

Service Manual

Radio Cassette
RX-F20L

FM-LW-MW-SW Stereo Radio Cassette Recorder



■ SPECIFICATIONS

General:

Power Requirement:	Battery; 9V (Six, "C" Size dry Batteries) (National UM-2 or equivalent) AC; 220V/50Hz with AC adaptor Car battery; with optional car adaptor RP-917
Power Consumption:	AC Adaptor only (10W)
Power Output:	7W (3.5W×2)...RMS (max.) 7W (3.5W×2)...MPO (music)
Speaker:	10cm (4") PM Dynamic Speaker (3Ω)
Input:	MIC; sensitivity 0.25mV/applicable microphone impedance 200~600Ω DC IN; 9V
Output:	EXT SP; 3Ω~8Ω HEADPHONES; 320mW/32Ω
REC/P.B Connection:	5P DIN type IN; 0.27mV/2.7kΩ OUT; 420mV/470kΩ
Dimensions:	400mm(W)×127mm(H)×96mm(D) (15 ³ / ₄ "×5"×3 ²⁵ / ₃₂ "
Weight:	1.95kg (4 lb. 5 oz) without batteries

Radio Section:

Radio Frequency Range:	FM; 87.5~108MHz LW; 150~285kHz (2000~1060m) MW; 520~1610kHz (577~186m) SW; 5.9~18MHz (50.8~16.7m)
Intermediate Frequency:	FM; 10.7MHz AM; 455kHz (LW, MW, SW)
Sensitivity:	FM; 2.2μV/50mW output LW; 250μV/m/50mW output MW; 158μV/m/50mW output SW; 15μV/50mW output

Tape Deck Section:

Frequency Response:	90~10,000Hz (with normal tape) 60~10,000Hz (with CrO ₂ tape) 60~12,000Hz (with Metal tape)
Recording System:	AC bias, AC erase
Tape Speed:	4.8cm/s, (1 ⁷ / ₈ ips)
Wow and Flutter:	0.3% (WRMS)
Program Time:	1 hour with C-60 cassette tape
Track System:	4-track 2 channel stereo recording and playback

Specifications are subject to change without notice.

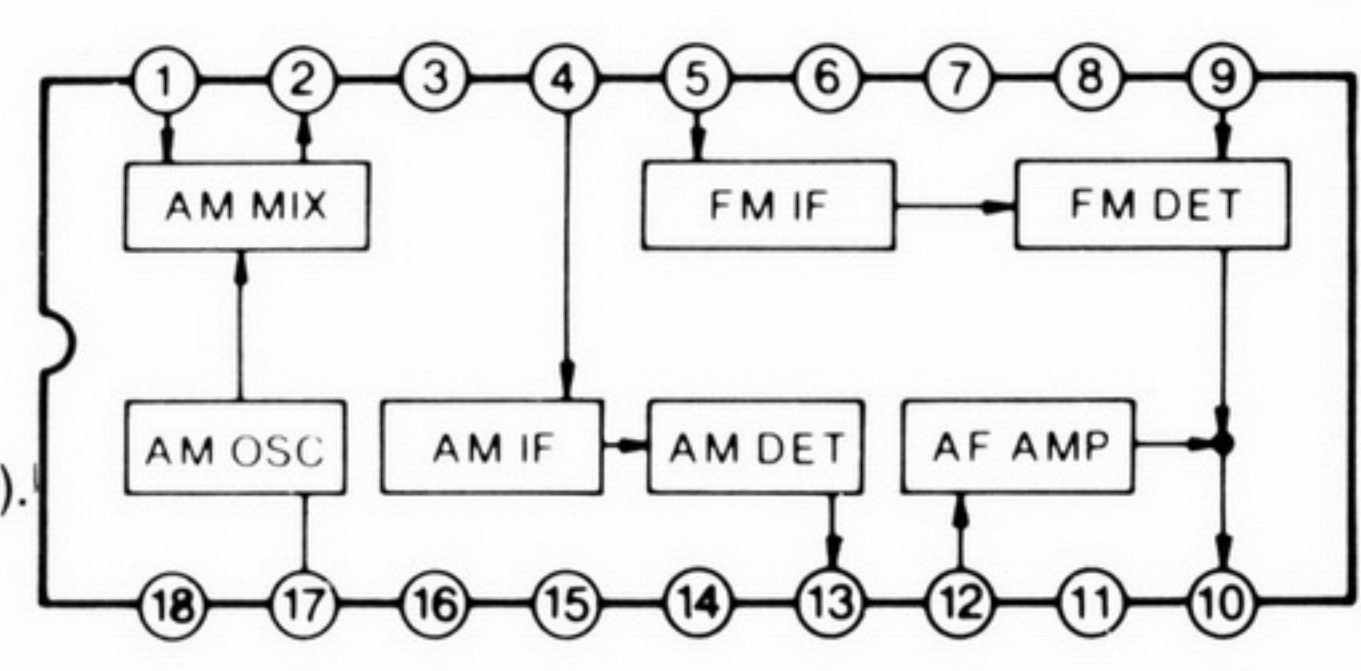
Panasonic

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

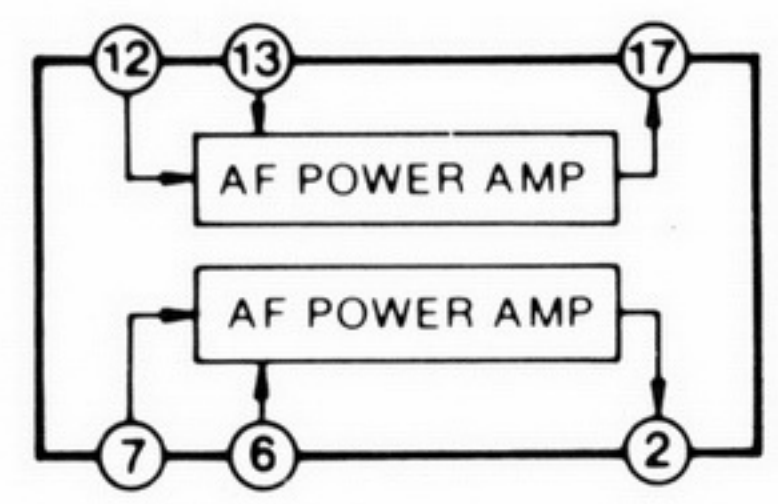
Notes:

- S1-1~S1-10...Record/playback switch in "playback" position. (1...Playback, 3...Record).
- S2-1~S2-4 ...Function switch in "TAPE" position. (1...TAPE, 2...RADIO, 3...SLEEP).
- S3-1~S3-4 ...Mode/beat proof switch in "AMBIENCE/III" position. (1...MONO/I, 2...STEREO/II; 3...AMBIENCE/III).
- S4-1~S4-4 ...Tape selector switch in "NORMAL" position. (1...NORMAL, 2...CrO₂, 3...METAL).
- S5-1~S5-8 ...Band switch in "FM" position. (1...FM, 2...LW, 3...MW, 4...SW).
- S6-1, S6-2 ...Rec mute ON/OFF switch in "OFF" position.
- S7TPS switch.
- S8-1~S8-4 ...DIN "ON/OFF" switch in "OFF" position. (1...ON, 3...OFF).
- S9Play ON/OFF switch in "OFF" position.
- S10Motor ON/OFF switch in "OFF" position.
- S11FF, Rewind ON/OFF switch in "OFF" position.
- VR1VCO oscillator frequency adjustment VR.
- VR101Balance control VR.
- VR102Tone control VR.
- VR103Volume control VR.
- VR105Bias current adjustment VR.
- The mark (▼) shows test point e.g. ▼ = test point 1.
- DC voltage measurement are taken with electronics voltmeter from negative terminal of battery.
- < >...FM position, ()...AM position, <>...TPS, position, []...Record position.
- Battery current: No signal96 mA
Maximum output (radio) 700 mA
Maximum output (tape) 840 mA

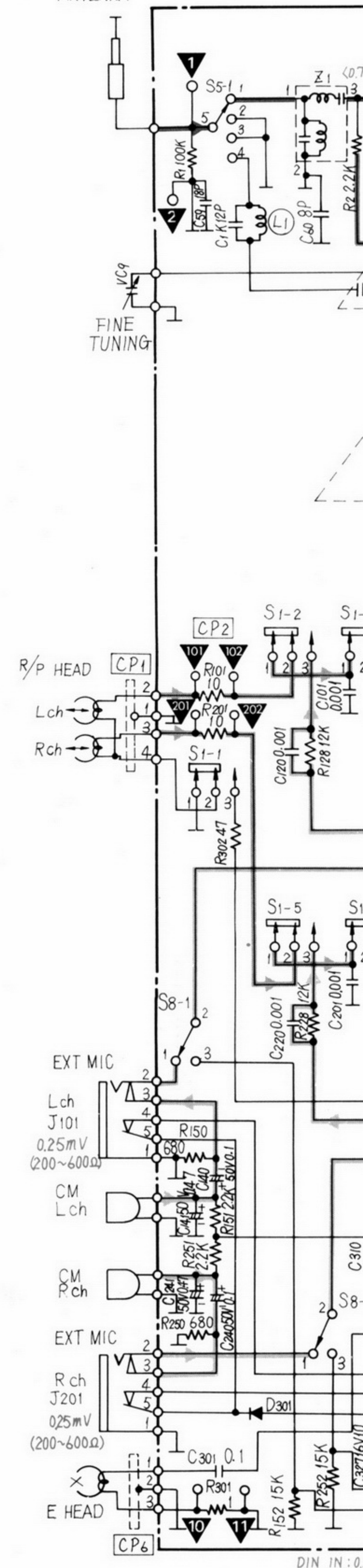
IC1 AN7220B

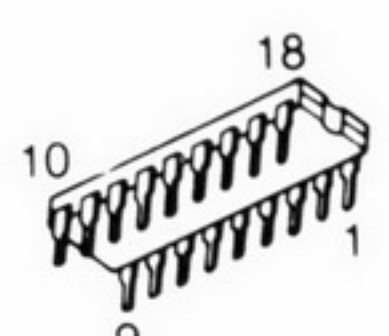
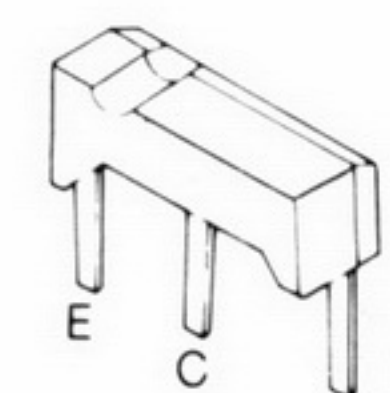
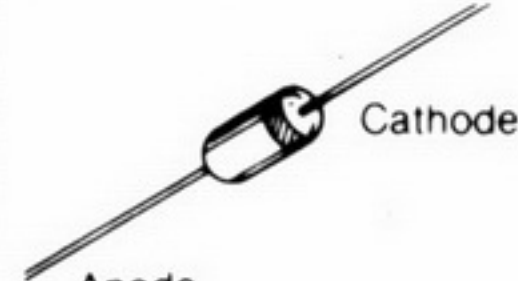
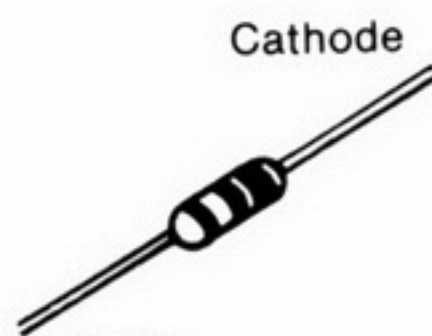
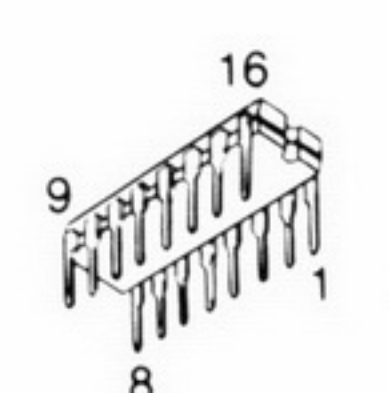
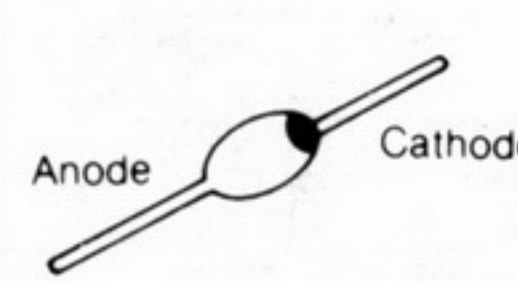
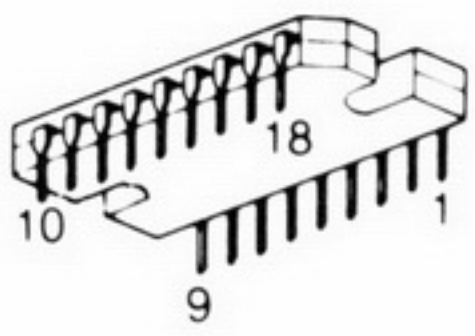
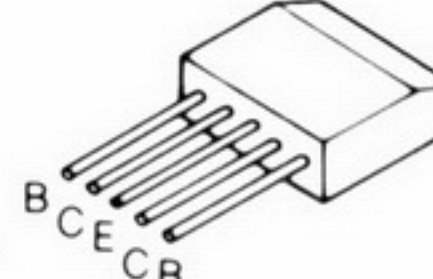
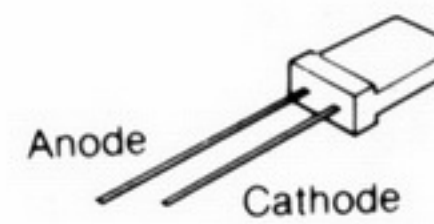
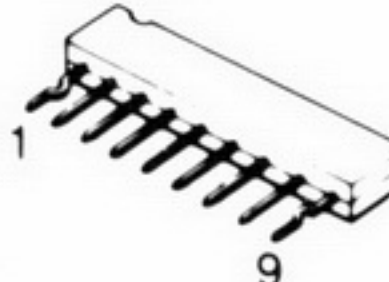
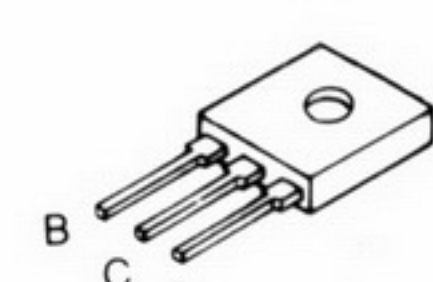
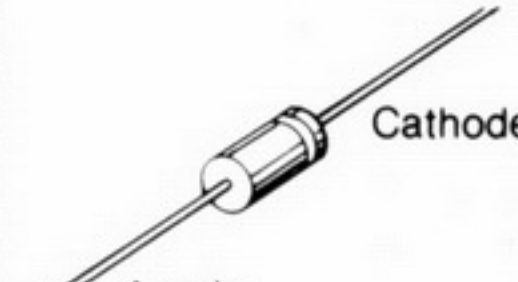


IC4 AN7146M



Q1 2SA1254 FM RF AMP



 IC1, 5	 Q1~6, 101~108, 201~208, 301, 303, 304, 306~308	 Anode Cathode D1, 2, 101~103, 201~203, 301~303, 305, 309, 318	 Anode Cathode D310
 IC2	 Anode Cathode D3		
 IC4	 Q302	 Anode Cathode D4	
 IC6	 Q305	 Anode Cathode D304, 311	

D301 MA150 SWITCHING
D302 MA16 SWITCHING

SCHEMATIC DIAGRAM

