HCD-FX300i

SERVICE MANUAL

Ver. 1.2 2010.06

US Model
Canadian Model
AEP Model
UK Model
E Model
Australian Model

- HCD-FX300i (US, CND, UK, SP, TW, KR, TH, AUS) is the amplifier, CD player, tuner and iPod section in CMT-FX300i (US, CND, UK, SP, TW, KR, TH, AUS).
- HCD-FX300i (AEP, E2, E51, MX) is the amplifier, CD player, tuner, USB and iPod section in CMT-FX300i (AEP, E2, E51, MX).

- iPod is a trademark of Apple Inc., registered in the U.S. and other countries.
- MPEG Layer-3 audio coding technology and patents licensed from Fraunhofer IIS and Thomson.
- All other trademarks and registered trademarks are of their respective holders. In this manual, ™ and ® marks are not specified.

Model Name Using Similar Mechanism	NEW
Base Unit Name (US, CND, UK, SP, TW, KR, TH, AUS)	BU-D1BD73
Base Unit Name (AEP, E2, E51, MX)	BU-D1BD73U
Optical Pick-up Block Name	DA11MMVGP

- Abbreviation

AUS	: Australian model	E51	: Chilean and Peruvian models	SP	: Singapore model
CND	: Canadian model	KR	: Korean model	TH	: Thai model
E2	: 120V AC area in E model	MX	: Mexican model	TW	: Taiwan model

SPECIFICATIONS

Amplifier section
AUDIO POWER SPECIFICATIONS
POWER OUTPUT AND TOTAL HARMONIC DISTORTION:
(The United States model only)
With 4 ohm loads, both channels driven, from 120 – 15,000 Hz; rated 5watts per channel minimum RMS power, with no more than 10% total harmonic distortion from 250 milliwatts to rated output.

European model:
DIN power output (rated): 4 watts + 4 watts (4 ohms at 1 kHz, DIN)
Continuous RMS power output (reference): 5 watts + 5 watts (4 ohms at 1 kHz, 10% THD)
Music power output (reference): 9 watts + 9 watts
Other models:
DIN power output (rated): 4 watts + 4 watts (4 ohms at 1 kHz, DIN)
Continuous RMS power output (reference): 5 watts + 5 watts (4 ohms at 1 kHz, 10% THD)

Input
AUDIO IN (stereo mini jack): Sensitivity 550 mV, impedance 50 kilohms

Outputs
PHONES (stereo mini jack): Accepts headphones with an impedance of 8 ohms or more
SPEAKERS: Accepts impedance of 4 ohms

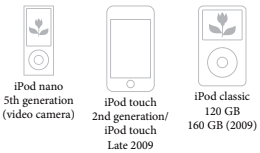
CD player section
System: Compact disc and digital audio system
Laser Diode Properties
Emission Duration: Continuous
Laser Output*: Less than 44.6μW
* This output is the value measurement at a distance of 200mm from the objective lens surface on the Optical Pick-up Block with 7mm aperture.
Frequency response: 20 Hz – 20 kHz
Signal-to-noise ratio: More than 90 dB
Dynamic range: More than 90 dB

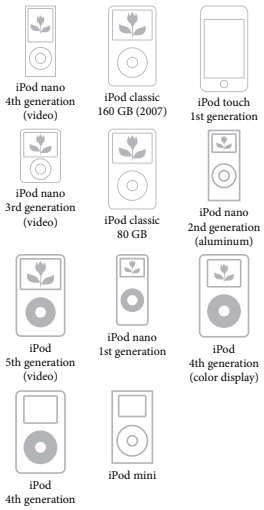
Tuner section
FM stereo, FM/AM superheterodyne tuner

FM tuner section:
Tuning range:
North American model: 87.5 MHz – 108.0 MHz (100 kHz step)
Other models: 87.5 MHz – 108.0 MHz (50 kHz step)
Antenna: FM lead antenna
Intermediate frequency: 225 kHz

AM tuner section:
Tuning range
European model:
531 kHz – 1,602 kHz (9 kHz step)
North American, E2, E51 and MX models:
530 kHz – 1,710 kHz (10 kHz step)
531 kHz – 1,710 kHz (9 kHz step)
Australian model:
531 kHz – 1,710 kHz (9 kHz step)
530 kHz – 1,710 kHz (10 kHz step)
SP, TW, KR, TW and TH models:
531 kHz – 1,602 kHz (9 kHz step)
530 kHz – 1,610 kHz (10 kHz step)
Antenna: AM loop antenna
Intermediate frequency: 53 kHz

iPod section
Compatible iPod models:





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COMPACT DISC RECEIVER

9-889-797-03
2010F05-1

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Sony Corporation
Audio&Video Business Group
Published by Sony Techno Create Corporation

SONY®

USB section (AEP, E2, E51 and MX models only)
Supported bit rate:
MP3 (MPEG 1 Audio Layer-3): 32 kbps – 320 kbps, VBR
Sampling frequencies:
MP3 (MPEG 1 Audio Layer-3): 32/44.1/48 kHz
(USB) port: Type A, maximum current 500 mA

General
Power requirements:
European model: AC 230 V, 50/60 Hz
Latin American models (except for Mexican model):
AC 110 V – 120 V or 220 V – 240 V, 50/60 Hz, adjustable with voltage selector
Mexican model: AC 120 V, 60 Hz
North American model: AC 120 V, 60 Hz
Australian model: AC 230 V – 240 V, 50/60 Hz
Korean model: AC 220 V, 60 Hz
Thai model: AC 220 V, 60 Hz
Taiwan model: AC 120 V, 50/60 Hz
Other models: AC 220 V – 240 V, 50/60 Hz
Power consumption: 28 watts (AEP, UK, E2, E51, MX)
25 watts (US, CND, SP, KR, TW, TH, AUS)
Dimensions (W/H/D) (excl. speakers):
Approx. 158 mm × 240 mm × 251.5 mm
Mass (excl. speakers): Approx. 2.2 kg

Design and specifications are subject to change without notice.

- Standby power consumption: 0.5 W
- Halogenated flame retardants are not used in the certain printed wiring boards.

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  TW : Taiwan model

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.

FLEXIBLE CIRCUIT BOARD REPAIRING

- Keep the temperature of soldering iron around 270 °C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

CLASS 1 LASER PRODUCT
LUOKAN 1 LASERLAITE
KLASS 1 LASERAPPARAT

This appliance is classified as a CLASS 1 LASER product. This marking is located on the rear exterior.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety check 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 TEST

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 2 V AC range are suitable. (See Fig. A)

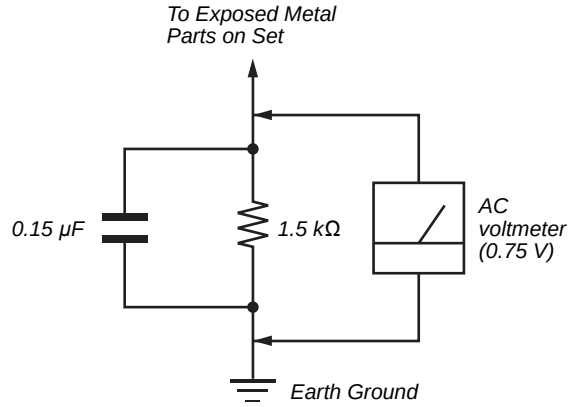


Fig. A. Using an AC voltmeter to check AC leakage.

SAFETY-RELATED COMPONENT WARNING!

COMPONENTS IDENTIFIED BY MARK ⚠ 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.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ 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.

TABLE OF CONTENTS

Accessories are given in the last of the electrical parts list.

- Abbreviation
  E2 : 120V AC area in E model
  E51 : Chilean and Peruvian models
  MX : Mexican model

SECTION 1
SERVICING NOTES

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body. During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pickup block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

UNLEADED SOLDER

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.
(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size)

: LEAD FREE MARK

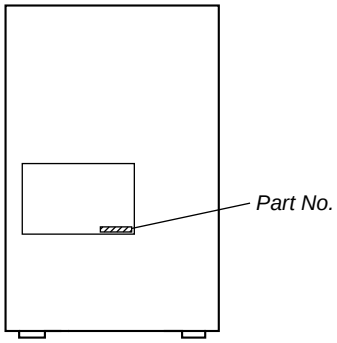
Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40 °C higher than ordinary solder.
  Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
  Soldering irons using a temperature regulator should be set to about 350 °C.
  Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity
  Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder
  It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

NOTE OF REPLACING THE IC101 ON THE USB BOARD (AEP, 120V AC area in E, Mexican, Chilean and Peruvian models only)

IC101 on the USB board cannot exchange with single.
When this part on the USB board is damaged, exchange the entire mounted board.

MODEL IDENTIFICATION
- Back Panel -



Model	Part No.
AEP model	4-178-680-0□
Mexican model	4-178-681-0□
120V AC area in E, Chilean and Peruvian models	4-178-682-0□
Thai model	4-178-683-0□
US model	4-178-684-0□
Canadian model	4-178-685-0□
Singapore model	4-178-686-0□
Australian model	4-178-687-0□
Taiwan model	4-178-688-0□
Korean model	4-178-689-0□
UK model	4-178-690-0□

LASER DIODE AND FOCUS SEARCH OPERATION CHECK

During normal operation of the equipment, emission of the laser diode is prohibited unless the upper lid is closed while turning on the SW880. (push switch type)
The following checking method for the laser diode is operable.

- Method
  Emission of the laser diode is visually checked.
  1. Open the upper lid.
  2. Push the SW880 as shown in Fig.1.
  Note: Do not push the detection lever strongly, or it may be bent or damaged.
  3. Check the object lens for confirming normal emission of the laser diode. If not emitting, there is a trouble in the automatic power control circuit or the optical pick-up.
  In this operation, the object lens will move up and down 2 times along with inward motion for the focus search.

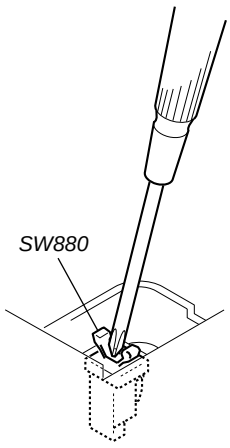


Fig. 1. Method to push the SW880

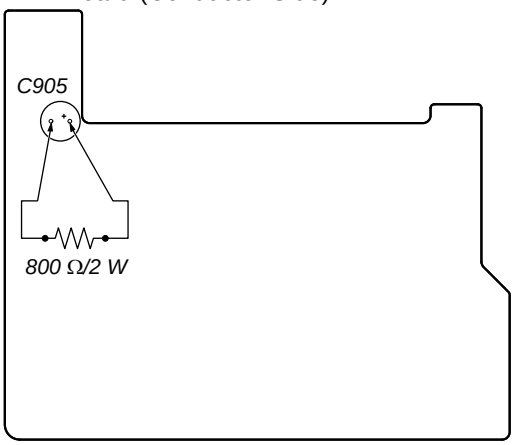
CAPACITOR ELECTRICAL DISCHARGE PROCESSING

When checking the board, the electrical discharge is necessary for the electric shock prevention.
Connect the resistors referring to the figure below.

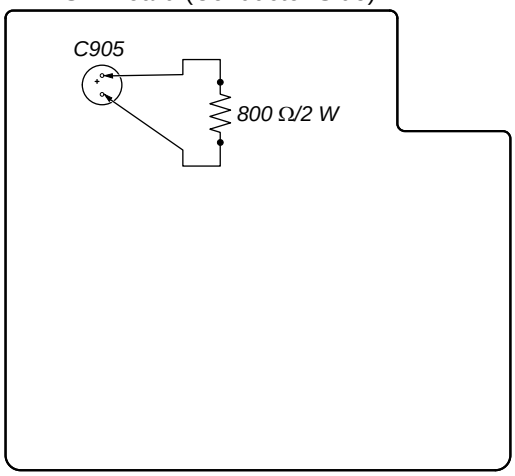
- PT board (C905) (Except 120V AC area in E, Chirean and Peruvian models only)
- PT-SW board (C905) (120V AC area in E, Chirean and Peruvian models only)
- MAIN board (C903, C904) (All models)

Both ends of respective capacitors.

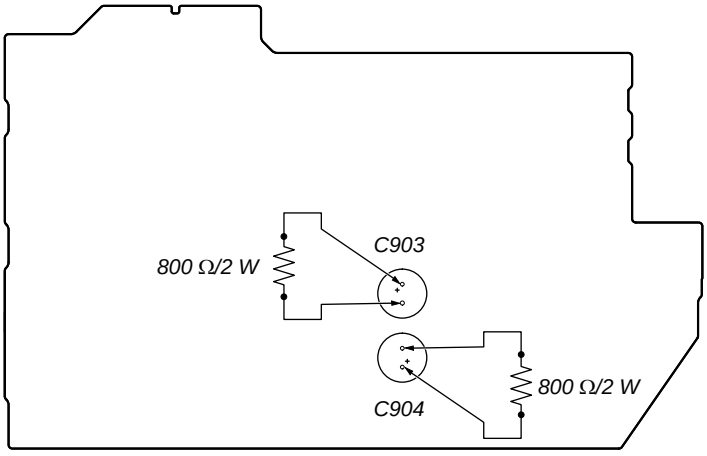
– PT Board (Conductor Side) –



– PT-SW Board (Conductor Side) –



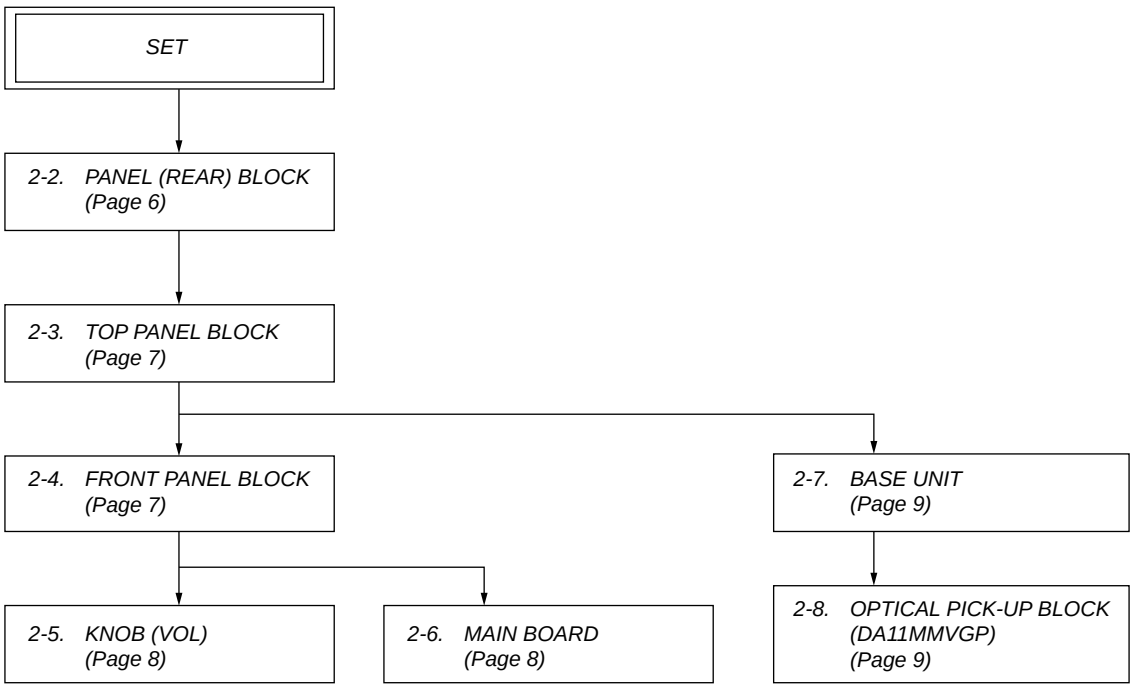
– MAIN Board (Conductor Side) –



SECTION 2
DISASSEMBLY

- This set can be disassembled in the order shown below.

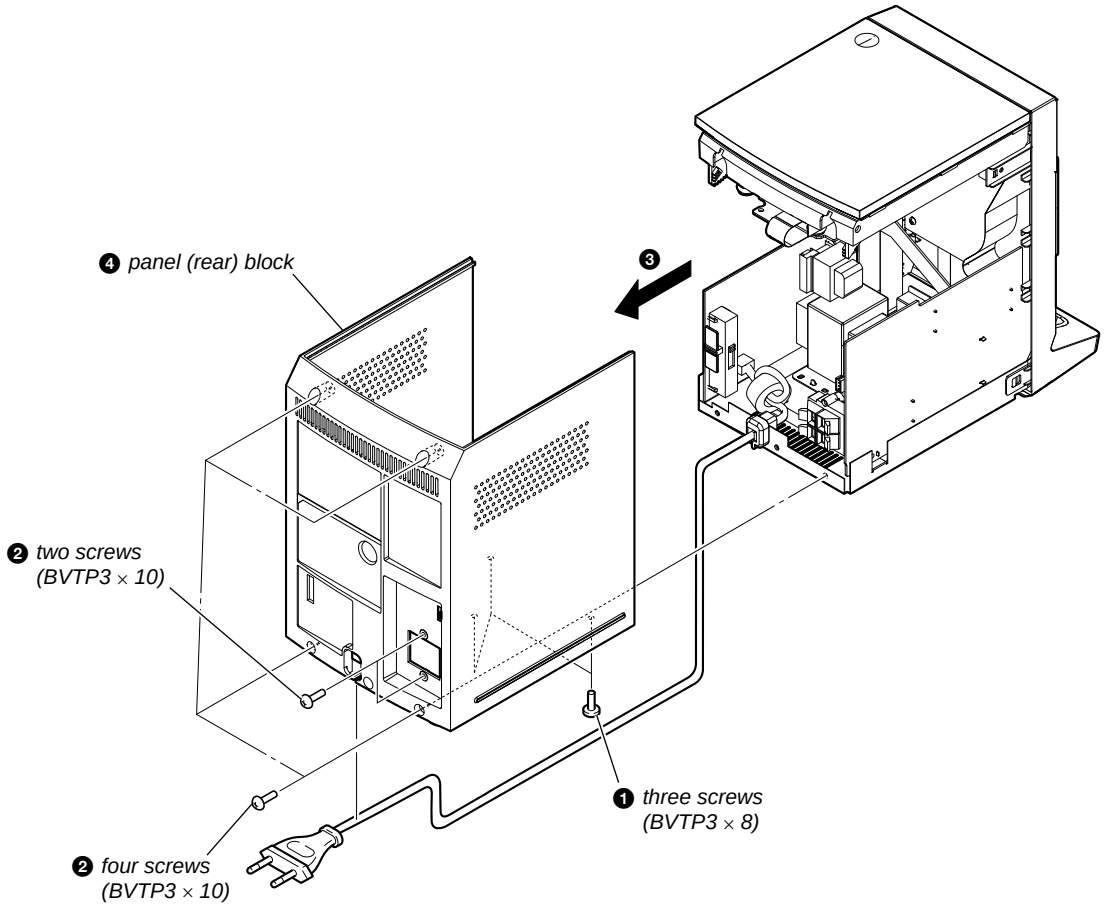
2-1. DISASSEMBLY FLOW



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

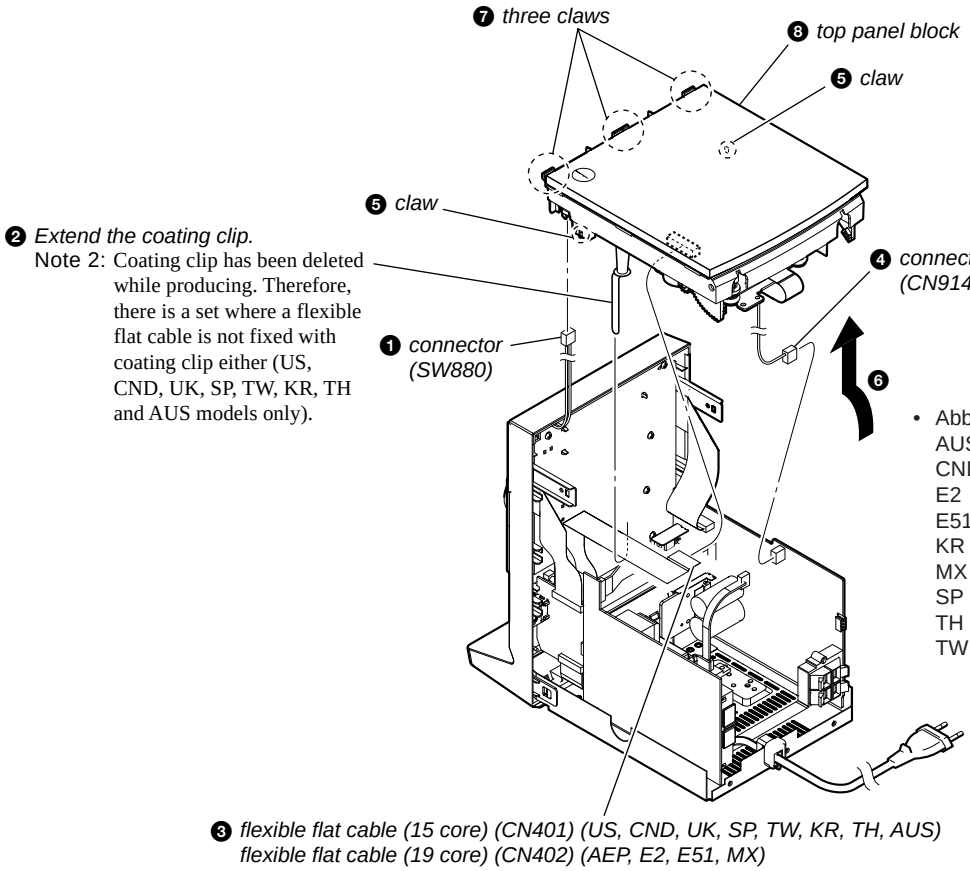
2-2. PANEL (REAR) BLOCK

Note: This illustration sees the set from rear side.



2-3. TOP PANEL BLOCK

Note 1: This illustration sees the set from rear side.



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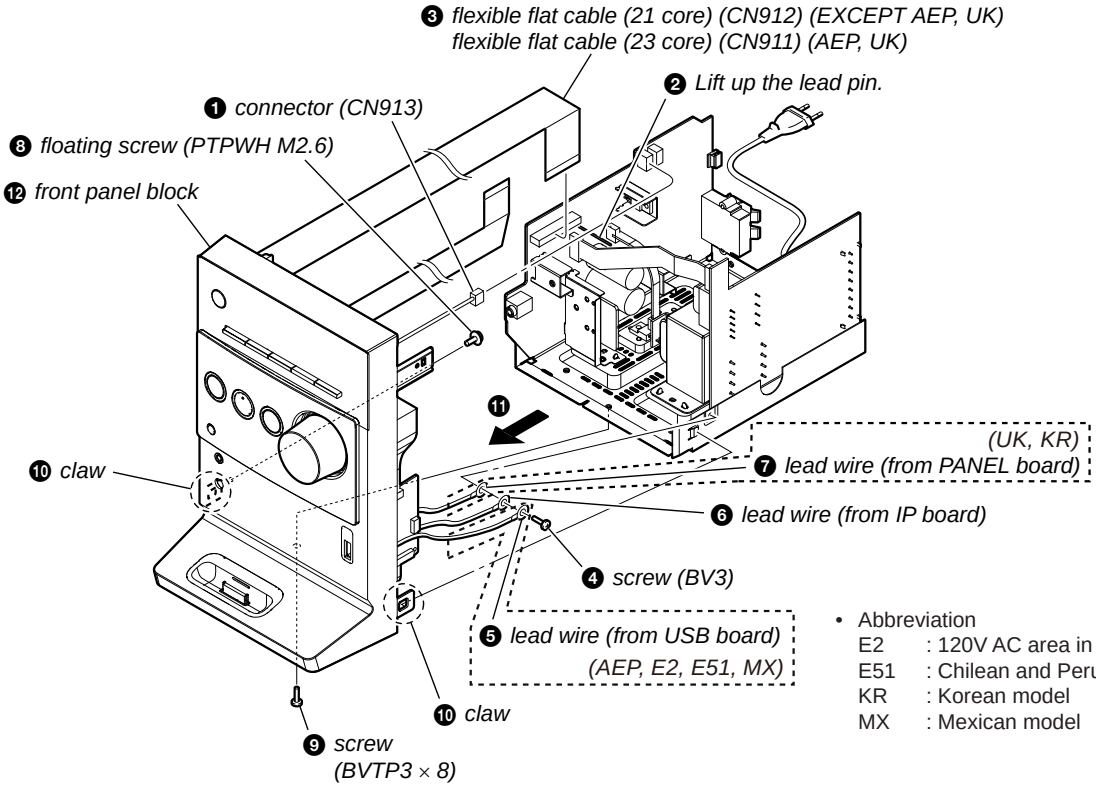
2-4. FRONT PANEL BLOCK



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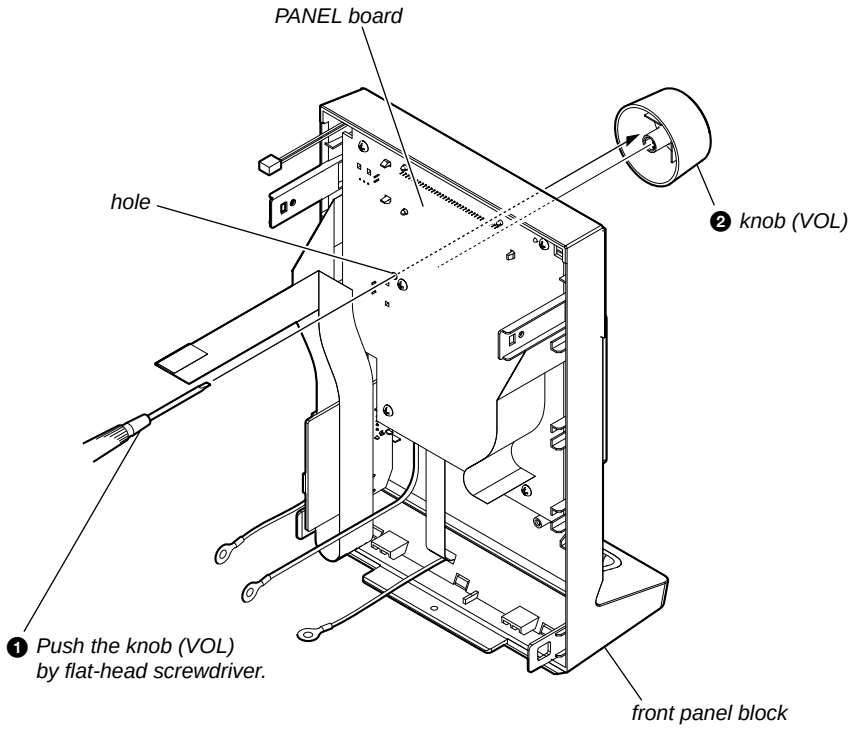
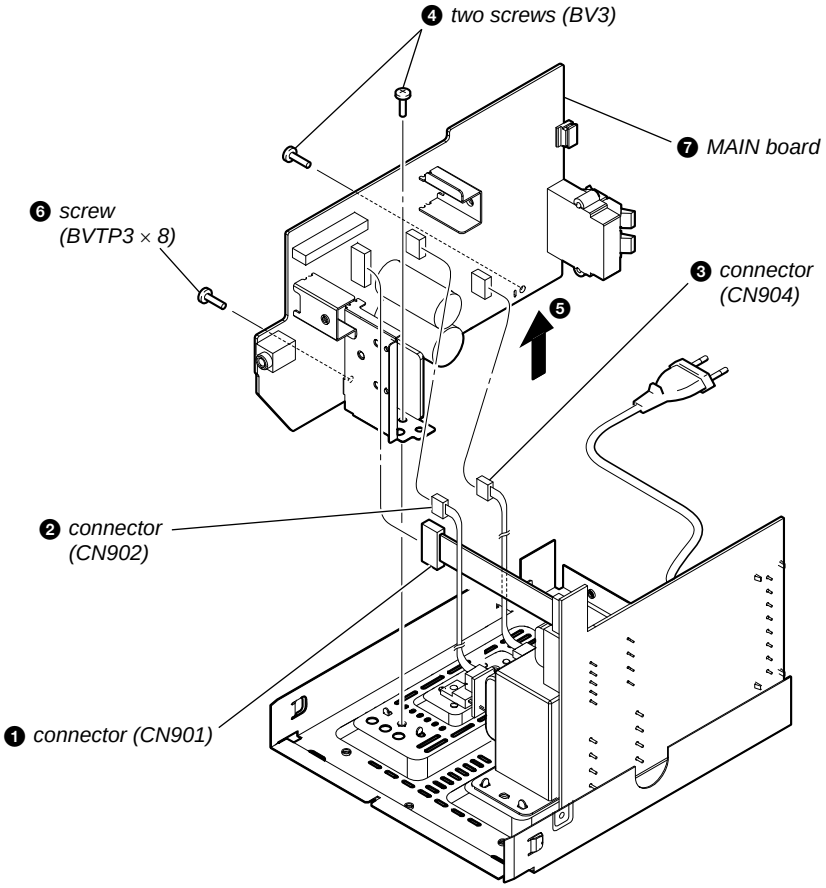
2-5. KNOB (VOL)

Note: This illustration sees the front panel block from PANEL board side.

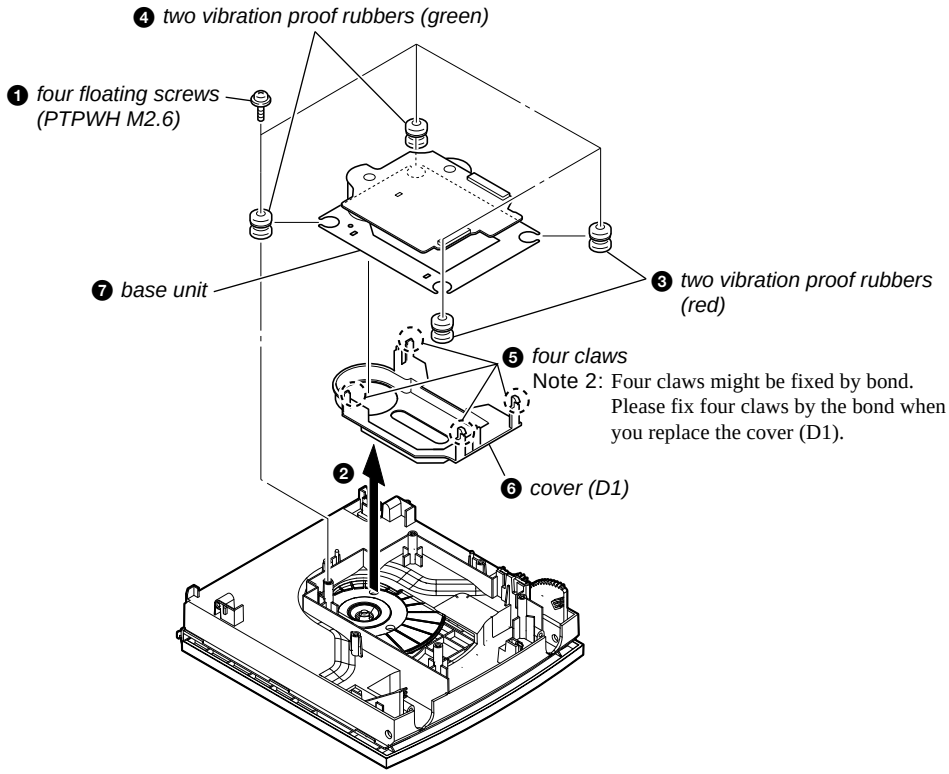


2-6. MAIN BOARD



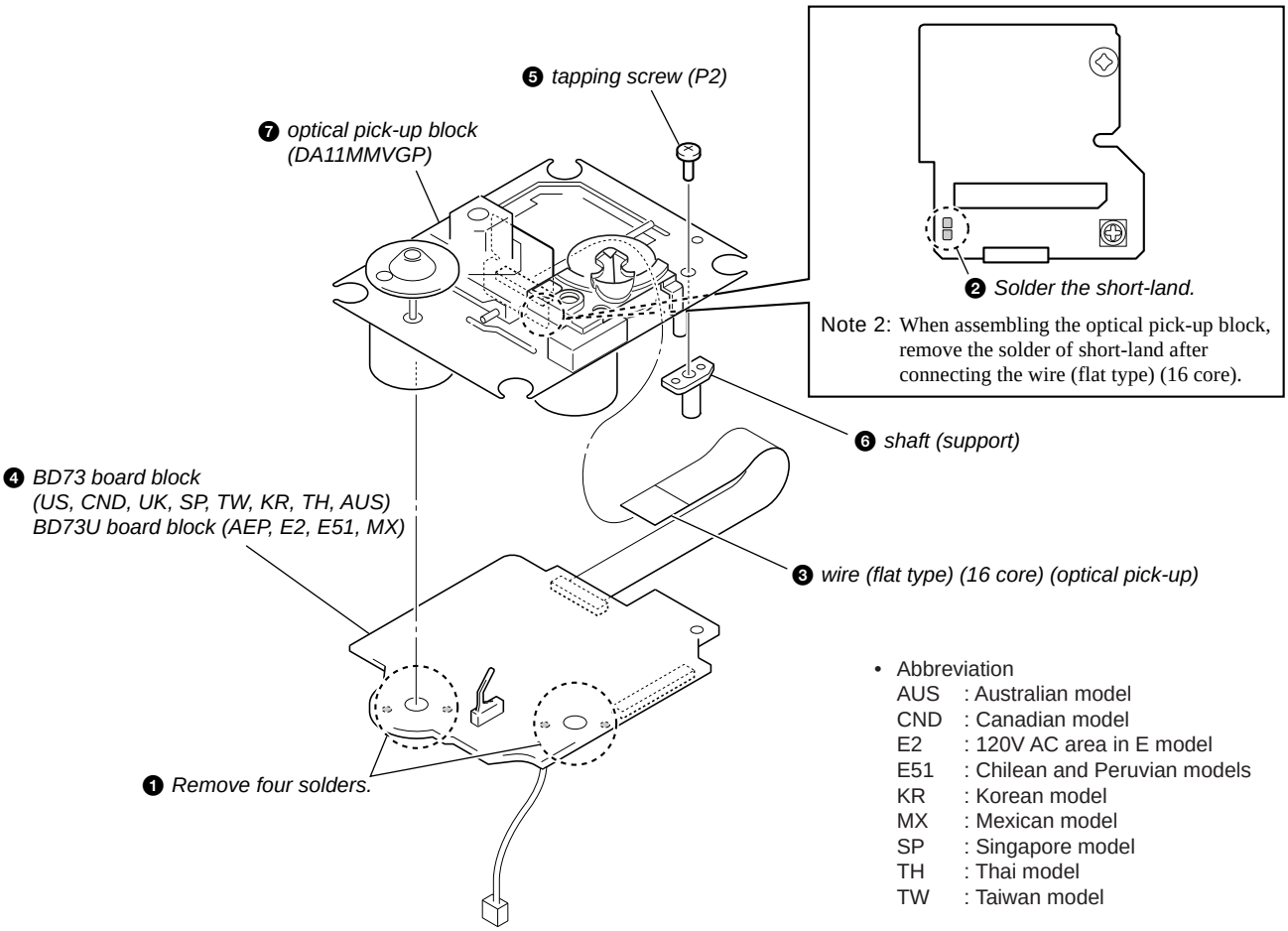
2-7. BASE UNIT

Note 1: This illustration sees the top panel block from base unit side.



2-8. OPTICAL PICK-UP BLOCK (DA11MMVGP)

Note 1: When disconnecting the wire (flat type) (16 core) of optical pick-up block, solder the short-land.



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SECTION 3
TEST MODE

COLD RESET

The cold reset clears all data including preset data stored in the memory to initial conditions. Execute this mode when returning the set to the customer.

Procedure:

1. In the standby status, press the [I/⏻] button to turn the power on.
2. Press three buttons of [FUNCTION], [🗀 +] and [I/⏻] simultaneously.
3. When “RESET” appears, the set enters standby status.

PANEL TEST MODE

Enter The Panel Test Mode

Procedure:

1. In the standby status, press the [I/⏻] button to turn the power on.
2. Press three buttons of [ENTER], [FUNCTION] and [I/⏻] simultaneously
3. When the panel test mode is activated, segments of the liquid crystal display are all turned on.

Version Check

Procedure:

1. In the panel test mode (segments of the liquid crystal display are all turned on), press the [🗀 +] button.
2. On the liquid crystal display, date and version are displayed.
3. Press the [🗀 +] button, and the USB micom version is displayed.
4. From this status, press the [🗀 –] button, and the destination and model name are displayed.
5. To release from this mode, press three button of [ENTER], [FUNCTION] and [I/⏻] simultaneously .

Key Test Mode (AEP, 120V AC area in E, Mexican, Chilean and Peruvian models only)

Procedure:

1. In the panel test mode (segments of the liquid crystal display are all turned on), press the [▶II] button.
2. The message “KEY0 0 0”displayed. Whenever any buttons are pressed the value is changed.
   The message “VOL UP” is displayed when [VOLUME] knob is turned clockwise, and “VOL DOWN” is displayed when [VOLUME] knob is turned counterclockwise.
3. To release from this mode, press three button of [ENTER], [FUNCTION] and [I/⏻] simultaneously.

TUNER STEP CHANGE

(Except AEP and UK models only)

The AM tuning interval can be changed over 9 kHz or 10 kHz.

Procedure:

1. Press the [I/⏻] button to turn the power on.
2. Press the [FUNCTION] button to select TUNER (AM) function.
3. Press the [I/⏻] button again to turn the power off (standby).
4. After pressing the [DISPLAY] button on the remote commander, while pressing the [TUNE + ▶▶ ▷▷I] button, press the [I/⏻] button.
5. It turns power on and display “9K STEP” or “10K STEP”, and thus the tuning interval is changed over.

CD/USB POWER MANAGE

This mode is for switch the CD/USB power supply on/off. Even if this state pulls out AC plug, it is held.

Procedure:

1. Press the [I/⏻] button to turn the power on.
2. Press the [FUNCTION] button to select CD function.
3. Press the [I/⏻] button again to turn the power off (standby).
4. After pressing the [DISPLAY] button on the remote commander, while pressing the [■] button, press the [I/⏻] button.
5. It turns power on and display “CD POWER”, then display “ON” or “OFF”.

CD SERVICE MODE

This mode can move the SLED of the optical pick-up, and also can turn the optical pick-up laser power on and off.

Procedure:

1. Press the [I/⏻] button to turn the power on.
2. Press the [FUNCTION] button to select CD function.
3. Press three buttons of [DSGX], [TUNE + ▶▶ ▷▷I] and [I/⏻] simultaneously.
4. It enters the CD service mode and displays “SERVICE”.
5. To exit from this mode, press three buttons of [DSGX], [TUNE + ▶▶ ▷▷I] and [I/⏻] simultaneously.

Key Operation:

[TUNE + ▶▶ ▷▷I], [– TUNE I◁◁ ◀◀]:

Use these keys to move the SLED.
When [TUNE + ▶▶ ▷▷I] is pressed in this mode, the SLED moves to outer circumference and the message “SLED OUT” is displayed.
When [– TUNE I◁◁ ◀◀] is pressed in this mode, the SLED moves to inner circumference and the message “SLED IN” is displayed.

[FUNCTION]:

Use this key to turn the optical pick-up laser power on and off. When the laser power is turned on, the message “LD ON” is displayed. When the laser power is turned off, the message “LD OFF” is displayed.

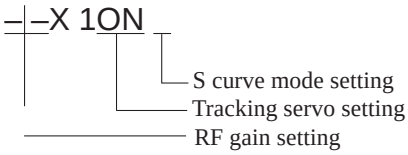
SECTION 4
ELECTRICAL CHECK

CD FACTORY MODE

Note 1: Do not enter the this mode while any other test mode is in progress.
Note 2: Do not enter any other test mode while the this mode is in progress.

Procedure:

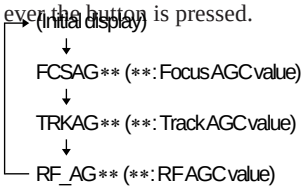
1. Press the [I/⏻] button to turn the power on.
2. Press the [FUNCTION] button to select CD function
3. Press three buttons of [DSGX], [🗀 –] and [I/⏻] simultaneously.
4. It enters the CD factory mode and the message “FACTORY” is displayed. When the [DSGX] button is pressed four times, the following message (initial display) is displayed.



Key Operation:

[DSGX]:

The display changes in the following order whenever the button is pressed.



[ENTER]:

RF gain setting changes whenever the button is pressed.
“– –”: No gain fixation.
“AL”: Fix to the gain for AL disc.
“RW”: Fix to the gain for RW disc.

[🗀 +]:

Tracking servo setting changes whenever the button is pressed.
“ON”: Tracking servo ON.
“OFF”: Tracking servo OFF.

[FUNCTION]:

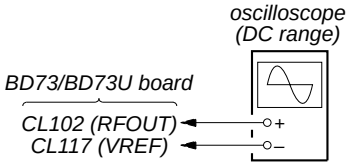
S curve mode setting changes whenever the button is pressed.
“ ”: S curve mode OFF.
“S”: S curve mode ON.

5. To release from this mode, press three buttons of [DSGX], [🗀 –] and [I/⏻] simultaneously.

CD SECTION

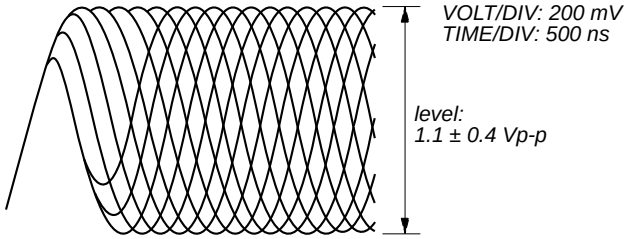
Note:
1. CD Block is basically constructed to operate without adjustment.
2. Use YEDS-18 disc (Part No. 3-702-101-01) unless otherwise indicated.
3. Use an oscilloscope with more than 10 MΩ impedance.
4. Clean the object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.
5. Check the focus bias check when optical pick-up block is replaced.

FOCUS BIAS CHECK



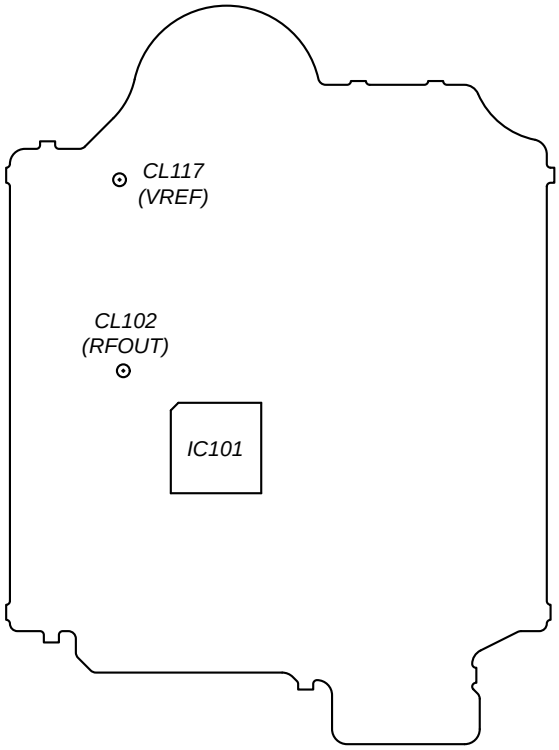
Procedure:

1. Connect the oscilloscope to CL102 (RFOUT) and CL117 (VREF) on the BD73/BD73U board.
2. Press the [I/⏻] button to turn the power on, and press the [FUNCTION] button to select CD function.
3. Set disc (YEDS-18) and press the [▶II] button to playback.
4. Confirm that oscilloscope waveform is as shown in the figure below (eye pattern).
   A good eye pattern means that the diamond shape (◊) in the center of the waveform can be clearly distinguished.



Checking Location:

– BD73 Board (Conductor Side) –
– BD73U Board (Conductor Side) –

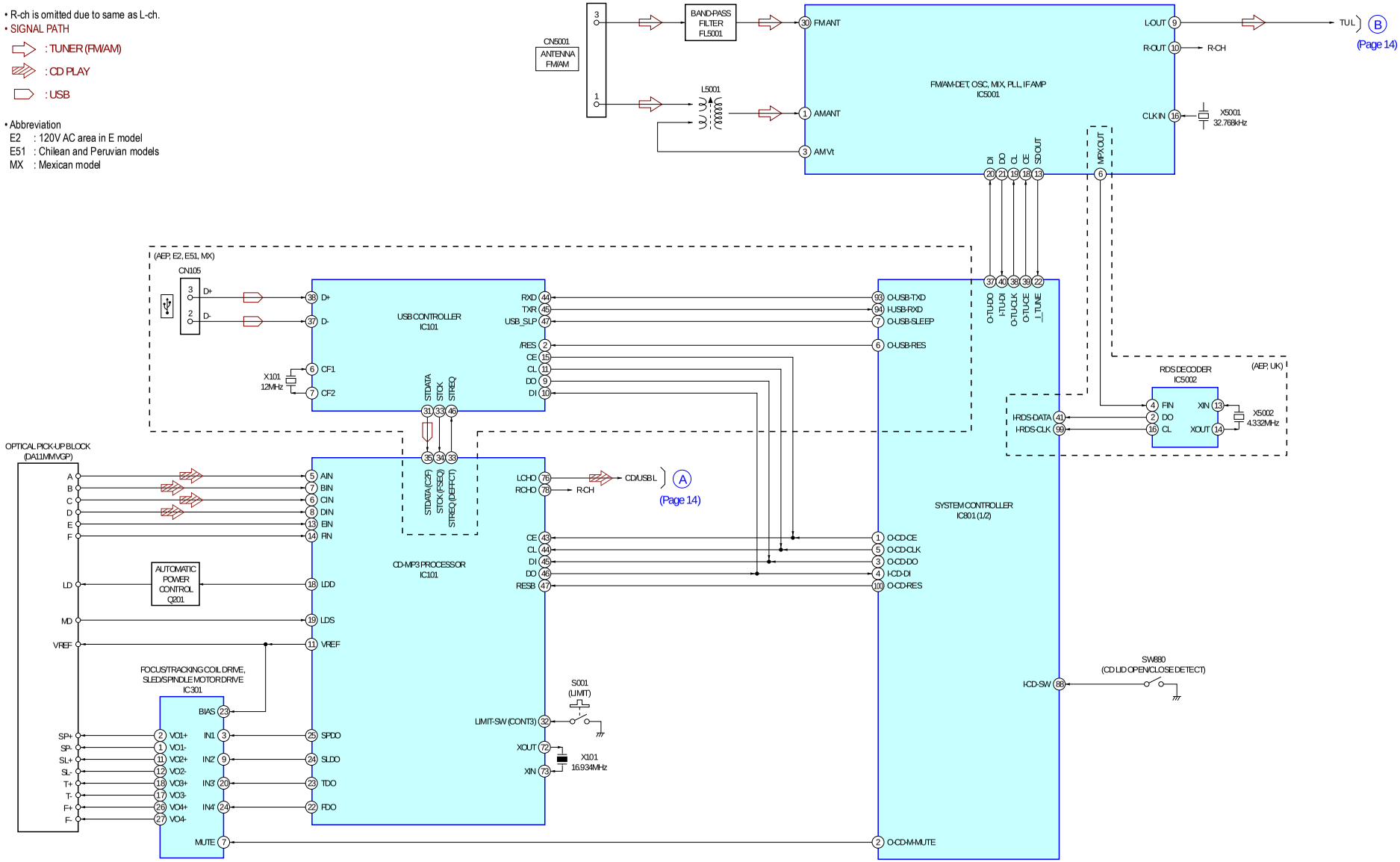


MEMO

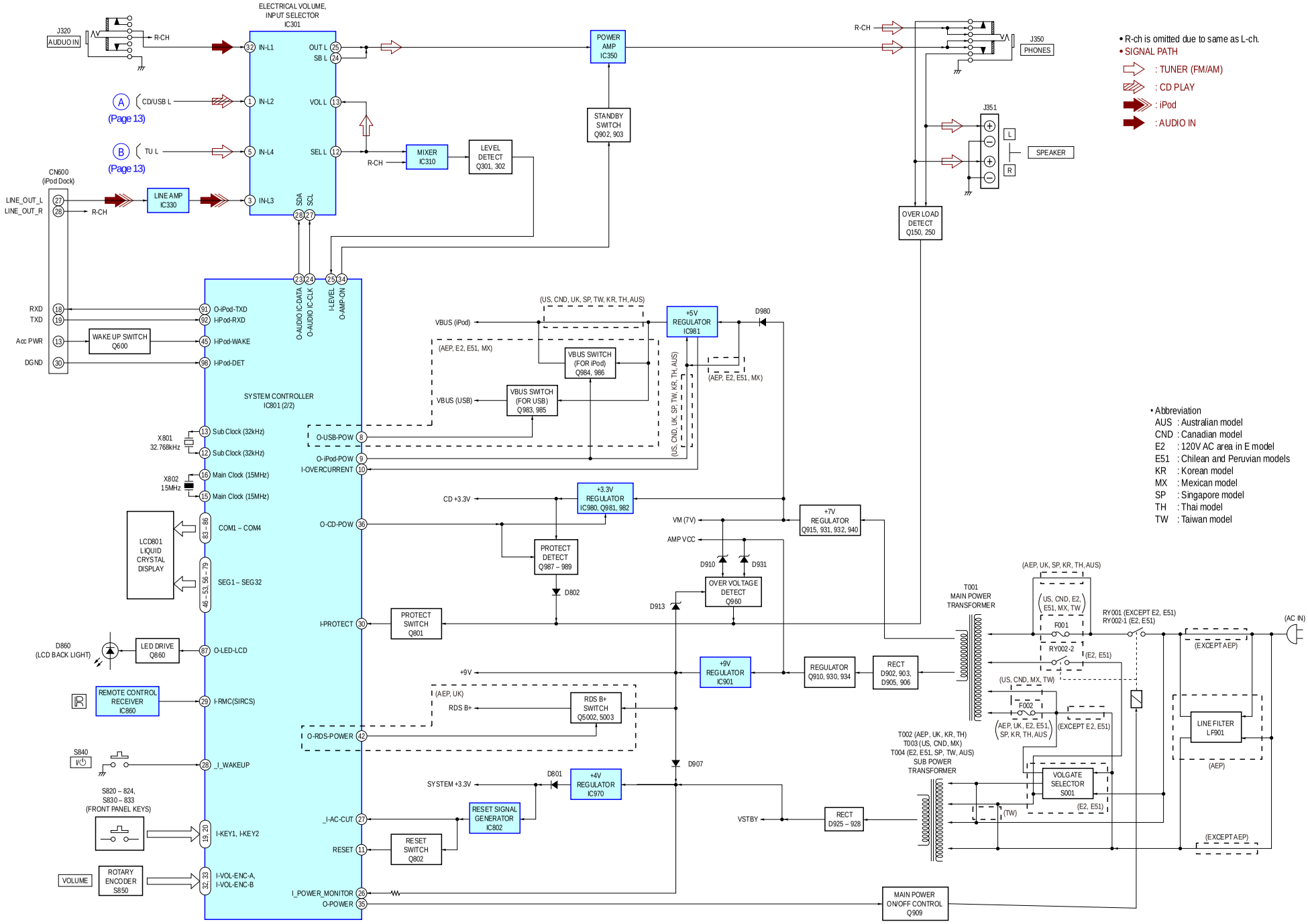
SECTION 5
DIAGRAMS

5-1. BLOCK DIAGRAM - CD, TUNER, USB Section -

- R-ch is omitted due to same as L-ch.
- SIGNAL PATH
  - : TUNER (FM/AM)
  - : CD PLAY
  - : USB
- Abbreviation
  - E2 : 120V AC area in E model
  - E51 : Chilean and Peruvian models
  - MX : Mexican model



5-2. BLOCK DIAGRAM - OUTPUT, PANEL, POWER SUPPLY Section -



THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

For Printed Wiring Boards.

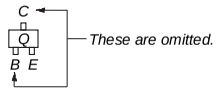
Note:

- ○——: parts extracted from the component side.
- ——: parts extracted from the conductor side.
- : indicates side identified with part number.
- : Pattern from the side which enables seeing.
  (The other layers' patterns are not indicated.)

Caution:	
Pattern face side: (Conductor Side)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Component Side)	Parts on the parts face side seen from the parts face are indicated.

Caution:	
Pattern face side: (SIDE B)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (SIDE A)	Parts on the parts face side seen from the parts face are indicated.

- Indication of transistor.



- Abbreviation
  AUS : Australian model
  CND : Canadian model
  E2 : 120V AC area in E model
  E51 : Chilean and Peruvian models
  KR : Korean model
  MX : Mexican model
  SP : Singapore model
  TH : Thai model
  TW : Taiwan model

For Schematic Diagrams.

Note:

- All capacitors are in µF unless otherwise noted. (p: pF) 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- : panel designation.

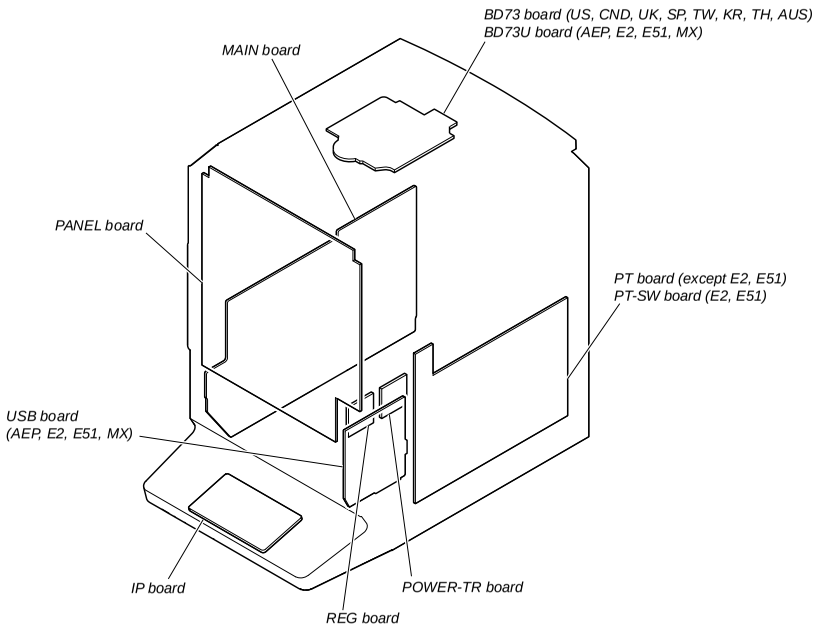
Note:	Note:
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

- : B+ Line.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.

– CD Board –
no mark: CD PLAY
– USB Board –
no mark: USB
– Other Boards –
no mark: TUNER (FM)
[ ]: TUNER (AM)
( ): CD PLAY
< >: USB
{ }: iPod
* : Impossible to measure

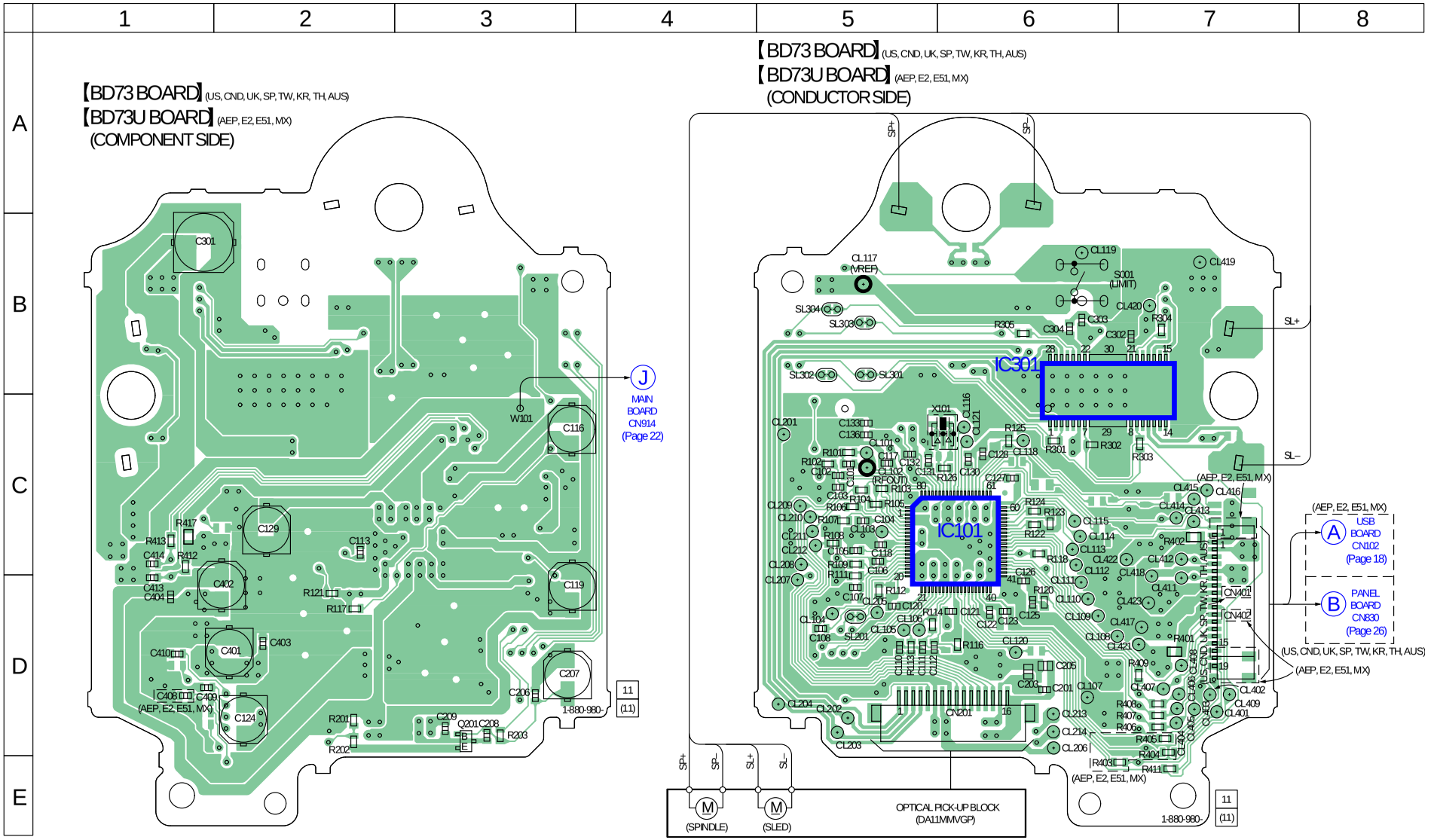
- Voltages are taken with VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  : TUNER (FM/AM)
  : CD PLAY
  : USB
  : iPod
  : AUDIO IN
- Abbreviation
  AUS : Australian model
  CND : Canadian model
  E2 : 120V AC area in E model
  E51 : Chilean and Peruvian models
  KR : Korean model
  MX : Mexican model
  SP : Singapore model
  TH : Thai model
  TW : Taiwan model

- Circuit Boards Location

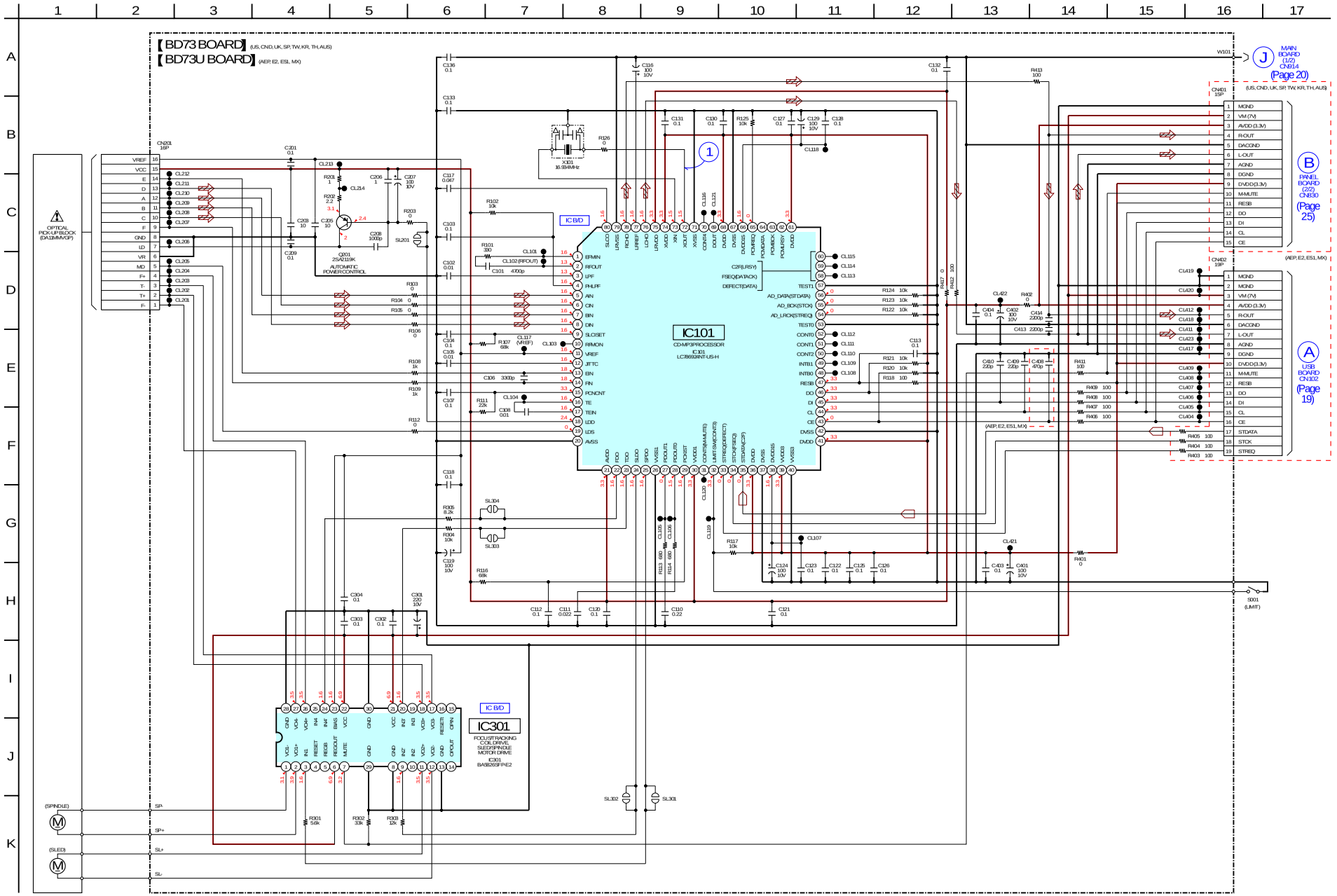


- Abbreviation
  AUS : Australian model
  CND : Canadian model
  E2 : 120V AC area in E model
  E51 : Chilean and Peruvian models
  KR : Korean model
  MX : Mexican model
  SP : Singapore model
  TH : Thai model
  TW : Taiwan model

5-3. PRINTED WIRING BOARD - BD73/BD73U Board - • See page 15 for Circuit Boards Location. • : Uses unleaded solder.



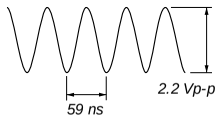
5-4. SCHEMATIC DIAGRAM - BD73/BD73U Board - • See page 18 for Waveforms. • See page 29 for IC Block Diagrams.



• Waveforms

– BD73/BD73U Board –

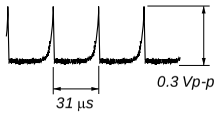
① IC101 ⑫ (XOUT)



1 V/DIV, 50 ns/DIV

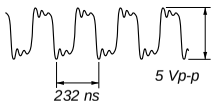
– MAIN Board –

⑳ IC5001 ⑯ (CLK IN)



100 mV/DIV, 10 µs/DIV

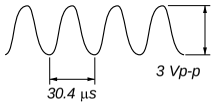
㉑ IC5002 ⑭ (XOUT)



2 V/DIV, 100 ns/DIV

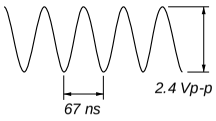
– PANEL Board –

㉚ IC801
⑬ (Sub Clock (32kHz))



2 V/DIV, 20 µs/DIV

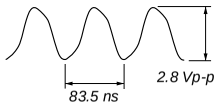
㉛ IC801
⑯ (Main Clock (15MHz))



1 V/DIV, 50 ns/DIV

– USB Board –

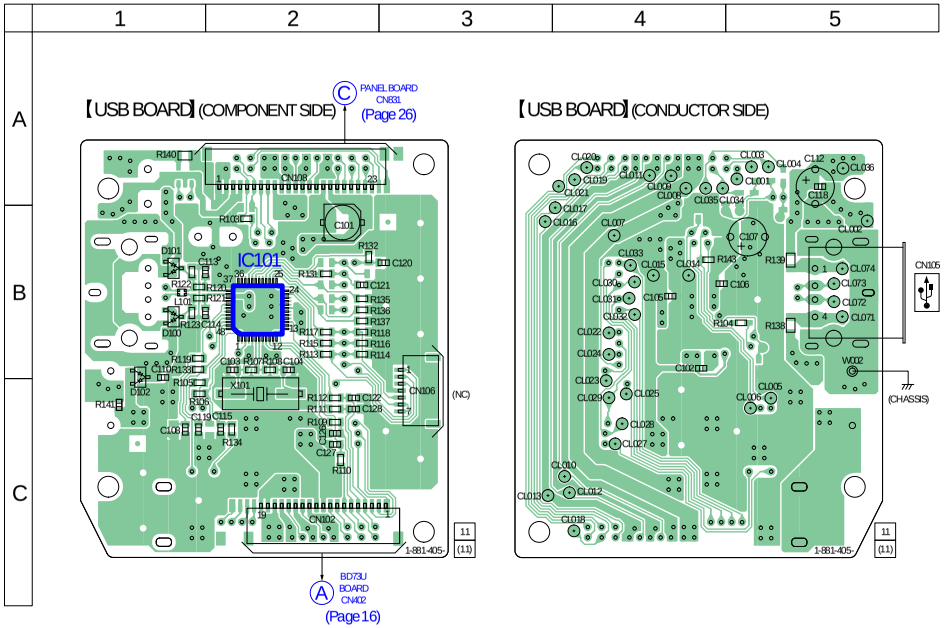
⑩ IC101 ⑦ (CF2)



2 V/DIV, 50 ns/DIV

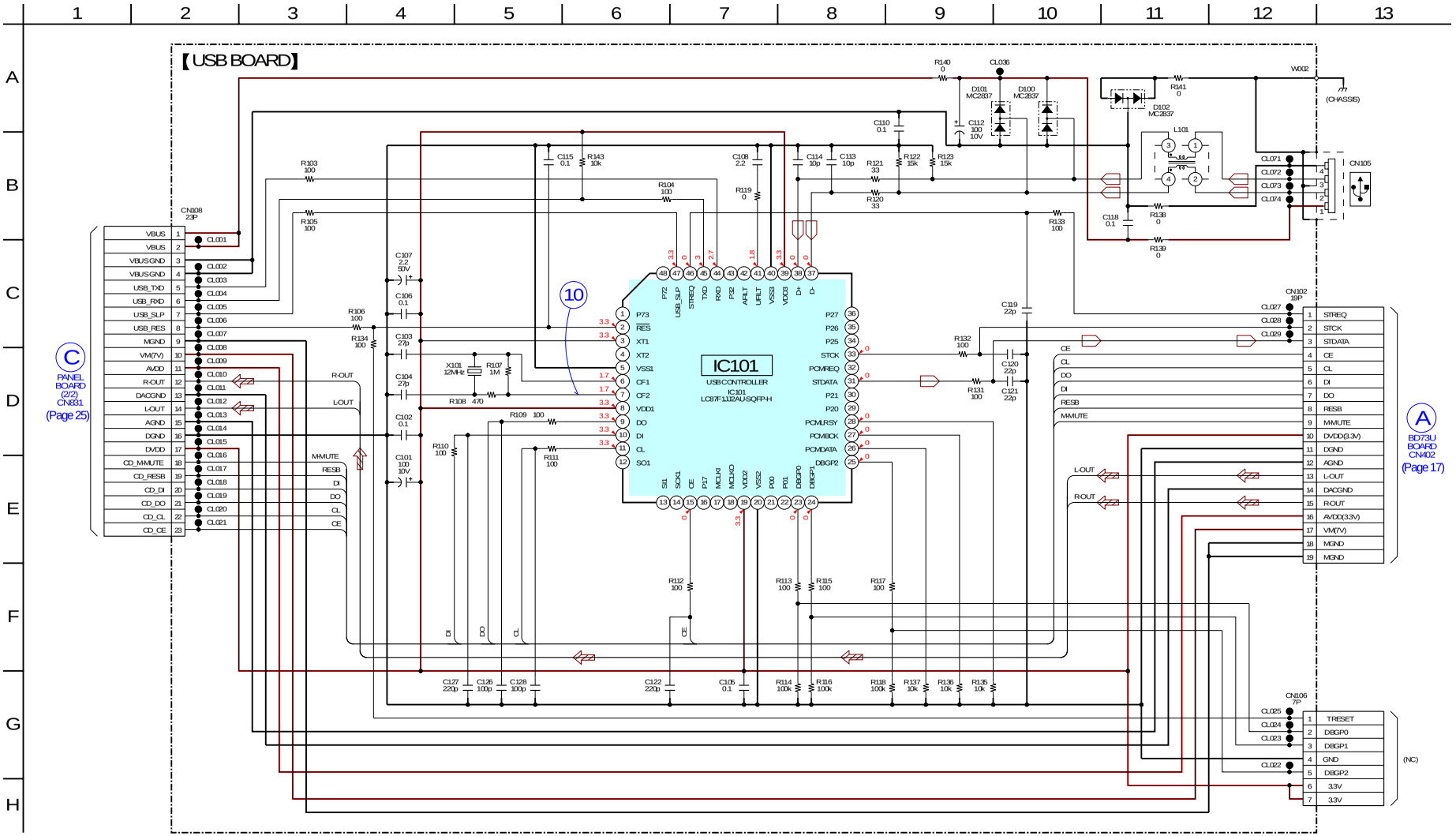
5-5. PRINTED WIRING BOARD - USB Board (AEP, E2, E51, MX) -

• See page 15 for Circuit Boards Location. • : Uses unleaded solder.



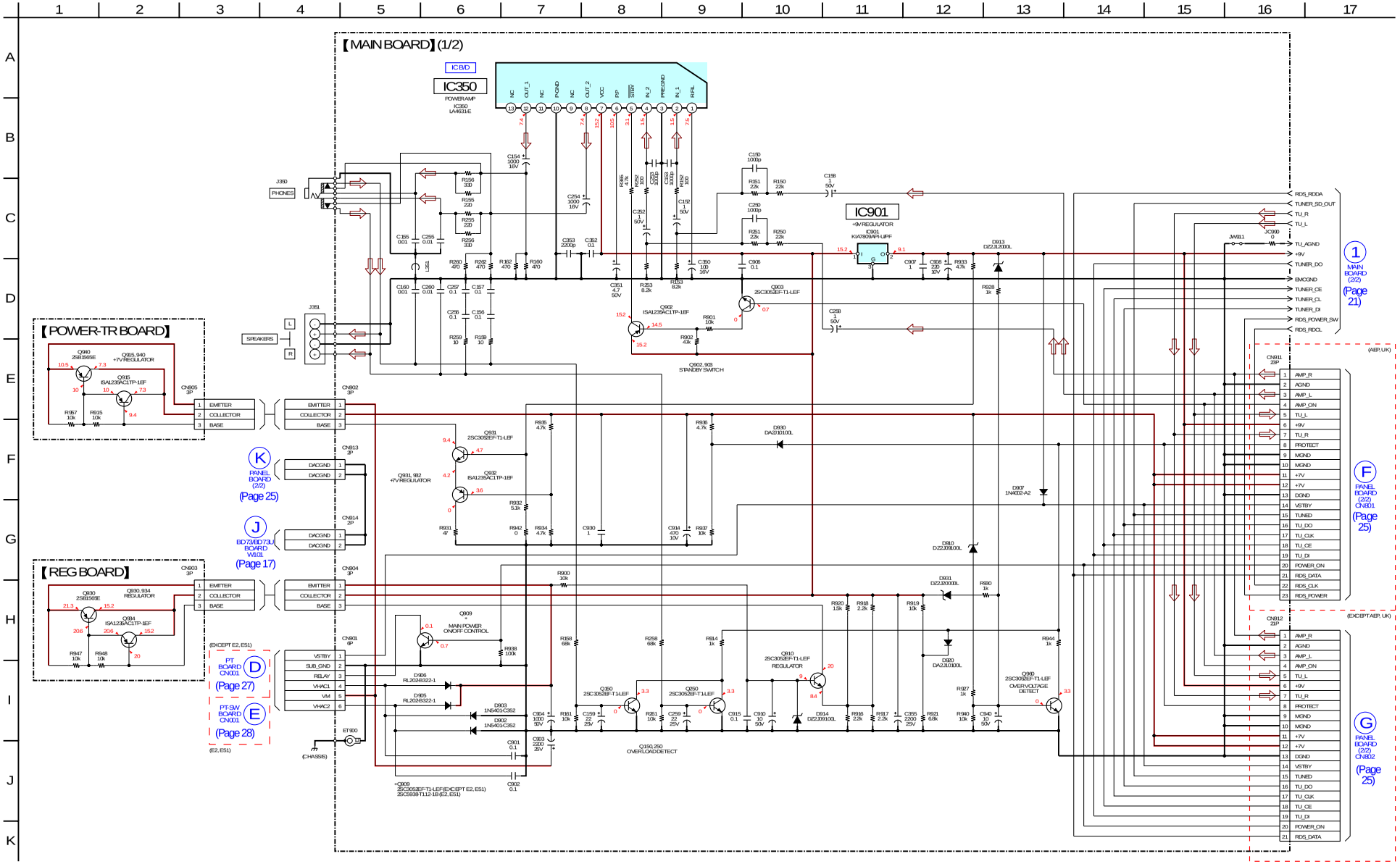
Note: IC101 cannot exchange with single. When this part is damaged, exchange the entire mounted board.

5-6. SCHEMATIC DIAGRAM - USB Board (AEP, E2, E51, MX) - • See page 18 for Waveforms. • See page 33 for IC Pin Function Description.

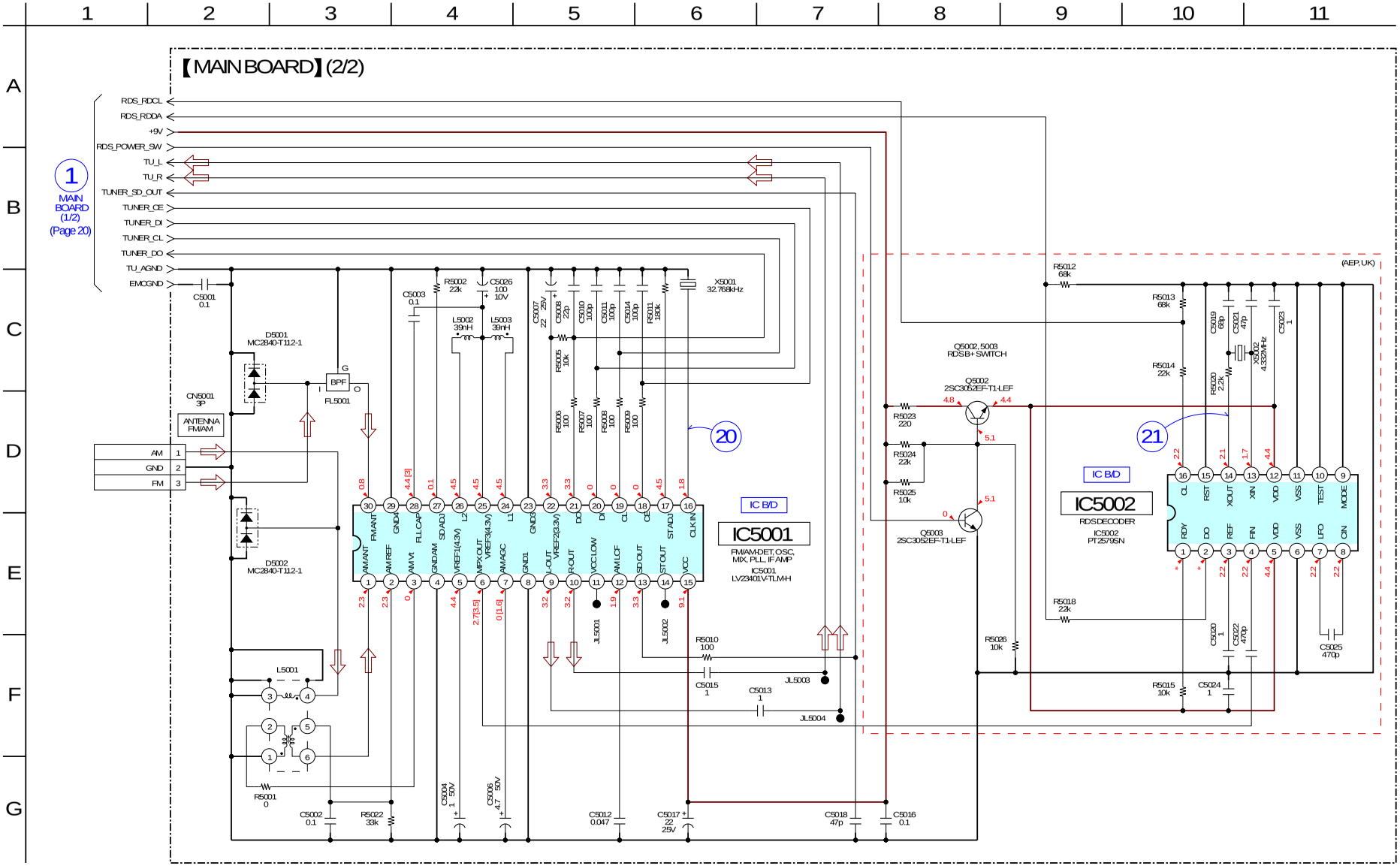


Note: IC101 cannot exchange with single. When this part is damaged, exchange the entire mounted board.

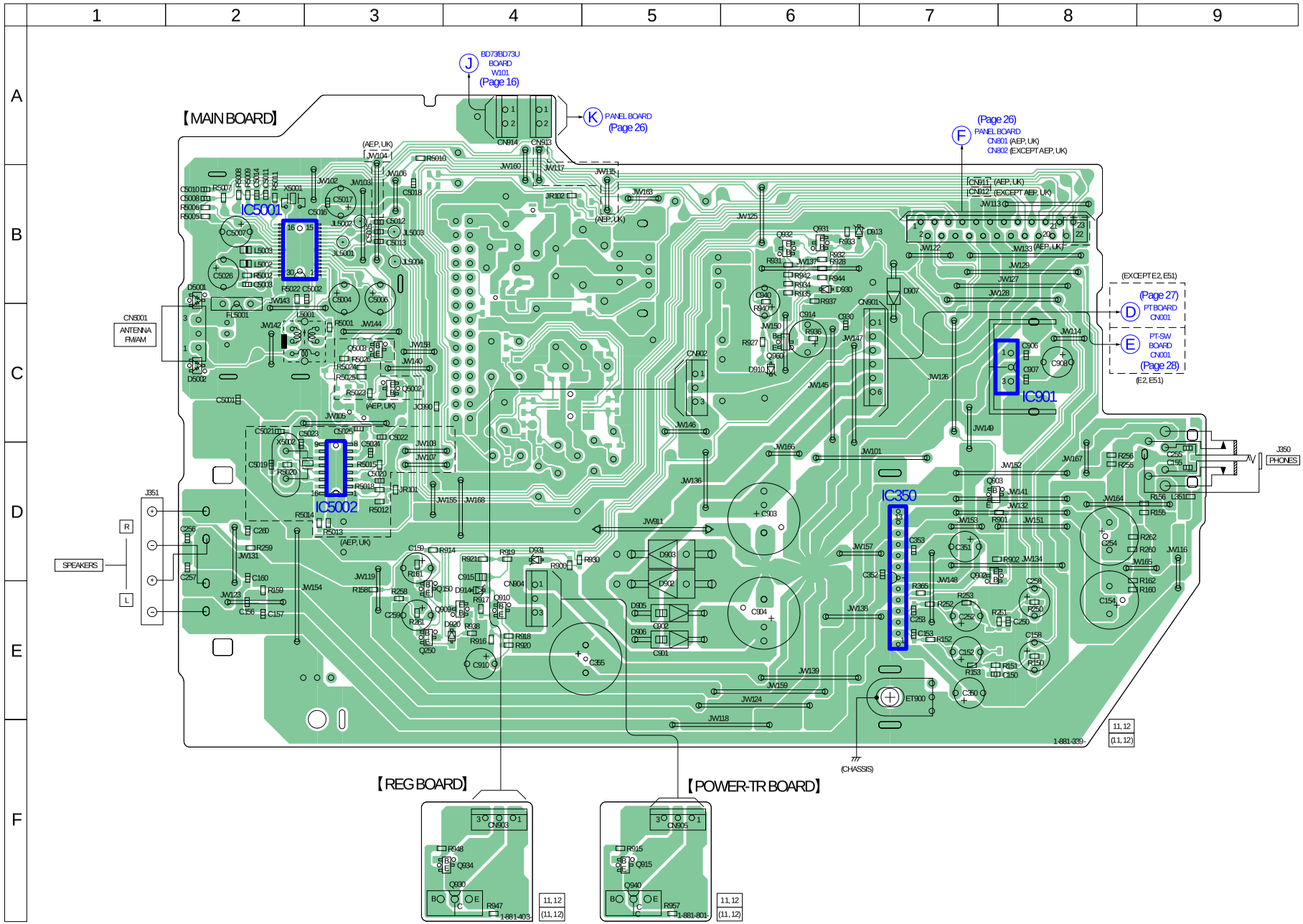
5-7. SCHEMATIC DIAGRAM - MAIN Section (1/2) - • See page 29 for IC Block Diagrams.



5-8. SCHEMATIC DIAGRAM - MAIN Section (2/2) - • See page 18 for Waveforms. • See page 29 for IC Block Diagrams.



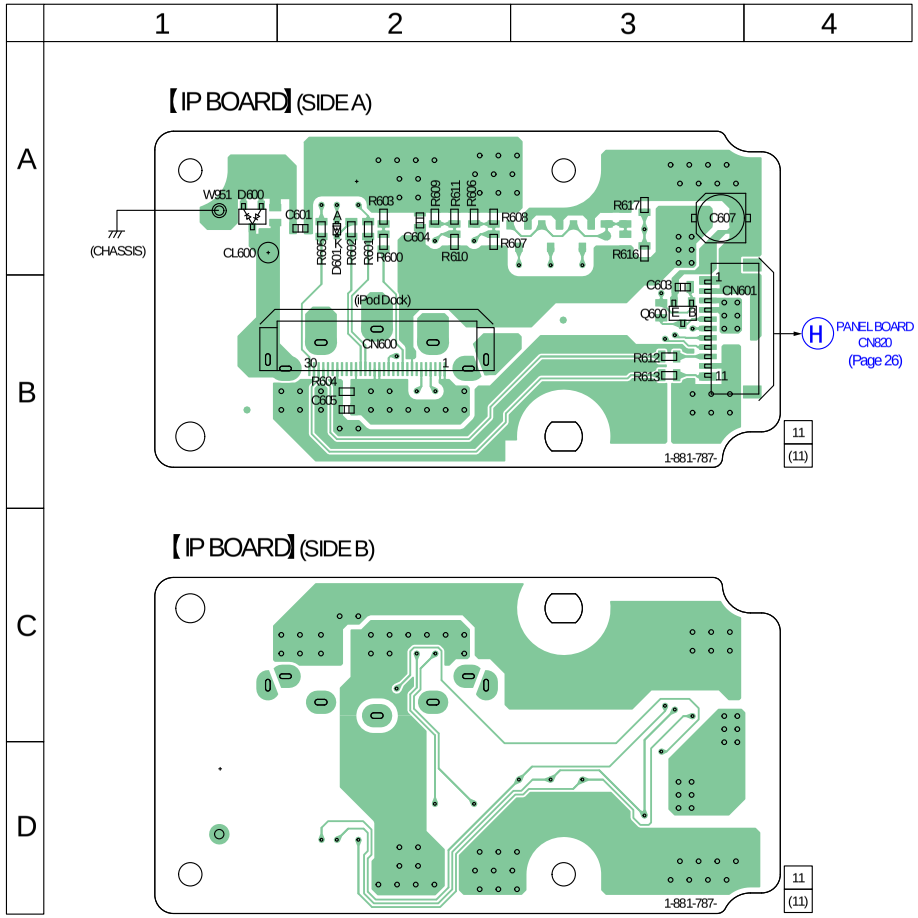
5-9. PRINTED WIRING BOARDS - MAIN Section - • See page 15 for Circuit Boards Location. • : Uses unleaded solder.



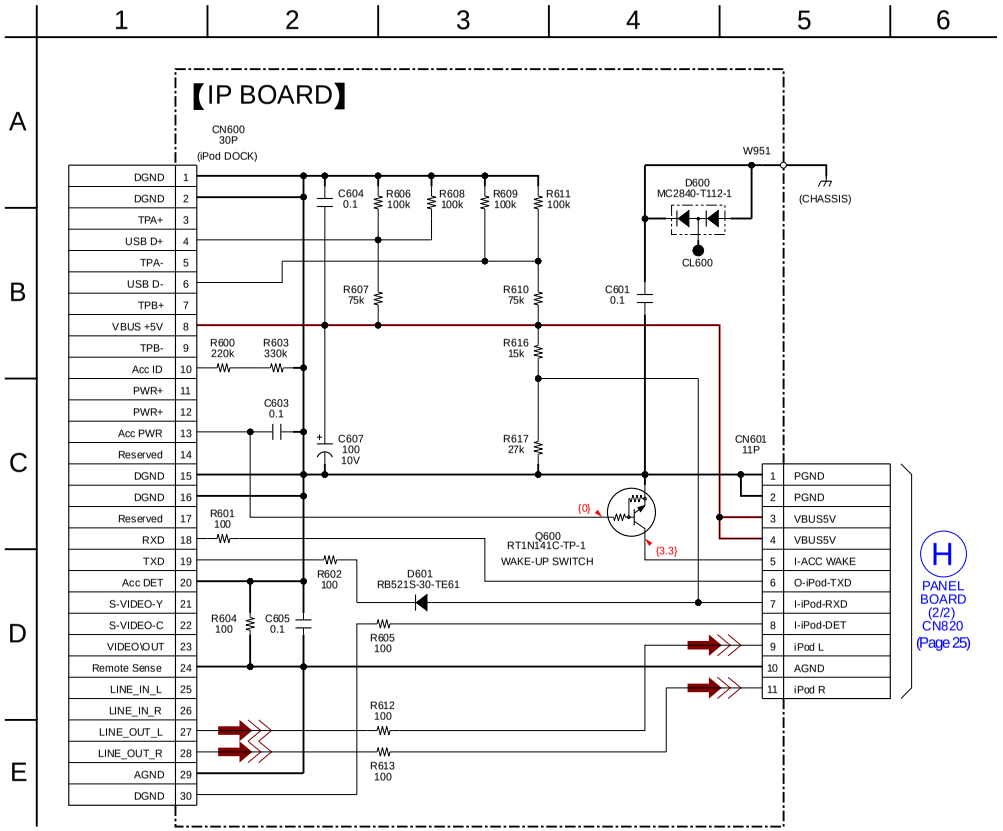
5-10. PRINTED WIRING BOARD - IP Board -

• See page 15 for Circuit Boards Location.

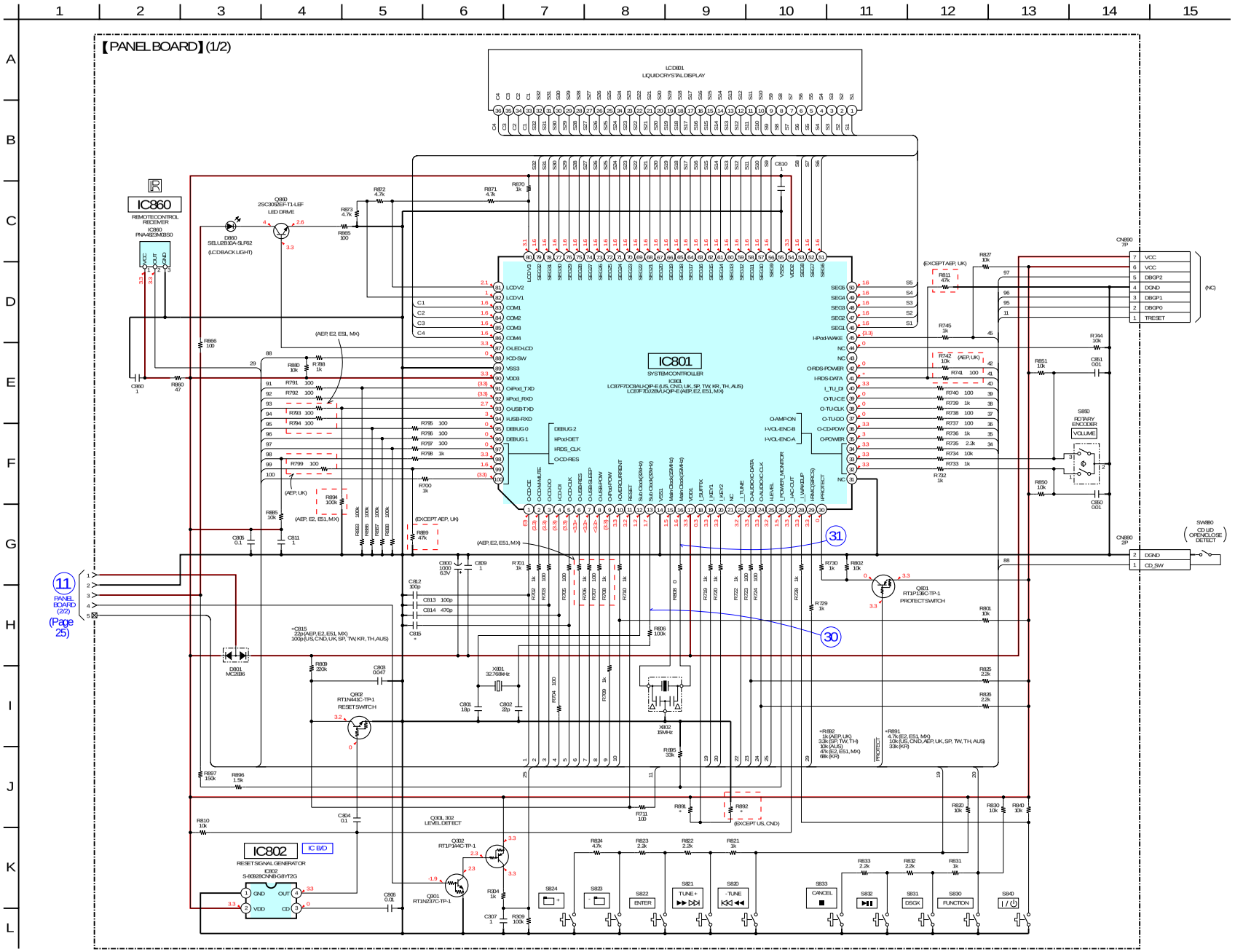
• : Uses unleaded solder.



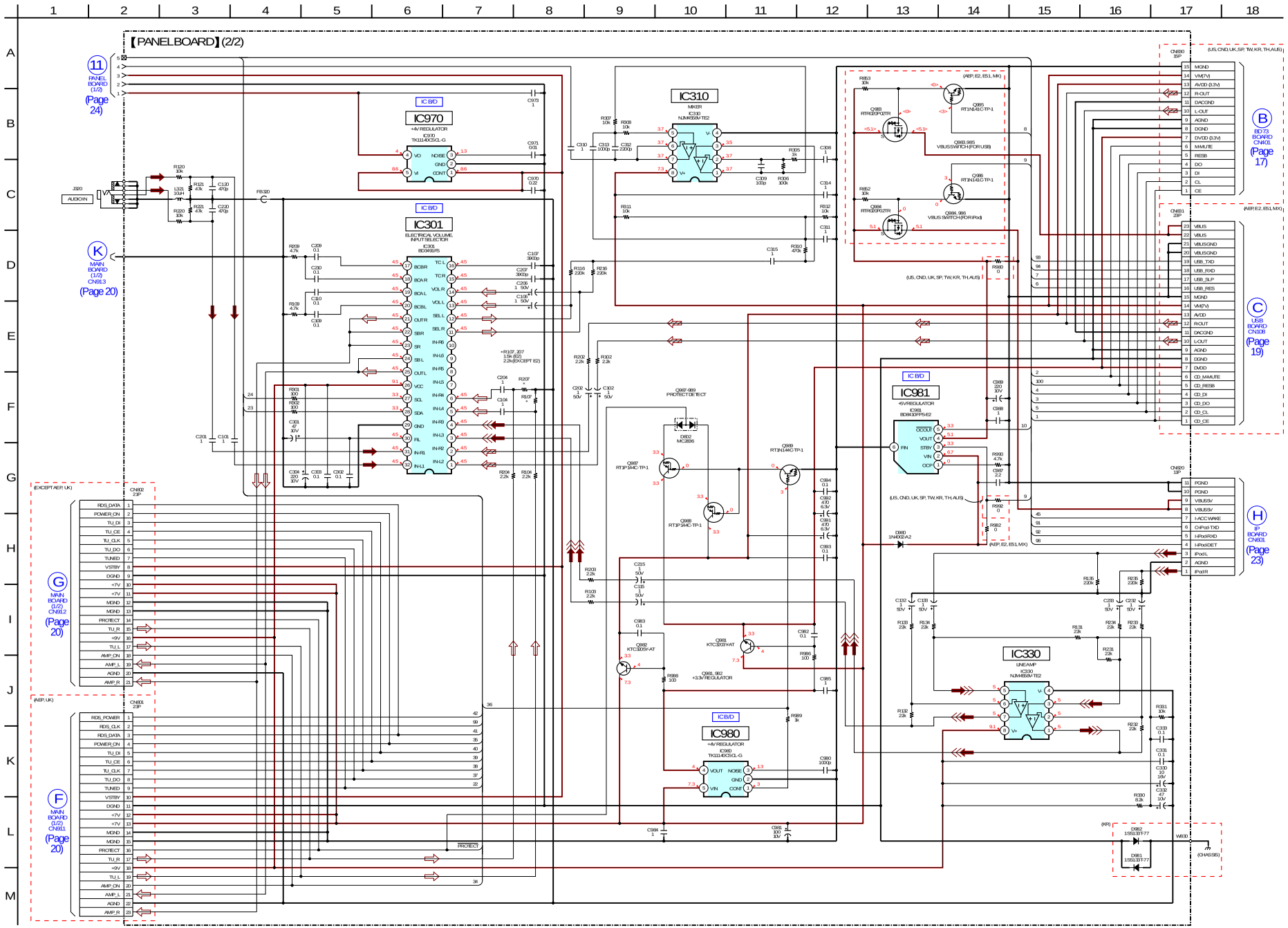
5-11. SCHEMATIC DIAGRAM - IP Board -



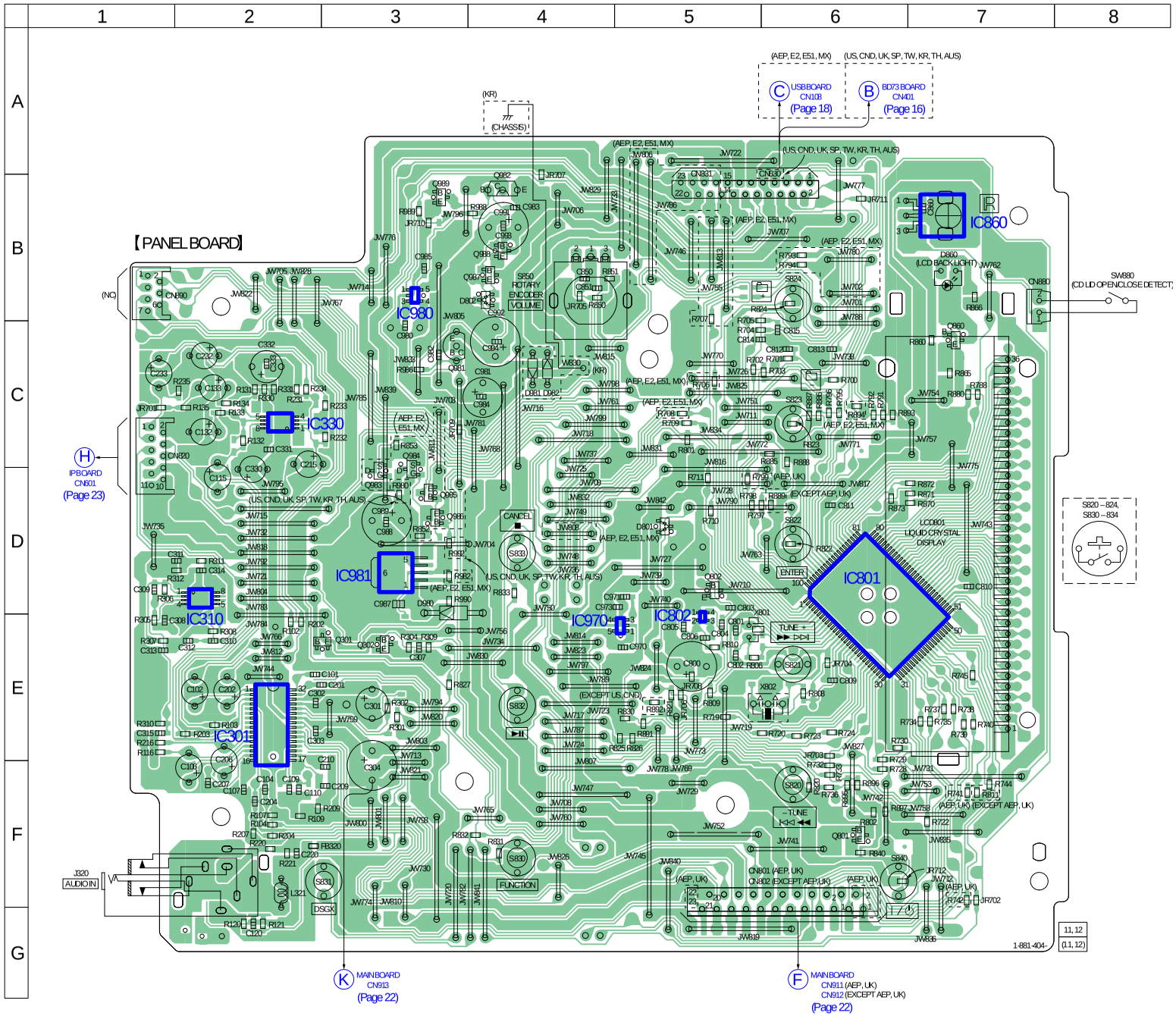
5-12. SCHEMATIC DIAGRAM - PANEL Board (1/2) - • See page 18 for Waveforms. • See page 29 for IC Block Diagrams. • See page 33 for IC Pin Function Description.



5-13. SCHEMATIC DIAGRAM - PANEL Board (2/2) - • See page 29 for IC Block Diagrams.

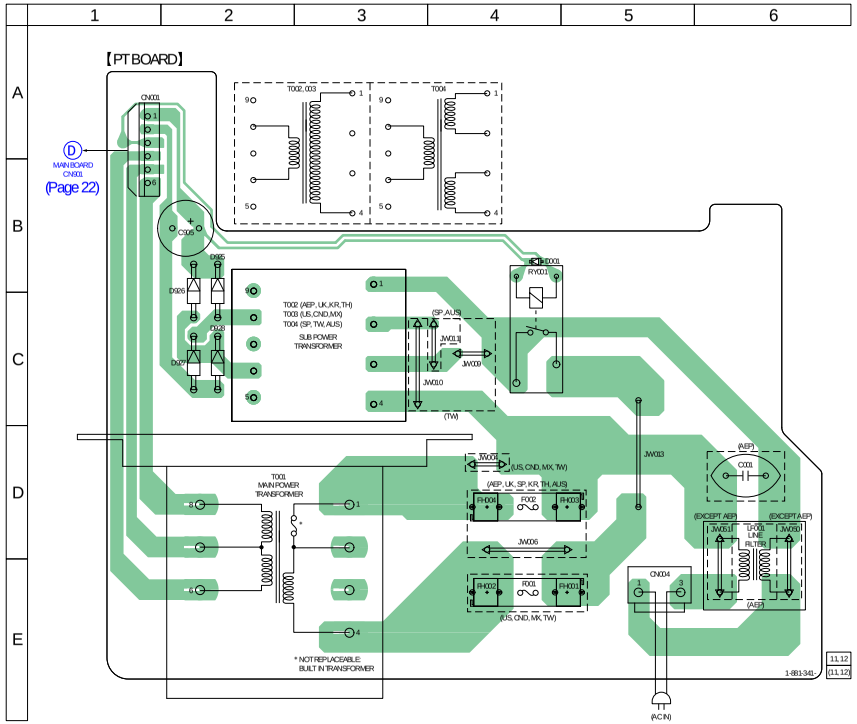


5-14. PRINTED WIRING BOARD - PANEL Board - • See page 15 for Circuit Boards Location. • : Uses unleaded solder.

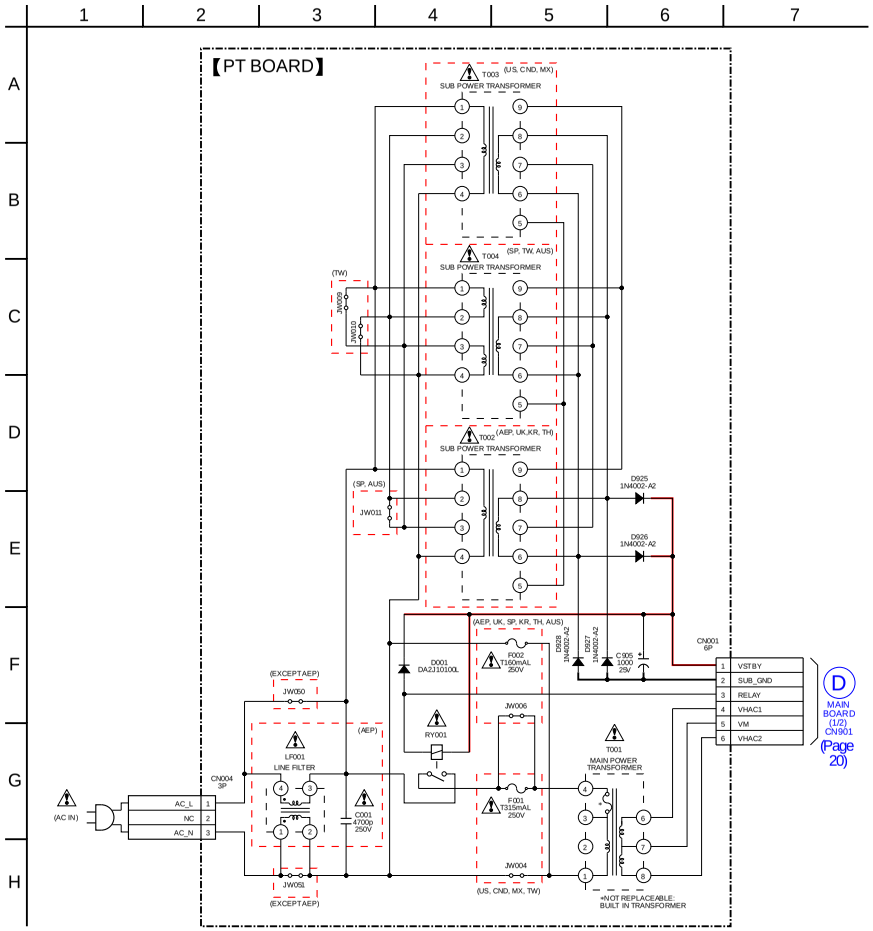


5-15. PRINTED WIRING BOARD - PT Board (Except E2, E51) -

• See page 15 for Circuit Boards Location. • : Uses unleaded solder.

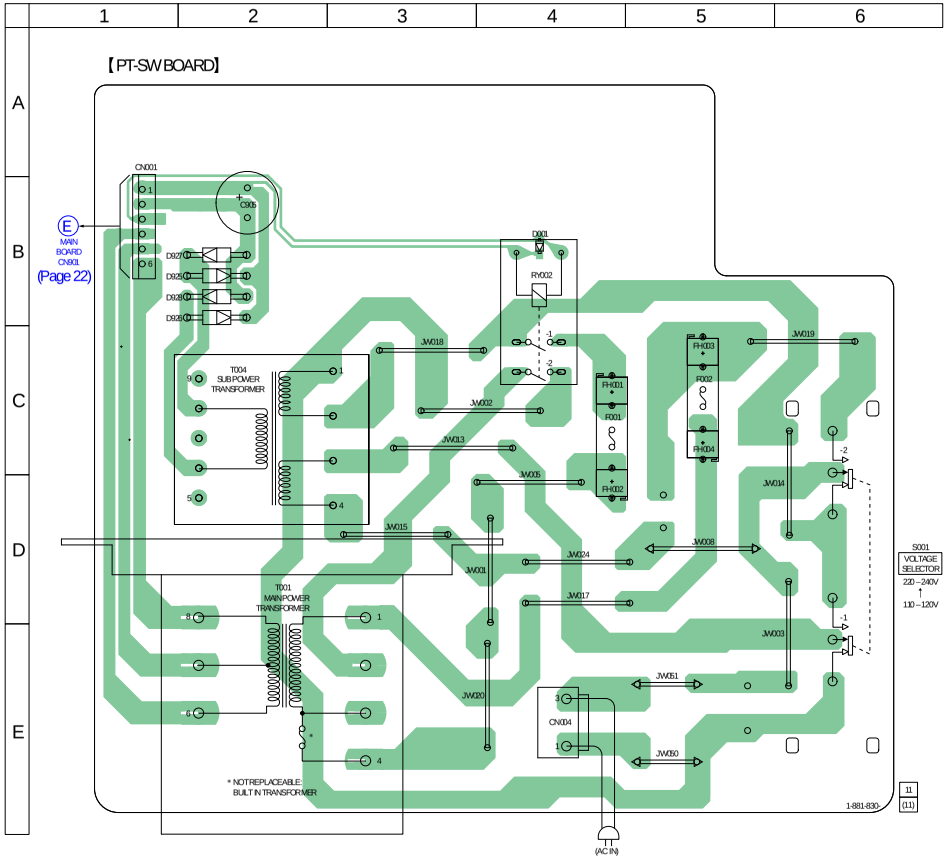


5-16. SCHEMATIC DIAGRAM - PT Board (Except E2, E51) -

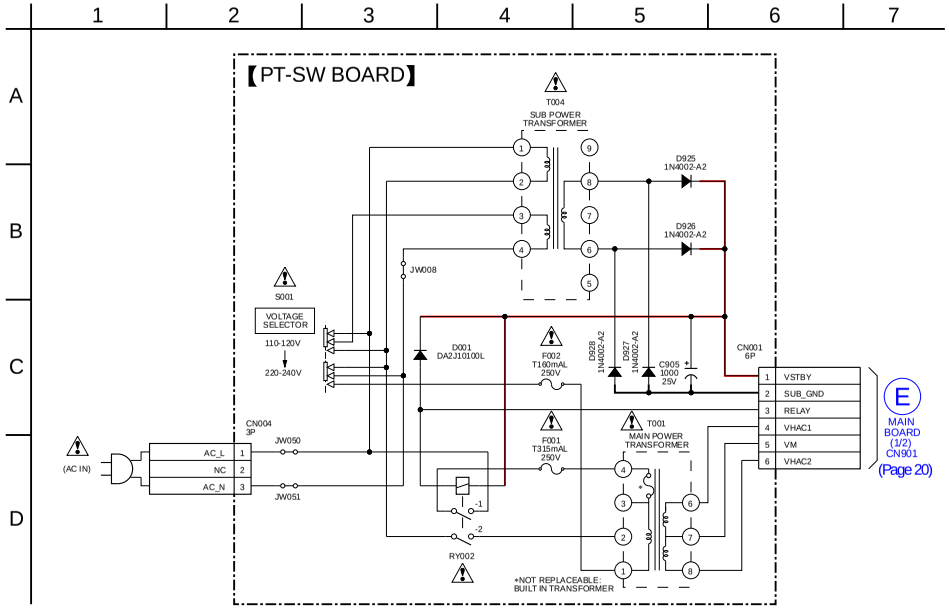


5-17. PRINTED WIRING BOARD - PT-SW Board (E2, E51) -

• See page 15 for Circuit Boards Location. • : Uses unleaded solder.



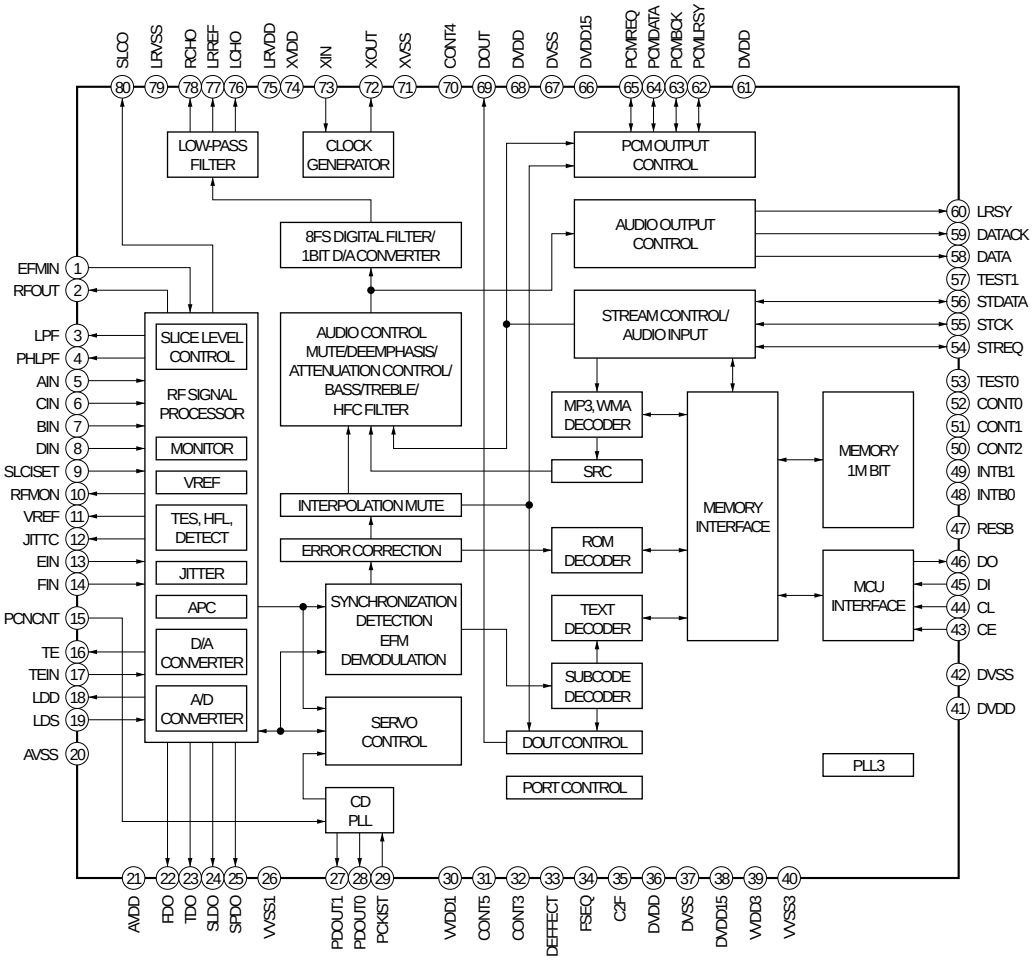
5-18. SCHEMATIC DIAGRAM - PT-SW Board (E2, E51) -



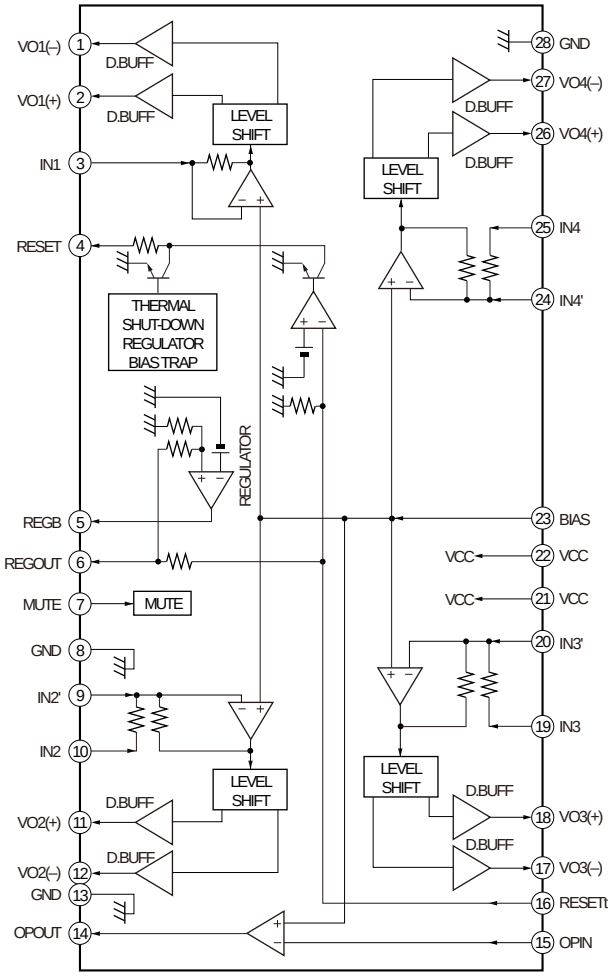
• IC Block Diagrams

– BD73/BD73U Board –

IC101 LC786924NT-US-H

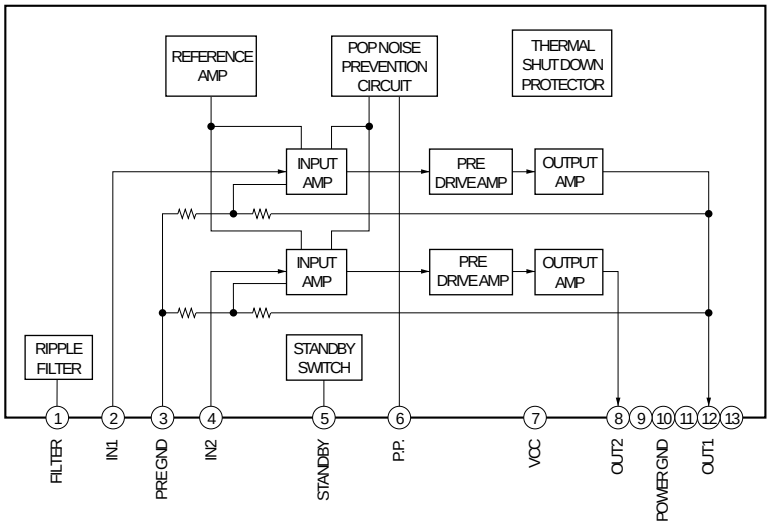


IC301 BA5826HFP-E2

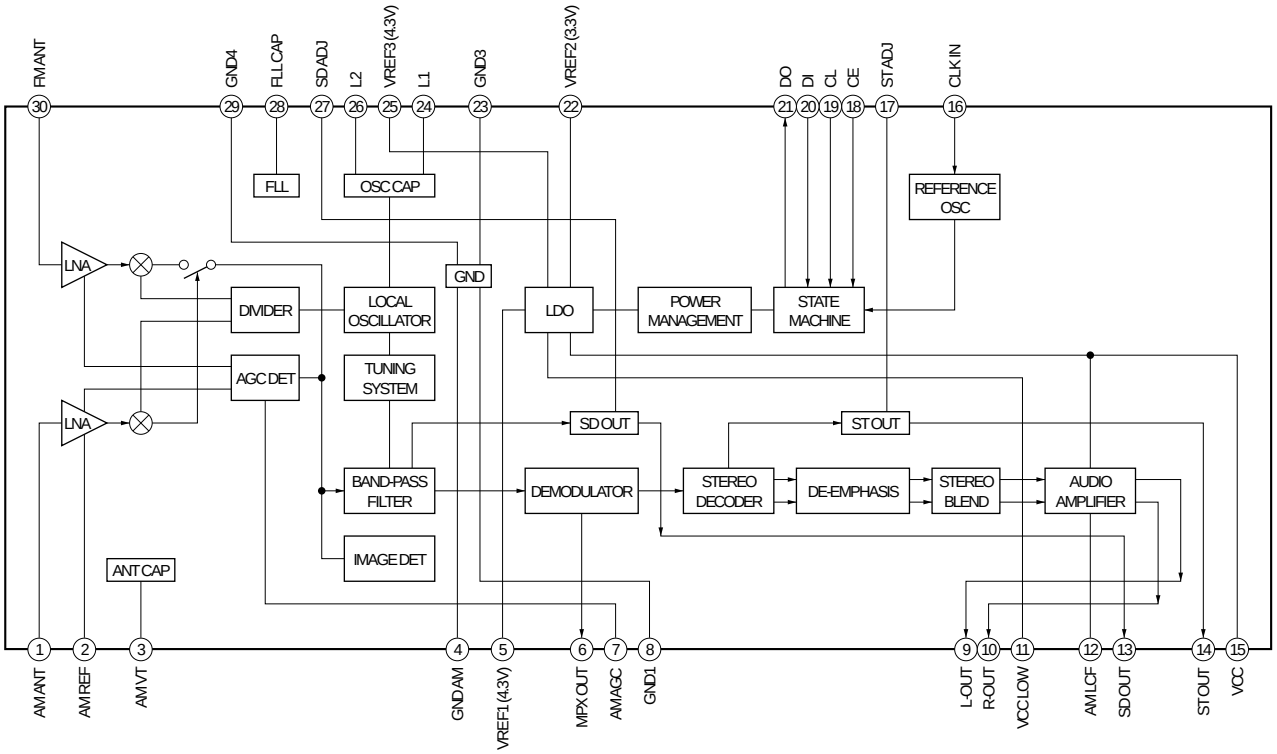


– MAIN Board –

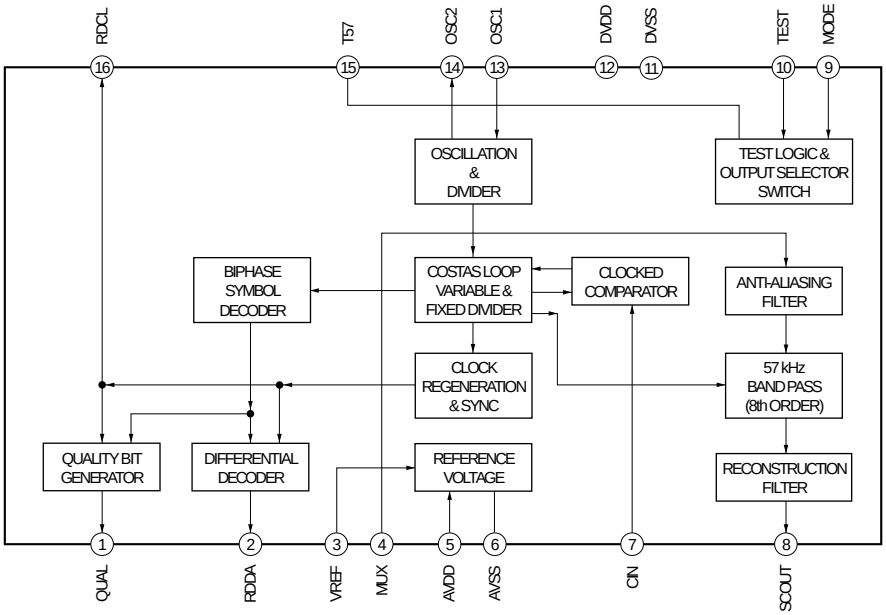
IC350 LA4631-E



IC5001 LV23401V-TLM-H

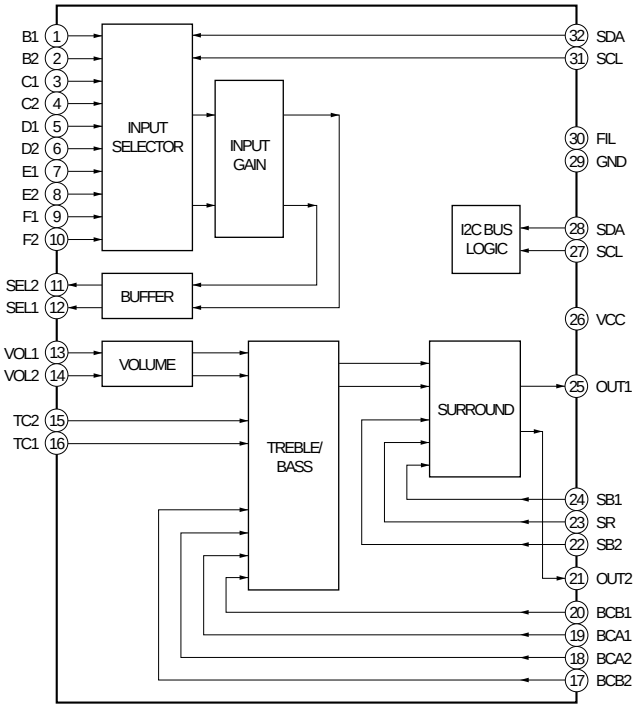


IC5002 PT2579SN

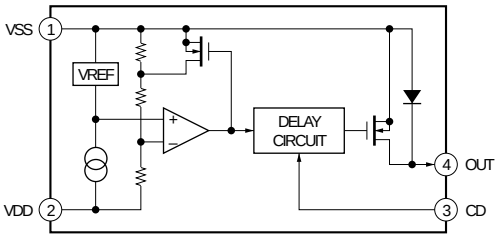


– PANEL Board –

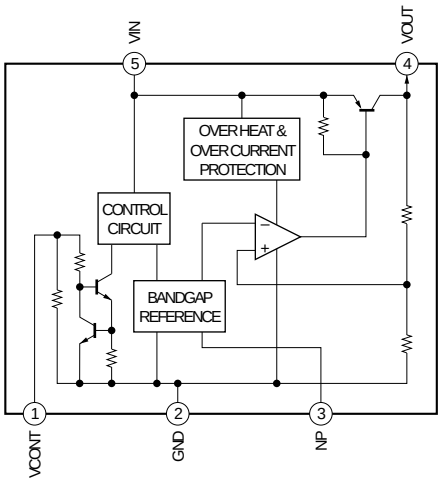
IC301 BD3491FS-SE2



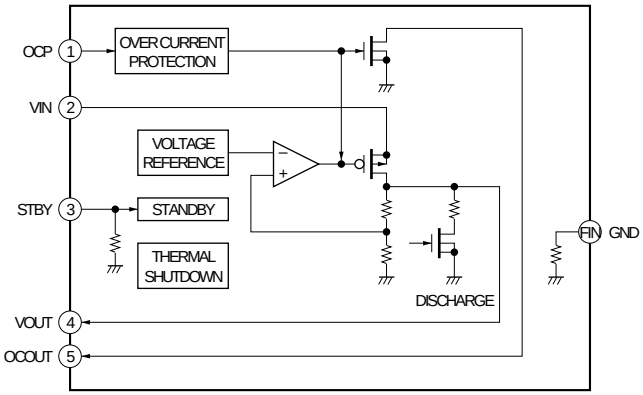
IC802 S-80928CNNB-G8YT2G



IC970, 980 TK11140CSCL-G



IC981 BD8410FPS-E2



• IC Pin Function Description

USB BOARD IC101 LC87F1JJ2AU-SQFP-H (USB CONTROLLER)

Pin No.	Pin Name	I/O	Description
1	P73	I/O	Not used
2	/RES	I	Reset signal input from the system controller "L": reset
3	XT1	I	Sub system clock input terminal (32.768 kHz) Not used
4	XT2	O	Sub system clock output terminal (32.768 kHz) Not used
5	VSS1	-	Ground terminal
6	CF1	I	Main system clock input terminal (12 MHz)
7	CF2	O	Main system clock output terminal (12 MHz)
8	VDD1	-	Power supply terminal (+3.3V)
9	DO	O	Serial data output to the CD-MP3 processor
10	DI	I	Serial data input from the CD-MP3 processor
11	CL	O	Serial data transfer clock signal output to the CD-MP3 processor
12	SO1	O	Serial data output terminal Not used
13	SI1	I	Serial data input terminal Not used
14	SCK1	O	Serial data transfer clock signal output terminal Not used
15	CE	O	Chip enable signal output to the CD-MP3 processor
16	P17	I/O	Not used
17	MCLKI	I	Master clock signal input terminal Not used
18	MCLKO	O	Master clock signal output terminal Not used
19	VDD2	-	Power supply terminal (+3.3V)
20	VSS2	-	Ground terminal
21, 22	P00, P01	I/O	Not used
23 to 25	DBGP0 to DBGP2	-	Debug terminal
26	PCMDATA	I/O	Serial data input/output terminal Not used
27	PCMBCK	I/O	Bit clock signal input/output terminal Not used
28	PCMLRSY	I/O	L/R sampling clock signal input/output terminal Not used
29, 30	P20, P21	I/O	Not used
31	STDATA	O	Audio serial data output to the CD-MP3 processor
32	PCMREQ	I/O	Request signal input/output terminal Not used
33	STCK	O	Audio serial data transfer clock signal output to the CD-MP3 processor
34 to 36	P25 to P27	I/O	Not used
37	D–	I	USB data (–) bus input terminal
38	D+	I	USB data (+) bus input terminal
39	VDD3	-	Power supply terminal (+3.3V)
40	VSS3	-	Ground terminal
41	UFILT	-	PLL filter circuit connection terminal for USB interface
42	AFILT	-	PLL filter circuit connection terminal for audio interface Not used
43	P32	I/O	Not used
44	RXD	I	Serial data input from the system controller
45	TXD	O	Serial data output to the system controller
46	STREQ	I	Request signal input from the CD-MP3 processor
47	USB_SLP	I	Sleep siganl input from the system controller
48	P72	I/O	Not used

PANEL BOARD IC801
LC87F7DC8AU-QIP-E (SYSTEM CONTROLLER)
(US, Canadian, UK, Singapore, Taiwan, Korean, Thai and Australian models)
LC87F7DJ2BVU-QIP-E (SYSTEM CONTROLLER) (AEP, 120V AC area in E, Mexican, Chilean and Peruvian models)

Pin No.	Pin Name	I/O	Description
1	O-CD-CE	O	Chip enable signal output to the CD-MP3 processor
2	O-CD-M-MUTE	O	Muting signal output to the coil/motor driver
3	O-CD-DO	O	Serial data output to the CD-MP3 processor
4	I-CD-DI	I	Serial data input from the CD-MP3 processor
5	O-CD-CLK	O	Serial data transfer clock signal output to the CD-MP3 processor
6	O-USB-RES	O	Reset signal output to the USB controller “L”: reset (AEP, 120V AC area in E, Mexican, Chilean and Peruvian models only)
7	O-USB-SLEEP	O	Sleep signal output to the USB controller (AEP, 120V AC area in E, Mexican, Chilean and Peruvian models only)
8	O-USB-POW	O	USB VBUS +5V power supply on/off control signal output terminal “H”: power on (AEP, 120V AC area in E, Mexican, Chilean and Peruvian models only)
9	O-iPod-POW	O	iPod VBUS +5V power supply on/off control signal output terminal “H”: power on
10	I-OVERCURRENT	I	Over current detection signal input terminal for USB controller power supply
11	RESET	I	System reset signal input from the reset signal generator “L”: reset For several hundreds msec. after the power supply rises, “L” is input, then it change to “H”
12	Sub Clock (32kHz)	I	Sub system clock input terminal (32.768 kHz)
13	Sub Clock (32kHz)	O	Sub system clock output terminal (32.768 kHz)
14	VSS1	-	Ground terminal
15	Main Clock (15kHz)	I	Main system clock input terminal (15 MHz)
16	Main Clock (15kHz)	O	Main system clock output terminal (15 MHz)
17	VDD1	-	Power supply terminal (+3.3V)
18	I_SUFFIX	I	Destination setting terminal
19, 20	I_KEY1, I_KEY2	I	Front panel key input terminal (A/D input)
21	NC	-	Not used
22	_I-TUNE	I	Tuned detection signal input from the FM/AM tuner “L”: tuned
23	O-AUDIO IC-DATA	O	Serial data output to the electrical volume
24	O-AUDIO IC-CLK	O	Serial data transfer clock signal output to the electrical volume
25	I-LEVEL	I	Sound level detection signal input from the electrical volume
26	I_POWER_MONITOR	I	Power supply monitor terminal
27	_I-AC-CUT	I	AC cut detection signal input terminal “L”: AC cut is detected
28	_I-WAKEUP	I	Wake-up signal input terminal by power switch key is pressed “L”: wake-up
29	I-RMC(SIRCS)	I	SIRCS signal input from the remote control receiver
30	I-PROTECT	I	Protect signal input terminal “H”: protect on
31	NC	-	Not used
32	I-VOL-ENC-A	I	Jog dial pulse input from the rotary encoder (A phase input) (for volume)
33	I-VOL-ENC-B	I	Jog dial pulse input from the rotary encoder (B phase input) (for volume)
34	O-AMP-ON	O	Standby signal output to the power amplifier “L”: standby
35	O-POWER	O	System power supply on/off control signal output terminal “H”: power on
36	O-CD-POW	O	CD power supply on/off control signal output terminal “H”: power on
37	O-TU-DO	O	Serial data output to the FM/AM tuner
38	O-TU-CLK	O	Serial data transfer clock signal output to the FM/AM tuner
39	O-TU-CE	O	Chip enable signal output to the FM/AM tuner
40	I-TU-DI	I	Serial data input from the FM/AM tuner
41	I-RDS-DATA	I	RDS serial data input from the RDS decoder (AEP and UK models only)
42	O-RDS-POWER	O	RDS power supply on/off control signal output terminal “H”: power on (AEP and UK models only)
43, 44	NC	-	Not used
45	I-iPod-WAKE	I	Wake-up signal input terminal by iPod is connected “L”: wake-up
46 to 53	SEG1 to SEG8	O	Segment drive signal output to the liquid crystal display
54	VDD2	-	Power supply terminal (+3.3V)
55	VSS2	-	Ground terminal
56 to 79	SEG9 to SEG32	O	Segment drive signal output to the liquid crystal display
80 to 82	LCD V3 to LCD V1	I	Liquid crystal display drive voltage setting terminal
83 to 86	COM1 to COM4	O	Common drive signal output to the liquid crystal display
87	O-LED-LCD	O	LED drive signal output terminal for liquid crystal display backlight “H”: LED on
88	I-CD-SW	I	CD lid open/close detection switch input terminal “L”: CD lid is opened
89	VSS3	-	Ground terminal

Pin No.	Pin Name	I/O	Description
90	VDD3	-	Power supply terminal (+3.3V)
91	O-iPod_TXD	O	Serial data output to the iPod
92	I-iPod_RXD	I	Serial data input from the iPod
93	O-USB_TXD	O	Serial data output to the USB controller (AEP, 120V AC area in E, Mexican, Chilean and Peruvian models only)
94	I-USB_RXD	I	Serial data input from the USB controller (AEP, 120V AC area in E, Mexican, Chilean and Peruvian models only)
95 to 97	DEBUG 0 to DEBUG 2	-	Debug terminal
98	i-iPod-DET	I	iPod detection signal input terminal “H”: iPod is connected
99	I-RDS-CLK	I	RDS serial data transfer clock signal input from the RDS decoder (AEP and UK models only)
100	O-CD-RES	O	Reset signal output to the CD-MP3 processor “L”: reset

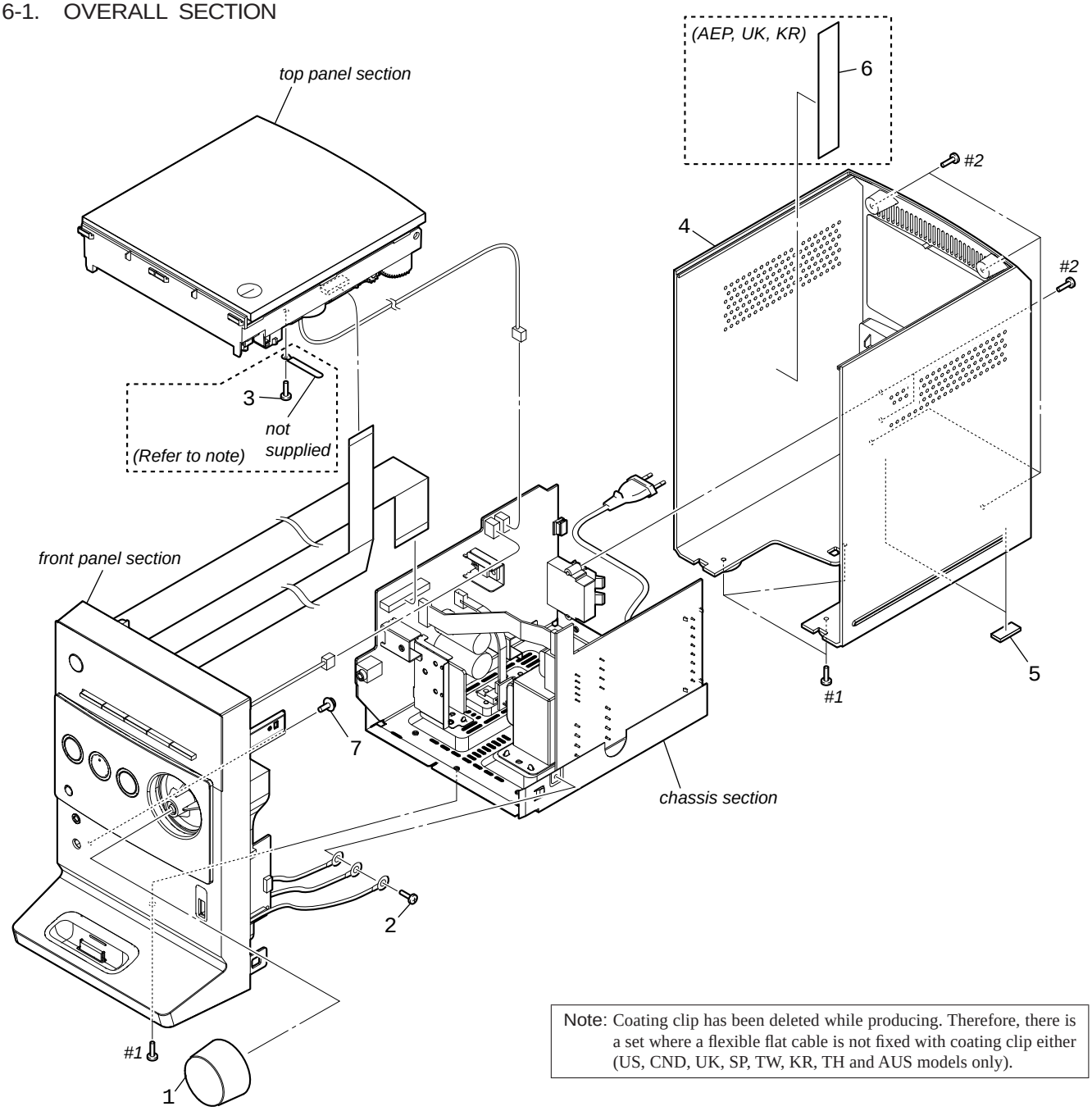
SECTION 6
EXPLODED VIEWS

Note:
- -XX and -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.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Color Indication of Appearance Parts Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Abbreviation
  AUS : Australian model
  CND : Canadian model
  E2 : 120V AC area in E model
  E51 : Chilean and Peruvian models
  KR : Korean model
  MX : Mexican model
  SP : Singapore model
  TH : Thai model
  TW : Taiwan model

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

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

6-1. OVERALL SECTION

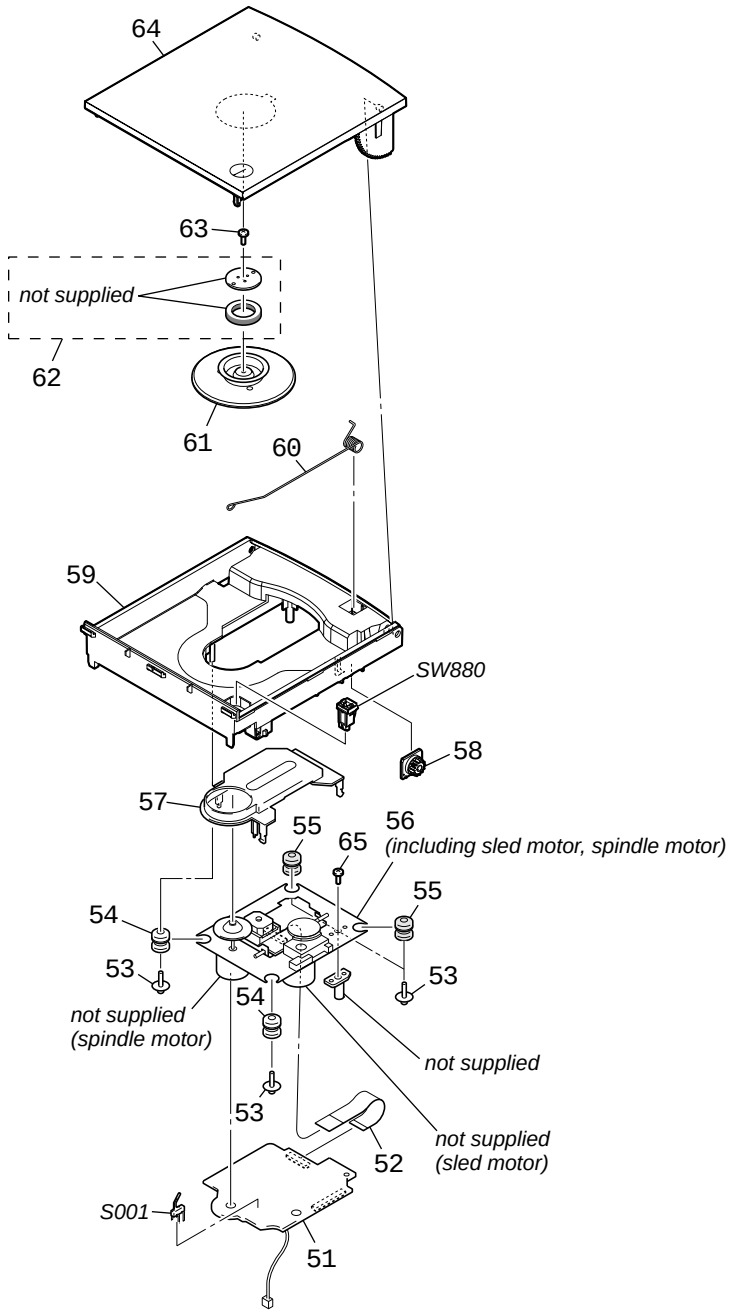


Note: Coating clip has been deleted while producing. Therefore, there is a set where a flexible flat cable is not fixed with coating clip either (US, CND, UK, SP, TW, KR, TH and AUS models only).

Ref. No.	Part No.	Description	Remark
1	4-171-957-01	KNOB (VOL)	
2	3-077-331-21	+BV3 (3-CR)	
3	3-087-053-01	+BVTP2.6 (3CR)	
4	4-171-952-01	PANEL (REAR) (CND)	
4	4-171-952-11	PANEL (REAR) (US)	
4	4-171-952-21	PANEL (REAR) (AEP, UK, SP, TW, KR, TH, AUS)	
4	4-171-952-41	PANEL (REAR) (MX)	

Ref. No.	Part No.	Description	Remark
4	4-171-952-51	PANEL (REAR) (E2, E51)	
5	3-198-753-11	FOOT (FELT)	
6	4-191-085-01	SHEET, COPPER (AEP, UK, KR)	
7	4-985-672-01	SCREW (+PTPWH M2.6), FLOATING	
#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
#2	7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3	

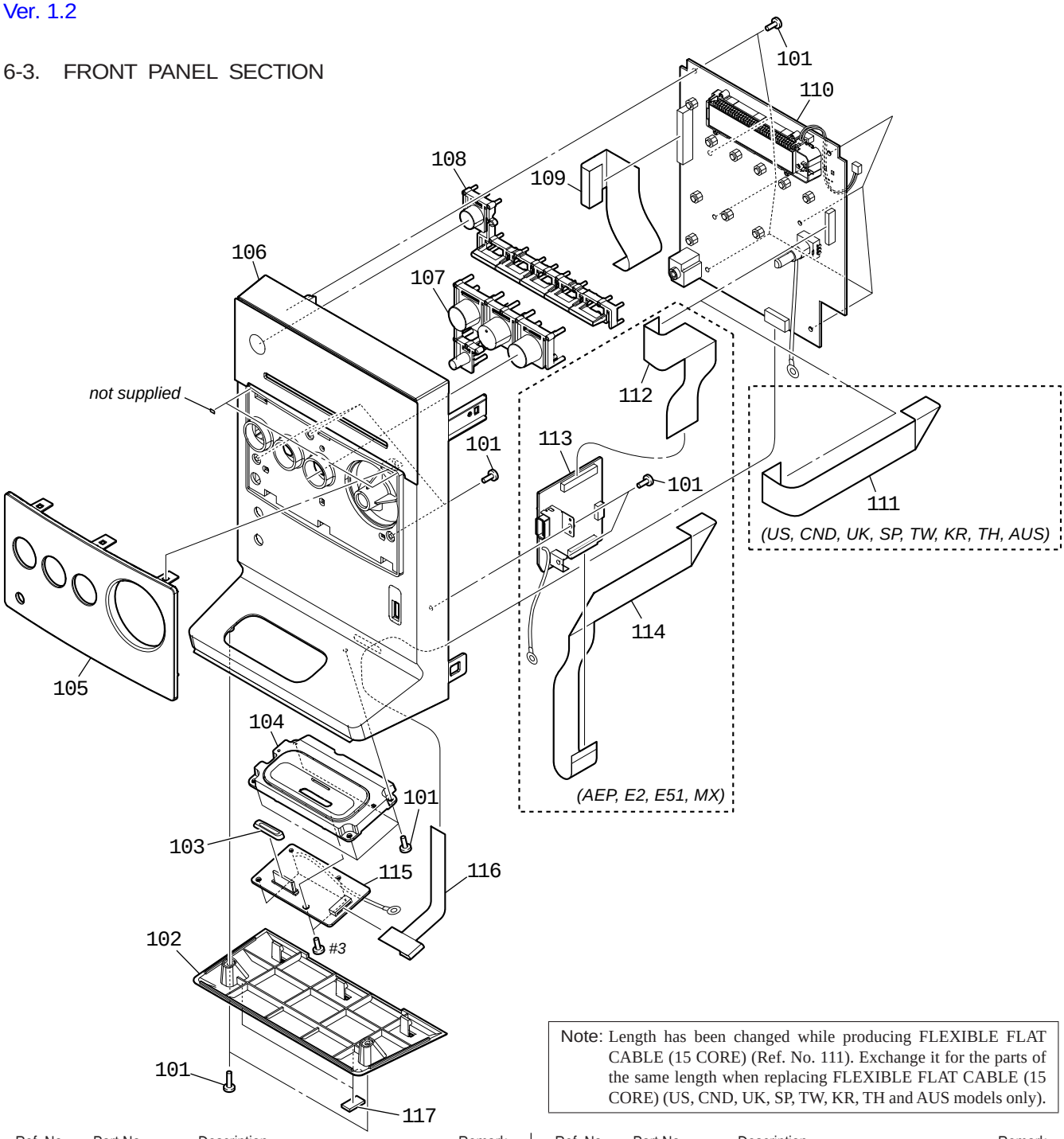
6-2. TOP PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	A-1748-697-A	BD73 BOARD, COMPLETE (US, CND, UK, SP, TW, KR, TH, AUS)	
51	A-1748-698-A	BD73U BOARD, COMPLETE (AEP, E2, E51, MX)	
52	1-834-268-21	WIRE (FLAT TYPE) (16 CORE)	
53	4-985-672-01	SCREW (+PTPWH M2.6), FLOATING	
54	3-931-379-31	RUBBER, VIBRATION PROOF (GREEN)	
55	3-931-379-21	RUBBER, VIBRATION PROOF (RED)	
⚠ 56	A-1780-028-A	OPTICAL PICK-UP BLOCK (DA11MMVGP) (Including sled motor, spindle motor)	
57	4-166-010-01	COVER (D1)	
58	4-232-238-01	DAMPER	
59	4-171-954-11	PANEL (TOP)	

Ref. No.	Part No.	Description	Remark
60	4-171-965-01	SPRING CD	
61	4-161-552-01	PULLEY, CHUCKING (D1)	
62	1-452-899-31	MAGNET	
63	3-253-143-01	SCREW (B2.6), (+) P TAPPING	
64	4-171-955-11	LID CD (US)	
64	4-171-955-21	LID CD (EXCEPT US)	
65	3-080-204-31	SCREW, TAPPING, P2	
S001	1-771-853-11	SWITCH, DETECTION (LIMIT)	
SW880	1-692-960-11	SWITCH, PUSH (1 KEY) (CD LID OPEN/CLOSE DETECT)	

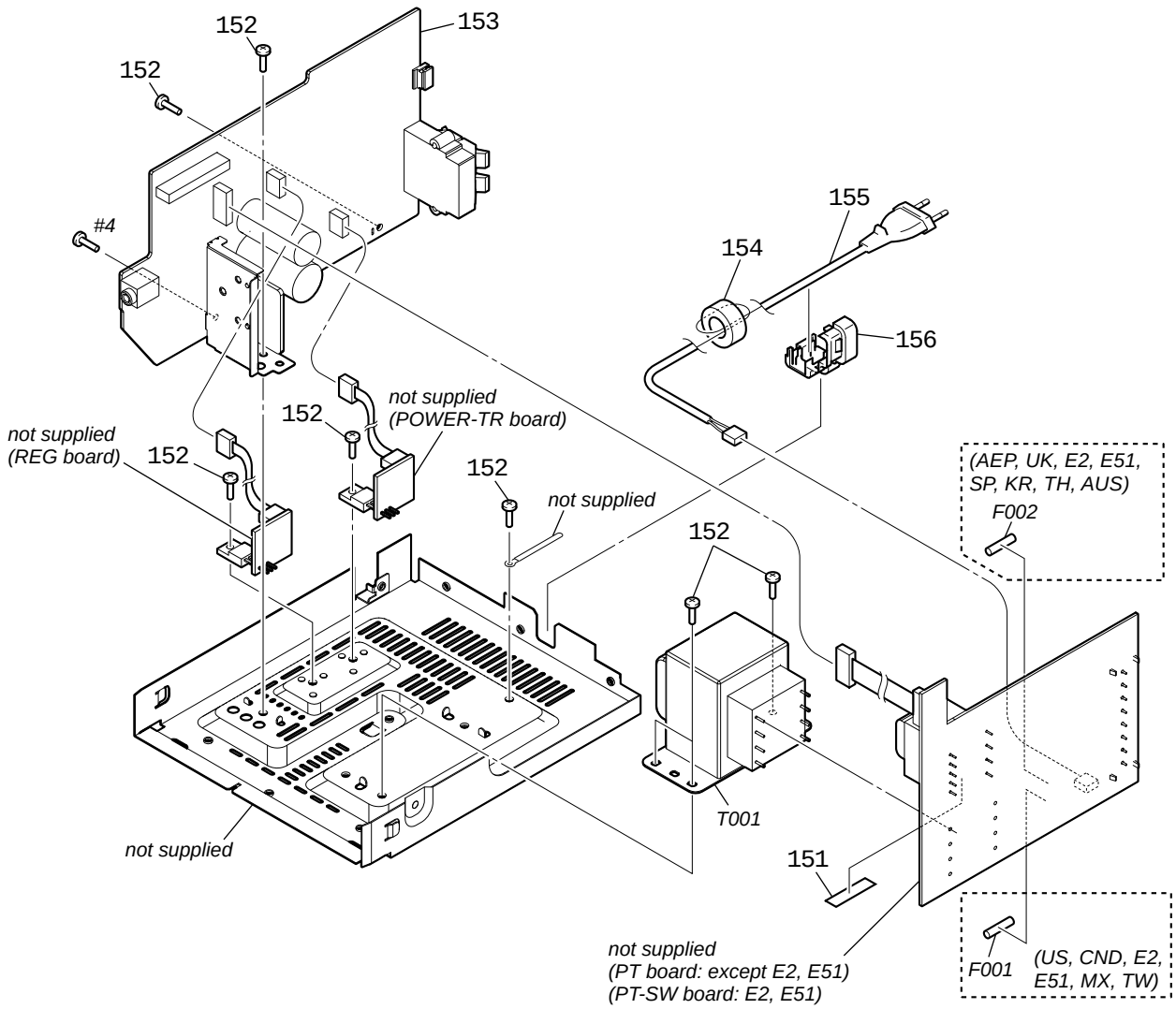
6-3. FRONT PANEL SECTION



Note: Length has been changed while producing FLEXIBLE FLAT CABLE (15 CORE) (Ref. No. 111). Exchange it for the parts of the same length when replacing FLEXIBLE FLAT CABLE (15 CORE) (US, CND, UK, SP, TW, KR, TH and AUS models only).

Ref. No.	Part No.	Description	Remark
101	3-087-053-01	+BVTP2.6 (3CR)	
102	4-171-960-01	STAGE (BOTTOM)	
103	3-277-576-01	ESCUTCHEON	
104	X-2547-707-1	IP ASSY	
105	4-171-953-01	PLATE (FRONT) (US, CND, UK, SP, TW, KR, TH, AUS)	
105	4-171-953-11	PLATE (FRONT) (AEP, E2, E51, MX)	
106	X-2547-706-1	FRONT ASSY (US)	
106	X-2547-712-1	FRONT ASSY (CND, UK, SP, TW, KR, TH, AUS)	
106	X-2547-713-1	FRONT ASSY (AEP)	
106	X-2547-714-1	FRONT ASSY (E2, E51, MX)	
107	4-171-958-01	BUTTON (FUNCTION) (FUNCTION, ▶II, ■) (US, CND, UK, SP, TW, KR, TH, AUS)	
107	4-171-958-11	BUTTON (FUNCTION) (FUNCTION, ▶II, ■) (AEP, E2, E51, MX)	
108	4-171-959-01	BUTTON (POWER) (I/⏻)	
109	1-832-876-21	CABLE, FLEXIBLE FLAT (21 CORE) (EXCEPT AEP, UK)	
109	1-832-886-21	CABLE, FLEXIBLE FLAT (23 CORE) (AEP, UK)	
110	A-1749-746-A	PANEL BOARD, COMPLETE (US, CND)	
110	A-1749-747-A	PANEL BOARD, COMPLETE (AUS)	
110	A-1749-748-A	PANEL BOARD, COMPLETE (SP, TW, TH)	
110	A-1749-749-A	PANEL BOARD, COMPLETE (AEP)	
110	A-1749-750-A	PANEL BOARD, COMPLETE (E51, MX)	
110	A-1765-489-A	PANEL BOARD, COMPLETE (KR)	
110	A-1765-490-A	PANEL BOARD, COMPLETE (UK)	
110	A-1771-584-A	PANEL BOARD, COMPLETE (E2)	
111	1-832-587-21	CABLE, FLEXIBLE FLAT (15 CORE) (length: 200 mm) (Former) (US, CND, UK, SP, TW, KR, TH, AUS)	
111	1-838-301-21	CABLE, FLEXIBLE FLAT (15 CORE) (length: 185 mm) (New) (US, CND, UK, SP, TW, KR, TH, AUS)	
112	1-832-626-21	CABLE, FLEXIBLE FLAT (23 CORE) (AEP, E2, E51, MX)	
113	A-1754-831-A	USB BOARD, COMPLETE (AEP, E2, E51, MX)	
114	1-837-819-21	CABLE, FLEXIBLE FLAT (19 CORE) (AEP, E2, E51, MX)	
115	A-1765-911-A	IP BOARD, COMPLETE	
116	1-832-566-21	CABLE, FLEXIBLE FLAT (11 CORE)	
117	4-186-795-01	FOOT (FELT)	
#3	7-685-504-19	SCREW +BTP 2X6 TYPE2 N-S	

6-4. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark
151	4-178-707-01	CUSHION (SUB TRANS)	
152	3-077-331-21	+BV3 (3-CR)	
153	A-1749-735-A	MAIN BOARD, COMPLETE (AEP, UK)	
153	A-1749-736-A	MAIN BOARD, COMPLETE (US, CND, MX, SP, TW, TH, AUS)	
153	A-1765-499-A	MAIN BOARD, COMPLETE (E2, E51)	
153	A-1766-840-A	MAIN BOARD, COMPLETE (KR)	
154	1-500-868-11	CORE, FERRITE	
⚠ 155	1-834-288-12	CORD, POWER (TH)	
⚠ 155	1-834-966-41	POWER-SUPPLY CORD (AEP, E2, E51, SP)	
⚠ 155	1-835-068-21	CORD, POWER (AUS)	
⚠ 155	1-837-308-11	CORD, POWER-SUPPLY (US, CND)	
⚠ 155	1-837-309-21	CORD, POWER (UK)	
⚠ 155	1-837-311-21	CORD, POWER-SUPPLY (KR)	
⚠ 155	1-837-344-11	CORD, POWER-SUPPLY (MX)	

Ref. No.	Part No.	Description	Remark
⚠ 155	1-837-345-11	CORD, POWER-SUPPLY (TW)	
156	3-703-244-00	BUSHING (2104), CORD (EXCEPT TH)	
156	4-916-783-01	BUSHING, CORD (TH)	
⚠ F001	1-532-467-33	FUSE (T315mAL/250V) (US, CND, E2, E51, MX, TW)	
⚠ F002	1-523-156-31	FUSE (T160mAL/250V) (AEP, UK, E2, E51, SP, KR, TH, AUS)	
⚠ T001	1-445-858-11	TRANSFORMER, POWER (AEP, UK)	
⚠ T001	1-445-859-11	TRANSFORMER, POWER (US, CND, MX)	
⚠ T001	1-445-860-11	TRANSFORMER, POWER (SP, AUS)	
⚠ T001	1-445-861-11	TRANSFORMER, POWER (KR, TH)	
⚠ T001	1-445-862-11	TRANSFORMER, POWER (TW)	
⚠ T001	1-445-863-11	TRANSFORMER, POWER (E2, E51)	
#4	7-685-646-71	SCREW +BVTP 3X8 TYPE2 IT-3	

SECTION 7
ELECTRICAL PARTS LIST

Note:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- 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
- CAPACITORS
  uF: µF
- COILS
  uH: µH
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA. . : µA. . , uPA. . , µPA. . ,
  uPB. . : µPB. . , uPC. . , µPC. . ,
  uPD. . : µPD. .
- Abbreviation
  AUS : Australian model
  CND : Canadian model
  E2 : 120V AC area in E model
  E51 : Chilean and Peruvian models
  KR : Korean model
  MX : Mexican model
  SP : Singapore model
  TH : Thai model
  TW : Taiwan model

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

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

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

Ref. No.	Part No.	Description			Remark
	A-1748-697-A	BD73 BOARD, COMPLETE (US, CND, UK, SP, TW, KR, TH, AUS)			
	A-1748-698-A	BD73U BOARD, COMPLETE (AEP, E2, E51, MX)			
		**********			
		< CAPACITOR >			
C101	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C102	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C103	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C104	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C105	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C106	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C107	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C108	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C110	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C111	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C112	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C113	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C116	1-128-995-21	ELECT CHIP	100uF	20%	10V
C117	1-100-756-91	CERAMIC CHIP	0.047uF	10%	50V
C118	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C119	1-128-995-21	ELECT CHIP	100uF	20%	10V
C120	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C121	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C122	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C123	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C124	1-128-995-21	ELECT CHIP	100uF	20%	10V
C125	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C126	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C127	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C128	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C129	1-128-995-21	ELECT CHIP	100uF	20%	10V
C130	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C131	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C132	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C133	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C136	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C201	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C203	1-137-710-91	CERAMIC CHIP	10uF	20%	6.3V
C205	1-137-710-91	CERAMIC CHIP	10uF	20%	6.3V
C206	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C207	1-128-995-21	ELECT CHIP	100uF	20%	10V
C208	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C209	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C301	1-128-394-11	ELECT CHIP	220uF	20%	10V
C302	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C303	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C304	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C401	1-128-995-21	ELECT CHIP	100uF	20%	10V
C402	1-128-995-21	ELECT CHIP	100uF	20%	10V
C403	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C404	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C408	1-164-315-11	CERAMIC CHIP	470PF	5%	50V (AEP, E2, E51, MX)
C409	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C410	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C413	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C414	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
		< CONNECTOR >			
CN201	1-770-425-51	CONNECTOR, FFC/FPC 16P			
CN401	1-784-867-51	CONNECTOR, FFC (LIF (NON-ZIF)) 15P (US, CND, UK, SP, TW, KR, TH, AUS)			
CN402	1-784-871-51	CONNECTOR, FFC (LIF (NON-ZIF)) 19P (AEP, E2, E51, MX)			
		< IC >			
IC101	6-714-785-01	IC LC786924NT-US-H			
IC301	6-710-637-01	IC BA5826HFP-E2			
		< TRANSISTOR >			
Q201	6-551-120-01	TRANSISTOR	2SA2119K		
		< RESISTOR >			
R101	1-216-815-11	METAL CHIP	330	5%	1/10W
R102	1-216-833-11	METAL CHIP	10K	5%	1/10W
R103	1-216-864-11	SHORT CHIP	0		
R104	1-216-864-11	SHORT CHIP	0		
R105	1-216-864-11	SHORT CHIP	0		
R106	1-216-864-11	SHORT CHIP	0		
R107	1-216-843-11	METAL CHIP	68K	5%	1/10W
R108	1-216-821-11	METAL CHIP	1K	5%	1/10W
R109	1-216-821-11	METAL CHIP	1K	5%	1/10W
R111	1-216-837-11	METAL CHIP	22K	5%	1/10W
R112	1-216-864-11	SHORT CHIP	0		
R113	1-216-819-11	METAL CHIP	680	5%	1/10W
R114	1-216-819-11	METAL CHIP	680	5%	1/10W
R116	1-216-843-11	METAL CHIP	68K	5%	1/10W
R117	1-216-833-11	METAL CHIP	10K	5%	1/10W
R118	1-216-809-11	METAL CHIP	100	5%	1/10W

Ref. No.	Part No.	Description			Remark
R120	1-216-833-11	METAL CHIP	10K	5%	1/10W
R121	1-216-833-11	METAL CHIP	10K	5%	1/10W
R122	1-216-833-11	METAL CHIP	10K	5%	1/10W
R123	1-216-833-11	METAL CHIP	10K	5%	1/10W
R124	1-216-833-11	METAL CHIP	10K	5%	1/10W
R125	1-216-833-11	METAL CHIP	10K	5%	1/10W
R126	1-216-864-11	SHORT CHIP	0		
R201	1-218-446-11	METAL CHIP	1	5%	1/10W
R202	1-216-789-11	METAL CHIP	2.2	5%	1/10W
R203	1-216-864-11	SHORT CHIP	0		
R301	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R302	1-216-839-11	METAL CHIP	33K	5%	1/10W
R303	1-216-834-11	METAL CHIP	12K	5%	1/10W
R304	1-216-833-11	METAL CHIP	10K	5%	1/10W
R305	1-216-832-11	METAL CHIP	8.2K	5%	1/10W
R401	1-216-295-91	SHORT CHIP	0		
R402	1-216-295-91	SHORT CHIP	0		
R403	1-216-809-11	METAL CHIP	100	5%	1/10W (AEP, E2, E51, MX)
R404	1-216-809-11	METAL CHIP	100	5%	1/10W (AEP, E2, E51, MX)
R405	1-216-809-11	METAL CHIP	100	5%	1/10W (AEP, E2, E51, MX)
R406	1-216-809-11	METAL CHIP	100	5%	1/10W
R407	1-216-809-11	METAL CHIP	100	5%	1/10W
R408	1-216-809-11	METAL CHIP	100	5%	1/10W
R409	1-216-809-11	METAL CHIP	100	5%	1/10W
R411	1-216-809-11	METAL CHIP	100	5%	1/10W
R412	1-216-809-11	METAL CHIP	100	5%	1/10W
R413	1-216-809-11	METAL CHIP	100	5%	1/10W
R417	1-216-295-91	SHORT CHIP	0		
		< VIBRATOR >			
X101	1-795-101-21	VIBRATOR, CERAMIC (16.934MHz)			
**********					
	A-1765-911-A	IP BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C601	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C603	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C604	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C605	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C607	1-165-492-21	ELECT CHIP	100uF	20%	10V
		< CONNECTOR >			
CN600	1-820-701-11	PIN, CONNECTOR 30P (iPod DOCK)			
CN601	1-784-863-51	CONNECTOR, FFC (LIF (NON-ZIF)) 11P			
		< DIODE >			
D600	6-500-848-01	DIODE MC2840-T112-1			
D601	8-719-071-34	DIODE RB521S-30-TE61			
		< TRANSISTOR >			
Q600	8-729-038-23	TRANSISTOR	RT1N141C-TP-1		
		< RESISTOR >			
R600	1-218-903-11	METAL CHIP	220K	0.5%	1/10W
R601	1-216-809-11	METAL CHIP	100	5%	1/10W
R602	1-216-809-11	METAL CHIP	100	5%	1/10W

Ref. No.	Part No.	Description			Remark
R603	1-218-907-11	METAL CHIP	330K	0.5%	1/10W
R604	1-216-809-11	METAL CHIP	100	5%	1/10W
R605	1-216-809-11	METAL CHIP	100	5%	1/10W
R606	1-218-895-11	METAL CHIP	100K	0.5%	1/10W
R607	1-218-892-11	METAL CHIP	75K	0.5%	1/10W
R608	1-218-895-11	METAL CHIP	100K	0.5%	1/10W
R609	1-218-895-11	METAL CHIP	100K	0.5%	1/10W
R610	1-218-892-11	METAL CHIP	75K	0.5%	1/10W
R611	1-218-895-11	METAL CHIP	100K	0.5%	1/10W
R612	1-216-809-11	METAL CHIP	100	5%	1/10W
R613	1-216-809-11	METAL CHIP	100	5%	1/10W
R616	1-216-835-11	METAL CHIP	15K	5%	1/10W
R617	1-216-838-11	METAL CHIP	27K	5%	1/10W
**********					
	A-1749-735-A	MAIN BOARD, COMPLETE (AEP, UK)			
	A-1749-736-A	MAIN BOARD, COMPLETE (US, CND, MX, SP, TW, TH, AUS)			
	A-1765-499-A	MAIN BOARD, COMPLETE (E2, E51)			
	A-1766-840-A	MAIN BOARD, COMPLETE (KR)			
		**********			
	7-685-646-71	SCREW +BVTP 3X8 TYPE2 IT-3			
		< CAPACITOR >			
C150	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C152	1-126-960-11	ELECT	1uF	20%	50V
C153	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C154	1-126-767-11	ELECT	1000uF	20%	16V
C155	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C156	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V
C157	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V
C158	1-126-960-11	ELECT	1uF	20%	50V
C159	1-104-662-91	ELECT	22uF	20%	25V
C160	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C250	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C252	1-126-960-11	ELECT	1uF	20%	50V
C253	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C254	1-126-767-11	ELECT	1000uF	20%	16V
C255	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C256	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V
C257	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V
C258	1-126-960-11	ELECT	1uF	20%	50V
C259	1-104-662-91	ELECT	22uF	20%	25V
C260	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C350	1-126-933-11	ELECT	100uF	20%	16V
C351	1-126-963-11	ELECT	4.7uF	20%	50V
C352	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V
C353	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C355	1-126-943-11	ELECT	2200uF	20%	25V
C901	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C902	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C903	1-126-943-11	ELECT	2200uF	20%	25V
C904	1-126-972-11	ELECT	1000uF	20%	50V
C906	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V
C907	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C908	1-126-923-91	ELECT	220uF	20%	10V
C910	1-126-964-11	ELECT	10uF	20%	50V
C914	1-126-925-91	ELECT	470uF	20%	10V
C915	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C930	1-165-908-11	CERAMIC CHIP	1uF	10%	10V

Ref. No.	Part No.	Description			Remark
C940	1-126-964-11	ELECT	10uF	20%	50V
C5001	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C5002	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C5003	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C5004	1-126-960-11	ELECT	1uF	20%	50V
C5006	1-126-963-11	ELECT	4.7uF	20%	50V
C5007	1-104-662-91	ELECT	22uF	20%	25V
C5008	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C5010	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C5011	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C5012	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C5013	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C5014	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C5015	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C5016	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C5017	1-104-662-91	ELECT	22uF	20%	25V
C5018	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C5019	1-162-925-11	CERAMIC CHIP	68PF	5%	50V (AEP, UK)
C5020	1-165-908-11	CERAMIC CHIP	1uF	10%	10V (AEP, UK)
C5021	1-162-923-11	CERAMIC CHIP	47PF	5%	50V (AEP, UK)
C5022	1-164-315-11	CERAMIC CHIP	470PF	5%	50V (AEP, UK)
C5023	1-165-908-11	CERAMIC CHIP	1uF	10%	10V (AEP, UK)
C5024	1-165-908-11	CERAMIC CHIP	1uF	10%	10V (AEP, UK)
C5025	1-164-315-11	CERAMIC CHIP	470PF	5%	50V (AEP, UK)
C5026	1-104-658-91	ELECT	100uF	20%	10V
		< CONNECTOR >			
CN901	1-819-134-11	PIN, CONNECTOR 6P			
CN902	1-819-131-11	PIN, CONNECTOR 3P			
CN904	1-819-131-11	PIN, CONNECTOR 3P			
CN911	1-784-784-11	CONNECTOR, FFC 23P (AEP, UK)			
CN912	1-568-838-11	CONNECTOR, FFC 21P (EXCEPT AEP, UK)			
CN913	1-819-130-11	PIN, CONNECTOR 2P			
CN914	1-819-130-11	PIN, CONNECTOR 2P			
* CN5001	1-506-680-11	PLUG, CONNECTOR (2.5mm) 3P			(ANTENNA FM/AM)
		< DIODE >			
D902	6-501-569-01	DIODE 1N5401-C352			
D903	6-501-569-01	DIODE 1N5401-C352			
D905	6-502-411-01	DIODE RL202-B322-1			
D906	6-502-411-01	DIODE RL202-B322-1			
D907	6-501-582-01	DIODE 1N4002-A2			
D910	6-502-972-01	DIODE DZ2J09100L			
D913	6-503-025-01	DIODE DZ2J12000L			
D914	6-502-972-01	DIODE DZ2J09100L			
D920	6-502-961-01	DIODE DA2J10100L			
D930	6-502-961-01	DIODE DA2J10100L			
D931	6-503-033-01	DIODE DZ2J20000L			
D5001	6-500-848-01	DIODE MC2840-T112-1			
D5002	6-500-848-01	DIODE MC2840-T112-1			
		< EARTH TERMINAL >			
* ET900	1-537-738-21	TERMINAL, EARTH			

Ref. No.	Part No.	Description			Remark
		< BAND PASS FILTER >			
FL5001	1-236-711-21	FILTER, BAND PASS			
		< IC >			
IC350	6-706-641-01	IC LA4631-E			
IC901	6-713-032-01	IC KIA7809API-U/PF			
IC5001	6-714-822-01	IC LV23401V-TLM-H			
IC5002	6-708-918-01	IC PT2579SN (AEP, UK)			
		< JACK >			
J350	1-815-629-21	JACK (PHONES)			
J351	1-780-314-11	TERMINAL BOARD (SPEAKERS)			
		< JUMPER RESISTOR >			
JC990	1-216-864-11	SHORT CHIP	0		
JR101	1-216-864-11	SHORT CHIP	0		
JR102	1-216-864-11	SHORT CHIP	0		
		< COIL >			
L351	1-469-128-21	FERRITE, EMI (SMD) (1608)			
L5001	1-457-757-11	COIL, AM ANTENNA			
L5002	1-481-550-21	INDUCTOR	0.039uH		
L5003	1-481-550-21	INDUCTOR	0.039uH		
		< TRANSISTOR >			
Q150	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF		
Q250	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF		
Q902	6-551-696-01	TRANSISTOR	ISA1235AC1TP-1EF		
Q903	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF		
Q909	6-550-889-01	TRANSISTOR	2SC5938-T112-1B (E2, E51)		
Q909	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF		(EXCEPT E2, E51)
Q910	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF		
Q931	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF		
Q932	6-551-696-01	TRANSISTOR	ISA1235AC1TP-1EF		
Q960	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF		
Q5002	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF (AEP, UK)		
Q5003	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF (AEP, UK)		
		< RESISTOR >			
R150	1-216-837-11	METAL CHIP	22K	5%	1/10W
R151	1-216-837-11	METAL CHIP	22K	5%	1/10W
R152	1-216-809-11	METAL CHIP	100	5%	1/10W
R153	1-216-832-11	METAL CHIP	8.2K	5%	1/10W
R155	1-216-813-11	METAL CHIP	220	5%	1/10W
R156	1-216-815-11	METAL CHIP	330	5%	1/10W
R158	1-216-843-11	METAL CHIP	68K	5%	1/10W
R159	1-216-797-11	METAL CHIP	10	5%	1/10W
R160	1-216-817-11	METAL CHIP	470	5%	1/10W
R161	1-216-833-11	METAL CHIP	10K	5%	1/10W
R162	1-216-817-11	METAL CHIP	470	5%	1/10W
R250	1-216-837-11	METAL CHIP	22K	5%	1/10W
R251	1-216-837-11	METAL CHIP	22K	5%	1/10W
R252	1-216-809-11	METAL CHIP	100	5%	1/10W
R253	1-216-832-11	METAL CHIP	8.2K	5%	1/10W
R255	1-216-813-11	METAL CHIP	220	5%	1/10W
R256	1-216-815-11	METAL CHIP	330	5%	1/10W
R258	1-216-843-11	METAL CHIP	68K	5%	1/10W
R259	1-216-797-11	METAL CHIP	10	5%	1/10W

Ref. No.	Part No.	Description			Remark
R260	1-216-817-11	METAL CHIP	470	5%	1/10W
R261	1-216-833-11	METAL CHIP	10K	5%	1/10W
R262	1-216-817-11	METAL CHIP	470	5%	1/10W
R365	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R900	1-216-833-11	METAL CHIP	10K	5%	1/10W
R901	1-216-833-11	METAL CHIP	10K	5%	1/10W
R902	1-216-841-11	METAL CHIP	47K	5%	1/10W
R914	1-216-821-11	METAL CHIP	1K	5%	1/10W
R916	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R917	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R918	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R919	1-216-833-11	METAL CHIP	10K	5%	1/10W
R920	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R921	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R927	1-216-821-11	METAL CHIP	1K	5%	1/10W
R928	1-216-821-11	METAL CHIP	1K	5%	1/10W
R930	1-216-821-11	METAL CHIP	1K	5%	1/10W
R931	1-216-805-11	METAL CHIP	47	5%	1/10W
R932	1-218-864-11	METAL CHIP	5.1K	0.5%	1/10W
R933	1-218-863-11	METAL CHIP	4.7K	0.5%	1/10W
R934	1-218-863-11	METAL CHIP	4.7K	0.5%	1/10W
R935	1-218-863-11	METAL CHIP	4.7K	0.5%	1/10W
R936	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R937	1-216-833-11	METAL CHIP	10K	5%	1/10W
R938	1-216-845-11	METAL CHIP	100K	5%	1/10W
R940	1-216-833-11	METAL CHIP	10K	5%	1/10W
R942	1-216-864-11	SHORT CHIP	0		
R944	1-216-821-11	METAL CHIP	1K	5%	1/10W
R5001	1-216-864-11	SHORT CHIP	0		
R5002	1-216-837-11	METAL CHIP	22K	5%	1/10W
R5005	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5006	1-216-809-11	METAL CHIP	100	5%	1/10W
R5007	1-216-809-11	METAL CHIP	100	5%	1/10W
R5008	1-216-809-11	METAL CHIP	100	5%	1/10W
R5009	1-216-809-11	METAL CHIP	100	5%	1/10W
R5010	1-216-809-11	METAL CHIP	100	5%	1/10W
R5011	1-216-848-11	METAL CHIP	180K	5%	1/10W
R5012	1-216-843-11	METAL CHIP	68K	5%	1/10W (AEP, UK)
R5013	1-216-843-11	METAL CHIP	68K	5%	1/10W (AEP, UK)
R5014	1-216-837-11	METAL CHIP	22K	5%	1/10W (AEP, UK)
R5015	1-216-833-11	METAL CHIP	10K	5%	1/10W (AEP, UK)
R5018	1-216-837-11	METAL CHIP	22K	5%	1/10W (AEP, UK)
R5020	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (AEP, UK)
R5022	1-216-839-11	METAL CHIP	33K	5%	1/10W
R5023	1-216-813-11	METAL CHIP	220	5%	1/10W (AEP, UK)
R5024	1-216-837-11	METAL CHIP	22K	5%	1/10W (AEP, UK)
R5025	1-216-833-11	METAL CHIP	10K	5%	1/10W (AEP, UK)
R5026	1-216-833-11	METAL CHIP	10K	5%	1/10W (AEP, UK)
		< VIBRATOR >			
X5001	1-813-202-11	VIBRATOR, CRYSTAL (32.768kHz)			
X5002	1-579-900-21	VIBRATOR, CRYSTAL (4.332MHz) (AEP, UK)			

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	A-1749-746-A	PANEL BOARD, COMPLETE (US, CND)
	A-1749-747-A	PANEL BOARD, COMPLETE (AUS)
	A-1749-748-A	PANEL BOARD, COMPLETE (SP, TW, TH)
	A-1749-749-A	PANEL BOARD, COMPLETE (AEP)
	A-1749-750-A	PANEL BOARD, COMPLETE (E51, MX)
	A-1765-489-A	PANEL BOARD, COMPLETE (KR)
	A-1765-490-A	PANEL BOARD, COMPLETE (UK)
	A-1771-584-A	PANEL BOARD, COMPLETE (E2)
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	2-636-545-01	SHEET (LCD)
	4-176-447-01	HOLDER, LCD
	4-176-448-01	ILLUMINATOR, LCD

< CAPACITOR >

C101	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C102	1-115-871-11	ELECT	1uF	20%	50V
C104	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C106	1-115-871-11	ELECT	1uF	20%	50V
C107	1-164-173-11	CERAMIC CHIP	0.0039uF	10%	50V
C109	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V
C110	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V
C115	1-115-871-11	ELECT	1uF	20%	50V
C120	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C132	1-115-871-11	ELECT	1uF	20%	50V
C133	1-115-871-11	ELECT	1uF	20%	50V
C201	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C202	1-115-871-11	ELECT	1uF	20%	50V
C204	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C206	1-115-871-11	ELECT	1uF	20%	50V
C207	1-164-173-11	CERAMIC CHIP	0.0039uF	10%	50V
C209	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V
C210	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V
C215	1-115-871-11	ELECT	1uF	20%	50V
C220	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C232	1-115-871-11	ELECT	1uF	20%	50V
C233	1-115-871-11	ELECT	1uF	20%	50V
C301	1-126-785-11	ELECT	47uF	20%	10V
C302	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V
C303	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V
C304	1-126-176-11	ELECT	220uF	20%	10V
C307	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C308	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C309	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C310	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C311	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C312	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C313	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C314	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C315	1-125-837-91	CERAMIC CHIP	1uF	10%	6.3V
C330	1-126-791-11	ELECT	10uF	20%	35V
C331	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C332	1-126-785-11	ELECT	47uF	20%	10V
C333	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C800	1-126-916-11	ELECT	1000uF	20%	6.3V
C801	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C802	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C803	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C804	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V

Ref. No.	Part No.	Description			Remark
C805	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C806	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C809	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C810	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C811	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C812	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C813	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C814	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C815	1-162-919-11	CERAMIC CHIP	22PF	5%	50V (AEP, E2, E51, MX)
C815	1-162-927-11	CERAMIC CHIP	100PF	5%	50V (US, CND, UK, SP, TW, KR, TH, AUS)
C850	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C851	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C860	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C970	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C971	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C973	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C980	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C981	1-126-382-11	ELECT	100uF	20%	16V
C982	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C983	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C984	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C985	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C987	1-125-889-11	CERAMIC CHIP	2.2uF	10%	10V
C988	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C989	1-126-176-11	ELECT	220uF	20%	10V
C991	1-119-941-91	ELECT	470uF	20%	6.3V
C992	1-119-941-91	ELECT	470uF	20%	6.3V
C993	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C994	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
		< CONNECTOR >			
CN801	1-784-784-11	CONNECTOR, FFC 23P (AEP, UK)			
CN802	1-568-838-11	CONNECTOR, FFC 21P (EXCEPT AEP, UK)			
CN820	1-779-548-21	CONNECTOR, FFC (LIF (NON-ZIF)) 11P			
CN830	1-779-283-11	CONNECTOR, FFC (LIF (NON-ZIF)) 15P (US, CND, UK, SP, TW, KR, TH, AUS)			
CN831	1-779-291-11	CONNECTOR, FFC (LIF (NON-ZIF)) 23P (AEP, E2, E51, MX)			
CN890	1-779-544-21	CONNECTOR, FFC (LIF (NON-ZIF)) 7P			
		< DIODE >			
D801	6-500-334-01	DIODE MC2836-T112-1			
D802	6-500-334-01	DIODE MC2836-T112-1			
D860	6-502-498-01	LED SELU2B10A-SLF62FGH (LCD BACK LIGHT)			
D980	6-501-582-01	DIODE 1N4002-A2			
D981	8-719-991-33	DIODE 1SS133T-77 (KR)			
D982	8-719-991-33	DIODE 1SS133T-77 (KR)			
		< FERRITE BEAD >			
FB320	1-469-128-21	FERRITE, EMI (SMD) (1608)			
		< IC >			
IC301	6-713-384-01	IC BD3491FS-SE2			
IC310	8-759-278-58	IC NJM4558V-TE2			
IC330	8-759-278-58	IC NJM4558V-TE2			
IC801	A-1754-842-A	IC LC87F7DC8AU-QIP-E (for SERVICE) (US, CND, UK, SP, TW, KR, TH, AUS)			

Ref. No.	Part No.	Description			Remark
IC801	A-1754-843-A	IC LC87F7DJ2BVU-QIP-E (for SERVICE) (AEP, E2, E51, MX)			
IC802	6-702-749-01	IC S-80928CNNB-G8YT2G			
IC860	6-600-768-01	IC PNA4823M03S0			
IC970	6-703-639-01	IC TK11140CSCL-G			
IC980	6-703-639-01	IC TK11140CSCL-G			
IC981	6-715-266-01	IC BD8410FPS-E2			
		< JACK >			
J320	1-815-603-11	JACK (AUDIO IN)			
		< JUMPER RESISTOR >			
JR701	1-216-864-11	SHORT CHIP	0		
JR702	1-216-864-11	SHORT CHIP	0		
JR703	1-216-864-11	SHORT CHIP	0		
JR704	1-216-864-11	SHORT CHIP	0		
JR705	1-216-864-11	SHORT CHIP	0		
JR706	1-216-864-11	SHORT CHIP	0		
JR707	1-216-864-11	SHORT CHIP	0		
JR708	1-216-864-11	SHORT CHIP	0		
JR709	1-216-864-11	SHORT CHIP	0		
JR710	1-216-864-11	SHORT CHIP	0		
JR711	1-216-864-11	SHORT CHIP	0		
JR712	1-216-864-11	SHORT CHIP	0		
		< COIL >			
L321	1-410-509-11	INDUCTOR	10uH		
		< LIQUID CRYSTAL DISPLAY >			
LCD801	1-811-122-11	DISPLAY PANEL, LIQUID CRYSTAL			
		< TRANSISTOR >			
Q301	8-729-027-50	TRANSISTOR	DTC123JKA-T146		
Q302	8-729-027-26	TRANSISTOR	DTA114YKA-T146		
Q801	6-551-473-01	TRANSISTOR	RT1P136C-TP-1		
Q802	8-729-038-28	TRANSISTOR	RT1N441C-TP-1		
Q860	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF		
Q981	8-729-036-86	TRANSISTOR	KTC3203Y-AT		
Q982	8-729-028-54	TRANSISTOR	KTC3205		
Q983	6-551-456-01	FET	RTR020P02TL (AEP, E2, E51, MX)		
Q984	6-551-456-01	FET	RTR020P02TL (AEP, E2, E51, MX)		
Q985	8-729-038-23	TRANSISTOR	RT1N141C-TP-1 (AEP, E2, E51, MX)		
Q986	8-729-038-23	TRANSISTOR	RT1N141C-TP-1 (AEP, E2, E51, MX)		
Q987	8-729-027-26	TRANSISTOR	DTA114YKA-T146		
Q988	8-729-027-26	TRANSISTOR	DTA114YKA-T146		
Q989	8-729-027-46	TRANSISTOR	DTC114YKA-T146		
		< RESISTOR >			
R102	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R103	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R104	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R107	1-216-823-11	METAL CHIP	1.5K	5%	1/10W (E2)
R107	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (EXCEPT E2)
R109	1-216-829-11	METAL CHIP	4.7K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R116	1-216-849-11	METAL CHIP	220K	5%	1/10W
R120	1-216-833-11	METAL CHIP	10K	5%	1/10W
R121	1-216-841-11	METAL CHIP	47K	5%	1/10W
R131	1-216-837-11	METAL CHIP	22K	5%	1/10W
R132	1-216-837-11	METAL CHIP	22K	5%	1/10W
R133	1-216-837-11	METAL CHIP	22K	5%	1/10W
R134	1-216-837-11	METAL CHIP	22K	5%	1/10W
R135	1-216-849-11	METAL CHIP	220K	5%	1/10W
R202	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R203	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R204	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R207	1-216-823-11	METAL CHIP	1.5K	5%	1/10W (E2)
R207	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (EXCEPT E2)
R209	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R216	1-216-849-11	METAL CHIP	220K	5%	1/10W
R220	1-216-833-11	METAL CHIP	10K	5%	1/10W
R221	1-216-841-11	METAL CHIP	47K	5%	1/10W
R231	1-216-837-11	METAL CHIP	22K	5%	1/10W
R232	1-216-837-11	METAL CHIP	22K	5%	1/10W
R233	1-216-837-11	METAL CHIP	22K	5%	1/10W
R234	1-216-837-11	METAL CHIP	22K	5%	1/10W
R235	1-216-849-11	METAL CHIP	220K	5%	1/10W
R301	1-216-809-11	METAL CHIP	100	5%	1/10W
R302	1-216-809-11	METAL CHIP	100	5%	1/10W
R304	1-216-821-11	METAL CHIP	1K	5%	1/10W
R305	1-216-821-11	METAL CHIP	1K	5%	1/10W
R306	1-216-845-11	METAL CHIP	100K	5%	1/10W
R307	1-216-833-11	METAL CHIP	10K	5%	1/10W
R308	1-216-833-11	METAL CHIP	10K	5%	1/10W
R309	1-216-845-11	METAL CHIP	100K	5%	1/10W
R310	1-216-853-11	METAL CHIP	470K	5%	1/10W
R311	1-216-833-11	METAL CHIP	10K	5%	1/10W
R312	1-216-833-11	METAL CHIP	10K	5%	1/10W
R330	1-216-832-11	METAL CHIP	8.2K	5%	1/10W
R331	1-216-833-11	METAL CHIP	10K	5%	1/10W
R700	1-216-821-11	METAL CHIP	1K	5%	1/10W
R701	1-216-821-11	METAL CHIP	1K	5%	1/10W
R702	1-216-821-11	METAL CHIP	1K	5%	1/10W
R703	1-216-809-11	METAL CHIP	100	5%	1/10W
R704	1-216-809-11	METAL CHIP	100	5%	1/10W
R705	1-216-809-11	METAL CHIP	100	5%	1/10W
R706	1-216-821-11	METAL CHIP	1K	5%	1/10W (AEP, E2, E51, MX)
R707	1-216-809-11	METAL CHIP	100	5%	1/10W (AEP, E2, E51, MX)
R708	1-216-821-11	METAL CHIP	1K	5%	1/10W (AEP, E2, E51, MX)
R709	1-216-821-11	METAL CHIP	1K	5%	1/10W
R710	1-216-821-11	METAL CHIP	1K	5%	1/10W
R711	1-216-809-11	METAL CHIP	100	5%	1/10W
R719	1-216-821-11	METAL CHIP	1K	5%	1/10W
R720	1-216-821-11	METAL CHIP	1K	5%	1/10W
R722	1-216-821-11	METAL CHIP	1K	5%	1/10W
R723	1-216-809-11	METAL CHIP	100	5%	1/10W
R724	1-216-809-11	METAL CHIP	100	5%	1/10W
R728	1-216-821-11	METAL CHIP	1K	5%	1/10W
R729	1-216-821-11	METAL CHIP	1K	5%	1/10W
R730	1-216-821-11	METAL CHIP	1K	5%	1/10W
R732	1-216-821-11	METAL CHIP	1K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R733	1-216-821-11	METAL CHIP	1K	5%	1/10W
R734	1-216-833-11	METAL CHIP	10K	5%	1/10W
R735	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R736	1-216-821-11	METAL CHIP	1K	5%	1/10W
R737	1-216-809-11	METAL CHIP	100	5%	1/10W
R738	1-216-809-11	METAL CHIP	100	5%	1/10W
R739	1-216-821-11	METAL CHIP	1K	5%	1/10W
R740	1-216-809-11	METAL CHIP	100	5%	1/10W
R741	1-216-809-11	METAL CHIP	100	5%	1/10W (AEP, UK)
R742	1-216-833-11	METAL CHIP	10K	5%	1/10W (AEP, UK)
R744	1-216-833-11	METAL CHIP	10K	5%	1/10W
R745	1-216-821-11	METAL CHIP	1K	5%	1/10W
R788	1-216-821-11	METAL CHIP	1K	5%	1/10W
R791	1-216-809-11	METAL CHIP	100	5%	1/10W
R792	1-216-809-11	METAL CHIP	100	5%	1/10W
R793	1-216-809-11	METAL CHIP	100	5%	1/10W (AEP, E2, E51, MX)
R794	1-216-809-11	METAL CHIP	100	5%	1/10W (AEP, E2, E51, MX)
R795	1-216-809-11	METAL CHIP	100	5%	1/10W
R796	1-216-809-11	METAL CHIP	100	5%	1/10W
R797	1-216-809-11	METAL CHIP	100	5%	1/10W
R798	1-216-821-11	METAL CHIP	1K	5%	1/10W
R799	1-216-809-11	METAL CHIP	100	5%	1/10W (AEP, UK)
R801	1-216-833-11	METAL CHIP	10K	5%	1/10W
R802	1-216-833-11	METAL CHIP	10K	5%	1/10W
R806	1-216-845-11	METAL CHIP	100K	5%	1/10W
R808	1-216-864-11	SHORT CHIP	0		
R809	1-216-849-11	METAL CHIP	220K	5%	1/10W
R810	1-216-833-11	METAL CHIP	10K	5%	1/10W
R811	1-216-841-11	METAL CHIP	47K	5%	1/10W (EXCEPT AEP, UK)
R820	1-216-833-11	METAL CHIP	10K	5%	1/10W
R821	1-216-821-11	METAL CHIP	1K	5%	1/10W
R822	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R823	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R824	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R825	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R826	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R827	1-216-833-11	METAL CHIP	10K	5%	1/10W
R830	1-216-833-11	METAL CHIP	10K	5%	1/10W
R831	1-216-821-11	METAL CHIP	1K	5%	1/10W
R832	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R833	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R840	1-216-833-11	METAL CHIP	10K	5%	1/10W
R850	1-216-833-11	METAL CHIP	10K	5%	1/10W
R851	1-216-833-11	METAL CHIP	10K	5%	1/10W
R852	1-216-833-11	METAL CHIP	10K	5%	1/10W (AEP, E2, E51, MX)
R853	1-216-833-11	METAL CHIP	10K	5%	1/10W (AEP, E2, E51, MX)
R860	1-216-805-11	METAL CHIP	47	5%	1/10W
R865	1-216-809-11	METAL CHIP	100	5%	1/10W
R866	1-216-809-11	METAL CHIP	100	5%	1/10W
R870	1-216-821-11	METAL CHIP	1K	5%	1/10W
R871	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R872	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R873	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R880	1-216-833-11	METAL CHIP	10K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R885	1-216-833-11	METAL CHIP	10K	5%	1/10W
R886	1-216-845-11	METAL CHIP	100K	5%	1/10W
R887	1-216-845-11	METAL CHIP	100K	5%	1/10W
R888	1-216-845-11	METAL CHIP	100K	5%	1/10W
R889	1-216-841-11	METAL CHIP	47K	5%	1/10W (EXCEPT AEP, UK)
R891	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (E2, E51, MX)
R891	1-216-833-11	METAL CHIP	10K	5%	1/10W (US, CND, AEP, UK, SP, TW, TH, AUS)
R891	1-216-839-11	METAL CHIP	33K	5%	1/10W (KR)
R892	1-216-821-11	METAL CHIP	1K	5%	1/10W (AEP, UK)
R892	1-216-827-11	METAL CHIP	3.3K	5%	1/10W (SP, TW, TH)
R892	1-216-833-11	METAL CHIP	10K	5%	1/10W (AUS)
R892	1-216-841-11	METAL CHIP	47K	5%	1/10W (E2, E51, MX)
R892	1-216-843-11	METAL CHIP	68K	5%	1/10W (KR)
R893	1-216-845-11	METAL CHIP	100K	5%	1/10W
R894	1-216-845-11	METAL CHIP	100K	5%	1/10W (AEP, E2, E51, MX)
R895	1-216-839-11	METAL CHIP	33K	5%	1/10W
R896	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R897	1-216-847-11	METAL CHIP	150K	5%	1/10W
R980	1-216-864-11	SHORT CHIP	0 (US, CND, UK, SP, TW, KR, TH, AUS)		
R982	1-216-864-11	SHORT CHIP	0 (AEP, E2, E51, MX)		
R986	1-216-809-11	METAL CHIP	100	5%	1/10W
R988	1-216-809-11	METAL CHIP	100	5%	1/10W
R989	1-216-821-11	METAL CHIP	1K	5%	1/10W
R990	1-218-863-11	METAL CHIP	4.7K	0.5%	1/10W
R992	1-216-864-11	SHORT CHIP	0 (US, CND, UK, SP, TW, KR, TH, AUS)		
		< SWITCH/ROTARY ENCODER >			
S820	1-771-410-21	SWITCH, TACTILE (– TUNE, ⏮ ◀◀)			
S821	1-771-410-21	SWITCH, TACTILE (TUNE +, ▶▶ ⏭)			
S822	1-771-410-21	SWITCH, TACTILE (ENTER)			
S823	1-771-410-21	SWITCH, TACTILE (– 📁)			
S824	1-771-410-21	SWITCH, TACTILE (📁 +)			
S830	1-771-410-21	SWITCH, TACTILE (FUNCTION)			
S831	1-771-410-21	SWITCH, TACTILE (DSGX)			
S832	1-771-410-21	SWITCH, TACTILE (▶II)			
S833	1-771-410-21	SWITCH, TACTILE (CANCEL, ■)			
S840	1-771-410-21	SWITCH, TACTILE (I/⏻)			
S850	1-480-469-11	ENCODER, ROTARY (VOLUME)			
		< VIBRATOR >			
X801	1-814-067-11	OSCILLATOR, CRYSTAL (32.768kHz)			
X802	1-814-399-11	VIBRATOR, CERAMIC (15MHz)			
**********					
		POWER-TR BOARD			
		**********			
		< TRANSISTOR >			
Q915	6-551-696-01	TRANSISTOR	ISA1235AC1TP-1EF		
Q940	8-729-024-93	TRANSISTOR	2SB1565E		

Ref. No.	Part No.	Description			Remark
		< RESISTOR >			
R915	1-216-833-11	METAL CHIP	10K	5%	1/10W
R957	1-216-833-11	METAL CHIP	10K	5%	1/10W
**********					
		PT BOARD (EXCEPT E2, E51)			
		**********			
		< CAPACITOR >			
⚠ C001	1-113-924-91	CERAMIC	0.0047uF	20%	250V (AEP)
C905	1-126-942-61	ELECT	1000uF	20%	25V
		< CONNECTOR >			
CN004	1-564-321-00	PIN, CONNECTOR (3.96mm PITCH) 2P			
		< DIODE >			
D001	6-502-961-01	DIODE DA2J10100L			
D925	6-501-582-01	DIODE 1N4002-A2			
D926	6-501-582-01	DIODE 1N4002-A2			
D927	6-501-582-01	DIODE 1N4002-A2			
D928	6-501-582-01	DIODE 1N4002-A2			
		< FUSE HOLDER >			
FH001	1-533-217-31	FUSE HOLDER (US, CND, MX, TW)			
FH002	1-533-217-31	FUSE HOLDER (US, CND, MX, TW)			
FH003	1-533-217-31	FUSE HOLDER (AEP, UK, SP, KR, TH, AUS)			
FH004	1-533-217-31	FUSE HOLDER (AEP, UK, SP, KR, TH, AUS)			
		< LINE FILTER >			
⚠ LF001	1-443-993-11	TRANSFORMER, LINE FILTER (LFT) (AEP)			
		< RELAY >			
⚠ RY001	1-755-334-11	RELAY, AC POWER			
		< TRANSFORMER >			
⚠ T002	1-443-912-11	TRANSFORMER, POWER (AEP, UK, KR, TH)			
⚠ T003	1-445-563-11	TRANSFORMER, POWER (US, CND, MX)			
⚠ T004	1-445-105-11	TRANSFORMER, POWER (SP, TW, AUS)			
**********					
		PT-SW BOARD (E2, E51)			
		**********			
		< CAPACITOR >			
C905	1-126-942-61	ELECT	1000uF	20%	25V
		< CONNECTOR >			
CN004	1-564-321-00	PIN, CONNECTOR (3.96mm PITCH) 2P			
		< DIODE >			
D001	6-502-961-01	DIODE DA2J10100L			
D925	6-501-582-01	DIODE 1N4002-A2			
D926	6-501-582-01	DIODE 1N4002-A2			
D927	6-501-582-01	DIODE 1N4002-A2			
D928	6-501-582-01	DIODE 1N4002-A2			
		< FUSE HOLDER >			
FH001	1-533-217-31	FUSE HOLDER			
FH002	1-533-217-31	FUSE HOLDER			

Ref. No.	Part No.	Description			Remark
FH003	1-533-217-31	FUSE HOLDER			
FH004	1-533-217-31	FUSE HOLDER			
		< RELAY >			
⚠ RY002	1-755-496-11	RELAY			
		< SWITCH >			
⚠ S001	1-786-404-11	SELECTOR, VOLTAGE (SWS-2201) (VOLTAGE SELECTOR)			
		< TRANSFORMER >			
⚠ T004	1-445-105-11	TRANSFORMER, POWER			
**********					
		REG BOARD			
		**********			
		< TRANSISTOR >			
Q930	8-729-024-93	TRANSISTOR	2SB1565E		
Q934	6-551-696-01	TRANSISTOR	ISA1235AC1TP-1EF		
		< RESISTOR >			
R947	1-216-833-11	METAL CHIP	10K	5%	1/10W
R948	1-216-833-11	METAL CHIP	10K	5%	1/10W
**********					
	A-1754-831-A	USB BOARD, COMPLETE (AEP, E2, E51, MX)			
		**********			
		< CAPACITOR >			
C101	1-165-492-21	ELECT CHIP	100uF	20%	10V
C102	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C103	1-162-920-11	CERAMIC CHIP	27PF	5%	50V
C104	1-162-920-11	CERAMIC CHIP	27PF	5%	50V
C105	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C106	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C107	1-126-961-11	ELECT	2.2uF	20%	50V
C108	1-165-884-11	CERAMIC CHIP	2.2uF	10%	6.3V
C110	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C112	1-104-658-91	ELECT	100uF	20%	10V
C113	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C114	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C115	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C118	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C119	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C120	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C121	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C122	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C126	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C127	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C128	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
		< CONNECTOR >			
CN102	1-784-871-51	CONNECTOR, FFC (LIF (NON-ZIF)) 19P			
CN105	1-822-423-11	CONNECTOR, USB (A) ( )			
CN106	1-784-859-51	CONNECTOR, FFC (LIF (NON-ZIF)) 7P			
CN108	1-784-834-51	CONNECTOR, FFC (LIF (NON-ZIF)) 23P			
		< DIODE >			
D100	6-501-579-01	DIODE MC2837			
D101	6-501-579-01	DIODE MC2837			
D102	6-501-579-01	DIODE MC2837			
		< IC >			
IC101	(Not supplied)	IC LC87F1JJ2AU-SQFP-H			
		< COIL >			
L101	1-457-223-11	COMMON MODE CHOKE COIL			
		< RESISTOR >			
R103	1-216-809-11	METAL CHIP	100	5%	1/10W
R104	1-216-809-11	METAL CHIP	100	5%	1/10W
R105	1-216-809-11	METAL CHIP	100	5%	1/10W
R106	1-216-809-11	METAL CHIP	100	5%	1/10W
R107	1-216-857-11	METAL CHIP	1M	5%	1/10W
R108	1-216-817-11	METAL CHIP	470	5%	1/10W
R109	1-216-809-11	METAL CHIP	100	5%	1/10W
R110	1-216-809-11	METAL CHIP	100	5%	1/10W
R111	1-216-809-11	METAL CHIP	100	5%	1/10W
R112	1-216-809-11	METAL CHIP	100	5%	1/10W
R113	1-216-809-11	METAL CHIP	100	5%	1/10W
R114	1-216-845-11	METAL CHIP	100K	5%	1/10W
R115	1-216-809-11	METAL CHIP	100	5%	1/10W
R116	1-216-845-11	METAL CHIP	100K	5%	1/10W
R117	1-216-809-11	METAL CHIP	100	5%	1/10W
R118	1-216-845-11	METAL CHIP	100K	5%	1/10W
R119	1-216-864-11	SHORT CHIP	0		
R120	1-216-803-11	METAL CHIP	33	5%	1/10W
R121	1-216-803-11	METAL CHIP	33	5%	1/10W
R122	1-216-835-11	METAL CHIP	15K	5%	1/10W
R123	1-216-835-11	METAL CHIP	15K	5%	1/10W
R131	1-216-809-11	METAL CHIP	100	5%	1/10W
R132	1-216-809-11	METAL CHIP	100	5%	1/10W
R133	1-216-809-11	METAL CHIP	100	5%	1/10W
R134	1-216-809-11	METAL CHIP	100	5%	1/10W
R135	1-216-833-11	METAL CHIP	10K	5%	1/10W
R136	1-216-833-11	METAL CHIP	10K	5%	1/10W
R137	1-216-833-11	METAL CHIP	10K	5%	1/10W
R138	1-216-295-91	SHORT CHIP	0		
R139	1-216-295-91	SHORT CHIP	0		
R140	1-216-295-91	SHORT CHIP	0		
R141	1-216-864-11	SHORT CHIP	0		
R143	1-216-833-11	METAL CHIP	10K	5%	1/10W
		< VIBRATOR >			
X101	1-767-654-21	VIBRATOR, CRYSTAL (12MHz)			
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Note: IC101 cannot exchange with single. When this part is damaged, exchange the entire mounted board.

Ref. No.	Part No.	Description	Remark
		MISCELLANEOUS	
		**********	
52	1-834-268-21	WIRE (FLAT TYPE) (16 CORE)	
⚠ 56	A-1780-028-A	OPTICAL PICK-UP BLOCK (DA11MMVGP) (Including sled motor, spindle motor)	
62	1-452-899-31	MAGNET	
109	1-832-876-21	CABLE, FLEXIBLE FLAT (21 CORE) (EXCEPT AEP, UK)	
109	1-832-886-21	CABLE, FLEXIBLE FLAT (23 CORE) (AEP, UK)	
111	1-832-587-21	CABLE, FLEXIBLE FLAT (15 CORE) (length: 200 mm) (Former) (US, CND, UK, SP, TW, KR, TH, AUS)	
111	1-838-301-21	CABLE, FLEXIBLE FLAT (15 CORE) (length: 185 mm) (New) (US, CND, UK, SP, TW, KR, TH, AUS)	
112	1-832-626-21	CABLE, FLEXIBLE FLAT (23 CORE) (AEP, E2, E51, MX)	
114	1-837-819-21	CABLE, FLEXIBLE FLAT (19 CORE) (AEP, E2, E51, MX)	
116	1-832-566-21	CABLE, FLEXIBLE FLAT (11 CORE)	
154	1-500-868-11	CORE, FERRITE	
⚠ 155	1-834-288-12	CORD, POWER (TH)	
⚠ 155	1-834-966-41	POWER-SUPPLY CORD (AEP, E2, E51, SP)	
⚠ 155	1-835-068-21	CORD, POWER (AUS)	
⚠ 155	1-837-308-11	CORD, POWER-SUPPLY (US, CND)	
⚠ 155	1-837-309-21	CORD, POWER (UK)	
⚠ 155	1-837-311-21	CORD, POWER-SUPPLY (KR)	
⚠ 155	1-837-344-11	CORD, POWER-SUPPLY (MX)	
⚠ 155	1-837-345-11	CORD, POWER-SUPPLY (TW)	
⚠ F001	1-532-467-33	FUSE (T315mAL/250V) (US, CND, E2, E51, MX, TW)	
⚠ F002	1-523-156-31	FUSE (T160mAL/250V) (AEP, UK, E2, E51, SP, KR, TH, AUS)	
S001	1-771-853-11	SWITCH, DETECTION (LIMIT)	
SW880	1-692-960-11	SWITCH, PUSH (1 KEY) (CD LID OPEN/CLOSE DETECT)	
⚠ T001	1-445-858-11	TRANSFORMER, POWER (AEP, UK)	
⚠ T001	1-445-859-11	TRANSFORMER, POWER (US, CND, MX)	
⚠ T001	1-445-860-11	TRANSFORMER, POWER (SP, AUS)	
⚠ T001	1-445-861-11	TRANSFORMER, POWER (KR, TH)	
⚠ T001	1-445-862-11	TRANSFORMER, POWER (TW)	
⚠ T001	1-445-863-11	TRANSFORMER, POWER (E2, E51)	
**********			
		ACCESSORY	
		**********	
⚠	1-569-008-33	ADAPTOR, CONVERSION (E2, E51)	

Note: Length has been changed while producing FLEXIBLE FLAT CABLE (15 CORE) (Ref. No. 111). Exchange it for the parts of the same length when replacing FLEXIBLE FLAT CABLE (15 CORE) (US, CND, UK, SP, TW, KR, TH and AUS models only).

MEMO

REVISION HISTORY

Checking the version allows you to jump to the revised page.
Also, clicking the version at the top of the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	2010.03	New
1.1	2010.05	Addition of 120V AC area in E, Mexican, Chilean, Peruvian, Singapore, Taiwan, Korean and Thai models
1.2	2010.06	Addition of UK model