

Service Manual

Stereo Radio Cassette Recorder

Radio Cassette
RX-FS420



Color

(K) Black Type

Area

Country Code	Area	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, "R20/LR20" batteries)

Power Consumption: 15 W (AC only)

Power Output: 20 W (10 W x 2) PMPO
 10 W (5 W x 2) MPO

Speaker: Woofer; 10 cm PM Dynamic Speaker (2.7Ω)
 Tweeter; 1.5 cm ceramic speaker

Output: HEADPHONES; 32Ω, ø3.5

Dimensions: 460 (W) x 148 (H) x 151 (D) mm

Weight: 2.4 kg without batteries

Radio Section:

Radio Frequency Range: FM; 87.5 ~ 108 MHz
 LW; 148.5 ~ 285 kHz
 MW; 520 ~ 1610 kHz
 SW; 5.9 ~ 18 MHz

Intermediate Frequency: FM; 10.7 MHz
 MW; 459 kHz

Sensitivity: FM; 2 μV/50 mW output
 (-3dB Limit Sens.)
 LW; 200 μV/m/50 mW output
 MW; 159 μV/m/50 mW output
 SW; 6 μV/50 mW output

Tape Deck Section:

Frequency Response: 70 ~ 10,000 Hz

Recording System: AC bias, Magnet erase

Tape Speed: 4.8 cm/s

Track System: 4-track 2-channel stereo recording and playback

Notes:

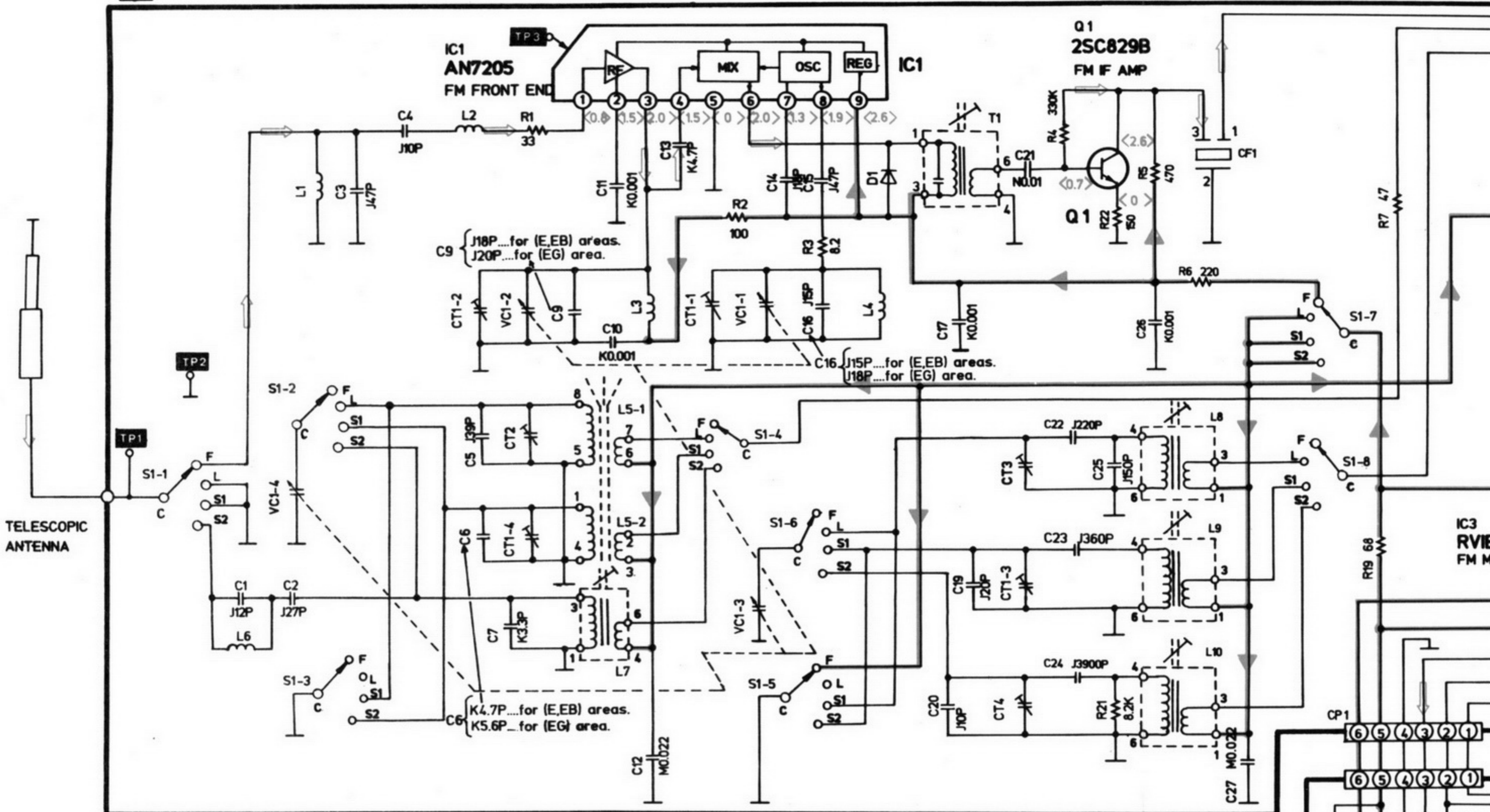
1. Weights and dimensions shown are approximate.
2. Design and specifications are subject to change without notice.

Panasonic

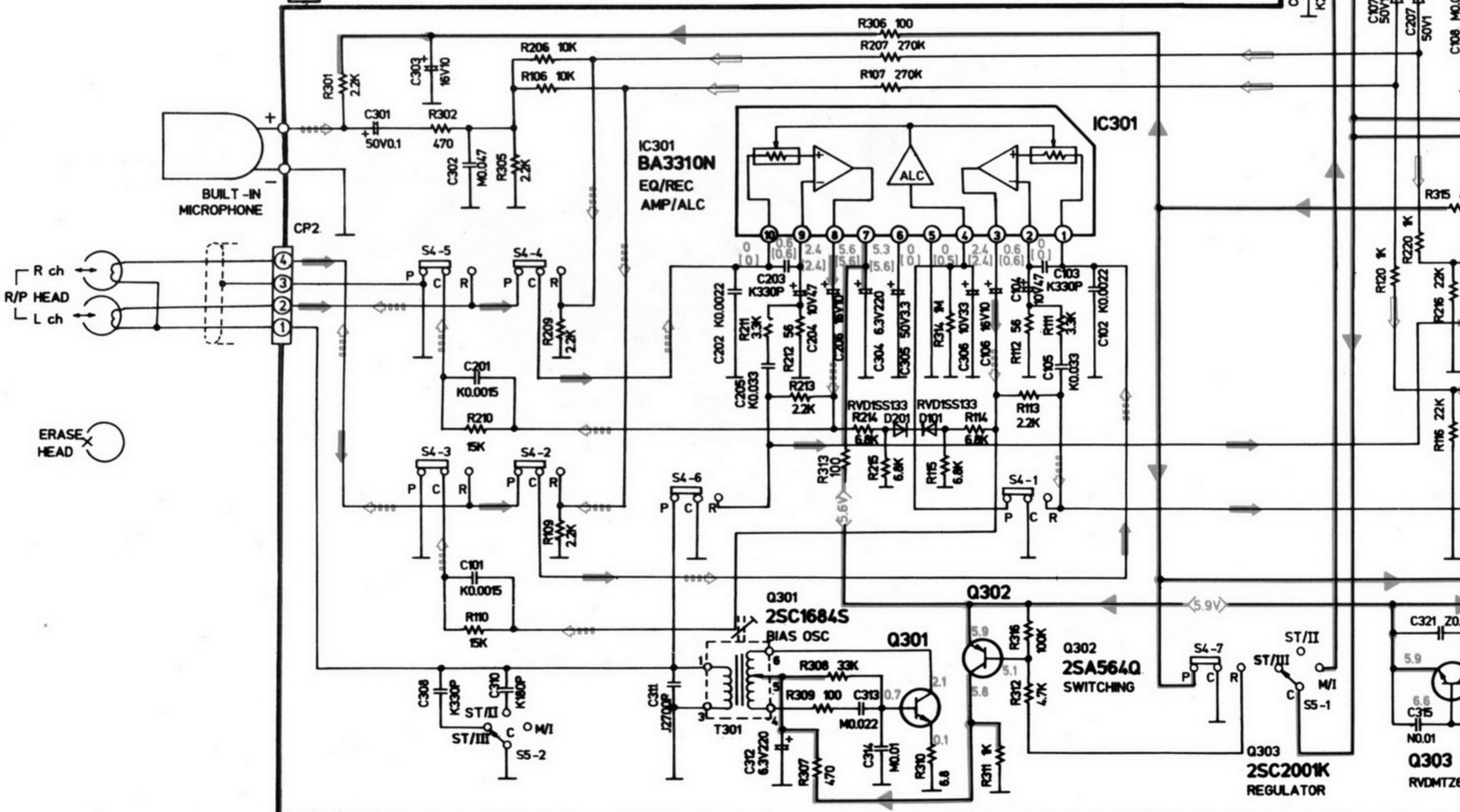
Matsushita Electric Industrial Co., Ltd.
 Central P.O. Box 288, Osaka 530-91, Japan

SCHEMATIC DIAGRAM

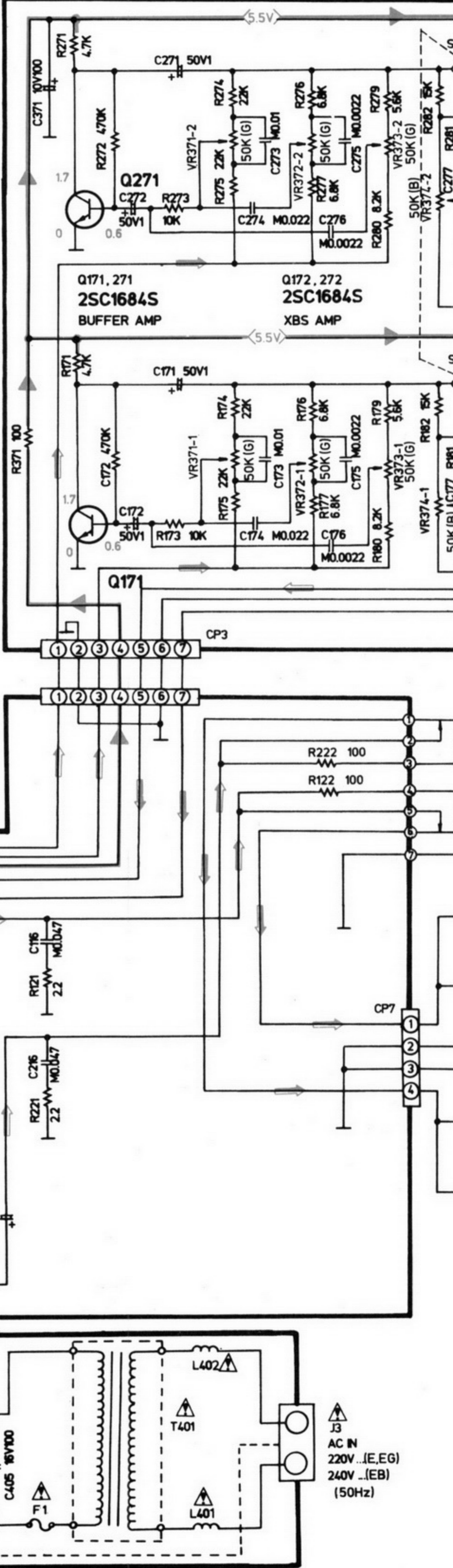
B TUNER CIRCUIT



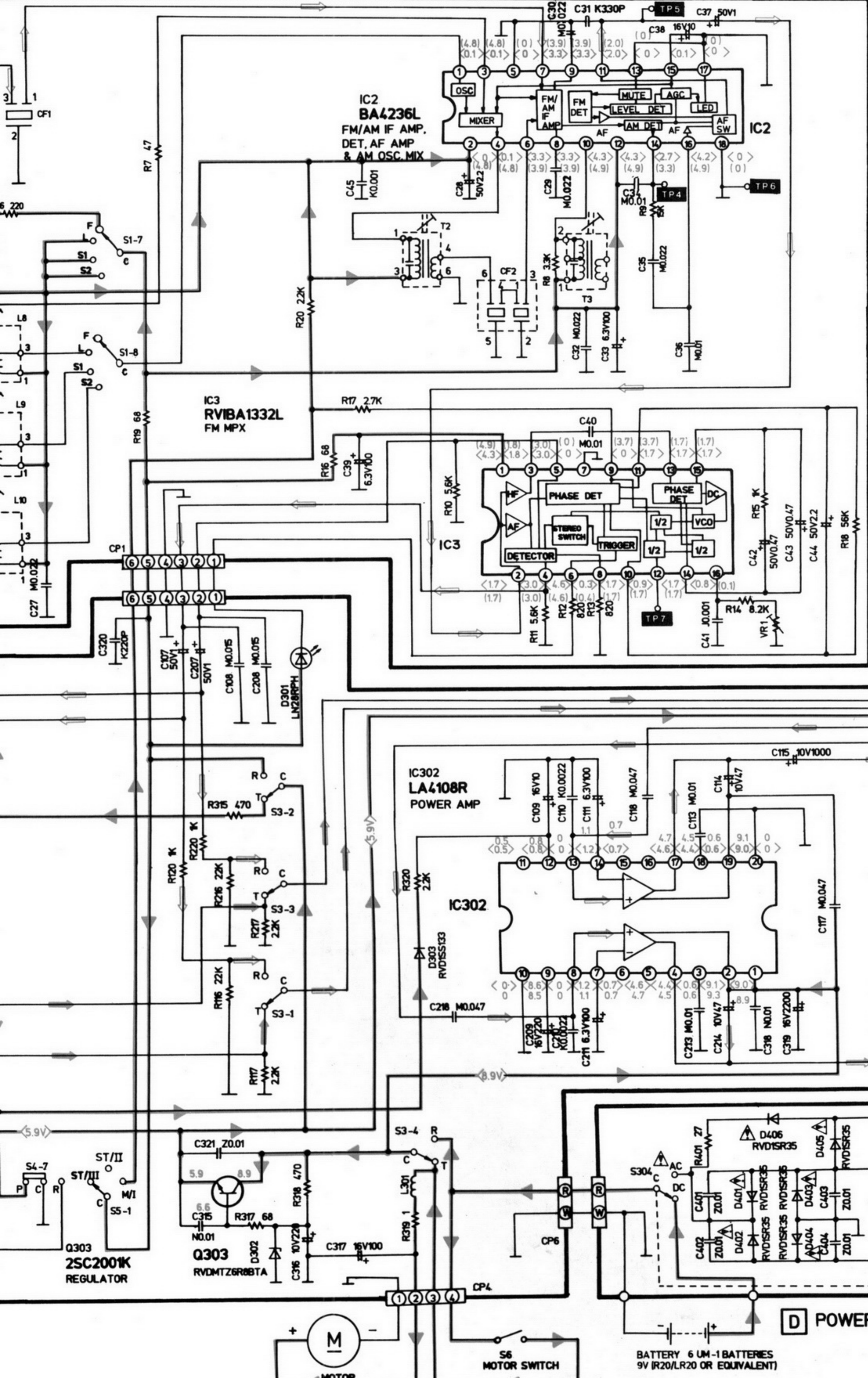
A MAIN CIRCUIT

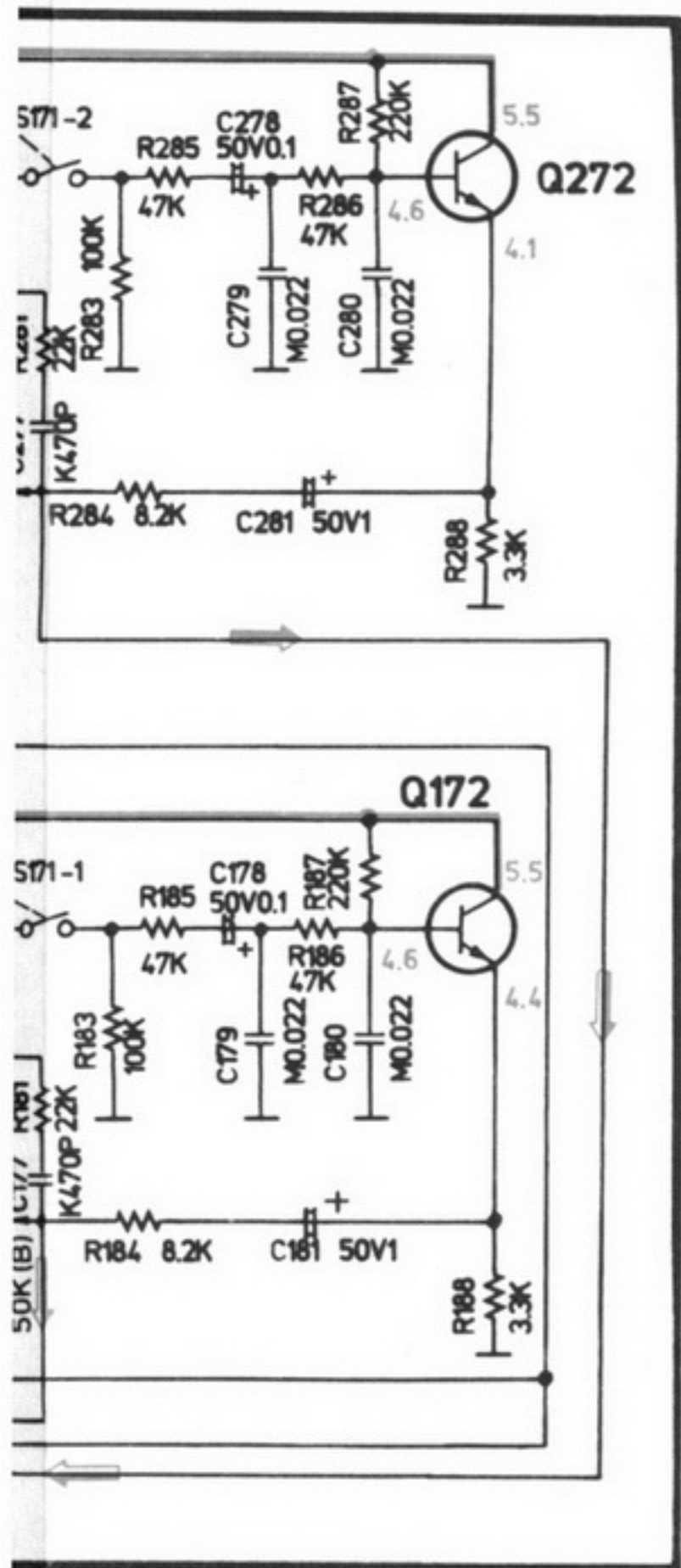


C GRAPHIC EQUALIZER CIRCUIT



D POWER SUPPLY CIRCUIT





Notes:

1. S1-1~S1-8: Band select switch in "FM" position.
(F... FM, L... LW, S1... MW, S2... 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" position.
(R... RECORD, P... PLAYBACK)
4. S5-1~S5-2: FM MODE/BP switch in "STEREO/III" position.
(M/... MONO/II, ST/II... STEREO/II, ST/III... STEREO/III)
5. S6: Motor switch in "OFF" position.
6. S171-1~S171-2: XBS switch in "OFF" position.
7. S304: AC/DC select switch in "DC" position.
8. VR1: FM VCO adjustment VR.
9. VR371-1~VR371-2: Graphic Equalizer VR. (100 Hz).
10. VR372-1~VR372-2: Graphic Equalizer VR. (1 kHz)
11. VR373-1~VR373-2: Graphic Equalizer VR. (10 kHz)
12. VR374-1~VR374-2: Volume control VR.
13. 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.
14. Battery Current: Vol. min 70 mA (Radio)
130 mA (Tape Playback)
Vol. max 250 mA (Radio)
340 mA (Tape Playback)
110 mA (Recording)

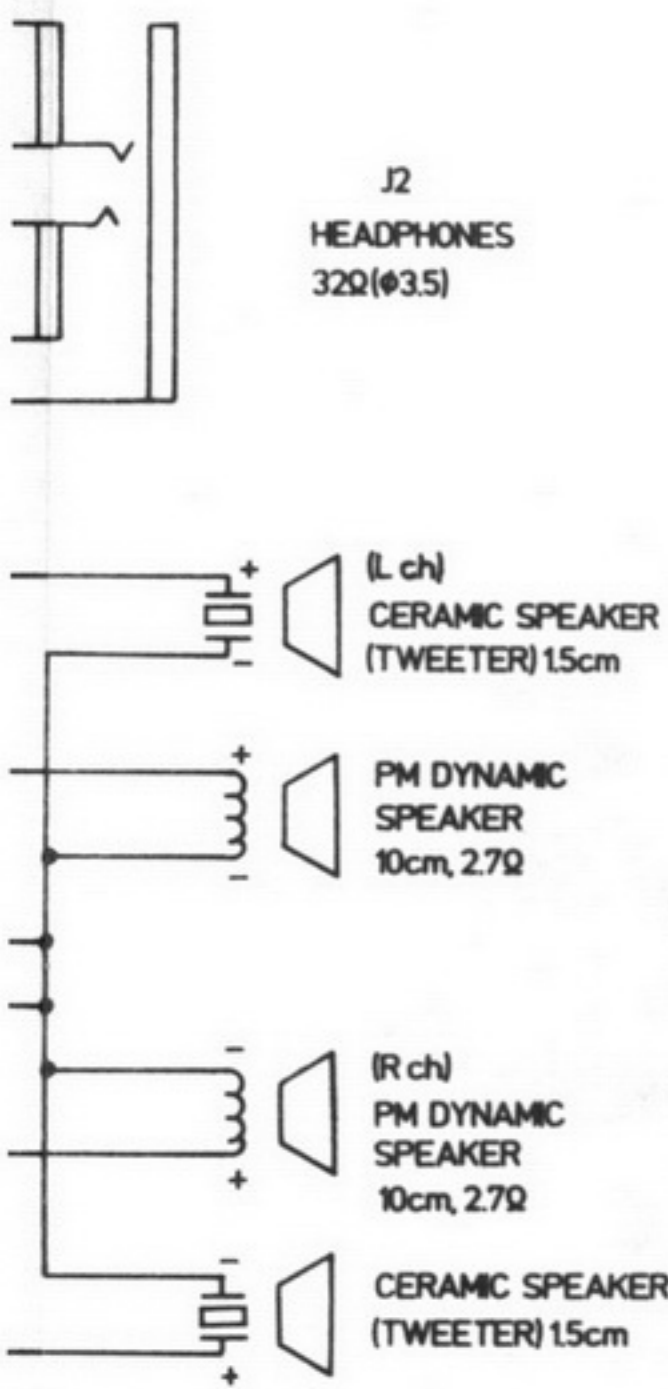
Measurement instruction
(Radio: FM 60dB, 30% Mod.)
(Tape: 315 Hz, 0dB)

15. Important safety notice:

Components identified by Δ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

16. The mark (■) shows test point e. g. TP1 = test point 1.

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



<p>AN7205</p>	<p>BA4236L</p>	<p>RVIBA1332L</p>	<p>LA4108R</p>	<p>BA3310N</p>
<p>2SC829B 2SC1684S 2SC2001K</p>	<p>RVD1SS133 RVD1SR35</p>	<p>RVDMTZ6R8BTA</p>	<p>SVGLB74UR3HL</p>	