S14-1 SONY MODEL 8R-33

Specifications

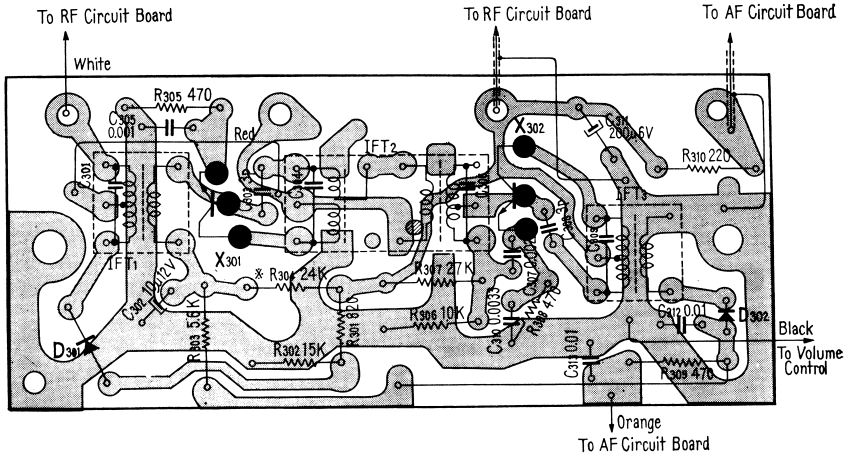
Circuit :	8 Transistor Superheterodyne
Frequency Coverage :	MW 530～1,605 Kc (566～187 m)
	SW_1 2～6 Mc (150～50 m)
	SW_2 6～18 Mc (50～16.7 m)
Antenna System :	MW Built-in Ferrite Bar Antenna
	SW Built-in Telescopic Antenna
	External Antenna Leads
Intermediate Frequency :	455 Kc
Maximum Sensitivity : (at 50mW output)	MW 30 dB (32 μV/m)
	SW_1 10 dB (3.2 μV/m)
	SW_2 16 dB (6.3 μV/m)
Selectivity :	34 dB at 10 Kc off resonance, at 1,400 Kc
Output Power :	600 mW (undistorted)
	900 mW (maximum)
Current Drain :	10 mA at zero signal, 250 mA at 600 mW output
Speaker :	4″ (10 cm), PM dynamic, 8Ω
Power Source :	4 "D" Size Flashlight Batteries, 6 V in total, or 117 V and 220 V house current by using SONY Power Adapter, Model AC-12
Dimensions :	11-3/4 (W)×6-3/4 (H)×3-7/8″ (D) (300×170×98 mm)
Weight :	4 lbs. 7 ozs. (2 Kgs.) with Batteries
Color :	White

SONY MODEL 8R-33

Mounting Diagram
IF Circuit

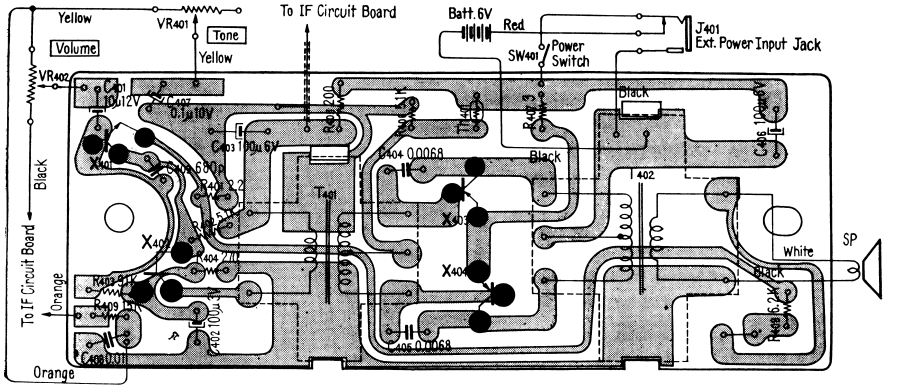
SONY 8R-33

—Printed Side—

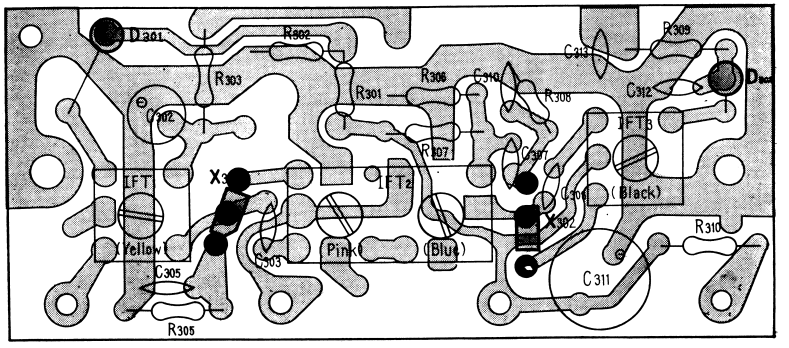


Mounting Diagram
AF Circuit

—Parts Side—

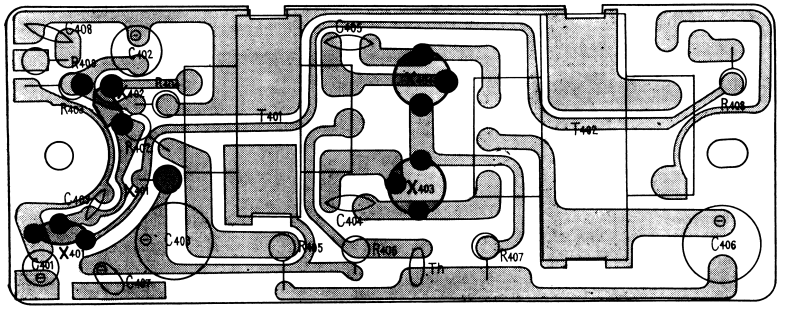


—Printed Side—

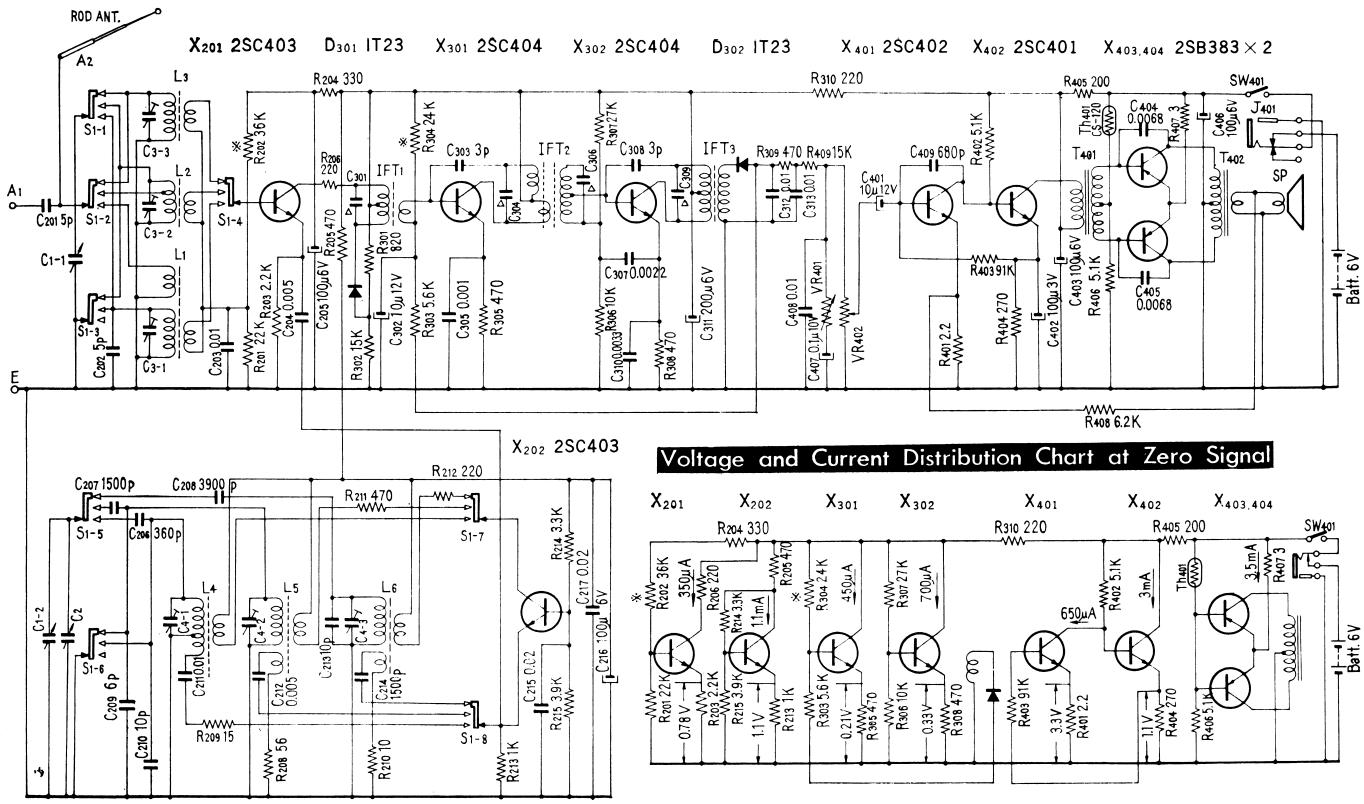


R_{304} is mounted on the printed side.

—Parts Side—



Schematic Diagram

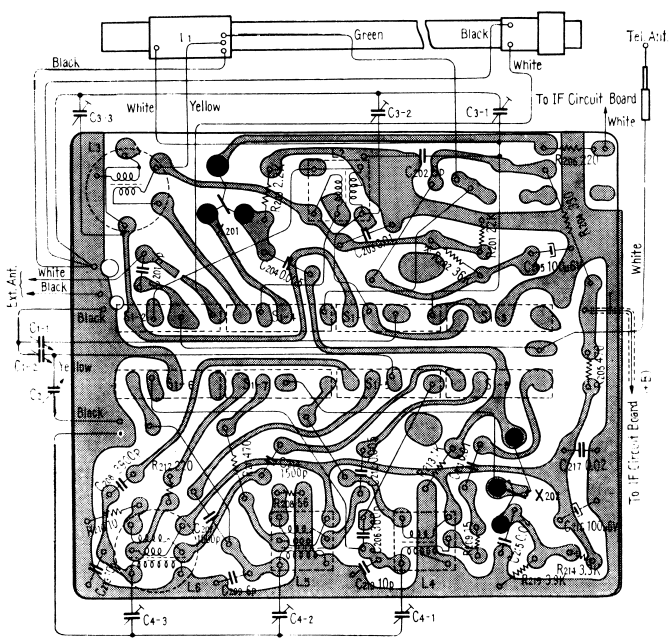


Voltage and Current Distribution Chart at Zero Signal

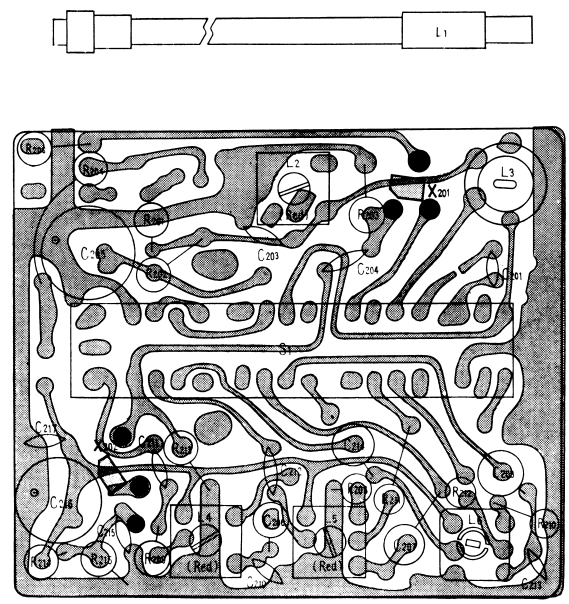
Mounting Diagram

RF Circuit

—Printed Side—



—Parts Side—



C is mounted on the printed side.

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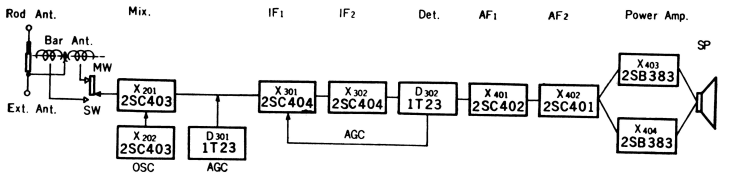
Block Diagram



Removal of Front Cabinet

SONY 8R-33

(1) Open the Battery Lid and take out the four Batteries.
(2) Set the Power Switch Button to the lower position (ON).
(3) Remove the two Screws marked with ★ shown in Fig. 1.
(4) Remove the two Back Cover Holding Screws.
(5) Carefully open the Back Cover a little at the Cabinet bottom.
Take care not to cut the leads.

If it is necessary to separate the Front Cabinet entirely from the Back Cover, excute following procedures.

a) Pull off the Antenna Connector Pin at the Telescopic Antenna Terminal.
b) Unsolder a red lead at the Battery Positive Contact Plate.
c) Unsolder a black lead at the Battery Negative Spring.

Removal of RF Circuit Board

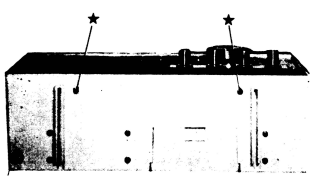
(1) Remove the Front Cabinet as outlined under "Removal of Front Cabinet".
(2) Remove the five Control Knobs by pulling straight out. Be careful not to lose the four Knob Spacers which are put on the respective shafts.
(3) Unsolder the two leads at the speaker terminals.
(4) Remove the four Screws marked with □ shown in Fig. 2.
(5) Remove the Chassis from the Front Cabinet taking care not to catch the Pointer to the Front Cabinet.
(6) Remove the two Screws marked with △ shown in Fig. 3.

Removal of IF Circuit Board

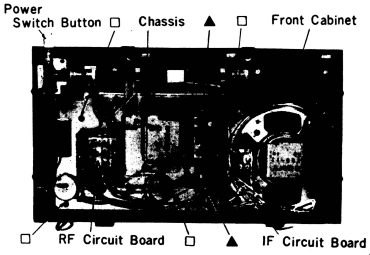
(1) Remove the two Screws marked with ▲ shown in Fig. 2.

Removal of AF Circuit Board

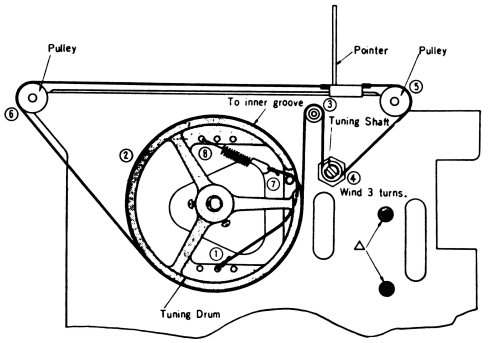
(1) Remove a Screw and a Stud securing the AF Circuit Board to the Chassis.



(Fig. 1)



To String the Dial Cord



(Fig. 3)

Adjustment and Alignment

a) Frequency Coverage

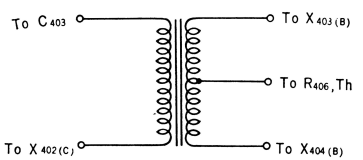
	Lower Limit	Adjust	Upper Limit	Adjust
MW	520 Kc	Core of MW OSC Coil (L_4)	1,680 Kc	MW OSC Trimmer (C_{4-1})
SW_1	1.95 Mc	Core of SW_1 OSC Coil (L_5)	6.2 Mc	SW_1 OSC Trimmer (C_{4-2})
SW_2	5.9 Mc	Core of SW_2 OSC Coil (L_6)	18.7 Mc	SW_2 OSC Trimmer (C_{4-3})

b) Tracking Adjustment

	Lower Checking Point	Adjust	Upper Checking Point	Adjust
MW	620 Kc	Position of MW ANT Coil (L_1)	1,400 Kc	MW ANT Trimmer (C_{3-1})
SW_1	1.95 Mc	Core of SW_1 ANT Coil (L_2)	6.2 Mc	SW_1 ANT Trimmer (C_{3-2})
SW_2	5.9 Mc	Core of SW_2 ANT Coil (L_3)	18.7 Mc	SW_2 ANT Trimmer (C_{3-3})

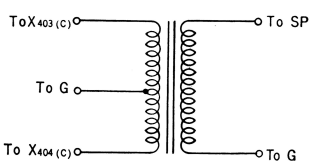
Audio Transformer

T_{401} : Driver Transformer



	DC Resistance	Impedance
Primary	Within 125Ω	1KΩ
Secondary	Within 190Ω	1.8KΩ (C.T)

T_{402} : Output Transformer



	DC Resistance	Impedance
Primary	Within 7Ω	68Ω (C.T)
Secondary	Within 0.75Ω	8Ω