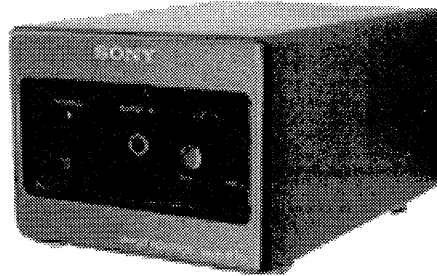


# IAD-IF70

## SERVICE MANUAL

*US Model  
Canadian Model  
AEP Model  
E Model*



### SPECIFICATIONS

#### Power requirements

The U. S. A. and Canada models: 120V AC, 60 Hz

Other region models: 220 - 230V AC, 50/60 Hz

#### Rated impedance

INPUT A (1.55V/10 K $\Omega$ )

INPUT B (13.77V/2 K $\Omega$ )

#### Power consumption

11 watts

#### Dimensions(w/h/d)

Approx. 85 × 70 × 140 mm (3 <sup>3</sup>/<sub>8</sub> × 2 <sup>7</sup>/<sub>8</sub> × 5 <sup>5</sup>/<sub>8</sub> inches)

#### Mass

The U. S. A. and Canada models: 730 g (1 lb 10 oz)

Other region models: 750 g (1 lb 11 oz)

#### Supplied accessories

Speaker cords (2)

Design and specifications are subject to change without notice.

**INPUT ADAPTOR**

**SONY®**

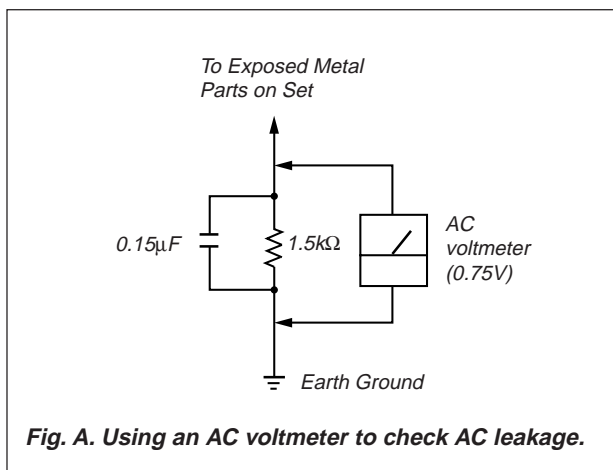
## SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer: Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

### LEAKAGE

The AC leakage from any exposed metal part to earth Ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)



**Fig. A. Using an AC voltmeter to check AC leakage.**

### SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY MARK  $\triangle$  OR DOTTED LINE WITH MARK  $\triangle$  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.

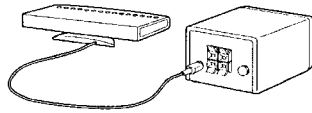
### ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE  $\triangle$  SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES 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.

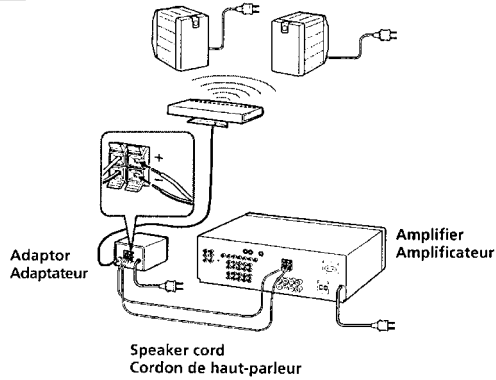
# SECTION 1 GENERAL

This section is extracted from instruction manual.

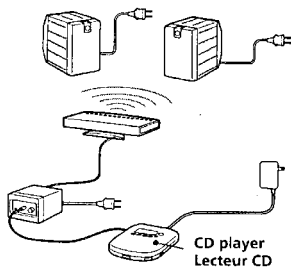
**A**



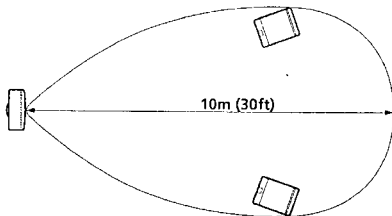
**B**



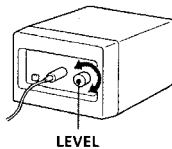
**C**



**D**



**E**



## Precaution

- The AC power cord must be changed only at a qualified service shop.
- The unit is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the unit itself has been turned off.
- The nameplate is located on the bottom exterior.
- Do not install the appliance in a confined space, such as a bookcase or built-in cabinet.

## Unpacking

- Input adaptor IAD-IF70 (1)
- Speaker cords (2)

## Hookups

- 1 Connect the transmitter (supplied with the SA-IF70) to the TRANSMITTER jack on the input adaptor (**A**).
- 2 To use the wireless speakers as the rear speakers:  
Connect the INPUT B SPEAKER on the rear panel to the REAR SPEAKER terminal on your amplifier (**B**).  
To use the wireless speakers as the main speaker:  
Connect the INPUT A jack on the front panel to the PHONES OUT jack on the CD player/portable cassette player (**C**).
- 3 Connect the AC power cords of the INPUT ADAPTOR and WIRELESS SPEAKER to a wall outlet (**B**, **C**).

## Operation

- 1 Place the speakers within the effective range.  
When using the wireless speakers as the rear speakers, refer the Operating instructions supplied with the SA-IF70.  
When using the speakers as the main speakers, place them within the effective range as shown the illustration **D**.
- 2 Press POWER to turn on the adaptor.  
The indicator on the adaptor lights up green.

### When the sound is not heard

Adjust the position, direction and angle of the transmitter so the wireless speakers are within the effective range.

### Adjusting the level

You can also adjust the level using LEVEL on the front panel (**E**).  
You make use of the maximum level.

## Troubleshooting

### No bass sound is heard from the rear speakers.

- Check that the speaker cords are connected properly.

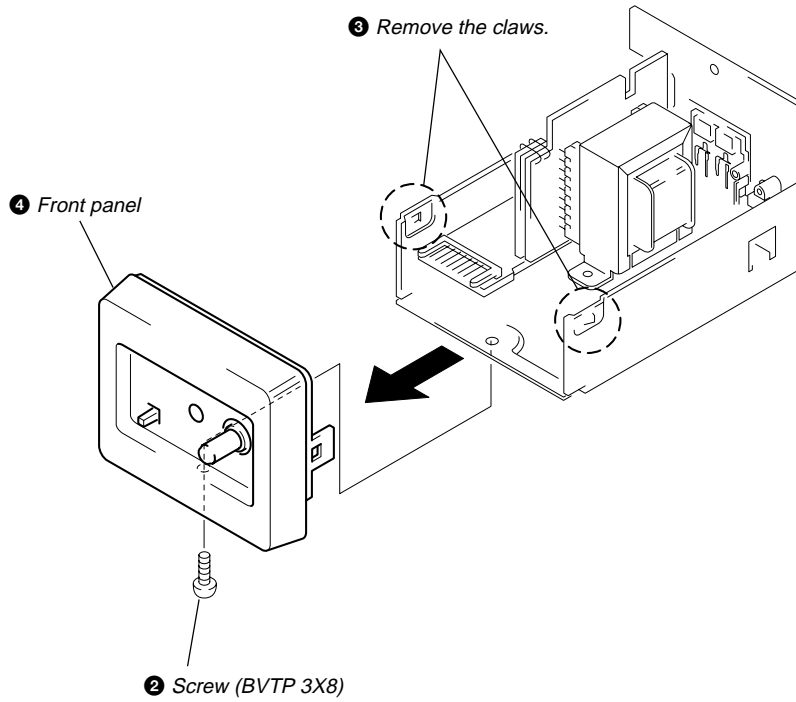
### A very low level sound is heard.

- You make use of the high level using LEVEL on the front panel.

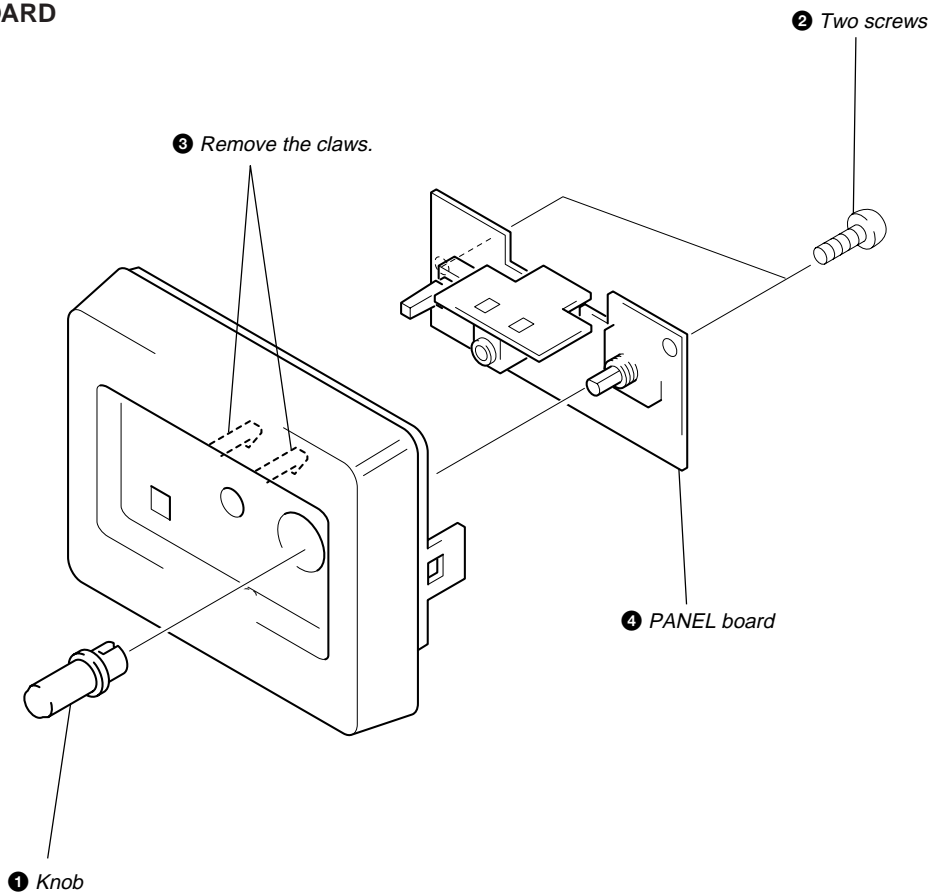
## SECTION 2 DISASSEMBLY

### 2-1. FRONT PANEL

❶ Remove three screws, and remove the case.

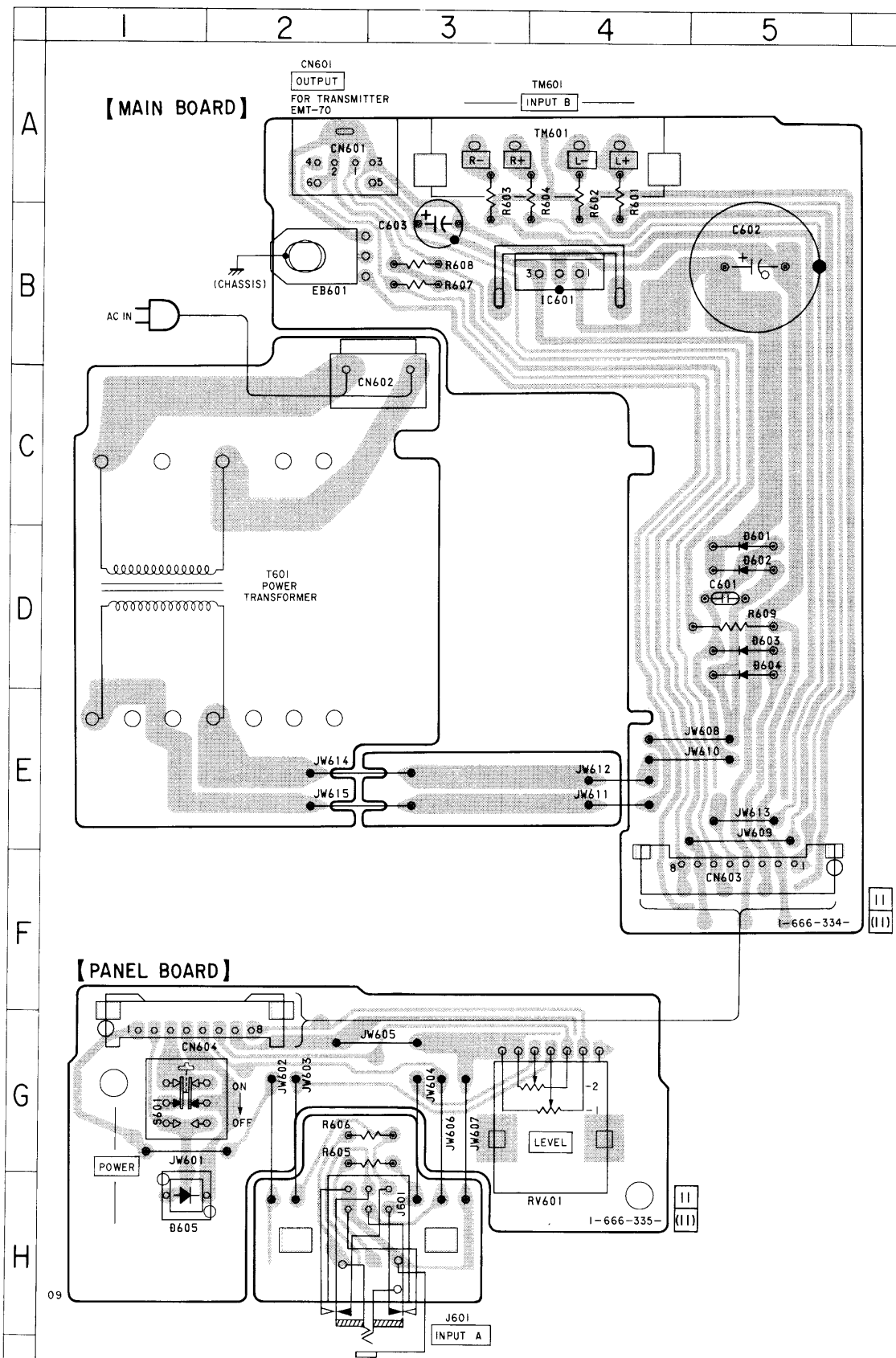


### 2-2. PANEL BOARD



SECTION 3  
DIAGRAMS

PRINTED WIRING BOARD

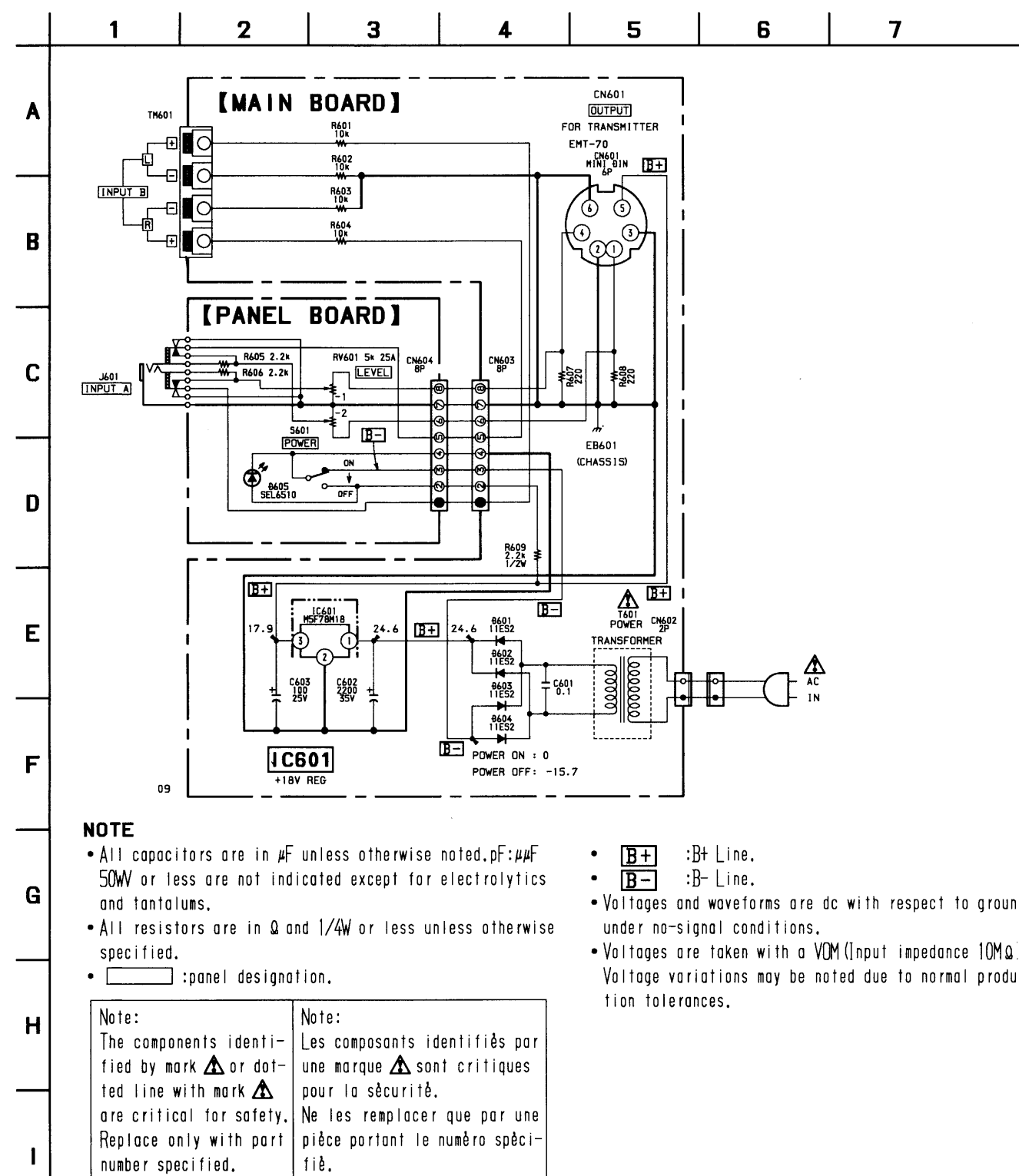


• Semiconductor Location

Ref. No.	Location
D601	D-5
D602	D-5
D603	D-5
D604	D-5
D605	H-1
IC601	B-4

Note:  
 • — : parts extracted from the component side.  
 • ■ : Pattern from the side which enable seeing.

SCHEMATIC DIAGRAM



NOTE

- All capacitors are in  $\mu\text{F}$  unless otherwise noted, pF:  $\mu\text{pF}$  50W or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and  $1/4\text{W}$  or less unless otherwise specified.
- : panel designation.

- B+ : B+ Line.
- B- : B- Line.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
- Voltages are taken with a VOM (Input impedance  $10\text{M}\Omega$ ). Voltage variations may be noted due to normal production tolerances.

<p>Note:                  The components identified by mark <math>\Delta</math> or dotted line with mark <math>\Delta</math> are critical for safety. Replace only with part number specified.</p>	<p>Note:                  Les composants identifiés par une marque <math>\Delta</math> sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.</p>
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## SECTION 4 EXPLODED VIEWS

**NOTE:**

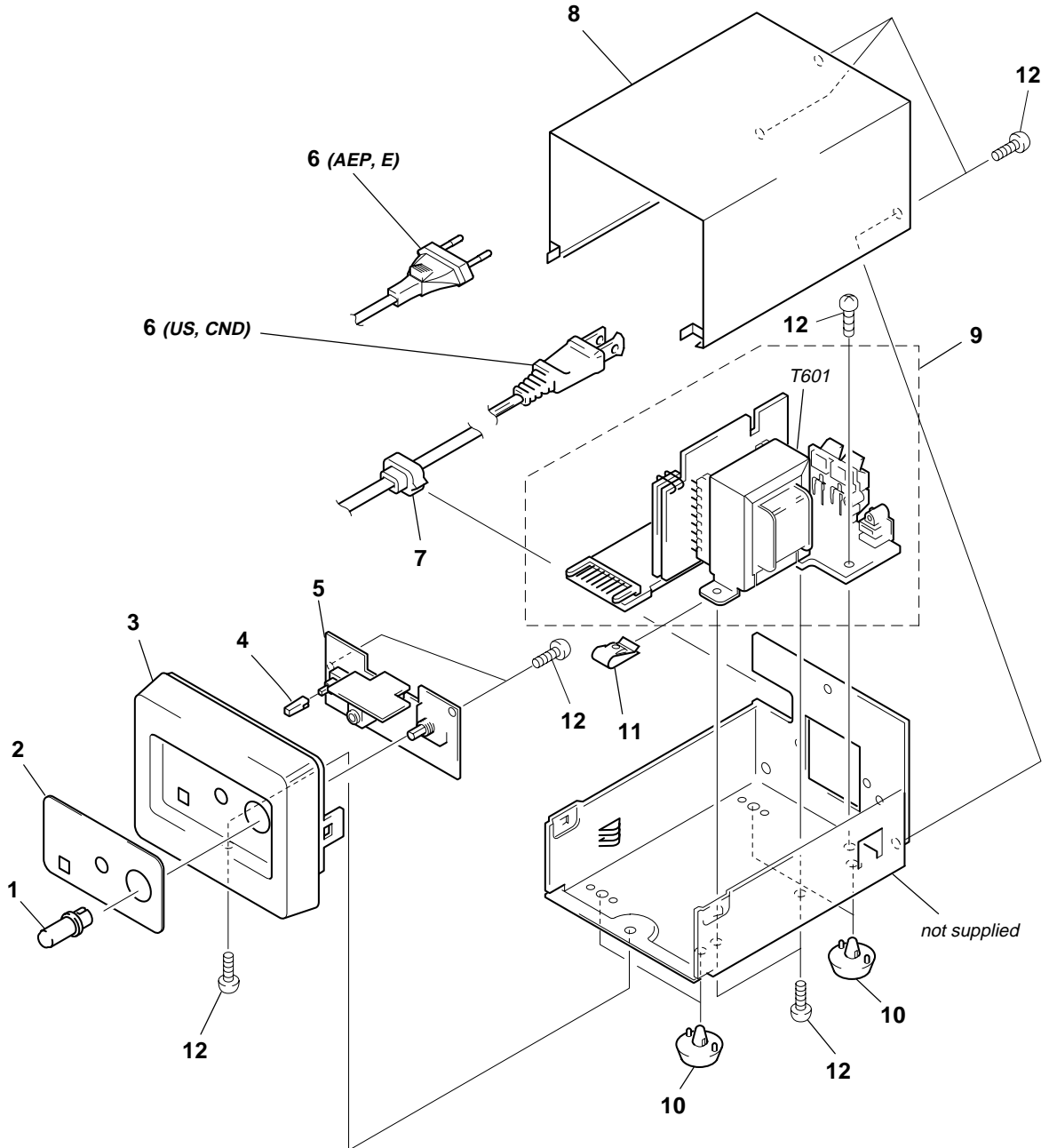
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.

- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.
- Abbreviation  
CND : Canadian model

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

Les composants identifiés par une marque  $\triangle$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

### 4-1. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	4-956-323-01	NOB (MIC)		* 8	4-991-633-01	CASE (8565)	
2	4-991-631-01	PLATE (F), INDICATION		* 9	A-4398-843-A	MAIN BOARD, COMPLETE (US,CND)	
3	4-991-632-01	PANEL, FRONT		* 9	A-4398-844-A	MAIN BOARD, COMPLETE (AEP,E)	
4	3-380-952-21	BUTTON		10	4-965-822-01	FOOT	
* 5	1-666-335-11	PANEL BOARD		11	4-994-278-01	NUT, SPEED	
$\triangle$ 6	1-558-945-21	CORD, POWER (POLAR.SPT-1)(US,CND)		12	7-685-646-79	SCREW +BVTP3X8 TYPE2 IT-3	
$\triangle$ 6	1-575-651-21	CORD, POWER (AEP,E)		$\triangle$ T601	1-431-371-11	TRANSFORMER, POWER (US,CND)	
* 7	3-703-244-00	BUSHING (2104), CORD (AEP,E)		$\triangle$ T601	1-431-372-11	TRANSFORMER, POWER (AEP,E)	
7	3-703-571-00	BUSHING (S) (4516), CORD (US,CND)					

**MAIN** **PANEL**

**SECTION 5**  
**ELECTRICAL PARTS LIST**

Note:

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

Les composants identifiés par une marque  $\Delta$  sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifié.

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

- 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, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- RESISTORS  
All resistors are in ohms  
METAL: Metal-film resistor  
METAL OXIDE: Metal Oxide-film resistor  
F : nonflammable
- SEMICONDUCTORS  
In each case, u:  $\mu$ , for example:  
uA...:  $\mu$  A..., uPA...:  $\mu$  PA..., uPB...:  $\mu$  PB...,  
uPC...:  $\mu$  PC..., uPD...:  $\mu$  PD...
- CAPACITORS  
uF :  $\mu$  F
- COILS  
uH :  $\mu$  H
- Abbreviation  
CND : Canadian model

Ref. No.	Part No.	Description	Remark
*	A-4398-843-A	MAIN BOARD, COMPLETE (US,CND) *****	
*	A-4398-844-A	MAIN BOARD, COMPLETE (AEP,E) *****	
		< CAPACITOR >	
C601	1-130-495-00	MYLAR	0.1uF 5% 50V
C602	1-126-953-11	ELECT	2200uF 20% 35V
C603	1-104-665-11	ELECT	100uF 20% 25V
		< CONNECTOR >	
CN601	1-774-136-11	CONNECTOR, ROUND TYPE 6P (OUTPUT)	
CN602	1-580-230-11	PIN, CONNECTOR (PC BOARD) 2P	
* CN603	1-770-392-11	PIN, CONNECTOR (PC BOARD) 8P	
		< DIODE >	
D601	8-719-200-82	DIODE	11ES2
D602	8-719-200-82	DIODE	11ES2
D603	8-719-200-82	DIODE	11ES2
D604	8-719-200-82	DIODE	11ES2
		< GROUND TERMINAL >	
EB601	1-537-770-21	TERMINAL BOARD, GROUND	
		< IC >	
IC601	8-759-605-01	IC	M5F78M18L
		< RESISTOR >	
R601	1-249-429-11	CARBON	10K 5% 1/4W
R602	1-249-429-11	CARBON	10K 5% 1/4W
R603	1-249-429-11	CARBON	10K 5% 1/4W
R604	1-249-429-11	CARBON	10K 5% 1/4W
R607	1-247-815-91	CARBON	220 5% 1/4W
R608	1-247-815-91	CARBON	220 5% 1/4W
R609	1-260-103-11	CARBON	2.2K 5% 1/2W
		< TRANSFORMER >	
$\Delta$ T601	1-431-371-11	TRANSFORMER, POWER (US,CND)	
$\Delta$ T601	1-431-372-11	TRANSFORMER, POWER (AEP,E)	
		< TERMINAL >	
TM601	1-537-925-31	TERMINAL BOARD (INPUT B)	

Ref. No.	Part No.	Description	Remark
*	1-666-335-11	PANEL BOARD *****	
		< CONNECTOR >	
CN604	1-770-401-11	HOUSING, CONNECTOR(PC BOARD)8P	
		< DIODE >	
D605	8-719-018-46	DIODE	SEL3510C-CD (POWER)
		< JACK >	
J601	1-562-837-21	JACK (INPUT A)	
		< RESISTOR >	
R605	1-249-421-11	CARBON	2.2K 5% 1/4W F
R606	1-249-421-11	CARBON	2.2K 5% 1/4W F
		< VARIABLE RESISTOR >	
RV601	1-225-470-11	RES, VAR	5K/5K (LEVEL)
		< SWITCH >	
S601	1-554-118-00	SWITCH, PUSH (1 KEY)(POWER)	
*****			
		MISCELLANEOUS *****	
$\Delta$ 6	1-558-945-21	CORD, POWER (POLAR.SPT-1)(US,CND)	
$\Delta$ 6	1-575-651-21	CORD, POWER (AEP,E)	
$\Delta$ T601	1-431-371-11	TRANSFORMER, POWER (US,CND)	
$\Delta$ T601	1-431-372-11	TRANSFORMER, POWER (AEP,E)	
*****			
		ACCESSORIES & PACKING MATERIALS *****	
	1-769-433-11	CORD, SPEAKER	
	3-859-855-11	MANUAL, INSTRUCTION (ENGLISH,FRENCH,SPANISH,PORTUGUESE,CHINESE)	
	3-859-855-21	MANUAL, INSTRUCTION (GERMAN,DUTCH,ITALIAN,SWEDISH)(AEP,E)	
*****			

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