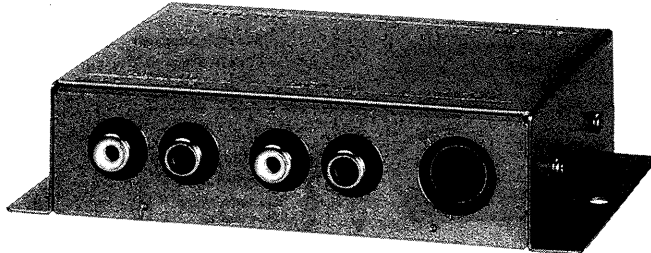


XA-107

SERVICE MANUAL

*US Model
Canadian Model
AEP Model
E Model*



SPECIFICATIONS

Aux input level	- 10 dBs
Dimensions	Approx. 120 × 28 × 78 mm (w/h/d) (4 3/4 × 1 1/8 × 3 1/8 in.)
Mass	Approx. 240 g (8.47 oz)
Accessories supplied	BUS cable (2 m) (1) RCA pin cord (2 m) (1) Mounting screw (2)

Design and specifications are subject to change without notice.

Features

XA-107 is a source selector for connecting external equipment (equipped with the "AUDIO OUT" pin jacks) and a Sony BUS system compatible CD changer to a Sony BUS system compatible master unit.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

SOURCE SELECTOR
SONY®

SECTION 1 GENERAL

This section is extracted from instruction manual.

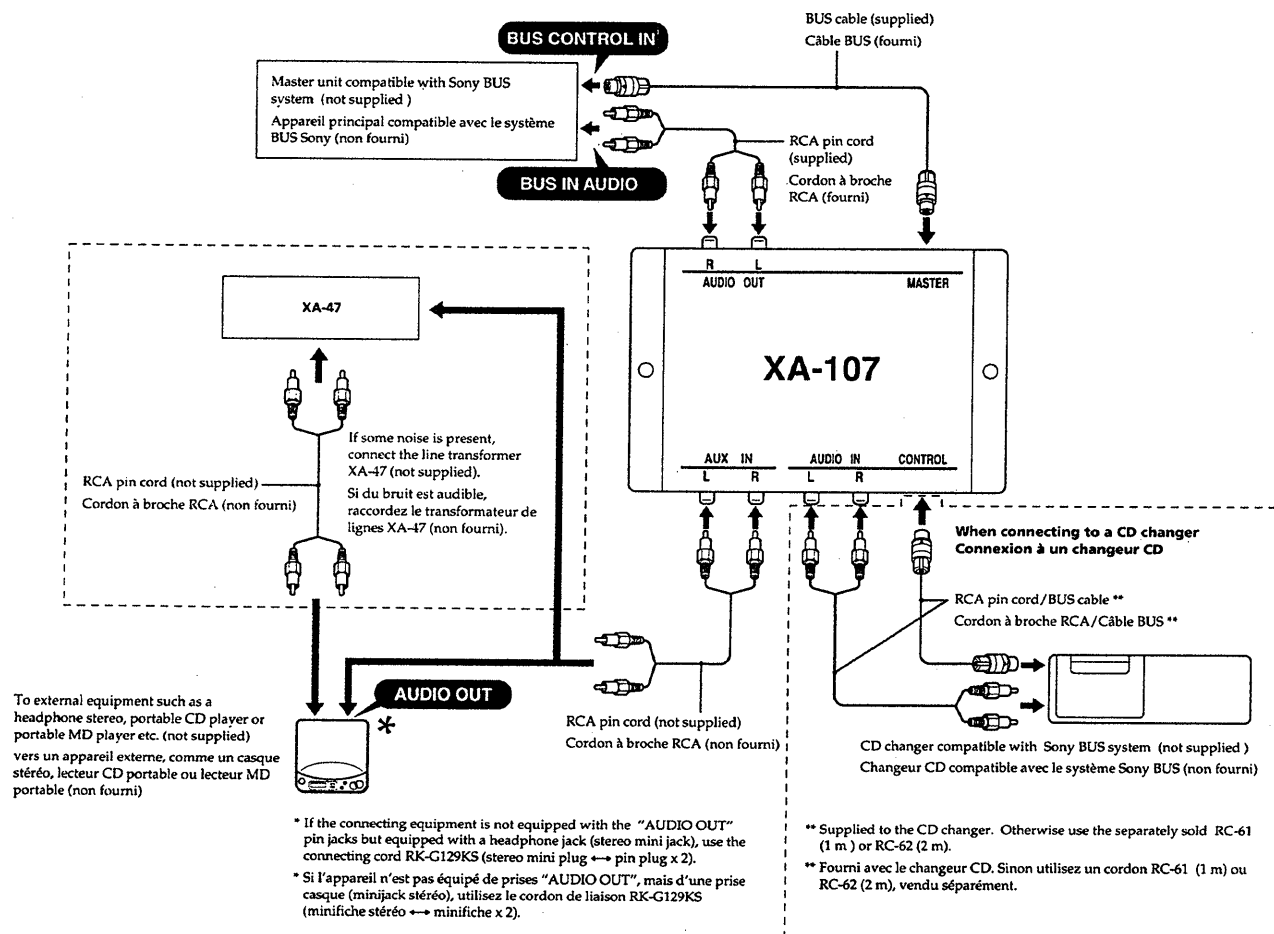
Connections

Notes

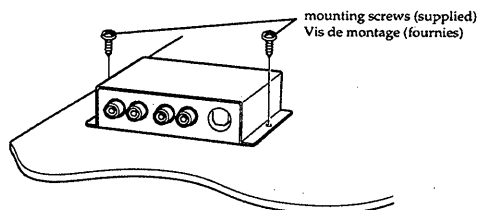
- Be sure to refer to the operating instructions and installation/connection manuals of the equipment to be connected as well.
- When the installation and connections are over, press the reset button on the master unit after turning the master unit on.

Connection diagram

Schéma des connexions



Mounting on the Mounting Board for the Power Amplifier etc.



Playing Connected External Equipment*

When equipment other than a CD player (such as a headphone stereo or a portable MD player etc.) is connected, the messages that appear on the display windows of the master unit and its operation procedure are the same.

- 1 Press CD button (or CD/MD button) several times to display the following messages on the display windows of the master unit.

With the master unit which is equipped with the custom file function

Display "AUX PLAY" on the main display window.



AUX PLAY

With the master unit which is not equipped with the custom file function

Display "TRACK 0" on the main display window.



TRK 0 00:00

Note

The track and minute/second indications on the main display window of the master unit remains as "0" and do not change.

- 2 Adjust the volume with the master unit or connected equipment.

Note

The functions of the connected external equipment cannot be controlled by the master unit. (The master unit can only be used to adjust the volume and tone.)

* When a Sony BUS system compatible CD changer is connected, refer to the operating instructions manual of your master unit for the operation of the CD changer.

SECTION 2 DIAGRAMS

2-1. IC PIN FUNCTION DESCRIPTION

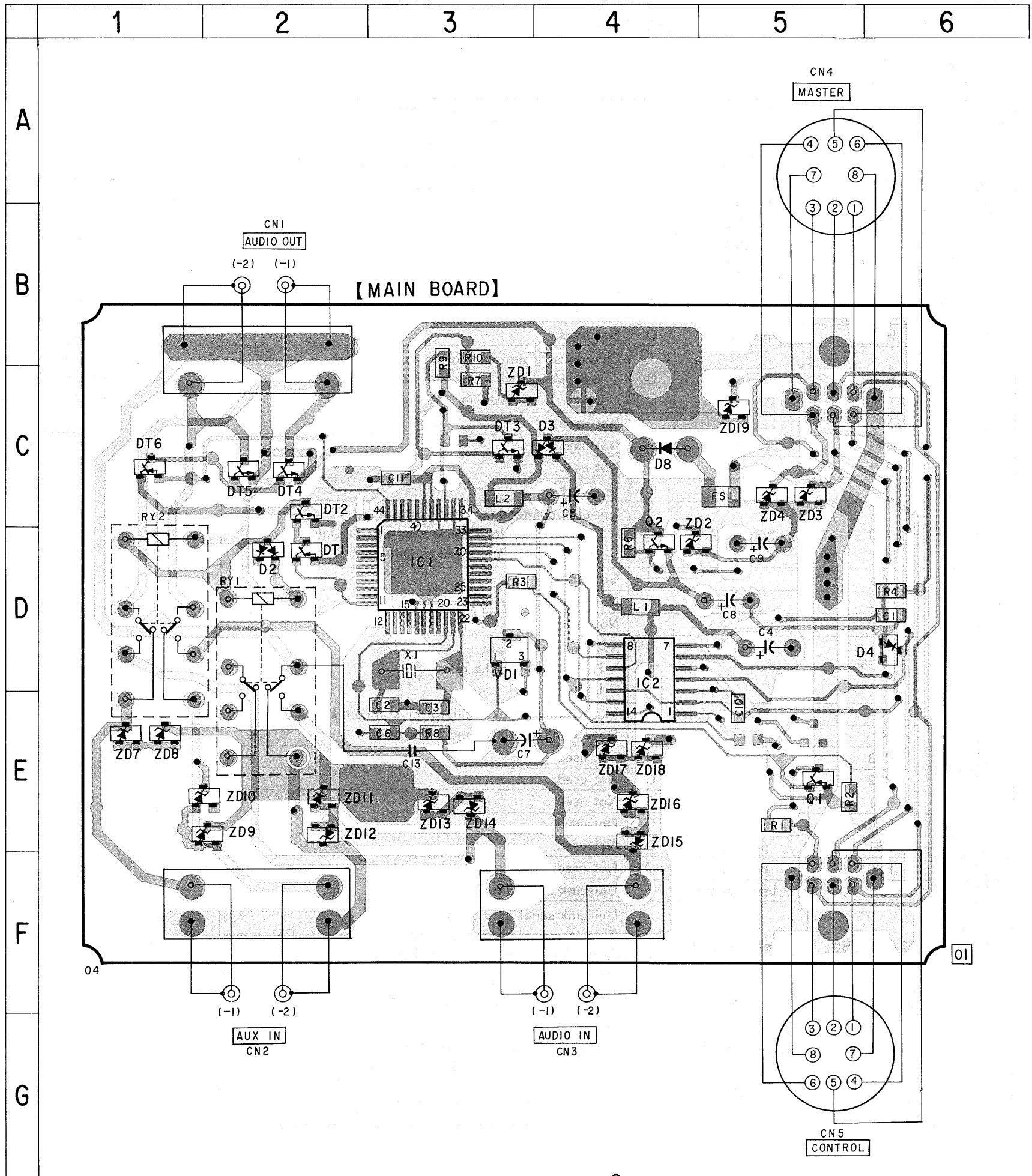
IC1 μ PD75004FP (Selector Micro Computer)

Pin No.	Pin Name	Description	I/O	Function
1	P72/KR6	port7.2	O	Not used.
2	P71/KR5	port7.1	O	Not used.
3	P70/KR4	port7.0	O	Not used.
4	P63/KR3	port6.3	O	Not used.
5	P62/KR2	port6.2	O	Not used.
6	P61/KR1	port6.1	O	Not used.
7	P60/KR0	port6.0	O	Not used.
8	P53	port5.3	O	Not used.
9	P52	port5.2	O	Not used.
10	P51	port5.1	O	Not used.
11	P50	p_asel/port5.0	O	Channel selection output for audio output. High(Hi-z) : Uni-Link input selection Low : AUX input selection
12	NC		—	Not used.
13	P43	port4.3	O	Not used.
14	P42	port4.2	O	Not used.
15	P41	port4.1	O	Not used.
16	P40	p_lkof/port4.0	O	Uni-Link connection control output. High(Hi-z) : None connection of Uni-Link Low : Connected to Uni-Link
17	Vss		—	Ground
18	XT1		I	Not used. (connected to Vss)
19	XT2		I	Not used.
20	$\overline{\text{RESET}}$		I	System reset output. High : Release the reset Low : Reset
21	X1		I	Main system clock oscillator crystal connected. None oscillation at stand-by position.
22	X2			
23	P33	port3.3	O	Not used.
24	P32	port3.2	O	Not used.
25	P31	port3.1	O	Not used.
26	P30	port3.0	O	Not used.
27	P81	port8.1	O	Not used.
28	P80	port8.0	O	Not used.
29	P03/SI/SB1	p_bssi/port0.3	I	Uni-Link serial data input.
30	P02/SO/SB0	p_bssso/port0.2	I/O	Uni-Link serial data output. This terminal become input position at CSI stop. (Therefore, This terminal become input terminal at stand-by position.)
31	P01/SCK	p_bscck/port0.1	I	Uni-Link serial clock input.
32	P00/INT4	p_bson/port0.0	I	Uni-Link bus input. High : Bus off (Bus deactive) Low : Bus on (Bus active)
33	P13/TI0	port1.3	I	Not used.
34	NC		—	Not used.

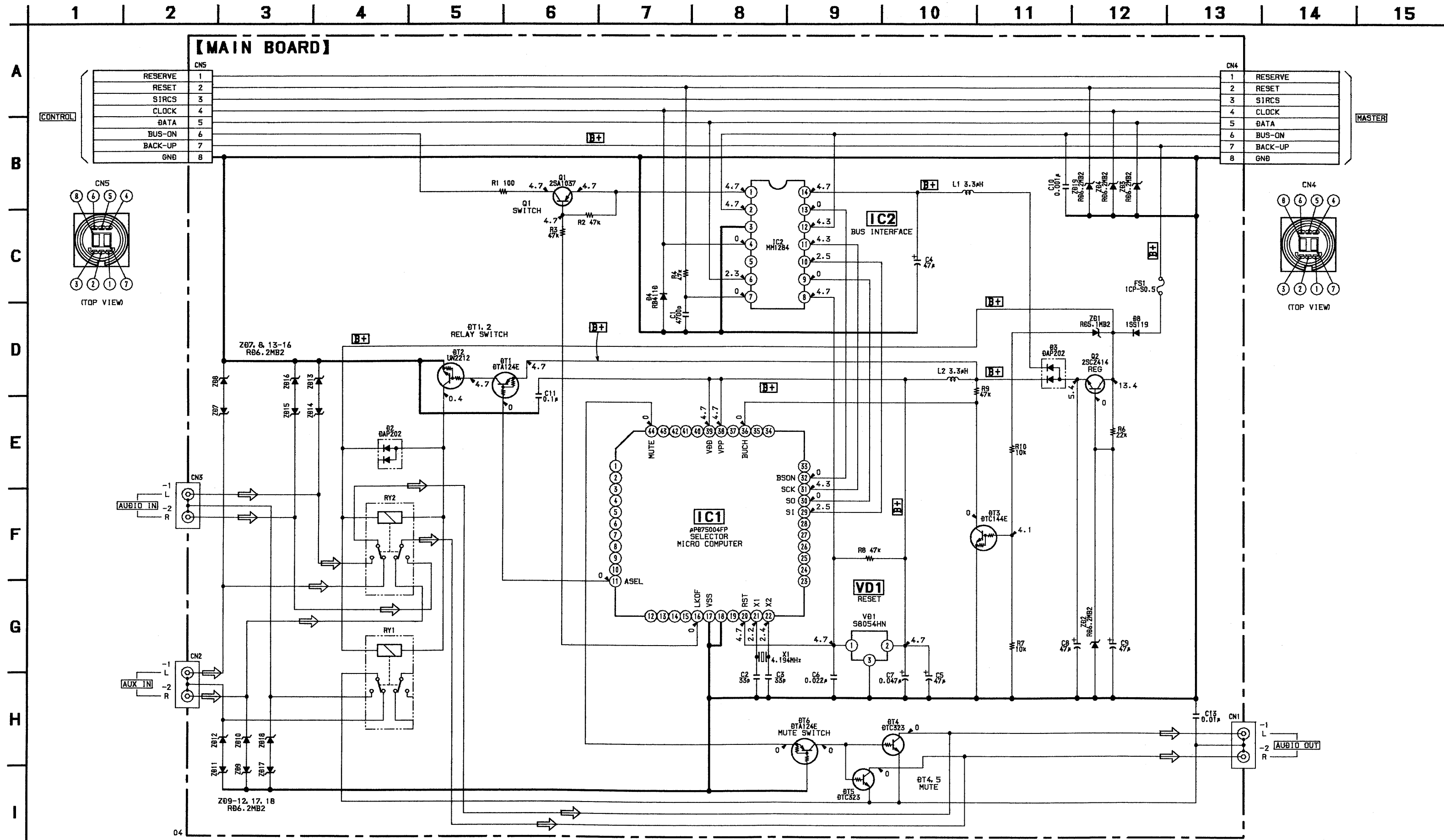
Pin No.	Pin Name	Description	I/O	Function
35	P12/INT2	port1.2	I	Not used.
36	P11/INT1	p_buch/port1.1	I	Back up detective input. High : abnormal voltage Low : normal voltage
37	P10/INT0	port1.0	I	Not used.
38	NC/VPP(75P008)		—	Not used. (connected to VDD)
39	VDD		—	Positive voltage.
40	P23/BUZ	port2.3	O	Not used.
41	P22/PCL	port2.2	O	Not used.
42	P21	port2.1	O	Not used.
43	P20/PTO0	port2.0	O	Not used.
44	P73/KR7	p_mute/port7.3	O	Muting control output. High : Mute on Low : Mute off

• Semiconductor Location

Ref. No.	Location
D2	D-2
D3	C-4
D4	D-6
D8	C-5
DT1	D-2
DT2	C-2
DT3	C-3
DT4	C-2
DT5	C-2
DT6	C-1
IC1	D-3
IC2	E-4
Q1	E-6
Q2	D-4
VD1	D-3
ZD1	C-3
ZD2	D-5
ZD3	C-5
ZD4	C-5
ZD7	E-1
ZD8	E-1
ZD9	E-2
ZD10	E-2
ZD11	E-2
ZD12	E-2
ZD13	E-3
ZD14	E-3
ZD15	E-4
ZD16	E-4
ZD17	E-4
ZD18	E-4
ZD19	C-5



Note:
 • : Through hole.
 • : Pattern on the side which is seen.
 ○ : Pattern of the rear side.

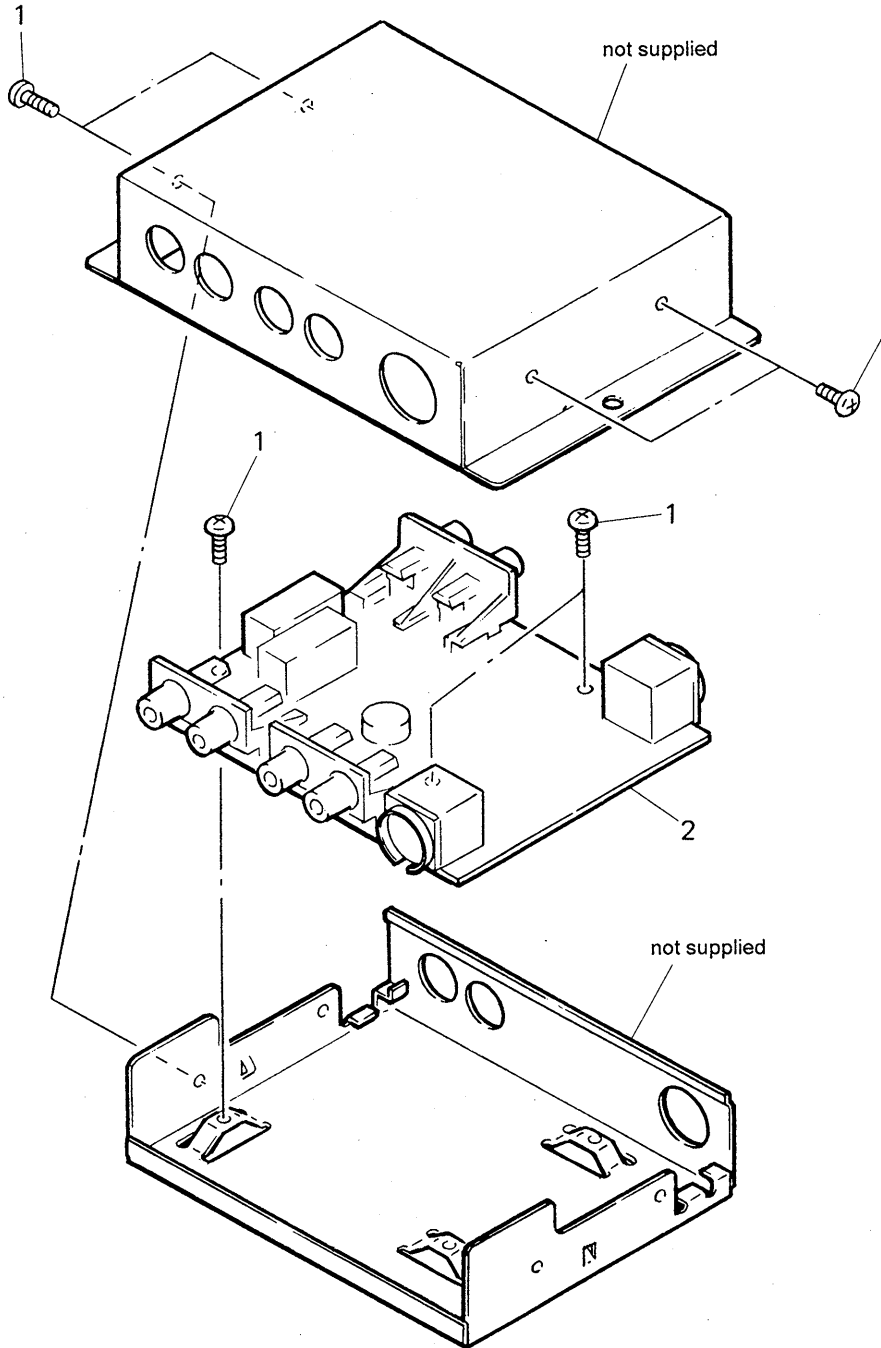


SECTION 3 EXPLODED VIEW

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.



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	7-621-770-67	SCREW +B 2. 6X6		* 2	9-909-240-01	MAIN BOARD, COMPLETE	

SECTION 4 ELECTRICAL PARTS LIST

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.

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

Ref. No.	Part No.	Description	Remark		Ref. No.	Part No.	Description	Remark
*	9-909-240-01	MAIN BOARD, COMPLETE *****					< IC >	
		< CAPACITOR >						
C1	1-162-625-11	CERAMIC CHIP	0.0047uF	5%	50V		< INDUCTOR >	
C2	1-163-239-11	CERAMIC CHIP	33PF	5%	50V			
C3	1-163-239-11	CERAMIC CHIP	33PF	5%	50V			
C4	1-126-022-11	ELECT	47uF	20%	25V	L1	1-410-198-51	INDUCTOR 3.3uH
C5	1-126-022-11	ELECT	47uF	20%	25V	L2	1-410-198-51	INDUCTOR 3.3uH
		< TRANSISTOR >						
C6	1-164-161-11	CERAMIC CHIP	0.022uF	10%	100V	Q1	8-729-902-23	TRANSISTOR 2SA1037K
C7	1-104-904-11	ELECT	0.047uF		5.5V	Q2	8-729-120-28	TRANSISTOR 2SC1623-L5L6
C8	1-126-022-11	ELECT	47uF	20%	25V		< RESISTOR >	
C9	1-126-022-11	ELECT	47uF	20%	25V			
C10	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V	R1	1-216-025-00	METAL CHIP 100 5% 1/10W
C11	1-163-038-00	CERAMIC CHIP	0.1uF		25V	R2	1-216-089-00	METAL CHIP 47K 5% 1/10W
C13	1-130-438-00	FILM	0.01uF	5%	50V	R3	1-216-089-00	METAL CHIP 47K 5% 1/10W
		< CONNECTOR >				R4	1-216-089-00	METAL CHIP 47K 5% 1/10W
CN1	1-563-716-21	JACK, PIN 2P (AUDIO OUT)				R6	1-216-081-00	METAL CHIP 22K 5% 1/10W
CN2	1-563-716-21	JACK, PIN 2P (AUX IN)				R7	1-216-073-00	METAL CHIP 10K 5% 1/10W
CN3	1-563-716-21	JACK, PIN 2P (AUDIO IN)				R8	1-216-089-00	METAL CHIP 47K 5% 1/10W
CN4	1-580-907-11	PLUG, CONNECTOR (MASTER)				R9	1-216-089-00	METAL CHIP 47K 5% 1/10W
CN5	1-580-907-11	PLUG, CONNECTOR (CONTROL)				R10	1-216-073-00	METAL CHIP 10K 5% 1/10W
		< DIODE >					< RELAY >	
D2	8-719-914-44	DIODE DAP202K				RY1	1-515-726-11	RELAY RY-12WOH-K
D3	8-719-914-44	DIODE DAP202K				RY2	1-515-726-11	RELAY RY-12WOH-K
D4	8-719-938-75	DIODE SB05-05CP					< IC >	
D8	8-719-911-19	DIODE 1SS119				VD1	8-759-940-45	IC S-8054HN-CB-S
		< TRANSISTOR >					< OSCILLATOR >	
DT1	8-729-901-05	TRANSISTOR DTA124EK				X1	1-577-273-11	OSCILLATOR, CERAMIC (4.194MHz)
DT2	8-729-424-59	TRANSISTOR UN2212					< DIODE >	
DT3	8-729-901-01	TRANSISTOR DTC144EK				ZD1	8-719-105-82	DIODE RD5. 1M-B2
DT4	8-729-015-39	TRANSISTOR DTC323TK				ZD2-4	8-719-106-08	DIODE RD6. 2M-B2
DT5	8-729-015-39	TRANSISTOR DTC323TK				ZD7-19	8-719-106-08	DIODE RD6. 2M-B2
DT6	8-729-901-05	TRANSISTOR DTA124EK						
		< IC LINK >						
FS1	1-533-545-11	LINK, CHIP IC ICP-S0.5						

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
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ACCESSORIES & PACKING MATERIALS

- 1-751-354-21 CORD, CONNECTION (RCA PIN CORD)
- 1-590-519-11 CORD (WITH CONNECTOR) (BUS CABLE)
- 3-759-118-21 MANUAL, INSTRUCTION (ENGLISH)
- 7-621-846-40 SCREW, WOOD +R 4. 1X16