24	R.F.	2.4	255	50	3.5	25										
				24	1st Det.	2.4	260	60	9	38										
				27	Osc.	2.4	60	...	3.5	25										
				24	I.F.	2.4	265	50	3	22										
				24	2nd Det.	2.4	116	40	7	25										
				47	Output	2.5	205	220	7	...										
				80	Rectifier	4.5	260/Plate	...	...	...										
<b>490</b> All-Wave 550 K.C. 19 M.C.	125	260	4-24, 5-27, 1-47, 1-80	Tube		Filament Volts	Plate Volts	Screen Grid Volts	Control Grid Volts	Cathode Volts										
				Type	Circuit															
				SHORT WAVE UNIT																
				27	Osc.	2.2	110	24	24	3.3	0									
				24	1st Det.	2.2	24	24	5.	0										
				BROADCAST UNIT																
				24	R.F.	2.1	220	50	6.	15										
				27	Osc.	2.1	80	...	6	15										
				24	1st Det.	2.1	210	55	5	15										
				24	I.F.	2.1	220	60	8	15										
				27	Rect. Det.	2.1	...	...	...	14										
				27	Amp. Det.	2.1	150	...	0	15										
				27	1st Audio	2.1	150	...	2	15										
47	Output	2.4	205	220	7	...														
80	Rectifier	4.5	220/Plate	...	...	...														
<b>511</b>	50	Neutrodyne Adj. Freq. 1200-1400	4-26, 1-27, 1-71A, 1-80	Tubes		Filament Volts	Plate Volts	Grid Volts												
				Type	Circuit															
				26	R.F. & 1st A.F.	1.62	98.0	6.0												
				27	Det.	2.65	38.0	...												
				71	Output	5.26	148.0	29.0												
80	Rect.	5.26	375 A.C.	30 each plate																
<b>600</b> 530-1800 K.C.	45	460	1-6A7, 1-77, 1-41, 1-80	Point	Tube→	6A7	77	41	80											
				F.....	6.3	6.3	6.3	5.0												
				P.....	222	47	210	...												
				SG.....	76	25	222	...												
				K.....	1.4	...	...	...												
				G2.....	157	...	...	...												
<b>602</b> (A.C.-D.C.) 530-1800 K.C.	55	460	1-6A7, 1-78, 1-75, 1-43, 1-25Z5	Point	Tube→	6A7	78	75	43	25Z5										
				F.....	6.3	6.3	6.3	25	25											
				P.....	102	102	40	97	...											
				SG.....	47	47	...	102	...											
				K.....	0.7	0.9	...	12.5	...											
				G2.....	94	...	...	...	...											

†Line Voltage 120. Readings made direct from tube sockets on underside of chassis, using test prods, and high resistance D. C. voltmeter for D. C. voltages; A. C. voltmeter for A. C. voltages. Volume control of set at maximum. \*4 Volts with Volume Control "off".



Model No.	Power Input (Watts)	I.F. (K.C.)	Tubes Used	†Tube Socket Voltages																																																
610	5.7-18.0 M.C. 2.3-2.5 M.C. 540-1720 K.C.	55	1-6A7, 1-78, 1-75, 1-42, 1-80	<table border="1"> <tr> <td>Tube</td> <td>6A7</td> <td>78</td> <td>75</td> <td>42</td> </tr> <tr> <td>Point</td> <td>P</td> <td>P</td> <td>L.F.</td> <td>Output</td> </tr> <tr> <td>SG</td> <td>2.5</td> <td>2.5</td> <td>1.45</td> <td>228</td> </tr> <tr> <td>K</td> <td>2.3</td> <td>2.3</td> <td>...</td> <td>255</td> </tr> <tr> <td colspan="5">6A7-G<sub>2</sub> = 147</td> </tr> </table>	Tube	6A7	78	75	42	Point	P	P	L.F.	Output	SG	2.5	2.5	1.45	228	K	2.3	2.3	...	255	6A7-G <sub>2</sub> = 147																											
Tube	6A7	78	75	42																																																
Point	P	P	L.F.	Output																																																
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K	2.3	2.3	...	255																																																
6A7-G <sub>2</sub> = 147																																																				
611	5.8-18.0 M.C. 2.3-2.5 M.C. 540-1720 K.C. (A.C.-D.C.)	50	1-6A7, 1-78, 1-75, 1-43, 1-25Z5	<table border="1"> <tr> <td>Tube</td> <td>6A7</td> <td>78</td> <td>75</td> <td>43</td> <td>25Z5</td> </tr> <tr> <td>Point</td> <td>P</td> <td>P</td> <td>L.F.</td> <td>2nd Del.</td> <td>Output</td> </tr> <tr> <td>SG</td> <td>1.06</td> <td>1.02</td> <td>0.41</td> <td>101</td> <td>121</td> </tr> <tr> <td>K</td> <td>0.8</td> <td>1.1</td> <td>0</td> <td>106</td> <td>121</td> </tr> <tr> <td colspan="6">6A7-G<sub>2</sub> = 173</td> </tr> </table>	Tube	6A7	78	75	43	25Z5	Point	P	P	L.F.	2nd Del.	Output	SG	1.06	1.02	0.41	101	121	K	0.8	1.1	0	106	121	6A7-G <sub>2</sub> = 173																							
Tube	6A7	78	75	43	25Z5																																															
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620	5.7-18.0 M.C. 2.3-2.5 M.C. 540-1720 K.C.	65	1-6A7, 2-78, 1-75, 1-42, 1-80	<table border="1"> <tr> <td>Tube</td> <td>78</td> <td>6A7</td> <td>78</td> <td>75</td> <td>42</td> </tr> <tr> <td>Point</td> <td>P</td> <td>Det. Osc.</td> <td>L.F.</td> <td>2nd Del.</td> <td>Output</td> </tr> <tr> <td>SG</td> <td>2.65</td> <td>2.68</td> <td>2.85</td> <td>1.53</td> <td>243</td> </tr> <tr> <td>K</td> <td>2.65</td> <td>2.5</td> <td>2.85</td> <td>...</td> <td>258</td> </tr> <tr> <td colspan="6">6A7-G<sub>2</sub> = 173</td> </tr> </table>	Tube	78	6A7	78	75	42	Point	P	Det. Osc.	L.F.	2nd Del.	Output	SG	2.65	2.68	2.85	1.53	243	K	2.65	2.5	2.85	...	258	6A7-G <sub>2</sub> = 173																							
Tube	78	6A7	78	75	42																																															
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6A7-G <sub>2</sub> = 173																																																				
623	5.7-18.0 M.C. 2.3-2.5 M.C. 540-1720 K.C. (Battery Operated) 670 M.A. Plate Current 19 M.A. Filament	460	1-1C6, 1-34, 2-30, 1-32, 1-19 (Model 623-A uses 1 type 6 ballast tube)	<table border="1"> <tr> <td>Tube</td> <td>1C6</td> <td>34</td> <td>30</td> <td>32</td> <td>30</td> <td>19</td> </tr> <tr> <td>Point</td> <td>Det. Osc.</td> <td>L.F.</td> <td>2nd Del.</td> <td>A.F.</td> <td>Driver</td> <td>Output</td> </tr> <tr> <td>SG</td> <td>1.35</td> <td>0.1</td> <td>0</td> <td>52</td> <td>1.33</td> <td>1.34</td> </tr> <tr> <td>Occ. Pl.</td> <td>100</td> <td>0.2</td> <td>0.1</td> <td>24</td> <td>0.18</td> <td>3.0 ea.</td> </tr> <tr> <td colspan="7">6A7-G<sub>2</sub> = 173</td> </tr> </table>	Tube	1C6	34	30	32	30	19	Point	Det. Osc.	L.F.	2nd Del.	A.F.	Driver	Output	SG	1.35	0.1	0	52	1.33	1.34	Occ. Pl.	100	0.2	0.1	24	0.18	3.0 ea.	6A7-G <sub>2</sub> = 173																			
Tube	1C6	34	30	32	30	19																																														
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624	5.7-18.0 M.C. 2.3-2.5 M.C. 530-1720 K.C. (6-volt battery)	1.5 Amps.	1-1C6, 1-1A4, 1-32, 2-30, 1-19	<table border="1"> <tr> <td>Point</td> <td>1C6</td> <td>1A4</td> <td>30</td> <td>32</td> <td>2</td> <td>2</td> <td>19</td> </tr> <tr> <td>Tube</td> <td>1C6</td> <td>1A4</td> <td>30</td> <td>32</td> <td>2</td> <td>2</td> <td>19</td> </tr> <tr> <td>SG</td> <td>1.50</td> <td>1.50</td> <td>...</td> <td>50</td> <td>33</td> <td>150</td> <td>150</td> </tr> <tr> <td>P</td> <td>2</td> <td>2</td> <td>...</td> <td>33</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>G<sub>2</sub></td> <td>115</td> <td>80</td> <td>...</td> <td>...</td> <td>...</td> <td>...</td> <td>...</td> </tr> <tr> <td colspan="8">6A7-G<sub>2</sub> = 175</td> </tr> </table>	Point	1C6	1A4	30	32	2	2	19	Tube	1C6	1A4	30	32	2	2	19	SG	1.50	1.50	...	50	33	150	150	P	2	2	...	33	2	2	2	G <sub>2</sub>	115	80	...	...	...	...	...	6A7-G <sub>2</sub> = 175							
Point	1C6	1A4	30	32	2	2	19																																													
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630	5.7-18.0 M.C. 1.75-5.8 M.C. 540-1720 K.C.	70	1-6A7, 2-78, 1-75, 1-42, 1-80	<table border="1"> <tr> <td>Tube</td> <td>78</td> <td>6A7</td> <td>78</td> <td>75</td> <td>42</td> </tr> <tr> <td>Point</td> <td>P</td> <td>Det. Osc.</td> <td>L.F.</td> <td>2nd Del.</td> <td>Output</td> </tr> <tr> <td>SG</td> <td>2.45</td> <td>2.45</td> <td>2.6</td> <td>1.88</td> <td>298</td> </tr> <tr> <td>K</td> <td>2.7</td> <td>2.7</td> <td>2.6</td> <td>...</td> <td>311</td> </tr> <tr> <td colspan="6">6A7-G<sub>2</sub> = 175</td> </tr> </table>	Tube	78	6A7	78	75	42	Point	P	Det. Osc.	L.F.	2nd Del.	Output	SG	2.45	2.45	2.6	1.88	298	K	2.7	2.7	2.6	...	311	6A7-G <sub>2</sub> = 175																							
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640	5.7-18.0 M.C. 2.3-2.5 M.C. 540-1720 K.C.	85	1-6A7, 2-78, 1-85, 2-42, 1-80	<table border="1"> <tr> <td>Tube</td> <td>78</td> <td>6A7</td> <td>78</td> <td>85</td> <td>42</td> </tr> <tr> <td>Point</td> <td>P</td> <td>Det. Osc.</td> <td>L.F.</td> <td>2nd Del.</td> <td>Output</td> </tr> <tr> <td>SG</td> <td>2.71</td> <td>2.40</td> <td>2.42</td> <td>1.02</td> <td>240</td> </tr> <tr> <td>K</td> <td>2.1</td> <td>2.2</td> <td>2.3</td> <td>...</td> <td>250</td> </tr> <tr> <td colspan="6">6A7-G<sub>2</sub> = 102V</td> </tr> </table>	Tube	78	6A7	78	85	42	Point	P	Det. Osc.	L.F.	2nd Del.	Output	SG	2.71	2.40	2.42	1.02	240	K	2.1	2.2	2.3	...	250	6A7-G <sub>2</sub> = 102V																							
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Model No.	Power Input (Watts)	I.F. (K.C.)	Tubes Used	†Tube Socket Voltages							
<b>641</b> (D.C.) 530-1720 K.C. 2.2-2.6 M.C. 5.8-18.0 M.C.	40	460	2-78, 1-6A7, 1-76, 1-85, 2-43	<b>Tube</b>	<b>78 R.F.</b>	<b>6A7 Det.-Osc.</b>	<b>78 I.F.</b>	<b>85 2nd Det.</b>	<b>76 A.F.</b>	<b>43 Output</b>	
				Point P SG K Osc. Pl.	102 102 0 ...	102 56 0 86	93 102 1 ...	31 ... 0 ...	102 ... 0 ...	110 112 37 ...	
<b>642</b> (32-volts D.C.) 540-1750 K.C. 1.75-5.8 M.C. 5.8-18.0 M.C.	43	460	1-78, 1-6A7, 1-76, 1-6F7, 1-85, 2-48	<b>Tube</b>	<b>78 R.F.</b>	<b>6A7 1st Det.</b>	<b>78 Osc.</b>	<b>6F7 1st A.F.</b>	<b>85 2nd A.F.</b>	<b>48 Output</b>	
				Point P SG K Osc. Pl.	32 32 1 ...	14.5 14.5 1 14.5	32 ... 1 ...	32 32 1.5 6.5	29 ... 1 ...	32 32 5.8 ...	
<b>643</b> (Battery Operated) 150-390 K.C. 540-1720 K.C. 1.75-5.8 M.C. 5.8-18.0 M.C.	Fil. Cur. 750 M.A. Plate Cur. 22 M.A.	460	1-1C6, 2-34, 1-32, 2-30, 1-19 (Model 643-A uses 1 type 1C1 bal- last tube)	<b>Tube</b>	<b>1C6 Det. Osc.</b>	<b>34 R.F.</b>	<b>34 I.F.</b>	<b>30 2nd Det.</b>	<b>32 1st A.F.</b>	<b>30 Driver</b>	<b>19 Output</b>
				Point P SG K G2	137 63 12 100	137 63 ... ...	137 63 ... ...	0 ... ... ...	50 25 ... ...	137 ... ... ...	137 ... 3 each ...
<b>645</b> 540-1750 K.C. 1.75-5.8 M.C. 5.75- 18.0 M.C.	100	460	2-78, 1-6A7, 1-85, 2-42, 1-80	<b>Point Tube</b>	<b>78</b>	<b>6A7</b>	<b>78</b>	<b>85</b>	<b>42</b>	<b>80</b>	
				F..... P..... SG..... K..... G2.....	6.3 245 90 ... ...	6.3 243 90 158	6.3 258 90 ...	6.3 82 ... ...	6.3 240 256 ...	5.0 ... ... ...	
<b>650</b> 145-390 K.C. 540-1720 K.C. 2.3-2.5 M.C. 5.8-18.0 M.C.	98	460	2-78, 1-6A7, 1-75, 3-42, 1-80	<b>Tube</b>	<b>78 R.F.</b>	<b>6A7 Det.-Osc.</b>	<b>78 I.F.</b>	<b>75 2nd Det.</b>	<b>42 Driver</b>	<b>42 Output</b>	
				Point P SG K	55 90 2.2	200 90 2.3 6A7:G <sub>2</sub> = 155	200 90 2.6	115 ... ...	200 200 ...	300 200 ...	
<b>651</b> (A.C.-D.C.) 540-1750 K.C. 1.75-5.8 M.C. 5.75- 18.0 M.C.	65	460	2-78, 1-6A7, 1-85, 1-76, 2-43, 1-25Z5	<b>Point Tube</b>	<b>6A7</b>	<b>78 R.F.</b>	<b>78 I.F.</b>	<b>85</b>	<b>76</b>	<b>43</b>	<b>25Z5</b>
				F..... P..... SG..... K..... G2.....	6.3 98 57 1.4 88	6.3 98 98 1.5 ...	6.3 105 57 1.8 ...	6.3 35 ... ...	6.3 86 ... ...	6.3 102 104 17.5 ...	-25 ... ... 113 ...
<b>655</b> 540-1750 K.C. 1.75-5.8 M.C. 5.75- 18.0 M.C.	100	460	2-78, 1-6A7, 1-75, 3-42, 1-80	<b>Point Tube</b>	<b>6A7</b>	<b>78 R.F.</b>	<b>78 I.F.</b>	<b>75</b>	<b>42 Driver</b>	<b>42 Output</b>	<b>80</b>
				F..... P..... SG..... K..... G2.....	6.3 200 75 ... 150	6.3 205 75 ... ...	6.3 205 75 ... ...	6.3 105 ... ...	6.3 195 195 ...	6.3 280 280 ... (G <sub>1</sub> = 30V)	5.0 ... ... ...

†Line Voltage 120. Readings made direct from tube sockets on underside of chassis, using test prods, and high resistance D. C. voltmeter for D. C. voltages; A. C. voltmeter for A. C. voltages. Volume control of set at maximum.

Model No.	Power Input (Watts)	I.F. (K.C.)	Tubes Used	† Tube Socket Voltages																																																																		
660 150-390 K.C. 540-1750 K.C. 1.75-5.8 M.C. 5.8-18.0 M.C.	90	460	3-78, 1-76, 1-77, 1-75, 3-42, 1-80,	<table border="1"> <thead> <tr> <th>Tube</th> <th>Point</th> <th>P</th> <th>SG</th> <th>K</th> </tr> </thead> <tbody> <tr> <td>78</td> <td>R.F.</td> <td>200</td> <td>85</td> <td>2.0</td> </tr> <tr> <td>77</td> <td>Det.</td> <td>200</td> <td>85</td> <td>5.3</td> </tr> <tr> <td>78</td> <td>1st</td> <td>100</td> <td>200</td> <td>3.7</td> </tr> <tr> <td>78</td> <td>1st</td> <td>200</td> <td>85</td> <td>2.0</td> </tr> <tr> <td>78</td> <td>1st</td> <td>205</td> <td>85</td> <td>5.7</td> </tr> <tr> <td>75</td> <td>A.F.</td> <td>118</td> <td>0</td> <td>0</td> </tr> <tr> <td>42</td> <td>Driver</td> <td>200</td> <td>0</td> <td>0</td> </tr> <tr> <td>42</td> <td>P.P.</td> <td>290</td> <td>0</td> <td>0</td> </tr> </tbody> </table>	Tube	Point	P	SG	K	78	R.F.	200	85	2.0	77	Det.	200	85	5.3	78	1st	100	200	3.7	78	1st	200	85	2.0	78	1st	205	85	5.7	75	A.F.	118	0	0	42	Driver	200	0	0	42	P.P.	290	0	0																					
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665	140	460	4-78, 1-76, 3-85, 1-6B7, 1-6F7, 1-42, 1-80, 1-5Z3, 2-6A3	<table border="1"> <thead> <tr> <th>Tube</th> <th>Point</th> <th>P</th> <th>SG</th> <th>K</th> <th>G</th> </tr> </thead> <tbody> <tr> <td>78</td> <td>R.F.</td> <td>195</td> <td>90</td> <td>2.2</td> <td>...</td> </tr> <tr> <td>78</td> <td>Det.</td> <td>125</td> <td>195</td> <td>5.1</td> <td>...</td> </tr> <tr> <td>78</td> <td>1st</td> <td>195</td> <td>90</td> <td>5.1</td> <td>...</td> </tr> <tr> <td>78</td> <td>1st</td> <td>195</td> <td>90</td> <td>2.3</td> <td>...</td> </tr> <tr> <td>78</td> <td>1st</td> <td>195</td> <td>90</td> <td>4.4</td> <td>...</td> </tr> <tr> <td>85</td> <td>1st</td> <td>60</td> <td>85</td> <td>0</td> <td>...</td> </tr> <tr> <td>85</td> <td>2nd</td> <td>85</td> <td>13</td> <td>0</td> <td>...</td> </tr> <tr> <td>42</td> <td>Driver</td> <td>19</td> <td>190</td> <td>0</td> <td>...</td> </tr> <tr> <td>6A3</td> <td>P.P.</td> <td>300</td> <td>195</td> <td>0</td> <td>...</td> </tr> <tr> <td>6B7</td> <td>A.V.C.</td> <td>195</td> <td>0</td> <td>...</td> <td>...</td> </tr> </tbody> </table>	Tube	Point	P	SG	K	G	78	R.F.	195	90	2.2	...	78	Det.	125	195	5.1	...	78	1st	195	90	5.1	...	78	1st	195	90	2.3	...	78	1st	195	90	4.4	...	85	1st	60	85	0	...	85	2nd	85	13	0	...	42	Driver	19	190	0	...	6A3	P.P.	300	195	0	...	6B7	A.V.C.	195	0	...	...
Tube	Point	P	SG	K	G																																																																	
78	R.F.	195	90	2.2	...																																																																	
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680	140	460	4-78, 1-76, 3-85, 1-6B7, 1-6F7, 1-42, 1-80, 1-5Z3, 2-6A3	<table border="1"> <thead> <tr> <th>Tube</th> <th>Point</th> <th>P</th> <th>SG</th> <th>K</th> <th>Tr. Pl.</th> <th>Fl.</th> </tr> </thead> <tbody> <tr> <td>85</td> <td>A.B.C.</td> <td>85</td> <td>37</td> <td>0</td> <td>...</td> <td>...</td> </tr> <tr> <td>85</td> <td>Shadow</td> <td>70</td> <td>0</td> <td>...</td> <td>...</td> <td>...</td> </tr> <tr> <td>85</td> <td>Rect.</td> <td>320</td> <td>...</td> <td>...</td> <td>...</td> <td>...</td> </tr> <tr> <td>80</td> <td>Rect.</td> <td>80</td> <td>...</td> <td>...</td> <td>...</td> <td>...</td> </tr> </tbody> </table>	Tube	Point	P	SG	K	Tr. Pl.	Fl.	85	A.B.C.	85	37	0	...	...	85	Shadow	70	0	...	...	...	85	Rect.	320	...	...	...	...	80	Rect.	80	...	...	...	...																															
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80	Rect.	80	...	...	...	...																																																																

# Auto Radio Sets

Model No.	Power Input (Watts)	I.F. (K.C.)	Tubes Used	†Tube Socket Voltages
<b>3</b> (Trans.)		Tuned R.F. 1000-1200 (Adj. Freq.)	3-24, 2-01A, 2-71A	*
<b>5</b> (Trans.)		460	1-6A7, 1-78, 1-75, 1-41, 1-84	*
<b>6</b> (Trans.) 6F		260	3-36, 1-85, 1-41 3-36, 1-85, 1-41, 1-84	*
<b>7</b> (Trans.) 1st type 2d type		175	3-36, 2-38 3-36, 1-38, 1-41	*
<b>8</b> (Trans.)		175	3-36, 1-38, 2-41	*
<b>9</b> (Trans.) 9F		260	3-36, 1-85, 1-37, 1-79 3-36, 1-85, 1-37, 1-79, 1-84	*
<b>10</b> (Trans.)		260	2-39/44, 1-6A7, 1-75, 1-42, 1-84	*
<b>11</b> (Trans.) 1st type 2d type		260	2-44, 1-77, 1-75, 1-42, 1-84	*
<b>12</b> (Trans.) Code 121 Code 122		175	3-36, 1-38, 1-41	*
<b>700</b> (Trans.)		260	2-44, 1-77, 1-75, 1-42, 1-84	*
<b>800</b> (Trans.)		260	2-39/44, 1-6A7, 1-75, 1-37, 1-79, 1-84	*
<b>802</b>		260	2-39/44, 1-6A7, 1-75, 1-37, 1-79 1-84	*
<b>805</b>		260	1-6A7, 1-41, 1-75, 1-78, 1-84	*

\*Voltages not given for auto radio models due to voltage variations.

†Line Voltage 120. Readings made direct from tube sockets on underside of chassis, using test prods, and high resistance D. C. voltmeter for D. C. voltages; A. C. voltmeter for A. C. voltages. Volume control of set at maximum.

\*Voltage  
†Line Vol  
Volume c

Model No.	Power Input (Watts)	I.F. (K.C.)	Tubes Used	† Tube Socket Voltages
806	—	260	1-6A7, 1-41, 1-75, 2-78, 1-84	*
808	—	260	1-6A6, 1-6A7, 1-75, 1-76, 1-77, 1-78, 1-84	*
809	—	260	1-6A7, 1-41, 1-75, 2-78, 1-84	*
816	...	260	1-6A7, 2-78, 1-75, 1-41, 1-84	*
817	...	260	1-6A7, 2-78, 1-75, 1-41, 1-84	*
818	...	260	1-6A7, 2-78, 1-75, 1-41, 1-84	*
819	...	260	1-6A7, 2-78, 1-75, 2-41, 1-84	*

\* Voltages not given for auto radio mode's due to voltage variations. † Tube Socket Voltages

Volume control of set at maximum. Line Voltage 120. Readings made direct from tube sockets on underside of chassis, using test prods, and high resistance D. C. voltmeter for D. C. voltages; A. C. voltmeter for A. C. voltages.