

# Service Manual

Radio

## RF-2900LBS

FM-AM 6-Band Portable Radio



### ■ SPECIFICATIONS

Frequency Range:	FM	87.5~108 MHz	Power Output:	3W DC Maximum		
	LW	150~410 kHz (2000~731m)		Power Source:	AC 110~125V/220~240V 50-60 Hz or 9V (Six "D" Size Flashlight Batteries) (National UM-1 or equivalent)	
	MW	525~1610 kHz (571~186m)				
	SW <sub>1</sub>	3.2~8 MHz (93.8~37.5m)				
	SW <sub>2</sub>	8~16 MHz (37.5~18.7m)				
	SW <sub>3</sub>	16~30 MHz (18.7~10m)				
Intermediate Frequency:	FM	10.7 MHz	Power Consumption:		11W (AC Only)	
	AM	(LW, MW & SW) 455 kHz		Speaker:	10 cm (4") PM Dynamic Speaker	
	SW	1st IF 2 MHz			Dimensions:	381(Wide) x 246(High) x 120(Deep)mm (15" x 9 $\frac{11}{16}$ " x 4 $\frac{3}{4}$ " )
		2nd IF 455 kHz				
Sensitivity:	FM	2.5 $\mu$ V (S/N 26 dB), 2 $\mu$ V (3 dB down limiter sens.)	Weight:			3.6 kg. (7 lb. 15 oz.) without batteries
	LW	70 $\mu$ V/m (S/N 6 dB), 600 $\mu$ V/m (S/N 26 dB)		Impedance:		Speaker .....8 $\Omega$
	MW	30 $\mu$ V/m (S/N 6 dB), 400 $\mu$ V/m (S/N 26 dB)			Earphone Jack .....8 $\Omega$	
	SW <sub>1</sub>	1.8 $\mu$ V (S/N 6 dB), 19 $\mu$ V (S/N 26 dB)			Multiplex Out Jack .....10k $\Omega$ (40mV)	
	SW <sub>2</sub>	0.8 $\mu$ V (S/N 6 dB), 9 $\mu$ V (S/N 26 dB)			FM Antenna Terminal .....75 $\Omega$	
	SW <sub>3</sub>	1.2 $\mu$ V (S/N 6 dB), 13 $\mu$ V (S/N 26 dB)			Phono Jack .....500k $\Omega$ (50mV)	
					Recording Out Jack.....80k $\Omega$ (100mV)	

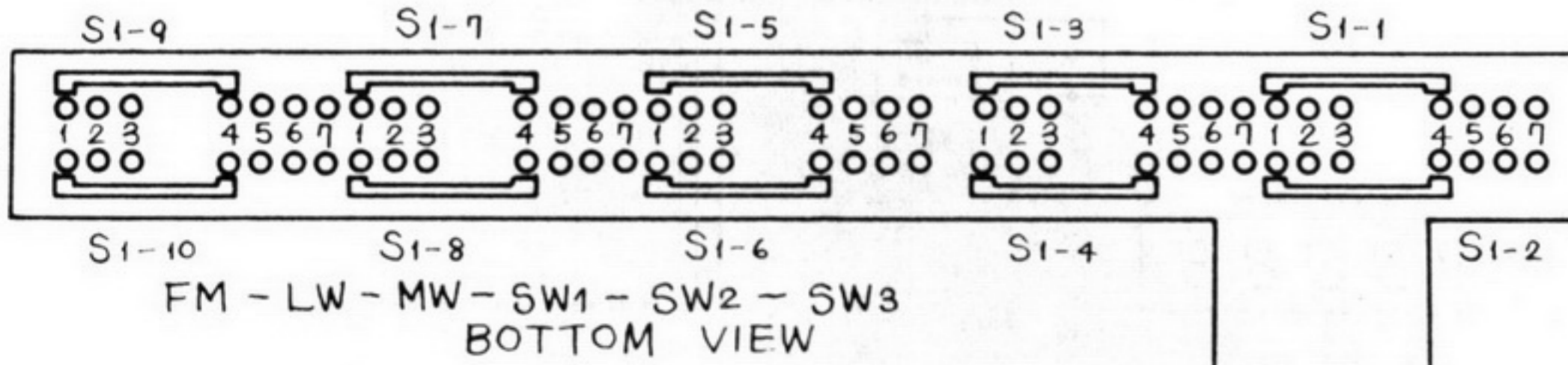
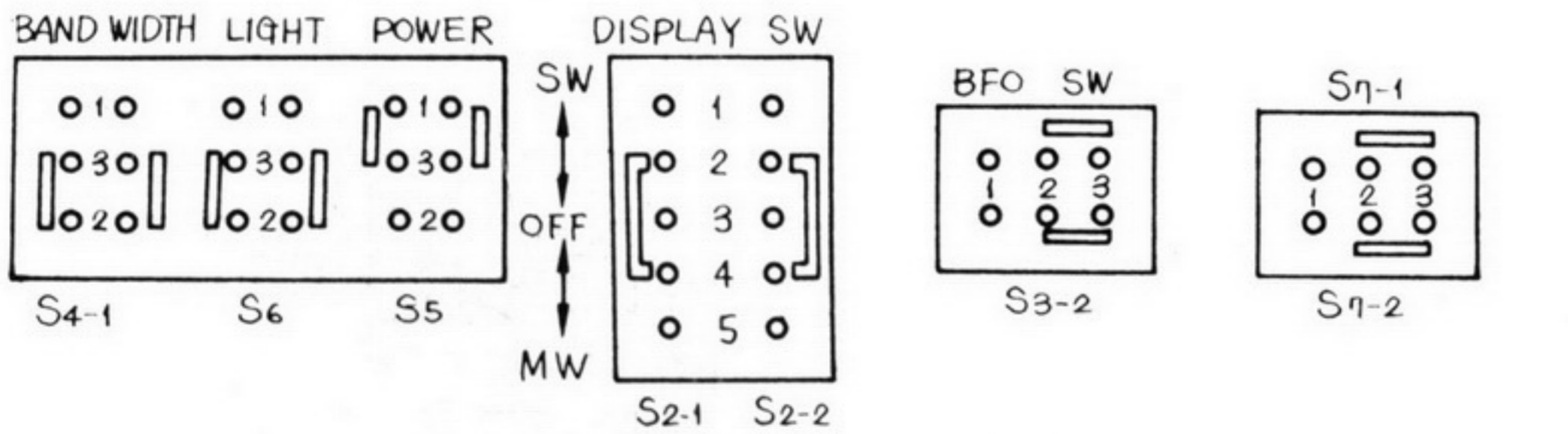
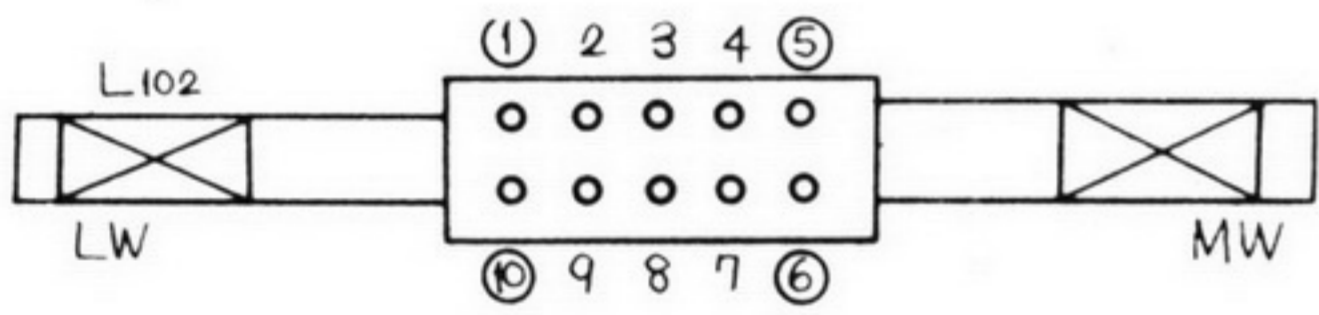
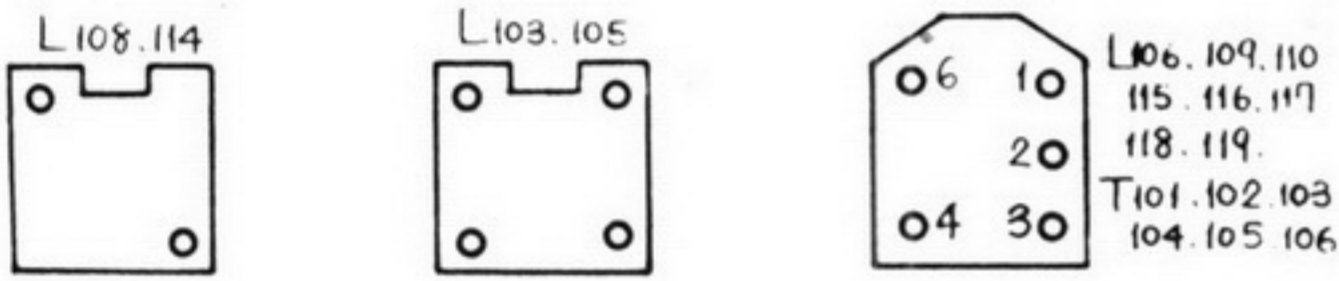
Specifications are subject to change without notice.

Matsushita Electric Trading Co., Ltd.  
P.O. Box 288, Central Osaka, Japan

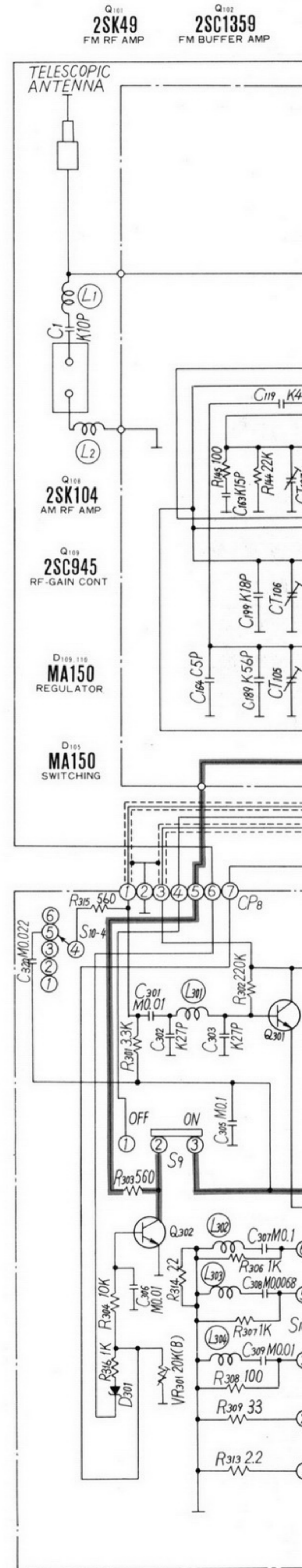


**Notes:**

1. S<sub>1-1</sub>~S<sub>1-10</sub>: Band switch in "FM" position.
2. S<sub>2-1</sub>, S<sub>2-2</sub>: Digital display switch in "OFF" position.
3. S<sub>3-1</sub>, S<sub>3-2</sub>: BFO switch in "OFF" position.
4. S<sub>4-1</sub>: Band width switch in "NARROW" position.
5. S<sub>5</sub>: Radio ON/OFF switch in "OFF" position.
6. S<sub>6</sub>: Light switch in "OFF" position.
7. S<sub>7</sub>: Phono/Radio switch in "Radio" position.
8. S<sub>8</sub>: Voltage selector switch.
9. S<sub>9</sub>: Preselector switch in "ON" position.
10. S<sub>10-1</sub>~S<sub>10-3</sub>: Preselector Band switch in "MW" position.
11. DC voltage measurements are taken with electronics voltmeter from negative terminal of battery.  
 □.....FM position ( ).....AM position  
 < >.....SW position
12. \* mark.....chip resistor and capacitor.
13. Battery current. No signal .....36 mA  
 Maximum output .....600 mA
14. ⚠ indicates that only parts specified by the manufacturer be used for safety.
15. VR<sub>101</sub> ...Meter Control, VR<sub>201</sub> ...RF Gain Control,  
 VR<sub>202</sub> ...SW Cal Control, VR<sub>203</sub> ...BFO Pitch Control,  
 VR<sub>204</sub> ...Base Control, VR<sub>205</sub> ...Treble Control  
 VR<sub>206</sub> ...Volume Control, VR<sub>301</sub> ...D.AGC Control



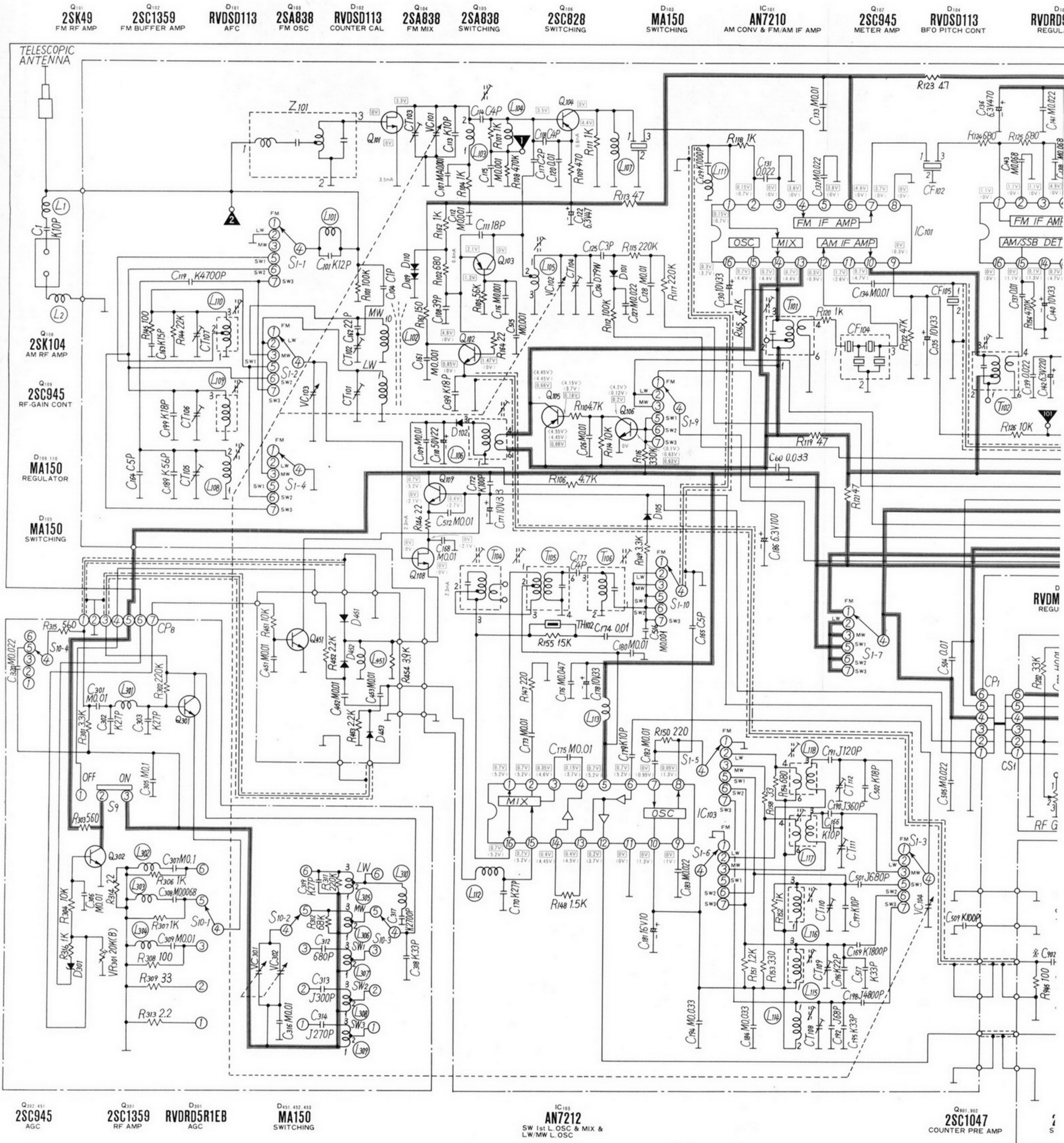
<p>IC101,102,103</p>
<p>IC901</p>
<p>IC902</p>
<p>ECB Q101~109 Q201,203,204 Q301,901~908</p>
<p>Q205</p>
<p>ECB Q206,207</p>
<p>Cathode Anode D101,102,104,108 D201,202,203,301,401 402,403,404</p>
<p>Cathode Anode D103,105,106,107 902,903</p>



Q302 451 2SC945 AGC, Q301 2SC1359 RF AMP, RVDRO AGC



# SCHEMATIC DIAGRAM





MODEL RF-2900LBS

