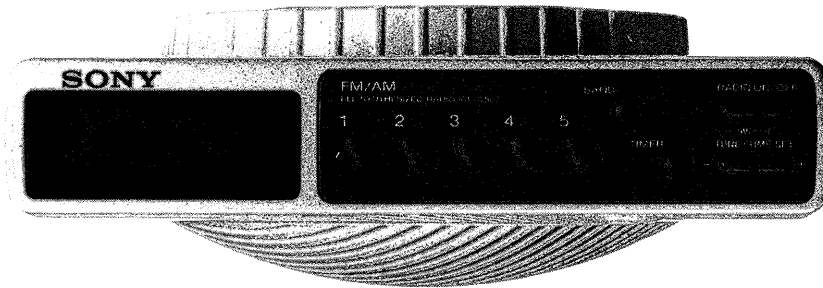


ICF-C503

SERVICE MANUAL

AEP Model



SPECIFICATIONS

Band	Frequency range	Channel step
FM	87.5–108 MHz	0.05* MHz (fixed)
AM	531–1602 kHz	9 kHz (fixed)

* The frequency display is raised or lowered by a step of 0.1 MHz. (Example: Frequency 88.05 MHz is displayed as "88.0 MHz".)

Intermediate frequency: FM: 10.7 MHz
AM: 450 kHz

Speaker: Approx. 7.7cm (3 inches) dia.

Power output: 240 mW (at 10% harmonic distortion)

Power requirements:
220–230 V AC, 50Hz

Dimensions: Approx. 222 × 81 × 229 mm
(8 3/4 × 4 1/8 × 9 1/8 inches) (w/h/d)
incl. projecting parts and controls

Mass: Approx. 930 g (2 lb 1 oz)

Accessories supplied: Mounting screws (3),
Template (1), Bracket (1), Cord clamp (1)

Design and specifications are subject to change without notice.



Note

This appliance conforms with EEC Directive 87/308/EEC regarding interference suppression.

FEATURES

- PLL (phase locked loop) synthesized kitchen radio for easy operation
- Memory preset for up to 5 stations on each band
- Count down timer
- Easy mounting bracket
- Self power backup: Even if the power supply is interrupted, the time setting and the memory will be backed up for 1 hour without batteries.

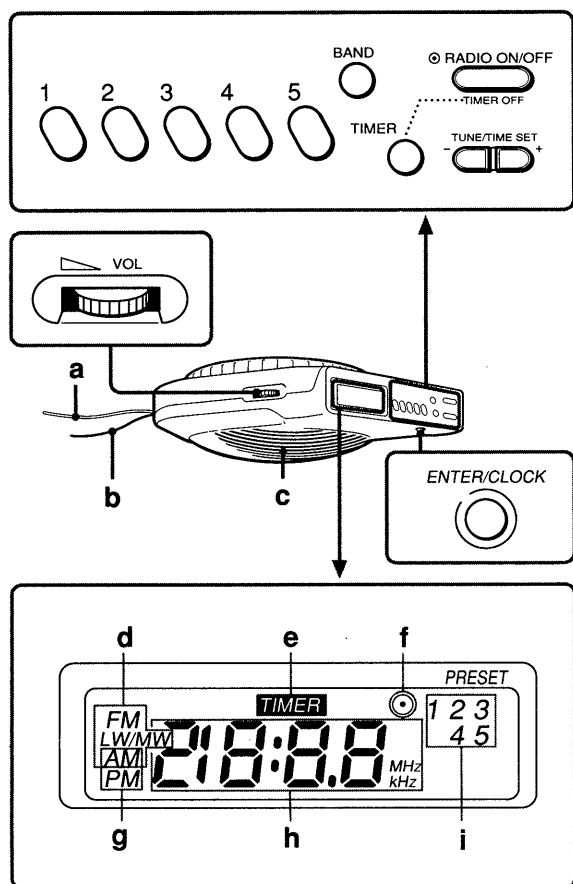
SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK  OR DOTTED LINE WITH MARK  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.

FM/AM PLL
SYNTHESIZED KITCHEN RADIO
SONY[®]

SECTION 1 GENERAL

This section is extracted from instruction manual.



English

Location of Control

See illustrations above.

- a AC power cord
- b FM wire antenna
- c Speaker
- d Band indication
- e Timer indication
- f Power indication
- g AM/PM indication
- h Time/frequency indication
- i PRESET number indication

Setting the Clock

1. Plug in the unit.
The display flashes "AM 12:00" or "0:00".
2. While holding down **ENTER/CLOCK**, press either + or - under **TUNE/TIME SET** till the correct time appears in the display. When you release **ENTER/CLOCK**, the clock begins to operate and ":" flashes.

- The clock system varies depending on the model you own.
12-hour system: "AM 12:00" = midnight
24-hour system: "0:00" = midnight
- To set the current time rapidly, keep pressing **ENTER/CLOCK** and the + or - button together to advance or return to a time that is within a few minutes of the current time. Then press the + or - button to set the time to current time.

Operating the Radio

Manual Tuning

1. Press **RADIO ON/OFF/TIMER OFF** to turn on the radio.
The band, frequency, power indication and the preset number will appear in the display window. After 5 seconds, the indication becomes the current time.
2. Adjust **VOL** (volume).
3. Press **BAND** to select the band. Every push changes the display as follows. (The last frequency selected in each band appears alternately.)
LW → AM(MW) → FM
4. Tune in a station by pressing the + or - button under **TUNE/TIME SET**.
The FM channel step is set to 0.05 MHz and the AM channel step is set to 9 kHz. (The FM frequency indication changes every 0.1MHz.) The LW channel step is set to 9 kHz.
A beep sounds at the band edge.

- To turn off the radio, press **RADIO ON/OFF/TIMER OFF**.
- To improve reception
FM: Extend the FM wire antenna fully to improve reception.
AM (MW)/LW: Rotate the unit horizontally for optimum reception. A ferrite bar antenna is built into the unit.
- To check the station you are listening to, press the + button lightly. The band and frequency appear for 5 seconds.

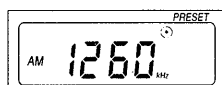
Preset Tuning

Presetting the Station

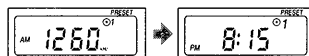
You can preset up to 5 stations in each band with a numbered button, 1 to 5.

Example: To set AM 1260 kHz in preset number 1.

1. Tune in to AM 1260 kHz (See "Manual Tuning").



2. While holding down **ENTER/CLOCK**, press the "1" button. The beeps sound and the station is preset. Though the indication becomes the current time after 5 seconds, the preset number remains.



- To change the preset station, install a new station's frequency in the number of which you wish to change the stations. The previous frequency is canceled.

Tuning in a Preset Station

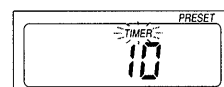
1. Press **RADIO ON/OFF/TIMER OFF** to turn on the radio.
 2. Press **BAND** to select the desired band.
 3. Press the preset number button of the station.
The band, frequency, power indication and preset number appear in the display window. After 5 seconds, the indication becomes the current time. The preset number remains.
- To turn off the radio, press **RADIO ON/OFF/TIMER OFF**.
 - To check the station you are listening to, press the preset number button. The band and frequency appear for 5 seconds.

Setting the Count Down Timer

Use the timer as a reminder. The beep sounds for 10 seconds when the preset time has passed. The beep sounds when the radio is on or off. The timer can be set at 1 minute intervals between 1 and 60.

Example: To set the 15 minutes timer

1. Press **TIMER**. The beep sounds and the display will flash "TIMER".

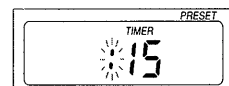


- When you first set the timer, the display shows "10". The next time you set the timer, the display shows the time you set previously.

2. While "TIMER" is flashing, press the + or - button. When "15" appears in the display, release the + or - button and press **TIMER**. The beep sounds twice, ":" flashes, and the timer is set.

Note

- Set the count down timer while "TIMER" is flashing for 10 seconds.



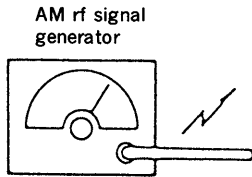
- While the timer is set, the display shows the remaining time. To display the current time, press **TIMER**. Press **TIMER** again, and the remaining time reappears.
- To stop the beep in the middle of beeping, press **RADIO ON/OFF/TIMER OFF**.
- To cancel the timer setting time, while holding down **TIMER**, press **RADIO ON/OFF/TIMER OFF**. When "TIMER" in the display disappears, release the both buttons. The timer setting time is canceled and the current time appears in the display.

SECTION 2 ELECTRICAL ADJUSTMENTS

● AM Section

Setting :

BAND switch : AM



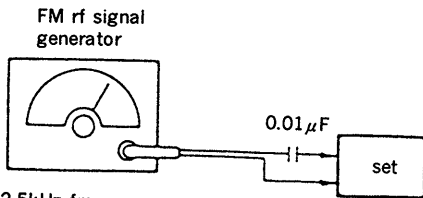
Put the lead-wire antenna close to the set.

30% amplitude modulation by 400Hz signal
output level: as low as possible

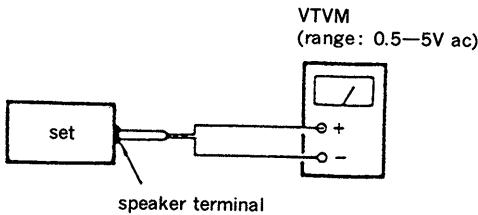
● FM Section

Setting :

BAND switch : FM



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 by the trimmer capacitors.

AM IF ADJUSTMENT		
Adjust for a maximum reading on VTVM.		
T1		
450kHz		

AM VCO VOLTAGE ADJUSTMENT		
Adjustment Part	Frequency Display	Reading on Digital voltmeter
L6	1,602kHz	7.5±1.0V (check)
(confirmation)	531kHz	1.4±0.3V (check)

Note : Not use the AM RF signal generator in this adjustment.

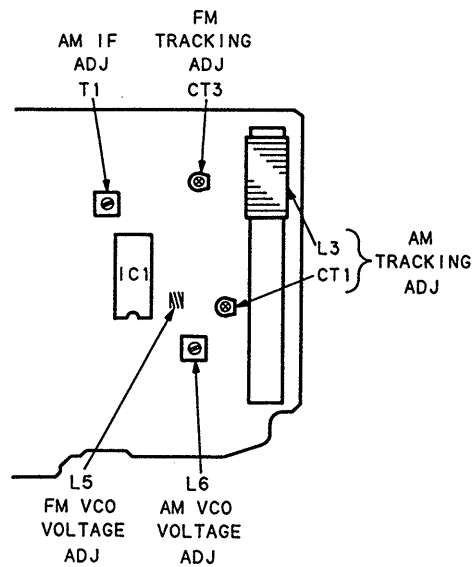
AM TRACKING ADJUSTMENT		
Adjust for a maximum reading on VTVM.		
L3	CT1	
621kHz	1,404kHz	

FM VCO VOLTAGE ADJUSTMENT		
Adjustment Part	Frequency Display	Reading on Digital voltmeter
L5	108MHz	9.5±1.0V (check)
(confirmation)	87.5MHz	more than 2.0V (check)

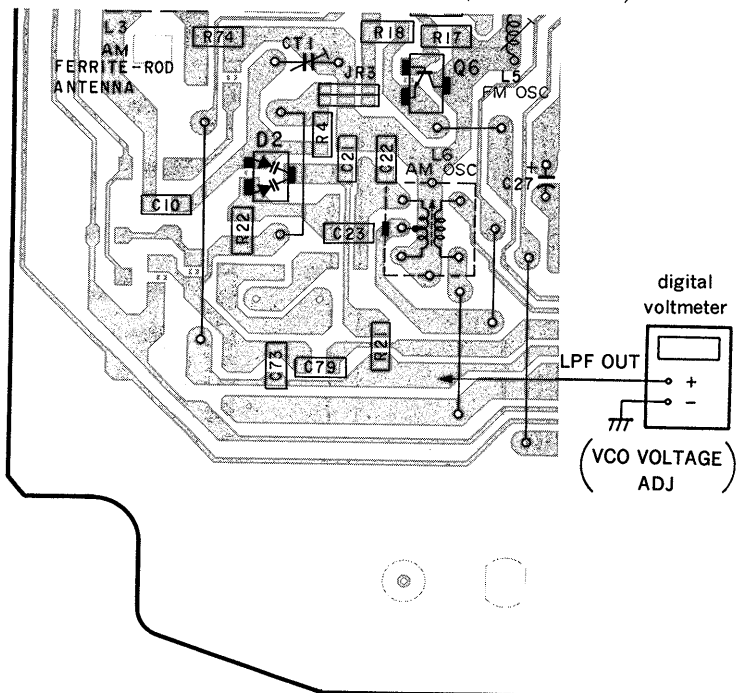
Note : Not use the FM RF signal generator in this adjustment.

FM TRACKING ADJUSTMENT		
Adjust for a maximum reading on VTVM.		
CT3		
108MHz		

Adjustment Location : main board (component side)

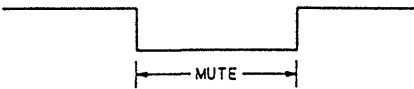


Adjustment Location : main board (conductor side)



SECTION 3 PIN DESCRIPTION

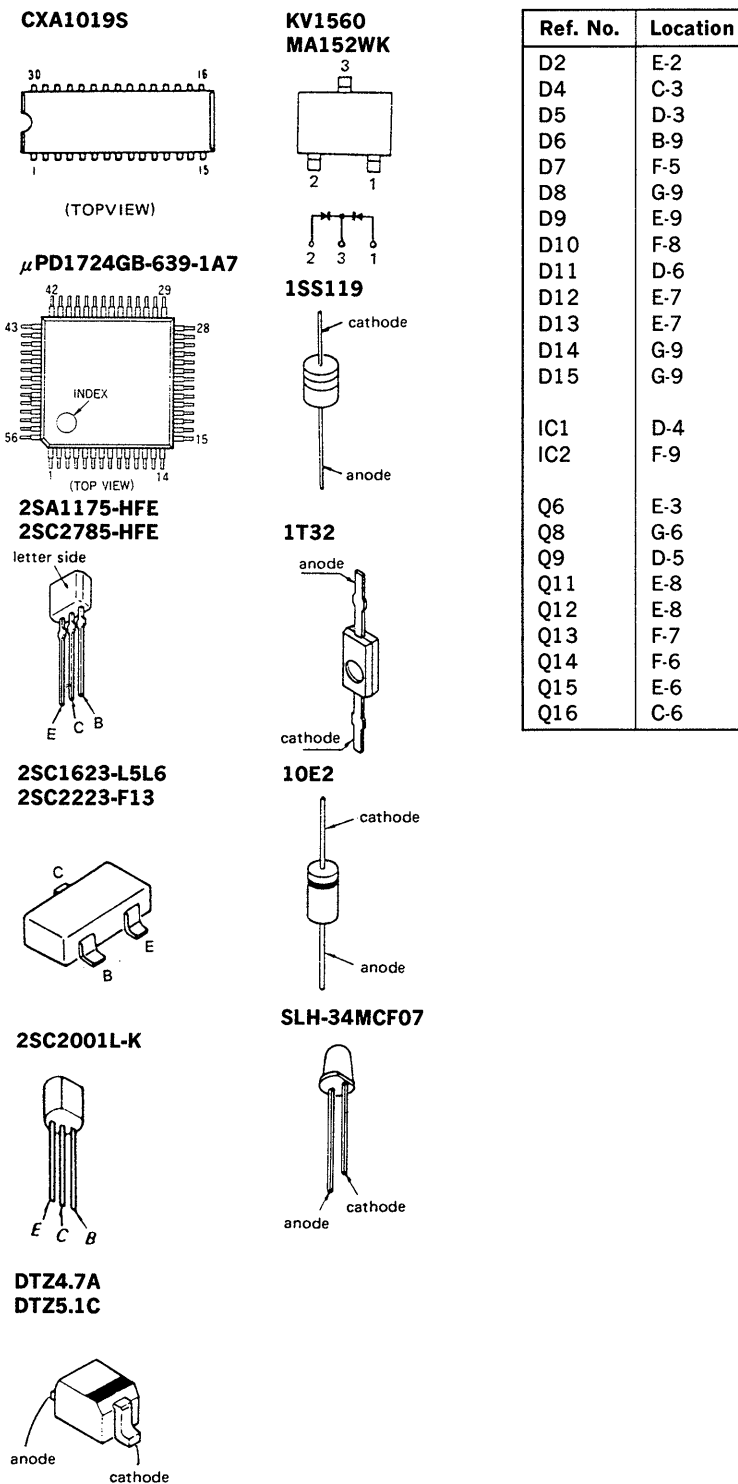
IC2 μ PD1724GB-639-1A7

Pin No.	Pin Name	Signal Name	I/O	Description
1-8	LCD10-LCD3	LCD10-LCD3	O	LCD drive segment signal
9	LCD2	LCD2	O	Unused pin
10	LCD1	LCD1	O	Unused pin
11	NC		—	Connected to GND.
12-14	COM3-COM1	COM3-COM1	O	LCD drive common signal
15	VSS3		—	Pin for doubler circuit capacitor connection to develop LCD drive voltage
16	CAP2			
17	CAP1			
18	VSS2			
19	VDP	$\overline{\text{MUTE}}$	O	<p>Audio signal mute. Active : Low. LOW when MUTE ON.</p> 
20	CGP	BEEP	O	Activates buzzer. (1 kHz)
21	NC		—	
22	VDD		—	5V power supply input terminal
23	VCOH	TV VCO	I	Unused pin
24	VCOM	FM VCO	I	FM VCO input
25	VCOL	AM VCO	I	AM VCO input
26	VSS1		—	GND
27	EO1		O	Unused pin
28	EO2		O	PLL error output pin
29	CE	CE	I	<p>Detects power supply line status.</p> <p>Power supply line OFF : Low</p> <p>Power supply line ON : High</p>
30	X0		O	Crystal oscillator connection pin
31	X1		I	
32	VSS4		—	Pin for regulator circuit capacitor connection to attain stable drive voltage of the oscillator
33	PA3	ALARM OUT	—	Connected to +5V.
34	PA2	WEATHER	O	Unused pin
35	PA1	TVL. LW	O	Unused pin
36	PA0	AM	O	BAND output pin. Low : FM, High : AM
37	PB3	CST OUT	—	Unused pin
38	PB2	POWER OUT	O	Unused pin
39	PB1	INT OUT	O	Connected to +5V.
40	PB0	TVH. WEATHER	O	Unused pin

Pin No.	Pin Name	Signal Name	I/O	Description
41-44	PC3-PC0	KEY SOURCE	O	<p>Conducts Key Scan. Timing chart (Eg.) When the PC3 line key is pressed.</p>
45	K3	KEY RETURN	I	Unused pin
46-48	K2-K0	KEY RETURN	I	<p>Key Return input Key Scan</p> <ol style="list-style-type: none"> ① Set PC0, PC1, PC2 and PC3 to "High". ② When noe of the 15 keys is pressed, PC0-PC3 will be set to "Low". ③ Each port is set to "High" (Key scan) in the following order PC0 → PC1 → PC2 → PC3 to determine the pressed key. <p>K0-K3 input condition The figure in the right indicates that the key following PC1 is pressed.</p> <p>* When the initial key is pressed and held down while the next key is pressed, the second key input will not be accepted until the initial key is released (for +, - keys only). Release the initial key and press the next key so that the second key input will be accepted.</p>
49	NC		—	Connected to +5V.
50	NC		—	Connected to GND.
51-56	LCD16-LCD11	LCD16-LCD11	O	LCD drive segment signal

SECTION 4
DIAGRAMS

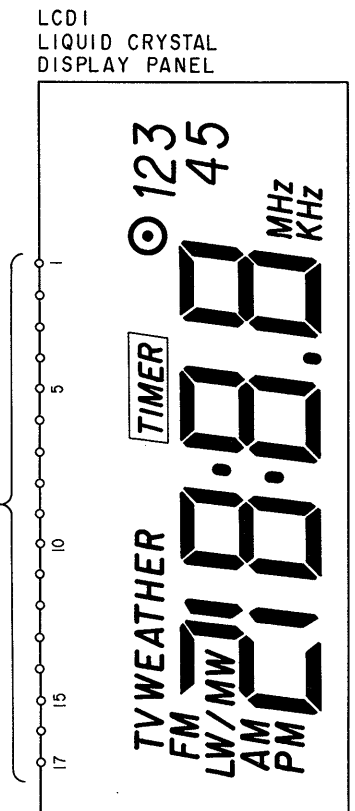
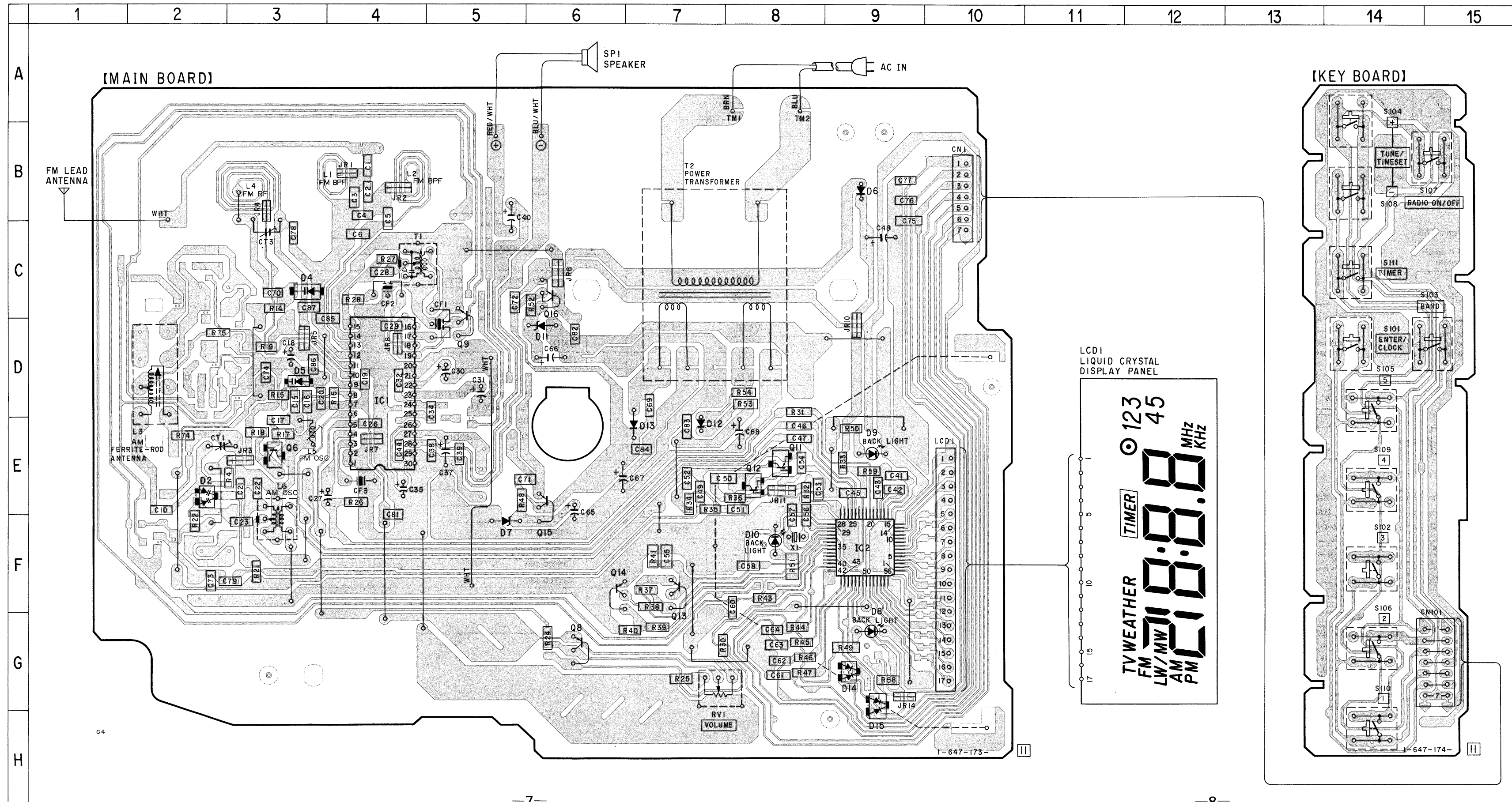
4-1. SEMICONDUCTOR LEAD LAYOUTS • Semiconductor Location



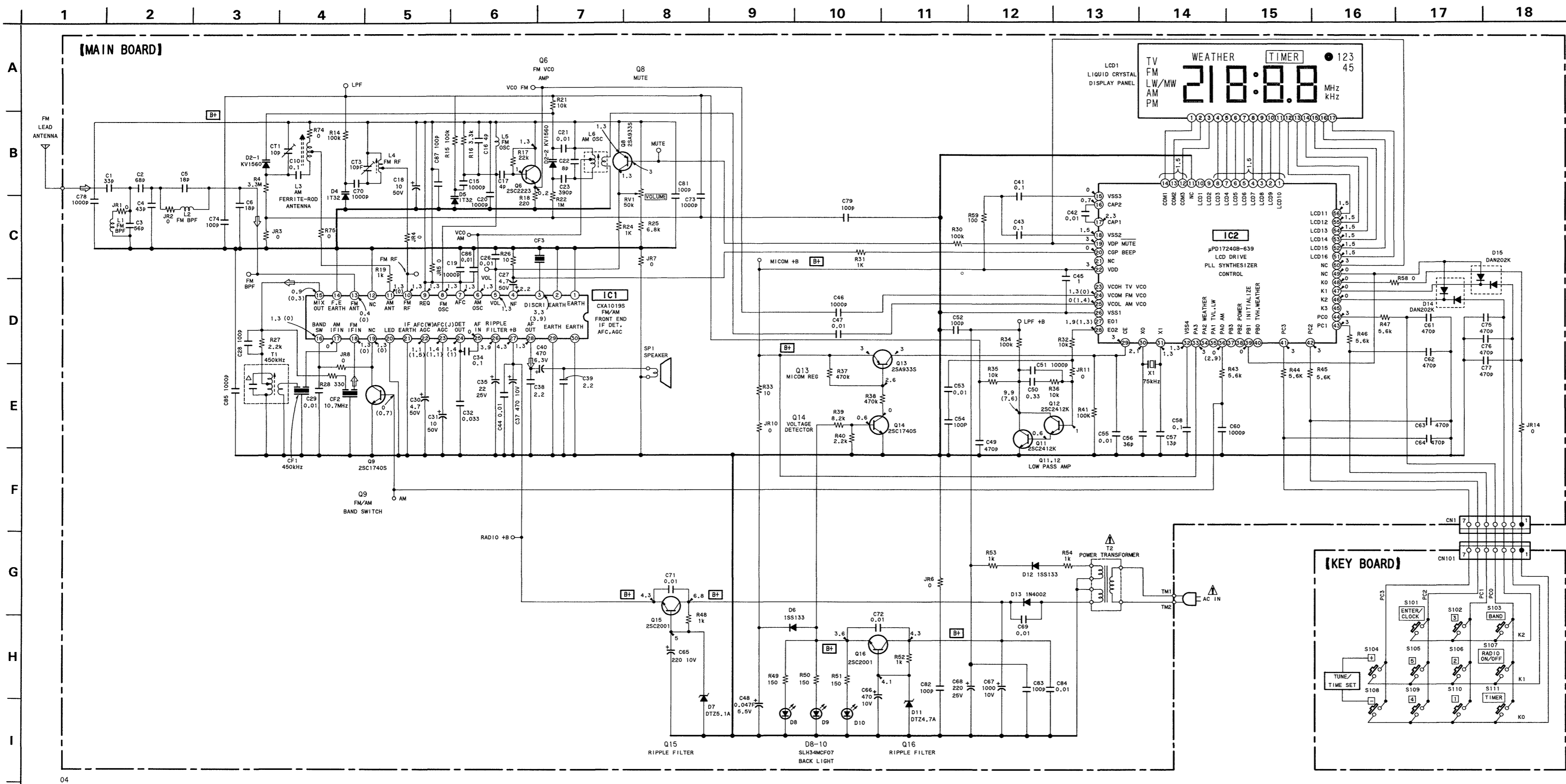
Ref. No.	Location
D2	E-2
D4	C-3
D5	D-3
D6	B-9
D7	F-5
D8	G-9
D9	E-9
D10	F-8
D11	D-6
D12	E-7
D13	E-7
D14	G-9
D15	G-9
IC1	D-4
IC2	F-9
Q6	E-3
Q8	G-6
Q9	D-5
Q11	E-8
Q12	E-8
Q13	F-7
Q14	F-6
Q15	E-6
Q16	C-6

Note:
 • ○ : parts extracted from the component side.
 • □ : indicates side identified with part number.

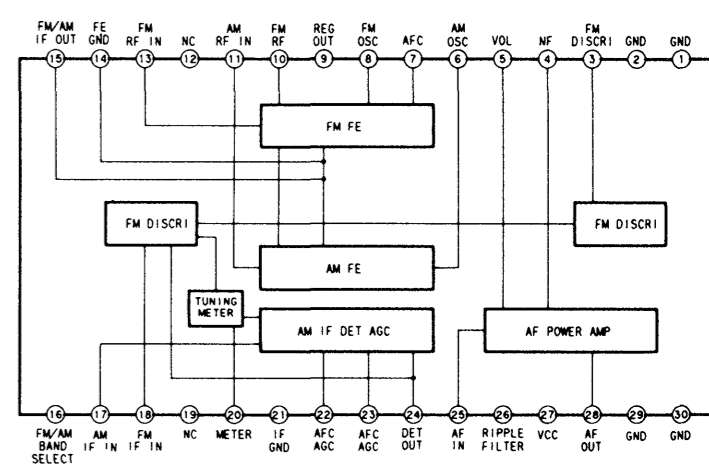
4-2. PRINTED WIRING BOARDS



4-3. SCHEMATIC DIAGRAM



• IC Block Diagram
IC1 CXA1019S



- Note:**
- All capacitors are in μF unless otherwise noted. $\text{pF} = \mu\mu\text{F}$. 50VW or less are not indicated except for electrolytics and tantalums.
 - All resistors are in Ω and $1/4\text{W}$ or less unless otherwise specified.
 - \triangle : internal component.

Note: The components identified by mark \triangle or dotted line with mark \triangle are critical for safety. Replace only with part number specified.

- Voltage is dc with respect to ground under no-signal (detuned) conditions.
no mark: FM
(): AM
- Voltages are taken with a VOM (Input Impedance $10\text{M}\Omega$). Voltage variations may be noted due to normal production tolerances.
- Signal path
 \Rightarrow : FM

SECTION 6 ELECTRICAL PARTS LIST

KEY	MAIN
-----	------

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

The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

- Abbreviations
G : German model
IT: Italian model

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

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
*	1-647-174-11	KEY BOARD ***** < CONNECTOR >		C23	1-163-131-00	CERAMIC CHIP 390PF	5% 50V
* CN101	1-695-228-11	PIN, CONNECTOR (PC BOARD) 7P < SWITCH >		C26	1-164-232-11	CERAMIC CHIP 0.01uF	50V
S101	1-554-937-11	SWITCH, KEY BOARD (ENTER/CLOCK)		C27	1-124-927-11	ELECT 4.7uF	20% 100V
S102	1-554-937-11	SWITCH, KEY BOARD (3)		C28	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
S103	1-554-937-11	SWITCH, KEY BOARD (BAND)		C29	1-164-232-11	CERAMIC CHIP 0.01uF	50V
S104	1-554-937-11	SWITCH, KEY BOARD (TUNE/TIME SET +)		C30	1-124-927-11	ELECT 4.7uF	20% 100V
S105	1-554-937-11	SWITCH, KEY BOARD (5)		C31	1-124-907-11	ELECT 10uF	20% 50V
S106	1-554-937-11	SWITCH, KEY BOARD (2)		C32	1-163-989-11	CERAMIC CHIP 0.033uF	10% 25V
S107	1-554-937-11	SWITCH, KEY BOARD (RADIO ON/OFF)		C34	1-164-004-11	CERAMIC CHIP 0.1uF	10% 25V
S108	1-554-937-11	SWITCH, KEY BOARD (TUNE/TIME SET -)		C35	1-126-233-11	ELECT 22uF	20% 50V
S109	1-554-937-11	SWITCH, KEY BOARD (4)		C37	1-124-472-11	ELECT 470uF	20% 10V
S110	1-554-937-11	SWITCH, KEY BOARD (1)		C38	1-164-505-11	CERAMIC CHIP 2.2uF	16V
S111	1-554-937-11	SWITCH, KEY BOARD (TIMER)		C39	1-164-505-11	CERAMIC CHIP 2.2uF	16V
*****				C40	1-124-472-11	ELECT 470uF	20% 10V
*	A-3679-495-A	MAIN BOARD, COMPLETE *****		C41	1-164-004-11	CERAMIC CHIP 0.1uF	10% 25V
*	3-377-638-11	CASE (LCD), SHIELD		C42	1-164-232-11	CERAMIC CHIP 0.01uF	10% 100V
	3-385-689-01	HOLDER (LCD)		C43	1-164-004-11	CERAMIC CHIP 0.1uF	10% 25V
	3-385-690-01	FRAME, REFLECTION		C44	1-164-232-11	CERAMIC CHIP 0.01uF	50V
	9-911-839-XX	CUSHION, LOCK PLATE		C45	1-162-638-11	CERAMIC CHIP 1uF	16V
	< CAPACITOR >			C46	1-163-141-00	CERAMIC CHIP 0.001uF	5% 50V
C1	1-163-105-00	CERAMIC CHIP 33PF	5% 50V	C47	1-164-232-11	CERAMIC CHIP 0.01uF	10% 100V
C2	1-163-113-00	CERAMIC CHIP 68PF	5% 50V	C48	1-125-733-31	CAP, DOUBLE LAYER 0.047F	4V
C3	1-163-111-00	CERAMIC CHIP 56PF	5% 50V	C49	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
C4	1-163-108-00	CERAMIC CHIP 43PF	5% 50V	C50	1-164-006-11	CERAMIC CHIP 0.33uF	10% 16V
C5	1-163-099-00	CERAMIC CHIP 18PF	5% 50V	C51	1-163-141-00	CERAMIC CHIP 0.001uF	5% 50V
C6	1-163-099-00	CERAMIC CHIP 18PF	5% 50V	C52	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
C10	1-164-004-11	CERAMIC CHIP 0.1uF	10% 25V	C53	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C15	1-163-141-00	CERAMIC CHIP 0.001uF	5% 50V	C54	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
C16	1-163-087-00	CERAMIC CHIP 4PF	50V	C55	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C17	1-163-087-00	CERAMIC CHIP 4PF	50V	C56	1-163-106-00	CERAMIC CHIP 36PF	5% 50V
C18	1-124-907-11	ELECT 10uF	20% 50V	C57	1-163-096-00	CERAMIC CHIP 13PF	5% 50V
C19	1-163-141-00	CERAMIC CHIP 0.001uF	5% 50V	C58	1-164-004-11	CERAMIC CHIP 0.1uF	10% 25V
C20	1-163-141-00	CERAMIC CHIP 0.001uF	5% 50V	C60	1-163-141-00	CERAMIC CHIP 0.001uF	5% 50V
C21	1-164-232-11	CERAMIC CHIP 0.01uF	50V	C61-64			
C22	1-163-091-00	CERAMIC CHIP 8PF	50V		1-163-133-00	CERAMIC CHIP 470PF	5% 50V
				C65	1-126-176-11	ELECT 220uF	20% 10V
				C66	1-124-472-11	ELECT 470uF	20% 10V
				C67	1-124-473-11	ELECT 1000uF	20% 10V
				C68	1-124-120-11	ELECT 220uF	20% 25V
				C69	1-164-232-11	CERAMIC CHIP 0.01uF	50V
				C70	1-163-141-00	CERAMIC CHIP 0.001uF	5% 50V

MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C71	1-164-232-11	CERAMIC CHIP	0.01uF			< JUMPER RESISTOR >	
C72	1-164-232-11	CERAMIC CHIP	0.01uF				
C73	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V		
C74	1-163-117-00	CERAMIC CHIP	100PF	5%	50V		
C75	1-163-197-00	CERAMIC CHIP	470PF	5%	50V		
C76	1-163-133-00	CERAMIC CHIP	470PF	5%	50V		
C77	1-163-133-00	CERAMIC CHIP	470PF	5%	50V		
C78	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V		
C79	1-163-117-00	CERAMIC CHIP	100PF	5%	50V		
C81-83							
	1-163-117-00	CERAMIC CHIP	100PF	5%	50V		
C84	1-164-232-11	CERAMIC CHIP	0.01uF		50V		
C85	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V		
C86	1-164-232-11	CERAMIC CHIP	0.01uF		50V		
C87	1-163-117-00	CERAMIC CHIP	100PF	5%	50V		
		< FILTER >					
CF1	1-577-319-11	FILTER, CERAMIC	450kHz				
CF2	1-579-312-81	FILTER, CERAMIC	10.7MHz				
CF3	1-579-312-81	FILTER, CERAMIC	10.7MHz				
		< CONNECTOR >					
* CN1	1-695-234-11	SOCKET, CONNECTOR (PC BOARD)7P					
		< TRIMMER >					
CT1	1-141-304-21	CAP, TRIMMER	10PF				
CT3	1-141-304-21	CAP, TRIMMER	10PF				
		< DIODE >					
D2	8-719-951-05	DIODE	KV1560				
D4	8-719-949-46	DIODE	1T32				
D5	8-719-949-46	DIODE	1T32				
D6	8-719-911-19	DIODE	1SS119				
D7	8-719-977-00	DIODE	DTZ5.1C				
D8-10							
	8-719-037-81	DIODE	SLH-34MCF07				
D11	8-719-976-94	DIODE	DTZ4.7A				
D12	8-719-911-19	DIODE	1SS119				
D13	8-719-200-02	DIODE	10E2				
D14	8-719-400-18	DIODE	MA152WK				
D15	8-719-400-18	DIODE	MA152WK				
		< IC >					
IC1	8-752-035-29	IC	CXA1019S				
IC2	8-759-184-34	IC	uPD1724GB-639-1A7				
JR1	1-216-295-00	METAL CHIP	0	5%	1/10W		
JR2	1-216-296-00	METAL CHIP	0	5%	1/8W		
JR3	1-216-296-00	METAL CHIP	0	5%	1/8W		
JR4	1-216-295-00	METAL CHIP	0	5%	1/10W		
JR5	1-216-296-00	METAL CHIP	0	5%	1/8W		
JR6	1-216-296-00	METAL CHIP	0	5%	1/8W		
JR7	1-216-295-00	METAL CHIP	0	5%	1/10W		
JR8	1-216-295-00	METAL CHIP	0	5%	1/10W		
JR10	1-216-296-00	METAL CHIP	0	5%	1/8W		
JR11	1-216-296-00	METAL CHIP	0	5%	1/8W		
JR14	1-216-295-00	METAL CHIP	0	5%	1/10W		
		< COIL >					
L3	1-402-616-11	ANTENNA, FERRITE-ROD (AM)					
L5	1-406-545-11	COIL, AIR-CORE					
L6	1-406-485-11	COIL (OSC)					
		< LIQUID CRYSTAL DISPLAY >					
LCD1	1-810-029-11	DISPLAY PANEL, LIQUID CRYSTAL					
		< TRANSISTOR >					
Q6	8-729-102-07	TRANSISTOR	2SC2223-F13				
Q8	8-729-119-76	TRANSISTOR	2SA1175-HFE				
Q9	8-729-119-78	TRANSISTOR	2SC2785-HFE				
Q11	8-729-120-28	TRANSISTOR	2SC1623-L5L6				
Q12	8-729-120-28	TRANSISTOR	2SC1623-L5L6				
Q13	8-729-119-76	TRANSISTOR	2SA1175-HFE				
Q14	8-729-119-78	TRANSISTOR	2SC2785-HFE				
Q15	8-729-011-92	TRANSISTOR	2SC2001-K1K2				
Q16	8-729-011-92	TRANSISTOR	2SC2001-K1K2				
		< RESISTOR >					
R4	1-216-133-00	METAL CHIP	3.3M	5%	1/10W		
R14	1-216-097-00	METAL CHIP	100K	5%	1/10W		
R15	1-216-097-00	METAL CHIP	100K	5%	1/10W		
R16	1-216-061-00	METAL CHIP	3.3K	5%	1/10W		
R17	1-216-081-00	METAL CHIP	22K	5%	1/10W		
R18	1-216-033-00	METAL CHIP	220	5%	1/10W		
R19	1-216-049-00	METAL CHIP	1K	5%	1/10W		
R21	1-216-073-00	METAL CHIP	10K	5%	1/10W		
R22	1-216-121-00	METAL CHIP	1M	5%	1/10W		
R24	1-216-049-00	METAL CHIP	1K	5%	1/10W		
R25	1-216-069-00	METAL CHIP	6.8K	5%	1/10W		
R26	1-216-001-00	METAL CHIP	10	5%	1/10W		
R27	1-216-057-00	METAL CHIP	2.2K	5%	1/10W		
R28	1-216-037-00	METAL CHIP	330	5%	1/10W		
R30	1-216-097-00	METAL CHIP	100K	5%	1/10W		

Ref. No.	Part No.	Description	Remark		
R31	1-216-049-00	METAL CHIP	1K	5%	1/10W
R32	1-216-073-00	METAL CHIP	10K	5%	1/10W
R33	1-216-001-00	METAL CHIP	10	5%	1/10W
R34	1-216-097-00	METAL CHIP	100K	5%	1/10W
R35	1-216-073-00	METAL CHIP	10K	5%	1/10W
R36	1-216-073-00	METAL CHIP	10K	5%	1/10W
R37	1-216-113-00	METAL CHIP	470K	5%	1/10W
R38	1-216-113-00	METAL CHIP	470K	5%	1/10W
R39	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R40	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R41	1-216-097-00	METAL CHIP	100K	5%	1/10W
R43-47	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R48	1-216-049-00	METAL CHIP	1K	5%	1/10W
R49	1-216-178-00	METAL GLAZE	150	5%	1/8W
R50	1-216-029-00	METAL CHIP	150	5%	1/10W
R51	1-216-178-00	METAL GLAZE	150	5%	1/8W
R52-54	1-216-049-00	METAL CHIP	1K	5%	1/10W
R58	1-216-295-00	METAL CHIP	0	5%	1/10W
R59	1-216-025-00	METAL CHIP	100	5%	1/10W
R74	1-216-295-00	METAL CHIP	0	5%	1/10W
R75	1-216-295-00	METAL CHIP	0	5%	1/10W
< VARIABLE RESISTOR >					
RV1	1-241-542-11	RES, VAR, CARBON 50K (VOLUME)			
< TRANSFORMER >					
T1	1-404-790-11	TRANSFORMER, IF			
<u>△</u> T2	1-423-520-11	TRANSFORMER, POWER			
< TERMINAL >					
* TM1	1-535-771-11	TERMINAL			
* TM2	1-535-771-11	TERMINAL			
< VIBRATOR >					
X1	1-567-769-11	VIBRATOR, CRYSTAL (75kHz)			

MISCELLANEOUS					

<u>△</u> 16	1-551-958-21	CORD, POWER			
SP1	1-504-262-11	SPEAKER (7.7CM)			

Ref. No.	Part No.	Description	Remark
ACCESSORIES & PACKING MATERIALS			

	1-501-499-11	COUPLER, ANTENNA (AEP)	
*	3-387-929-01	TEMPLATE	
*	3-388-569-01	INDIVIDUAL CARTON	
	3-756-562-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, GERMAN) (AEP, G)	
	3-756-562-41	MANUAL, INSTRUCTION (PORTUGUESE, DUTCH, SWEDISH, ITALIAN) (AEP, IT)	
*	3-897-241-01	CLAMP, CORD	
	3-902-011-01	SCREW (+B 5X65), FITTING	

HARDWARE LIST			

#1	7-684-025-04	N 5, TYPE 2	
#2	7-685-647-79	SCREW +P 3X10 TYPE2 NON-SLIT	
#3	7-685-649-79	SCREW +P 3X14 TYPE2 NON-SLIT	

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

