SERVICE MANUAL^{*}



本资料由OKXIA视听皮带资源库www.okxia.cn提供 US Model Canadian Model AEP Model UK Model E Model Tourist Model

SPECIFICATIONS

Circuit system	FM: Superheter SW/MW/LW: Dual conve	odyne rsion superheterodyne
Frequency range	Band Saudi Arabia mode	Other models
1 7 0	FM 87.5 - 108.0 MHz	76.0 - 108.0 MHz
	SW 1621 – 26100 kHz	1621 – 29999 kHz
	MW 530 – 1620 kHz	530 – 1620 kHz
	LW 150 – 285 kHz	150 – 529 kHz
Speaker	Approx. 77 mm (3 1/8 inches)	
Power output	400 mW (at 10 % harmonic di	
Outputs	Recording output jack (stered	
	output level 245 mV (-10 d	
	output impedance 10 kiloh	m or less
	Headphones jack (stereo min	ijack) 16 ohms
Power requirements	6 V DC	
	Four R6 (size AA) batteries	
	DC IN 6V jack accepts:	
	Sony AC-E601 AC power a	
	(supplied for Tourist mod	5,
Battery life	Using Sony SUM-3(NS) batte	nes:
	FM: approx. 15 hours,	
	AM: approx. 10 hours	hattorios
	Using Sony AM-3(N) alkaline	batteries.
	FM: approx. 33 hours,	
	AM: approx. 20 hours (When listening for four hour	s a day at normal volume)
Dimensions	Approx. 191.2 x 118 x 32.3 mr	
Dimensions	$(75/8 \times 43/4 \times 15/16 \text{ inche})$	
	including projecting parts	
Mass	Approx. 615 g (1 lb. 5.7 oz) in	cluding batteries
Accessories supplied	Batteries (4) * 1	8
	Stereo headphones (1) * 1	
	Ear pad (2) * 1	
	AC power adaptor AC-E601 (1) * 1
	AC plug adaptor (1) * 1	
	Compact antenna (1)	
	Antenna connector (1) * 1	
	Carrying case (1)	
	Wave handbook (1) * 2	
	How to catch the wave (1) *	
	* 1 supplied for the Tourist	
	* 2 not supplied for the Sauce	li Arabia model only

Design and specifications subject to change without notice.



FEATURES

- An FM stereo/SW/MW/LW receiver with worldwide band coverage.
- Quartz controlled PLL (Phase Locked Loop) synthesizer system using a microcomputer for easy pinpoint tuning. The tuned frequency is digitally displayed.
- SSB (Single Side Band) can be received (except for the Saudi Arabia model only).
- •FM stereo reception for headphones (supplied for the Tourist model only).

Direct tuning	Tuning in the station by inputting the frequency of the station directly
Manual tuning	Even if you don't know the frequency of the station, you can tune in the station precisely.
Scan tuning	Automatic searching of a station
Preset tuning	Up to 20 stations, 10 stations each for FM and AM, can be preset for button-touch tuning.
Timer standby	Receiving a desired station at the desired time
Sleep timer	Turning the radio off automatically in 60 minutes
Power sources	Three different power sources: internal batteries, house current, car batteries



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2-1. Cabin	net (Rear)))
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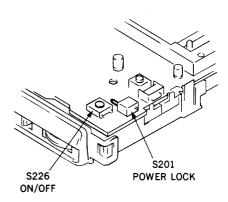
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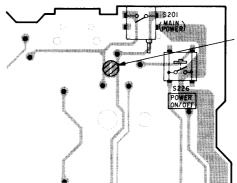
5-1.	Cabinet Section	• • • • • • •	
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SERVICING NOTE



How to turn the power ON/OFF

- 1. Short the pattern by solder bridge as shown below. (S201 (Power Lock) switch is turn ON.)
- 2. Push the S226 (ON/OFF) switch.



Short the pattern by solder bridge.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK $\underline{\mathbb{A}}$ OR DOTTED LINE WITH MARK $\underline{\mathbb{A}}$ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

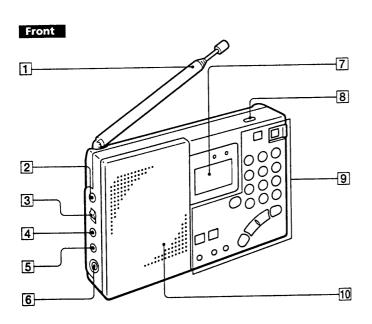
ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

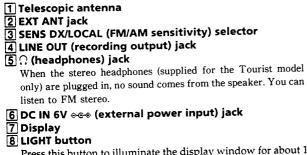
LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE A SUR LES DIA-GRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRI-TIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

SECTION 1 GENERAL

This section is extracted from instruction manual.

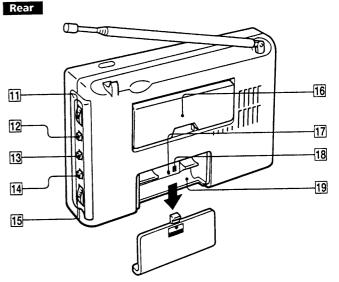
Location and Function of Controls





Press this button to illuminate the display window for about 15 seconds.

- 9 Control panel
- 10 Speaker



 SSB FINE TUNE control (Except for the Saudi Arabia model only)

 I2 LSB/USB selector

- 13 AM MODE selector
- 14 TONE selector
- 15 VOLUME control

16 Stand



17 RESET button

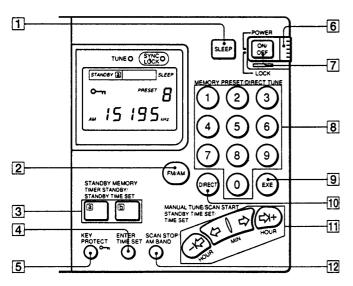
Press this button with an pointed object when the unit functions incorrectly. When this button is pressed, the preset stations and the clock settings are erased.

18 MW CH STEP (MW channel step) 9/10 kHz selector

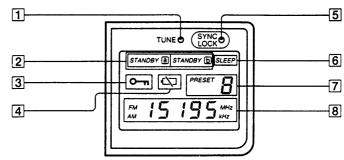
19 Battery compartment

Location and Function of Controls

Control panel



Display



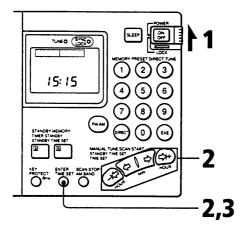
- **1** SLEEP button
- 2 FM/AM button 3 STANDBY MEMORY/TIMER STANDBY/STANDBY TIME SET a/b buttons
- **4** ENTER/TIME SET button
- 5 KEY PROTECT ⊶ button
- 6 POWER/LOCK (main power) switch

Set this switch to POWER, then press the ON/OFF button to turn on the radio. Set the switch to LOCK when carrying the radio. When this switch is set to LOCK, the power will not be turned on even if you press the ON/OFF button.

- 7 ON/OFF (power) button
- 8 MEMORY PRESET/DIRECT TUNE 0 9 buttons
- 9 EXE (execute) button
- **10 DIRECT button**
- 11 MANUAL TUNE/SCAN START/STANDBY TIME SET/TIME SET buttons
- 12 SCAN STOP/AM BAND button

- 1 TUNE indicator
- Lights when a station is tuned in.
- 2 STANDBY a/b indicators
- Appears when the standby timer a/b is set. **3** Key protect indicator
 - While this indicator appears, all the functions of the buttons are locked.
- 4 Battery empty indicator
- 5 SYNC LOCK indicator
- Lights when the synchronous detection is performed.
- **6** SLEEP indicator
- Appears when the sleep timer is operating.
- **Preset display**
- 8 Time/frequency display

Setting the Clock



1 Set POWER/LOCK to POWER.

When you first install batteries or the clock is reset, "0:00" flashes in the display. Press TIME SET.

2 While holding down TIME SET, press a MANUAL TUNE/ SCAN START/STANDBY TIME SET/TIME SET button to adjust the clock.

Every pressing of an inner MANUAL TUNE/SCAN START/ STANDBY TIME SET/TIME SET button (⇔ or ⇔) changes the time setting by one minute, and an outer button (⇔ or ⇔) by one hour. To advance the time digits rapidly, keep it pressed.



3 Release TIME SET.

The ":" indication starts flashing, and the clock begins to operate.

While listening to the radio You cannot set the clock while you are listening to the radio. Be sure to press

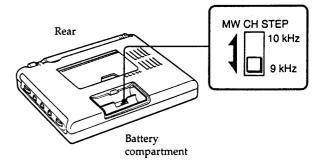
ON/OFF to turn the radio off and then

The display when POWER/LOCK is LOCK

The current time is displayed.

Changing the MW Channel Step

The MW channel step is factory-set to 10 (9) kHz to match the frequency allocation system of the country. If you use the radio where the frequency allocation system is based on 9 (10) kHz interval, set the MW CH STEP 9/10 kHz selector in the battery compartment to 9 (10) kHz.



- **1** Set POWER/LOCK to LOCK.
- **2** Open the battery compartment and remove the batteries.
- 3 Change MW CH STEP 9/10 kHz.
- 4 Install the batteries and close the battery compartment.
- **5** Set POWER/LOCK to POWER.

The frequency allocation of the area

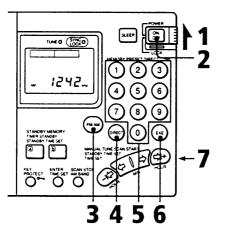
Area	Frequency allocation system		
North America, South America	10 kHz step		
Other countries	9 kHz step		

Change the MW CH STEP 9/10 kHz within 10 minutes

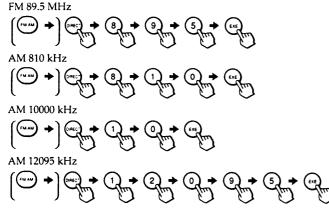
If more than 10 minutes have passed after the batteries were removed, the current time will be erased. In this case, set the time again.

set the clock.

Direct Tuning



Examples



1 Set POWER/LOCK to POWER.

- **2 Press ON/OFF.** The radio is turned on.
- **3** Press FM/AM to select the band (FM or AM).
- Select AM to receive SW, MW or LW.
- **4 Press DIRECT.** The frequency in the display is erased.

Note

After pressing a button, press the next button within 10 seconds. If you do not, the display will return to the previously received station.

When you input a frequency outside the frequency range

The display will return to the previously received station. Press DIRECT and enter the correct frequency again.

If you input a wrong frequency Press DIRECT to cancel the entry, and perform the above procedure from step 4 with the correct frequency. When the sound is distorted Normally set SENS DX/LOCAL to DX. However, when the sound is distorted, set it to LOCAL.

When you are listening to the news Set TONE to NEWS. Vocal will be heard more clearly. When you are listening to music, set it to MUSIC.

5 Enter the frequency of the desired station directly by pressing the MEMORY PRESET/DIRECT TUNE buttons 0 - 9.

6 Press EXE. When the station is tuned in, the TUNE indicator

previous button.

7 Adjust VOLUME.

For MW/LW reception

Retract the telescopic antenna.

The built-in ferrite bar antenna activates. Since this antenna is directional, rotate the unit

horizontally to the optimum

Pull out the telescopic antenna to its full length and set it

For SW reception

lights.

direction.

vertically.

Minimum entry digit:

AM: 1 kHz

(See the examples at left.)

FM: 0.05 MHz (50 kHz)

To turn off the radio, press ON/OFF.

To Improve Reception

For FM band, a decimal point is not required. For AM band, lower triple zero digits can be omitted.

You should press a button within 10 seconds after pressing the

For FM reception

Pull out the telescopic antenna to expose its swivel base and adjust its length, angle and direction.

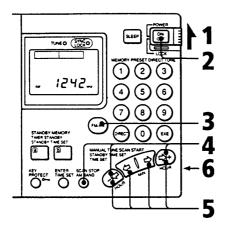


To Prevent Accidental Change of the Received Station

Press KEY PROTECT •.... The •... mark appears in the display window and all the buttons on the control panel do not work.

To release the key protect function, press KEY PROTECT - again.

Manual Tuning



- **1** Set POWER/LOCK to POWER.
- **2 Press ON/OFF.** The radio is turned on.
- **3 Press FM/AM** to select the band (FM or AM).
- Select AM to receive SW, MW or LW.
 4 If you select the FM band, skip this step.
 While pressing the SCAN STOP/AM BAND, press an outer MANUAL TUNE/SCAN START/STANDBY TIME SET/TIME SET button (冷 or ⇔) repeatedly to select the desired band or meter band.





The minimum frequency in that band or meter band is received.

╉

5 Press an MANUAL TUNE/SCAN START/STANDBY TIME SET/ TIME SET button to search for a desired station. Pressing the outer (☆ or ☆) or inner (☆ or ☆) buttons changes the frequency in the following frequency step.

Band	Outer buttons (I⇔ or ⇔I)	Inner buttons (⇔ or ⇔)
FM	50 kHz	50 kHz
SW	5 kHz	1 kHz
MW	9/10 kHz	1 kHz
LW	9 kHz	1 kHz

When the station is tuned in, the TUNE indicator lights.

6 Adjust VOLUME.

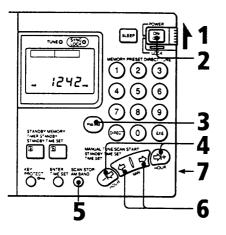
To turn off the radio, press ON/OFF.

What is a meter band? SW is divided into 13 bands by the wave length (meter). Each band is called a meter band. (See the table on page 19.)

Frequency band does not change If you keep pressing MANUAL TUNE/ SCAN START/STANDBY TIME SET/ TIME SET, the frequency will repeat in the following ranges.

Band	inner buttons (수 or 수)	Outer buttons * (ICP or 다)
FM	76 ↔ 108 MHz	76 ↔ 108 MHz
АМ	150 ↔ 299999 kHz	in each broadcast band or meter band

Scan Tuning



- **1** Set POWER/LOCK to POWER.
- **2** Press ON/OFF. The radio is turned on.
- **3 Receive a broadcast band** by way of direct tuning or manual tuning. (Refer to the table on the next page for the frequency range of each broadcast band.)
- 4 Keep pressing an outer MANUAL TUNE/SCAN START/ STANDBY TIME SET/TIME SET button (☆ or ☆) for about 2 seconds. Scan tuning will begin within the frequency range. When a station is received, the scanning will stop automatically for about 2 seconds and the TUNE indicator lights.
- **5 Press SCAN STOP/AM BAND** to listen to the station being received. The scan tuning stops and the station being received is tuned in.
- 6 Tune in the station more precisely by inner buttons of MANUAL TUNE/SCAN START/STANDBY TIME SET/TIME SET (\$ or \$\$), if required.
- 7 Adjust VOLUME.

To turn off the radio, press ON/OFF.

The frequency allocation (channel		
step)		
FM	50 kHz	
SW		
MW		
LW	9 kHz	

When scan tuning stops too often Set SENS DX/LOCAL to LOCAL.

Frequency Range of the Auto Scan for Each Broadcast Band

Broad	lcast band	Frequency range	SW meter band
	LW	153 kHz - 522 kHz * 1	_
		530 kHz - 1620 kHz	
	MW	(10 kHz step)	-
		531 kHz - 1620 kHz	
		(9 kHz step)	_
		2250 kHz – 2550 kHz	120 meter band
		3150 kHz - 3450 kHz	90 meter band
АМ		3850 kHz - 4050 kHz	75 meter band
		4700 kHz - 5100 kHz	60 meter band
		5900 kHz - 6250 kHz	49 meter band
		7100 kHz - 7400 kHz	41 meter band
	sw	9400 kHz – 10000 kHz	31 meter band
		11500 kHz - 12150 kHz	25 meter band
		13500 kHz - 13900 kHz	22 meter band
		15000 kHz – 15700 kHz	19 meter band
		17450 kHz - 18000 kHz	16 meter band
		21450 kHz - 21950 kHz	13 meter band
		25600 kHz - 26100 kHz	11 meter band
	FM	76.00 MHz - 108.00 MHz * 2	-

*1 153-279kHz for the Saudi Arabia model

* 2 87.50-108.00MHz for the Saudi Arabia model

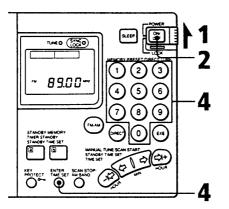
19

Frequency band does not change If you do not stop scanning, the scanning

will repeat in the range of the broadcast band or meter band.

Preset Tuning

Presetting a Station



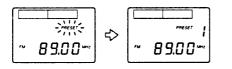
- **1** Set POWER/LOCK to POWER.
- **2 Press ON/OFF.** The radio is turned on.
- 3 Tune in a desired station by way of direct tuning (see page 14), manual tuning (see page 16) or scan tuning (see page 18).
 4 While keeping ENTER pressed, press one of the MEMORY
- PRESET/DIRECT TUNE buttons 0 to 9.
 The action which is transition protocol in a protocol to the method.

The station which is tuned in is preset on that button. The preset number appears in the display.



Ex. To preset FM 89.0 MHz on MEMORY PRESET/DIRECT TUNE 1

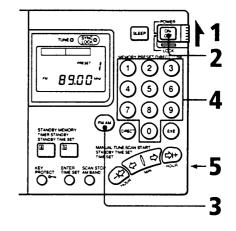
+



The number of stations you can preset Up to 20 stations, 10 stations each for FM and AM, can be preset to MEMORY PRESET/DIRECT TUNE button 0 to 9.

To change the preset station Preset a station to the desired MEMORY PRESET/DIRECT TUNE button 0 to 9. The station previously preset to the button is erased.

Tuning in a Preset Station

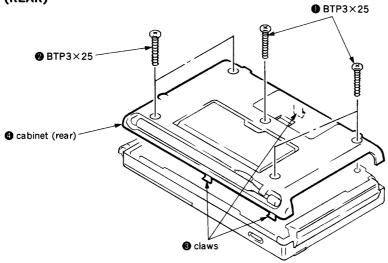


- 1 Set POWER/LOCK to POWER.
- **2 Press ON/OFF.** The radio is turned on.
- **3** Press FM/AM to select the band (FM or AM).
- **4** Press the desired MEMORY PRESET/DIRECT TUNE button 0 to 9.
- The station preset on that button will be tuned in. **5** Adjust VOLUME.
 - To turn off the radio, press ON/OFF.

SECTION 2 DISASSEMBLY

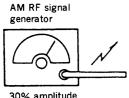
Note : Follow the disassembly procedure in the numerical order given.

2-1. CABINET (REAR)



SECTION 3 ELECTRICAL ADJUSTMENTS

• AM Section

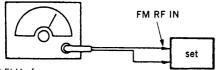


Put the lead-wire antenna close to the set.

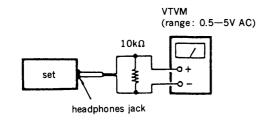
30% amplitude modulation by 400Hz signal

• FM Section

FM RF signal generator



22.5kHz frequency deviation by 400Hz signal output level: as low as possible



• Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done be the trimmer capacitors.

(1) 1st IF Adjustment

Setting :

SENS switch : DX TONE switch : MUSIC AM MODE switch : NORM

Procedure :

- 1. Set the frequencies of the AM RF SSG and the frequency display of the set to AM 150kHz.
- 2. Adjust T104 and T105 so that the reading on the VTVM becomes in maximum.

Adjustment Location : main board

(2) 2nd Local Adjustment

Setting :

SENS switch :	DX
TONE switch :	MUSIC
AM MODE switch :	NORM

Procedure :

- 1. Connect frequency counter as shown page 12.
- 2. Tune the set to AM 150kHz.
- 3. Adjust RV401 so that the reading on the frequency counter becomes in $55.39MHz \pm 30Hz$.

Adjustment Location : main board

(3) SSB 0 Beat Adjustment

Setting :

SENS switch : DX TONE switch : MUSIC AM MODE switch : SYNC

Procedure :

- 1. Short the jumper wire between the IC401 pin 6 and GND.
- 2. Insert Headphones plug into Headphones jack.
- 3. Tune the set to AM 150kHz.
- 4. Set the SYNC/SSB switch to USB.
- minimized.
- 6. Set the SYNC/SSB switch to LSB.
- 7. Adjust CT401 so that the sound from headphones is minimized.
- 8. Repeat the above steps 4 to 7 several times.
- 9. After adjustment, release the jumper wire.

Adjustment Location : main board

(4) (AM)/FM VCO Adjustment

Setting :

SENS switch : DX TONE switch : MUSIC AM MODE switch : NORM

Procedure :

- 1. Connect digital voltmeter as shown page 12.
- 2. Tune the set to AM 150kHz.
- 3. Confirm that the reading on the digital voltmeter becomes in more than 2.2V.
- 4. Tune the set to AM 29999kHz.
- 5. Confirm that the reading on the digital voltmeter becomes in less than 13V.
- 6. Tune the set to FM 76.00MHz.
- 7. Adjust T403 so that the reading on the digital voltmeter becomes in 2.0 ± 0.05 V.
- 8. Tune the set to FM 108.00MHz.
- 9. Confirm that the reading on the digital voltmeter becomes in more than 11V.

Adjustment Location : main board

(5) FM Tracking Adjustment

Setting :

SENS switch : DX TONE switch : MUSIC

Procedure :

- 1. Set the frequencies of the FM RF SSG and the frequency display of the set to FM 104.00MHz.
- 2. Adjust CT101 and CT102 so that the reading on the VTVM becomes in maximum.
- 3. Set the frequencies of the FM RF SSG and the frequency display of the set to FM 80.00MHz.
- 5. Adjust CT401 so that the sound from headphones is 4. Adjust T101 and T102 so that the reading on the VTVM becomes in maximum.
 - 5. Repeat the above setps 1 to 4 several times.

Adjustment Location : main board

(6) Stereo (MPX) Adjustment

Setting :

SENS switch : DX TONE switch : MUSIC

Procedure :

- 1. Insert Headphones plug into Headphones jack.
- 2. Connect a capacitor $(10\mu F)$ between one side of C414 and GND.
- 3. Connect frequency counter as shown page 12.
- 4. Tune the set to FM 108.00MHz.
- 5. Adjust RV403 so that the reading on the frequency counter becomes in $76 \text{kHz} \pm 300 \text{Hz}$.

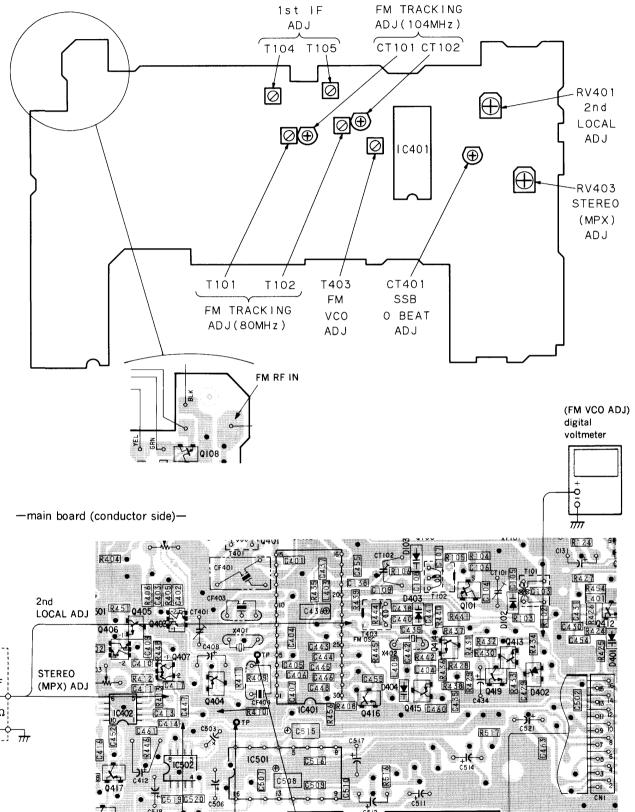
DC 5V

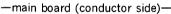
frequency

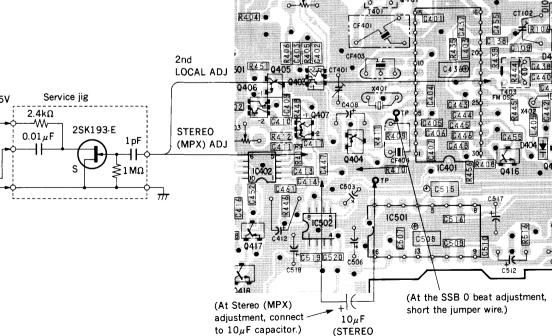
counter

6. Remove the Headphones plug.

Adjustment Location : main board







(MPX) ADJ)

Adjustment Location : main board -main board (component side)-

SECTION 4 DIAGRAMS

4-1. IC PIN DESCRIPTION

• IC201 μPD1724GB·SR7167J (LCD DRIVE/CONTROLLER) (Except Italian Model) IC201 UPD1724GB-SR7167IT (LCD_DRIVE/CONTROLLER) (Italian Model)

IC201	μPD1724GB-SR7167IT (LC	D DRIV	E/CONTROLLER) (Italian Model)
Pin No.	Pin Name	1/0	Pin Description
1	LCD10	0	Segment signal output terminal for LCD panel.
2	LCD9	0	Segment signal output terminal for LCD panel.
3	LCD8	0	Segment signal output terminal for LCD panel.
4	LCD7	0	Segment signal output terminal for LCD panel.
5	LCD6	0	Segment signal output terminal for LCD panel.
6	LCD5	0	Segment signal output terminal for LCD panel.
7	LCD4	0	Segment signal output terminal for LCD panel.
8	LCD3	0	Segment signal output terminal for LCD panel.
9	LCD2	0	Segment signal output terminal for LCD panel.
10	LCD1	0	Segment signal output terminal for LCD panel.
11	NC	_	No connection
12	COM3	0	Common signal output terminal for LCD panel.
13	COM2	0	Common signal output terminal for LCD panel.
14	COM1	0	Common signal output terminal for LCD panel.
15	VSS3	_	Capacitor connection terminal for doubler.
16	CAP2	—	Capacitor connection terminal for doubler.
17	CAP1	—	Capacitor connection terminal for doubler.
18	VSS2		Capacitor connection terminal for doubler.
19	VDP (MUTE)	0	VDP (Variable Duty Port) or output port of 1bit port (PG2).
20	CGP (AM/FM)	0	CGP (Clock Generator Port) or output port of 1bit port (PD3).
21	NC	_	No connection
22	VDD	_	Power supply terminal of device.
23	VHF	Ι	PLL part oscillation (VCO) frequency input terminal
24	HF	Ι	PLL part oscillation (VCO) frequency input terminal
25	AM	Ι	Not used.
26	VSS1	—	Connect to GND.
27	E01	0	Not used.
28	E02	0	PLL error output terminal
29	CE (VDET2)	Ι	Select signal input terminal of device.
30	XO	0	Connection terminal of crystal oscillator (75kHz).
31	XI	I	Connection terminal of crystal oscillator (75kHz).
32	VSS4		Capacitor connection terminal for regulator.
33	PA3 (VDET1)	I/O	I/O (Input/Output) port of 4bit. (Port A)
34	PA2	I/O	I/O (Input/Output) port of 4bit. (Port A)
35	PA1 (BAR/ROD)	I/O	I/O (Input/Output) port of 4bit. (Port A)
36	PA0 (SD)	I/O	I/O (Input/Output) port of 4bit. (Port A)
37	PB3 (POWER)	0	Output exclusive port of 4bit. (Port B)
38	PB2 (INT)	0	Output exclusive port of 4bit. (Port B)
39	PB1	0	Output exclusive port of 4bit. (Port B)
40	PB0	0	Output exclusive port of 4bit. (Port B)
41	PC3	0	Output exclusive port of 4bit. (Port C)
42	PC2	0	Output exclusive port of 4bit. (Port C)
43	PC1	0	Output exclusive port of 4bit. (Port C)
44	PC0	0	Output exclusive port of 4bit. (Port C)
45	K3	I	Key•return signal input

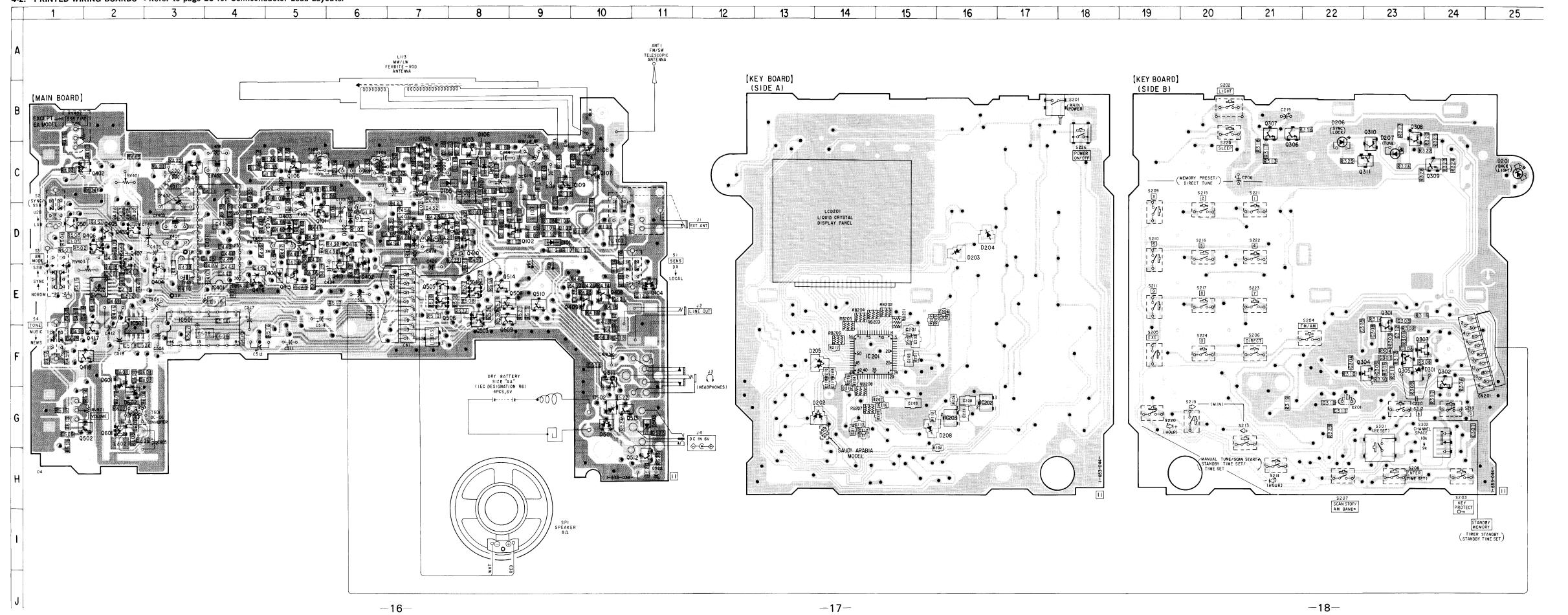
Pin No.	Pin Name	1/0	Pin Description
46	K2	Ι	Key•return signal input
47	K1	Ι	Key•return signal input
48	K0	Ι	Key•return signal input
49	NC	-	Connect to GND.
50	NC	—	Connect to GND.
51	LCD16	0	Segment signal output terminal for LCD panel.
52	LCD15	0	Segment signal output terminal for LCD panel.
53	LCD14	0	Segment signal output terminal for LCD panel.
54	LCD13	0	Segment signal output terminal for LCD panel.
55	LCD12	0	Segment signal output terminal for LCD panel.
56	LCD11	0	Segment signal output terminal for LCD panel.

-12-

 Semico 	nductor L	ocation	
Ref. No.	Location	Ref. No.	Location
D101	D-9	Q301	F-23
D102	D-6	Q302	F-24
D103	C-5	Q303	F-23
D104	E-11	Q304	F-23
D105	C-7	Q305	F-23
D106	C-8	Q306	B-21
D107	C-8	Q307	B-21
D108	C-8	Q308	B-23
D201	C-25	Q309	C-24
D202	G-14	Q310	C-22
D203	D-16	Q311	C-22
D204	D-16	Q401	C-3
D205	F-14	Q402	C-1
D206	C-22	Q403	D-2
D207	C-23	Q404	E-3
D208	G-15	Q405	D-2
D301	F-23	Q406	D-2
D401	D-7	Q407	D-2
D402	E·6	Q408	E-10
D403	D-5	Q409	E-10
D404	E-5	Q410	D-8
D501	G-10	Q411	D-7
D502	G-10	Q412	D-7
D503	G-11	Q413	D-6
D601	F-2	Q414	D-5
D602	G-2	Q415	E-5
10001	F14	Q416	E-4 F-2
IC201	F-14	Q417	F-2 F-1
IC202	G-16	Q418	. –
1C203	G-16	Q419	D-6 D-1
IC401	E-4	Q501	G-1
IC402 IC501	E-2 F-3	Q502	E-8
IC501	F-3	Q503	E-0 E-8
10502	F•2	Q504 Q505	E-8 E-7
10503	F•7	-	E-7 E-7
Q101	D-5	Q506 Q508	E-7 E-8
Q101 Q102	D-5 D-9	Q508 Q509	E-8
Q102	C-8	Q510	E-0 E-9
Q103	C-8 C-7	Q510 Q511	F-10
Q104 Q105	C-7	Q511 Q512	H-10
Q105 Q106	C-5	Q512 Q513	G-10
0107	C-10	Q513 Q514	E-8
0108	C-10 C-10	Q601	G-2
0108	C-10 C-9	2001	0.5
_ <u>2103</u>	0.2	J	L

Semiconductor Location

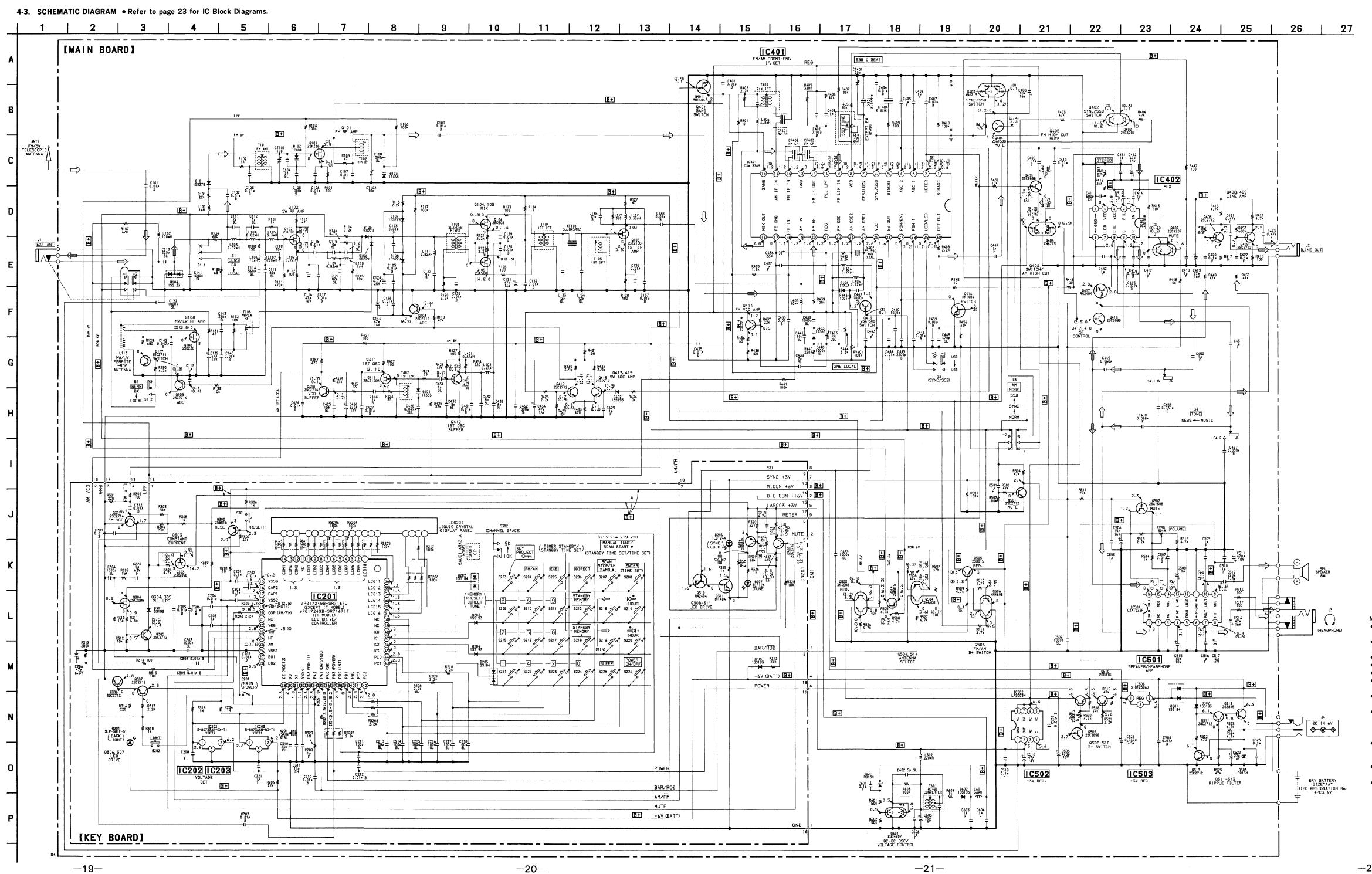
4-2. PRINTED WIRING BOARDS • Refer to page 25 for Semiconductor Lead Layouts.





- Note:
 : parts extracted from the component side.
 : Through hole.
 : indicates side identified with part number.
 : Pattern on the side which is seen.
 : Pattern on the rear side.
 Abbreviation EA : Saudi Arabia model

		21	22	23	24	25	
--	--	----	----	----	----	----	--



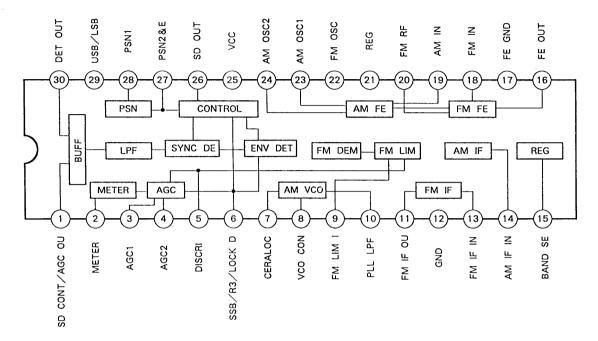


Note

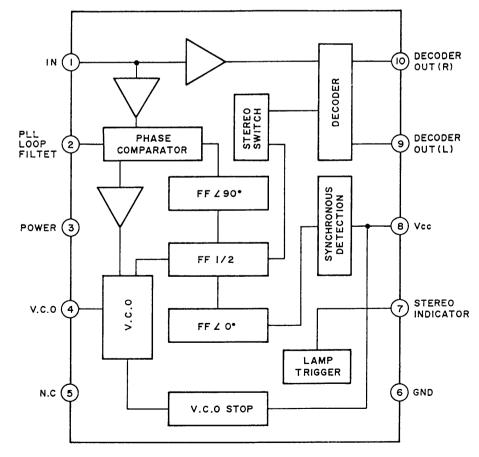
- All capacitors are in μ F unless otherwise noted. pF : $\mu\mu$ F 50WV or less are not indicated except for electrolytics and tantalums. • All resistors are in Ω and 1/4 W or less unless otherwise
- specified. • Δ : internal component.
- B+ : B+ Line
- _____: adjustment for repair.
- Power voltage is dc 6V and fed with regulated dc power supply from external power voltage jack.
- Voltage is dc with respect to ground under no-signal (detuned) conditions.
- no mark: FM (): AM
- < >: LW
- []: **SW**
- Voltages are taken with a VOM (Input Impedance $10M\Omega$). Voltage variations may be noted due to normal production tolerances.
- Signal path.
- ⇒ : FM
- Abbreviation
- EA : Saudi Arabia model

• IC Block Diagrams

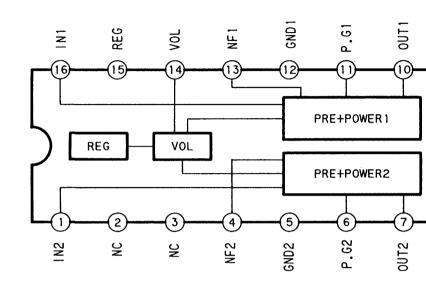
IC401 CXA1376S



IC402 LA3335M

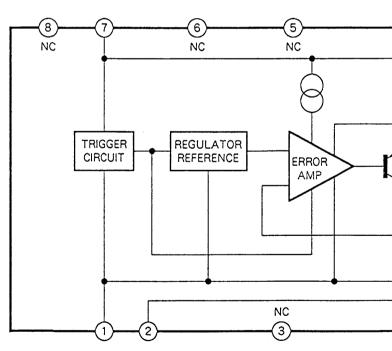


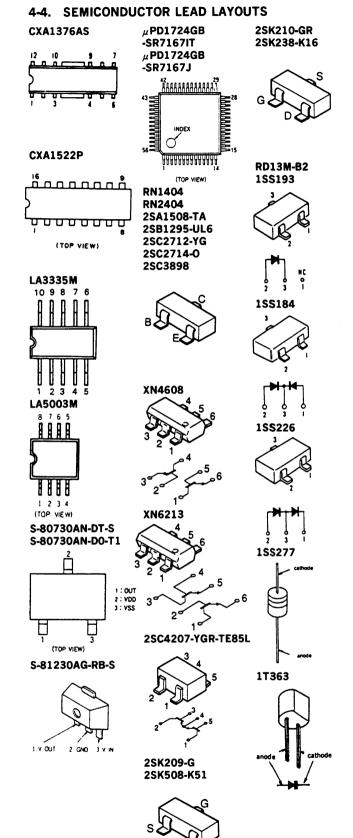
IC501 CXA1522P

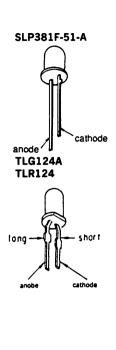


VCC

IC502 LA5003M



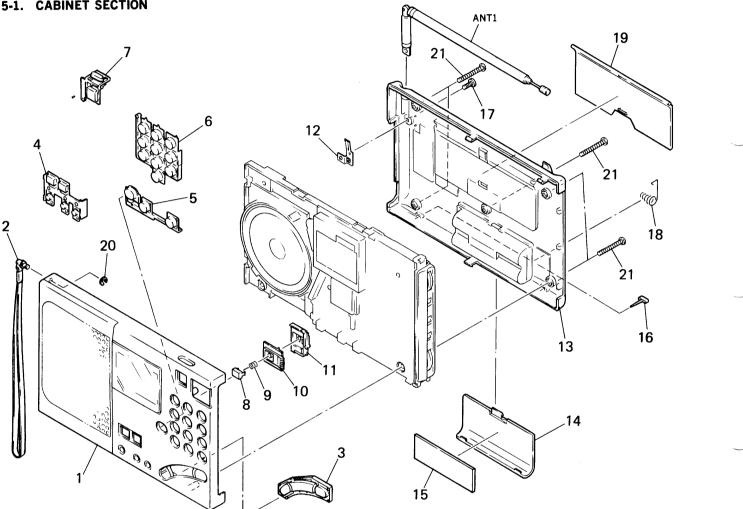




NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

5-1. CABINET SECTION



Ref.No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remarl
1	X-3369-299-1	CABINET (FRONT) ASSY		12	3-893-840-01	PLATE (ANTENNA), CONTACT	
2	3-881-938-00	STRAP, HAND		13	3-914-396-01	CABINET (REAR)	
3	3-914-390-01	BUTTON (JOG)		14	3-893-838-01	LID, BATTERY CASE	
4	3-914-400-01	BUTTON (STANDBY)		15	9-911-844-XX	CUSHION (BATTERY CASE LID)	
5	3-914-391-01	BUTTON (BAND)		16	3-893-846-01	FOOT, RUBBER	
6	3-914-389-01	BUTTON (10 KEY)		17	4-924-242-11	SCREW (M3X6), FLAT HEAD	
7	3-893-825-02	BUTTON (SLEEP)		18	3-893-845-01	TERMINAL (PLUS MINUS), BATTER	łY
8	3-893-829-01	BUTTON (POWER)		19	3-893-839-11	STAND	
9	3-893-862-01	SPRING, COMPRESSION		20	7-624-104-04	STOP RING 2.0, TYPE -E	
10	3-893-835-01	KNOB (LOCK)		21	7-685-152-19	SCREW +BTP 3X25 TYPE2 N-S	
11	3-893-836-01	RETAINER		ANT1	1-501-712-11	ANTENNA, TELESCOPIC	



SECTION 5 EXPLODED VIEWS

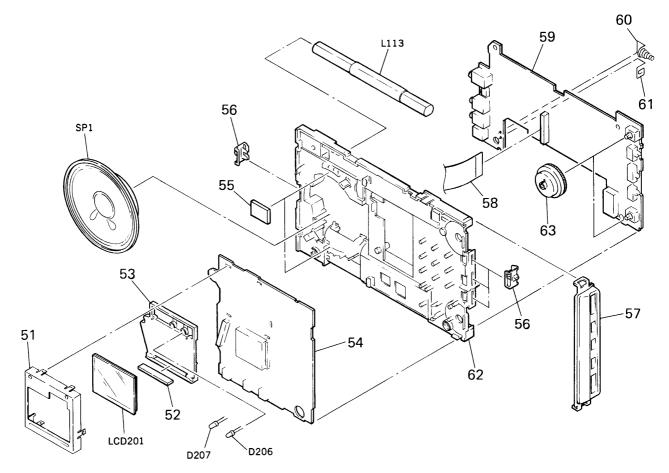
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts Example :

KNOB, BALANCE (WHITE)... (RED) ↑ ↑ Parts Color Cabinet's Color Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

 Abbreviation EA : Saudi Arabia model

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5-2. CHASSIS SECTION



Ref.No.	Part No.	Description	Remark	Re	f. No.	Part No.	Description	Remark
51	3-914-393-01	HOLDER, LCD			60	3-917-410-01	TERMINAL (-), BATTERY	
52	1-537-729-11	CONDUCTIVE BOARD, CON	INECTION		61	3-917-414-01	TERMINAL (+), BATTERY	
53	3-914-392-01	PLATE, LIGHT GUIDE		*	62	3-914-397-01	CHASSIS	
* 54	A-3679-582-A	KEY BOARD, COMPLETE			63	3-914-401-01	KNOB (VOL)	
55	9-911-841-XX	CUSHION, ANTENNA			D206	8-719-812-43	LED TLG124A (SYNC LOCK)	
56	3-914-388-01	KNOB (AM MODE)			D207	8-719-812-41	LED TLR124 (TUNE)	
57	3-914-399-01	COVER (EXCEPT EA)			L113	1-402-479-21	ANTENNA, FERRITE-ROD (LW/MW)	
57	3-914-399-11	COVER (EA)			LCD201	1-810-543-11	DISPLAY PANEL, LIQUID CRYSTAL	
58	1-765-428-11	WIRE, PARALLEL (FFC)	(16 CORE)		SP1	1-544-577-11	SPEAKER (7.7CM)	
* 59	A-3661-990-A	MAIN BOARD, COMPLETE	(EXCEPT EA)					
* 59	A-3661-999-A	MAIN BOARD, COMPLETE	(EA)					

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KEY
```

NOTE:

SECTION 6 ELECTRICAL PARTS LIST

NOTE								r		
the p parts compo -XX a they origi RESIS All r METAL	warts list may specified in onents used on and -X mean st may have some inal one. STORS resistors are .:Metal-film r	andardized part difference fro in ohms. esistor.	rom the r the s, so m the	they a Some of when of SEMICO In ea uA uPB CAPACI uF:	are seldom m delay should ordering the DNDUCTORS ach case, u: : μ A : μ PB UTORS μ F When	l be anticipa ese items. :μ, for exam IPA: μPA IPC: μPC indicating p	routine servi ted ple: uPD: μPD. arts by refer	ce. ence	The components in mark \triangle or dotter \triangle are critical replace only with specified. Les composants in marque \triangle sont or la sécurité. Ne les remplacer	d line with ma for safety. n part number dentifiés par ritiques pour que par une p
		oxide-film res	istor.	COILS		er, please in	clude the boa	rð. 🛛	portant le numéro	o spécifié.
 Abbre IT : EA : G : 	nflammable eviations Italian model Saudi Arabia German model Tourist model	model		uH: ,	un ——					
Ref.No.	Part No.	Description		Re	emark	Ref.No.	Part No.	Descript	tion	Remark
*	A-3679-582-A	KEY BOARD, COM	PLETE	_			·	< DIODE	>	
		*****	****							
						D201	8-719-991-09		SLP381F-51-A (BAG	CK LIGHT)
		CONDUCTIVE BOA		ION		D202	8-719-801-78		1SS184	
		PLATE, LIGHT G	UIDE			D203	8-719-801-48		1SS193	
	3-914-393-01	HOLDER, LCD				D204 D205	8-719-801-48 8-719-801-78		1SS193 1SS184	
		< CAPACITOR >				0200	0 / 10 001 /0	UTODE	100104	
						D206	8-719-812-43	LED	TLG124A (SYNC LO	CK)
C201	1-163-038-00	CERAMIC CHIP	0. 1uF		25V	D200	8-719-812-41		TLR124 (TUNE)	,
C202		CERAMIC CHIP	0. 01uF	10%	25V	D208	8-719-801-48		1SS193	
C203		CERAMIC CHIP	0. 1uF		25V	D301	8-719-801-48		1SS193	
C204		CERAMIC CHIP	0.01uF	10%	25V					
C205	1-164-346-11	CERAMIC CHIP	1uF		16V			< IC $>$		
C206	1-126-154-11	FLECT	47uF	20%	6. 3V	10901	8-759-273-36	IC 11DI	D1724GB-SR7167J (I	FXCFPT IT)
C200		CERAMIC CHIP	47ur 0. 01uF	20% 10%	25V		8-759-273-37		D1724GB-SR7167IT	
C207		CERAMIC CHIP	1uF	10/0	16V		8-759-519-46		80730AN-DT-S	···/
C210		CERAMIC CHIP	0. 01uF	10%	25V		8-759-196-22		80736AN-D0-T1	
C211		CERAMIC CHIP	100PF	5%	50V	-				
								< LIQUII	D CRYSTAL DISPLAY	>
C212	1-162-970-11	CERAMIC CHIP	0. 01uF	10%	25V				-	
C213-2						LCD201	1-810-543-11	DISPLAY	PANEL, LIQUID CR	YSTAL
		CERAMIC CHIP	100PF	5%	50V					
C219	1-126-163-11		4. 7uF	20%	50V			< TRANS	ISTOR >	
C220	1-130-834-00		1uF	10%	63V	0001	0 700 000 00	TDANCTO	TOD 9009714 0	
C221	1-154-345-11	CERAMIC CHIP	1uF		16V	Q301	8-729-200-86			
0201	1-164 000 11	CERAMIC CHIP	0.01E		50V	Q302	8-729-807-87			
C301		CERAMIC CHIP	0.01uF	E.	50V	Q303 Q304	8-729-220-93 8-729-220-93			
C303		CERAMIC CHIP	0.001uF	5% 5%	50V 50V	Q304 0305	8-729-220-93			
C304 C305-3		UCRAMIC UNIP	0.001uF	5%	50V	Q305	0-123-230-49	10403131	1011 2302/12-16	
0000-0		CERAMIC CHIP	0.01uF		50V	Q306	8-729-230-49	TRANSIST	TOR 2SC2712-YG	
C310		CERAMIC CHIP	33PF	5%	50V	Q307	8-729-230-49			
0010	1 100 200 11	Chiumito VIII	0011	070	001	0308	8-729-807-87			
0011	4 400 000 00	OPDAMIA OUID	1000	50/	COV	0000	0 720 000 00			

< CONNECTOR >

13PF

0. 01uF

5%

50V

50V

CN201 1-695-446-11 SOCKET, CONNECTOR 16P

C311 1-163-096-00 CERAMIC CHIP

C312 1-164-232-11 CERAMIC CHIP

Q309 8-729-230-49 TRANSISTOR

Q310 8-729-207-70 TRANSISTOR

Q311 8-729-207-58 TRANSISTOR RN1404

2SC2712-YG

RN2404



lef.No.	Part No.	Description			Remark	Ref. No.	Part No.	Descrip	tion	Remar
	-	< RESISTOR >						< SWITC	H >	
R201	1-216-797-11	METAL CHIP	10	5%	1/16W	S201	1-571-754-11	SWITCH,	PUSH (1 KE	Y) (MAIN POWER)
R202	1-216-825-11		2. 2K	5%	1/16W	S202	1-572-499-21	SWITCH,	TACTIL (LI	GHT)
R203	1-216-825-11		2. 2K		1/16W	S203				(KEY PROTECT O)
R204	1-216-857-11		1M	5%	1/16W	S204	1-571-760-11			
R204 R205	1-216-833-11		10K	5%	1/16W	S204	1-571-760-11			
R206	1-216-837-11	METAL CHIP	22K	5%	1/16W	S206	1-571-760-11	SWITCH.	KEY BOARD	(DIRECT)
R207-2					_,	S207	1-571-760-11	SWITCH.	KEY BOARD	(SCAN STOP/AM BAND
11207 2	1-216-825-11	METAL CHID	2. 2K	5%	1/16W	S208	1-571-760-11			
D919			22 Z K	5%	1/16₩	S209	1-571-760-11			
R212	1-216-837-11						1-571-760-11			
R217 R301	1-216-845-11 1-216-033-00		100K 220	5% 5%	1/16W 1/10W	S210	1-3/1-/00-11	5#1100,	NET DUARD	(0)
						S211	1-571-760-11	SWITCH,	KEY BOARD	(9)
R302	1-216-025-00	METAL CHIP	100	5%	1/10W	S212				(STANDBY MEMORY b)
					1/10W	S212	1-571-760-11	,		(ormoor abitotte a)
R303	1-216-093-00		68K	5%		3213	1 3/1 /00 11			CCAN CTADT))
R304	1-216-037-00		330	5%	1/10W	6014	1 681 860 11			'SCAN START))
R305	1-216-001-00		10	5%	1/10W	S214	1-571-760-11			
R306	1-216-049-00	METAL CHIP	1K	5%	1/10W	S215	1-571-760-11	•		E/SCAN START)) (2)
D207	1-216-089-00	METAL CUID	47K	5%	1/10W	5215	1 5/1 /00 11	0	NET DOMED	(2)
R307						0216	1-571-760-11	CWITCH	KEN BUYDU	(5)
R308	1-216-065-00		4.7K		1/10W	S216				
R309	1-216-077-00		15K	5%	1/10W	S217	1-571-760-11			
R310	1-216-077-00		15K	5%	1/10W	S218				(STANDBY MEMORY a)
R311	1-216-069-00	METAL CHIP	6. 8K	5%	1/10W	S219	1-571-760-11			
								•		(SCAN START))
R312	1-216-073-00	METAL CHIP	10K	5%	1/10W	S220	1-571-760-11			
R313	1-216-117-00	METAL CHIP	680K	5%	1/10W			(5)+	• (MANUAL TU	NE/SCAN START))
R314	1-216-001-00	METAL CHIP	10	5%	1/10W					
R315	1-216-025-00	METAL CHIP	100	5%	1/10₩	S221	1-571-760-11			
R316	1-216-033-00	METAL CHIP	220	5%	1/10W	S222	1-571-760-11	SWITCH,	KEY BOARD	(4)
						S223	1-571-760-11	SWITCH,	KEY BOARD	(7)
R317	1-216-129-00	METAL CHIP	2. 2M	5%	1/10W	S224	1-571-760-11	SWITCH.	KEY BOARD	(10)
R318	1-216-049-00		1K	5%	1/10W	S225	1-571-760-11			
R319	1-216-121-00		1M	5%	1/10W	5220	1 0/1 /00 11			()
						S226	1-571-760-11	SWITCH	KEV BOARD	(POWER ON/OFF)
R320	1-216-081-00		22K	5%	1/10W					
R321	1-216-057-00	METAL CHIP	2. 2K	5%	1/10W	S301 S302	1-692-247-11			CLICK) (RESET) NNEL SPACE)
R322	1-216-093-00	METAL CHIP	68K	5%	1/10W					
	1-216-073-00		10K		1/10W			< VIBRA	ATOR >	
R324	1-216-045-00		680	5%	1/10W					
R325	1-216-049-00		1K	5%	1/10₩	X201	1-567-769-11	VIBRAT	DR CRYSTAL	(75kHz)
R326	1-216-049-00		1K 1K	5%	1/10W	1				****
0007	4 040 005 00		4 77	5 00	1 /1 OW					
R327	1-216-065-00		4. 7K		1/10W					
R328	1-216-073-00		10K	5%	1/10W					
R329	1-216-121-00		1M	5%	1/10W	1				
R330	1-216-001-00	METAL CHIP	10	5%	1/10W					
		< COMPOSITION	CIRCUI	r blo	СК >					
RB201	-206									
		RES, NETWORK								

	1-236-502-11	RES,	NETWORK
RB207	1-236-631-11	RES,	NETWORK
RB208	1-236-631-11	RES,	NETWORK

Ref.No.	Part No.	Description		Rem	ark	Ref.No.	Part No.	Description		Re	mark
*	A-3661-990-A	MAIN BOARD,	- Complete (except	EA)		C404	1-164-232-11	CERAMIC CHIP	0. 01uF		50V
*	A-3361-999-A	MAIN BOARD,	COMPLETE (EA)			C405	1-164-346-11	CERAMIC CHIP	1uF		16V
		****	****			C406	1-164-346-11	CERAMIC CHIP	1uF		16V
						C407	1-164-232-11	CERAMIC CHIP	0. 01uF		50V
		< CAPACITOR	>			C408	1-126-157-11	ELECT	10uF	20%	16V
C101-1	03					C409	1-164-232-11	CERAMIC CHIP	0. 01uF		50V
0101 1	1-164-232-11	CERAMIC CHIP	9 0.01uF		50V	C410		CERAMIC CHIP	0. 01uF		50V
C104	1-163-086-00				50V	C411		CERAMIC CHIP	680PF	5%	50V
C105	1-163-141-00			5%	50V	C412	1-124-589-11		47uF	20%	16V
C106	1-164-232-11			0.0	50V	C413		CERAMIC CHIP	0. 1uF		25V
C107	1-164-232-11				50V	0110	1 100 000 00		01 201		
0107	1 104 202 11	OLIQUATO OTT	0.010		001	C414	1-164-346-11	CERAMIC CHIP	1uF		16V
C108	1-163-141-00	CERAMIC CHIE	9 0. 001uF	5%	50V	C415		CERAMIC CHIP	0. 022uF	10%	25V
C100	1-164-232-11			070	50V	C416		CERAMIC CHIP	0. 022uF	10%	25V
C103	1-163-125-00			5%	50V	C417		CERAMIC CHIP	1uF	10/0	16V
	1-163-085-00			J <i>1</i> 0	50V	C417		CERAMIC CHIP	1uF		16V
C111					50V 50V	0410	1 104 340 11	CENAMIC CITT	Tui		101
C112	1-163-086-00	UERAMIC UNIF	- JPT		304	C410	1-124-234-00	FIFCT	22uF	20%	16V
0110	1 104 040 11	OF DAMLO OUT	алан (т. 1. н. Г. 1.		1.01/	C419		CERAMIC CHIP	2201 0. 1uF	204	25V
C113	1-164-346-11			F 0/	16V	C420					25V 25V
C114	1-163-135-00			5%	50V	C421		CERAMIC CHIP	0. 47uF		
C115	1-163-115-00			5%	50V	C422		CERAMIC CHIP	0. 1uF		25V
C116	1-124-589-11			20%	16V	C423	1-164-005-11	CERAMIC CHIP	0. 47uF		25V
C117	1-164-232-11	CERAMIC CHIE	9 0. 01uF		50V				0.01 5		500
-						C424		CERAMIC CHIP	0. 01uF	-	50V
C118	1-164-232-11				50V	C425		CERAMIC CHIP	15PF	5%	50V
C119	1-163-093-00			5%	50V	C426	1-124-635-00		220uF	20%	6. 3V
C120	1-163-115-00			5%	50V	C427		CERAMIC CHIP	0.01uF	4.84	50V
C121	1-163-083-00				50V	C428	1-161-021-11	CERAMIC	0. 047uF	10%	25V
C122	1-163-141-00	CERAMIC CHI	9 0. 001uF	5%	50V						
						C429		CERAMIC CHIP	1uF		16V
C123	1-164-232-11				50V	C430		CERAMIC CHIP	15PF	5%	50V
C124	1-126-163-11		4. 7uF	20%	50V	C431		CERAMIC CHIP	0. 01uF		50V
C125	1-164-232-11				50V	C432		CERAMIC CHIP	8PF		50V
C126	1-164-232-11	CERAMIC CHI			50V	C433	1-163-091-00	CERAMIC CHIP	8PF		50V
C127	1-163-092-00	CERAMIC CHI	9PF	0. 25PF	50V						
						C434	1-124-589-11		47uF	20%	16V
C128-1	130					C435	1-164-232-11	CERAMIC CHIP	0. 01uF		50V
	1-164-232-11	CERAMIC CHI	0.01uF		50V	C436	1-135-162-21	TANTALUM CHIP	33uF	20%	6. 3V
C131	1-124-589-11	ELECT	47uF	20%	16V	C437	1-164-346-11	CERAMIC CHIP	1uF		16V
C132	1-164-232-11	CERAMIC CHI	P 0. 01uF		50V	C438	1-163-141-00	CERAMIC CHIP	0. 001uF	5%	50V
C133	1-163-095-00	CERAMIC CHI	P 12PF	5%	50V						
C134	1-163-095-00	CERAMIC CHI	P 12PF	5%	50V	C439	1-163-085-00	CERAMIC CHIP	2PF		50V
						C440	1-163-141-00	CERAMIC CHIP	0. 001uF	5%	50V
C135	1-163-097-00	CERAMIC CHI	P 15PF	5%	50V	C441	1-163-093-00	CERAMIC CHIP	10PF	5%	50V
C136-3	138					C442	1-163-141-00	CERAMIC CHIP	0. 001uF	5%	50V
	1-164-232-11	CERAMIC CHI	9 0. 01uF		50V	C443	1-164-346-11	CERAMIC CHIP	1uF		16V
C139	1-124-589-11	ELECT	47uF	20%	16V						
C140	1-164-232-11				50V	C444	1-164-232-11	CERAMIC CHIP	0. 01uF		50V
C141	1-163-141-00			5%	50V	C445		CERAMIC CHIP	0. 0022uF	10%	100V
						C446		CERAMIC CHIP	0. 01uF		50V
C142	1-163-809-11	CERAMIC CHI	9 0.047uF	10%	25V	C447		CERAMIC CHIP	1uF		16V
C142	1-163-129-00			5%	50V	C448		CERAMIC CHIP	560PF	5%	50V
C143	1-124-589-11		47uF	20%	16V		100 00			- •	
C401	1-164-232-11				50V	C449	1-163-036-00	CERAMIC CHIP	0. 068uF		50V
C401		CERAMIC CHI			50V	C450-4		Children of the	01 0 0 0 U I		
0402	107 202 II	Opicimity VIII	0. 0101		501	0100 9		CERAMIC CHIP	1uF		16V
C403	1-164-346-11	CERAMIC CHI	2 1uF		16V	C453		CERAMIC CHIP	101 1PF		50V
0403	7 104 JAO 11	OFIGHTE OUL	Tut		101	1 0400	1 100 000 00	SERVICE OTHER			001

MAIN

Ref.No.	Part No.	Description		Re	emark	Ref.No.	Part No.	Description		Remark
C454	1-163-083-00	CERAMIC CHIP	1PF	_	50V			< TRIMMER >		
C455		CERAMIC CHIP	0. 01uF		50V					
C456		CERAMIC CHIP	0. 039uF	10%	25V	CT101	1-141-304-21	CAP TRIMMER	10PF	
C457	1-162-587-11	CERAMIC CHIP	0. 039uF	10%	25V		1-141-304-21		10PF	
C458		CERAMIC CHIP	0. 068uF	20.0	50V			TRIMMER, CERAN		
0450	1 104 000 14	APPANIA AND	0.04 5							
C459 C460		CERAMIC CHIP CERAMIC CHIP	0. 01uF 0. 001uF	50	50V			< DIODE >		
C461		CERAMIC CHIP		5%	50V	D 404				
C461		CERAMIC CHIP	1uF 0. 001uF	50/	16V	D101	8-719-921-22			
C463		CERAMIC CHIP		5% 5%	50V	D102	8-719-002-81			
0100	1 103 141 00	ULINAMIC UNIP	0.001uF	5%	50V	D103	8-719-002-81			
C501	1-164-346-11	CERAMIC CHIP	1F		1.01	D104	8-719-800-76			
C502	1-163-141-00			50	16V	D105	8-719-921-22	DIODE 1SS277		
C502			0.001uF	5%	50V					
	1-126-925-11		470uF	20%	10V	D106	8-719-921-22			
C504	1-164-232-11		0. 01uF		50V	D107	8-719-921-22	DIODE 1SS277		
C505	1-164-346-11	CERAMIC CHIP	1uF		16V	D108	8-719-921-22			
0500	4 400 455 44					D401	8-719-002-81	DIODE 1T363		
C506	1-126-157-11		10uF	20%	16V	D402	8-719-801-48	DIODE 1SS193		
C507	1-164-232-11		0. 01uF		50V					
C508		TANTALUM CHIP	10uF	20%	10V	D403	8-719-002-81	DIODE 1T363		
C509	1-164-346-11		1uF		16V	D404	8-719-002-81	DIODE 1T363		
C510	1-164-346-11	CERAMIC CHIP	1uF		16V	D501	8-719-801-78	DIODE 1SS184		
						D502	8-719-801-48	DIODE 1SS193		
C511	1-126-925-11	ELECT	470uF	20%	10V	D503	8-719-106-80		B2	
C512	1-124-635-00		220uF	20%	6. 3V					
C514	1-124-589-11		47uF	20%	16V	D601	8-719-106-80	DIODE RD13M-	B2	
C515	1-135-216-11	TANTALUM CHIP	10uF	20%	10V	D602	8-719-801-48	DIODE 1SS193		
C516	1-164-346-11	CERAMIC CHIP	1uF		16V					
								< IC >		
C517	1-126-157-11		10uF	20%	16V					
C518	1-124-589-11		47uF	20%	16V	IC401	8-752-064-31	IC CXA1376AS		
C519	1-163-038-00		0. 1uF		25V	IC402	8-759-804-98	IC LA3335M		
C520	1-164-232-11		0. 01uF		50V	IC501	8-752-059-51	IC CXA1522P		
C521	1-125-701-11	DOUBLE LAYER	0.047F		5. 5V	IC502	8-759-801-15	IC LA5003M		
						1C503	8-759-939-41	IC S-81230AG-	-RB-S	
C522	1-124-234-00		22uF	20%	16V					
C523	1-163-038-00		0. 1uF		25V			< JACK >		
C601	1-163-038-00		0. 1uF		25V					
C602	1-163-088-00	CERAMIC CHIP	5PF		50V	J1	1-569-187-11	JACK (EXT ANT)		
C603	1-164-346-11	CERAMIC CHIP	1uF		16V	J2	1-566-819-41	JACK 1P (LINE C	UT)	
						J3	1-566-891-11	JACK (HEADPHONE	S)	
C604	1-164-346-11		1uF		16V	J4	1-695-153-11	JACK, DC (DC IN	6V)	
C605	1-124-234-00	-	22uF	20%	16V					
C606	1-164-346-11	CERAMIC CHIP	1uF		16V			< COIL >		
		< FILTER >				L101	1 410 000 11		4 11	
							1-410-993-11		1uH	
CF401	1-577-707-11	FILTER, CERAMIC					1-408-789-21 1-410-992-11		100uH	
		FILTER, CERAMIC							0. 82uH	
		FILTER, CERAMIC			1	L104	1-410-992-11		0. 82uH	
		FILTER, CERAMIC				L105	1-410-999-11	INDUCIOK CHIP	3. 3uH	
		, •••••••••••••••••••••••••••••••••				L106	1-412-008-31	INDUCTOR CHIP	15uH	
	<	CONNECTOR >					1-410-658-31		220uH	
							1-412-005-11		8. 2uH	
CN1	1-695-447-11 \$	SOCKET, CONNECTO	R 16P				1-410-992-11		0. 82uH	
							1-410-993-11 I		1uH	
					,		- 110 000 11 1		TALL	

MAIN

Ref.No.	Part No.	Description		Remark	Ref.No.	Part No.	Description		R	emark
L111	1-410-992-11	INDUCTOR CHI	P 0. 82uH		Q509	8-729-805-39	TRANSISTOR	2SC3898		
L112	1-410-987-11	INDUCTOR CHI	P 0. 33uH		Q510	8-729-807-87	TRANSISTOR	2SB1295-U	.6	
L113			RITE-ROD (LW/MW)		Q511	8-729-230-49	TRANSISTOR	2SC2712-Y	3	
L401		INDUCTOR CHI			Q512	8-729-807-87		2SB1295-U	.6	
L402		INDUCTOR CHI			Q513	8-729-230-49		2SC2712-Y		
L403	1-412-006-31	INDUCTOR CHI	P 10uH		Q514	8-729-807-87	TRANSISTOR	2SB1295-UI	L6	
L404	1-412-932-21		0.27uH		Q601	8-729-014-86		2SC4207-Y	GR-TE85L	
L405	1-412-931-11		0. 22uH							
L406	1-410-326-61	INDUCTOR	6. 8uH				< RESISTOR >			
L601	1-414-194-11		33uH							
					R101	1-216-081-00	METAL CHIP	22K S	5% 1/10	W
L602	1-410-658-31	INDUCTOR CHI	P 220uH		R102	1-216-049-00			5% 1/10	
2002	1 110 000 00				R103	1-216-097-00			5% 1/10	
		< TRANSISTOR	>		R104	1-216-025-00			5% 1/10	
		, include the second			R105	1-216-017-00			5% 1/10	
Q101	8-729-123-86	TRANSISTOR	2SK238-K16			1 110 011 00				
Q101	8-729-116-64		2SK508-K51		R106	1-216-097-00	METAL CHIP	100K 5	5% 1/10	W
Q102	8-729-230-49		2SC2712-YG		R107	1-216-041-00			5% 1/10	
Q104	8-729-116-64		2SK508-K51		R108	1-216-029-00			5% 1/10	
Q101	8-729-116-64		2SK508-K51		R109	1-216-049-00			5% 1/10	
Q100	0 720 110 01	Themesion	250000 001		R110	1-216-073-00			5% 1/10	
Q106	8-729-208-47	TRANSISTOR	2SK210-GR					1011		
Q100	8-729-200-86		2SC2714-0		R111	1-216-113-00	METAL CHIP	470K	5% 1/10	w
Q108	8-729-123-86		2SK238-K16		R112	1-216-025-00			5% 1/10	
Q100 Q109	8-729-200-86		2SC2714-0		R112 R113	1-216-017-00			5% 1/10	
Q401	8-729-207-58		RN1404		R113 R114	1-216-057-00			5% 1/10	
Q IOI	0 120 201 00	112101010101	101101		R115	1-216-073-00			5% 1/10	
Q402	8-729-014-86	TRANSISTOR	2SC4207-YGR-TE85L		niio	1 110 010 00		1011	1, 10	
Q403	8-729-420-07		XN6213		R116	1-216-057-00	METAL CHIP	2. 2K	5% 1/10	W
Q404	8-729-805-71		2SA1508-TA		R117	1-216-097-00		100K		
Q405	8-729-805-39		2SC3898		R118	1-216-089-00			5% 1/10	
Q406	8-729-420-07		XN6213		R120-1				1, 10	
QIOO	0 /20 120 0/	110,0010100	1110210		NIEC I	1-216-057-00	METAL CHIP	2. 2K	5% 1/10	W
Q407	8-729-014-86	TRANSISTOR	2SC4207-YGR-TE85L		R123	1-216-025-00			5% 1/10	
Q408	8-729-230-49		2SC2712-YG							
Q409	8-729-230-49		2SC2712-YG		R124	1-216-049-00	METAL CHIP	1K S	5% 1/10	W
Q410	8-729-200-86		2SC2714-0		R125	1-216-025-00			5% 1/10	
Q411	8-729-208-47		2SK210-GR		R126	1-216-039-00			5% 1/10	
Q	0 120 200 11	in the lot of			R127	1-216-017-00			5% 1/10	
0412	8-729-200-86	TRANSISTOR	2SC2714-0		R128	1-216-025-00			5% 1/10	
Q413	8-729-230-49		2SC2712-YG			1 110 010 00		100	2, 20	
Q414	8-729-200-86		2SC2714-0		R129	1-216-045-00	METAL CHIP	680	5% 1/10	W
Q415	8-729-805-71		2SA1508-TA		R130	1-216-065-00			5% 1/10	
Q416	8-729-207-58		RN1404		R131	1-216-017-00			5% 1/10	
QIIO	0 120 201 00	mandioioion	1011101		R132	1-216-073-00			5% 1/10	
Q417	8-729-207-70	TRANSISTOR	RN2404		R133	1-216-073-00			5% 1/10	
Q418	8-729-805-39		2SC3898		11100	1 210 070 00		1011 0	JAJ 1/10	
Q410 Q419	8-729-230-49		2SC2712-YG		R134	1-216-045-00	METAL CHIP	680 5	5% 1/10	w
Q413 Q501	8-729-230-49		2SC2712-YG		R135	1-216-021-00			5% 1/10	
Q501 Q502	8-729-805-71		2SA1508-TA		R135	1-216-065-00			5% 1/10	
\$00L	5 125 000 /1	nameroror	LUNIOUU IN		R135 R401	1-216-295-00			5% 1/10 5% 1/10	
Q503	8-729-402-16	TRANSISTOR	XN4608		R401 R402	1-216-057-00			5% 1/10	
Q504	8-729-402-16		XN4608		1.104	- 410 00r 00	METING VIIII	2.211	// 1/ IU	.,
Q504 Q505	8-729-807-87		2SB1295-UL6		R403	1-216-089-00	METAL CHIP	47K 5	5% 1/10	w
Q506	8-729-402-16		XN4608		R403	1-216-089-00			5% 1/10	
Q508	8-729-807-87		2SB1295-UL6		R405	1-216-109-00			5% 1/10	
1000	2 120 001 01		2001200 000		R405	1-216-089-00			5% 1/10	
				I	1,100	1 210 000 00	METTE VIII	1/11 0	1/10	••

MAIN

Ref.No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
R407	1-216-085-00	METAL CHIP	33K	5%	1/10W	R456	1-216-085-00	METAL CHIP	33K	5%	1/10W
R408	1-216-057-00		2. 2K		1/10W	R501	1-216-097-00	METAL CHIP	100K	5%	1/10₩
R409	1-216-025-00		100	5%	1/10W	R502	1-216-097-00	METAL CHIP	100K	5%	1/10₩
R410	1-216-097-00		100K		1/10W	R503	1-216-089-00	METAL CHIP	47K	5%	1/10W
R411	1-216-041-00		470	5%	1/10W	R504	1-216-089-00	METAL CHIP	47K	5%	1∕10₩
R412	1-216-689-11	METAL CHIP	39K	0.5%	1/10W	R505	1-216-065-00	METAL CHIP	4. 7K	5%	1/10W
R413	1-216-065-00	METAL CHIP	4. 7K	5%	1/10W	R506	1-216-089-00	METAL CHIP	47K	5%	1/10W
R414	1-216-117-00	METAL CHIP	680K	5%	1/10W	R507	1-216-089-00	METAL CHIP	47K	5%	1/10W
R415	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	R508-5	10				
R416	1-216-065-00	METAL CHIP	4.7K	5%	1/10₩		1-216-065-00		4. 7K		1/10₩
						R511	1-216-081-00	METAL CHIP	22K	5%	1/10W
R417	1-216-025-00		100	5%	1/10W					50/	1 /10#
R418	1-216-025-00		100	5%	1/10₩	R512	1-216-065-00		4.7K		1/10₩
R419	1-216-089-00		47K	5%	1/10W	R513	1-216-057-00		2. 2K		1/10W
R420	1-216-013-00		33	5%	1/10W	R514	1-216-049-00		1K	5%	1/10W
R421	1-216-025-00	METAL CHIP	100	5%	1/10W	R515	1-216-065-00		4. 7K		1/10W
						R516	1-216-025-00	METAL CHIP	100	5%	1/10₩
R422	1-216-025-00		100	5%	1/10W	0545	4 040 005 00		100	ΓW	1 /10₩
R423	1-216-013-00		33	5%	1/10₩	R517	1-216-025-00		100	5%	1/10W
R424	1-216-013-00		33	5%	1/10W	R518	1-216-089-00		47K	5% F%	1/10W
R425	1-216-085-00		33K	5%	1/10₩	R519	1-216-089-00		47K	5% 5%	1/10W
R426	1-216-089-00	METAL CHIP	47K	5%	1/10₩	R520	1-216-065-00		4.7K		1/10W
			100	50/	1 /1 01	R521	1-216-057-00	METAL CHIP	2. 2K	J <i>7</i> 0	1/10W
R427	1-216-025-00		100	5%	1/10W	DEGO	1 916 041 00	METAL CUID	470	5%	1/10W
R428	1-216-057-00		2. 2K		1/10W	R522					1/10W
R429	1-216-073-00		10K	5%	1/10W	R523	1-216-065-00		4.7K		
R430	1-216-063-00		3. 9K		1/10W	R524	1-216-065-00		4. 7K 47K	5% 5%	1/10W 1/10W
R431	1-216-025-00	METAL CHIP	100	5%	1/10₩	R525 R526	1-216-089-00 1-216-065-00		47K 4.7K		1/10W
D422	1-216-063-00	METAL CHID	3. 9K	5%	1/10W	1320	1 210 005 00	METAL UIII	4.71	5.0	1/100
R432	1-216-063-00		3. 9K 470	5%	1/10W	R527	1-216-065-00	METAL CHIP	4. 7K	5%	1/10W
R433 R434	1-216-041-00		470 10K	5%	1/10W	R601	1-216-101-00		150K		1/10₩
R434 R435	1-216-073-00		1. 5K		1/10W	R602	1-216-097-00		100K		1/10W
R435 R436	1-216-013-00		33	5%	1/10W	R603	1-216-097-00		100K		1/10W
11450	1 210 010 00	METTE OTT	00	0/1	1/ 100	R604	1-216-049-00		1K	5%	1/10W
R437	1-216-081-00	METAL CHIP	22K	5%	1/10W						
R438	1-216-025-00		100	5%	1/10W			< VARIABLE RE	SISTOR >	,	
R439	1-216-097-00		100K		1/10W						
R440	1-216-105-00	METAL CHIP	220K	5%	1/10W	RV401	1-241-767-21	RES, ADJ, CAR	BON 1001	ζ	
R441	1-216-097-00		100K	5%	1/10₩	RV402	1-223-450-11	RES, VAR, CAR (EXCEPT EA)	BON 50K	(SSB I	FINE TUNE)
R442	1-216-057-00	METAL CHID	2. 2K	5%	1/10W	RVAD3	1-241-765-11	RES, ADJ, CAR	BON 22K		
R442	1-216-097-00		100K		1/10W	l l		RES, VAR, CAR		(VOLU	ME)
R444	1-216-061-00		3. 3K		1/10W						,
R445	1-216-001-00		10	5%	1/10W			< SWITCH >			
R445	1-216-025-00		100	5%	1/10W						
1110	1 210 020 00		100	0.0	1, 10.	S1	1-571-850-81	SWITCH, SLIDE	(SENS)		
R447	1-216-025-00	METAL CHIP	100	5%	1/10W	S2	1-571-850-81	SWITCH, SLIDE	(SYNC/S	SSB)	
R448	1-216-073-00		10K	5%	1/10W	S3	1-554-061-00	SWITCH, SLIDE	(AM MOI	DE)	
R449	1-216-089-00		47K	5%	1/10W	S4	1-571-850-81	SWITCH, SLIDE	(TONE)		
R450	1-216-089-00		47K	5%	1/10W						
R451	1-216-295-00		0	5%	1/10W			< TRANSFORMER	>		
R452	1-216-041-00	METAL CHIP	470	5%	1/10W	T101	1-460-037-11	COIL (WITH CO	RE)		
R453	1-216-117-00	METAL CHIP	680K	5%	1/10W	T102		COIL (WITH CO			
R454	1-216-033-00	METAL CHIP	220	5%	1/10W	T103		TRANSFORMER,			
R455	1-216-079-00	METAL CHIP	18K	5%	1/10W	T104	1-404-780-21	TRANSFORMER,	IF		

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Ref.No.	Part No.	Description	Remark		
 T105	1-426-395-11	COIL (RF)			
T106	1-426-468-21	TRANSFORMER, HIGH	FREQUENCY		
T401		TRANSFORMER, IF			
T402	1-406-371-11	COIL (OSC)			
T403	1-460-039-11	COIL (WITH CORE)			
T601	1-449-902-11	TRANSFORMER, DC-DC	CONVERTER		
		< VIBRATOR >			
X401	1-760-478-21	VIBRATOR, CERAMIC	(3.64MHz)		
X402	1-760-343-21	VIBRATOR, CRYSTAL	(55. 390MHz)		
XF101		FILTER, CRYSTAL			
******	*****	*****	*****		
		MISCELLANEOUS			

58	1-765-428-11	WIRE, PARALLEL (FF	C) (16 CORE)		
ANT1		ANTENNA, TELESCOPI			
SP1	1-544-577-11	SPEAKER (7.7CM)			
		****	*****		
* * * * * * * * *	* * * * * * * * * * * * * * * * * * * *	******	*****************		
	ACCESSORIE	S & PACKING MATERIA	LS		
	*****	*****	**		
Λ	1-465-848-11	ADAPTOR, AC (AC-E	i01) (JE)		
	1-501-398-21	ANTENNA, WIRE (SW)			
î	1-506-443-00	ADAPTOR, PLUG (JE)			
Â	1-569-007-11	ADAPTOR, CONVERSIO	N 2P (JE)		
	3-758-846-01	MANUAL, INSTRUCTIO	ON (JAPANESE, ENGLISH,		
		KOREAN, ARABIC) (EA	, JE)		
	3-758-846-11	MANUAL, INSTRUCTIO	ON (ENGLISH, FRENCH,		
		SPANISH, SWEDISH, PO	RTUGUESE) (US, AEP, E)		
	3-758-846-41	MANUAL, INSTRUCTIO	ON (ENGLISH, FRENCH,		
		GERMAN, DUTCH, ITAL	AN) (Canadian, UK, G, IT)		
	3-893-802-09	HAND BOOK (JE)		The components identified by	Les composants identifiés
	3-893-802-10	BOOK, GUIDE, WAVE	(EXCEPT EA)	mark A or dotted line with	par une marque A sont
	3-895-517-11	SCREW (2), TAPPIN	, STEP	mark. A are critical for	critiques pour la sécurité.
				safety. Replace only with	Ne les remplacer que par une piè
k		INDIVIDUAL CARTON		part number specified.	portant le numéro spécifié.
*	3-918-114-01	INDIVIDUAL CARTON	(JE)	Pare number spectrice.	por conte re numero spectrice.

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SEE ADDITIONAL INFORMATION

SONY: SERVICE MANUAL

US Model Canadian Model AEP Model UK Model E Model Tourist Model



File this Supplement with the Service Manual.

Subject : Add the adaptor AC

(ENG-97008)

Page 34

SONY.

SERVICE MANUAL

Ver 1.0

1998.06

US Model Canadian Model AEP Model UK Model E Model Tourist Model Chinese Model

SUPPLEMENT - 2

File this Supplement with the Service Manual.

Subject : CHINESE MODEL HAS BEEN ADDED

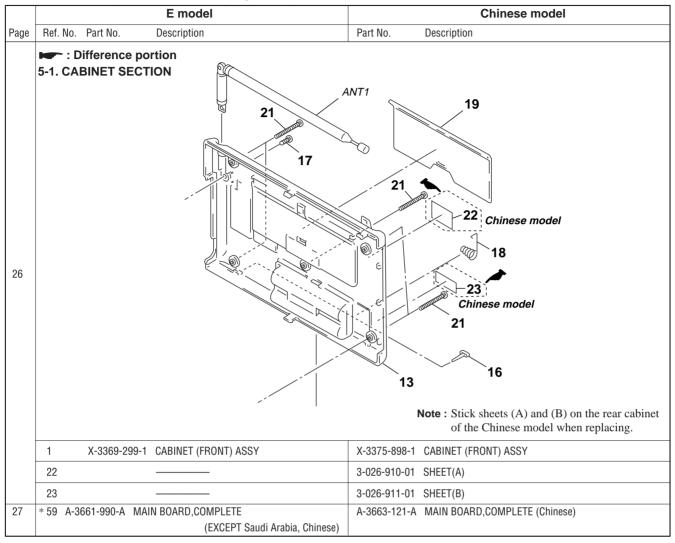
The Chinese model is approximately the same as the E model.

Only difference between Chinese model and E model are listed.

Refer to original Service Manual (9-959-655-11) and Supplement-1 (9-959-655-81) previously issued for the other information.

• DIFFERENCE PARTS LIST

EXPLODED VIEWS (Service Manual See page 26, 27)



ELECTRICAL PARTS LIST

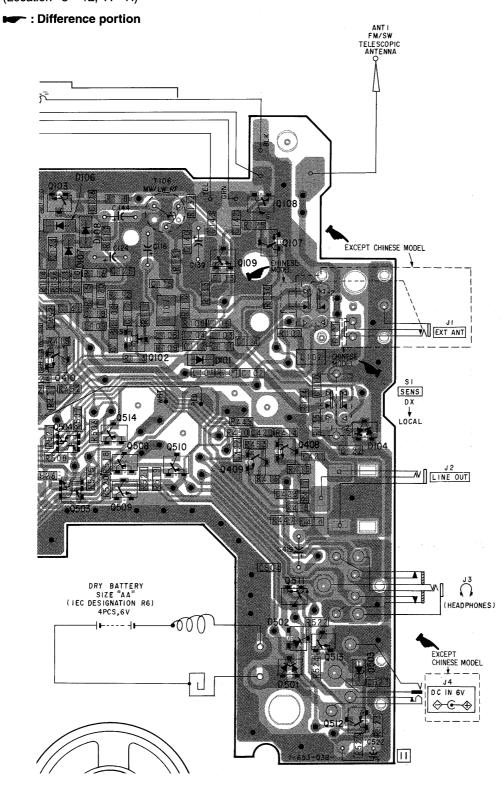
MAIN (Service Manual See page 30, 31)

		E model	Chinese model			
Ref. No.	Part No.	Description	Part No.	Description		
	* A-3661-990-A	MAIN BOARD,COMPLETE	* A-3663-121-A	MAIN BOARD,COMPLETE (Chinese)		
		(EXCEPT Saudi Arabia, Chinese)				
J1	1-569-187-11	JACK (EXT ANT)				

ACCESSORIES & PACKING MATERIALS (Service Manual See page 34)

	E model	Chinese model			
Part No.	Description	Part No.	Description		
3-758-846-11	MANUAL, INSTRUCTION	3-758-846-04	MANUAL, INSTRUCTION (JAPANESE, ENGLISH, KOREAN,		
	(ENGLISH, FRENCH, SPANISH, SWEDISH,		ARABIC) (Saudi Arabia, Tourist, Chinese)		
	PORTUGUESE) (US,AEP,E)	3-758-846-21	MANUAL, INSTRUCTION (CHINESE) (Chinese)		

PRINTED WIRING BOARDS (Service Manual See page 16, 17) (Location 8 - 12, A - H)

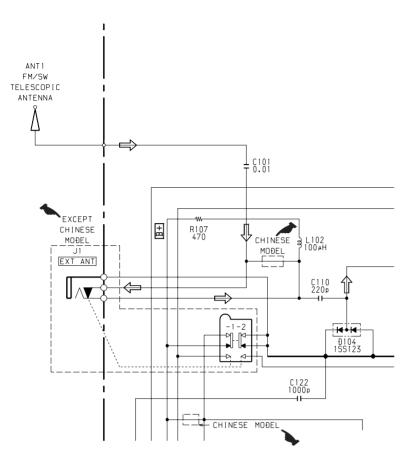


Note :

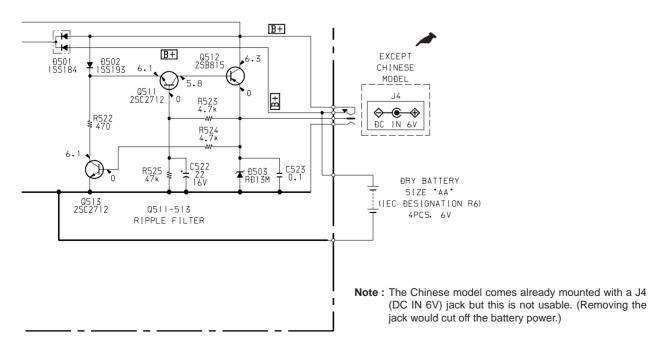
- The Chinese model comes already mounted with a J4 (DC IN 6V) jack but this is not usable. (Removing the jack would cut off the battery power.)
 Pattern on the side which is seen.
 Pattern of the rear side.

SCHEMATIC DIAGRAM (Service Manual See page 19) (Location : 1 - 4, C - F)

: Difference portion



SCHEMATIC DIAGRAM (Service Manual See page 22) (Location : 24 - 27, M - P)



9-959-655-82

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