Service Manual

Stereo Radio Cassette Recorder

Radio Cassette

RX-FS410

Color

(K) . . . . . Black Type

Area

Country Code	Areas	Color
(E)	Continental Europe	(K)
(EB)	Great Britain	
(EG)	F.R. Germany/Italy	

MECHANISM SERIES (SG-20)

■ SPECIFICATIONS

General:

Power Requirement:	AC; (E) (EG) .....220 V, 50 Hz
	(EB) .....240 V, 50 Hz
	Battery; 9 V (Six UM-1, Batteries)
Power Consumption:	15 W (AC only)
Power Output:	16 W (8 W x 2) ... PMPO
Speaker:	10 cm PM Dynamic Speaker (2.7Ω)
Output:	HEADPHONES; 32Ω, ø3.5
Dimensions (W x H x D):	460 mm x 148 mm x 151 mm
Weight:	2.4 kg without batteries

Radio Section:

Radio Frequency Range:	FM; 87.5 ~ 108 MHz
	MW; 520 ~ 1610 kHz
	LW; 148.5 ~ 285 kHz
	SW; 5.9 ~ 18 MHz
Intermediate Frequency:	FM; 10.7 MHz
	AM; 459 kHz
Sensitivity:	FM; (E, EB) .....2.2 μV/50 mW output (-3 dB Limit Sens.)
	(EG) .....2.5 μV/50 mW output
	MW; (E, EB) .....140 μV/m/50 mW output
	(EG) .....125 μV/m/50 mW output
	LW; (E, EB) .....160 μV/m/50 mW output
	(EG) .....140 μV/m/50 mW output
	SW; 4 μV/50 mW output

Tape Deck Section:

Frequency Response:	70 ~ 10,000 Hz
Tape Speed:	4.8 cm/s
Recording System:	AC bias, Magnet erase
Track System:	4-track 2-channel stereo recording and playback

Notes:

1. Weights and dimensions shown are approximate.
2. Design and specifications are subject to change without notice.

Panasonic

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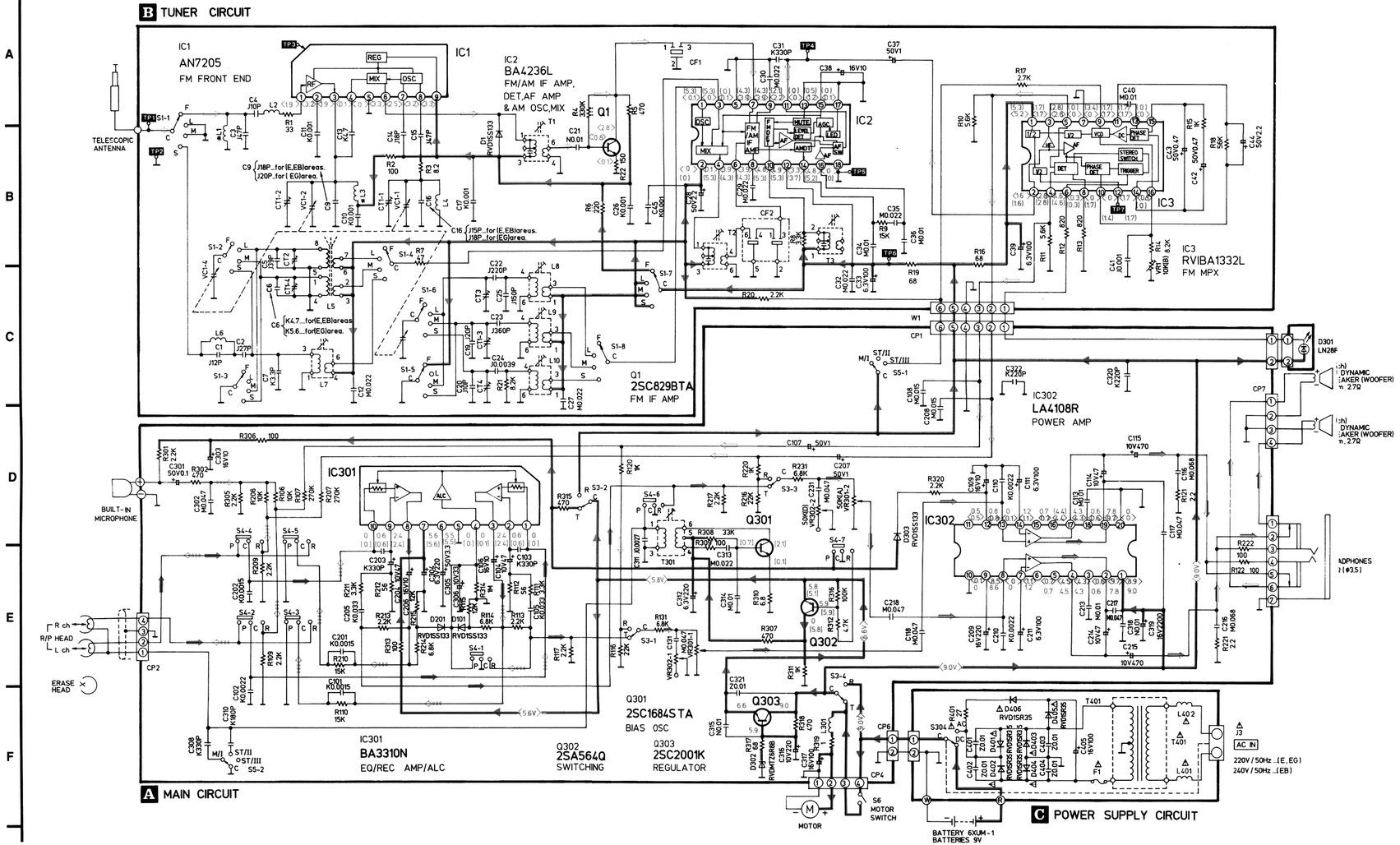
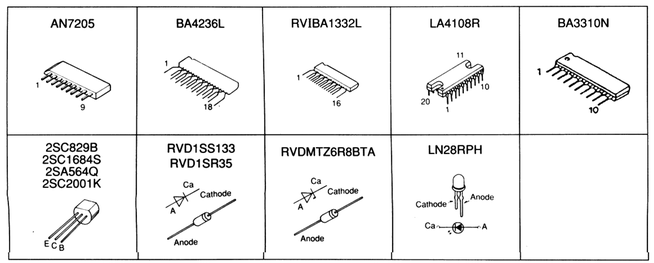
■ SCHEMATIC DIAGRAM (Parts List on Page 18, 19, 20)



Notes:

1. S1-1 ~ S1-8 : Band select switch in "FM" position. (F . . . FM , L . . . LW, M . . . MW, S . . . SW)
2. S3-1 ~ S3-4 : Function select switch in "TAPE/ OFF " position. (T . . . TAPE/ OFF , R . . . RADIO)
3. S4-1 ~ S4-7 : Record/Playback switch in "PLAYBACK" positon. (R . . . RECORD, P . . . PLAYBACK).
4. S5-1 ~ S5-2 : FM mode/Beat proof select switch in "MONO/I" position. (M/I . . . MONO/I, ST/II . . . STEREO/II, ST/III . . . STEREO/III)
5. S6 : Motor switch in "OFF" position.
6. S304 : AC/DC select switch in "DC" position.
7. VR1 : FM VCO adjustment VR.
8. VR301-1, VR301-2 : Volume control VR.
9. VR302-1, VR302-2 : Tone control VR.
10. DC voltage measurements are taken with electronic voltmeter. The negative terminal of the battery provides negative meter connection point.
    No mark . . . . PLAYBACK, [ ] . . . . RECORD, ( ) . . . . AM, < > . . . . FM
11. Battery current : Vol. min ..... 70mA (Radio)
    130mA (Tape Playback)
    Vol. max. ..... 800mA (Radio)
    960mA (Tape Playback)
    870mA (Recording)
    Measurement Instruction
    (Radio : FM 60dB, 30% Mod.
    Tape: 315 Hz, 0dB)
12. Important Safety notice:
    Components identified by ⚠ mark have special characteristics important for safety.
    When replacing any of these components, use only manufacturer's specified parts.
13. The mark (■) shows test point eg: TP1 test point 1.

• This schematic diagram may be modified at any time with the development of new technology.

... FM SIGNAL LINE
... PLAYBACK SIGNAL LINE
... RECORD SIGNAL LINE
... PLAYBACK/FM SIGNAL LINE
... + B LINE

■ TERMINAL GUIDE OF IC'S, TRANSISTORS AND DIODES