

AN-LP1

SERVICE MANUAL

*US Model
Canadian Model
AEP Model
UK Model
E Model
Australian Model
Tourist Model*



- This set consists of the following units.

Antenna Module
Antenna Controller
Filter Unit

SPECIFICATIONS

Power requirements:

DC 3 V, two R6 (size AA) batteries

Dimensions (w/h/d):

Antenna Module

In use: Approx. 490 x 480 x 17.8 mm
(19 3/8 x 19 x 23/32 in.)

Folded: Approx. 205 x 180 x 17.8 mm
(8 1/8 x 7 1/8 x 23/32 in.)

Antenna Controller

Approx. 120 x 72 x 29.5 mm

(4 3/4 x 2 7/8 x 1 3/16 in.) incl. projecting parts

Mass:

Antenna Module

Approx. 92 g (3.3 oz.)

Antenna Controller

Approx. 149 g (5.3 oz.) incl. batteries

Supplied accessories:

Carrying case (1)

Batteries (2)*

Design and specifications are subject to change without notice.

- World model only

Features

- An active antenna for better Short Wave reception.
- A built-in amplifier that makes the reception like it is used at outdoors.
- A compact size that is easy to carry.

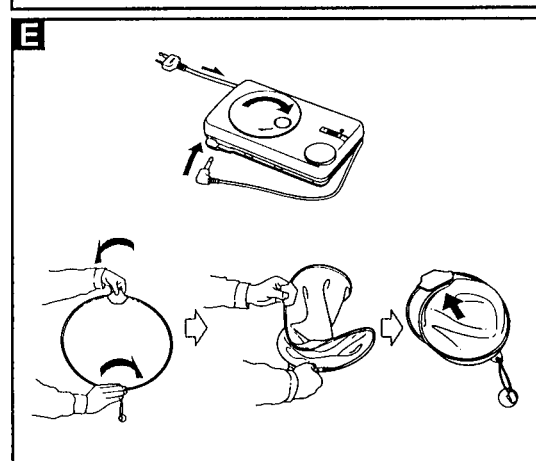
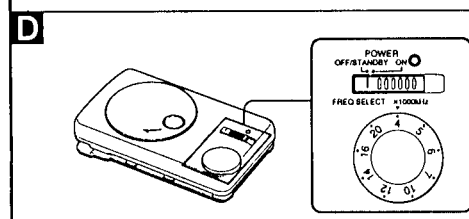
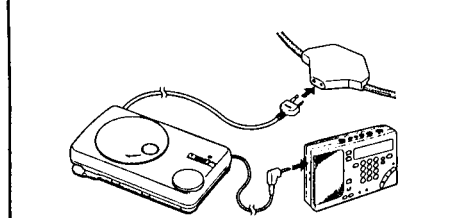
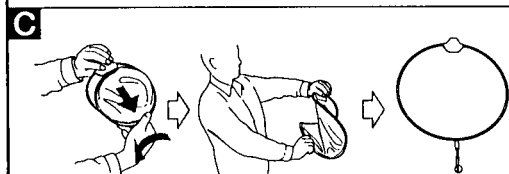
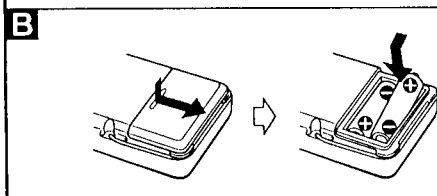
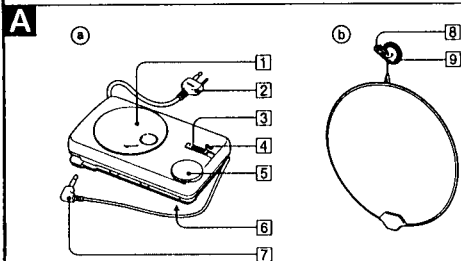
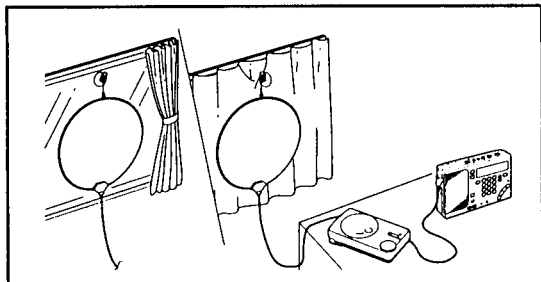
SHORT WAVE ACTIVE ANTENNA



SONY®

This section is extracted from instruction manual.

SECTION 1 GENERAL



Location and Function of Controls (see Fig. A)

- Ⓐ Antenna controller
- 1 Cord winder
 - 2 Long cord
 - 3 POWER switch
 - 4 POWER lamp
 - 5 FREQ SELECT control
 - 6 Battery compartment
 - 7 Short cord
- Ⓑ Antenna module
- 8 Clip
 - 9 Suction cup

Inserting the Batteries (see Fig. B)

To insert the batteries into the antenna controller.

- 1 Open the battery compartment lid.
- 2 Insert two R6 (size AA) batteries with correct polarity.
- 3 Close the lid.

Battery life on dry batteries

Sony R6 (size AA) dry batteries
approx. 40 hours

When to replace the batteries

When the batteries become weak, the POWER lamp dims. Replace both batteries with new ones. When the batteries get exhausted, the POWER lamp goes off with the operation.

Notes on the batteries

- Do not charge the dry batteries.
- Do not carry the dry batteries with coins or other metallic objects. It can generate heat if the positive and negative terminals of the batteries are accidentally contacted by a metallic object.
- When you are not going to use the unit for a long time, remove the batteries to avoid damage from battery leakage and corrosion.

Setting Up (see Fig. C)

Place the antenna module by the window or where the reception is well. Then connect the antenna controller, antenna module and radio.

- 1 Unfold the antenna module slowly. When unfolding the antenna module, be careful not to hit yourself with it or your surroundings (other people and non-durable items).
- 2 Pull out the long cord with a double pin plug from the antenna controller until it stops and connect it to the antenna module.
- 3 Attach the antenna module to a glass window or the curtain.
- 4 Take out the short cord with a single pin plug from the antenna controller and connect it to external antenna jack of the radio.

Notes

- Do not use the unit at outdoors.
- You may not get best reception if the long cord of the antenna controller is kept near the radio. Keep the long cord as far away from the radio as possible.
- Keep the radio and antenna controller away from the TV, telephone, personal computer and fluorescent lamps to avoid noise interference.

Operating the Active Antenna (see Fig. D)

- 1 Set the POWER switch on the antenna controller to ON.
POWER lamp will be lit.
- 2 Adjust the FREQ SELECT control.

Band Meter	Frequency range	FREQ SELECT control (x 1000 kHz)
75mb	3850 kHz-4050 kHz	4
60mb	4700 kHz-5100 kHz	5
49mb	5900 kHz-6250 kHz	6
41mb	7100 kHz-7400 kHz	7
31mb	9400 kHz-10000 kHz	10
25mb	11500 kHz-12150 kHz	12
22mb	13500 kHz-13900 kHz	14
19mb	15000 kHz-15700 kHz	16
16mb	17450 kHz-18000 kHz	16
15mb	18850 kHz-19100 kHz	20
13mb	21450 kHz-21950 kHz	20

Notes on the Radio

- For details on radio operation, refer to its instructions manual.
- Set the DX/LOCAL switch of the radio to DX when using the active antenna.

Note

- This active antenna is only for SW (Short Wave). When you receive FM, MW or LW be sure to unplug this active antenna. If you leave the active antenna plugged in to the radio, the telescopic antenna and the ferrite bar antenna will not operate.

To turn off the antenna controller

Set the POWER switch to OFF/STANDBY.

When using ICF-SW1000T or ICF-SW7600G with the active antenna

When the antenna controller is connected to the EXT ANT jack of the radio, the power supply of the antenna controller is linked to the power supply of the radio. Set the POWER switch of the antenna controller to OFF/STANDBY.

When using ICF-SW100S/SW100E with the active antenna

The power supply of the antenna controller is linked to the power supply of the radio, but this may not work properly. Set the POWER switch of the antenna controller to ON.

Using ICF-SW10, ICF-SW77 with the active antenna

We do not recommend using ICF-SW77 with this antenna. Please consult your nearest Sony dealer.

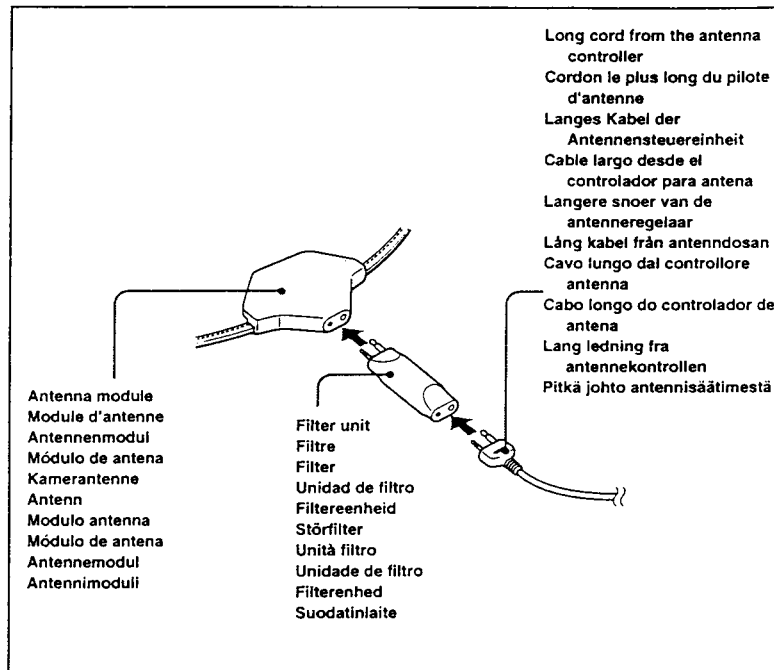
After use (see Fig. E)

- 1 Disconnect the antenna module, antenna controller and radio.
- 2 Reel up the long cord.
- 3 Wrap the short cord to the antenna controller and set it in place.
- 4 Twist and fold the antenna module and then put it in the carrying case.

Precautions

- Do not leave the unit in the location near heat source, or in a place subject to direct sunlight, excessive dust, or mechanical shock.
- Use the unit within a temperature range of 0°C to 40°C (32°F to 104°F).
- Do not use the unit where there is high humidity like the bathroom.
- When you are not going to use the unit for a long period of time, remove the batteries to avoid damage from battery leakage and corrosion.
- Do not wash the antenna module.
- When folding the antenna module, do not bend it by force or break it.
- When you are not going to use the unit for a long period of time, put it away.

Attaching the filter unit/Fixation du filtre
 Anbringung des Filters/Instalación de la unidad de filtro
 Bevestiging van de filtereenheid/Hur störfiltret fästas
 Applicazione dell'unità filtro/Fixação da unidade de filtro
 Päämonterointi af filterenheden/Suodatinlaitteen kiinnittäminen



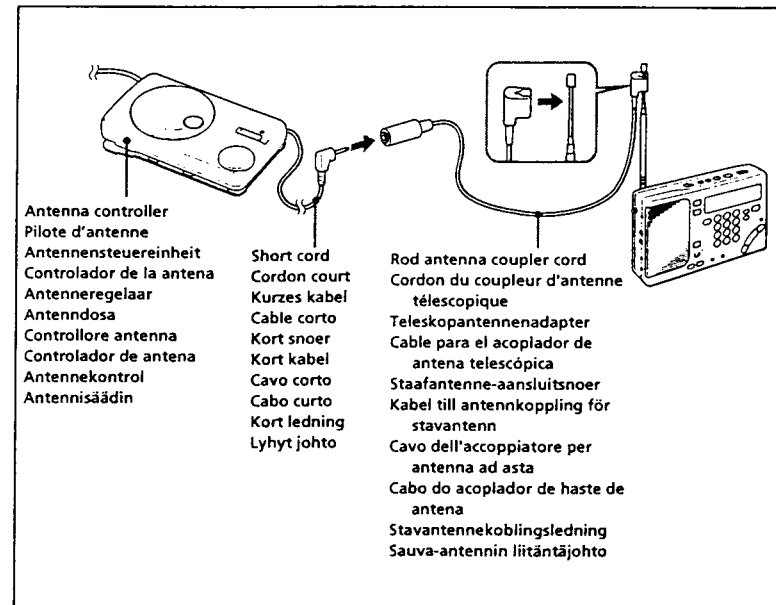
When the filter unit is supplied
 When connecting the antenna module, antenna controller and the radio, attach the supplied filter unit as shown in the illustration.

Note
 Be sure to attach the filter unit. Otherwise, there may be a reception interference by other electrical appliances.

Quand le filtre est fourni
 Lorsque vous raccordez le module d'antenne, le pilote et la radio, fixez le filtre fourni comme indiqué sur l'illustration.

Remarque
 Veillez à fixer le filtre, sinon des interférences provenant d'appareils électriques pourraient gêner la réception.

On the rod antenna coupler cord
 Corden de coupleur d'antenne télescopique
 Verwendung des Teleskopantennenadapters
 En el cable del acoplador para antena telescópica
 Gebruik van het staafantenne-aansluitsnoer
 Anslutning av antenncopplingskabel för stavantenn
 Cavo dell'accoppiatore per antenna ad asta
 Acerca do cabo do acoplador de haste de antena
 Tilslutning af stavantennekoblerledningen
 Sauva-antennin liitäntäjohtosta

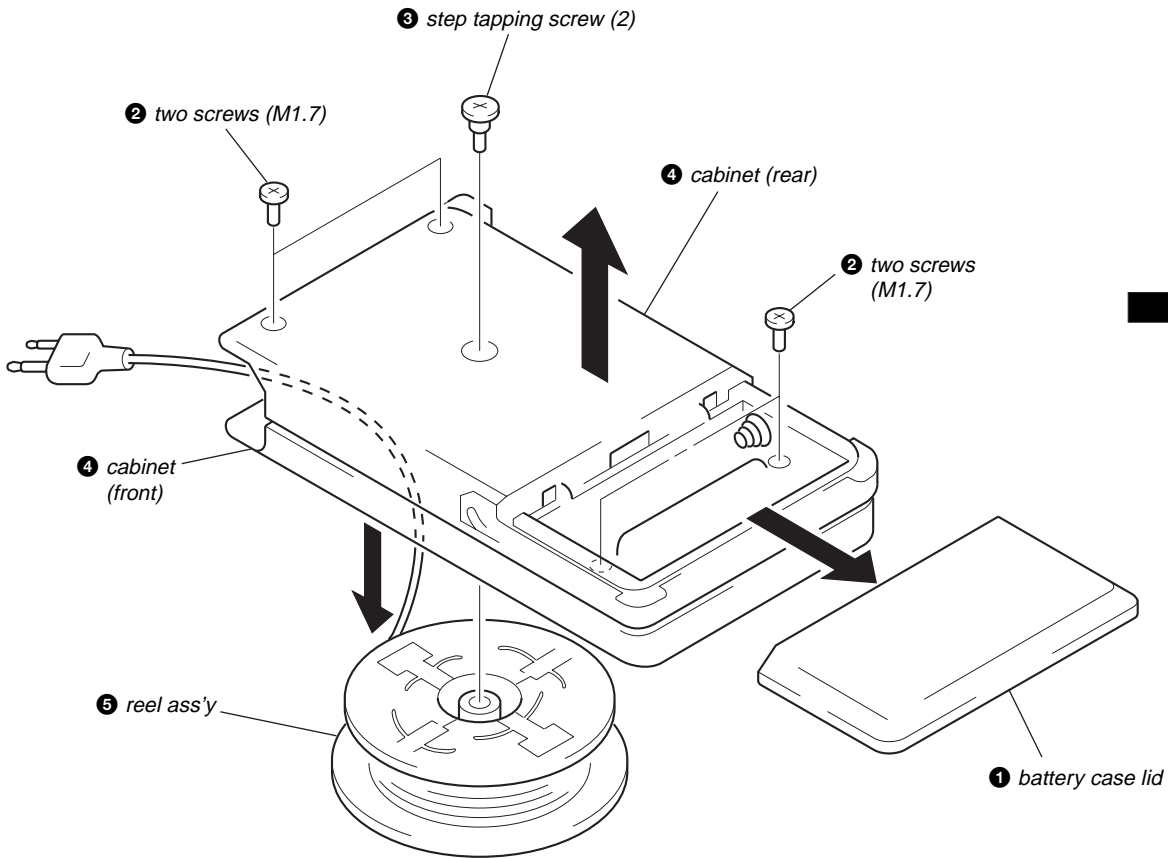


When using a radio without an external antenna jack
 Connect the antenna controller and the radio by using the supplied rod antenna coupler cord.

SECTION 2 DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

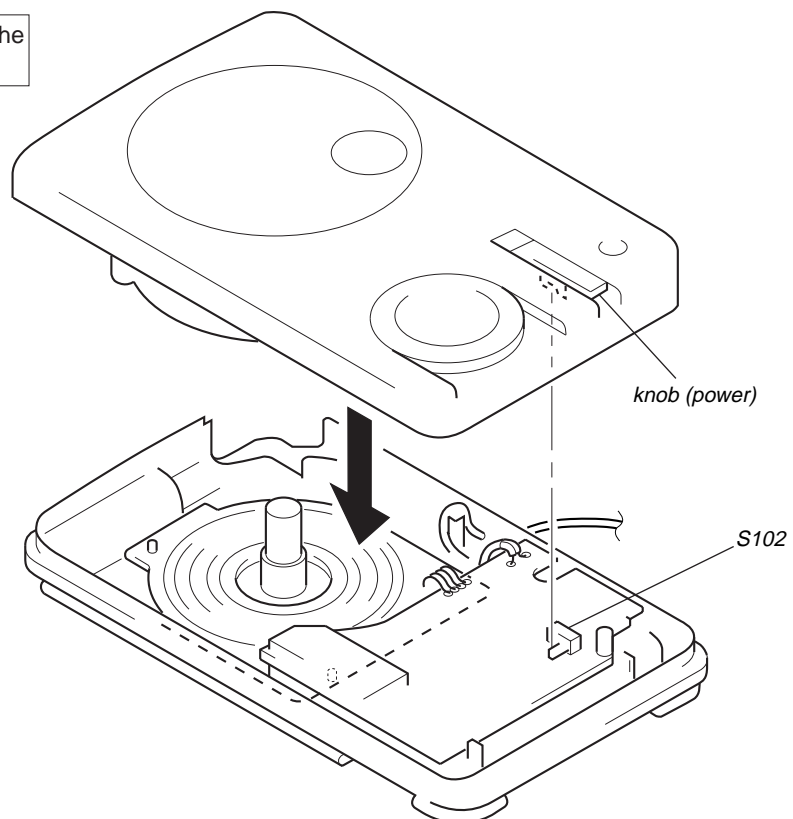
CABINET (FRONT/REAR), REEL ASS'Y



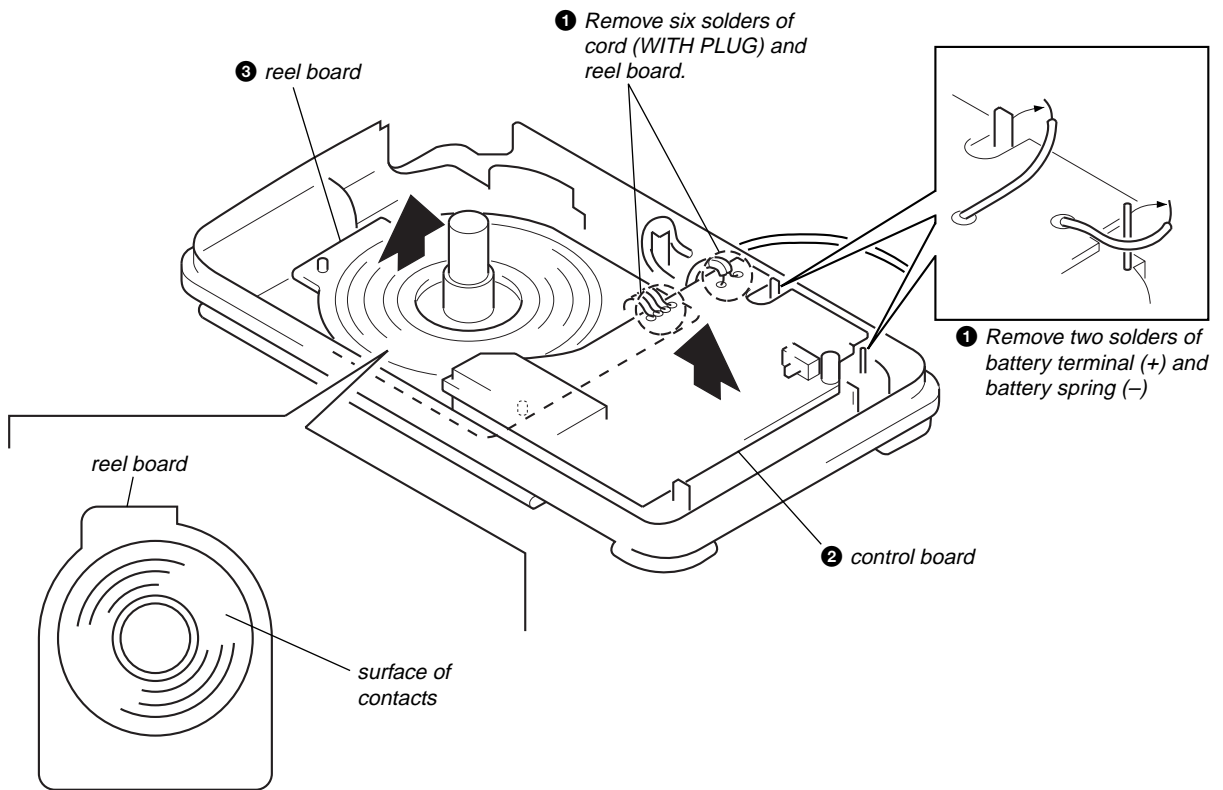
NOTE FOR INSTALLATION

• CABINET (FRONT)

On installation cabinet (FRONT) adjust the knob (POWER) and S102.

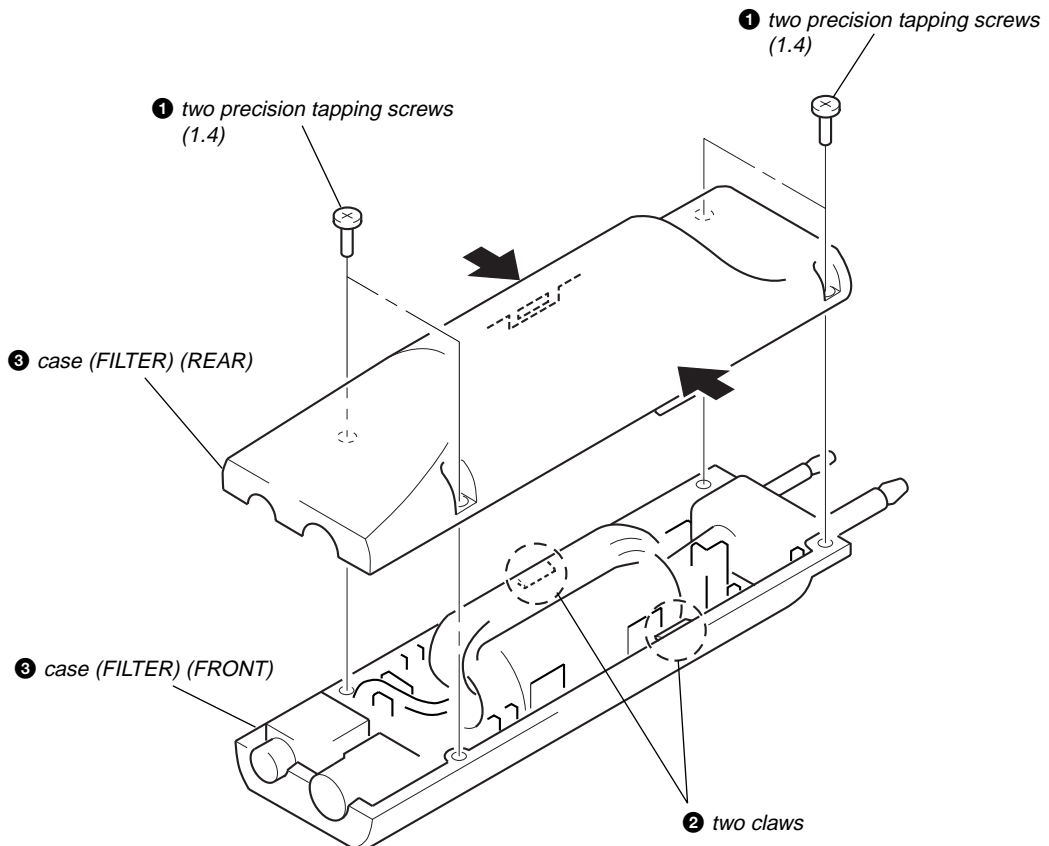


CONTROL/REEL BOARD



Note on installation: Apply grease (J-2502-028-1) to the surface of contacts on the reel board.

CLAMP FILTER



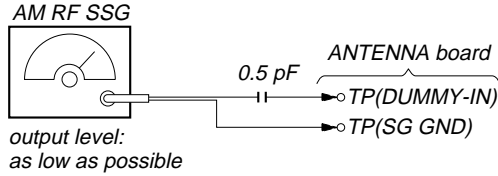
SECTION 3 ELECTRICAL ADJUSTMENT

FREQUENCY ADJUSTMENT

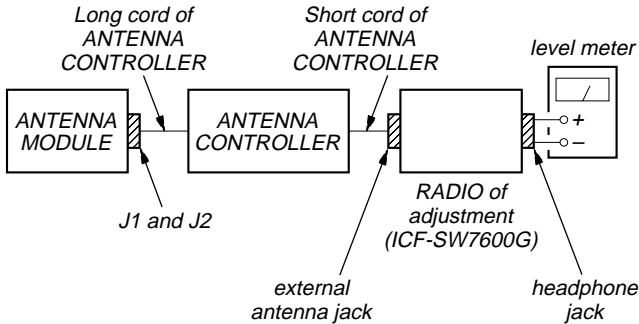
Connection:

Note: Make this adjustment, if either ANTENNA board or CONTROL board in this set was replaced or if equivalent work was executed, because these boards have been adjusted in a pair.

1. Connect AM RF SSG to the TP (DUMMY-IN) and TP (SG GND) of the ANTENNA board.



2. Disconnect a loop antenna assy from the ANTENNA board, and connect a dummy antenna coil (2.2 μ H (1-410-320-00)) between TP (ANT+) and TP (ANT-) of the ANTENNA board.
3. Connect the ANTENNA MODULE, ANTENNA CONTROLLER, RADIO for adjustment (e.g. multi-band radio having external antenna input terminal (ICF-SW7600G)), and level meter as shown below.



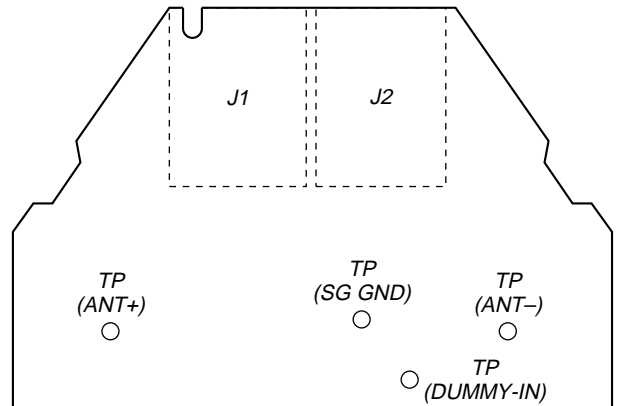
Adjustment Procedure:

1. Adjust the receiving frequency of the radio for adjustment (ICF-SW7600G) to the AM RF SSG frequency (refer to the following table).
2. Adjust respective adjusting elements on the CONTROL board so that the level meter reading becomes maximum when the frequency of AM RF SSG and the FREQ SELECT switch are set as listed below.

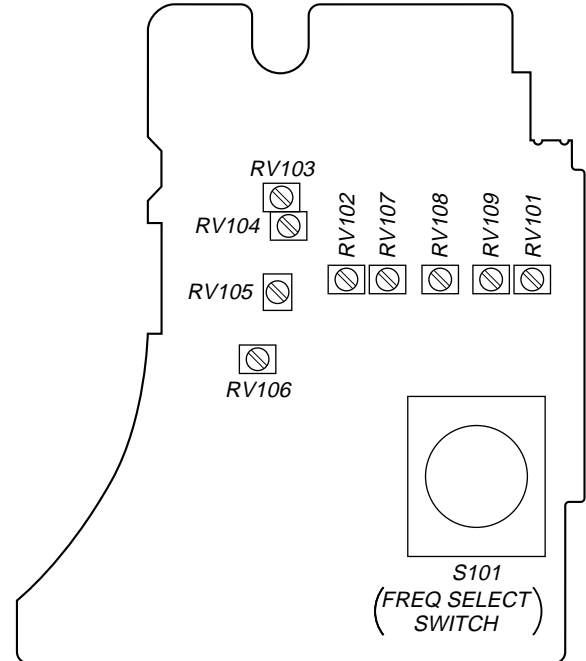
AM RF SSG frequency	FREQ. SELECT switch position	Adjusting elements
3.950 MHz	4	RV101
4.900 MHz	5	RV102
6.075 MHz	6	RV103
7.250 MHz	7	RV104
9.700 MHz	10	RV105
11.825 MHz	12	RV106
13.700 MHz	14	RV107
16.500 MHz	16	RV108
20.400 MHz	20	RV109

Adjustment and Connection Location:

[ANTENNA BOARD] (Conductor Side)



[CONTROL BOARD] (Conductor Side)

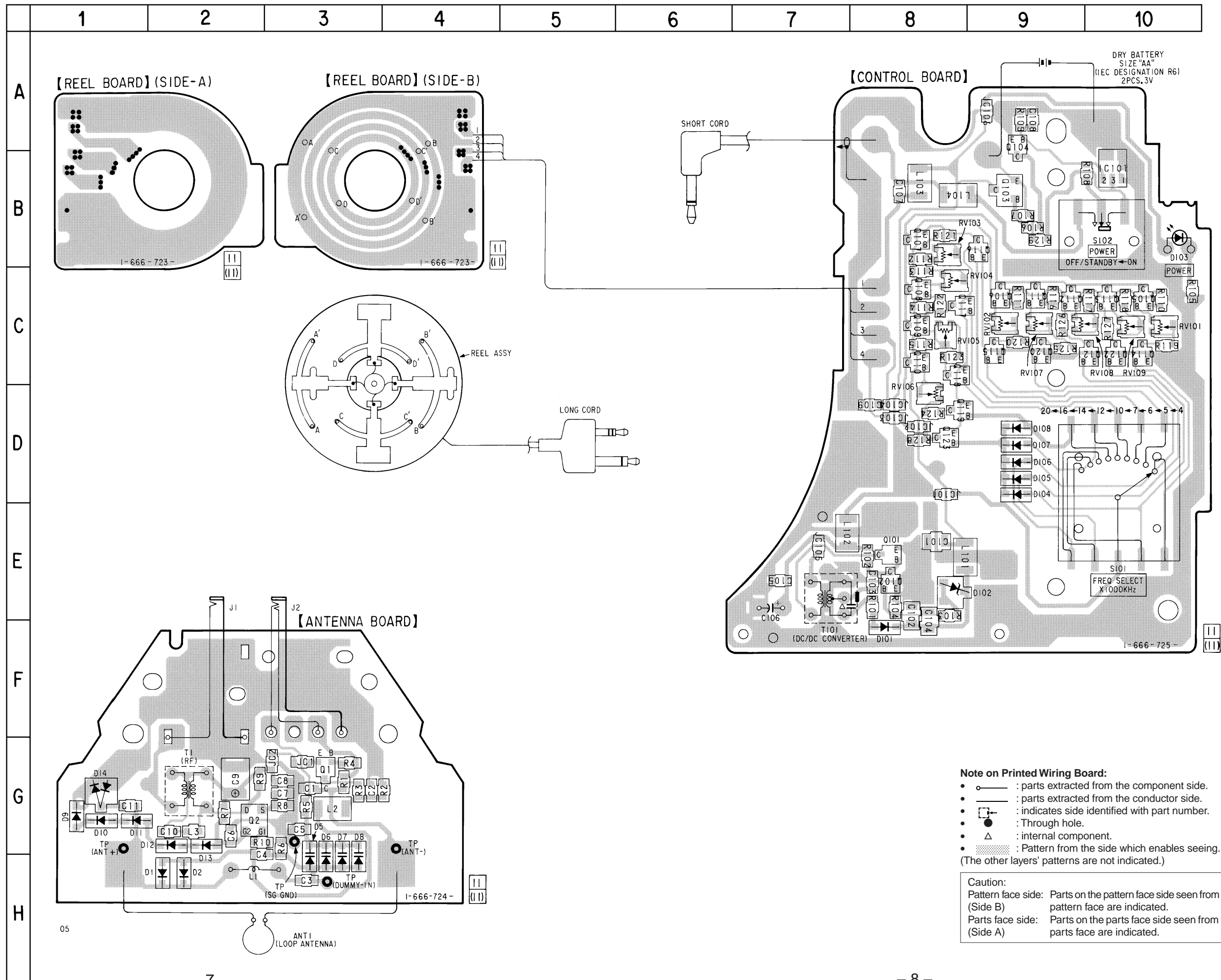


SECTION 4
DIAGRAMS

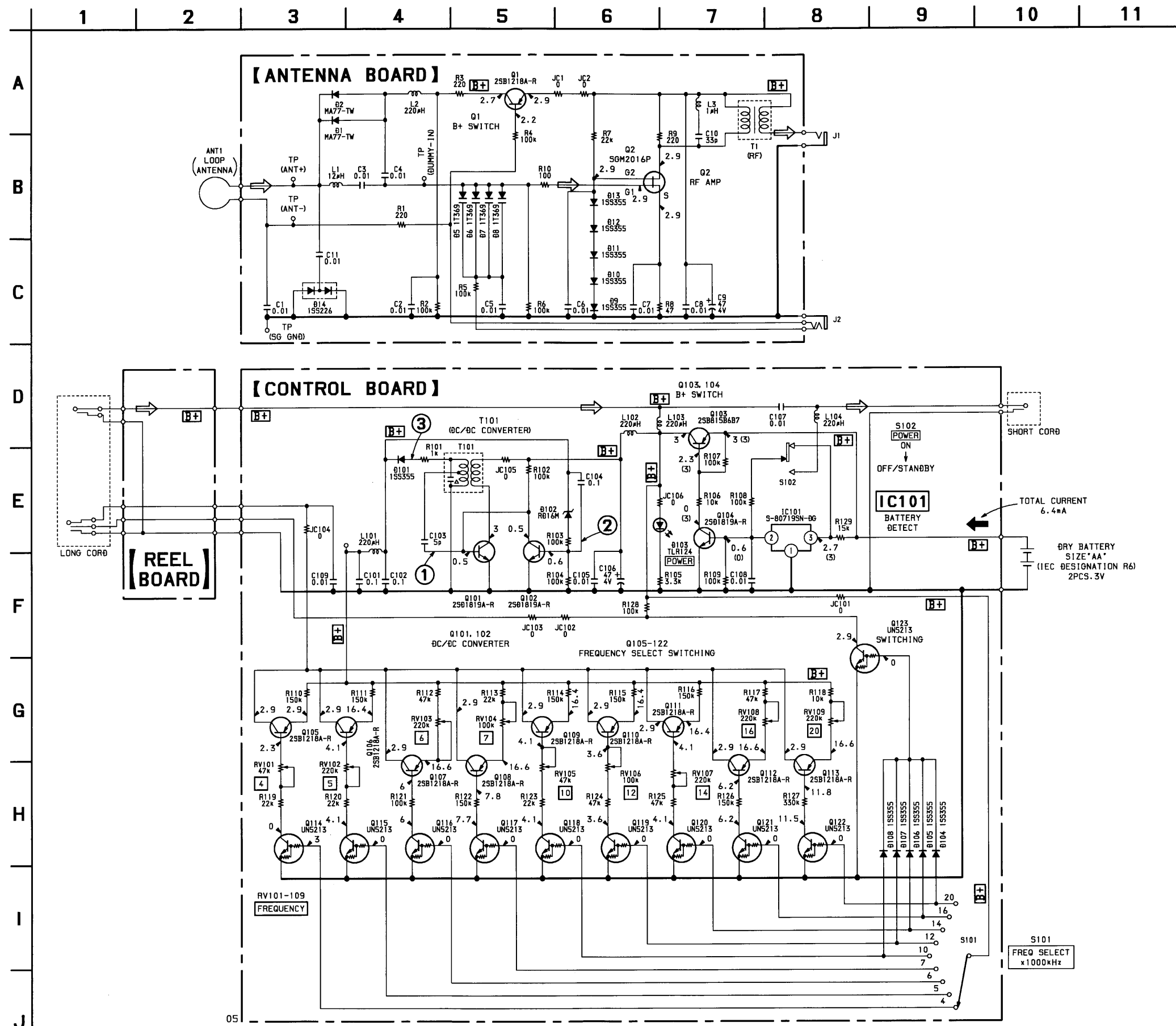
4-1. PRINTED WIRING BOARDS

• Semiconductor Location

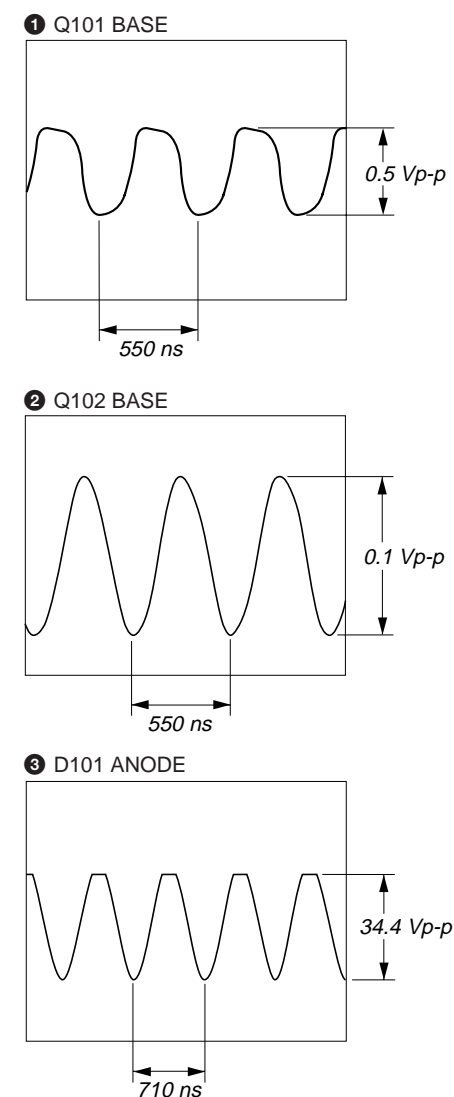
Ref. No.	Location
D1	H-2
D2	H-2
D5	G-3
D6	G-3
D7	G-3
D8	G-3
D9	G-1
D10	G-1
D11	G-1
D12	G-2
D13	G-2
D14	G-1
D101	F-8
D102	E-8
D103	B-10
D104	D-9
D105	D-9
D106	D-9
D107	D-9
D108	D-9
IC101	B-10
Q1	G-3
Q2	G-2
Q101	E-8
Q102	E-8
Q103	B-9
Q104	A-9
Q105	C-10
Q106	C-9
Q107	B-8
Q108	C-8
Q109	C-8
Q110	C-8
Q111	C-9
Q112	C-9
Q113	C-10
Q114	C-10
Q115	C-9
Q116	B-9
Q117	C-9
Q118	C-8
Q119	D-8
Q120	C-9
Q121	C-10
Q122	C-10
Q123	D-8



4-2. SCHEMATIC DIAGRAM



• Waveforms



Note on Schematic Diagram:

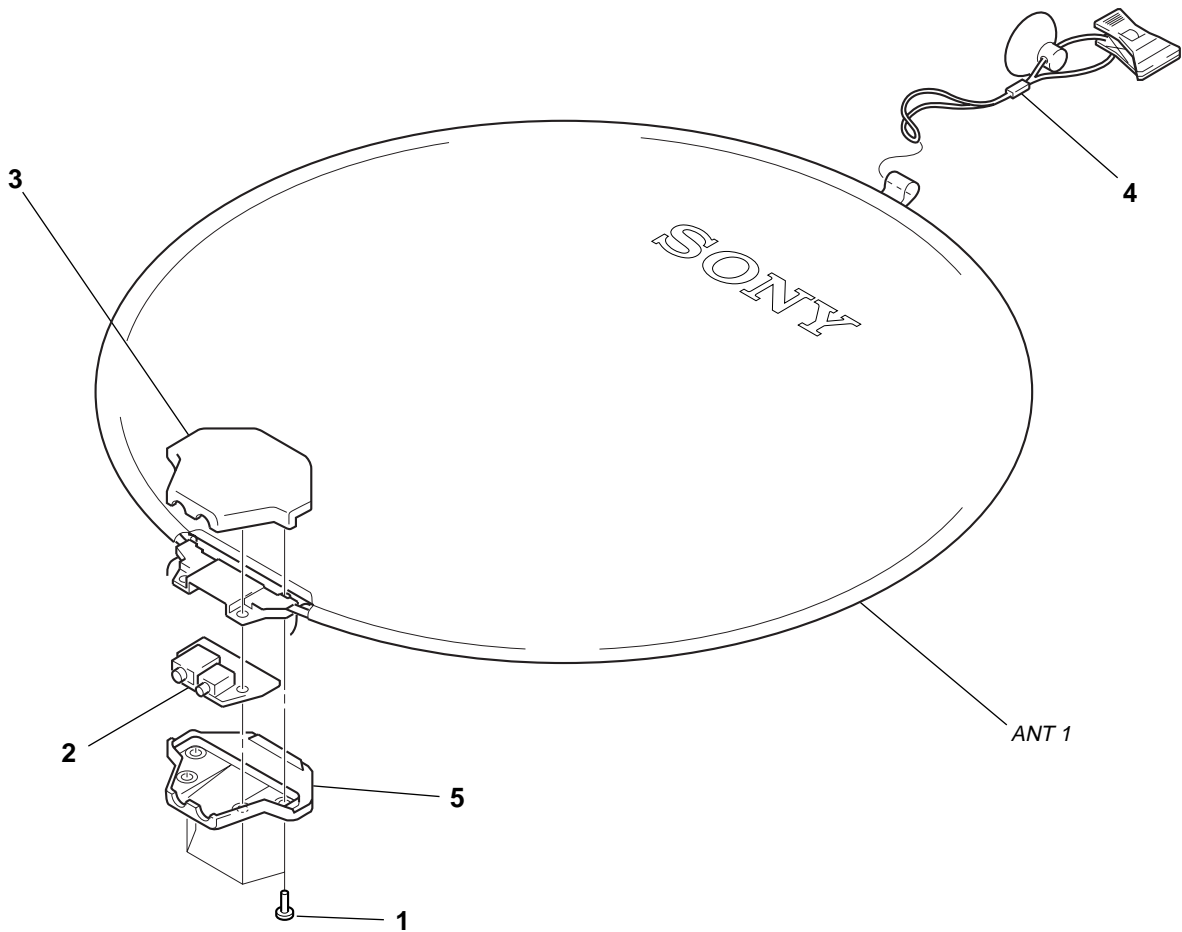
- All capacitors are in μF unless otherwise noted. pF: $\mu F \cdot 50$ WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $1/4 W$ or less unless otherwise specified.
- Δ : internal component.
- \square : panel designation.
- B+ : B+ Line.
- \square : adjustment for repair.
- Power voltage is dc 3 V and fed with regulated dc power supply from battery terminal.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
no mark : FREQ. SELECT "4"
() : STANDBY
- Voltages are taken with a VOM (Input impedance 10 M Ω). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
- \Rightarrow : RF

SECTION 5 EXPLODED VIEWS

NOTE:

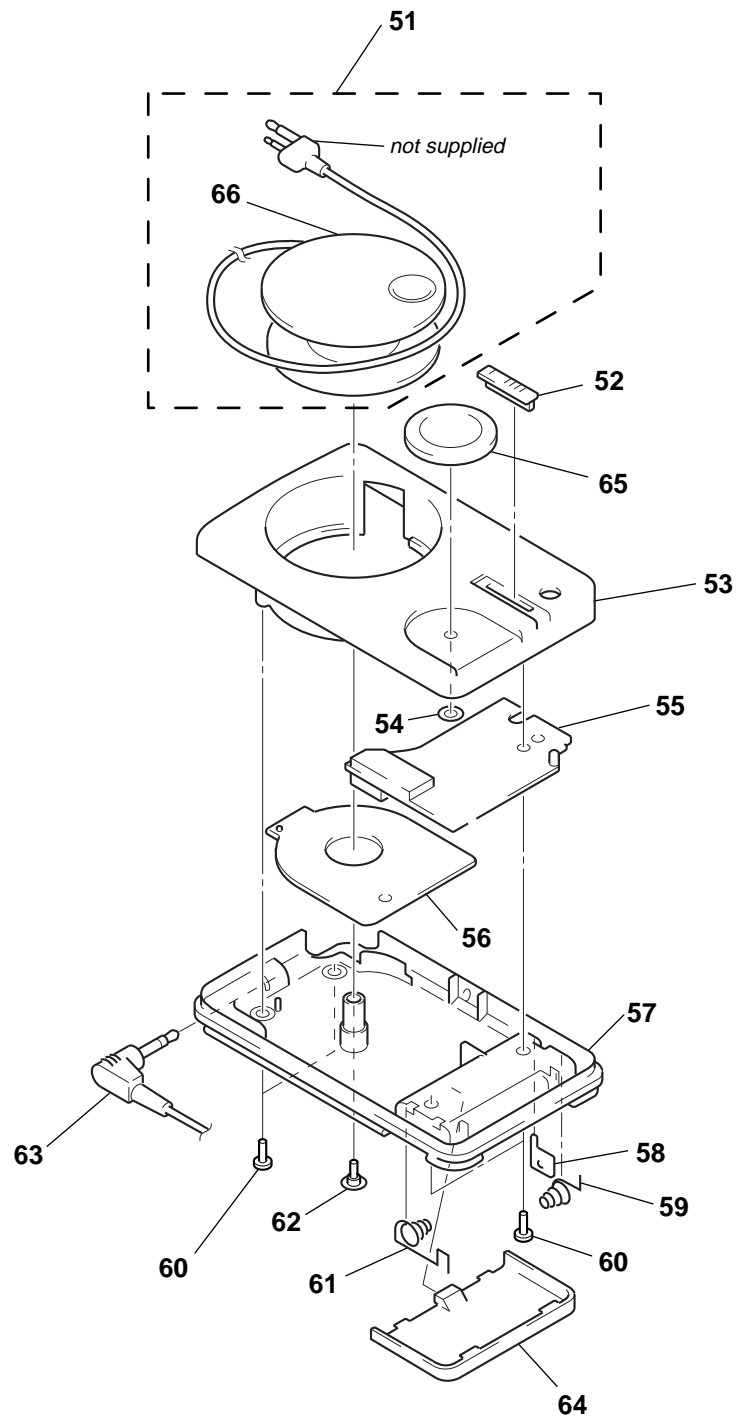
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
Example:
KNOB, BALANCE (WHITE) . . . (RED)
 ↑ ↑
 Parts Color Cabinet's Color
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Accessories and packing materials are given in the last of the electrical parts list.

(1) ANTENNA MODULE



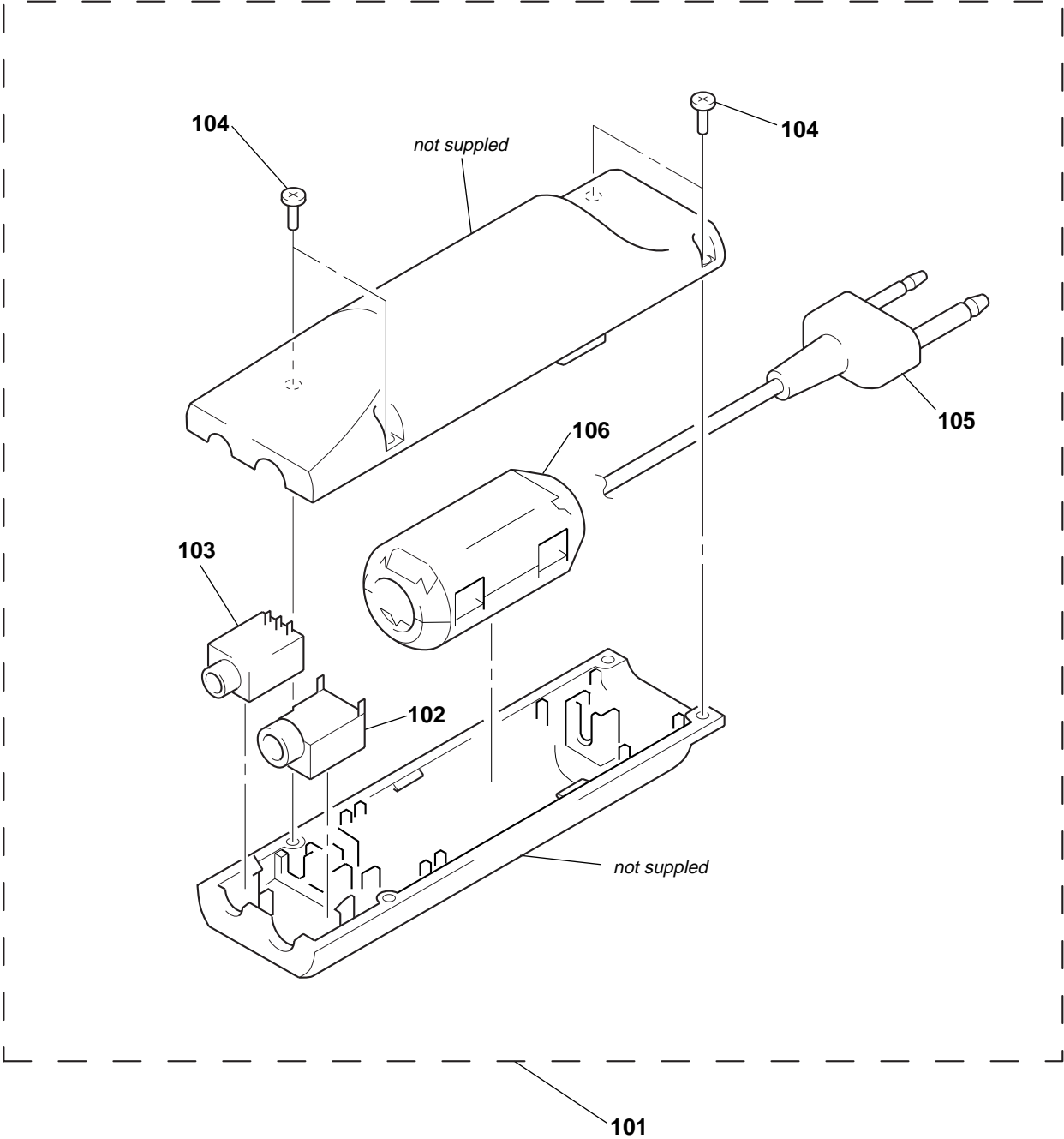
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	3-910-063-01	SCREW (1.7X10)		4	3-018-979-01	STRAP	
* 2	A-3679-909-A	ANTENNA BOARD, COMPLETE		5	3-015-954-01	CASE (LOWER)	
3	3-015-953-01	CASE (UPPER)		ANT1	X-3374-227-1	ANTENNA ASSY (LOOP ANTENNA)	

(2) ANTENNA CONTROLLER



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	A-3638-504-A	REEL ASSY		59	3-907-745-01	SPRING (-), BATTERY	
52	3-015-951-01	KNOB (POWER)		60	3-363-895-01	SCREW (M1.7)	
53	3-015-948-01	CABINET (FRONT)		61	3-907-747-01	SPRING (+/- B), BATTERY	
54	3-899-829-01	WASHER (SLIT)		62	3-895-517-11	SCREW (2), TAPPING, STEP	
* 55	A-3679-910-A	CONTROL BOARD, COMPLETE		63	1-782-543-11	CORD (WITH PLUG) (1PIN)	
* 56	1-666-723-11	REEL BOARD		64	3-015-956-01	LID, BATTERY CASE	
57	3-015-949-01	CABINET (REAR)		65	3-015-952-01	KNOB (TUNE)	
58	3-377-127-01	TERMINAL (+), BATTERY		66	3-015-950-01	REEL	

(3) FILTER UNIT



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	A-3638-531-A	FILTER ASSY, CLAMP		104	3-309-597-31	SCREW (1.4), TAPPING, PRECISION	
102	1-569-215-11	JACK		105	1-782-542-21	CORD (WITH PLUG) (2PIN)	
103	1-573-996-11	JACK, SMALL (WATERPROOF)		106	1-543-798-11	FILTER, CLAMP (FERRITE CORE)	

SECTION 6

ANTENNA

CONTROL

ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
All resistors are in ohms.
METAL: Metal-film resistor.
METAL OXIDE: Metal oxide-film resistor.
F: nonflammable

- Items marked "***" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
In each case, u: μ , for example:
uA. . . : μ A. . . uPA. . . : μ PA. . .
uPB. . . : μ PB. . . uPC. . . : μ PC. . .
uPD. . . : μ PD. . .
- CAPACITORS
uF: μ F
- COILS
uH: μ H

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
*	A-3679-909-A	ANTENNA BOARD, COMPLETE *****		L3	1-412-979-21	INDUCTOR CHIP 1uH	
		< CAPACITOR >				< TRANSISTOR >	
C1	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V	Q1	8-729-402-55	TRANSISTOR 2SB1218A-R	
C2	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V	Q2	8-766-003-12	FET SGM2016P-T7	
C3	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V			< RESISTOR >	
C4	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V	R1	1-216-813-11	METAL CHIP 220	5% 1/16W
C5	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V	R2	1-216-845-11	METAL CHIP 100K	5% 1/16W
C6	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V	R3	1-216-813-11	METAL CHIP 220	5% 1/16W
C7	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V	R4	1-216-845-11	METAL CHIP 100K	5% 1/16W
C8	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V	R5	1-216-845-11	METAL CHIP 100K	5% 1/16W
C9	1-104-908-11	TANTAL. CHIP 47uF	20% 4V	R6	1-216-845-11	METAL CHIP 100K	5% 1/16W
C10	1-162-921-11	CERAMIC CHIP 33PF	5% 50V	R7	1-216-837-11	METAL CHIP 22K	5% 1/16W
C11	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V	R8	1-216-805-11	METAL CHIP 47	5% 1/16W
		< DIODE >		R9	1-216-813-11	METAL CHIP 220	5% 1/16W
D1	8-719-421-40	DIODE MA77		R10	1-216-809-11	METAL CHIP 100	5% 1/16W
D2	8-719-421-40	DIODE MA77				< TRANSFORMER >	
D5	8-713-101-57	DIODE 1T369-M20-T8A		T1	1-426-357-11	TRANSFORMER, RF	
D6	8-713-101-57	DIODE 1T369-M20-T8A		*****			
D7	8-713-101-57	DIODE 1T369-M20-T8A		*	A-3679-910-A	CONTROL BOARD, COMPLETE *****	
D8	8-713-101-57	DIODE 1T369-M20-T8A				< CAPACITOR >	
D9	8-719-988-62	DIODE 1SS355		C101	1-164-004-11	CERAMIC CHIP 0.1uF	10% 25V
D10	8-719-988-62	DIODE 1SS355		C102	1-164-004-11	CERAMIC CHIP 0.1uF	10% 25V
D11	8-719-988-62	DIODE 1SS355		C103	1-162-910-11	CERAMIC CHIP 5PF	0.25PF50V
D12	8-719-988-62	DIODE 1SS355		C104	1-164-004-11	CERAMIC CHIP 0.1uF	10% 25V
D13	8-719-988-62	DIODE 1SS355		C105	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
D14	8-719-800-76	DIODE ISS226		C106	1-126-154-11	ELECT 47uF	20% 6.3V
		< JACK >		C107	1-163-031-11	CERAMIC CHIP 0.01uF	50V
J1	1-569-215-11	JACK		C108	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
J2	1-573-996-21	JACK, SMALL (WATERPROOF)		C109	1-162-974-11	CERAMIC CHIP 0.01uF	50V
		< RESISTOR >				< DIODE >	
JC1	1-216-864-11	METAL CHIP 0	5% 1/16W	D101	8-719-988-62	DIODE 1SS355	
JC2	1-216-864-11	METAL CHIP 0	5% 1/16W	D102	8-719-106-98	DIODE RD16M-B2	
		< COIL >		D103	8-719-812-41	LED TLR124 (POWER)	
L1	1-408-410-00	INDUCTOR 12uH		D104	8-719-988-62	DIODE 1SS355	
L2	1-410-658-31	INDUCTOR CHIP 220uH		D105	8-719-988-62	DIODE 1SS355	

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
D106	8-719-988-62	DIODE 1SS355		R111	1-216-847-11	METAL CHIP 150K 5%	1/16W
D107	8-719-988-62	DIODE 1SS355		R112	1-216-841-11	METAL CHIP 47K 5%	1/16W
D108	8-719-988-62	DIODE 1SS355		R113	1-216-837-11	METAL CHIP 22K 5%	1/16W
		< IC >		R114	1-216-847-11	METAL CHIP 150K 5%	1/16W
IC101	8-759-249-34	IC S-80719SN-DG		R115	1-216-847-11	METAL CHIP 150K 5%	1/16W
		< RESISTOR >		R116	1-216-847-11	METAL CHIP 150K 5%	1/16W
JC101	1-216-864-11	METAL CHIP 0 5% 1/16W		R117	1-216-841-11	METAL CHIP 47K 5%	1/16W
JC102	1-216-864-11	METAL CHIP 0 5% 1/16W		R118	1-216-833-11	METAL CHIP 10K 5%	1/16W
JC103	1-216-864-11	METAL CHIP 0 5% 1/16W		R119	1-216-837-11	METAL CHIP 22K 5%	1/16W
JC104	1-216-864-11	METAL CHIP 0 5% 1/16W		R120	1-216-837-11	METAL CHIP 22K 5%	1/16W
JC105	1-216-864-11	METAL CHIP 0 5% 1/16W		R121	1-216-845-11	METAL CHIP 100K 5%	1/16W
JC106	1-216-864-11	METAL CHIP 0 5% 1/16W		R122	1-216-847-11	METAL CHIP 150K 5%	1/16W
		< COIL >		R123	1-216-837-11	METAL CHIP 22K 5%	1/16W
L101	1-410-658-31	INDUCTOR CHIP 220uH		R124	1-216-841-11	METAL CHIP 47K 5%	1/16W
L102	1-410-658-31	INDUCTOR CHIP 220uH		R125	1-216-841-11	METAL CHIP 47K 5%	1/16W
L103	1-410-658-31	INDUCTOR CHIP 220uH		R126	1-216-847-11	METAL CHIP 150K 5%	1/16W
L104	1-410-658-31	INDUCTOR CHIP 220uH		R127	1-216-851-11	METAL CHIP 330K 5%	1/16W
		< TRANSISTOR >		R128	1-216-845-11	METAL CHIP 100K 5%	1/16W
Q101	8-729-402-32	TRANSISTOR 2SD1819A-R		R129	1-216-835-11	METAL CHIP 15K 5%	1/16W
Q102	8-729-402-32	TRANSISTOR 2SD1819A-R				< VARIABLE RESISTOR >	
Q103	8-729-800-71	TRANSISTOR 2SB815B7-TB		RV101	1-241-480-11	RES. ADJ, CERMET 47K	
Q104	8-729-402-32	TRANSISTOR 2SD1819A-R		RV102	1-241-482-11	RES. ADJ, CERMET 220K	
Q105	8-729-402-55	TRANSISTOR 2SB1218A-R		RV103	1-241-482-11	RES. ADJ, CERMET 220K	
Q106	8-729-402-55	TRANSISTOR 2SB1218A-R		RV104	1-241-481-11	RES. ADJ, CERMET 100K	
Q107	8-729-402-55	TRANSISTOR 2SB1218A-R		RV105	1-241-480-11	RES. ADJ, CERMET 47K	
Q108	8-729-402-55	TRANSISTOR 2SB1218A-R		RV106	1-241-481-11	RES. ADJ, CERMET 100K	
Q109	8-729-402-55	TRANSISTOR 2SB1218A-R		RV107	1-241-482-11	RES. ADJ, CERMET 220K	
Q110	8-729-402-55	TRANSISTOR 2SB1218A-R		RV108	1-241-482-11	RES. ADJ, CERMET 220K	
Q111	8-729-402-55	TRANSISTOR 2SB1218A-R		RV109	1-241-482-11	RES. ADJ, CERMET 220K	
Q112	8-729-402-55	TRANSISTOR 2SB1218A-R				< SWITCH >	
Q113	8-729-402-55	TRANSISTOR 2SB1218A-R		S101	1-762-733-11	SWITCH, ROTARY (FREQ SELECT x1000kHz)	
Q114	8-729-402-42	TRANSISTOR UN5213		S102	1-572-272-11	SWITCH, SLIDE (POWER)	
Q115	8-729-402-42	TRANSISTOR UN5213				< TRANSFORMER >	
Q116	8-729-402-42	TRANSISTOR UN5213		T101	1-449-902-11	TRANSFORMER, DC-DC CONVERTER	
Q117	8-729-402-42	TRANSISTOR UN5213		*****			
Q118	8-729-402-42	TRANSISTOR UN5213				MISCELLANEOUS	
Q119	8-729-402-42	TRANSISTOR UN5213				*****	
Q120	8-729-402-42	TRANSISTOR UN5213		63	1-782-543-11	CORD (WITH PLUG) (1PIN)	
Q121	8-729-402-42	TRANSISTOR UN5213		102	1-569-215-11	JACK	
Q122	8-729-402-42	TRANSISTOR UN5213		103	1-573-996-11	JACK, SMALL (WATERPROOF)	
Q123	8-729-402-42	TRANSISTOR UN5213		105	1-782-542-21	CORD (WITH PLUG) (2PIN)	
		< RESISTOR >		106	1-543-798-11	FILTER, CLAMP (FERRITE CORE)	
R101	1-216-821-11	METAL CHIP 1K 5%	1/16W	ANT1	X-3374-227-1	ANTENNA ASSY (LOOP ANTENNA)	
R102	1-216-845-11	METAL CHIP 100K 5%	1/16W	*****			
R103	1-216-845-11	METAL CHIP 100K 5%	1/16W			ACCESSORIES & PACKING MATERIALS	
R104	1-216-845-11	METAL CHIP 100K 5%	1/16W			*****	
R105	1-216-827-11	METAL CHIP 3.3K 5%	1/16W			1-782-842-11	CORD, CONNECTION
R106	1-216-833-11	METAL CHIP 10K 5%	1/16W			3-015-932-01	CASE, CARRYING
R107	1-216-845-11	METAL CHIP 100K 5%	1/16W			3-860-701-01	MANUAL, INSTRUCTION (JAPANESE, ENGLISH, FRENCH, GERMAN, CHINESE, KOREAN, ARABIC)
R108	1-216-845-11	METAL CHIP 100K 5%	1/16W			3-860-701-11	MANUAL, INSTRUCTION (SPANISH, DUTCH, SWEDISH, ITALIAN, PORTUGUESE, DANISH, FINNISH) (AEP, UK, E, Australian)
R109	1-216-845-11	METAL CHIP 100K 5%	1/16W				
R110	1-216-847-11	METAL CHIP 150K 5%	1/16W				