

Service Manual

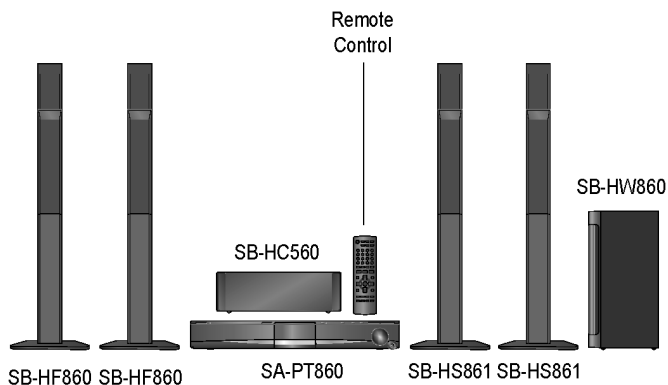
DVD Home Theater Sound System



SA-PT860GC
SA-PT860GCS
SA-PT860GCT
SA-PT860GS

Colour

(K).....Black Type



Specifications

Main unit SA-PT860GC/GCS/GCT/GS

●GENERAL

Power supply:	AC 110V to 127V/220V to 240V, 50/60 Hz
Power consumption:	This unit 135 W
Power consumption in standby mode:	approx. 0.4 W
Dimensions (W×H×D):	430 mm×68 mm×327 mm
Mass:	This unit 3.4 kg
Operating temperature range:	+0 °C to +40 °C
Operating humidity range:	35 % to 80 % RH (no condensation)

●AMPLIFIER SECTION

RMS Output Power: Dolby Digital Mode

Front Ch:	250 W per channel (6 Ω), 1 kHz, 10% THD
Surround Ch:	125 W per channel (3 Ω), 1 kHz, 10% THD
Center Ch:	250 W per channel (6 Ω), 1 kHz, 10% THD
Subwoofer Ch:	250 W per channel (6 Ω), 100 Hz, 10 % THD

Total RMS Dolby Digital mode power:

250 W

PMPO Output Power:

9300 W

DIN Output Power: Dolby Digital Mode

Front Ch:	150 W per channel (6 Ω), 1 kHz, 1% THD
Surround Ch:	70 W per channel (3 Ω), 1 kHz, 1% THD
Center Ch:	150 W per channel (6 Ω), 1 kHz, 1% THD
Subwoofer Ch:	150 W per channel (6 Ω), 100 Hz, 1 % THD

Total DIN Dolby Digital mode power:

740 W

●FM TUNER, TERMINALS SECTION

Preset Memory:	FM 30 stations
Frequency Modulation (FM)	
Frequency range:	87.50-108.00 MHz (50-kHz step)
Antenna terminals:	75 Ω (unbalanced)

Panasonic®

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Digital audio input

Optical digital input: Optical terminal
 Sampling frequency: 32 kHz, 44.1 kHz, 48 kHz

Phone jack

Terminal: Stereo, 3.5 mm jack

Mic jack

Sensitivity: 0.7 mV, 1.2 kΩ
 Terminal: Mono, 6.3mm jack (2 systems)

USB Port

USB standard: USB 2.0 full speed
 Media file format support: MP3 (*.mp3)
 WMA (*.wma)
 JPEG (*.jpg) (*.jpeg)
 MPEG4 (*.asf)
 USB device file system: FAT12, FAT16, FAT32
 USB Port power: Max. 500 mA

●DISC SECTION**Discs played [8 cm or 12 cm]:**

- (1) DVD (DVD-Video, DivX^{*5, 6})
- (2) DVD-RAM (DVD-VR, MP3^{*2, 5}, JPEG^{*4, 5}, MPEG4^{*5, 7}, DivX^{*5, 6})
- (3) DVD-R (DVD-Video, DVD-VR, MP3^{*2, 5}, JPEG^{*4, 5}, MPEG4^{*5, 7}, DivX^{*5, 6})
- (4) DVD-R DL (DVD-Video, DVD-VR)
- (5) DVD-RW (DVD-Video, DVD-VR, MP3^{*2, 5}, JPEG^{*4, 5}, MPEG4^{*5, 7}, DivX^{*5, 6})
- (6) +R/+RW (Video)
- (7) +R DL (Video)
- (8) CD, CD-R/RW [CD-DA, Video CD, SVCD^{*1}, MP3^{*2, 5}, WMA^{*3, 5}, JPEG^{*4, 5}, MPEG4^{*5, 7}, DivX^{*5, 6}]

^{*1} Conforming to IEC62107

^{*2} MPEG-1 Layer 3, MPEG-2 Layer 3

^{*3} Windows Media Audio Ver.9.0 L3

●Not compatible with Multiple Bit Rate (MBR)

^{*4} Exif Ver 2.1 JPEG Baseline files

●Picture resolution: between 160 x 120 and 6144 x 4096 pixels (Sub sampling is 4:0:0, 4:2:0, 4:2:2 or 4:4:4).
 Extremely long and narrow pictures may not be displayed.

^{*5} The total combined maximum number of recognizable audio, picture and video contents and groups: 4000 audio, picture and video contents and 400 groups.

^{*6} Plays all versions of DivX® video (including DivX®6) with standard playback of DivX® media files. Certified to the DivX Home Theater Profile.

^{*7} MPEG4 data recorded with the Panasonic SD multi cameras or DVD video recorders.

●Conforming to SD VIDEO specifications (ASF standard)/MPEG4 (Simple Profile) video system/G.726 audio system.

Pick up

Wavelength (DVD/CD): 655/785 nm
 Laser power (DVD/CD): CLASS 1/CLASS 1M

Audio output (Disc)

Number of channels: 5.1 ch (FL, FR, C, SL, SR, SW)

●VIDEO SECTION

Video system: PAL625/50, PAL525/60, NTSC

Composite video output

Output level: 1 Vp-p (75 Ω)
 Terminal: Pin jack (1 system)

Component video output

Y output level: 1 Vp-p (75 Ω)
 PB output level: 0.7 Vp-p (75 Ω)
 PR output level: 0.7 Vp-p (75 Ω)
 Terminal output level: Pin jack (Y:green, PB:blue, PR:red) (1 system)

HDMI AV output

Terminal: 19pin type A connector

HDAVI Control:

This unit supports "HDAVI Control 3" function.

Note:

1. Specifications are subject to change without notice.
 Mass and dimensions are approximate.
2. Total harmonic distortion is measured by the digital spectrum analyzer.

Solder:

This model uses lead free solder (PbF).

Mechanism:

This model uses DLS6 mechanism.

System	SC-PT865GC/GCS/GS-K	SC-PT865GCT-K
Main unit	SA-PT860GC/GCS/GS-K	SA-PT860GCT-K
Front speakers	SB-HF860G-K ^{*1}	SB-HF860G-K ^{*1}
Center speakers	SB-HC560E-K ^{*1}	SB-HC560E-K ^{*1}
Surround speakers	SB-HS861E-K ^{*1}	SB-HS861E-K ^{*1}
Subwoofer	SB-HW860E-K ^{*1}	SB-HW860E-K ^{*1}
Digital Transmitter	SH-FX65TGC-K ^{*1}	SH-FX65TGCT-K ^{*1}
Wireless System	SE-FX65AGC-K ^{*1}	SE-FX65AGCT-K ^{*1}

Refer to their respective original service manuals for *1.

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U.S. Patent Nos. 6,836,549; 6,381,747; 7,050,698; 6,516,132; and 5,583,936.

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Official DivX® Certified product.
Plays all versions of DivX® video (including DivX®6) with standard playback of DivX® media files.
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WMA is a compression format developed by Microsoft Corporation. It achieves the same sound quality as MP3 with a file size that is smaller than that of MP3.

This product is licensed under the MPEG-4 Visual patent portfolio license for the personal and non-commercial use of a consumer for (i) encoding video in compliance with the MPEG-4 Visual Standard ("MPEG-4 Video") and/or (ii) decoding MPEG-4 Video that was encoded by a consumer engaged in a personal and non-commercial activity and/or was obtained from a video provider licensed by MPEG LA to provide MPEG-4 Video. No license is granted or shall be implied for any other use. Additional information including that relating to promotional, internal and commercial uses and licensing may be obtained from MPEG LA, LLC. See <http://www.mpegla.com>.

iPod is a trademark of Apple Inc., registered in the U.S. and other countries.

■ Built-in decoders

You can play discs with these symbols.



WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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1 Safety Precautions

1.1. GENERAL GUIDELINES

1. When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
2. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
3. After servicing, carry out the following leakage current checks to prevent the customer from being exposed to shock hazards.

1.1.1. LEAKAGE CURRENT COLD CHECK

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Measure the resistance value, with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. When the exposed metallic part has a return path to the chassis, the reading should be between $1M\Omega$ and $5.2M\Omega$.
When the exposed metal does not have a return path to the chassis, the reading must be ∞

1.1.2. LEAKAGE CURRENT HOT CHECK

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a $1.5k\Omega$, 10 watts resistor, in parallel with a $0.15\mu F$ capacitors, between each exposed metallic part on the set and a good earth ground such as a water pipe, as shown in **Figure 1**.
3. Use an AC voltmeter, with 1000 ohms/volt or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet and repeat each of the above measurements.
6. The potential at any point should not exceed 0.75 volts RMS. A leakage current tester (Simpson Model 229 or equivalent) may be used to make the hot checks, leakage current must not exceed 1/2 milliamp. In case a measurement is outside of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.

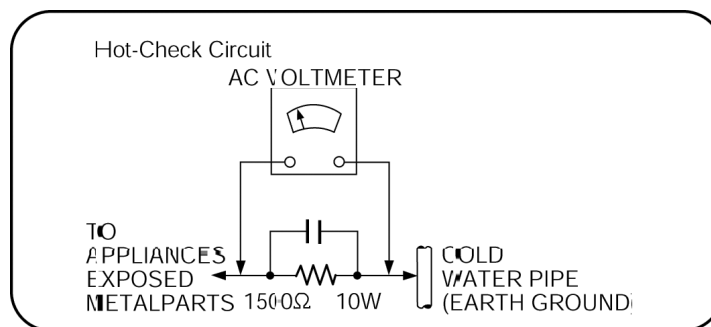


Figure 1

1.2. Before Repair and Adjustment

Disconnect AC power to discharge unit AC Capacitors as such (C5700, C5701, C5703, C5704, C5705, C5706, C5707) through a 10Ω , 10 W resistor to ground.

Caution:

DO NOT SHORT-CIRCUIT DIRECTLY (with a screwdriver blade, for instance), as this may destroy solid state devices.
After repairs are completed, restore power gradually using a variac, to avoid overcurrent.
Current consumption at AC 240 V, 50 Hz in NO SIGNAL mode volume minimal should be ~ 600 mA.
Current consumption at AC 127 V, 50/60 Hz in NO SIGNAL mode volume minimal should be ~ 600 mA.

1.3. Protection Circuitry

The protection circuitry may have operated if either of the following conditions are noticed:

- No sound is heard when the power is turned on.
- Sound stops during a performance.

The function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are “shorted”, or if speaker systems with an impedance less than the indicated rated impedance of the amplifier are used.

If this occurs, follow the procedure outlines below:

1. Turn off the power.
2. Determine the cause of the problem and correct it.
3. Turn on the power once again after one minute.

Note:

When the protection circuitry functions, the unit will not operate unless the power is first turned off and then on again.

1.4. Safety Parts Information

Safety Parts List:

There are special components used in this equipment which are important for safety.

These parts are marked by Δ in the Schematic Diagrams & Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

Table 1

Ref. No.	Part No.	Part Name & Description	Remarks
12	REXX0640-J	BLACK WIRE (AC INLET - SMPS)	[M] Δ
13	REXX0641-J	RED WIRE (AC INLET - SMPS)	[M] Δ
23	RGRX0067E-AA	REAR PANEL	[M] GC/GS Δ
23	RGRX0067E-CA	REAR PANEL	[M] GCT Δ
23	RGRX0067EB1A	REAR PANEL	[M] GCS Δ
66	RKMX0141-K1	TOP CABINET	[M] Δ
82	REXX0642-J	VOLTAGE SELECTOR WIRE 1 (WHITE)	[M] Δ
81	REXX0643-J	VOLTAGE SELECTOR WIRE 2 (BLUE)	[M] Δ
A2	K2CP2YY00001	AC CORD	[M] GCT Δ
A2	K2CQ2CA00007	AC CORD	[M] GC/GCS/GS Δ
A2	K2CT3CA00004	AC CORD	[M] GS Δ
A10	J0KG00000037	AC CLAMP FILTER	[M] Δ
PCB3	REPX0622D	SMPS INLET P.C.B.	[M] (RTL) Δ
PCB4	REPX0622D	AC INLET P.C.B	[M] (RTL) Δ
PCB13	REPX0622D	VOLTAGE SELECTOR P.C.B	[M] (RTL) Δ
DZ5701	ERZV10V511CS	ZNR	[M] Δ
S5701	K0ABCA000007	VOLTAGE SELECTOR	[M] Δ
L5701	ELF15N035AN	LINE FILTER	[M] Δ
L5702	G0B932H00001	LINE FILTER	[M] Δ
L5703	ELF22V022A	LINE FILTER	[M] Δ
T2900	G4D1A0000117	SWITCHING TRANSFORMER	[M] Δ
T5701	ETS42BN1A6AD	SWITCHING TRANSFORMER	[M] Δ
T5751	ETS19AB256AG	SWITCHING TRANSFORMER	[M] Δ
PC5701	B3PBA0000402	PHOTO COUPLER	[M] Δ
PC5702	B3PBA0000402	PHOTO COUPLER	[M] Δ
PC5720	B3PBA0000402	PHOTO COUPLER	[M] Δ
PC5799	B3PBA0000402	PHOTO COUPLER	[M] Δ
F1	K5D802BNA005	FUSE	[M] Δ
FP2901	K5G401A00008	FUSE PROTECTOR	[M] Δ
TH5702	D4CAC8R00002	THERMISTOR	[M] Δ
TH5860	D4CC11040013	THERMISTOR	[M] Δ
P5701	K2AA2B000017	AC INLET	[M] Δ
C5700	F1BAF1020020	1000pF	[M] Δ
C5701	F0CAF334A087	0.33uF	[M] Δ
C5703	F0C2H1040001	0.1uF 500V	[M] Δ
C5704	F1BAF1020020	1000pF	[M] Δ
C5705	F1BAF1020020	1000pF	[M] Δ
C5706	F1BAF1020020	1000pF	[M] Δ
C5707	F1BAF1020020	1000pF	[M] Δ

1.5. Caution for AC Cord

(For Saudi Arabia and Kuwait)

("GS" area code model only)

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.

A 5-ampere fuse is fitted in this plug.

Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362.

Check for the ASTA mark  or the BSI mark  on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.

If you lose the fuse cover the plug must not be used until a replacement cover is obtained.

A replacement fuse cover can be purchased from your local dealer.

CAUTION!

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY. THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

If a new plug is to be fitted please observe the wiring code as stated below.

If in any doubt please consult a qualified electrician.

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

Blue: Neutral, Brown: Live.

As these colours may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured Blue must be connected to the terminal which is marked with the letter N or coloured Black or Blue.

The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured Brown or Red.

WARNING: DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL WHICH IS MARKED WITH THE LETTER E, BY THE EARTH SYMBOL  OR COLOURED GREEN OR GREEN/YELLOW.

THIS PLUG IS NOT WATERPROOF—KEEP DRY.

Before use

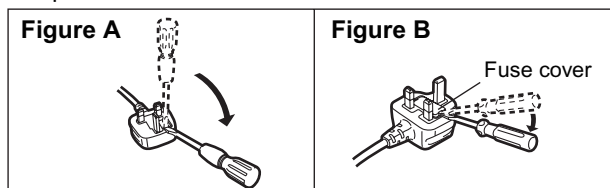
Remove the connector cover.

How to replace the fuse

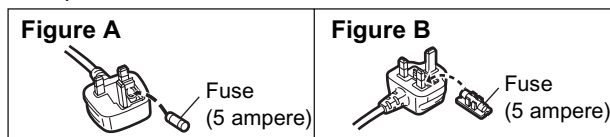
The location of the fuse differ according to the type of AC mains plug (figures A and B). Confirm the AC mains plug fitted and follow the instructions below.

Illustrations may differ from actual AC mains plug.

1. Open the fuse cover with a screwdriver.



2. Replace the fuse and close or attach the fuse cover.



2 Prevention of Electrostatic Discharge (ESD) to Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by electrostatic discharge (ESD).

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static (ESD protected)" can generate electrical charge sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

Caution:

Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity (ESD) sufficient to damage an ES device).

3 Precaution of Laser Diode

CAUTION:

THIS PRODUCT UTILIZES A LASER.

USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

CAUTION :

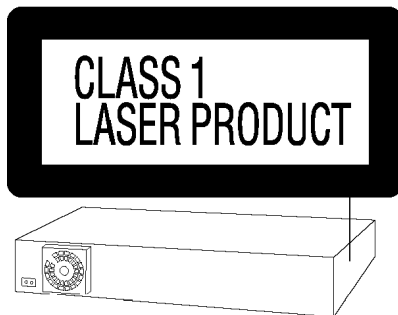
This product utilizes a laser diode with the unit turned "on", invisible laser radiation is emitted from the pickup lens.

Wavelength: 655 nm (DVD)/785 nm (CD)

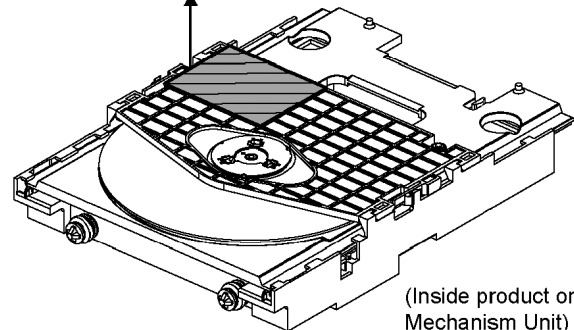
Maximum output radiation power from pickup: 100 μ W/VDE

Laser radiation from the pickup unit is safety level, but be sure the followings:

1. Do not disassemble the pickup unit, since radiation from exposed laser diode is dangerous.
2. Do not adjust the variable resistor on the pickup unit. It was already adjusted.
3. Do not look at the focus lens using optical instruments.
4. Recommend not to look at pickup lens for a long time.



(Back of product)



(Inside product on Mechanism Unit)

4 About Lead Free Solder (PbF)

4.1. Service caution based on legal restrictions

4.1.1. General description about Lead Free Solder (PbF)

The lead free solder has been used in the mounting process of all electrical components on the printed circuit boards used for this equipment in considering the globally environmental conservation.

The normal solder is the alloy of tin (Sn) and lead (Pb). On the other hand, the lead free solder is the alloy mainly consists of tin (Sn), silver (Ag) and Copper (Cu), and the melting point of the lead free solder is higher approx.30 degrees C (86°F) more than that of the normal solder.

Definition of PCB Lead Free Solder being used

The letter of "PbF" is printed either foil side or components side on the PCB using the lead free solder. (See right figure)	PbF
---	-----

Service caution for repair work using Lead Free Solder (PbF)

- The lead free solder has to be used when repairing the equipment for which the lead free solder is used.
(Definition: The letter of "PbF" is printed on the PCB using the lead free solder.)
- To put lead free solder, it should be well molten and mixed with the original lead free solder.
- Remove the remaining lead free solder on the PCB cleanly for soldering of the new IC.
- Since the melting point of the lead free solder is higher than that of the normal lead solder, it takes the longer time to melt the lead free solder.
- Use the soldering iron (more than 70W) equipped with the temperature control after setting the temperature at 350±30 degrees C (662±86°F).

Recommended Lead Free Solder (Service Parts Route.)

- The following 3 types of lead free solder are available through the service parts route.
RFKZ03D01K----- (0.3mm 100g Reel)
RFKZ06D01K----- (0.6mm 100g Reel)
RFKZ10D01K----- (1.0mm 100g Reel)

Note

* Ingredient: tin (Sn), 96.5%, silver (Ag) 3.0%, Copper (Cu) 0.5%, Cobalt (Co) / Germanium (Ge) 0.1 to 0.3%

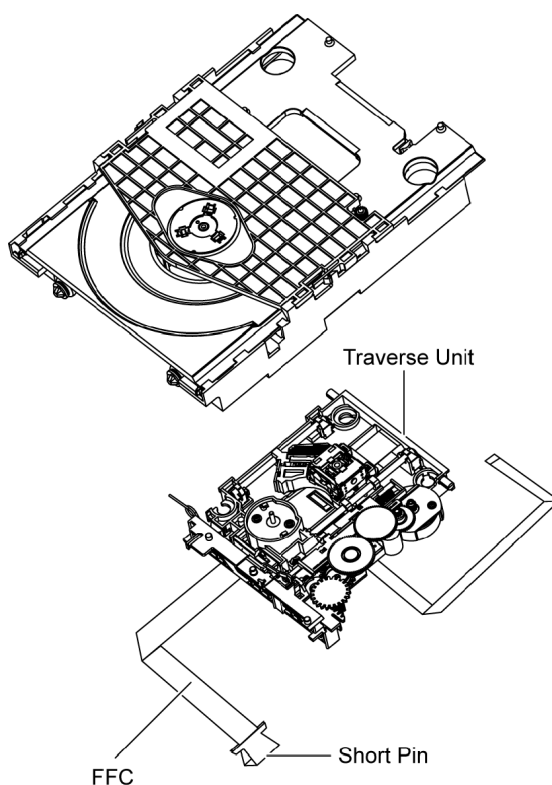
5 Handling Precautions for Traverse Unit

The laser diode in the optical pickup unit may break down due to static electricity of clothes or human body. Special care must be taken avoid caution to electrostatic breakdown when servicing and handling the laser diode in the traverse unit.

5.1. Cautions to Be Taken in Handling the Optical Pickup Unit

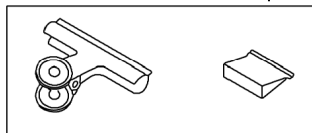
The laser diode in the optical pickup unit may be damaged due to electrostatic discharge generating from clothes or human body. Special care must be taken avoid caution to electrostatic discharge damage when servicing the laser diode.

1. Do not give a considerable shock to the optical pickup unit as it has an extremely high-precise structure.
2. To prevent the laser diode from the electrostatic discharge damage, the flexible cable of the optical pickup unit removed should be short-circuited with a short pin or a clip.
3. The flexible cable may be cut off if an excessive force is applied to it. Use caution when handling the flexible cable.
4. The antistatic FPC is connected to the new optical pickup unit. After replacing the optical pickup unit and connecting the flexible cable, cut off the antistatic FPC.



[Caution]

Ground the cable with a clip or a short pin.



Clip or Short Pin

5.2. Grounding for electrostatic breakdown prevention

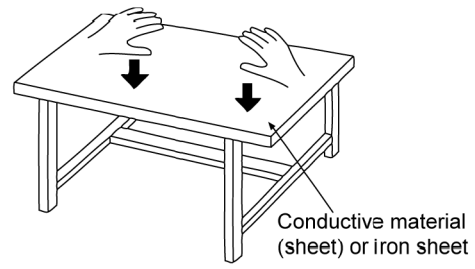
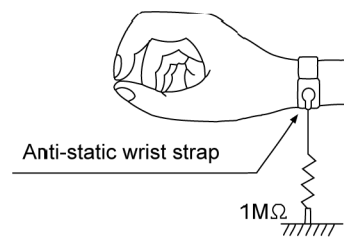
Some devices such as the DVD player use the optical pickup (laser diode) and the optical pickup will be damaged by static electricity in the working environment. Proceed servicing works under the working environment where grounding works is completed.

5.2.1. Worktable grounding

1. Put a conductive material (sheet) or iron sheet on the area where the optical pickup is placed, and ground the sheet.

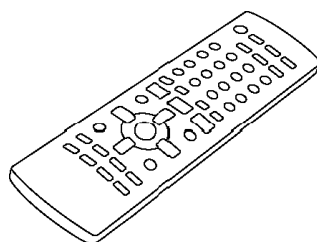
5.2.2. Human body grounding

1. Use the anti-static wrist strap to discharge the static electricity form your body.

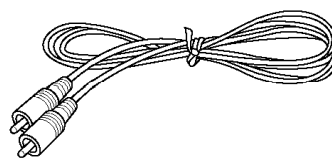


6 Accessories

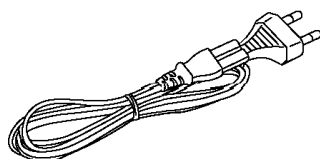
- Note: Refer to “Replacement Parts List” (Section 25) for the part number.



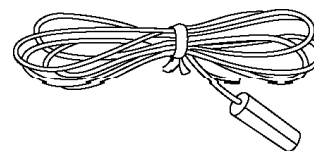
Remote control



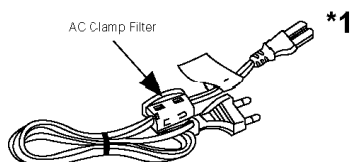
Video cable



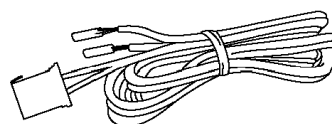
AC cord
(GC/GCS/GCT only)



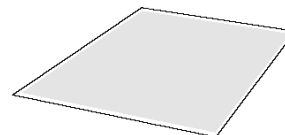
FM indoor antenna



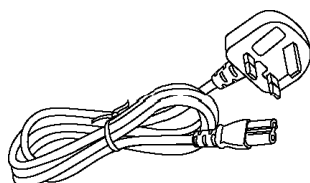
AC clamp filter
(GC/GCS/GCT)



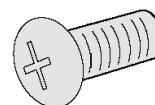
Speaker cord
(center)



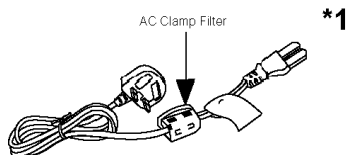
Speaker cable stickers



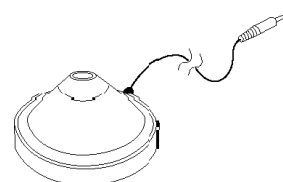
AC cord
(GS only)



Screws



AC clamp filter
(GS only)



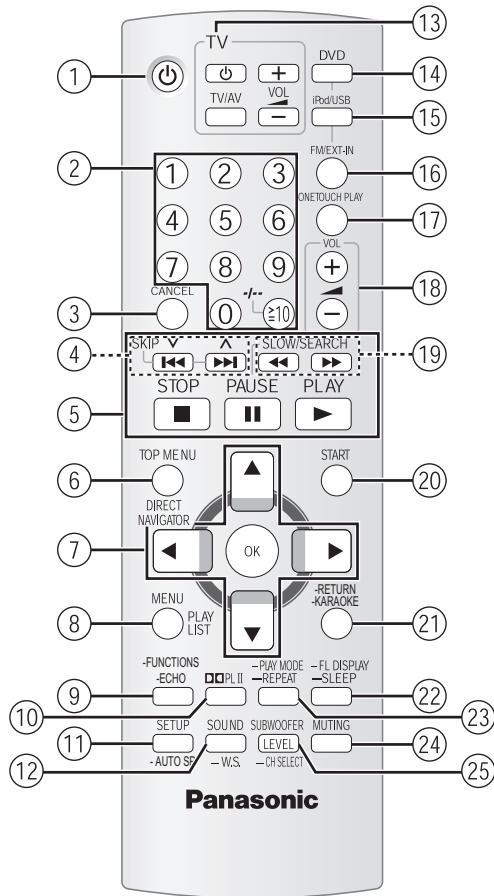
Auto speaker setup
microphone

- Special Note:

*1 AC clamp filter is to be attached to the AC cord used for the wireless receiver unit. (SE-FX65A)

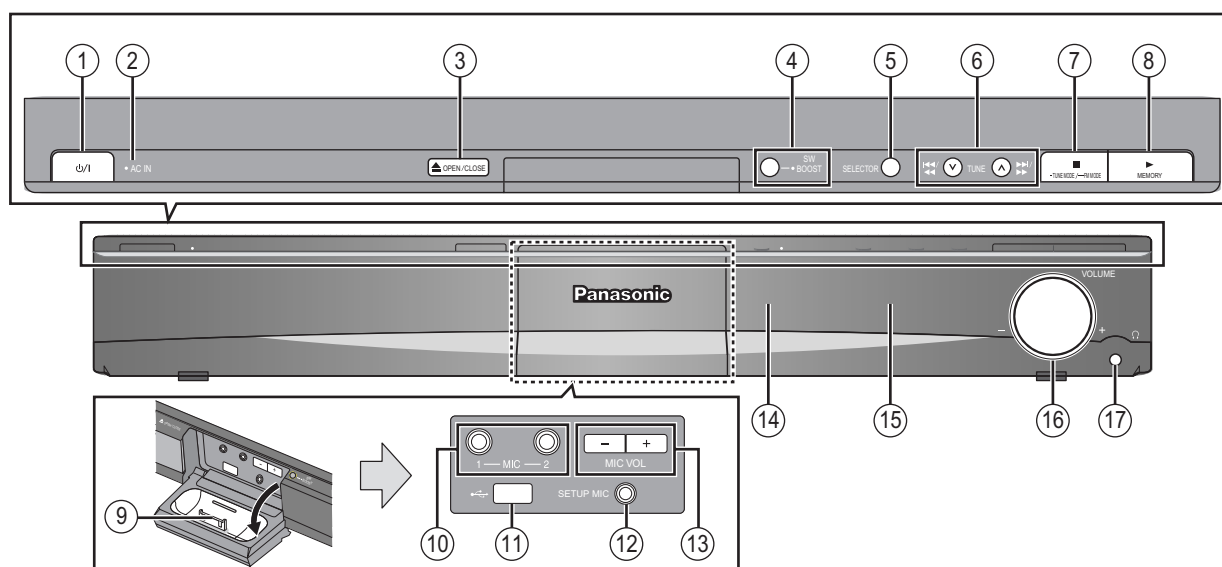
7 Operation Procedures

7.1. Remote Control Key Buttons Operations



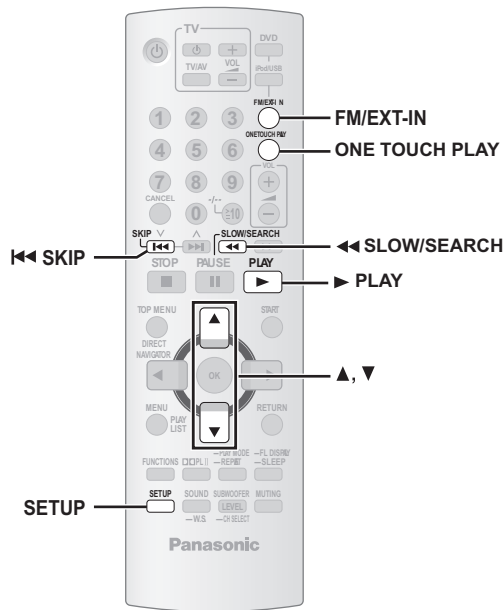
- ① Turn this unit on/off
- ② Select channels and title numbers etc. / Enter numbers
- ③ Cancel
- ④ Select preset radio stations
- ⑤ Basic operations for play
- ⑥ Show a disc top menu or program list
- ⑦ Select or confirm menu items / Frame-by-frame
- ⑧ Show a disc menu or play list
- ⑨ Show on-screen menu / Adjust echo level
- ⑩ Turn Dolby Pro Logic II on/off
- ⑪ Show setup menu / Auto speaker setup
- ⑫ Select sound mode / Turn Whisper-mode Surround on/off
- ⑬ TV operations
Aim the remote control at the Panasonic TV and press the button.
[⏻]: Turn the TV on/off
[TV/AV]: Change the TV's video input mode
[+ , -]: Adjust the TV volume
This may not work properly with some models.
- ⑭ Select disc as the source
- ⑮ Select USB or iPod as the source
- ⑯ Select FM tuner or external audio as the source
FM→AUX→D-IN
- ⑰ Start up and play a disc automatically
- ⑱ Adjust the volume of the main unit
- ⑲ Select radio stations manually
- ⑳ Show START menu
- ㉑ Return to previous screen / Show karaoke mode on screen menu
- ㉒ Switch information on the main unit's display or
Set the Sleep timer
Press and hold [-SLEEP].
While the time is shown on the main unit's display, press the [-SLEEP] repeatedly.
SLEEP 30→SLEEP 60→SLEEP 90→SLEEP 120
OFF (Cancel)
- To confirm the remaining time, press and hold the button again.
- ㉓ Select the play mode / Set the repeat mode
- ㉔ Mute the sound
● "MUTING" flashes in this unit's display while the function is on.
● To cancel, press the button again or adjust the volume.
● Muting is cancelled when you switch the unit to standby.
- ㉕ Adjust the subwoofer level or select speaker channel

7.2. Main Unit Key Buttons Operations



- | | |
|--|--|
| <p>① Standby/on switch [⏻/⏻]
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.</p> <p>② This indicator lights when the unit is connected to the AC mains supply.</p> <p>③ Open/Close the disc tray</p> <p>④ Turn Subwoofer Boost on/off</p> <p>⑤ Select the source
DVD/CD→USB→FM→AUX→D-IN→IPOD
←──────────────────┘</p> <p>⑥ Skip or slow-search play / Select the radio stations</p> <p>⑦ Stop playing / Select the tuning mode / Adjust the FM reception condition</p> <p>⑧ Play discs / Memorize the receiving radio stations</p> <p>⑨ Connect iPod</p> | <p>⑩ Connect microphones</p> <p>⑪ Connect USB device</p> <p>⑫ Connect Auto speaker setup microphone</p> <p>⑬ Adjust microphone volume</p> <p>⑭ Remote control signal sensor</p> <p>⑮ Display</p> <p>⑯ Adjust the volume of the main unit</p> <p>⑰ Connect headphones
Headphone plug type: Ø3.5 mm stereo mini plug</p> <ul style="list-style-type: none"> ● Reduce the volume before connecting. ● Audio is automatically switched to 2-channel stereo. ● To prevent hearing damage, avoid listening for prolonged periods of time. ● Excessive sound pressure from earphones and headphones can cause hearing loss. |
|--|--|

7.3. Using the VIERA Link "HDAVI Control™"



VIERA Link "HDAVI Control"

VIERA Link "HDAVI Control" is a convenient function that offers linked operations of this unit, and a Panasonic TV (VIERA) under "HDAVI Control". You can use this function by connecting the equipment with the HDMI cable. See the operating instructions for connected equipment for operational details.

- VIERA Link "HDAVI Control", based on the control functions provided by HDMI which is an industry standard known as HDMICEC (Consumer Electronics Control), is a unique function that we have developed and added. As such, its operation with other manufacturers' equipment that supports HDMICEC cannot be guaranteed.
- This unit supports "HDAVI Control 2" function. "HDAVI Control 2" is the newest standard (current as of February, 2007) for Panasonic's HDAVI Control compatible equipment. This standard is compatible with Panasonic's conventional HDAVI equipment. The TV with "HDAVI Control 2" function enables the following operation: VIERA Link Control only with TV's remote control (for "HDAVI Control 2").

Preparation

- Confirm that the HDMI connection has been made and the scart cable is not connected. Set "VIERA Link" to "ON".
- To complete and activate the connection correctly, turn on all VIERA Link "HDAVI Control" compatible equipment and set the TV to the corresponding HDMI input mode for this unit.

Setting the TV audio for VIERA Link "HDAVI Control"
Select between "AUX" and "D-IN" to work with the linked operations.

Confirm the audio connection to the AUX terminal (for "AUX") or OPTICAL IN terminal (for "D-IN")

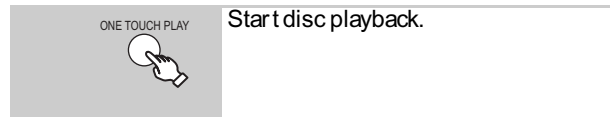
- 1 Press [FM/EXT-IN] to select "D-IN".
- 2 Press [SETUP] to select "TV AUDIO", then press [▲, ▼] to select "AUX" or "D-IN".

Whenever the connection or settings are changed, reconfirm the points above.

※ "AUX" and "D-IN" works depending on the "TV AUDIO" setting (→ above, Setting the TV audio for VIERA Link "HDAVI Control").

One touch play

You can turn on this unit and the TV, and start playing the disc with a single press of a button.



This function also works if you press [▶ PLAY] on this unit's remote control when this unit is in standby mode.

Note

Playback may not be immediately displayed on the TV. If you miss the beginning portion of playback, press [◀◀] or [▶▶] to go back to where playback started.

Auto input switching

- When you switch the TV input to:
TV tuner mode, this unit will automatically switch to "AUX"※ or "D-IN"※.
HDMI input mode for this unit, this unit will automatically switch to "DVD/CD" if it is in "AUX"※ or "D-IN"※ mode.
- When you start disc play, the TV will automatically switch its input mode for this unit.

Power off link

When the TV is turned off, this unit goes into standby mode automatically.

- This function works only when "DVD/CD", "USB", "AUX"※ or "D-IN"※ is selected as the source on this unit.
- When the TV is turned on, this unit does not turn on automatically. (Power on link is not available.)

Note

When you press [⏻], only this unit turns off. Other connected equipment compatible with VIERA Link "HDAVI Control" stays on.

Speaker control

You can select whether audio is output from this unit's speakers or the TV speakers by using the TV menu settings. For details, refer to the operating instructions of your TV.

Home Cinema

This unit's speakers are active.

- When this unit is in standby mode, changing the TV speakers to this unit's speakers in the TV menu will automatically turn this unit on and select "AUX" or "D-IN" as the source.
- The TV speakers are automatically muted.
- You can control the volume setting using the volume or mute button on the TV's remote control. (The volume level is displayed on this unit's FL display.)
- To cancel muting, you can also use this unit's remote control
- If you turn off this unit, TV speakers will be automatically activated.

TV

TV speakers are active.

- The volume of this unit is set to "0".
This function works only when "DVD/CD", "USB", "AUX" or "D-IN" is selected as the source on this unit.
- Audio output is 2-channel audio.

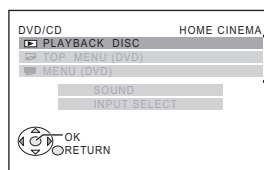
When switching between this unit's speakers and TV speakers, the TV screen may be blank for several seconds.

VIERA Link Control only with TV's remote control [for "HD AVI Control 2 (or later)"]

You can control the playback menus of this unit with the TV's remote control when using the "DVD/CD" or "USB" source. When operating the TV's remote control, refer to the below illustration for operation buttons.

- 1 Select this unit's operation menu by using the TV menu settings.
(For details, refer to the operating instructions of your TV).

The START menu will be shown.
e.g.



- 2 Select the desired item on the START menu.

Note

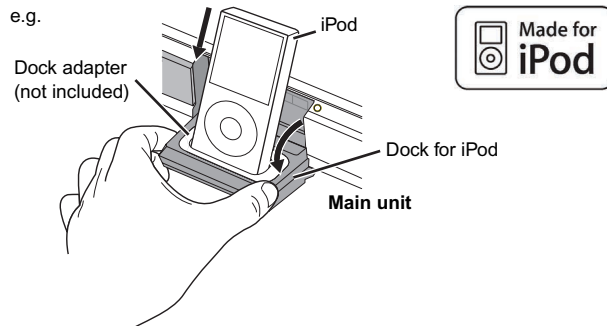
- Depending on the menu, some button operations cannot be performed from the TV's remote control.
- The START menu can also be shown by using a button on the TV's remote control (e.g. [OPTION]).
- You cannot input numbers with the numbered buttons on the TV's remote control ([0] to [9]). Use this unit's remote control to select the play list etc.

7.4. Using the iPod

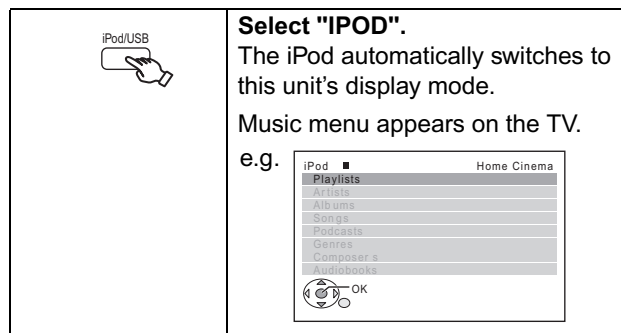
Preparation

- To view photos/videos from the iPod
 - Ensure the video connection to the VIDEO OUT terminal on this unit.
 - Operate the iPod menu to make the appropriate photo/video output settings for your TV. (Refer to operating instructions of your iPod.)
- To display the picture, turn on the TV and select the appropriate video input mode.
- Before connecting/disconnecting the iPod, turn this unit off or reduce the volume of this unit to its minimum.

Connect the iPod (not included) firmly.
Recharging starts when the iPod is inserted.

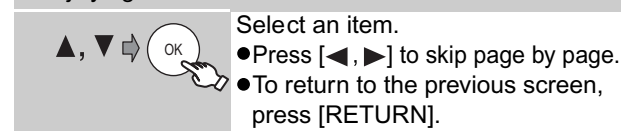


- Hold the dock when connecting/disconnecting the iPod.
 - Attach the dock adapter which should be supplied with your iPod to the dock for the stable use of the iPod.
- If you need an adapter, consult your iPod dealer.

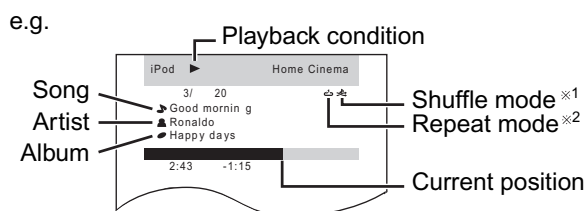


To operate through display of iPod, press [FUNCTIONS].

Enjoying music



Play starts from the selected song.



*1 To select shuffle modes

Press [–PLAY MODE]
Each time you press the button:

- ◀▶ : Song shuffle
- ◀▶ : Album shuffle
- Off: Cancel

*2 To select repeat modes

Press and hold [–REPEAT] and then press the button repeatedly within 3 seconds.
Each time you press the button:

- ↺ : Repeat 1 track
- ↺ : Repeat all
- Off: Cancel

Enjoying photos/videos

- 1  **Switch the iPod to its own display mode.**
Proceed operations through display of iPod.
- 2 **Play a slideshow or video on your iPod.**
The picture will be displayed on your TV.

You can also use the remote control to operate iPod menu.

[▲, ▼]: To navigate menu items

[OK]: To go to the next menu

[RETURN]: To return to the previous menu

Basic controls (For music and videos only)

Button	Function
[▶ PLAY]	Play
[■ STOP], [PAUSE]	Pause
[◀◀, ▶▶]	Skip
(press and hold) [◀◀, ▶▶]	Search

- You can enjoy surround sound effect when you press [DOLBY II] to turn on Dolby Pro Logic II

When using the START menu in "IPOD" mode

Select "Music" or "Photos/Videos".

Music: Shows the music menu.

Photos/Videos: Switches to display of iPod.

About recharging the battery

- iPod will start recharging regardless of whether this unit is on or off.
- "IPOD ✱" will be shown on this unit's display during iPod charging in this unit standby mode.
- Check iPod to see if the battery is fully recharged.
- If you are not using iPod for an extended period of time after recharging has completed, disconnect it from this unit, as the battery will be depleted naturally. (Once fully recharged, additional recharging will not occur.)

Note

When connecting the iPod, ensure the USB device has been disconnected.

Compatible iPod

- iPod touch (8GB, 16GB)
- iPod nano 3rd generation (video) (4GB, 8GB)
- iPod classic (80GB, 160GB)
- iPod nano 2nd generation (aluminum) (2GB, 4GB, 8GB)
- iPod 5th generation (video) (60GB, 80GB)
- iPod 5th generation (video) (30GB)
- iPod nano 1st generation (1GB, 2GB, 4GB)
- iPod 4th generation (color display) (40GB, 60GB)
- iPod 4th generation (color display) (20GB, 30GB)
- iPod 4th generation (40GB)
- iPod 4th generation (20GB)
- iPod mini (4GB, 6GB)

Compatibility depends on the software version of your iPod.

7.5. USB Connection and Operation

You can connect and play tracks or files from USB mass storage class devices.

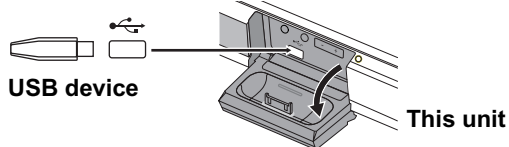
Devices which are defined as USB mass storage class:

- USB devices that support bulk only transfer.
- USB devices that support USB 2.0 full speed.

Preparation

- Before connecting any USB mass storage device to the unit, ensure that the data stored therein has been backed up.
- It is not recommended to use a USB extension cable. The USB device connected using the cable will not be recognised by this unit.

Connect the USB device (not included).



1

iPod/USB

Select "USB".
The menu screen appears.
e.g.

2

▲, ▼, ◀, ▶

Select an item.
• To return to the previous screen, press [RETURN].

Play starts from the selected content.

- You can enjoy surround sound effect when you press [DOLBY II] to turn on Dolby Pro Logic II
- For other operating functions, they are similar to those described in "Playing discs"

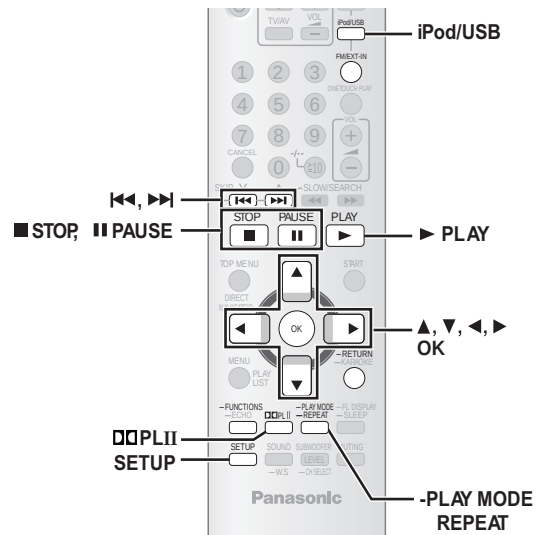
Supported Formats

Still pictures	JPEG (Extension: ".jpg", ".JPG", ".jpeg", ".JPEG")
Music	MP3 (Extension: ".mp3", ".MP3") WMA (Extension: ".wma", ".WMA")
* Video	MPEG4* (Extension: ".asf", ".ASF")

* For Panasonic D-Snap / DIGA

Note

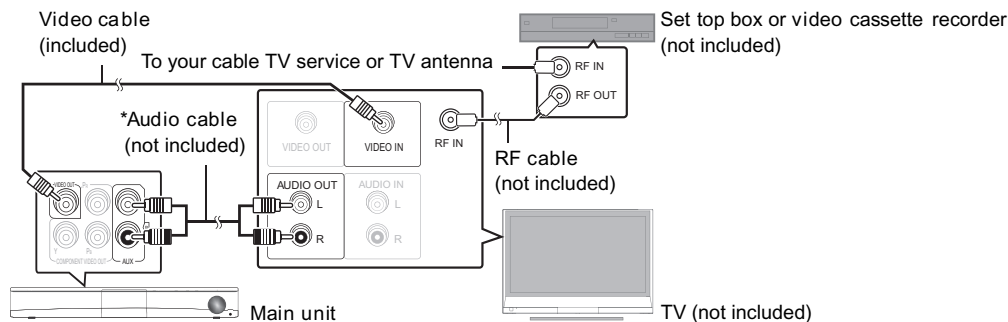
- Maximum: 256 folders, 4000 files, 12 characters for file/folder name
- Only one memory card will be selected when connecting a multiport USB card reader. Typically the first memory card inserted.
- When connecting the USB mass storage device, ensure the iPod has been disconnected.



7.6. Audio and Video Connection

7.6.1. Basic Setup

Basic setup example



* This connection enables you to play audio from your TV, set top box or video cassette recorder through your home theater system

7.6.2. Connecting to a Television with HDMI Component Video Out Terminal

TV terminal	Cable required (not included)	Main unit terminal	Features
	HDMI cable Notes •Non-HDMI-compliant cables cannot be utilized. •It is recommended that you use Panasonic's HDMI cable. Recommended part number: RP-CDHG15 (1.5 m), RP-CDHG30 (3.0 m), RP-CDHG50 (5.0 m), etc.	HDMI	This connection provides the best picture quality. •Set VIDEO PRIORITY" to "ON" •Set VIDEO FORMAT" in Menu 5 (HDMI) VIERA Link HD AVI Control If your Panasonic TV is VIERA Link compatible, you can operate it synchronising with home theater operations or vice versa •Make the extra audio connection when you use VIERA Link "HDAVI Control" function.
Panasonic TVs with 576/50i-50p, 480/60i-60p input terminals are progressive compatible. Consult the manufacturer if you have another brand of TV.	Video cables	COMPONENT VIDEO OUT • Connect to terminals of the same colour.	This connection provides a much purer picture than the VIDEO OUT terminal. To enjoy progressive video •Connect to a progressive output compatible TV. - Set "VIDEO OUT (I/P)" in "VIDEO" menu to "PROGRESSIVE" and then follow the instructions on the menu screen.

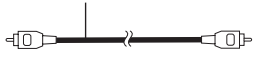
Note

- Do not make the video connections through the video cassette recorder.

Due to copy guard protection, the picture may not be displayed properly.

- Only one video connection is required. Choose one of the video connections above depending on your TV.

7.6.3. Connecting to a Television with Optical Terminal

TV or external equipment terminal	Cable required (not included)	This unit terminal	Features
 OPTICAL OUT	Optical digital audio cable  • Do not bend sharply when connecting.	OPTICAL IN  OPTICAL IN	This unit can decode the surround signals received through the set top box, digital broadcasting or satellite broadcasts. Refer to your equipment's operating instructions for details. Only Dolby Digital and PCM can be played with this connection. • After making this connection, make settings to suit the type of audio from your digital equipment

7.7. Disc Information

7.7.1. Disc Playability (Media)

Commercial discs

Disc	Logo	Indicated in these instructions by	Remarks
DVD-Video		DVD-V	High quality movie and music discs
Video CD		VCD	Music discs with video Including SVCD (Conforming to IEC62107)
CD		CD	Music discs

Recorded discs (○: Playable, —: Not playable)

Disc	Logo	Recorded on a DVD video recorder, etc.		Recorded on a personal computer, etc.					Finalizing ^{※6}
		DVD-VR ^{※2}	DVD-V ^{※4}	WMA	MP3	JPEG	MPEG4	DivX	
DVD-RAM		○	—	—	○	○	○	○	Not necessary
DVD-R/RW		○	○	—	○	○	○	○	Necessary
DVD-R DL		○ ^{※3}	○	—	—	—	—	—	Necessary
+ R/+ RW	—	—	(○) ^{※5}	—	—	—	—	—	Necessary
+ R DL	—	—	(○) ^{※5}	—	—	—	—	—	Necessary
CD-R/RW ^{※1}	—	—	—	○	○	○	○	○	Necessary ^{※7}

- It may not be possible to play all the above-mentioned discs in some cases due to the type of disc, the condition of the recording, the recording method, or how the files were created. [Refer to Section 7.7.2. File Extension Type Support WMA/MP3/JPEG/MPEG4/DIVX]]

^{※1} This unit can play CD-R/RW recorded with CD-DA or Video CD format.

^{※2} Discs recorded on DVD recorders or DVD video cameras, etc. using Version 1.1 of the Video Recording Format (a unified video recording standard).

^{※3} Discs recorded on DVD recorders or DVD video cameras using Version 1.2 of the Video Recording Format (a unified video recording standard).

^{※4} Discs recorded on DVD recorders or DVD video cameras using DVD-Video Format.

^{※5} Recorded using a format different from DVD-Video Format, therefore some functions cannot be used.

^{※6} A process that allows play on compatible equipment. To play a disc that is indicated as "Necessary", the disc must first be finalized on the device it was recorded on.

^{※7} Closing the session will also work.

Note about using a DualDisc

The digital audio content side of a DualDisc does not meet the technical specifications of the Compact Disc Digital Audio (CD-DA) format so playback may not be possible.

■ Discs that cannot be played

Blu-ray, HD DVD, AVCHD discs, DVD-RW version 1.0, DVD-Audio, DVD-ROM, CD-ROM, CDV, CD-G, SACD, DivX Video Discs and Photo CD, DVD-RAM that cannot be removed from their cartridge, 2.6 GB and 5.2 GB DVD-RAM, and "Chaoji VCD" available on the market including CVD, DVCD and SVCD that do not conform to IEC62107.

■ Video systems

- This unit can play PAL and NTSC, but your TV must match the system used on the disc.
- PAL discs cannot be correctly viewed on an NTSC TV.
- This unit can convert NTSC signals to PAL 60 for viewing on a PAL TV

7.7.2. File Extension Type Support (WMA/MP3/JPEG/MPEG4/DIVX)

Format	Disc	Extension	Reference
WMA	CD-R/RW	.WMA .wma	- Compatible compression rate: between 48 kbps and 320 kbps - You cannot play WMA files that are copy-protected. - This unit does not support Multiple Bit Rate (MBR: an encoding process for audio content that produces an audio file encoded at several different bit rates).
MP3	DVD-RAM DVD-R/RW CD-R/RW	.MP3 .mp3	- This unit does not support ID3 tags. - Sampling frequency and compression rate: DVD-RAM, DVD-R/RW: 11.02, 12, 22.05, 24 kHz (8 to 160 kbps), 44.1 and 48 kHz (32 to 320 kbps) CD-R/RW: 8, 11.02, 12, 16, 22.05, 24 kHz (8 to 160 kbps), 32, 44.1 and 48 kHz (32 to 320 kbps)
JPEG	DVD-RAM DVD-R/RW CD-R/RW	.JPG .jpg .JPEG .jpeg	- JPEG files taken on a digital camera that conform to DCF Standard (Design rule for Camera File system) Version 1.0 are displayed. Files that have been altered, edited or saved with computer picture editing software may not be displayed. - This unit cannot display moving pictures, MOTION JPEG and other such formats, still pictures other than JPEG (e.g. TIFF), or play pictures with attached audio.
MPEG4	DVD-RAM DVD-R/RW CD-R/RW	.ASF .asf	- You can play MPEG4 data [conforming to SD VIDEO specifications (ASF standard)/MPEG4 (Simple Profile) video system/G.726 audio system] recorded with Panasonic SD multi cameras or DVD recorders with this unit. - The recording date may differ from that of the actual date.
DivX	DVD-RAM DVD-R/RW CD-R/RW	.DIVX .divx .AVI .avi	- Plays all versions of DivX® video (including DivX® 6) [DivX video system/MP3, Dolby Digital or MPEG audio system] with standard playback of DivX® media files. Functions added with DivX Ultra are not supported. - DivX files greater than 2 GB or have no index may not be played properly on this unit. - This unit supports all resolutions up to maximum of 720k 480 (NTSC)/720k 576 (PAL). - You can select up to 8 types of audio and subtitles on this unit.

- There may be differences in the display order on the menu screen and computer screen.
- This unit cannot play files recorded using packet write.

DVD-RAM

- Discs must conform to UDF 2.0.

DVD-R/RW

- Discs must conform to UDF bridge (UDF 1.02/ISO9660).
- This unit does not support multi-session. Only the default session is played.

CD-R/RW

- Discs must conform to ISO9660 level 1 or 2 (except for extended formats).
- This unit supports multi-session but if there are many sessions it takes more time for play to start. Keep the number of sessions to a minimum to avoid this.

8 Self-Diagnosis and Special Mode Setting

8.1. Service Mode Summary Table

The service modes can be activated by pressing various button combination on the main unit and remote control unit.

Below is the summary for the various modes for checking:

Main unit buttons	Remote control unit buttons	Application	Note
[STOP]	[0]	Error code check.	(Refer to the section "8.2.1. Service Mode Table 1" for more information.)
	[5]	Jitter checking.	
	[PAUSE]	Initial setting of laser drive current.	
	[FUNCTIONS]	DVD laser drive current check.	(Refer to the section "8.2.2. Service Mode Table 2" for more information.)
	[3]	CD laser drive current check.	
	[6]	Region display and mode.	
	[SOUND]	CPPM/CRM keys check.	(Refer to the section "8.2.3. Service Mode Table 3" for more information.)
	[7]	Micro-processor firmware version check.	
	[≥10]	Initialization of the player (factory setting is restored). Used after replacement of Micro-processor (DV5 LSI) IC, FLASH ROM IC (IC8651), EEPROM IC (IC8611) and DVD Module P.C.B.	
	[OK]	DVD Module P.C.B. reset.	(Refer to the section "8.2.4. Service Mode Table 4" for more information.)
	[8]	DVD Module P.C.B. firmware version check.	
	[▲]	Timer 1 check.	
	[▼]	Timer 1 reset.	
	[►]	Timer 2 check.	
	[◀]	Timer 2 reset.	

Note:

An error code will be canceled if a power supply is turned OFF.

*1: CPPM is the copy guard function beforehand written in the disk for protection of copyrights.

*2: CEC is the consumer electronic control used for high-level user control of HDMI-connected devices.

*3: HDCP is the specification developed to control digital audio & video contents transmission for DVI or HDMI connections.

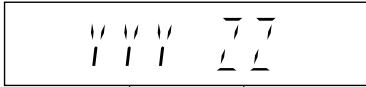
8.2. Service Mode Table

By pressing various button combinations on the main unit and remote control unit, you can activate the various service modes for checking.

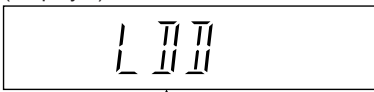
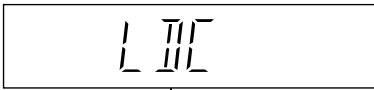
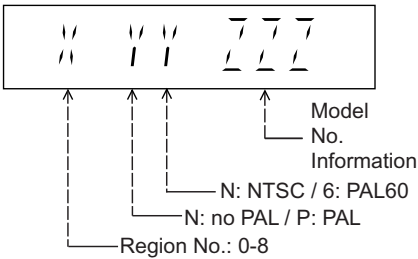
Special Note:

- Due to the limitations of the no. characters that can be shown on the FL Display, the "FL Display" button on the remote control unit can be used to show the two display pages. (Display 1 / Display 2).
- Refer to Section 7.1 for the section on "Remote Control Key Buttons Operations".

8.2.1. Service Mode Table 1

Item		FL Display	Key Operation
Mode Name	Description		Front Key
Error code check	Error code check The latest error code stored in the EEPROM IC is displayed. Note: Refer to "Section 8.3 DVD Self Diagnostic Function-Error Code" for more detailed information on the error codes.	 ↑ F / H / U Error code (play_err) is expressed in the following convention. Error code = 0 x DAXX is expressed: → DVDnn U12 Error code = 0 x DBXX is expressed: → DVDnn H12 Error code = 0 x DXXX is expressed: → DVDnn F123 Error code = 0 x 0000 is expressed: → DVDnn F--- * "xx" denotes the error code	In STOP (no disc) mode, press [STOP] button on the main unit, and [0] button on the remote control unit. *With pointing of cursor up and down on display. Cancelled automatically 5 seconds later. To exit, press [POWER] button on main unit or remote control.
Jitter check	Jitter check. Jitter rate is measured and displayed. Measurement is repeatedly done in the cycle of one second. Read error counter starts from zero upon mode setting. When target block data failed to be read out, the counter advances by one increment. When the failure is caused by minor error, it may be corrected when retried to enable successful reading. In this case, the counter advances by one. When the error persists even after retry, the counter may jump by two or more. FL Display sequence: Display 1→2.	(Display 1)  ↑ ↑ Jitter check mode Jitter rate Jitter rate is shown in decimal notation to one place of decimal. Focus drive value is shown in hexadecimal notation. (Display 2)  ↑ ↑ Lead Error Counter Focus Drive Value	In STOP (with disc inside tray) mode, press [STOP] button on the main unit, and [5] button on the remote control unit, after Display 1 appears, then press [PLAY]. Press [POWER] or [STOP] button to exit. Press [FL Display] on remote control unit for next page (FL Display).
Initial setting of laser drive current	Initial setting of laser drive current. Initial current value for the DVD laser and CD laser is separately saved in the EEPROM IC. FL Display sequence: Display 1→2.	(Display 1)  ↑ Laser current measurement mode The value denotes the current in decimal notation. (Display 2)  ↑ ↑ CD Laser DVD Laser The above example shows the initial current is XXXmA and YYYmA for CD laser and DVD laser respectively when the laser is switched on.	In STOP (no disc) mode, press [STOP] button on the main unit, and [PAUSE] button on the remote control unit. Cancelled automatically 5 seconds later. Press [FL Display] on remote control unit for next page (FL Display) on values of laser drive current.

8.2.2. Service Mode Table 2

Item		FL Display	Key Operation
Mode Name	Description		Front Key
DVD laser drive current measurement	DVD laser drive current measurement. DVD laser drive current is measured and the result is displayed together with the initial value stored in the EEPROM IC. After the measurement, DVD laser emission is kept on. It is turned off when POWER key is switched off. FL Display sequence: Display 1→2.	(Display 1)  DVD laser current measurement mode The value denotes the current in decimal notation. (Display 2)  DVD Laser Initial Value DVD Laser Value The above example shows the initial current is XXXmA and the measured value is YYYmA.	In STOP (no disc) mode, press [STOP] button on the main unit, and [FUNCTIONS] button on the remote control unit. Cancelled automatically 5 seconds later. Press [FL Display] on remote control unit for next page (FL Display) on values of dvd drive current.
CD laser drive current measurement	CD laser drive current measurement. CD laser drive current is measured and the result is displayed together with the initial value stored in the EEPROM IC. After the measurement, CD laser emission is kept on. It is turned off when POWER key is switched off. FL Display sequence: Display 1→2.	(Display 1)  CD laser current measurement mode The value denotes the current in decimal notation. (Display 2)  CD laser initial value CD laser value The above example shows the initial current is XXXmA and the measured value is YYYmA.	In STOP (no disc) mode, press [STOP] button on the main unit, and [3] button on the remote control unit. Cancelled automatically 5 seconds later. Press [FL Display] on remote control unit for next page. (FL Display)
Region display	Region code display, TV broadcasting system & the model no. information. Note: Refer to Figure 8.1 for "Video Design Information".	 Model No. Information N: NTSC / 6: PAL60 N: no PAL / P: PAL Region No.: 0-8	In STOP (no disc) mode, press [STOP] button on the main unit, and [6] button on the remote control unit. Cancelled automatically 5 seconds later.
CPPM/CRM Keys Check	CPPM/CRM refers to the Content Protection for Recordable Media and Pre-Recorded Media. It displays the existence of the keys as "1" or "0". OK: Existing of keys. NG: Non existing of keys.	 0: NG 0: NG 1: OK 1: OK	In STOP (no disc) mode, press [STOP] button on the main unit, and [SOUND] button on the remote control unit. Cancelled automatically 5 seconds later.

Model Series	Country Region	Region Code	TV Broadcasting System	Product			
				Signal System (Default)	Region Display (Default)	OSD Default	OSD Menu Language
P, PC, PX	USA, Canada, PX	1	NTSC	NTSC (*A)	1PN	English	English, Spanish, Canadian, French
(S)	Japan	2	NTSC	NTSC (*A)	2PN	Japanese	Japanese, English
E	Europe	2	PAL	PAL (*C)	2P6	English	English, French, German, Spanish, Polish, Russian, Czech, Hungarian
EB, EG	Europe	2	PAL	PAL (*C)	2P6	English	English, French, German, Italian, Spanish, Polish, Swedish, Dutch
GC, GS	Middle East	2	PAL	PAL (*C)	2P6	English	English, French, German, Spanish, Polish, Russian, Czech, Hungarian
GCS, GD, GT, GCT	South East Asia, Korea, Taiwan	3	PAL NTSC	NTSC (*B)	3PN	English	English, Traditional Chinese
GN	New Zealand, Australia	4	PAL	PAL (*C)	4P6	English	English, French, German, Italian, Spanish, Polish, Swedish, Dutch
PL, GCP, LB	Central/South/Latin America	4	NTSC	NTSC (*D)	4PN	English	English, Spanish, French, Brazilian Portuguese
EE	CIS	5	SECAM	PAL (*C)	5P6	English	English, French, German, Spanish, Polish, Russian, Czech, Hungarian
GK	China	6	PAL	NTSC (*B)	6PN	English	English, Simplified Chinese

NTSC (*A)

Source	Output
Screen Saver	NTSC
NTSC disc	NTSC
PAL disc	PAL (DVD-V)
	NTSC (DVD-A/VCD)

NTSC (*B)

Source	Output
Screen Saver	NTSC
NTSC disc	NTSC (default)
	PAL60
PAL disc	PAL

PAL (*C)

Source	Output
Screen Saver	PAL
NTSC disc	PAL60 (default)
	NTSC
PAL disc	PAL

NTSC (*D)

Source	Output
Screen Saver	NTSC
NTSC disc	NTSC
PAL disc	NTSC

Explanation of Display

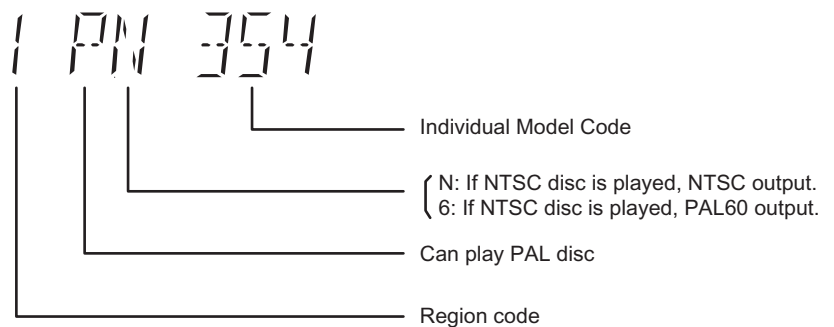
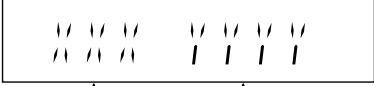
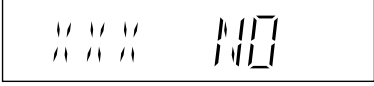
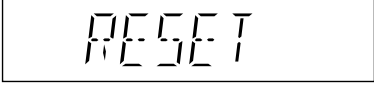
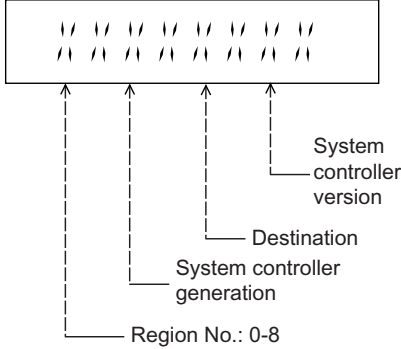


Figure 8.1 Video Design Information

8.2.3. Service Mode Table 3

Item		FL Display	Key Operation
Model Name	Description		Front Key
Micro-processor firmware version display & EEPROM checksum display.	Micro-processor firmware version display & EEPROM checksum display. EEPROM checksum is only available due to existence of EEPROM IC. Note: Condition 1/2/3 shows the state of EEPROM IC. FL Display sequence: Display 1→2→3.	(Display 1)  (Display 2)  ↑ ↑ Opecon EEPROM Version Checksum (If applicable, refer below.) (Condition 1)  If the version of the EEPROM does not match, [NG] is displayed. (Condition 2)  (a) If there is NO EEPROM header string OR (b) If there is no EEPROM (no data is received by Micro-processor), [NO] is displayed. (Condition 3)  If the EEPROM version matches, checksum [YYYY] is displayed. (Display 3) 	In STOP (no disc) mode, press [STOP] button on the main unit, and [7] button on the remote control unit. Cancelled automatically 5 seconds later. Press [FL Display] button on remote control unit for next page. (FL Display)
Initialization	Initialization. User settings are cancelled and player is initialized to factory setting. It is necessary when after replacement of Micro-processor (DV5 LSI) IC, FLASH ROM IC (IC8651), EEPROM IC (IC8611) & DVD Module P.C.B.		In STOP (no disc) mode, press [STOP] button on the main unit, and [≥10] button on the remote control unit. Cancelled automatically 5 seconds later.
DVD Module P.C.B. Reset	To reset DVD Module P.C.B. This process is used when the DVD Module P.C.B. or FLASH ROM IC is replaced with a new one.		While in initialization mode, press & hold [STOP] button on the main unit for 3 seconds, follow by [OK] button on the remote control unit. Cancelled automatically 5 seconds later.

8.2.4. Service Mode Table 4

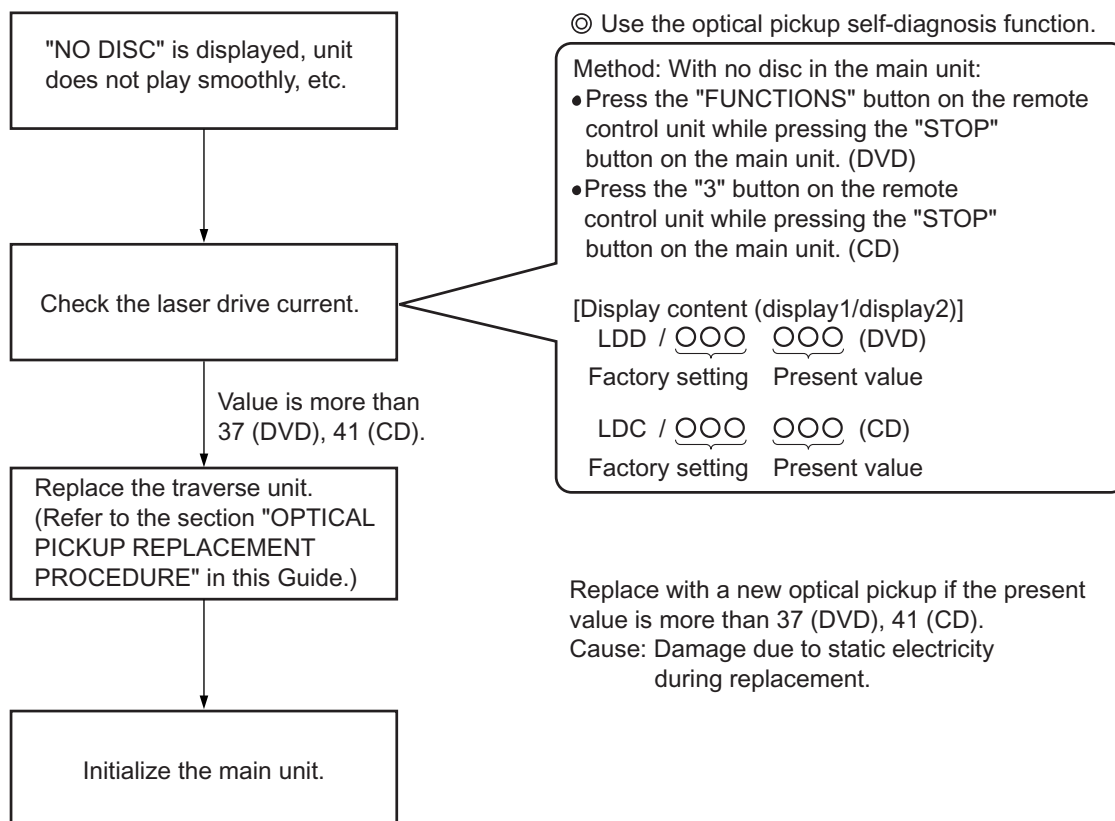
Item		FL Display	Key Operation
Mode Name	Description		Front Key
DVD Module P.C.B. firmware version display	DVD Module P.C.B. firmware version is displayed on the FL Display. The firmware version can be updated using recovery disc. Note: It is necessary to check for firmware version before carrying out the version up using the disc.		In STOP (no disc) mode, press [STOP] button on the main unit, and [8] button on the remote control unit. Cancelled automatically 5 seconds later.
Timer 1 check	Timer 1 check Laser operation timer is measured separately for DVD laser and CD laser. FL Display sequence: Display 1→2.	(Display 1)  Shown to the above is DVD laser usage time, and to the below is CD laser usage time. Time is shown in 5 digits of decimal notation in a unit of 10 hours. "00000" will follow "99999". (DVD laser) (Display 2)  Time is shown in 6 digits of decimal notation in a unit of 10 hours. "000000" will follow "999999". (CD laser)	In STOP (no disc) mode, press [STOP] button on the main unit, and [▲] button on the remote control unit. Cancelled automatically 5 seconds later. Press [FL Display] button for next page of FL Display.
Timer 1 reset	Timer 1 reset Laser operation timer of both DVD laser and CD laser is reset all at once.	 Time is shown in 5 digits of decimal notation in a unit of 10 hours. It will clear to "00000" upon reset.	While displaying Timer 1 data, press [STOP] button on the main unit, and [▼] button on the remote control unit. Cancelled automatically 5 seconds later
Timer 2 check	Timer 2 check Spindle motor operation timer	 Time is shown in 5 digits of decimal notation in a unit of 1 hour. "00000" will follow "99999".	In STOP (no disc) mode, press [STOP] button on the main unit, and [▶] button on the remote control unit. Cancelled automatically 5 seconds later.
Timer 2 reset	Timer 2 reset Spindle motor operation timer	 Time is shown in 5 digits of decimal notation in a unit of 1 hour. It will be cleared to "00000" upon activating this.	While displaying Timer 2 data, press [STOP] button on the main unit, and [◀] button on the remote control unit. Cancelled automatically 5 seconds later.

8.2.5. Optical Pick-up Self-Diagnosis

The optical pickup self-diagnosis function and tilt adjustment check function have been included in this unit. When repairing, use the following procedure for effective self-diagnosis and tilt adjustment. Be sure to use the self-diagnosis function before replacing the optical pickup when "NO DISC" is displayed. As a guideline, you should replace the optical pickup when the value of the laser drive current is more than the specified value.

Note:

Press the power button to turn on the power, and check the value within three minutes before the unit warms up. (Otherwise, the result will be incorrect.)



8.3. Wireless Service Mode Summary Table

The service modes can be activated by pressing various button combination on the player and remote control unit.

Below is the summary of major checking:

Player buttons	Remote control unit buttons	Application	Note
FAST FORWARD	3	ID setting	(Refer to the section "8.4.1. Service Mode Table 1" for more information).
STOP (only in AUX)	4	RF channel 1 display	(Refer to the section "8.4.2. Service Mode Table 2" for more information).
	5	RF channel 2 display	
	6	RF channel 3 display	
	7	Auto RF channel display	

Note: Main room refers to the location of the main unit.

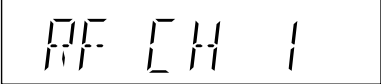
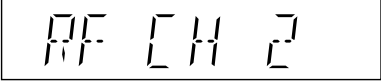
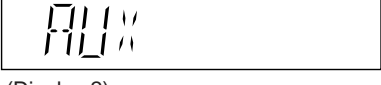
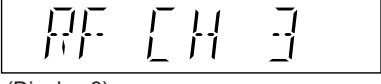
8.4. Service Mode Table (Wireless - eg. SH-FX67)

By pressing various button combinations on the player and remote control unit, you can activate the various service modes for checking.

8.4.1. Service Mode Table 1

Item		FL Display	Key Operation
Mode Name	Description		Front Key
ID Setting	To set the ID in the Tx & Rx. The system goes into "Pairing Mode". [P] will be displayed for 60 seconds to indicate it is in "Pairing Mode". During this condition, the "ID set" button on the receiver unit can be pressed to pair the Tx & Rx. After 60 seconds, the FL display will return to its previous display. Note: Carry out pairing when Tx or Rx has been changed.	 Note : W1 will blink when a new transmitter card is inserted or when the Receiver module P.C.B.(Rx) had been changed. It will stopped when pairing is completed.	In CD/DVD mode. Press and hold [FAST FORWARD] button on the main unit, and [3] button on the remote control unit. Press the [P/I] on main unit or remote control.

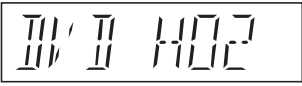
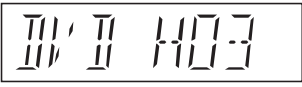
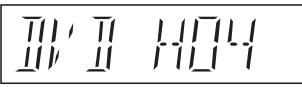
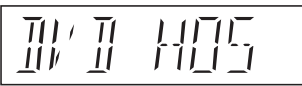
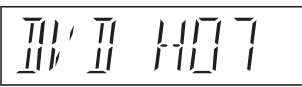
8.4.2. Service Mode Table 2

Item		FL Display	Key Operation
Mode Name	Description		Front Key
RF Channel Selection Display	RF Channel 1 Display*	(Display 1) 	Main set is in AUX mode.
	FL Display sequence: Display 1→2→3	(Display 2) 	Press and hold [STOP] button on the main unit, and [4] button on the remote control unit.
		(Display 3) 	After 2 seconds.
RF Channel 2 Display*	RF Channel 2 Display*	(Display 1) 	Main set is in AUX mode.
	FL Display sequence: Display 1→2→3	(Display 2) 	Press and hold [STOP] button on the main unit, and [5] button on the remote control unit.
		(Display 3) 	After 2 seconds.
RF Channel 3 Display*	RF Channel 3 Display*	(Display 1) 	Main set is in AUX mode.
	FL Display sequence: Display 1→2→3	(Display 2) 	Press and hold [STOP] button on the main unit, and [6] button on the remote control unit.
		(Display 3) 	After 2 seconds.
Auto RF Channel Display*	Auto RF Channel Display*	(Display 1) 	Main set is in AUX mode.
	FL Display sequence: Display 1→2→3	(Display 2) 	Press and hold [STOP] button on the main unit, and [7] button on the remote control unit.
		(Display 3) 	After 2 seconds.

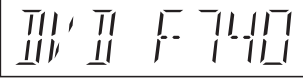
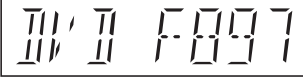
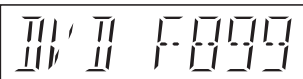
*Note: This mode is for purpose of disabling/enabling the frequency of automatic allocation and be able to select a fixed RF channel (channels 1, 2 or 3).

8.5. DVD Self Diagnostic Function-Error Code

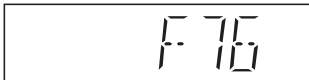
8.5.1. Mechanism Error Code Table

Error Code	Diagnosis Contents	Description of error	Automatic FL Display	Remarks
H01	Tray loading error	The tray opening and closing is abnormal. CLOSE and OPEN of the tray cannot be carried out properly. Loading motor error, DV5 LSI IC (IC8001) error.		Press [■STOP] on main unit for next error. (OPEN time: OPEN → CLOSE → OPEN → H01 at CLOSE: CLOSE → OPEN → CLOSE H01)
H02	Spindle servo error	The spindle servo/motor is abnormal. The FG pulse is abnormal. CLV servo error.		Press [■STOP] on main unit for next error.
H03	Traverse servo error	The traverse is abnormal. (Traverse servo, DV5 LSI IC (IC8001), TRV motor error.)		Press [■STOP] on main unit for next error.
H04	Tracking servo error	Tracking coil NG (OPU unit abnormal), DV5 LSI IC (IC8001) error.		Press [■STOP] on main unit for next error.
H05	Seek time out error	It is not possible to access the disc. TOC cannot read. Abnormal disc etc. Pickup abnormal or disk is dirty. (TRV motor error, DV5 LSI IC (IC8001) error.)		Press [■STOP] on main unit for next error.
H07	Driver IC thermal shut down	The spindle motor is abnormal. (short between brushes)		Press [■STOP] on main unit for next error.
U11	Focus servo error	Focus coil, FE signal error. Disc may be dirty.		Press [■STOP] on main unit for next error. (Unfinalized DVD-R is likely to become U11.)

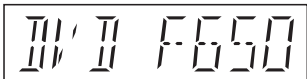
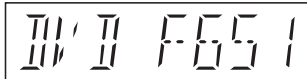
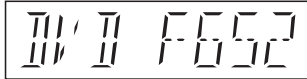
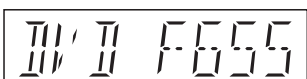
8.5.2. DVD Module Error Code Table

Error Code	Diagnosis Contents	Description of error	Automatic FL Display	Remarks
U702	HDMI/DVI I2C communication error	The communication error of I2C when connecting it with HDMI/DVI. For instance, when EDID information to which information on the TV set side has been described cannot be read, it is generated.		Press [■STOP] on main unit for next error.
U703	HDMI/DVI attestation error	When attestation (HDCP) with the TV side fails when connecting it with HDMI/DVI, it is generated.		Press [■STOP] on main unit for next error.
U704	HDMI/DVI SRM Riborcerar	It is generated at the equipment to which the TV set is Riborced when connecting it with HDMI/DVI.		Press [■STOP] on main unit for next error.
U705	HDMI/DVI SRM disk falsification check error	It is generated at the time of it is time when illegal the SRM data of the reproducing disk (verify error), when connecting it with HDMI/DVI.		Press [■STOP] on main unit for next error.
F740	HDMI device key	I2C error when writing HDMI Key device into transmitter.		Press [■STOP] on main unit for next error.
F893	FLASH ROM IC data falsification error	Firmware error, DV5.0 LSI IC (IC8651) error.		Press [■STOP] on main unit for next error.
F894	EEPROM IC abnormality error	When failing in the access to EEPROM IC located in the DVD Module P.C.B. (IC8611).		Press [■STOP] on main unit for next error.
F895	Language area abnormal	Firmware version agreement check for factory preset setting failure prevention.		Press [■STOP] on main unit for next error.
F897	Initialization error	Incomplete initialization after writing of new firmware (Factory preset setting failure prevention)		Press [■STOP] on main unit for next error.
F899	The communication specification disagreement between micro-processor	Unsuitable combination of number of system com and panel com used. (Frimware)		Press [■STOP] on main unit for next error.

8.5.3. Power Supply & Digital Amplifier Error Code Table

Error Code	Diagnosis Contents	Description of error	Automatic FL Display	Remarks
F61	The abnormalities in an output or power supply circuit of POWER AMP	In normal operation, when DCDET2 goes to "L" (Low) (Not during POWER OFF condition), F61 appears on FLDisplay for 1 second and PCONT goes to "L" (Low). This is due to speaker output has DC voltage or fan is not working.		Press [■ STOP] on main unit for next error.
F76	Abnormality in the output voltage of stabilized power supply	In normal operation when DCDET1 is detected "L" (Low) for two consecutive times, F76 is displayed on FL for 1 second and after that PCONT will be turned to "L" (Low). This is due to any of the DC voltages (+9V, +7V, -7V, +5V, +5.3V etc.) C22 not available.		Press [■ STOP] on main unit for next error.

8.5.4. USB Error Code Table

Error Code	Diagnosis Contents	Description of error	Automatic FL Display	Remarks
F650	USB device: Devices other than mass storage	Devices other than the mass storage class are connected.		Press [■ STOP] on main unit for next error.
F651	USB device: Non-Full Speed Device	The device that the transfer rate did not correspond to Full Speed was connected.		Press [■ STOP] on main unit for next error.
F652	USB device: Interface NG	The device in the interface (subclass) outside correspondence was connected. (correspondence interface) 001b: Reduced Block Commands (RBC) 010b: SFF-8020i. MMC-2 (ATAPI) 110b: SCSI transparent command set.		Press [■ STOP] on main unit for next error.
F655	USB device: Overcurrent detection	The overcurrent of 500mA or more was detected in VDD USB, and the USB device driver function was intercepted. (To intercept the current.)		Press [■ STOP] on main unit for next error.

8.6. Sales Demonstration Lock Function

This function prevents discs from being lost when the unit is used for sales demonstrations by disabling the disc eject function. "LOCKED" is displayed on the unit, and ordinary operation is disabled.

8.6.1. Setting

• Prohibiting removal of disc

1. Select the DVD/CD function.
2. At POWER ON condition, press and hold down the ■ button and the power button on the main unit for at least three seconds. (The message, "LOCKED" appears when the function is activated.)

Note:

OPEN/CLOSE  button is invalid and the main unit displays "LOCKED" while the lock function mode is entered.

- **Prohibiting operation of selector and disc**

1. Select the DVD/CD function.
2. At POWER ON condition, press and hold down the  button and the power button on the main unit for at least three seconds. (The message, "LOCKED" appears when the function is activated.)

Note:

The following buttons are invalid and the main unit displays "LOCKED" while the lock function mode is entered.

Main unit	 OPEN/CLOSE,  /-TUNE MODE/-FM MODE, SELECTOR,  /  /  ,  /  / 
Remote controller unit	iPod/USB, FM/EXT-IN, NUMERIC KEYS 0~9, ≥ 10 ,  ,  ,  ,  ,  ,  , RETURN,

8.6.2. Cancellation

The lock can be cancelled by the same procedure as used in setting. ("UNLOCKED" is displayed on cancellation. Disconnecting the power cable from power outlet does not cancel the lock.)

8.7. Service Precautions

8.7.1. Recovery after the DVD player is repaired

- When the FLASH ROM IC or DVD Module P.C.B. is replaced, carry out the recovery processing to optimize the drive.
Playback the recovery disk to process the recovery automatically.
- Recovery disc (Product number: RFKZD03R005) [SPG]
- Performing recovery process
 1. Load the recovery disc RFKZD03R005 on to the player and run it.
 2. Recovery is performed automatically. When it is finished, a message appears on the screen.
 3. Remove the recovery disc.
 4. Turn off the power.
 5. Initialize the player.

8.7.2. Firmware version-up of the DVD player

- The firmware of the DVD player may be renewed to improve the quality including operability and playability to the substandard discs.processing to optimize the drive.
The recovery disc has also firmware version-up.
- After version-up, recovery processing is executed automatically.
- Part number of the recovery disc for version-up will be noticed when it is supplied.
- Updating firmware
 1. Load the recovery disc on to the player and run it.
 2. Firmware version of the player is automatically checked. Appropriate message appears whenever necessary.
 3. Using remote controller's cursor key, select whether version updating is to be done or not. (Selection of Yes/No)
 4. a. If Yes is selected, version updating is performed.
 - b. If No is selected, only recovery is performed.
 5. a. When updating is finished, remove the disc according to the message appearing on the screen.
 - b. Remove the disc according to the message appearing on the screen.
 6. Turn off the power.

Note:

If the AC power supply is shut out during version-up due to a power failure, the version-up is improperly carried out. In such a case, replace the FLASH ROM IC and carry out the version-up again.

8.7.3. DVD Module P.C.B. Reset

- When after replacing FLASH ROM IC or DVD Module P.C.B., FL displays error code " DVD F897". This means the unit is not initialized properly and the following process needs to be carry out.
- Procedures:
 1. Press ≥ 10 on remote control while pressing "STOP" button on main unit. (To enter into initialization)

2. FL display show "INIT"
3. While still pressing "STOP" button on main unit, press "OK" on remote control. (To reset the unit)
4. FL will display "RESET" before FL display will change to TOC reading again.
5. Power off unit. Unplug the AC cord.
6. Power on the unit. It should be no problem. If problem persist check on the DVD Module P.C.B. or FLASH ROM IC.

9 Assembling and Disassembling

“ATTENTION SERVICER”

Be careful when disassembling and servicing.

Some chassis components may have sharp edges.

Special Note:

1. This section describes the disassembly procedures for all the major printed circuit boards and main components.
2. Before the disassembly process was carried out, do take special note that all safety precautions are to be carried out.
(Ensure that no AC power supply is connected during disassembling.)
3. For assembly after operation checks or replacement, reverse the respective procedures.
Special reassembly procedures are described only when required.
4. Do take note of the locators on each printed circuit board during reassembling procedures.
5. The Switch Regulator IC may have high temperature after prolonged use.
6. Use caution when removing the top cabinet and avoid touching heat sinks located in the unit.

**CAUTION: HOT!!
PLEASE DO NOT
TOUCH THE HEAT SINK**

7. Select items from the following index when checks or replacement are required.

- Disassembly of Top Cabinet
- Disassembly of Rear Panel
- Disassembly of DVD Mechanism Unit
- Disassembly of Front Panel
- Disassembly of Panel P.C.B.
- Disassembly of Power Button P.C.B.
- Disassembly of USB/Setup Mic P.C.B. & Mic P.C.B.
- Disassembly of DVD Lid
- Disassembly of Ipod Cradle P.C.B.
- Disassembly of AC Inlet P.C.B.
- Disassembly of Main P.C.B.
- Disassembly of D-Amp P.C.B.
- Replacement of Digital Amp IC (IC5000)
- Replacement of Digital Amp IC (IC5200)
- Replacement of Digital Amp IC (IC5300)
- Replacement of Digital Amp IC (IC5400)
- Disassembly of Voltage Selector P.C.B.
- Disassembly of SMPS P.C.B.
- Replacement of Switch Regulator IC (IC5701)
- Replacement of Switch Regulator Diode (D5702)
- Replacement of Regulator Diode (D5801)
- Replacement of Regulator Diode (D5802)
- Replacement of Regulator Diode (D5803)
- Replacement of Power Supply P.C.B.
- Replacement of Regulator IC (IC2903)
- Disassembly of DVD Module P.C.B.
- Disassembly of Coprocessor P.C.B.
- Disassembly of Wireless Adapter P.C.B.

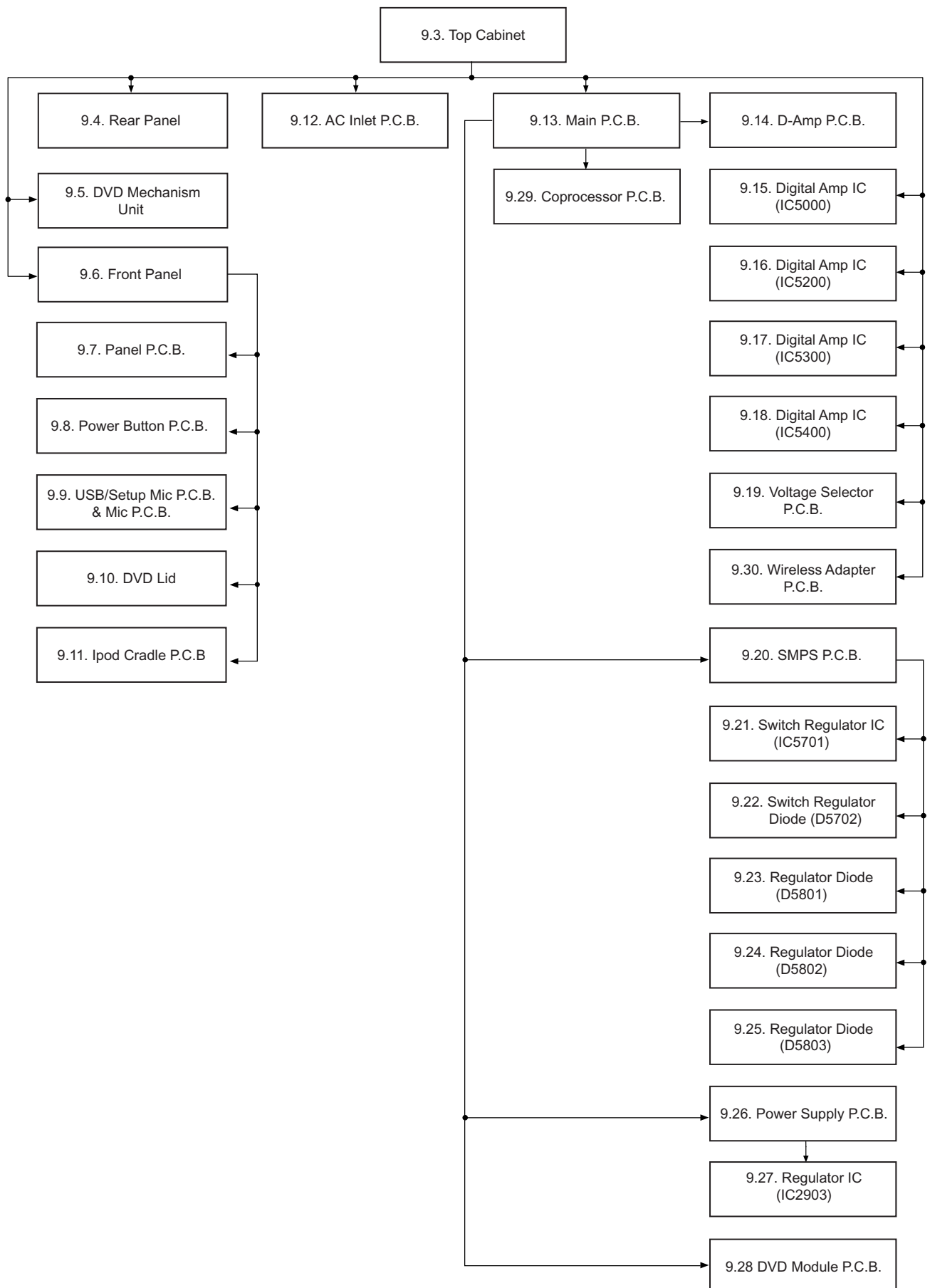
CAUTION NOTE:

Please use original screw and at correct locations.

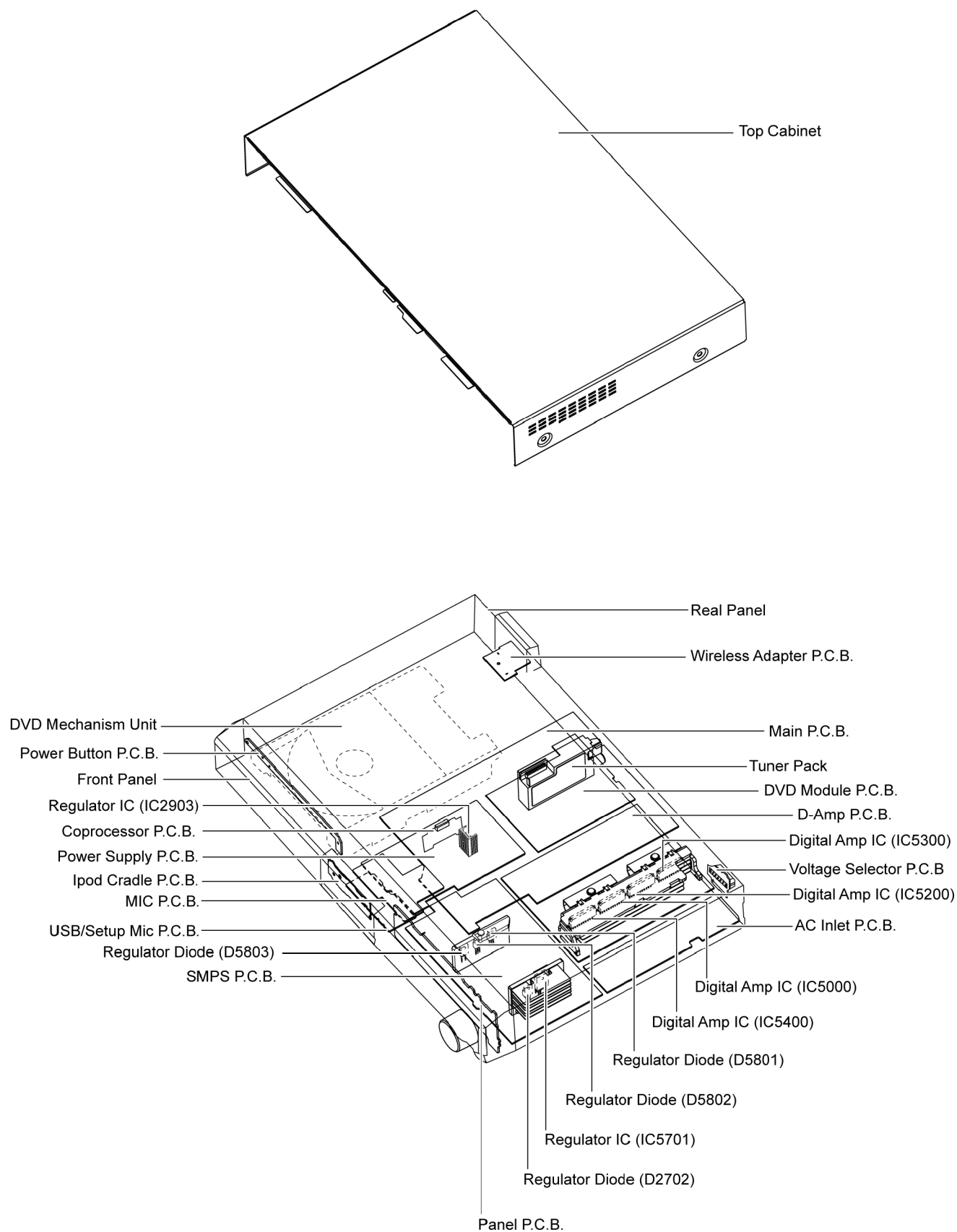
Below shown is part no. of different screw types used:

- | | |
|------------------------|----------------------|
| a :RHD30007-K2J | g :RHD30111-3 |
| b :RHD30119-S | h :XTW3+8TFJ |
| c :XSN3+4FJ | i :XTB3+10JFJ |
| d :RHDX03001 | j :XTB3+8JFJ |
| e :RHD26046 | k :RHD30090-1 |
| f :VHD1224-1 | |

9.1. Disassembly Flow Chart

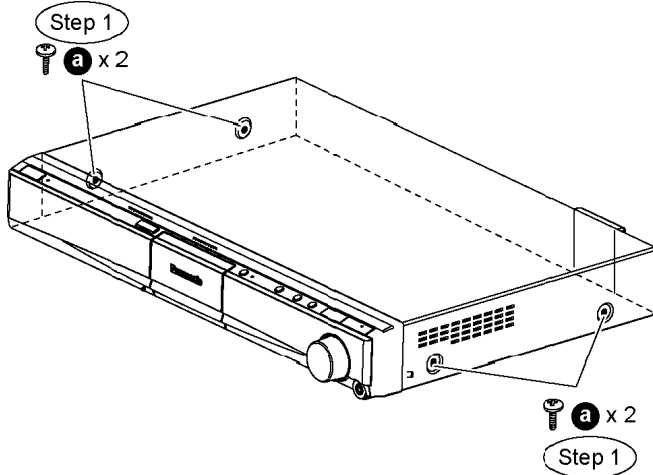


9.2. Main Components and P.C.B. Locations

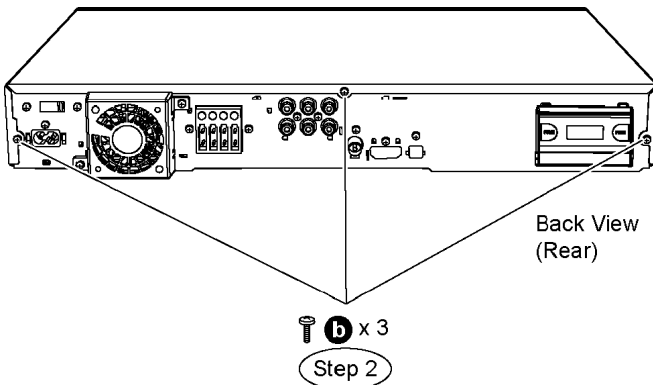


9.3. Disassembly of Top Cabinet

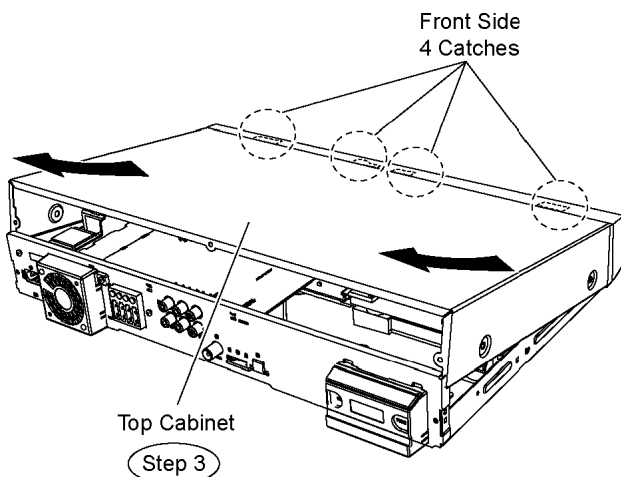
Step 1 Remove 4 screws at the sides of the top cabinet.



Step 2 Remove 3 screws at the rear of the top cabinet.



Step 3 Lift up the back part of the top cabinet and remove it in the direction of arrows.



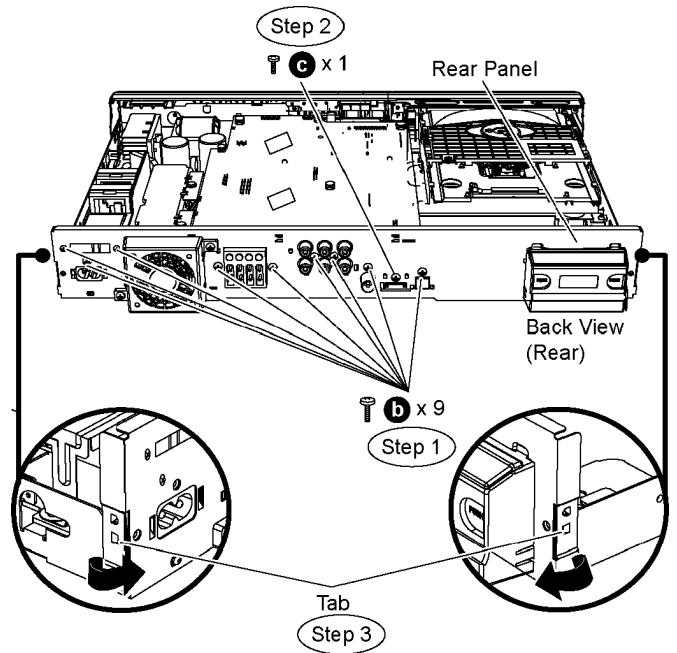
9.4. Disassembly of Rear Panel

- Follow (Step 1) to (Step 3) of Item 9.3.

Step 1 Remove 9 screws at the rear panel.

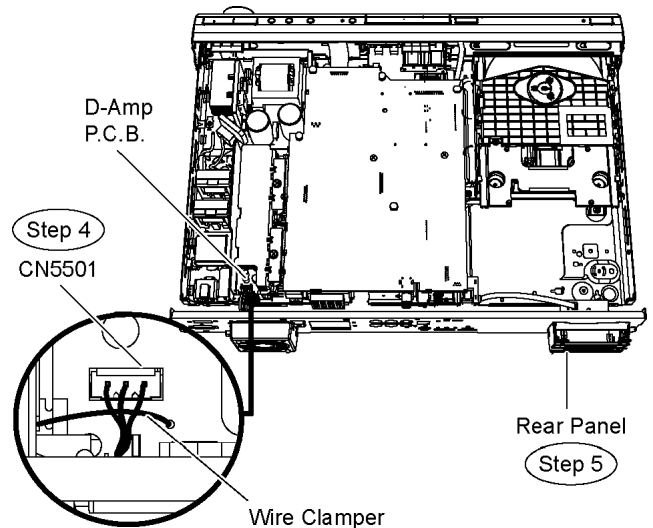
Step 2 Remove 1 screw at the rear panel.

Step 3 Release the tab of each side of the rear panel in the direction of arrow.



Step 4 Remove the wire clammer to detach the fan unit connector (CN5501) on D-Amp P.C.B.

Step 5 Remove the rear panel.



9.5. Disassembly of DVD Mechanism Unit

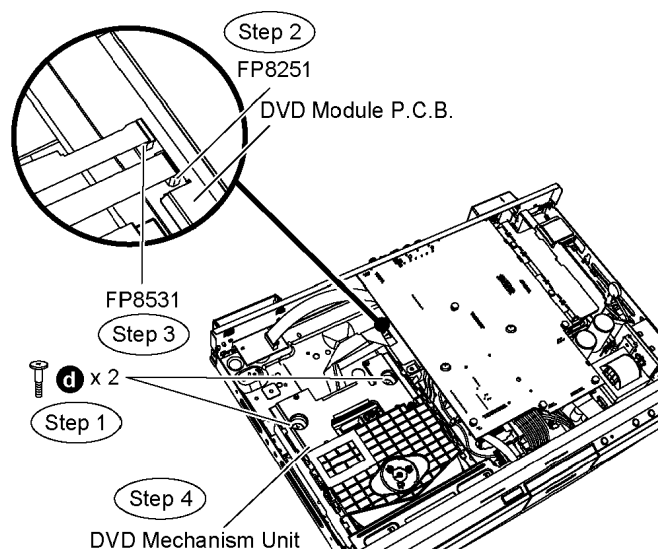
- Follow (Step 1) to (Step 3) of Item 9.3.

Step 1 Remove 2 screws from DVD mechanism unit.

Step 2 Detach 7P FFC cable at the connector (FP8251) on DVD Module P.C.B.

Step 3 Detach 26P FFC cable at the connector (FP8531) on DVD Module P.C.B.

Step 4 Remove the DVD mechanism unit.



9.6. Disassembly of Front Panel

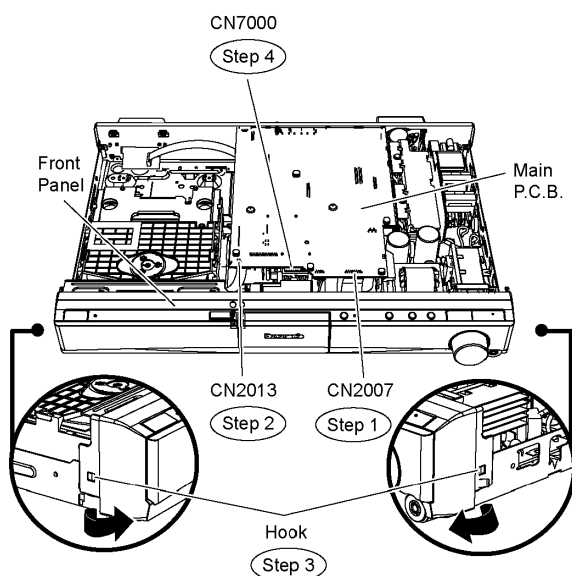
- Follow (Step 1) to (Step 3) of Item 9.3.

Step 1 Detach 17P FFC cable at the connector (CN2007) on Main P.C.B.

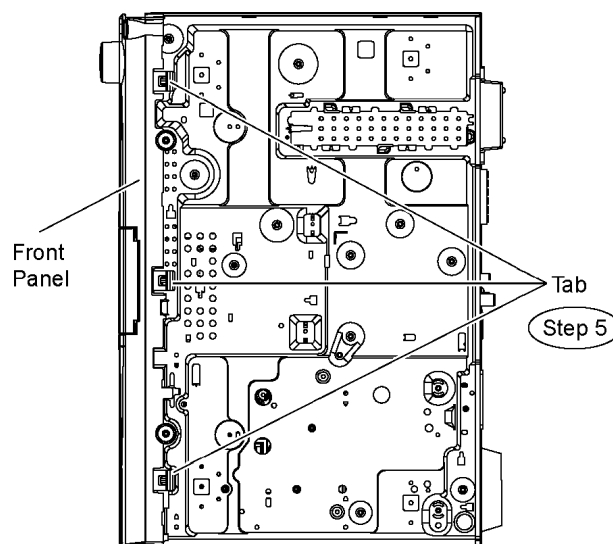
Step 2 Detach 4P FFC cable at the connector (CN2013) on Main P.C.B.

Step 3 Detach 12P FFC cable at the connector (CN7000) on Mic P.C.B.

Step 4 Release the hook at each side of the front panel in the direction of arrow.



Step 5 Release the tabs at the bottom of the front panel.



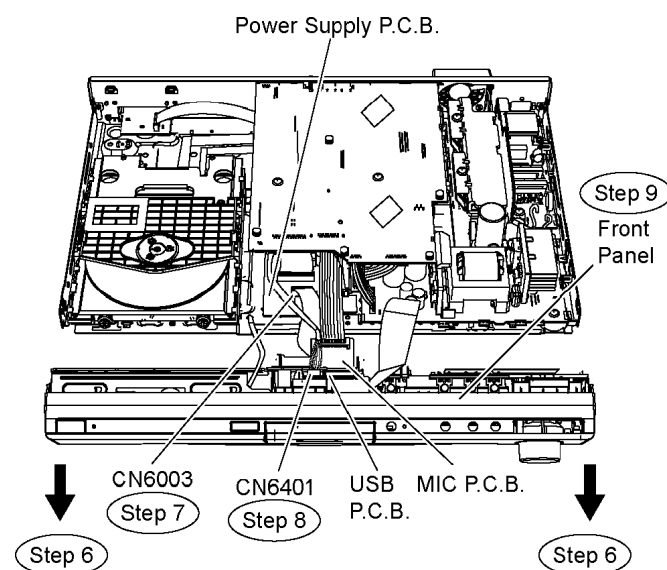
Caution: Do not exert strong force when releasing the tabs.

Step 6 Detach the front panel slightly forward in the direction of arrows.

Step 7 Detach 14P cable at the connector (CN6003) on Power Supply P.C.B.

Step 8 Detach 5P USB cable at the connector (CN6401) on USB P.C.B.

Step 9 Remove the front panel.

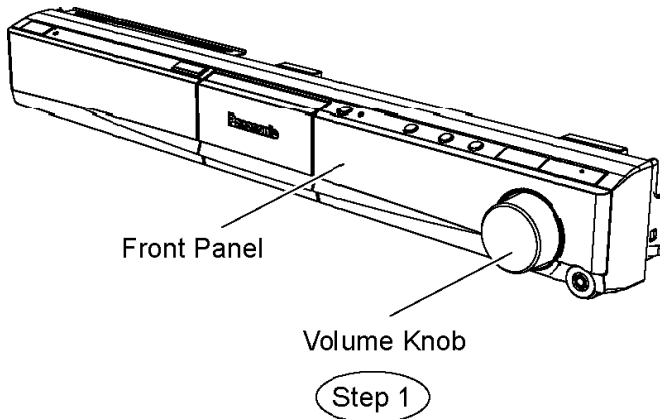


Caution: Do not attempt to exert strong force when detaching the front panel.

9.7. Disassembly of Panel P.C.B.

- Follow (Step 1) to (Step 3) of Item 9.3.
- Follow (Step 1) to (Step 9) of Item 9.6.

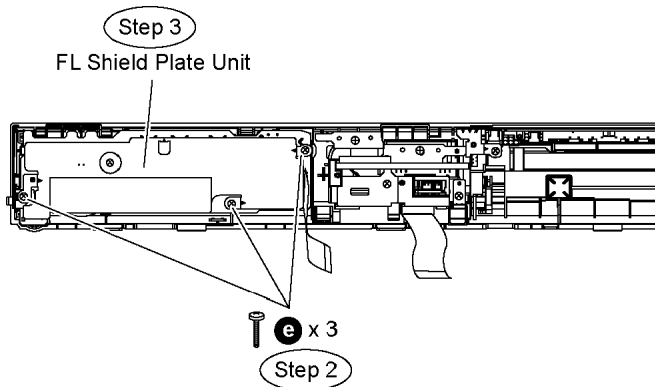
Step 1 Remove the volume knob.



- Disassembly of FL shield plate unit.

Step 2 Remove 3 screws from the FL shield plate unit.

Step 3 Remove the FL shield plate unit.



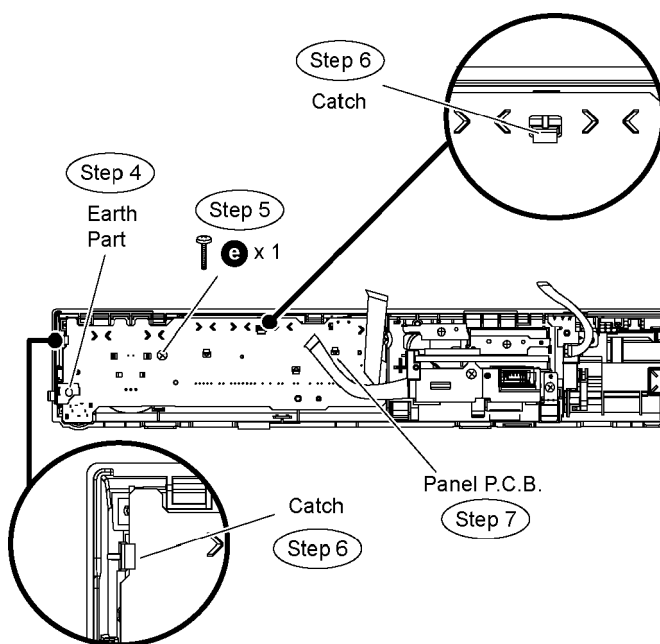
Caution Note: Keep the FL shield plate unit in safe place. Avoid denting it. Place it back during assembling.

Step 4 Remove the earth spring.

Step 5 Remove 1 screw on Panel P.C.B.

Step 6 Release the catch.

Step 7 Remove Panel P.C.B.



Caution Note: Keep the earth spring in safe place. Avoid denting it. Place it back during assembling.

9.8. Disassembly of Power Button P.C.B.

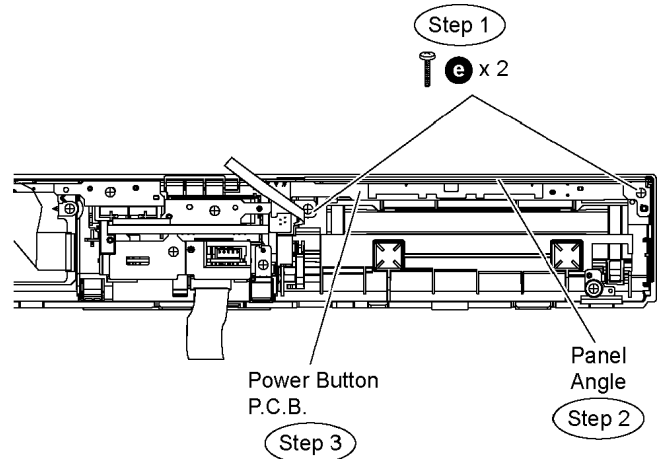
- Follow (Step 1) to (Step 3) of Item 9.3.
- Follow (Step 1) to (Step 9) of Item 9.6.

- Disassembly of Panel Angle.

Step 1 Remove 2 screws from the panel angle.

Step 2 Remove the panel angle.

Step 3 Remove Power Button P.C.B.



Caution Note: Keep the panel angle in safe place. Avoid denting it. Place it back during assembling.

9.9. Disassembly of USB/Setup Mic & Mic P.C.B.

- Follow (Step 1) to (Step 3) of Item 9.3.
- Follow (Step 1) to (Step 9) of Item 9.6.

- Disassembly of USB Bracket.

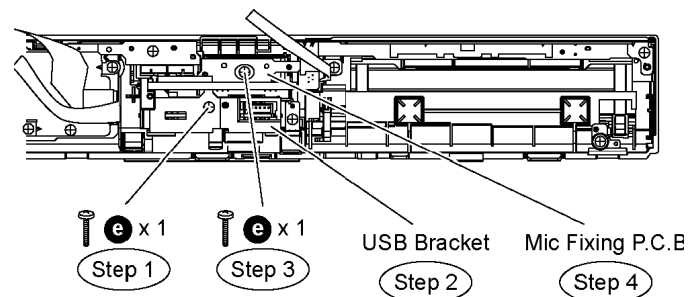
Step 1 Remove 1 screw from the USB bracket.

Step 2 Remove the USB bracket.

- Disassembly of Mic Fixing P.C.B.

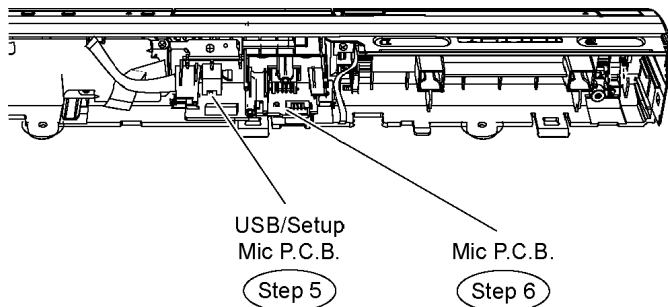
Step 3 Remove 1 screw from the Mic Fixing P.C.B.

Step 4 Remove the Mic Fixing P.C.B.



Step 5 Remove the USB/Setup Mic P.C.B.

Step 6 Remove the Mic P.C.B.



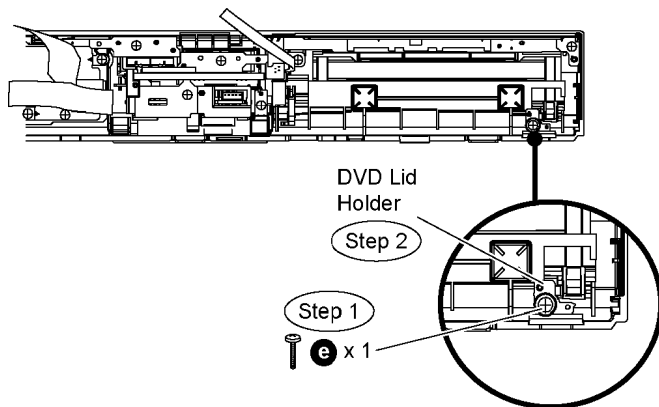
9.10. Disassembly of DVD Lid

- Follow (Step 1) to (Step 3) of Item 9.3.
- Follow (Step 1) to (Step 9) of Item 9.6.

- Disassembly of DVD Lid Holder

Step 1 Remove 1 screw from the DVD lid holder.

Step 2 Remove the DVD lid holder.



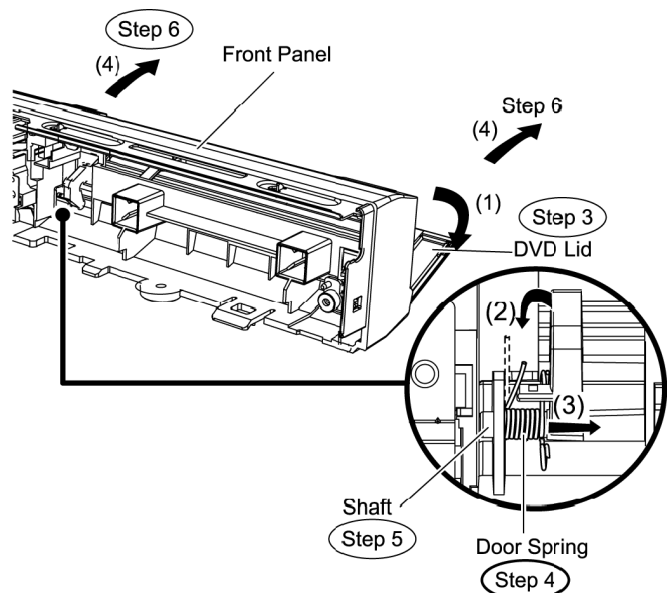
Caution Note: Keep the DVD lid holder in safe place. Avoid denting it. Place it back during assembling.

Step 3 Open the DVD lid in the direction of arrow (1), until it is aligned parallel with the front panel.

Step 4 Lift the door spring in the direction of arrow (2).

Step 5 Move the shaft of the DVD lid in the direction of arrow (3).

Step 6 Remove the DVD lid in the direction of arrow (4).

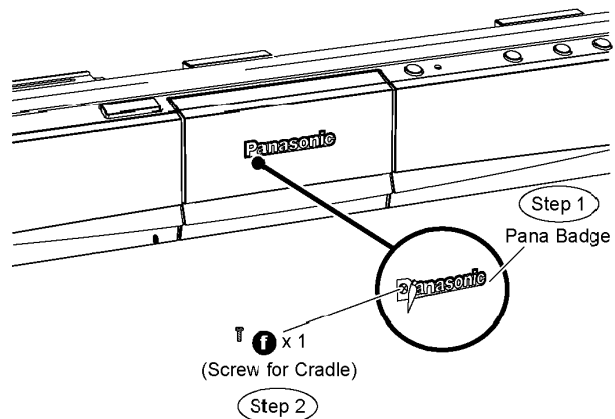


9.11. Disassembly of Ipod Cradle P.C.B.

- Follow (Step 1) to (Step 3) of Item 9.3.
- Follow (Step 1) to (Step 7) of Item 9.6.

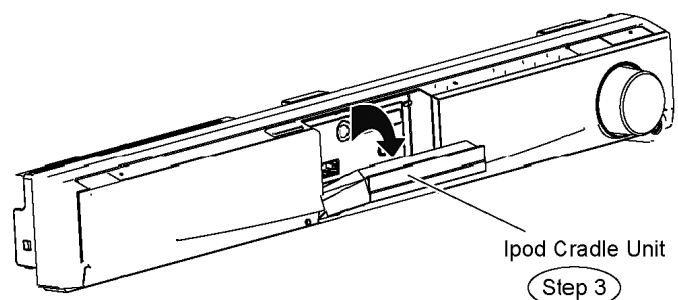
Step 1 Peel off the portion of the pana badge (paste type) with a pen knife.

Step 2 Remove the screw for cradle.



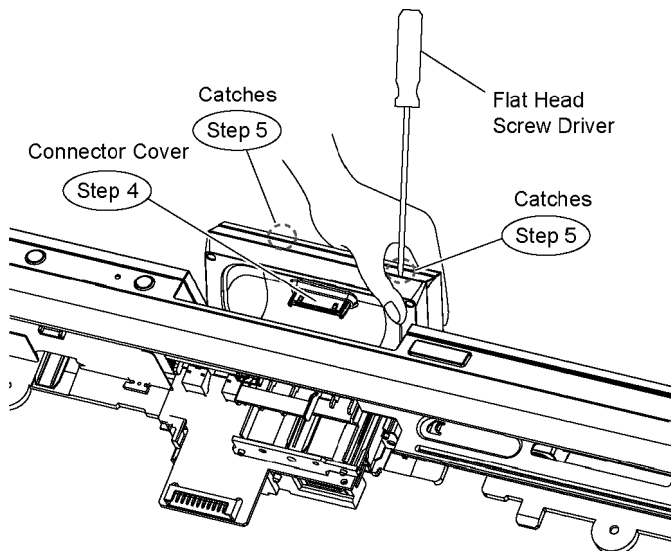
Caution Note: Keep the screw in safe place. Place it back during assembling.

Step 3 Flip the Ipod cradle unit for 45 degree as the direction of arrow.

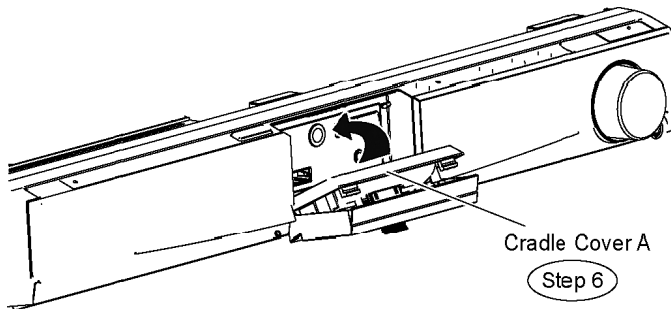


Step 4 Remove the connector cover.

Step 5 Use a flat head screwdriver (0.5-0.7mm) to release the catches according to the diagram show.

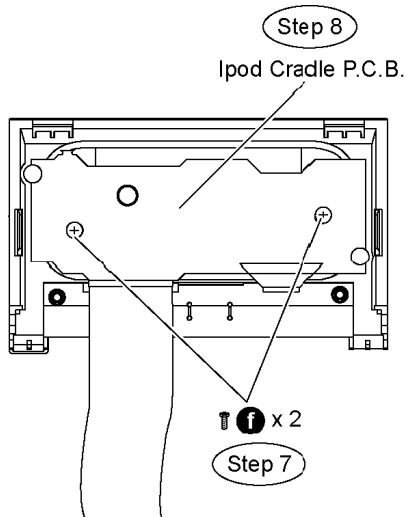


Step 6 Remove cradle cover A as the direction of arrow.



Step 7 Remove 2 screws on the Ipod cradle P.C.B.

Step 8 Remove Ipod cradle P.C.B.

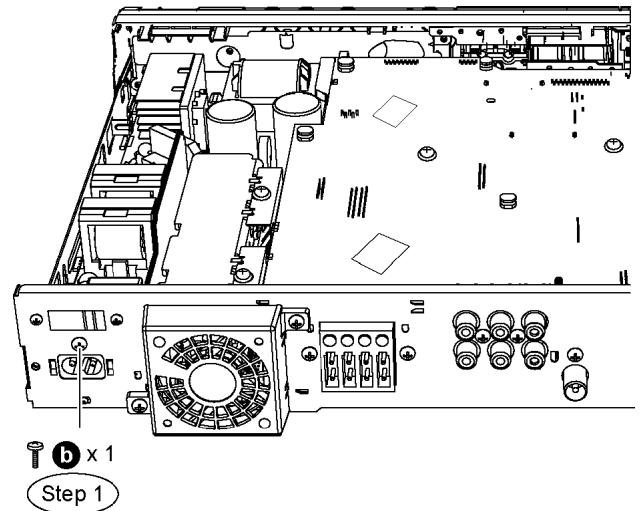


9.12. Disassembly of AC Inlet P.C.B.

- Follow (Step 1) to (Step 3) of Item 9.3.

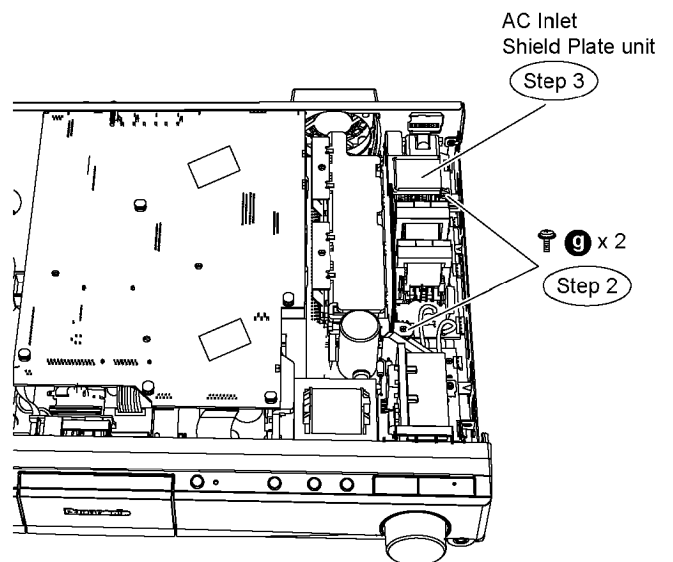
- Disassembly of AC Inlet Shield Plate Unit.

Step 1 Remove 1 screw at the rear panel.



Step 2 Remove 2 screws from the AC Inlet shield plate unit.

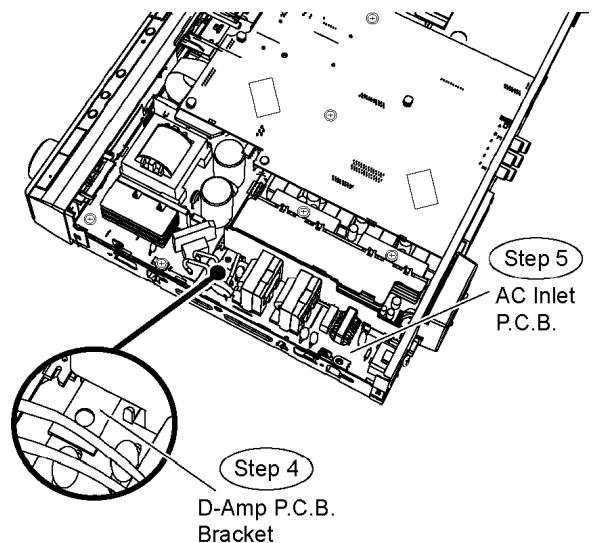
Step 3 Remove the AC Inlet shield plate unit.



Caution Note: Keep the AC Inlet shield plate unit in safe place. Avoid denting it. Place it back during assembling.

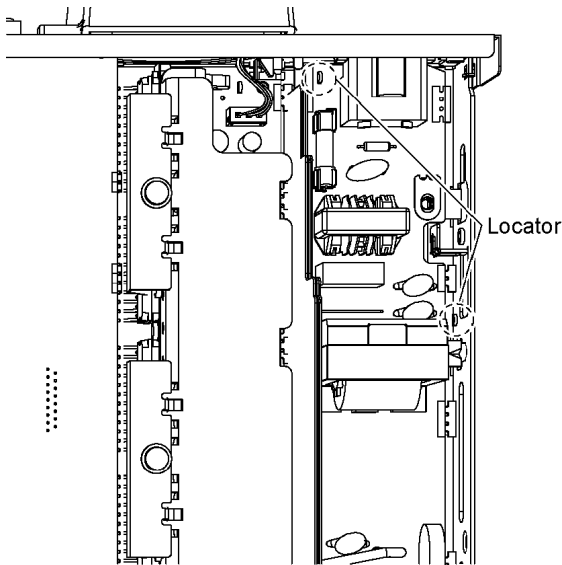
Step 4 Remove the D-Amp P.C.B. bracket.

Step 5 Remove AC Inlet P.C.B.



Caution Note: Keep the D-Amp P.C.B. bracket in safe

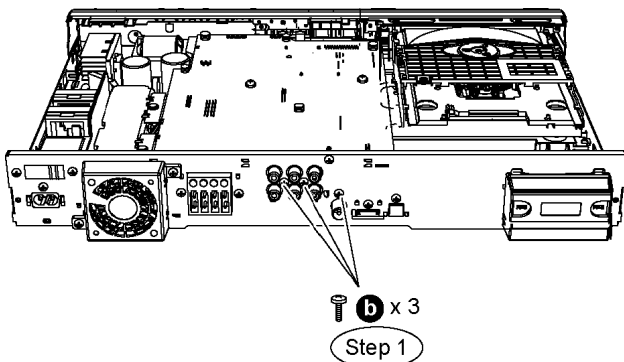
place. Avoid denting it. Place it back during assembling.
Special Note: During reassembling procedures, ensure the P.C.B. is seated properly at the locators.



9.13. Disassembly of Main P.C.B.

- Follow (Step 1) to (Step 3) of Item 9.3.

Step 1 Remove 3 screws at the rear panel.



Step 2 Remove 2 screws on Main P.C.B.

Step 3 Detach 17P FFC cable at the connector (CN2007) on the Main P.C.B.

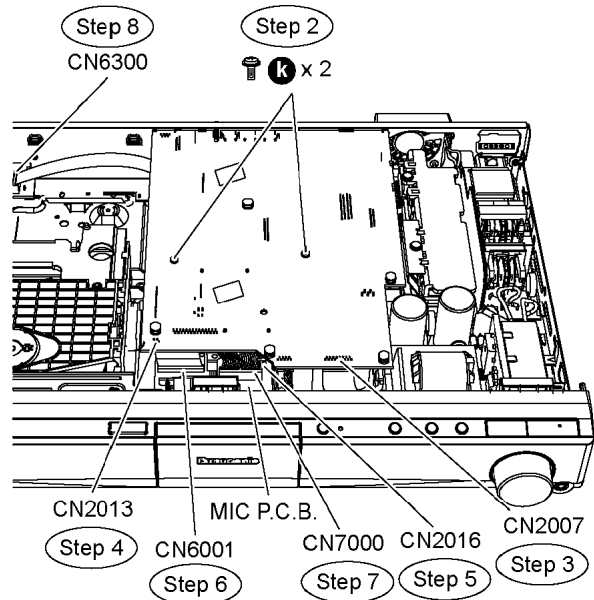
Step 4 Detach 4P FFC cable at the connector (CN2013) on the Main P.C.B.

Step 5 Detach 13P cable at the connector (CN2016) on the Power Supply P.C.B.

Step 6 Detach 28P cable at the connector (CN6001) on the Power Supply P.C.B.

Step 7 Detach 12P cable at the connector (CN7000) on the Mic P.C.B.

Step 8 Detach 14P cable at the connector (CN6300) on the Wireless Adapter P.C.B.



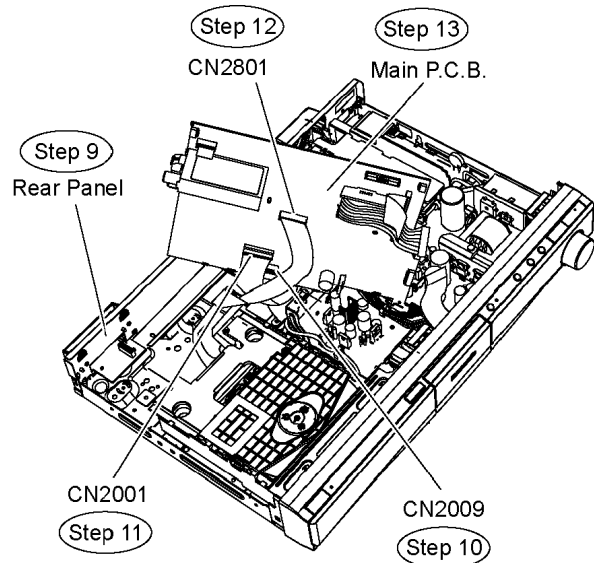
Step 9 Detach Main P.C.B. from the rear panel.

Step 10 Turn over Main P.C.B. to detach 17P FFC cable at the connector (CN2009) on the Main P.C.B.

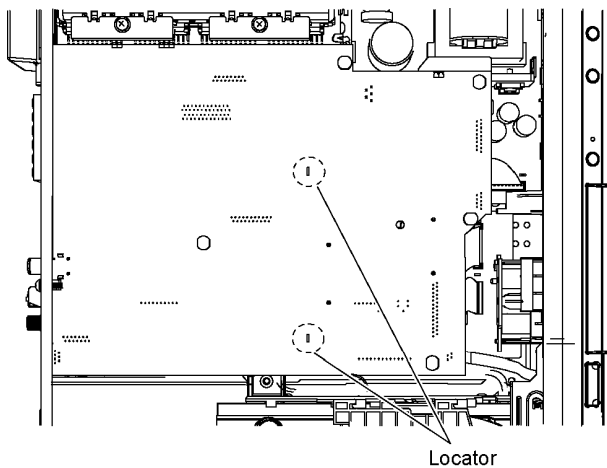
Step 11 Detach 50P FFC cable at the connector (CN2001) on the Main P.C.B.

Step 12 Detach 22P FFC cable at the connector (CN2801) on the Main P.C.B.

Step 13 Remove Main P.C.B.



Special Note: During reassembling procedures, ensure the P.C.B. is seated properly at the locators.



9.14. Disassembly of D-Amp P.C.B.

- Follow (Step 1) to (Step 3) of Item 9.3.
- Follow (Step 1) to (Step 4) of Item 9.12.
- Follow (Step 1) to (Step 9) of Item 9.13.

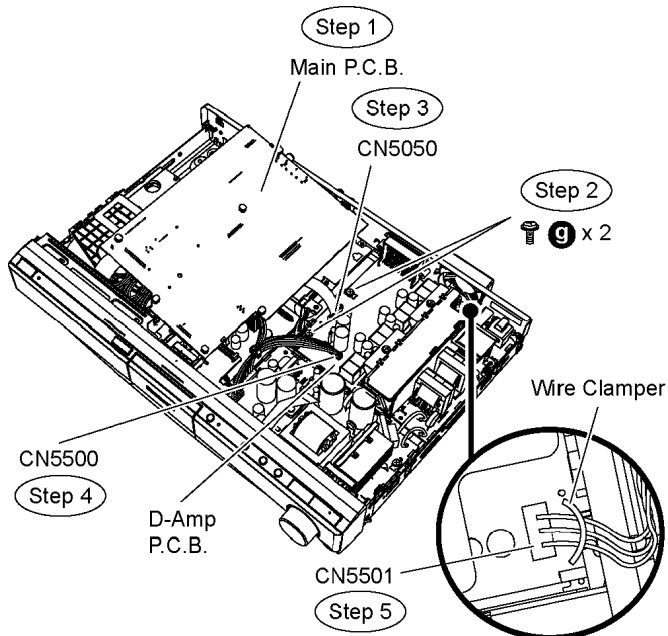
Step 1 Move aside Main P.C.B. and position it according to the diagram shown.

Step 2 Remove 2 screws on D-Amp P.C.B.

Step 3 Detach 17P cable at the connector (CN5050) on D-Amp P.C.B.

Step 4 Detach 8P cable at the connector (CN5500) on D-Amp P.C.B.

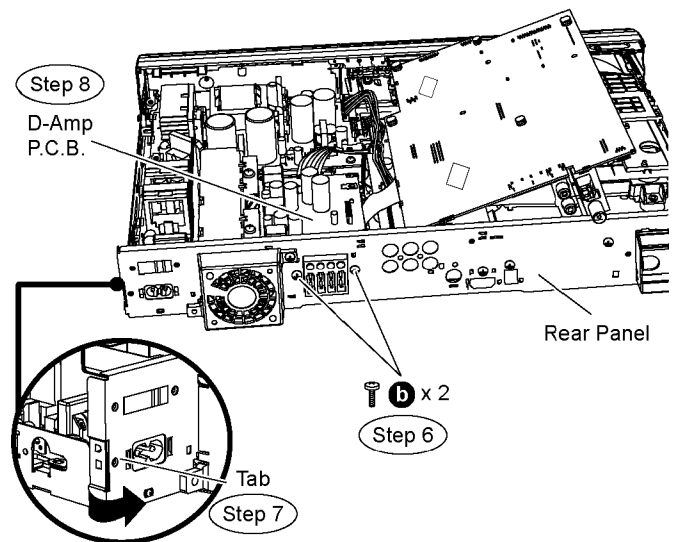
Step 5 Twist the wire clammer to detach 3P cable at the connector (CN5501) on D-Amp P.C.B.



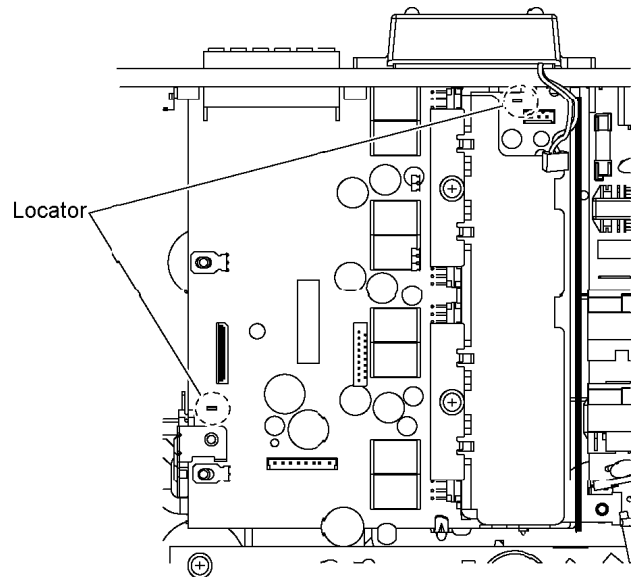
Step 6 Remove 2 screws at the rear panel.

Step 7 Release the tab of the rear panel in the direction of arrow.

Step 8 Remove D-Amp P.C.B.



Special Note: During reassembling procedures, ensure the P.C.B. is seated properly at the locators.

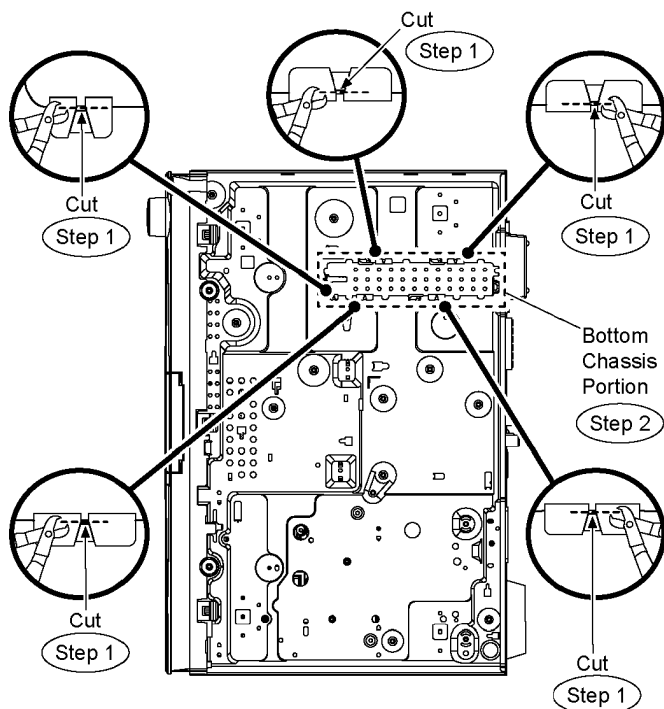


9.15. Replacement of Digital Amp IC (IC5000)

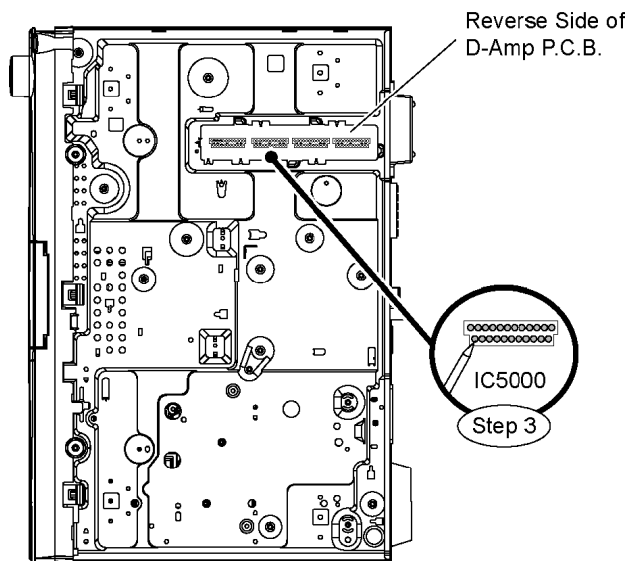
- Follow (Step 1) to (Step 3) of Item 9.3.

Step 1 Cut the 5 connecting points as indicated in the diagram.

Step 2 Detach the marked portion from the bottom chassis.



Step 3 Desolder pins of the digital amp IC (IC5000) on the reverse side of D-Amp P.C.B.



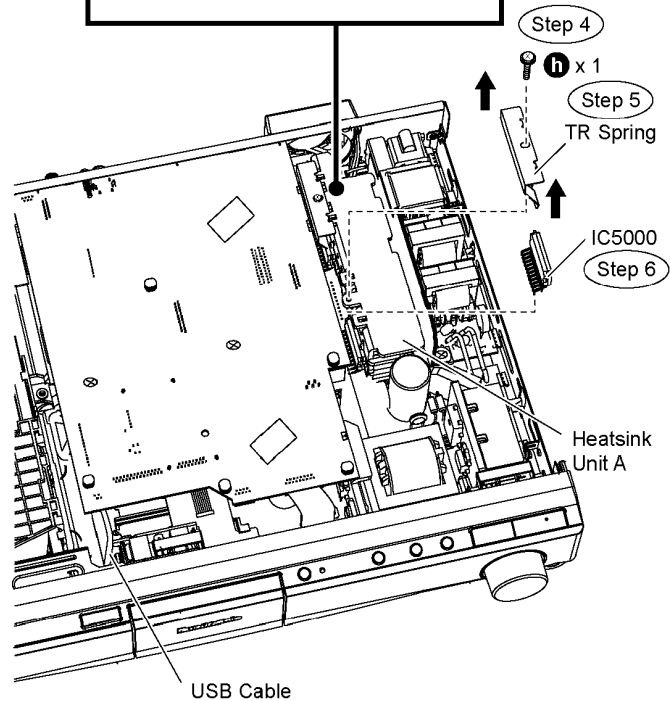
Step 4 Remove 1 screw from the TR spring.

Step 5 Remove the TR spring in the direction of arrows.

Step 6 Remove the digital amp IC (IC5000) from the heatsink unit A.

Caution: Handle the heatsink unit A with caution due to its high temperature after prolonged use. Touching it may lead to injuries.

**CAUTION: HOT!!
PLEASE DO NOT
TOUCH THE HEAT SINK**



Note: Refer to the diagrams of D-Amp P.C.B. (Item 20.4.) for location of the part.

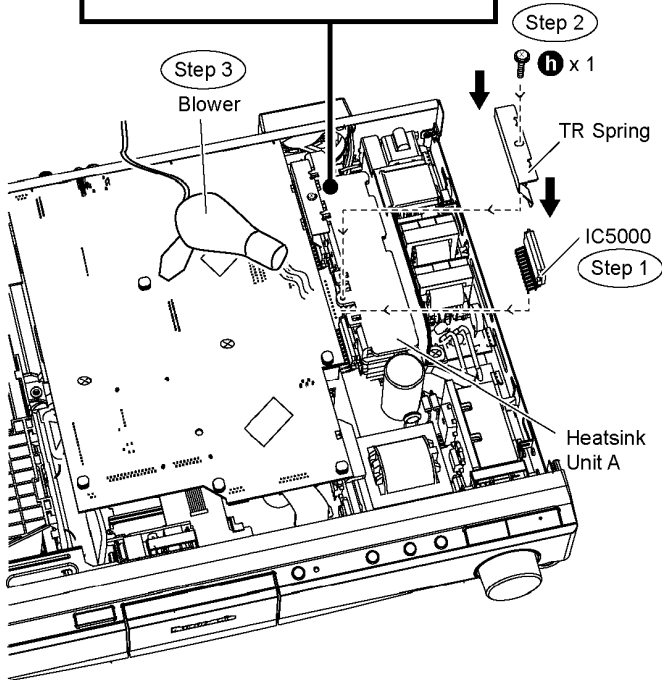
9.15.1. Assembly of the Digital Amp IC (IC5000)

Step 1 Fix the digital amp IC (IC5000) to the heatsink unit A.

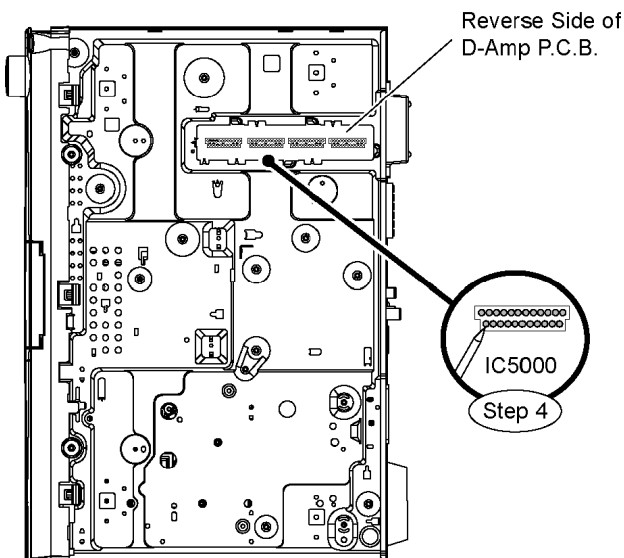
Step 2 Screw the TR spring to the heatsink unit A.

Step 3 Use a blower to remove the minute particles that might be caused after the process of the screwing TR spring to the heatsink unit A.

**CAUTION: HOT!!
PLEASE DO NOT
TOUCH THE HEAT SINK**



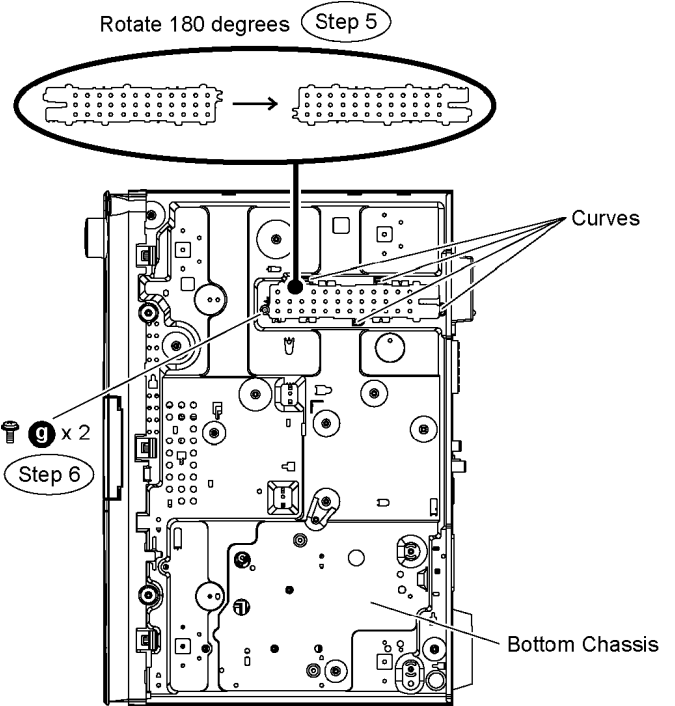
Step 4 Solder pins of the digital amp IC (IC5000) on the reverse side of D-Amp P.C.B.



Special Note: Ensure pins of the digital amp IC (IC5000) are properly seated and soldered on D-Amp P.C.B.

Step 5 Position the bottom chassis portion in to the curves according to the diagram shown. (Rotate the part at 180 degrees as compared to its original position)

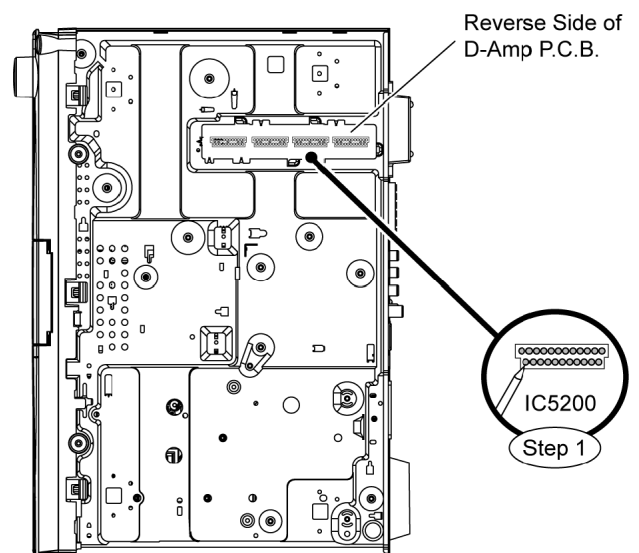
Step 6 Screw the portion to the bottom chassis.



9.16. Replacement of Digital Amp IC (IC5200)

- Follow (Step 1) to (Step 3) of Item 7.3.
- Follow (Step 1) to (Step 2) of Item 7.15.

Step 1 Desolder pins of the digital amp IC (IC5200) on the reverse side of D-Amp P.C.B.

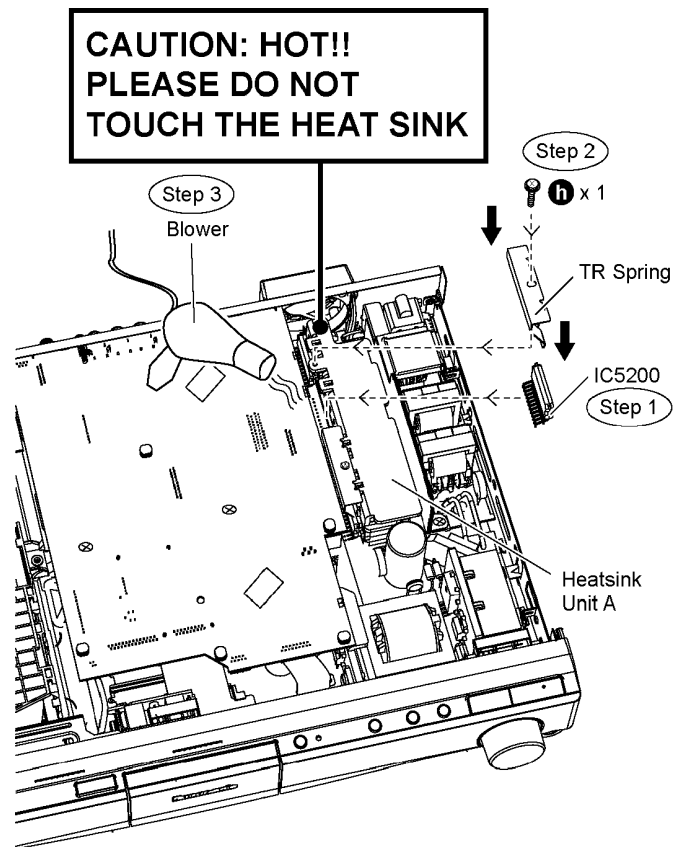
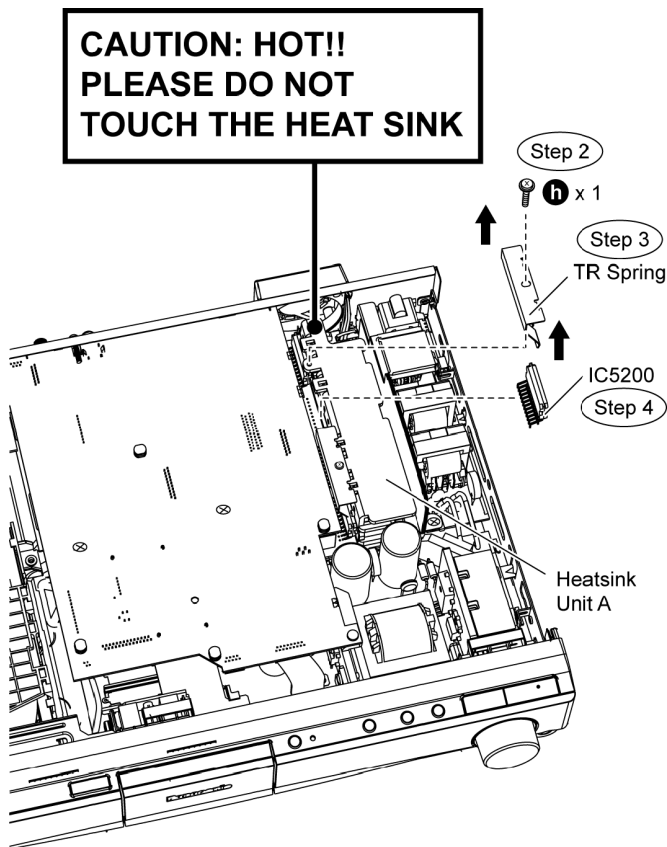


Step 2 Remove 1 screw.

Step 3 Remove the TR spring in the direction of arrows.

Step 4 Remove the digital amp IC (IC5200) from the heatsink unit A.

Caution: Handle the heatsink unit A with caution due to its high temperature after prolonged use. Touching it may lead to injuries.



Note: Refer to the diagrams of D-Amp P.C.B. (Item 13.4.) for location of the part.

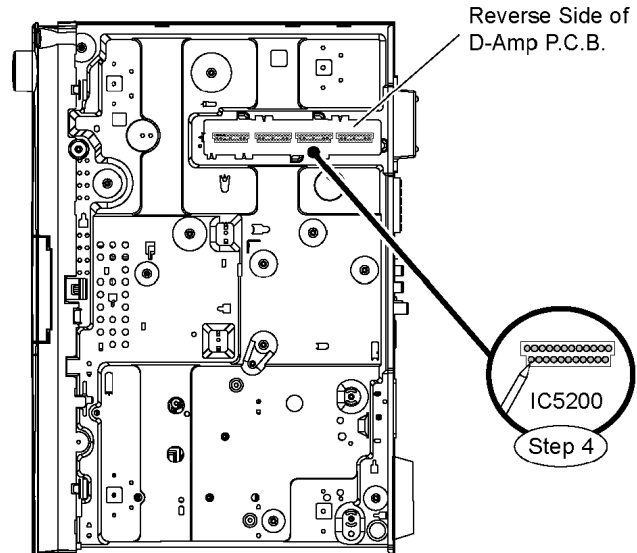
9.16.1. Assembly of the Digital Amp IC (IC5200)

Step 1 Fix the digital amp IC (IC5200) to the heatsink unit A.

Step 2 Screw the TR spring to the heatsink unit A.

Step 3 Use a blower to remove the minute particles that might be caused after the process of the screwing TR spring to the heatsink unit A.

Step 4 Solder pins of the digital amp IC (IC5200) on the reverse side of D-Amp P.C.B.



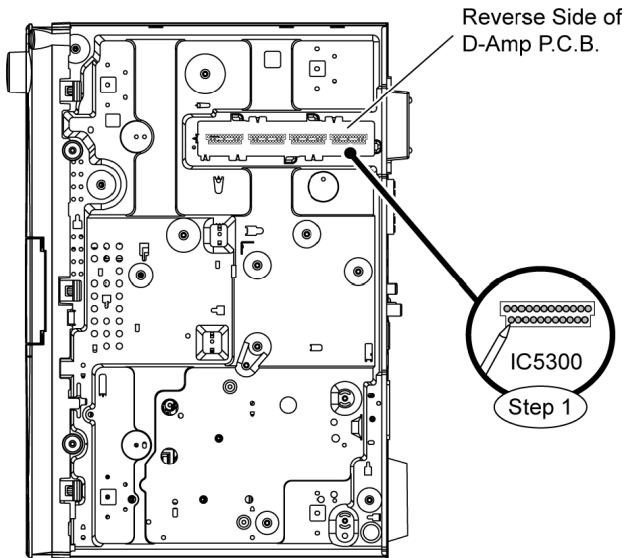
Special Note: Ensure pins of the digital amp IC (IC5200) are properly seated and soldered on D-Amp P.C.B.

Step 5 Follow (Step 5) to (Step 6) of Item 2.16.1

9.17. Replacement of Digital Amp IC (IC5300)

- Follow (Step 1) to (Step 3) of Item 9.3.
- Follow (Step 1) to (Step 2) of Item 9.15.

Step 1 Desolder pins of the digital amp IC (IC5300) on the reverse side of D-Amp P.C.B.

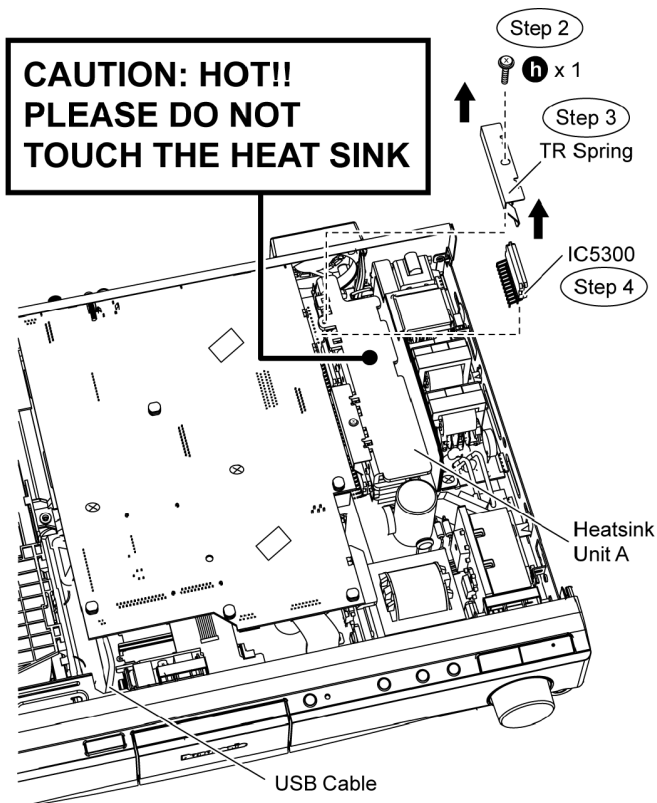


Step 2 Remove 1 screw.

Step 3 Remove the TR spring in the direction of arrows.

Step 4 Remove the digital amp IC (IC5300) from the heatsink unit A.

Caution: Handle the heatsink unit A with caution due to its high temperature after prolonged use. Touching it may lead to injuries.



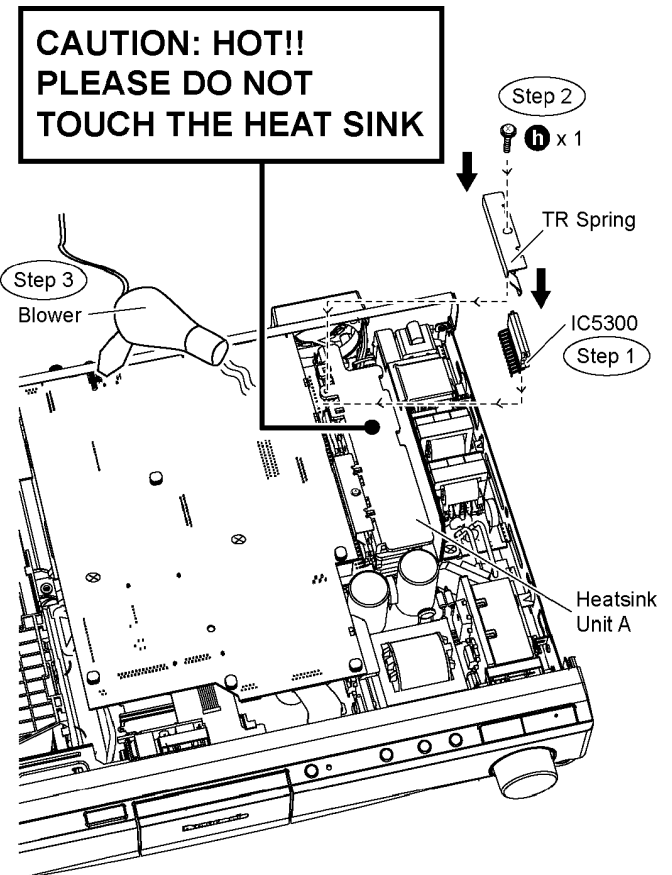
Note: Refer to the diagrams of D-Amp P.C.B. (Item 20.4.) for location of the part.

9.17.1. Assembly of Digital Amp IC (IC5300)

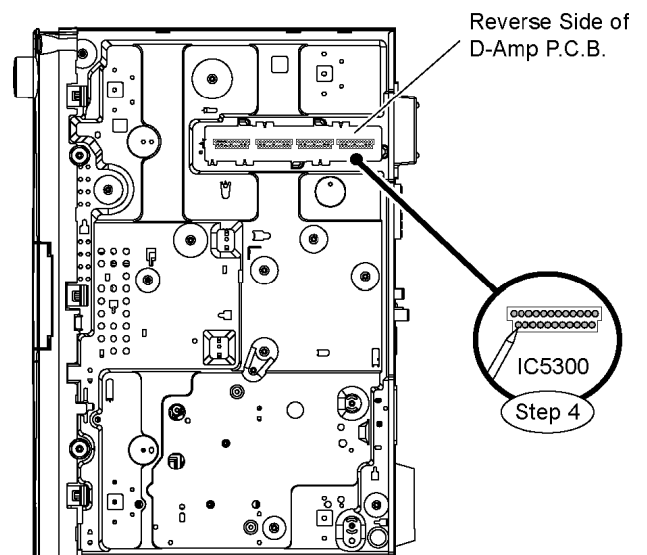
Step 1 Fix the digital amp IC (IC5300) to the heatsink unit A.

Step 2 Screw the TR spring to the heatsink unit A.

Step 3 Use a blower to remove the minute particles that might be caused after the process of the screwing TR spring to the heatsink unit A.



Step 4 Solder pins of the digital amp IC (IC5300) on the reverse side of D-Amp P.C.B.



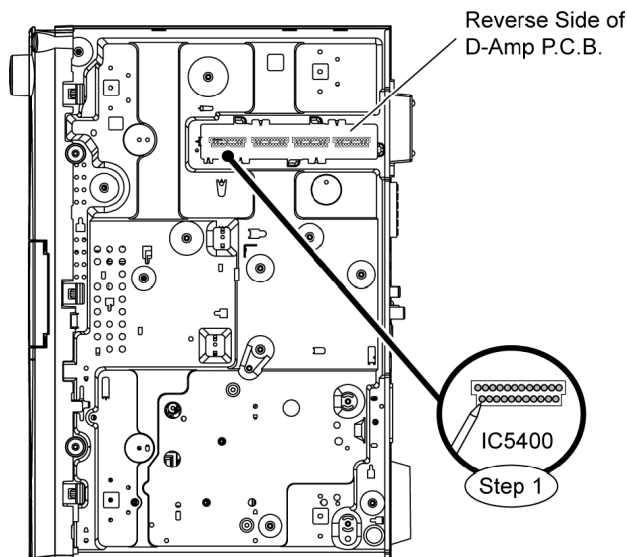
Special Note: Ensure pins of the digital amp IC (IC5300) are properly seated and soldered on D-Amp P.C.B.

Step 5 Follow (Step 5) to (Step 6) of Item 9.16.1

9.18. Replacement of Digital Amp IC (IC5400)

- Follow (Step 1) to (Step 3) of Item 9.3.
- Follow (Step 1) to (Step 2) of Item 9.15.

Step 1 Desolder pins of the digital amp IC (IC5400) on the reverse side of D-Amp P.C.B.



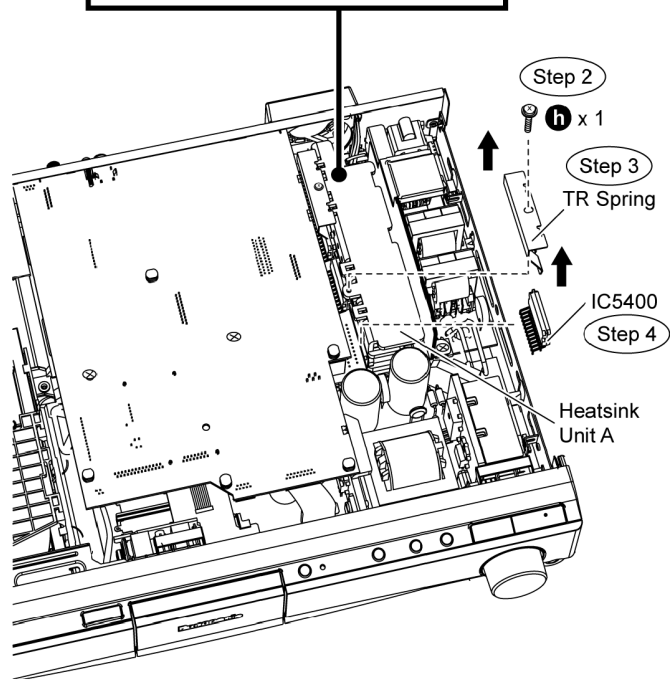
Step 2 Remove 1 screw.

Step 3 Remove the TR spring in the direction of arrows.

Step 4 Remove the digital amp IC (IC5400) from the heatsink unit A.

Caution: Handle the heatsink unit A with caution due to its high temperature after prolonged use. Touching it may lead to injuries.

**CAUTION: HOT!!
PLEASE DO NOT
TOUCH THE HEAT SINK**



Note: Refer to the diagrams of D-Amp P.C.B. (Item 20.4.) for location of the part.

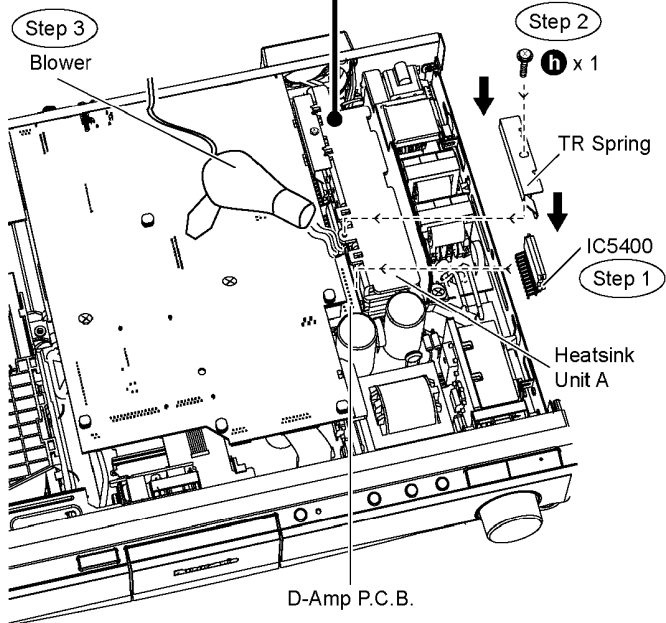
9.18.1. Assembly of Digital Amp IC (IC5400)

Step 1 Fix the digital amp IC (IC5400) to the heatsink unit A.

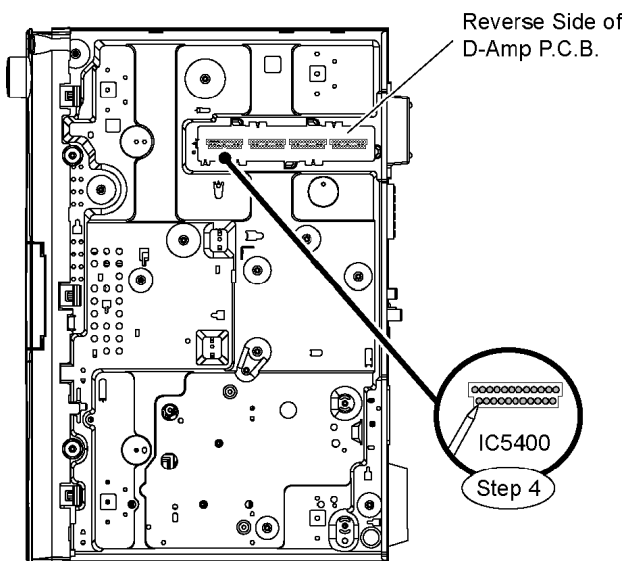
Step 2 Screw the TR spring to the heatsink unit A.

Step 3 Use a blower to remove the minute particles that might be caused after the process of the screwing TR spring to the heatsink unit A.

**CAUTION: HOT!!
PLEASE DO NOT
TOUCH THE HEAT SINK**



Step 4 Solder pins of the digital amp IC (IC5400) on the reverse side of D-Amp P.C.B.



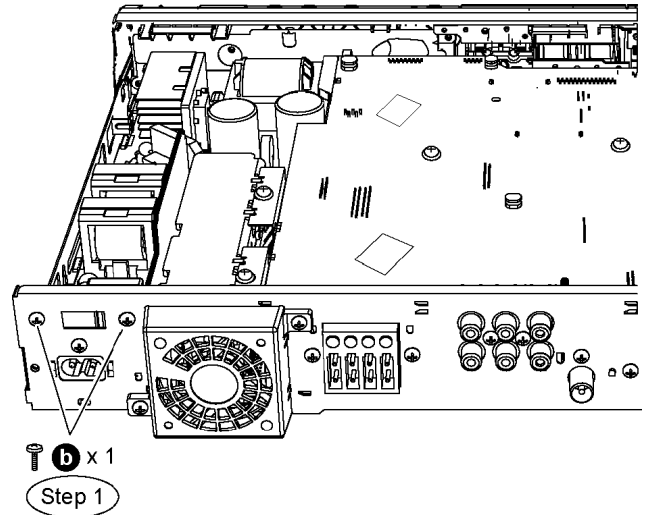
Special Note: Ensure pins of the digital amp IC (IC5400) are properly seated and soldered on D-Amp P.C.B.

Step 5 Follow (Step 5) to (Step 6) of Item 9.16.1

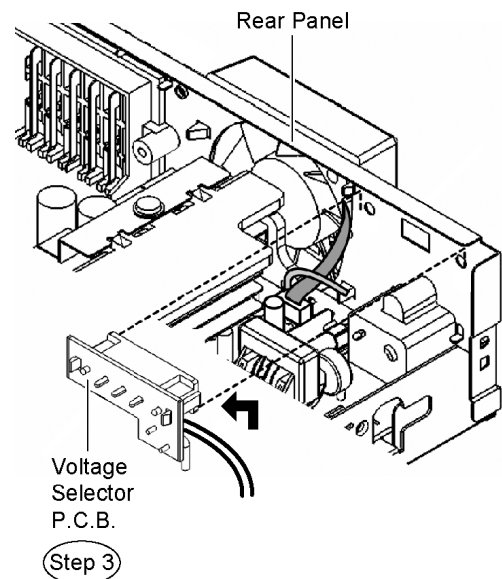
9.19. Disassembly of Voltage Selector P.C.B.

- Follow (Step 1) to (Step 3) of Item 9.3.

Step 1 Remove 2 screws from the rear panel.



Step 2 Remove voltage selector P.C.B in the direction of arrow.



9.20. Disassembly of SMPS P.C.B.

- Follow (Step 1) to (Step 3) of Item 9.3.
- Follow (Step 1) to (Step 9) of Item 9.13.

Step 1 Move aside Main P.C.B. and position it according to the diagram shown.

Step 2 Remove 4 screws on SMPS P.C.B.

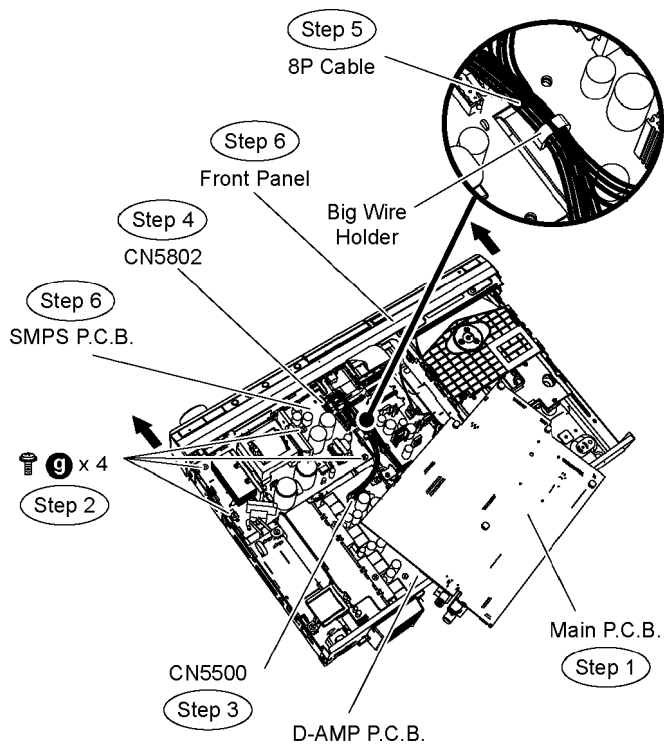
Step 3 Detach 8P cable at the connector (CN5500) on D-Amp P.C.B.

Step 4 Detach 11P cable at the connector (CN5802) on SMPS P.C.B.

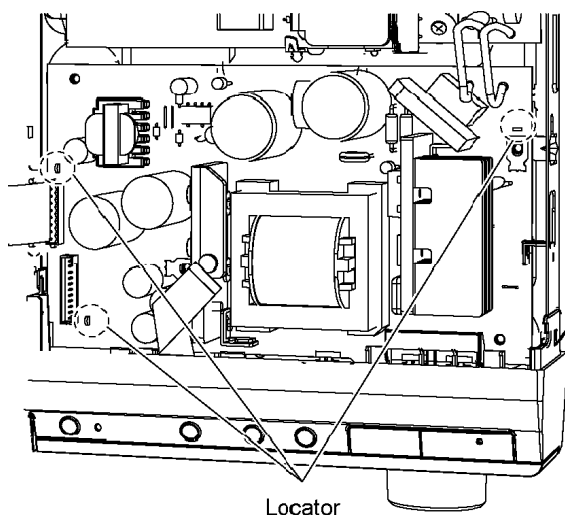
Step 5 Remove 8P cable (SMPS P.C.B. to D-Amp P.C.B.) from the big wire holder.

Step 6 Detach front panel in the direction of arrow.

Step 7 Remove SMPS P.C.B.



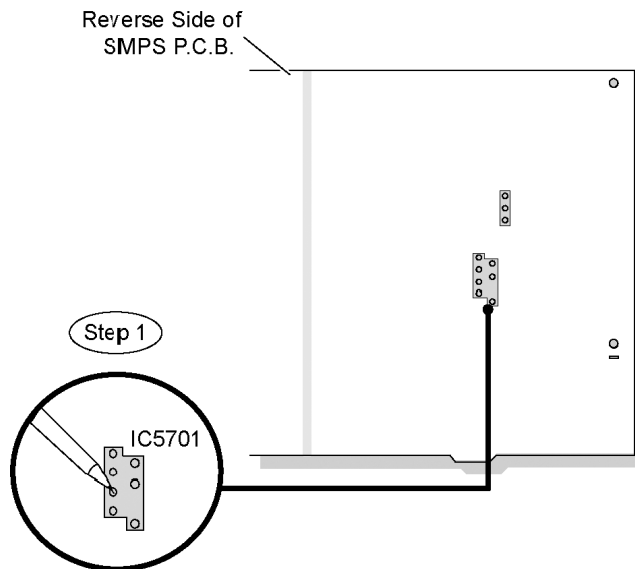
Special Note: During reassembling procedures, ensure the P.C.B. is seated properly at the locators.



9.21. Replacement of Switch Regulator IC (IC5701)

- Follow (Step 1) to (Step 3) of Item 9.3.
- Follow (Step 1) to (Step 9) of Item 9.13.
- Follow (Step 1) to (Step 6) of Item 9.20.

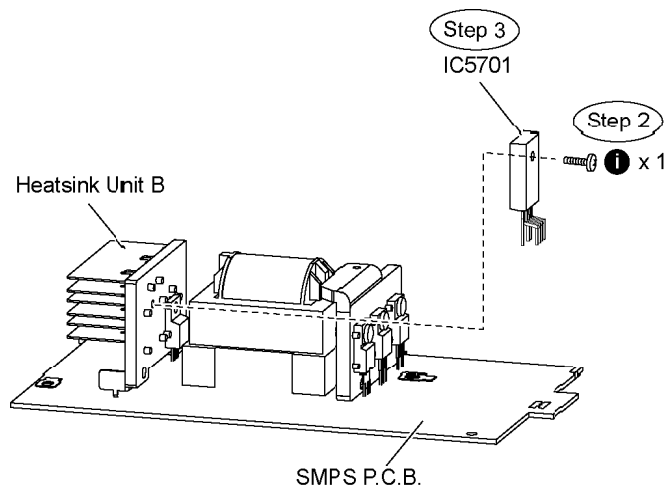
Step 1 Desolder pins of the switch regulator IC (IC5701) on the reverse side of SMPS P.C.B.



Step 2 Remove 1 screw from the switch regulator IC (IC5701).

Step 3 Remove the switch regulator IC (IC5701) from the heatsink unit B.

Caution: Handle the heatsink unit B with caution due to its high temperature after prolonged use. Touching it may lead to injuries.



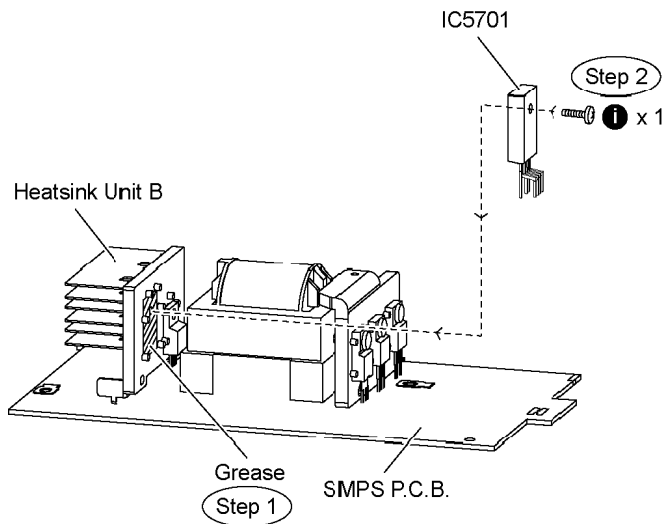
Note : Refer to the diagrams of SMPS P.C.B. (Item 20.5.) for location of the part.

9.21.1. Assembly of Switch Regulator IC (IC5701)

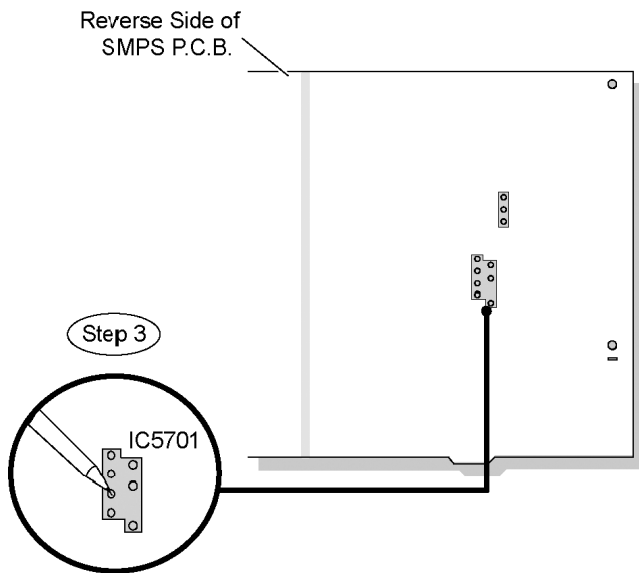
Step 1 Apply grease to the heatsink unit B.

Step 2 Fix and screw the switch regulator IC (IC5701) to the heatsink unit B.

Special Note: Ensure the switch regulator IC (IC5701) is tightly screwed to the heatsink unit B.



Step 3 Solder pins of the switch regulator IC (IC5701) on the reverse side of SMPS P.C.B.



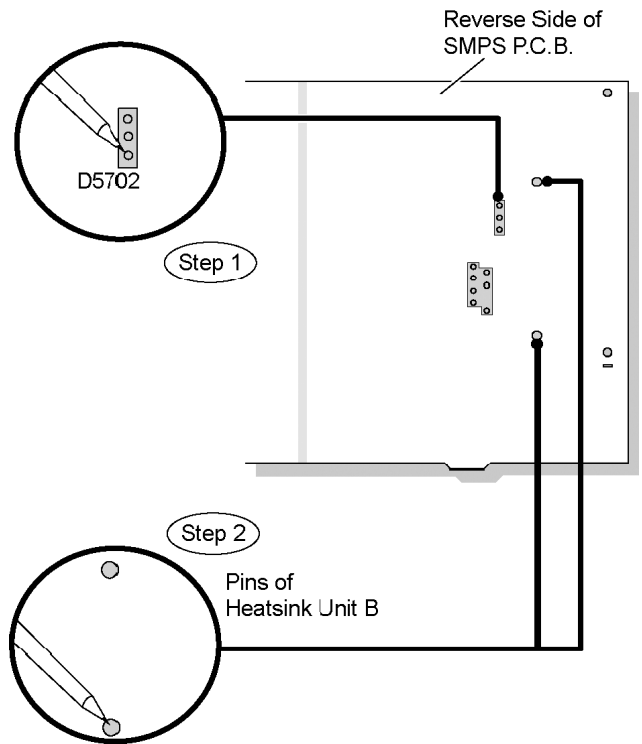
Special Note: Ensure pins of the switch regulator IC (IC5701) are properly seated and soldered on SMPS P.C.B.

9.22. Replacement of Switch Regulator Diode (D5702)

- Follow (Step 1) to (Step 3) of Item 9.3.
- Follow (Step 1) to (Step 9) of Item 9.13.
- Follow (Step 1) to (Step 6) of Item 9.20.

Step 1 Desolder pins of the switch regulator diode (D5702) on the reverse side of SMPS P.C.B.

Step 2 Desolder pins of the heatsink unit B.



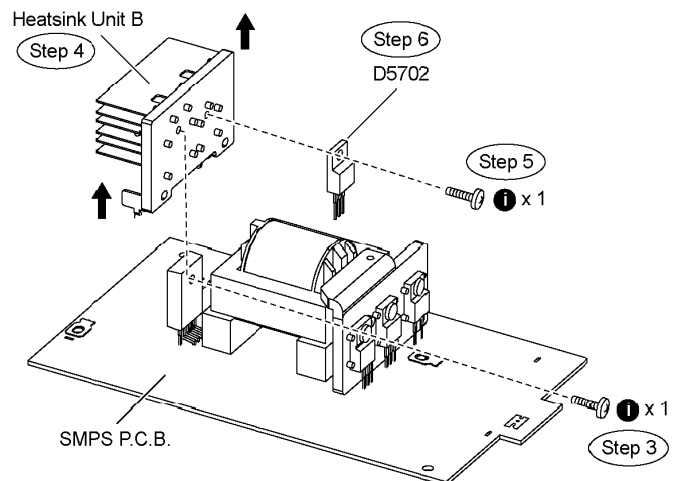
Step 3 Remove 1 screw from the switch regulator IC (IC5701).

Step 4 Remove the heatsink unit B in the direction of arrows.

Step 5 Remove 1 screw from the switch regulator diode (D5702).

Step 6 Remove the switch regulator diode (D5702) from the heatsink unit B.

Caution: Handle the heatsink unit B with caution due to its high temperature after prolonged use. Touching it may lead to injuries.



Note : Refer to the diagrams of SMPS P.C.B. (Item 20.5) for location of the part.

9.22.1. Assembly of Switch Regulator Diode (D5702)

Step 1 Apply grease to the heatsink unit B.

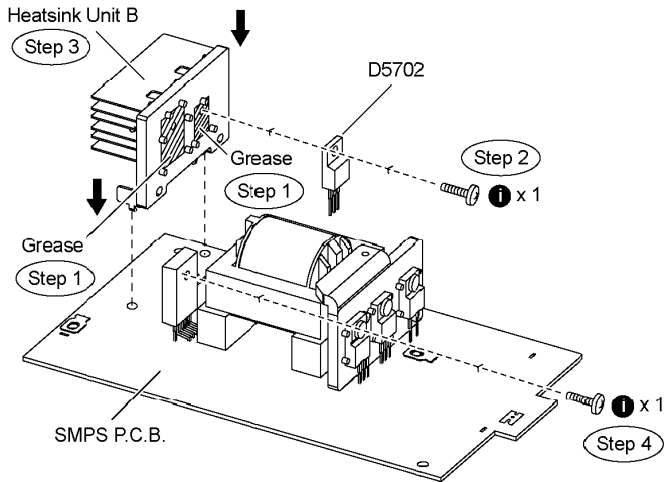
Step 2 Fix and screw the switch regulator diode (D5702) to the

heatsink unit B.

Special Note: Ensure the switch regulator diode (D5702) is tightly screwed to the heatsink unit B.

Step 3 Fix the heatsink unit B on SMPS P.C.B. in the direction of arrows.

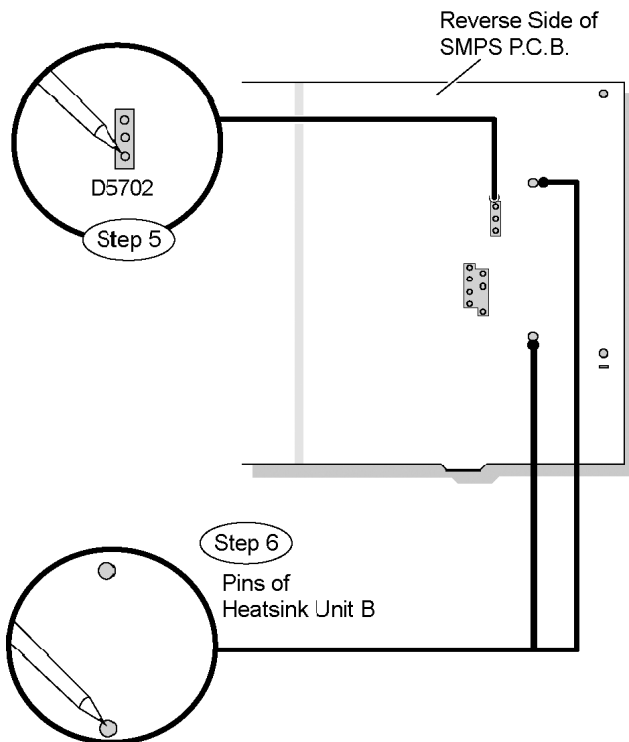
Step 4 Fix and screw the switch regulator IC (IC5701) to the heatsink unit B



Special Note: Ensure the heatsink unit B is properly seated on SMPS P.C.B.

Step 5 Solder pins of the switch regulator diode (D5702) on the reverse side of SMPS P.C.B.

Step 6 Solder pins of the heatsink unit B on the reverse side of SMPS P.C.B.

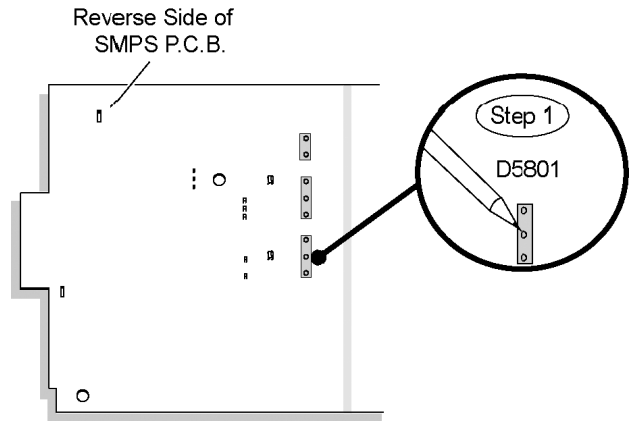


Special Note: Ensure pins of the switch regulator diode (D5702) are properly seated and soldered on SMPS P.C.B.

9.23. Replacement of Regulator Diode (D5801)

- Follow (Step 1) to (Step 3) of Item 9.3.
- Follow (Step 1) to (Step 9) of Item 9.14.
- Follow (Step 1) to (Step 6) of Item 9.21.

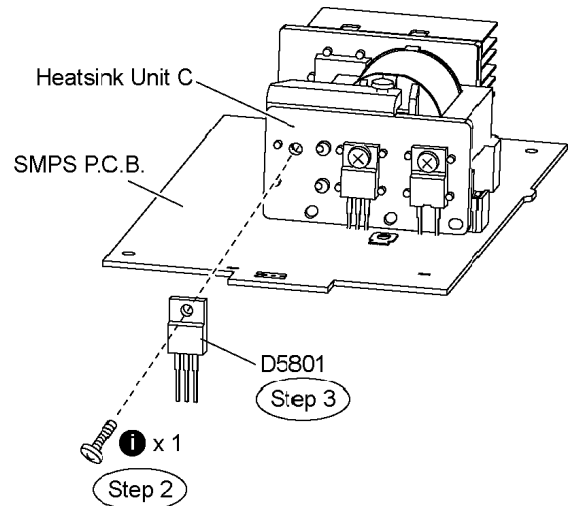
Step 1 Desolder pins of the regulator diode (D5801) on the reverse side of SMPS P.C.B.



Step 2 Remove 1 screw from the regulator diode (D5801).

Step 3 Remove the regulator diode (D5801) from the heatsink unit C.

Caution: Handle the heatsink unit C with caution due to its high temperature after prolonged use. Touching it may lead to injuries.



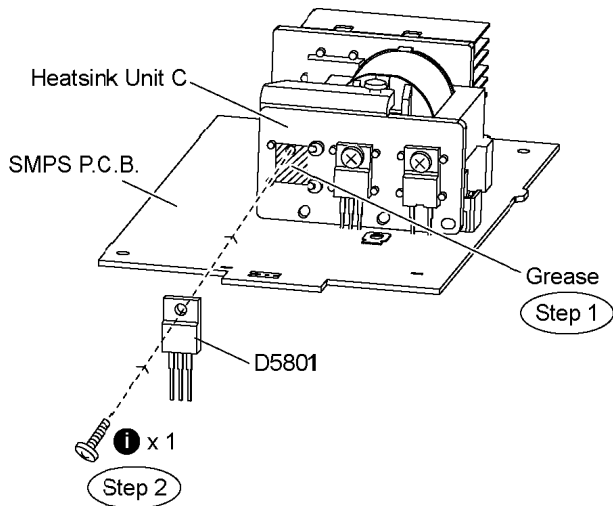
Note: Refer to the diagrams of SMPS P.C.B. (Item 20.5) for location of the part.

9.23.1. Assembly of Regulator Diode (D5801)

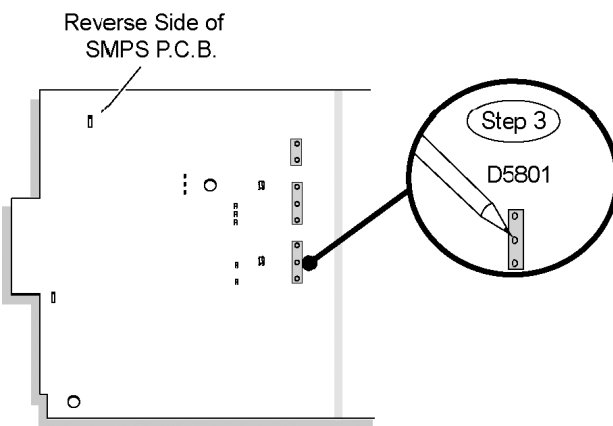
Step 1 Apply grease to the heatsink unit C.

Step 2 Fix and screw the regulator diode (D5801) to the heatsink unit C.

Special Note: Ensure the regulator diode (D5801) is tightly screwed to the heatsink unit C.



Step 3 Solder pins of the regulator diode (D5801) on the reverse side of SMPS P.C.B.

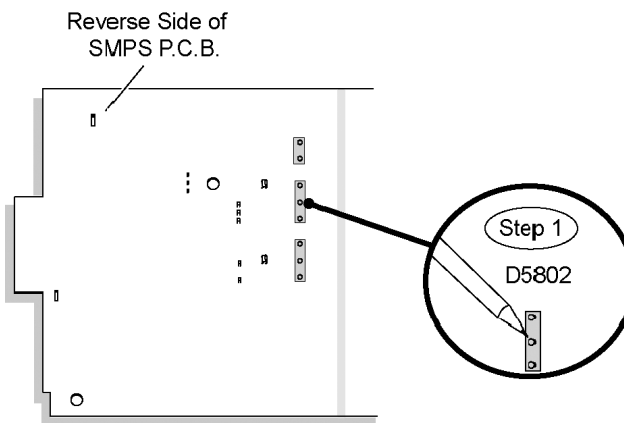


Special Note: Ensure pins of the regulator diode (D5801) are properly seated and soldered on SMPS P.C.B.

9.24. Replacement of Regulator Diode (D5802)

- Follow (Step 1) to (Step 3) of Item 9.3.
- Follow (Step 1) to (Step 9) of Item 9.13.
- Follow (Step 1) to (Step 6) of Item 9.20.

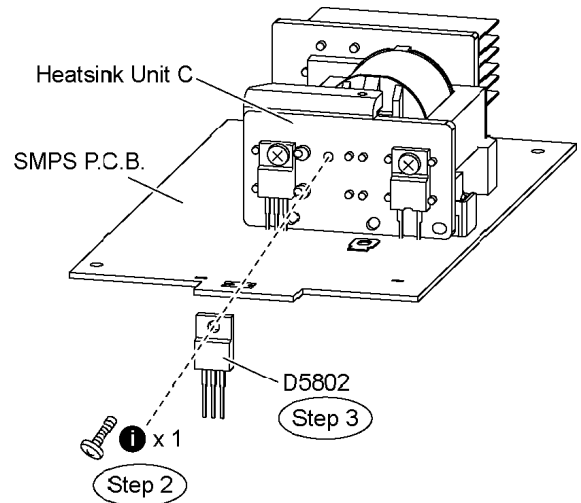
Step 1 Desolder pins of the regulator diode (D5802) on the reverse side of SMPS P.C.B.



Step 2 Remove 1 screw from the regulator diode (D5802).

Step 3 Remove the regulator diode (D5802) from the heatsink unit C.

Caution: Handle the heatsink unit C with caution due to its high temperature after prolonged use. Touching it may lead to injuries.



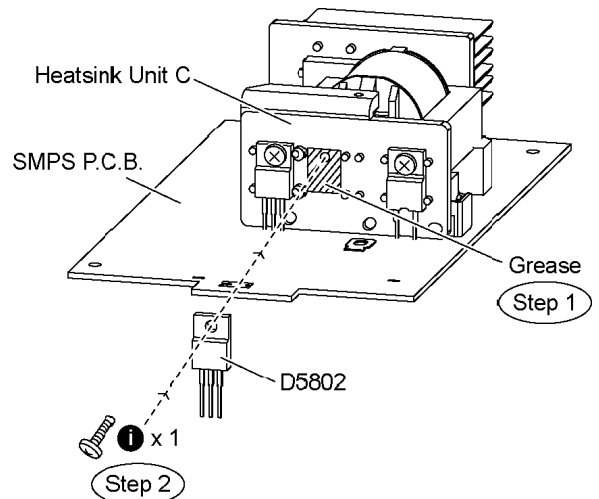
Note: Refer to the diagrams of SMPS P.C.B. (Item 20.5) for location of the part.

9.24.1. Assembly of Regulator Diode (D5802)

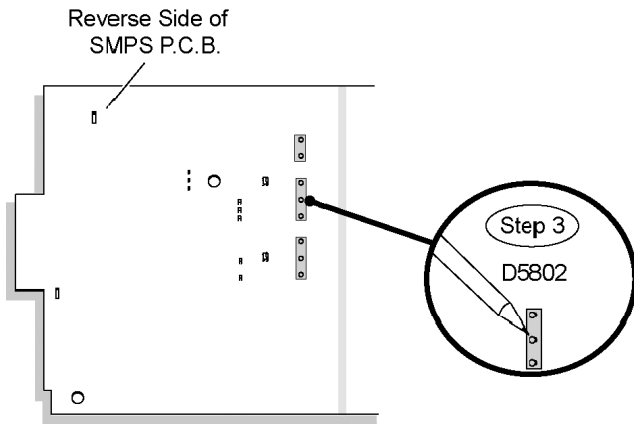
Step 1 Apply grease to the heatsink unit C.

Step 2 Fix and screw the regulator diode (D5802) to the heatsink unit C.

Special Note: Ensure the regulator diode (D5802) is tightly screwed to the heatsink unit C.



Step 3 Solder pins of the regulator diode (D5802) on the reverse side of SMPS P.C.B.

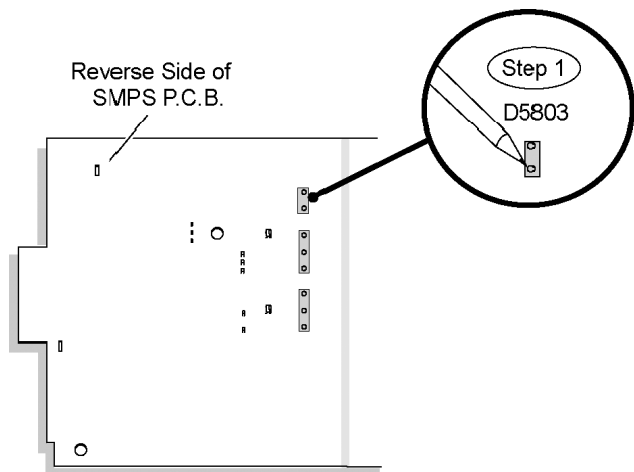


Special Note: Ensure pins of the regulator diode (D5802) are properly seated and soldered on SMPS P.C.B.

9.25. Replacement of Regulator Diode (D5803)

- Follow (Step 1) to (Step 3) of Item 9.3.
- Follow (Step 1) to (Step 9) of Item 9.13.
- Follow (Step 1) to (Step 6) of Item 9.20.

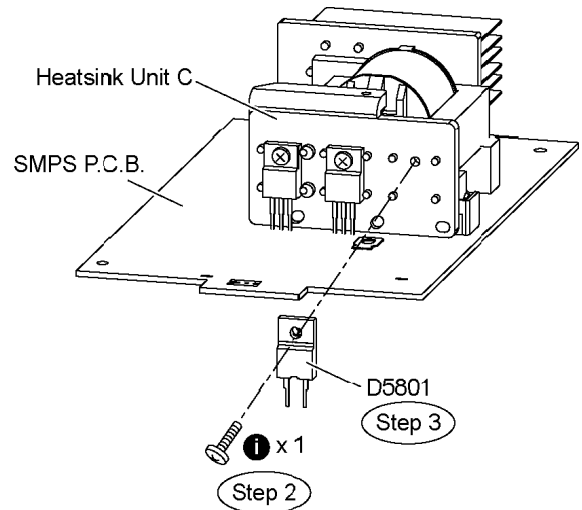
Step 1 Desolder pins of the regulator diode (D5803) on the reverse side of SMPS P.C.B.



Step 2 Remove 1 screw from the regulator diode (D5803).

Step 3 Remove the regulator diode (D5803) from the heatsink unit C.

Caution: Handle the heatsink unit C with caution due to its high temperature after prolonged use. Touching it may lead to injuries.



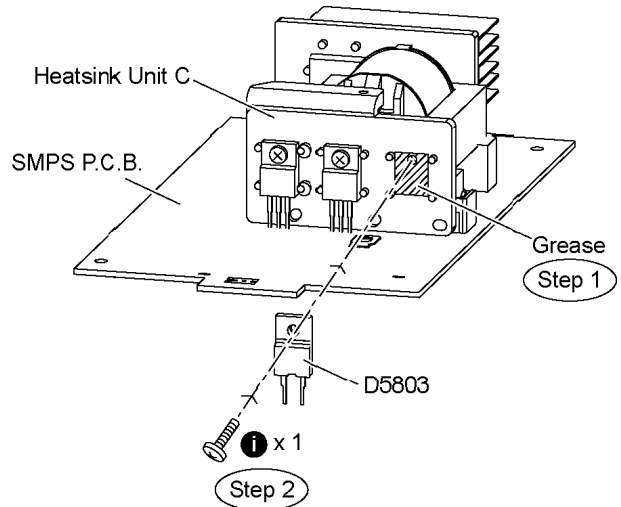
Note: Refer to the diagrams of SMPS P.C.B. (Item 20.5) for location of the part.

9.25.1. Assembly of Regulator Diode (D5803)

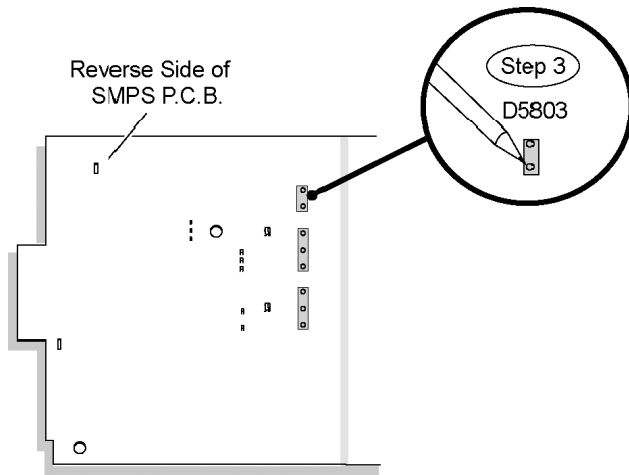
Step 1 Apply grease to the heatsink unit C.

Step 2 Fix and screw the regulator diode (D5803) to the heatsink unit C.

Special Note: Ensure the regulator diode (D5803) is tightly screwed to the heatsink unit C.



Step 3 Solder pins of the regulator diode (D5803) on the reverse side of SMPS P.C.B.



Special Note: Ensure pins of the regulator diode (D5803) are properly seated and soldered on SMPS P.C.B.

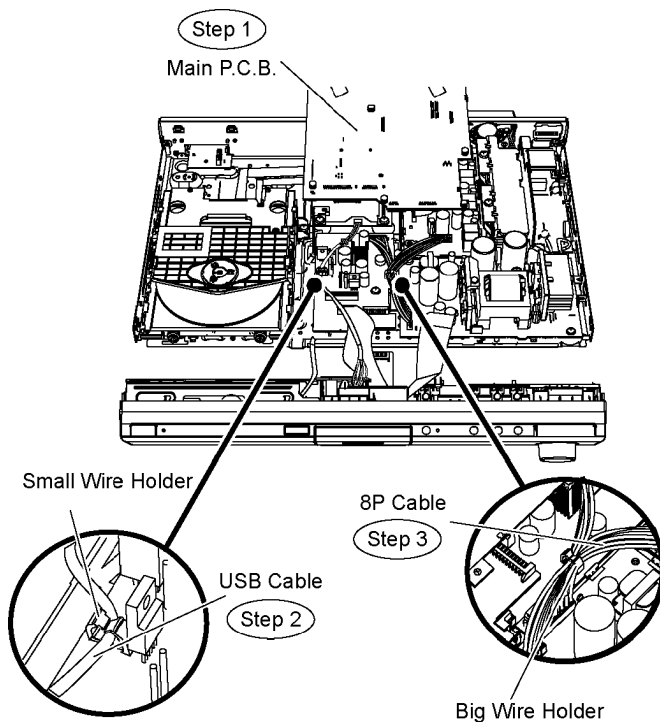
9.26. Disassembly of Power Supply P.C.B.

- Follow (Step 1) to (Step 3) of Item 9.3.
- Follow (Step 1) to (Step 5) of Item 9.6.
- Follow (Step 1) to (Step 9) of Item 9.13.

Step 1 Move aside Main P.C.B. and position it according to the diagram shown.

Step 2 Remove 5P USB cable (USB P.C.B. to DVD Module P.C.B.) from the small wire holder.

Step 3 Remove 8P cable (SMPS P.C.B. to D-Amp P.C.B.) from the big wire holder.



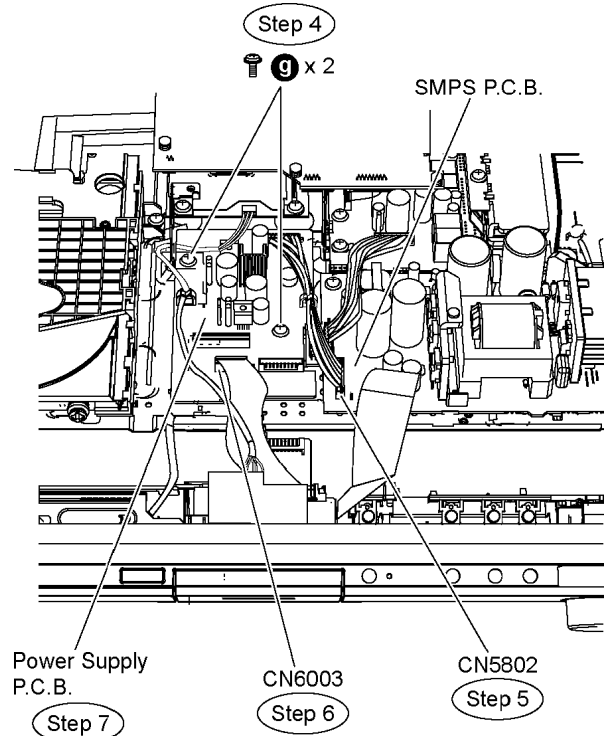
Step 4 Remove 2 screws on Power Supply P.C.B.

Step 5 Detach 11P cable at the connector (CN5802) on SMPS P.C.B.

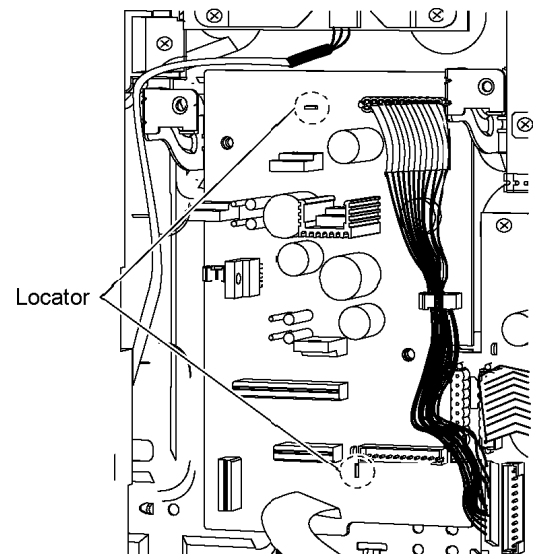
Step 6 Detach 14P FCC cable at the connector (CN6003) on

the Power Supply P.C.B.

Step 7 Remove Power Supply P.C.B.



Special Note: During reassembling procedures, ensure the P.C.B. is seated properly at the locators.

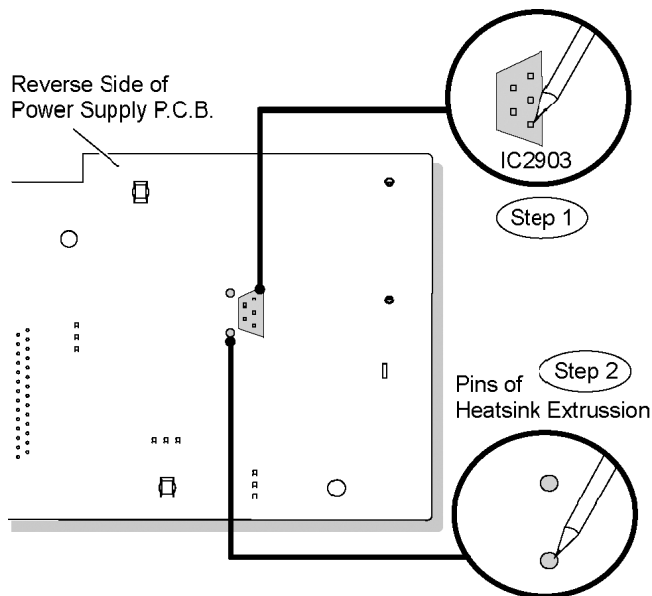


9.27. Replacement of Regulator IC (IC2903)

- Follow (Step 1) to (Step 3) of Item 9.3.
- Follow (Step 1) to (Step 5) of Item 9.6.
- Follow (Step 1) to (Step 9) of Item 9.13.
- Follow (Step 1) to (Step 7) of Item 9.26.

Step 1 Desolder pins of the regulator IC (IC2903) on the reverse side of Power Supply P.C.B.

Step 2 Desolder pins of the heatsink extrusion.

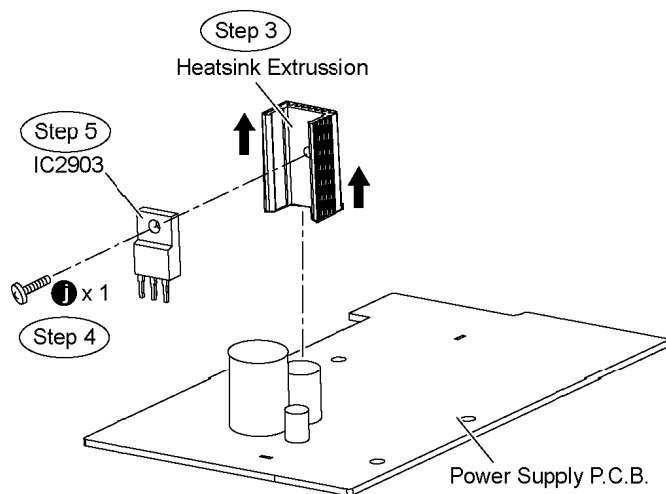


Step 3 Remove the heatsink extrusion in the direction of arrows.

Step 4 Remove 1 screw from the regulator IC (IC2903).

Step 5 Remove the regulator IC (IC2903) from the heatsink extrusion.

Caution: Handle the heatsink extrusion with caution due to its high temperature after prolonged use. Touching it may lead to injuries.



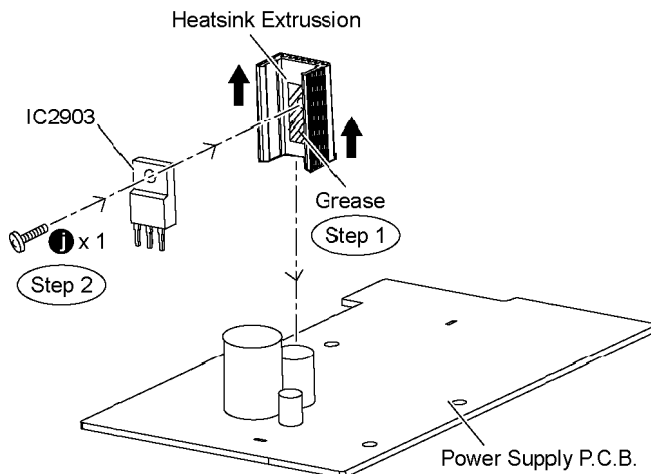
Note: Refer to the diagrams of Power Supply P.C.B. (Item 20.3) for location of the part.

9.27.1. Assembly of Regulator IC (IC2903)

Step 1 Apply grease to the heatsink extrusion.

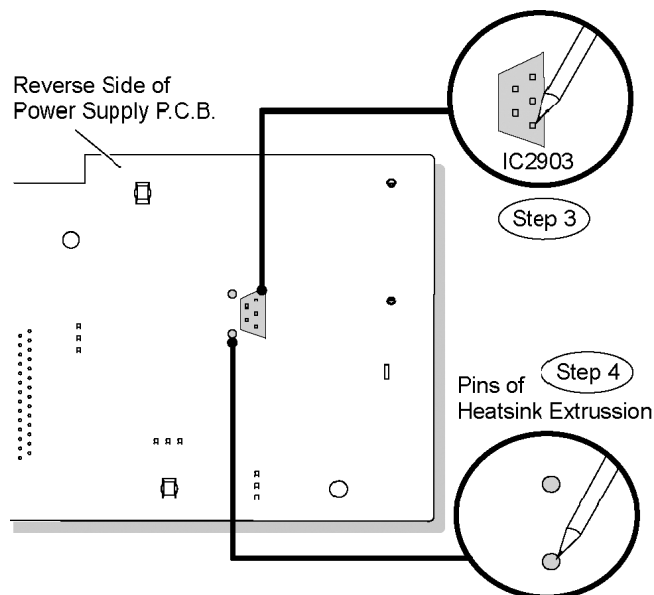
Step 2 Fix and screw the regulator IC (IC2903) to the heatsink extrusion.

Special Note: Ensure the regulator IC (IC2903) is tightly screwed to the heatsink extrusion.



Step 3 Solder pins of the regulator IC (IC2903) on the reverse side of Power Supply P.C.B.

Step 4 Solder pins of the heatsink extrusion on the reverse side of Power Supply P.C.B.

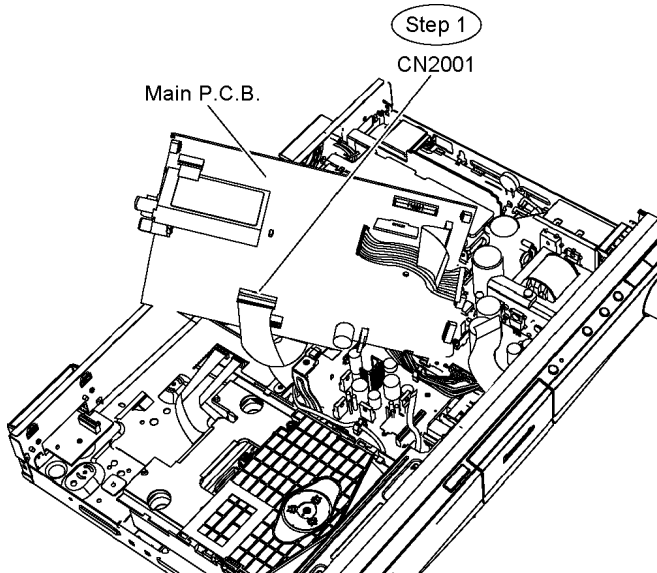


Special Note: Ensure pins of the regulator IC (IC2903) are properly seated and soldered on Power Supply P.C.B.

9.28. Disassembly of DVD Module P.C.B.

- Follow (Step 1) to (Step 3) of Item 9.3.
- Follow (Step 1) to (Step 10) of Item 9.13.

Step 1 Detach 50P FFC cable at the connector (CN2001) on Main P.C.B.

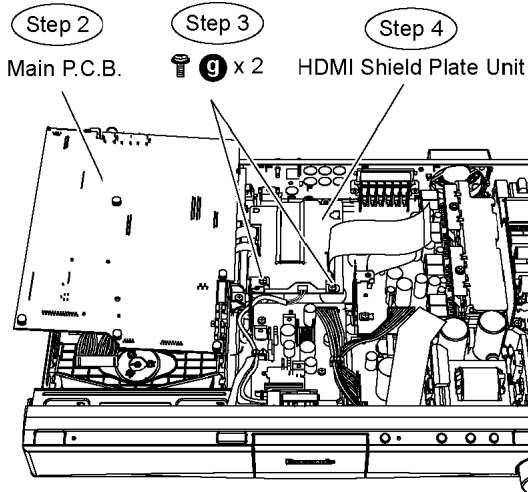


Step 2 Move aside Main P.C.B. and position it according to the diagram shown.

- Disassembly at HDMI Shield Plate Unit

Step 3 Remove 2 screws from the HDMI shield plate unit.

Step 4 Remove the HDMI shield plate unit.

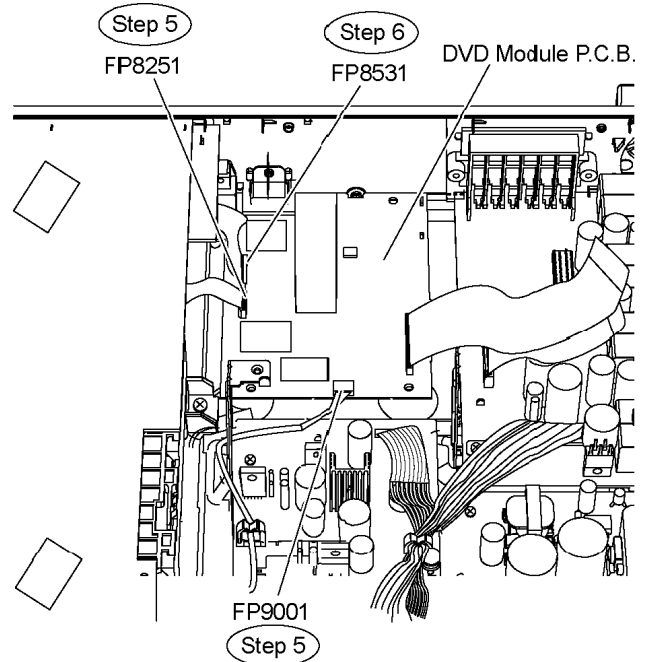


Caution Note: Keep the HDMI shield plate unit in safe place. Avoid denting it. Place it back during assembling.

Step 5 Detach 7P cable at the connector (FP8251) on DVD Module P.C.B.

Step 6 Detach 26P cable at the connector (FP8531) on DVD Module P.C.B.

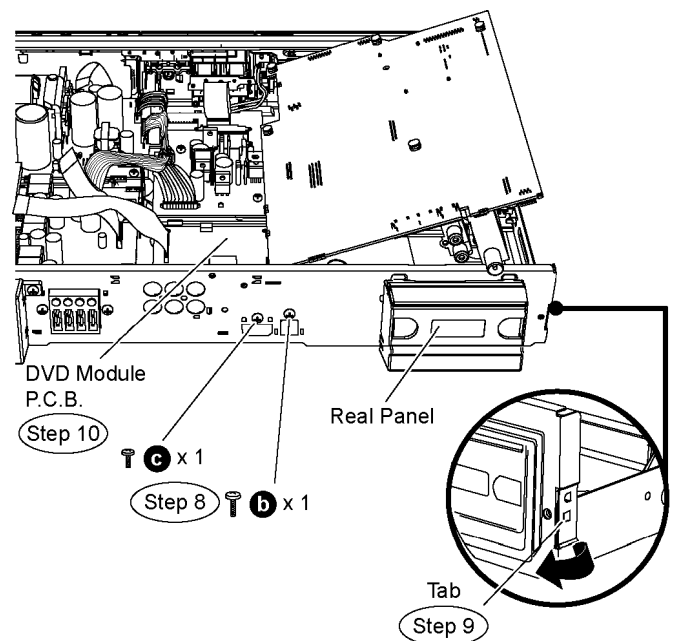
Step 7 Detach 5P cable at the connector (FP9001) on DVD Module P.C.B.



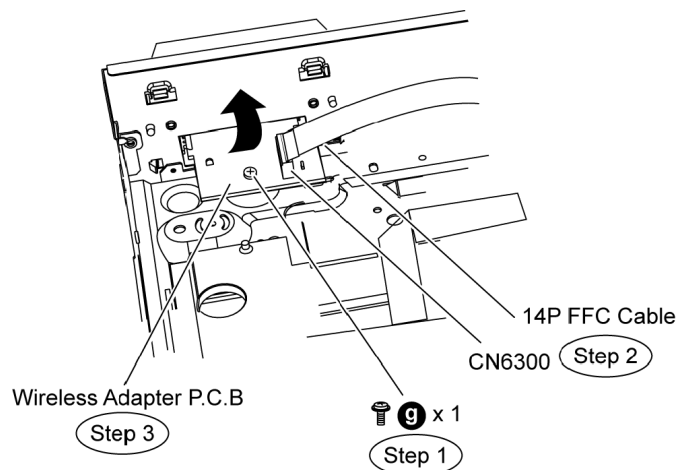
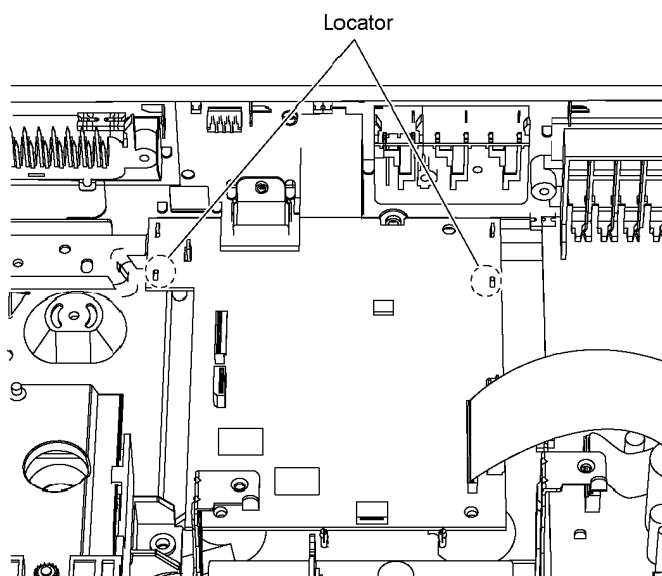
Step 8 Remove 2 screws at the rear panel.

Step 9 Release the tab of the rear panel in the direction of arrow.

Step 10 Remove DVD Module P.C.B.



Special Note: During reassembling procedures, ensure the P.C.B. is seated properly at the locators.

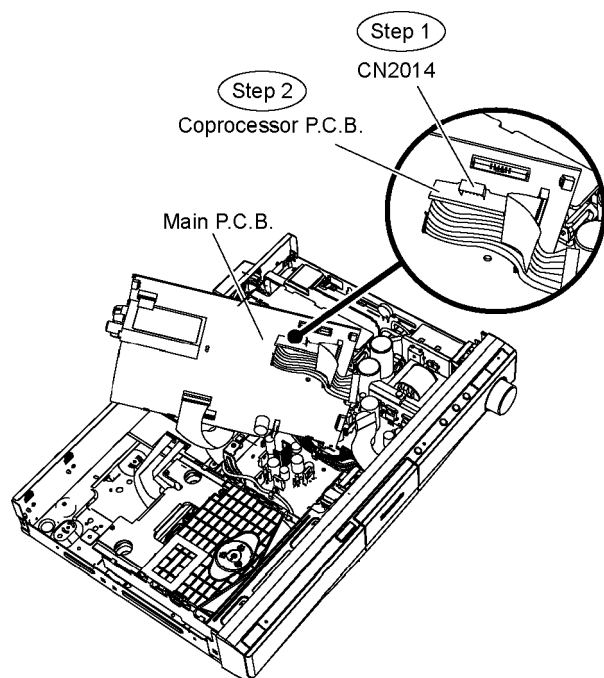


9.29. Disassembly of Coprocessor P.C.B.

- Follow (Step 1) to (Step 3) of Item 9.3.
- Follow (Step 1) to (Step 10) of Item 9.13.

Step 1 Detach Coprocessor P.C.B. at the connector (CN2014) on Main P.C.B.

Step 2 Remove Coprocessor P.C.B.



9.30. Disassembly of Wireless Adapter P.C.B.

Step 1 Remove 1 screw on Wireless Adapter P.C.B.

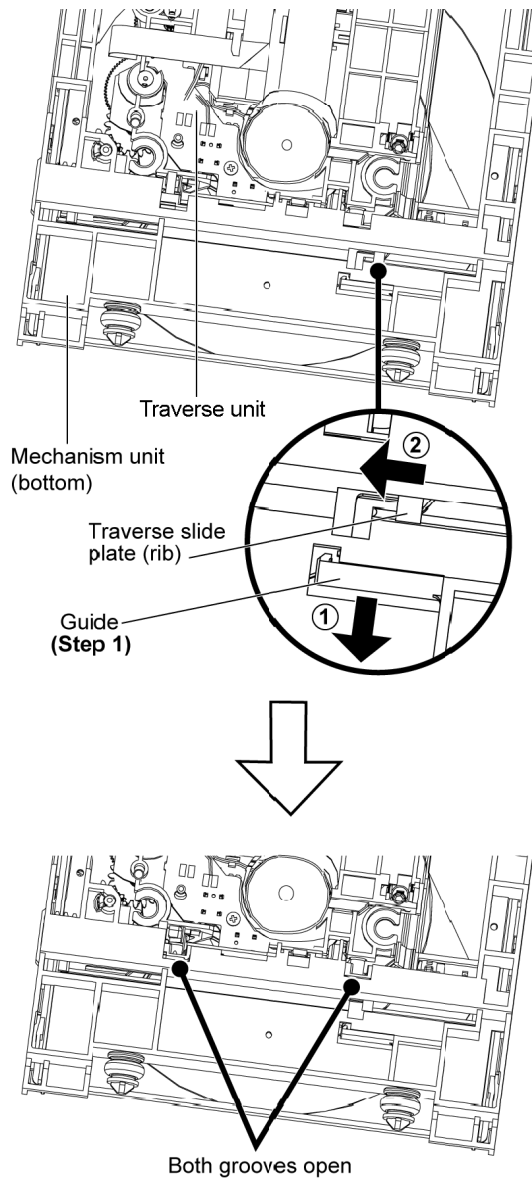
Step 2 Detach 14P FFC cable at the connector (CN6300) on wireless Adapter P.C.B.

Step 3 Align the wireless P.C.B straight in the direction of arrow to remove wireless Adapter P.C.B.

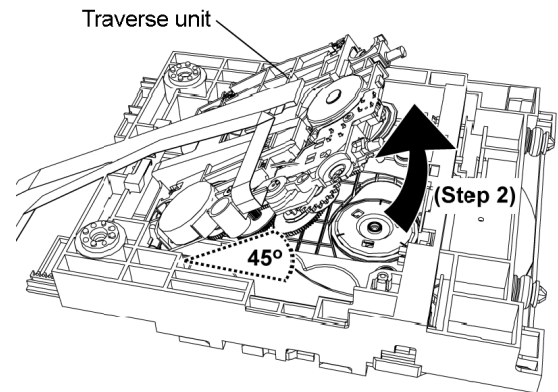
10 Assembling and Disassembling of DVD Mechanism Unit

10.1. Disassembling Procedures

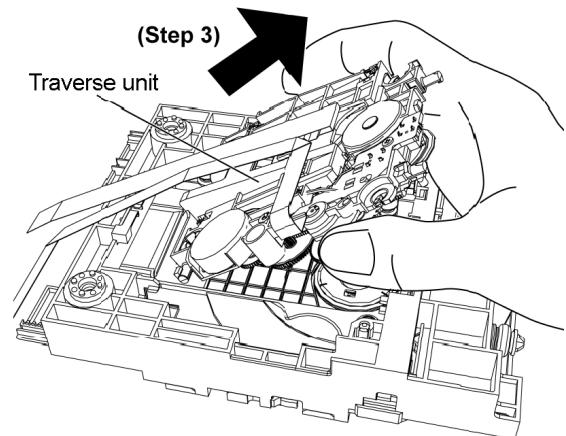
10.1.1. Disassembly of Traverse Unit



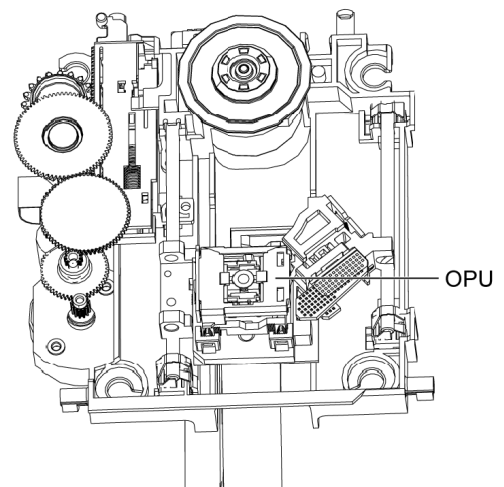
Step 1: Release the guide and slide the traverse slide plate (rib) as arrows shown.



Step 2: Lift up the Traverse unit approximately 45° as shown.



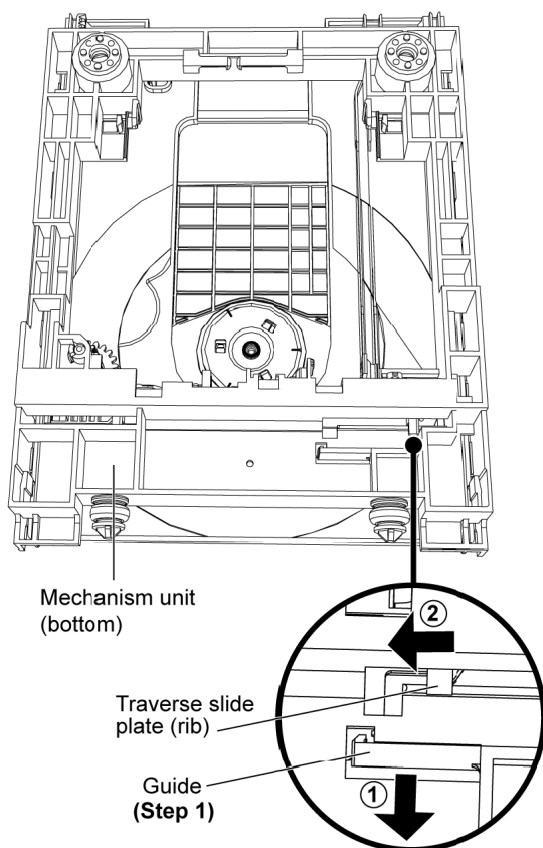
Step 3: Slide out the Traverse unit as arrow shown.



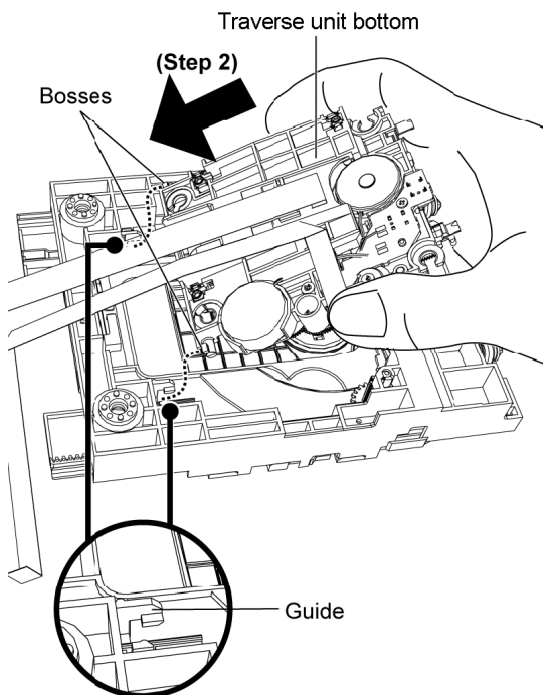
Caution: Do not touch the surface of the Traverse unit and place it so that the OPU is on top.

10.2. Assembling Procedure

10.2.1. Assembly of Traverse unit

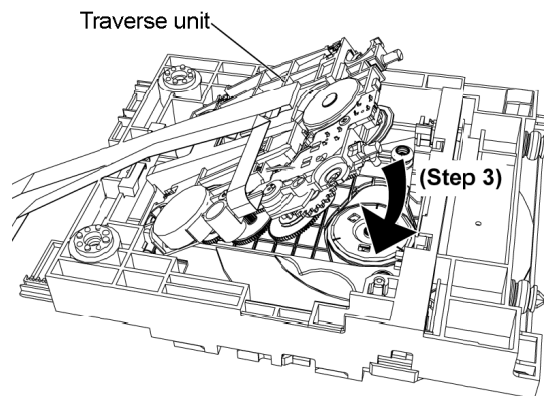


Step 1: Release the guide and slide the traverse slide palte (rib) as arrows shown.

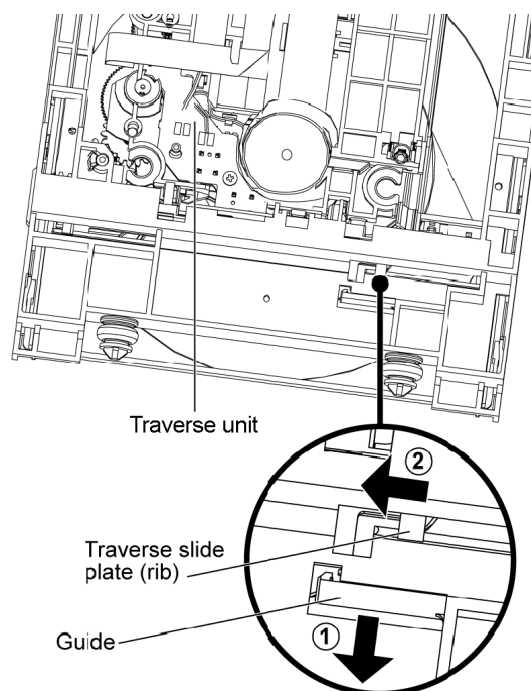


Step 2: Slot the Traverse unit approximately 45° into the mecha chassis as arrow shown.

Note: Ensure the bosses fix exactly onto the guides.



Step 3: Place down the Traverse unit as arrow shown.



Step 4: Release the guide and slide the traverse slide plate (rib) in the direction of arrows shown to lock in the traverse unit.

11 Service Fixture and Tools

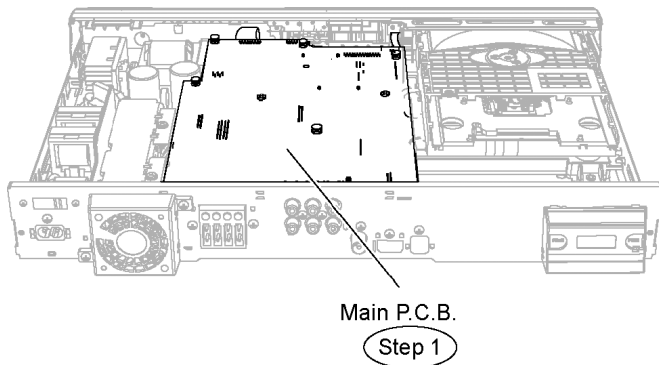
Prepare service tools before process service position.

Service Tools		Remarks
D-Amp P.C.B. (CN5500) - SMPS P.C.B. (H5801)	REXX0651 (8P cable)	[M](RTL)
Main P.C.B. (CN2009) - D-Amp P.C.B. (CN5050)	REEX0815 (17P cable)	[M](RTL)
Main P.C.B. (CN2015) - Power Supply P.C.B. (CN2016)	REXX0653-J (13P cable)	[M](RTL)

12 Service Position

12.1. Checking & Repairing Main P.C.B.

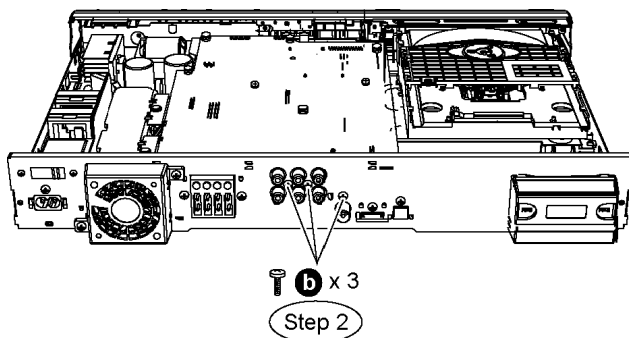
Step 1 Remove the top cabinet to service Main P.C.B.



12.2. Checking & Repairing D-Amp P.C.B.

Step 1 Remove the top cabinet.

Step 2 Remove 3 screws at the rear panel.



Step 3 Remove 2 screws on Main P.C.B.

Step 4 Detach 17P cable at the connector (CN2007) on Main P.C.B.

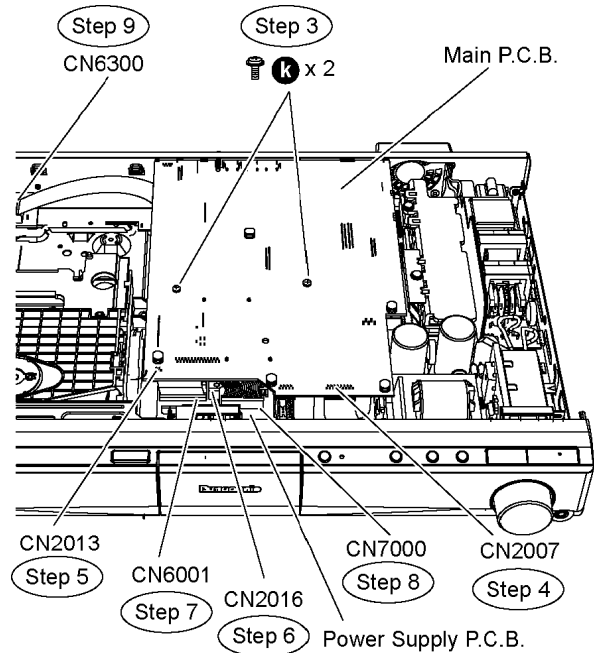
Step 5 Detach 4P cable at the connector (CN2013) on Main P.C.B.

Step 6 Detach 13P cable at the connector (CN2016) on Power Supply P.C.B.

Step 7 Detach 28P cable at the connector (CN6001) on Power Supply P.C.B.

Step 8 Detach 12P cable at the connector (CN7000) on Mic P.C.B.

Step 9 Detach 14P cable at the connector (CN6300) on Wireless Adapter P.C.B.

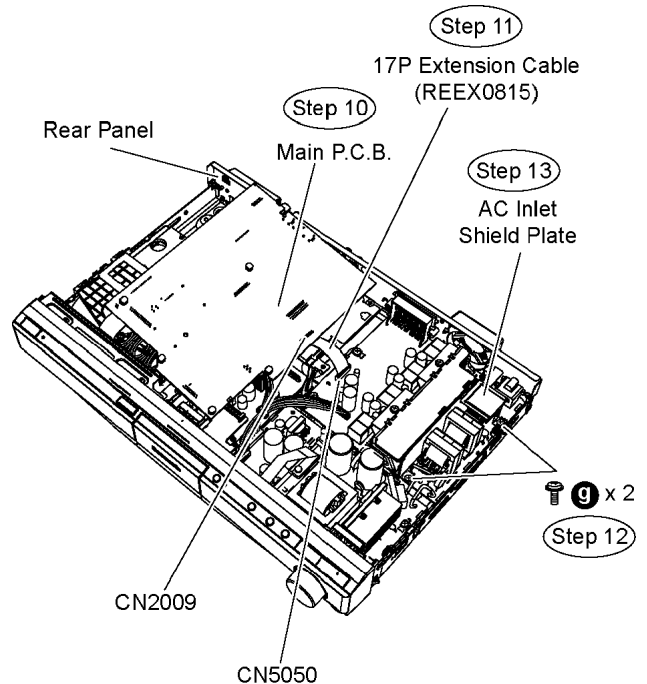


Step 10 Detach Main P.C.B. from the rear panel and position it according to the diagram show.

Step 11 Attach original cable with extension cable REEX0815 (17P cable from CN2009 to CN5050).

Step 12 Remove 2 screws then remove the AC Inlet shield plate unit.

Step 13 Remove AC Inlet shield plate unit.

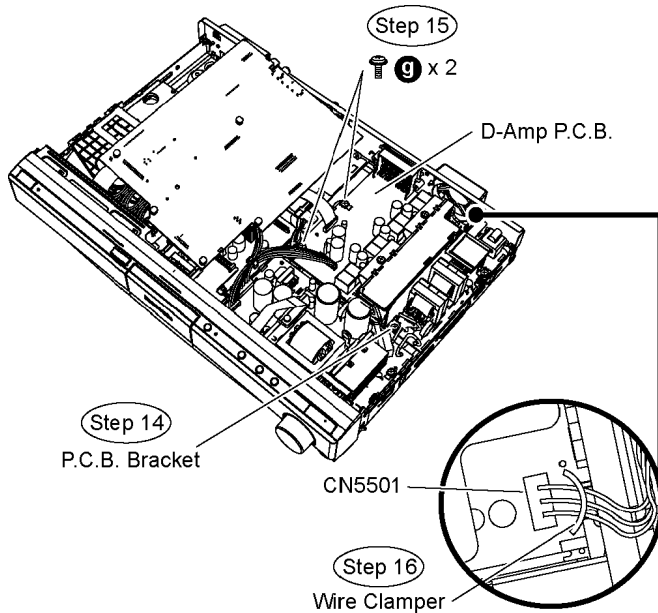


Step 14 Remove the P.C.B. bracket.

Caution Note: Keep the P.C.B. bracket in safe place. Avoid denting it. Place it back during assembling.

Step 15 Remove 2 screws on D-Amp P.C.B.

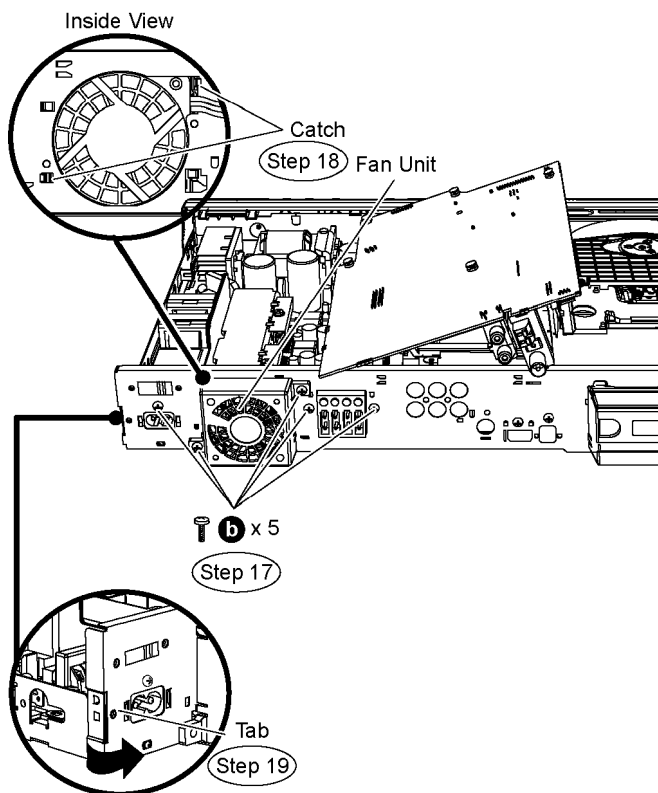
Step 16 Remove the wire clamber to detach 3P cable at the connector (CN5501) on D-Amp P.C.B.



Step 17 Remove 7 screws at the rear panel.

Step 18 Release the catches and remove the fan unit.

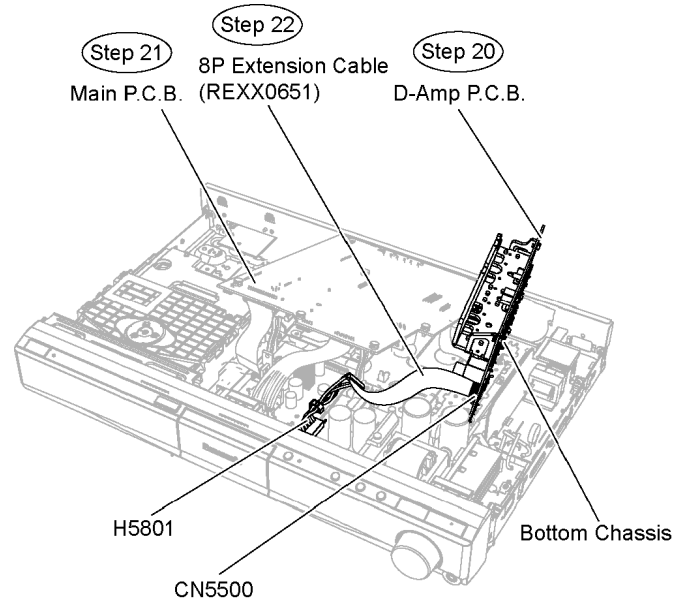
Step 19 Release the tab of the rear panel in the direction of arrow.



Step 20 Detach D-Amp P.C.B. from the bottom chassis and flip it vertically.

Step 21 Position Main P.C.B. according to the diagram shown.

Step 22 Attach original cable with extension cable REXX0651. (8P cable from H5801 to CN5500).



Caution Note: Ensure the cable is attached properly.

Step 23 Connect 13P cable at the connector (CN2016) on Power Supply P.C.B.

Step 24 Connect 28P cable at the connector (CN6001) on Power Supply P.C.B.

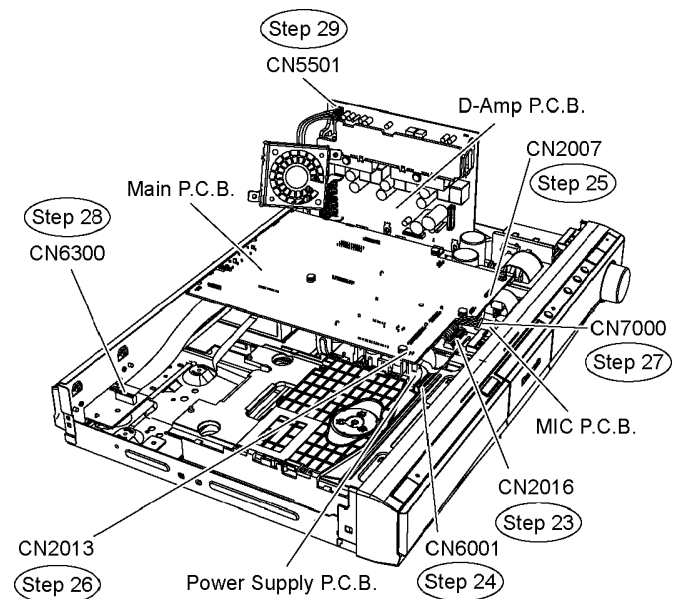
Step 25 Connect 17P cable at the connector (CN2007) on Main P.C.B.

Step 26 Connect 4P cable at the connector (CN2013) on Main P.C.B.

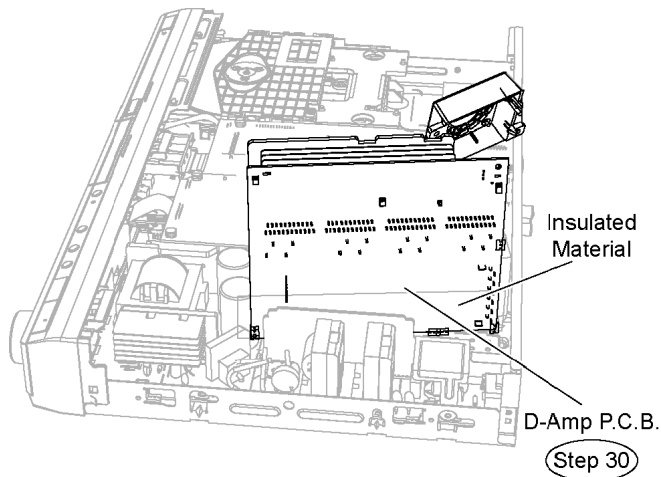
Step 27 Connect 12P cable at the connector (CN7000) on Mic P.C.B.

Step 28 Connect 14P cable at the connector (CN6300) on Wireless Adapter P.C.B.

Step 29 Connect the fan unit at the connector (CN5501) on D-Amp P.C.B.



Step 30 Position D-Amp P.C.B. with insulated material according to the diagram shown.



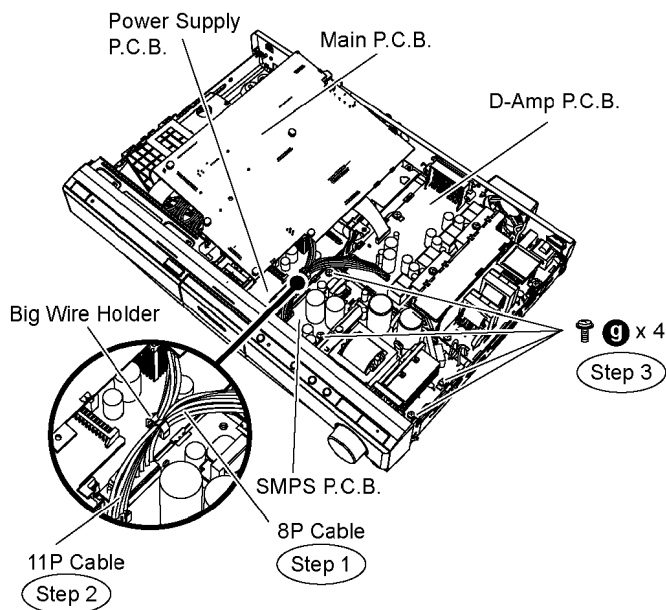
12.3. Checking & Repairing SMPS P.C.B.

- Follow (Step 1) to (Step 11) of Item 12.2.

Step 1 Remove the 8P cable (SMPS P.C.B. to D-Amp P.C.B.) from the small wire holder.

Step 2 Remove the 11P cable (SMPS P.C.B. to Power Supply P.C.B.) from the big wire holder.

Step 3 Remove 4 screws on SMPS P.C.B.



Step 4 Detach SMPS P.C.B. from the bottom chassis and flip it vertically.

Step 5 Position Main P.C.B. according to the diagram shown.

Step 6 Connect 13P cable at the connector (CN2016) on Power Supply P.C.B.

Step 7 Connect 28P cable at the connector (CN6001) on Power Supply P.C.B.

Step 8 Connect 17P cable at the connector (CN2007) on Main P.C.B.

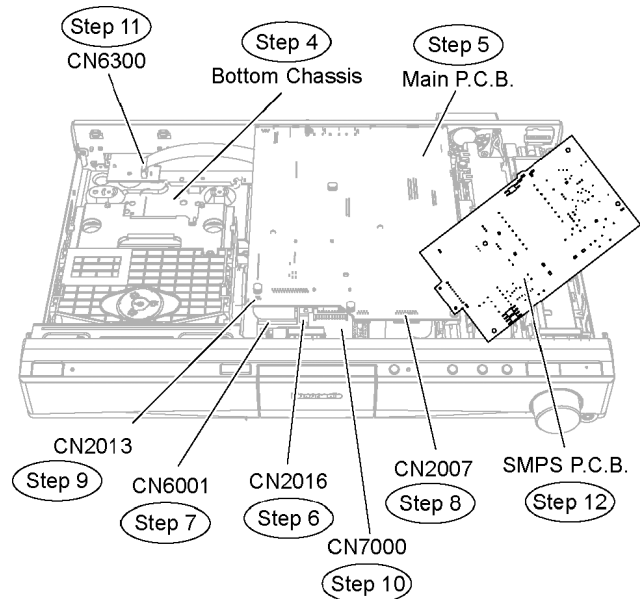
Step 9 Connect 4P cable at the connector (CN2013) on Main P.C.B.

Step 10 Connect 12P cable at the connector (CN7000) on Mic

P.C.B.

Step 11 Connect 14P cable at the connector (CN6300) on Wireless Adapter P.C.B.

Step 12 Position SMPS P.C.B. according to the diagram shown.



12.4. Checking & Repairing Power Supply P.C.B.

Step 1 Remove the top cabinet.

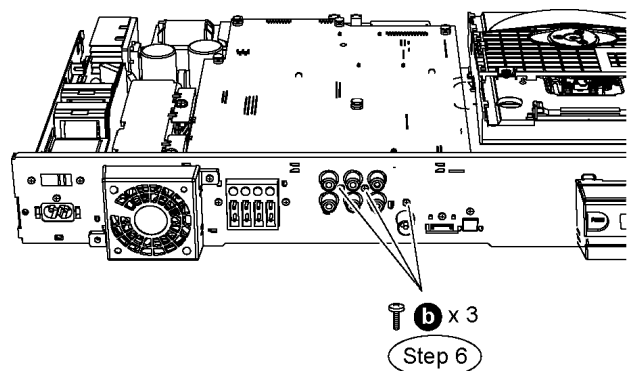
Step 2 Remove the front panel.

Step 3 Remove Panel P.C.B.

Step 4 Remove Power Button P.C.B.

Step 5 Remove Mic P.C.B.

Step 6 Remove 3 screws at rear panel.

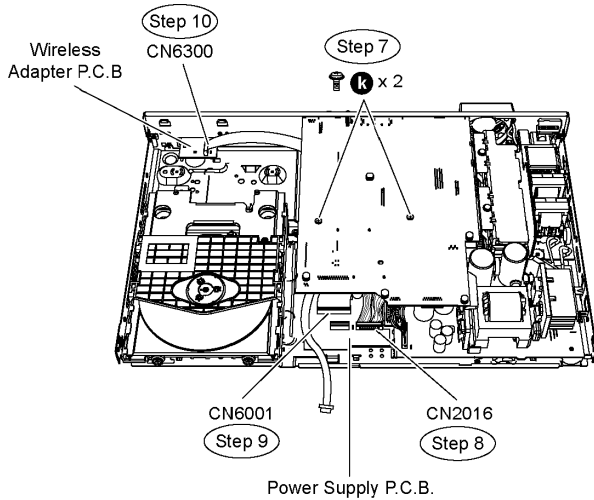


Step 7 Remove 2 screws on Main P.C.B.

Step 8 Detach 13P cable at the connector (CN2016) on Power Supply P.C.B.

Step 9 Detach 28P cable at the connector (CN6001) on Power Supply P.C.B.

Step 10 Detach 14P cable at the connector (CN6300) on Wireless Adapter P.C.B.

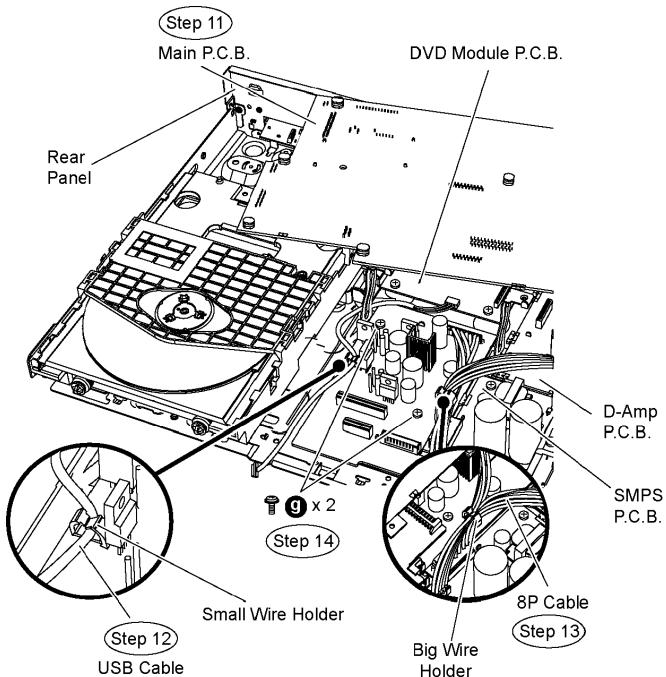


Step 11 Detach Main P.C.B. from the rear panel and position it according to the diagram shown.

Step 12 Remove 5P USB cable (USB P.C.B. to DVD Module P.C.B.) from the small wire holder.

Step 13 Remove 8P cable (SMPS P.C.B. to D-Amp P.C.B.) from the big wire holder.

Step 14 Remove 2 screws on Power Supply P.C.B.



Step 15 Detach Power Supply P.C.B. from the bottom chassis and flip it vertically.

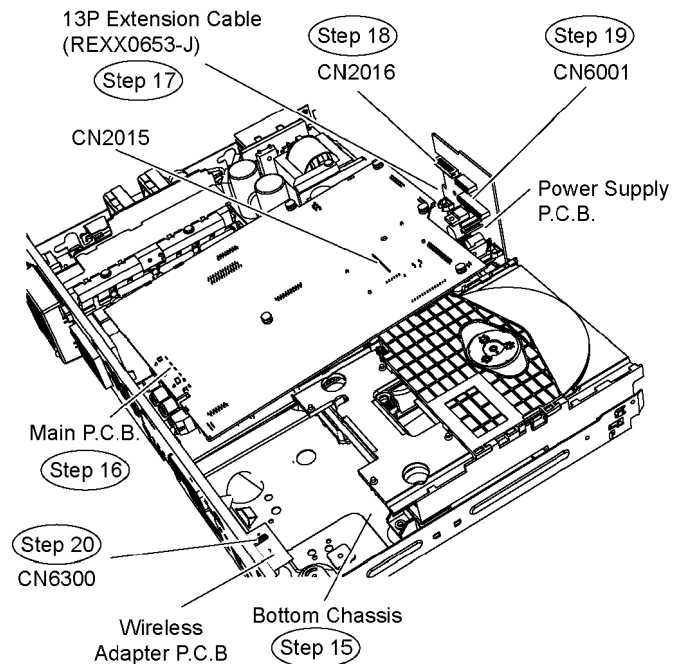
Step 16 Position Main P.C.B. according to the diagram shown.

Step 17 Attach original cable with extension cable REXX0653-J (13P cable from CN2015 to CN2016)

Step 18 Connect 13P cable at the connector (CN2016) on Power Supply P.C.B.

Step 19 Connect 28P cable at the connector (CN6001) on Power Supply P.C.B.

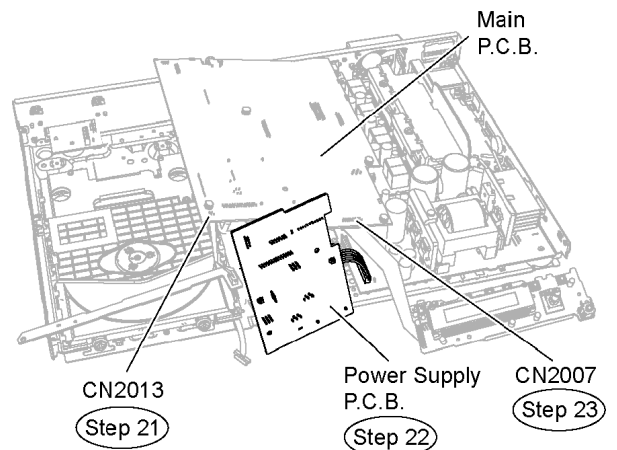
Step 20 Connect 14P cable at the connector (CN6300) on Wireless Adapter P.C.B.



Step 21 Connect 17P cable at the connector (CN2007) on Main P.C.B.

Step 22 Connect 4P cable at the connector (CN2013) on Main P.C.B.

Step 23 Position Power Supply P.C.B. according to the diagram shown.



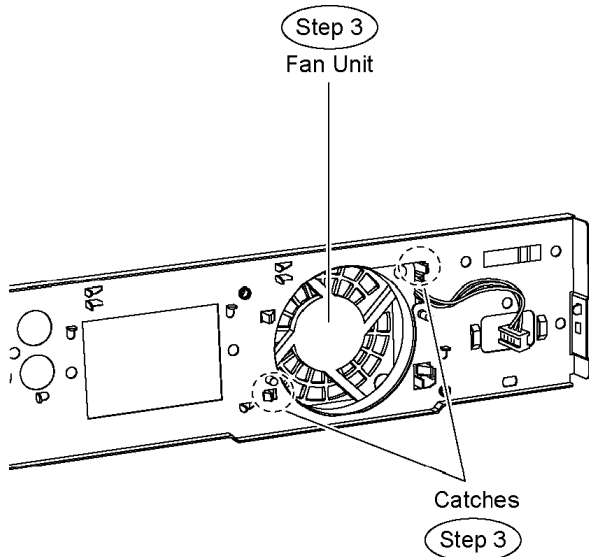
12.5. Checking & Repairing DVD Module P.C.B.

- Servicing Side A of DVD Module P.C.B.

Step 1 Remove the top cabinet.

Step 2 Remove the rear panel.(Remove all rear panel screws)

Step 3 Release the catches and remove the fan unit.



Step 4 Remove 2 screws on Main P.C.B.

Step 5 Detach 17p cable at the connector (CN2007) on Main P.C.B.

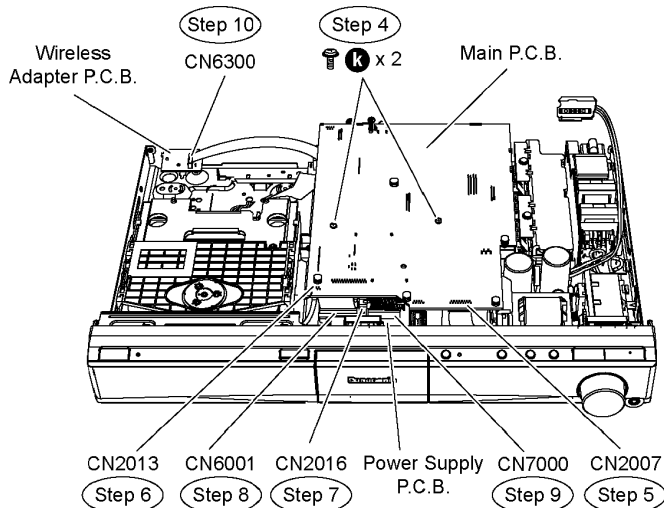
Step 6 Detach 4P cable at the connector (CN2013) on Main P.C.B.

Step 7 Detach 13P cable at the connector (CN2016) on Power Supply P.C.B.

Step 8 Detach 28P cable at the connector (CN6001) on Power Supply P.C.B.

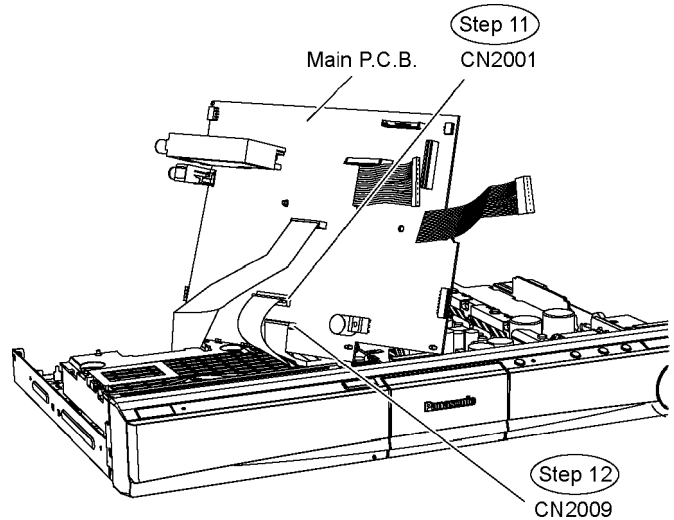
Step 9 Detach 12P cable at the connector (CN7000) on Mic P.C.B.

Step 10 Detach 14P cable at the connector (CN6300) on Wireless Adapter P.C.B.



Step 11 Turn over Main P.C.B. to detach 50P cable at the connector (CN2001).

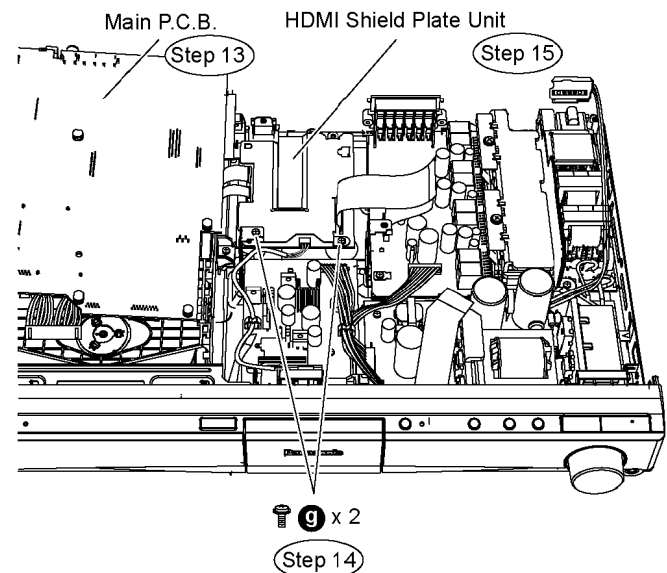
Step 12 Turn over Main P.C.B. to detach 17P cable at the connector (CN2009).



Step 13 Move aside Main P.C.B. and position it according to the diagram shown.

Step 14 Remove 2 screws from the HDMI shield plate unit.

Step 15 Remove the HDMI shield plate unit.



Caution Note: Keep the HDMI shield plate unit in safe place. Avoid denting it. Place it back during assembling.

Step 16 Move Main P.C.B. in the direction of arrow.

Step 17 Connect 13P cable at the connector (CN2016) on Power Supply P.C.B.

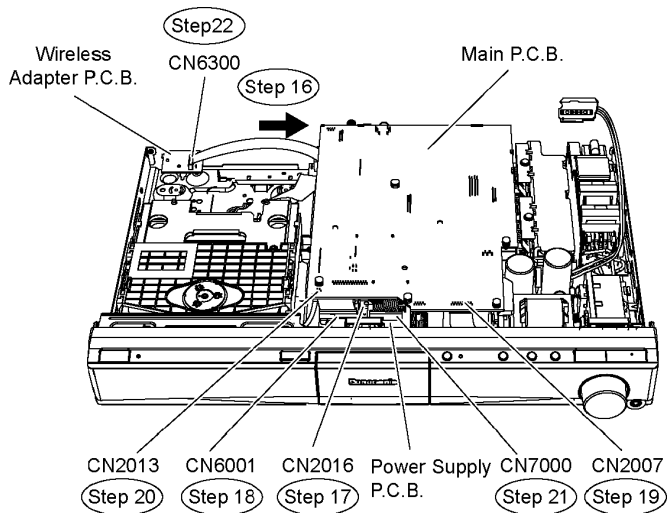
Step 18 Connect 28P cable at the connector (CN6001) on Power Supply P.C.B.

Step 19 Connect 17P cable at the connector (CN2007) on Main P.C.B.

Step 20 Connect 4P cable at the connector (CN2013) on Main P.C.B.

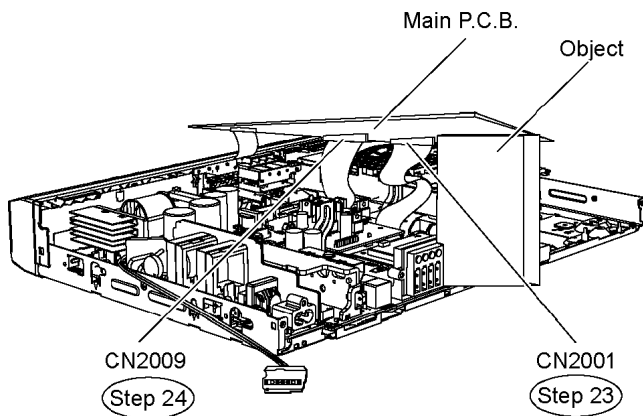
Step 21 Connect 12P cable at the connector (CN7000) on Mic P.C.B.

Step 22 Connect 14P cable at the connector (CN6300) on Wireless Adapter P.C.B.



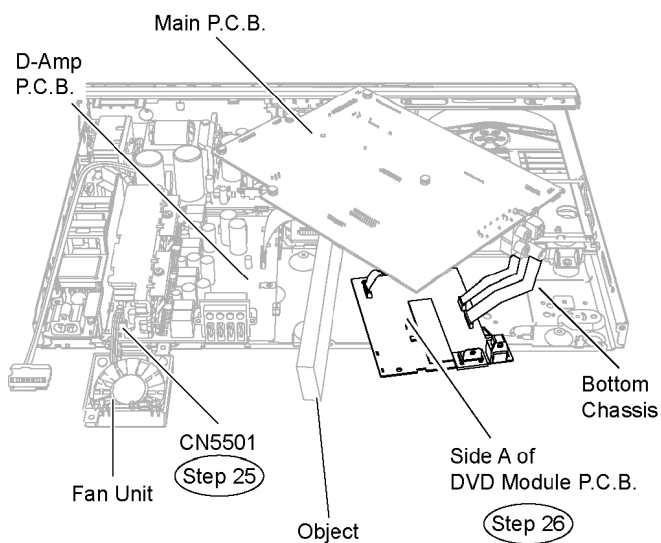
Step 23 Connect 50P cable at the connector (CN2001) on Main P.C.B.

Step 24 Connect 17P cable at the connector (CN2009) on Main P.C.B.



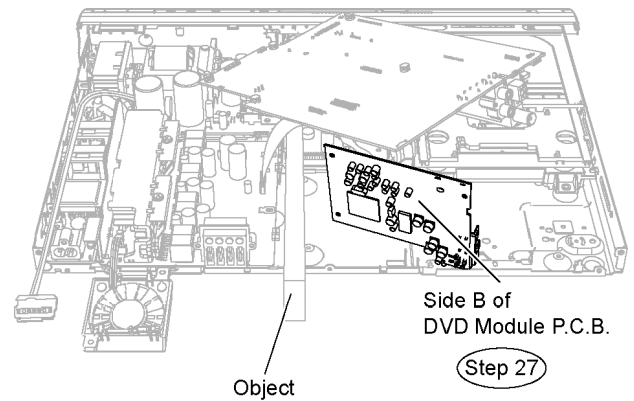
Step 25 Connect the fan unit at the connector (CN5501) on D-Amp P.C.B.

Step 26 Detach DVD Module P.C.B. from the bottom chassis and position its side A according to the diagram shown.



- Servicing side B of DVD Module P.C.B.

Step 27 Flip DVD Module P.C.B. to its side B and position it according to the diagram shown..



Note: An object can be placed beneath Main P.C.B. to adjust its height.

13 Measurements and Adjustments

13.1. Service Tools and Equipment

Application	Name	Number
Tilt adjustment	DVD test disc	DVDT-S20 [SPG]
	TORX screw driver (T6)	Available on sales route. (T6) or RFKZ0185 [SPG]
Others	Grease	RFKXPG641 [SPG]
Confirmation	CD test disc	PVCD-K06 or any other commercially available disc
	VCD test disc	PVCD-K06 or any other commercially available disc
	Recovery disc	RFKZD03R005 [SPG]

13.2. Important points in adjustment

13.2.1. Important points in optical adjustment

- Before starting optical adjustment, be sure to take anti-static measures.
- Optical pickup tilt adjustment is needed after replacement of the following components.

1. Optical pickup unit
2. Spindle motor unit
3. Optical pickup peripheral parts

Notes

Adjustment is generally unnecessary after replacing other parts of the traverse unit. However, make adjustment if there is a noticeable degradation in picture quality. Optical adjustments cannot be made inside the optical pickup. Adjustment is generally unnecessary after replacing the traverse unit.

13.2.2. Important points in electrical adjustment

- Follow the adjustment procedures described in this manual.

13.3. Storing and handling of test discs

- Surface precision is vital for DVD test discs. Be sure to store and handle them carefully.
1. Do not place discs directly onto the workbench, etc., after use.
 2. Handle discs carefully in order to maintain their flatness. Place them into their case after use and store them vertically. Store discs in a cool place where they are not exposed to direct sunlight or air from air conditioners.
 3. Accurate adjustment will not be possible if the disc is warped when placed on a surface made of glass, etc. If this happens, use a new test disc to make optical adjustments.
 4. If adjustment is done using a warped disc, the adjustment will be incorrect and some discs will not be playable.

13.4. Optical adjustment

13.4.1. Optical pickup tilt adjustment

Measurement point	Adjustment point	Mode	Disc
	Tangential adjustment screw Tilt adjustment screw	T01 (inner periphery) play T30 (center periphery) T43 (outer periphery) play	DVDT-S20 [SPG]
Measuring equipment	Adjustment value		
None (Main unit display for servicing is used.)	Adjust to the minimum jitter value.		

13.4.1.1. Adjustment procedure

1. While pressing STOP button on the main unit, press "5" on the remote control unit.
2. Confirm that "J_xxx/yyy_zz" (Display 1/Display 2) is shown on the front display.

For your information:

"yyy" and "zz" have nothing to do with the jitter value.
"yyy" is the error counter, while "zz" is the focus drive value.

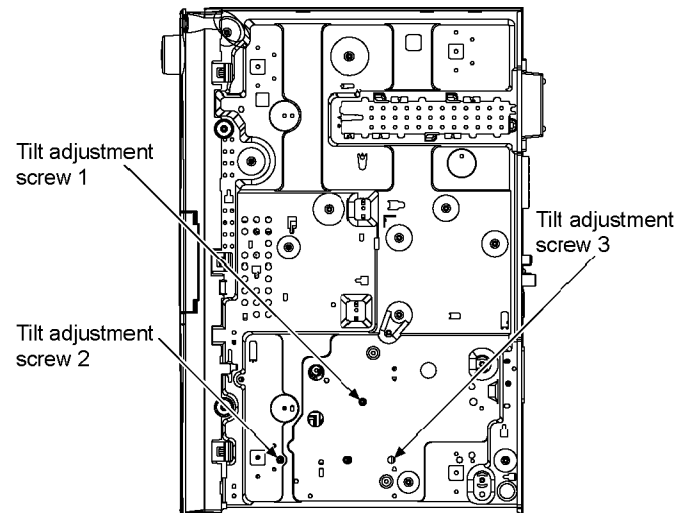
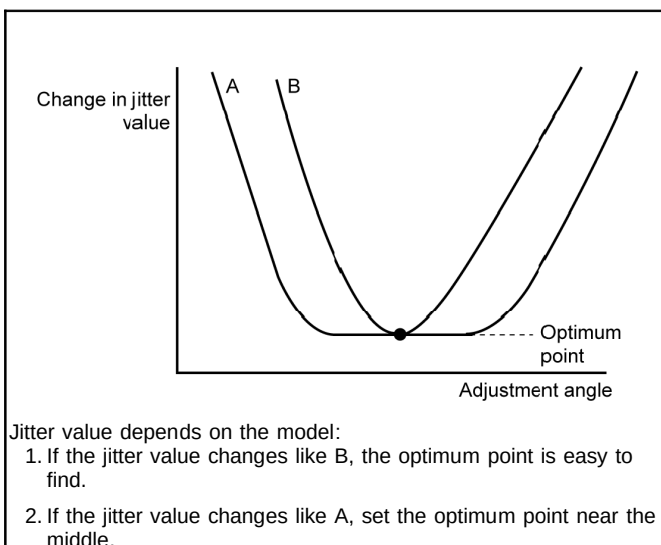
Note:

Jitter value appears on the front display.

3. Play test disc T30 (center periphery).
4. Adjust tangential adjustment screw so that the jitter value is minimized.
5. Play test disc T30 (center periphery).
6. Adjust tilt adjustment screw 1 so that the jitter value is minimized.
7. Play test disc T30 (center periphery).
8. Adjust tilt adjustment screw 2 so that the jitter value is minimized.
9. Repeat adjusting tilt adjustment screws 1 and 2 alternately until the jitter value is minimized.

13.4.1.2. Important points

1. Make tangential adjustment first, and then make tilt adjustment.
2. Repeat adjusting two or three times to find the optimum point.
3. Finish the procedure with tilt adjustment.

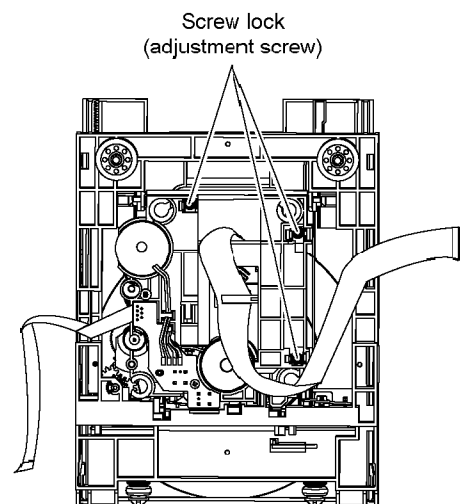


13.4.1.3. Check after adjustment

Play test disc or any other disc to make sure there is no picture degradation in the inner, middle and outer peripheries, and no audio skipping. After adjustment is finished, lock each adjustment screw in position using screw lock.

13.4.1.4. Procedure for screw lock

1. After adjustment, remove top cover, tray, clamber base and traverse unit in this sequence.
2. Lay the traverse unit upside down, and fix adjustment screw with screw lock.
3. After fixing, reassemble traverse unit, clamber base, tray and top cover.



14 Voltage and Waveform Chart

14.1. DVD Module P.C.B.

REF NO.	IC3901																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	-	-	-	-	1.3	1.4	0	2.9	3.4	0	0.1	0.1	3.3	0	0.1	0.1	3.4	0	0	0
REF NO.	IC3901																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	3.3	0.1	0	0	3.4	0	0	3.3	0	0	0	0	1.6	3.4	0.9	0.1	0.1	0.9	0.1	3.4
REF NO.	IC3901																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
CD PLAY	1.7	1.3	1.7	0.1	1.7	0.1	1.3	0.1	0.1	0.1	0.1	3.4	0.1	0.1	1.3	0.1	0.1	0.1	0.1	0
REF NO.	IC3901																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
CD PLAY	0	0	0	-	-	0.1	0.1	0.1	0.1	3.4	0.1	0.1	0.1	0.1	1.3	0.1	0.1	0	0	0.1
REF NO.	IC3901																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
CD PLAY	0.1	0.1	0.1	3.4	1.3	0.1	1.0	0.9	1.8	1.3	0.1	2.2	0.9	0.6	2.1	0.1	0.1	0.1	0.1	3.4
REF NO.	IC3901																			
MODE	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
CD PLAY	0.1	1.3	0.1	0.1	0	3.4	3.4	3.4	1.3	0	1.8	0.1	3.3	3.3	3.4	1.3	1.7	0	0	3.4
REF NO.	IC3901																			
MODE	121	122	123	124	125	126	127	128												
CD PLAY	3.4	0	1.3	3.4	0	1.4	-	-												
REF NO.	IC3952																			
MODE	1	2	3	4	5															
CD PLAY	8.5	0	1.4	5.1	8.8															
REF NO.	IC8001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0	0	0.1	3.3	0.1	3.3	0.1	0.1	1.0	0.9	1.7	1.2	2.2	0.9	0.1	3.3	0.6	2.0	0.1	1.2
REF NO.	IC8001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	2.5	0	0	2.2	0	2.4	0	0.9	1.0	1.9	3.3	0	0	2.0	0.8	2.1	2.0	1.0	0.9	2.4
REF NO.	IC8001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
CD PLAY	2.4	2.6	0.1	1.2	0.1	3.2	3.2	3.3	3.3	1.7	0.1	3.3	1.8	2.8	3.0	3.3	3.3	3.3	0.6	3.0
REF NO.	IC8001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
CD PLAY	1.6	0.1	0.1	0.9	3.3	1.9	1.7	0	3.3	3.3	0	3.3	3.3	0	0.3	1.2	3.3	3.3	3.3	3.3
REF NO.	IC8001																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
CD PLAY	0.1	0.1	1.2	3.3	0.9	2.4	0.1	1.9	0.1	0.5	1.8	3.3	1.5	1.5	1.9	1.9	1.7	1.7	1.7	1.7
REF NO.	IC8001																			
MODE	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
CD PLAY	0	0	0.2	0.1	0.2	2.1	3.3	0	2.3	1.7	2.5	2.5	2.5	2.5	2.5	2.5	2.4	2.4	2.4	2.5
REF NO.	IC8001																			
MODE	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140
CD PLAY	1.9	2.0	1.7	1.7	0.1	1.7	1.7	3.3	0.9	0.9	0.5	3.3	2.4	1.0	1.0	2.4	0.1	0.5	0.9	0.1
REF NO.	IC8001																			
MODE	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160
CD PLAY	3.3	3.3	0	0	0	0	3.3	1.5	1.7	1.7	0.9	1.7	0	3.3	1.5	1.6	0	1.2	3.0	-
REF NO.	IC8001																			
MODE	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180
CD PLAY	3.0	3.0	3.1	3.0	0	3.3	3.0	3.2	3.2	3.0	3.0	3.2	0	3.3	3.0	3.1	3.2	2.9	2.9	2.9
REF NO.	IC8001																			
MODE	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200
CD PLAY	3.3	1.6	1.6	3.3	1.6	0	1.2	3.3	3.3	3.2	3.6	0	2.0	0	0	3.3	1.6	0.1	0	1.6
REF NO.	IC8001																			
MODE	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216				
CD PLAY	0.1	1.6	0.4	0	3.3	1.7	1.8	0.4	1.6	0	1.2	2.3	2.7	2.7	3.3	0				
REF NO.	IC8051																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	3.3	3.2	3.3	2.9	2.9	0	3.2	3.0	3.3	3.2	3.0	0	2.8	3.3	2.8	3.3	3.3	3.2	3.2	2.0
REF NO.	IC8051																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	1.6	0	0.1	0.4	0.4	1.6	3.3	0	1.5	1.7	1.7	1.6	0	0	0	-	3.3	1.6	2.9	-
REF NO.	IC8051																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54						
CD PLAY	0	3.2	3.3	3.0	0	0	3.2	2.9	3.3	3.1	2.9	0	3.0	0						
REF NO.	IC8111																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	3.3	-	0	1.9	4.8	-	-	5.1												
REF NO.	IC8151																			
MODE	1	2	3	4	5															
CD PLAY	2.3	2.3	0	1.3	0.8															
REF NO.	IC8251																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	1.7	1.7	1.7	2.2	2.2	2.0	0.1	5.1	3.3	0	2.5	2.7	2.5	2.7	4.1	4.2	5.0	3.3	0	3.3
REF NO.	IC8251																			
MODE	21	22	23	24	25	26	27	28	29	30										
CD PLAY	8.9	8.7	1.8	1.7	1.7	1.7	3.3	3.3	0	0										

REF NO.	IC8421																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	1.7	1.7	0.9	1.7	3.3	3.3	3.3	0	0.9	0.1	0.1	5.1	5.1	5.1	0	0	2.6	2.6	2.6	2.6
REF NO.	IC8421																			
MODE	21	22	23	24	25	26	27	28	29	30										
CD PLAY	2.6	2.6	0	0.2	2.6	2.6	0	5.1	5.1	5.1										
REF NO.	IC8422																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
CD PLAY	2.6	2.6	0	2.6	0	5.1	5.1	0	1.4	1.7	1.6	1.7	3.3	0	5.1	0				
REF NO.	IC8601																			
MODE	1	2	3	4																
CD PLAY	3.3	1.2	0	0																
REF NO.	IC8606																			
MODE	1	2	3	4	5															
CD PLAY	3.3	3.3	0	0	-															
REF NO.	IC8611																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	0	0	0	0	3.2	3.2	0	3.3												
REF NO.	IC8651																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	2.6	2.4	2.2	0.6	2.5	1.2	0.9	1.1	1.9	0	3.3	3.3	3.3	3.3	1.1	2.1	0.8	2.2	2.1	1.0
REF NO.	IC8651																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	0.9	2.5	2.4	2.6	2.3	2.7	0	2.7	2.2	2.5	2.3	2.2	0.5	2.4	1.1	1.0	3.3	1.0	2.2	2.1
REF NO.	IC8651																			
MODE	41	42	43	44	45	46	47	48												
CD PLAY	1.0	0	2.4	2.4	2.5	0	3.3	2.5												
REF NO.	IC8691																			
MODE	1	2	3	4	5															
CD PLAY	3.0	3.0	0	4.5	5.1															
REF NO.	IC8695																			
MODE	1	2	3	4	5															
CD PLAY	2.7	2.7	0	4.2	5.1															
REF NO.	IC8701																			
MODE	1	2	3	4	5															
CD PLAY	-	1.5	0	1.8	3.3															
REF NO.	IC8901																			
MODE	1	2	3	4	5															
CD PLAY	3.3	3.3	0	3.3	3.3															
REF NO.	IC9001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0	2.2	2.6	2.4	2.4	0.9	0.9	2.0	2.2	0	2.7	2.2	2.1	1.0	0.9	2.5	2.4	2.6	2.3	3.3
REF NO.	IC9002																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0	1	1	1.1	2.4	0.6	2.1	2.3	2.5	0	2.7	2.6	2.3	2.3	0.6	2.5	1.2	1.0	1.0	3.3
REF NO.	IC9003																			
MODE	1	2	3	4	5	6														
CD PLAY	1.6	0.1	1.6	1.7	3.3	1.6														
REF NO.	IC9005																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	0.1	5.1	5.1	0.1	3.3	1.1	1.1	1.1												
REF NO.	Q3901				Q3902				Q3903				Q3941				Q3942			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	0	0	0.7		3.3	0	3.4		3.3	5.1	0		3.7	3.7	3.7		0	0	0	
REF NO.	Q3943				Q8321				Q8325				Q8331				Q8335			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	4.1	5.9	4.7		1.2	0	0.5		1.5	0	0.9		1.2	0	0.5		1.5	0	0.9	
REF NO.	Q8341				Q8551				Q8552				Q8561				Q8562			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	1.5	0	0.9		0	5.1	0.1		5.1	0.1	5.1		1.5	3.7	2.1		4.3	1.9	3.7	
REF NO.	Q8563				Q8564				Q8565				QR8111							
MODE	S	D	G		S	D	G		S	D	G		1	2	3	4	5	6		
CD PLAY	0	0.2	0.1		0	0	3.3		0	0.1	0.7		0	0	1.2	0	0	4.8		
REF NO.	QR8420				QR9030															
MODE	E	C	B		E	C	B													
CD PLAY	0	4.3	0		3.3	0	3.3													

PT860GC/GCS/GCT/GS DVD MODULE P.C.B.

14.2. D-Amp P.C.B.

REF NO.	IC5000																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	2.5	0.1	0.1	2.9	0	-29.3	-29.3	29.3	11	-0.1	-29.5	-17.3	-29.5	-0.1	11	29.3	-29.3	-29.3	0	29
STANDBY	2.5	0.1	0.1	2.9	0	-29.3	-21	29.3	11	-0.1	-29.5	-17.3	-29.5	-0.1	11	29.3	-29.3	-29.2	0	29
REF NO.	IC5000																			
MODE	21	22	23																	
CD PLAY	-0.1	-0.1	2.5																	
STANDBY	-0.1	-0.1	2.5																	
REF NO.	IC5200																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	2.5	-0.1	-0.1	29	0	-29.3	-29.3	29.3	11	-0.1	-29.5	-17.3	-29.5	-0.1	11	29.3	-29.3	-29.3	0	29
STANDBY	2.5	-0.1	-0.1	29	0	-29.3	-29.3	29.3	11	-0.1	-29.5	-17.3	-29.5	-0.1	11	29.3	-29.3	-29.3	0	29
REF NO.	IC5200																			
MODE	21	22	23																	
CD PLAY	-0.1	-0.1	2.5																	
STANDBY	-0.1	-0.1	2.5																	
REF NO.	IC5300																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	2.5	-0.1	-0.1	29	0	-29.3	-29.3	29.3	11	-0.1	-29.5	-17.3	-29.5	-0.1	11	29.3	-29.3	-29.3	0	29
STANDBY	2.5	-0.1	-0.1	29	0	-29.3	-29.3	29.3	11	-0.1	-29.5	-17.3	-29.5	-0.1	11	29.3	-29.3	-29.3	0	29
REF NO.	IC5300																			
MODE	21	22	23																	
CD PLAY	-0.1	-0.1	2.5																	
STANDBY	-0.1	-0.1	2.5																	
REF NO.	IC5400																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	2.5	-0.1	-0.1	29	0	-29.3	-21.2	29.3	11	-0.1	-29.5	-17.3	-29.5	-0.1	11	29.3	-29.3	-29.3	0	29
STANDBY	2.5	-0.1	-0.1	29	0	-29.3	-21.2	29.3	11	-0.1	-29.5	-17.3	-29.5	-0.1	11	29.3	-29.3	-29.3	0	29
REF NO.	IC5400																			
MODE	21	22	23																	
CD PLAY	-0.1	-0.1	2.5																	
STANDBY	-0.1	-0.1	2.5																	
REF NO.	IC5500																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
CD PLAY	0	5.2	5	0	2.7	2.2	0	2.5	2.6	2.6	2.5	0	5.2	5.2						
STANDBY	0	5.2	5	0	2.7	2.2	0	2.5	2.6	2.6	2.5	0	5.2	5.2						
REF NO.	IC5501																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
CD PLAY	2.5	2.6	2.5	0	2.6	0	0	0	0	0	0	0	5.2	5.2						
STANDBY	2.5	2.6	2.5	0	2.6	0	0	0	0	0	0	0	5.2	5.2						
REF NO.	Q5101				Q5102				Q5601				Q5602				Q5603			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	0	5.2	0		0	5.2	0		0	0	0.7		0	0	0.7		5.2	5.1	4.4	
STANDBY	0	5.2	0		0	5.2	0		0	0	0.7		0	0	0.7		5.2	5.1	4.5	
REF NO.	Q5604				Q5640				Q5641				Q5642				Q5644			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	0	0	0.7		6.9	16.4	7.4		0	5.2	0		0	0	0.7		0	3.7	0	
STANDBY	0	0	0.7		6.9	16.4	7.4		0	5.2	0		0	0	0.7		0	3.7	0	

PT860GC/GCS/GCT/GS D-AMP P.C.B.

14.3. Main P.C.B.

REF NO. MODE	IC2001																			
CD PLAY	1.7	0	5.2	5.2	5.2	0	1.6	0	0	1.7	5.2	5.2	2.6	0	-	5.2	5.2	5.2	3.8	1.7
STANDBY	1.7	0	5.2	5.2	5.2	0	1.6	0	0	1.6	5.2	5.1	2.6	0	-	5.2	5.2	5.2	3.8	1.6
REF NO. MODE	IC2001																			
CD PLAY	0	5.2	0	0	0	5.2	0	4.6	4.2	1.8	0	1.6	5.2	5.2	0	1.7	5.2	5.2	5.2	5.2
STANDBY	0	5.2	0	0	0	5.2	0	4.6	4.3	1.8	0	1.7	5.2	5.1	0	1.8	5.2	5.2	5.2	5.1
REF NO. MODE	IC2001																			
CD PLAY	0	0	5.1	0	0	0	5.2	0	0	1.7	5.2	0	0	0	0	0	0	0	0	1.9
STANDBY	0	5.2	5.0	5.0	0	0	5.2	0	0	1.8	5.1	0	0	0	0	0	0	0	0	1.9
REF NO. MODE	IC2001																			
CD PLAY	5.2	5.2	5.2	0	0	1.4	0	5.0	0	0	5.2	1.8	0	5.2	5.7	5.2	0	0	0	5.2
STANDBY	5.2	5.2	5.2	0	0	1.4	0	5.0	5.1	0	5.1	1.7	0	5.2	5.7	5.2	0	5.0	0	5.2
REF NO. MODE	IC2001																			
CD PLAY	2.8	1.7	0	0	4.2	2.6	1.9	5.2	2.6	0	2.6	1.8	0	2.6	1.3	0	3.6	5.2	5.2	0
STANDBY	2.8	1.7	0	0	4.2	2.6	1.9	5.1	2.6	0	2.6	1.7	0	2.6	1.3	0	3.6	5.2	5.2	0
REF NO. MODE	IC2002																			
CD PLAY	5.2	0	5.2	0	3.3															
STANDBY	5.2	0	5.1	0	3.3															
REF NO. MODE	IC2003																			
CD PLAY	0	0	0	0	0	1.8	0	5.2												
STANDBY	0	0	0	0	0	1.8	0	5.2												
REF NO. MODE	IC2101																			
CD PLAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STANDBY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REF NO. MODE	IC2101																			
CD PLAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STANDBY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REF NO. MODE	IC2101																			
CD PLAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STANDBY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REF NO. MODE	IC2101																			
CD PLAY	0	5.2	0	5.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STANDBY	0	5.2	0	5.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REF NO. MODE	IC2101																			
CD PLAY	0	0	6.8	6.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STANDBY	0	0	6.8	6.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REF NO. MODE	IC2102																			
CD PLAY	0	0	0	6.8	0	0	0	6.8												
STANDBY	0	0	0	6.8	0	0	0	6.9												
REF NO. MODE	IC2103																			
CD PLAY	0.3	0	0	7	0	0	0	0	0	0	-7.1	0	0	0.1						
STANDBY	0.3	0	0	7.1	0	0	0	0	0	0	-7.1	0	0	0.1						
REF NO. MODE	IC2501																			
CD PLAY	0	0	0	6.7	0	0	0	6.8												
STANDBY	0	0	0	6.7	0	0	0	6.9												
REF NO. MODE	IC2801																			
CD PLAY	5.1	0	0	2.2	5.0	0.1	0	1.5	2.2	0	1.5	0	2.2	5.0	2.2	5.1	2.3	2.3	0	2.3
STANDBY	5.1	0	0	2.2	5.0	0.1	0	1.5	2.2	0	1.5	0	2.2	5.5	2.2	5.1	2.3	2.3	0	2.3
REF NO. MODE	IC2801																			
CD PLAY	2.3	0	1.4	1.4	0	1.4	1.4	0	1.5	1.5	0	2.3								
STANDBY	2.3	0	1.4	1.4	0	1.4	1.4	0	1.5	1.5	0	2.3								
REF NO. MODE	Q2001				Q2002				Q2003				Q2004				Q2005			
CD PLAY	5.4	1.3	5.1		3.5	5.2	4.2		0	5.2	0		0	1.6	0		3.3	1.6	5.2	
STANDBY	5.4	1.3	5.1		3.5	5.2	4.2		0	5.1	0		0	1.6	0		3.3	1.6	5.2	
REF NO. MODE	Q2006				Q2007				Q2013				Q2030							
CD PLAY	0	0	4.3		0	5.2	0		3.6	5.2	4.3		3.6	5.2	4.3					
STANDBY	0	5.2	0		0	5.2	0		3.6	5.2	4.3		3.6	5.2	4.3					

REF NO.	IC6901																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0	0	0	0	29	0	0	4.1	2.5	1.9	1.9	0	5.0	24.4	24.4	22	24.4	17.2	19.7	14.9
STANDBY	0	0	0	0	29	0	0	4.1	2.5	1.9	1.9	0	5.0	24.5	24.5	22	24.4	14.9	19.7	12.5
REF NO.	IC6901																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	24.4	24.4	24.4	17.2	17.2	24.4	24.4	24.4	17.3	24.9	15	17.4	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.3
STANDBY	24.5	24.5	24.5	17.3	17.3	24.5	24.5	24.5	17.3	25	15	15.1	22.4	22.3	22.3	22.3	22.3	22.3	22.3	22.3
REF NO.	IC6901																			
MODE	41	42	43	44																
CD PLAY	22.3	22.2	5.0	0																
STANDBY	22.3	22.2	5.0	0																
REF NO.	Q6910																			
MODE	E	C	B																	
CD PLAY	0	4.8	0																	
STANDBY	0	4.8	0																	
PT860GC/GCS/GCT/GS PANEL P.C.B.																				

REF NO.	IC2900														
MODE	1	2	3	4	5										
CD PLAY	16.6	8.8	0	1	15.9										
STANDBY	16.8	8.8	0	1	16.1										
REF NO.	IC2903														
MODE	1	2	3	4	5										
CD PLAY	16.6	5.2	0	1	16										
STANDBY	16.8	5.2	0	1	16.2										
REF NO.	IC6101														
MODE	1	2	3	4	5	6	7	8							
CD PLAY	3.4	3.4	3.4	0	3.4	3.4	3.4	6.8							
STANDBY	3.4	3.4	3.4	0	3.4	3.4	3.4	6.8							
REF NO.	IC6601														
MODE	1	2	3	4	5										
CD PLAY	1	0	6.8	1.7	1.7										
STANDBY	1	0	6.8	1.7	1.7										
REF NO.	IC6602														
MODE	1	2	3	4	5										
CD PLAY	0	5.2	0	0	-										
STANDBY	0	5.2	0	0	-										
REF NO.	Q2900			Q2901			Q2902			Q2903			Q2904		
MODE	E	C	B		E	C	B		E	C	B		E	C	B
CD PLAY	0	16.5	-0.5		-6.8	-9.8	-7.4		0	-7.4	-0.6		6.8	8.9	7.5
STANDBY	0	16.6	-0.5		-6.8	-10	-7.4		0	-7.4	-0.6		6.8	8.9	7.5
REF NO.	Q2921			Q2922											
MODE	E	C	B		E	C	B								
CD PLAY	5.2	0	5.1		0	5.1	0								
STANDBY	5.2	0	5.1		0	5.1	0								

14.6. SMPS P.C.B.

REF NO.	IC5701																		
MODE	1	2	3	4	5	6	7												
CD PLAY	162	0	0	19.3	0.1	1.4	0.5												
STANDBY	162	0	0	19.3	0.1	1.4	0.5												
REF NO.	IC5780																		
MODE	1	2	3	4	5	6	7	8											
CD PLAY	20.4	0	0	0	14.8	5.1	20	21.3											
STANDBY	20.4	0	0	0	14.8	5.1	20	21.3											
REF NO.	IC5799																		
MODE	1	2	3	4	5	6	7	8											
CD PLAY	6.0	1.6	1.8	20.3	162.2	-	0	0											
STANDBY	6.0	1.6	2.0	20.3	163.0	-	0	0											
REF NO.	IC5801																		
MODE	1	2	3																
CD PLAY	-2.2	-29.5	-26.8																
STANDBY	-2.2	-29.5	-26.8																
REF NO.	IC5899																		
MODE	1	2	3																
CD PLAY	4.2	0	2.5																
STANDBY	4.2	0	2.5																
REF NO.	Q5720			Q5721			Q5722			Q5750			Q5802						
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B
CD PLAY	5.9	6.5	5.6		19.9	19.9	19.2		0	17.0	0.1		0	0	0.7		-21.9	-2.2	-22
STANDBY	5.9	6.6	5.6		19.9	19.9	19.2		0	16.8	0.1		0	0	0.7		-21.8	-2.2	-22
REF NO.	Q5803			Q5860			Q5861			Q5862			QR5801						
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B
CD PLAY	0	5.8	0		1.3	0	0.7		0	0	0.7		0	5.2	0		0	5.0	0
STANDBY	0	5.8	0		1.3	0	0.7		0	0	0.7		0	5.2	0		0	5.0	0
REF NO.	QR5802			QR5810			Q5898												
MODE	E	C	B		E	C	B		E	C	B								
CD PLAY	0	4.5	0		0	0.1	5		0	3.2	0.5								
STANDBY	1.5	1.5	0		0	0	5		0	3.2	0.5								

PT860GC/GCS/GCT/GS SMPS P.C.B.

14.7. Mic P.C.B.

REF NO.	IC7000																		
MODE	1	2	3	4	5	6	7	8											
CD PLAY	0	0	0	-6.9	0	0	0	6.9											
STANDBY	0	0	0	-6.9	0	0	0	7											
REF NO.	IC7100																		
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16			
CD PLAY	-	2.6	2.6	2.6	2.6	0.6	0.6	0	2.6	2.6	2.6	2.6	2.6	0.9	5.2	-			
STANDBY	-	2.6	2.6	2.6	2.6	0.6	0.6	0	2.6	2.6	2.6	2.6	2.6	0.9	5.2	-			
REF NO.	Q7001			Q7002			Q7003			Q7006			Q7007						
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B
CD PLAY	0	0	0		0	0	5		0	0	0		0	0	5		0	0	0
STANDBY	0	0	0		0	0	5		0	0	0		0	0	5		0	0	0
REF NO.	Q7008			Q7100			Q7101			Q7102			Q7106						
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B
CD PLAY	0	0	0		0	0	0		0	0	5		0	0	0		0	0	0
STANDBY	0	0	0		0	0	0		0	0	5		0	0	0		0	0	0
REF NO.	Q7107			Q7108															
MODE	E	C	B		E	C	B												
CD PLAY	0	0	5		0	0	0												
STANDBY	0	0	5		0	0	0												

PT860GC/GCS/GCT/GS MIC P.C.B.

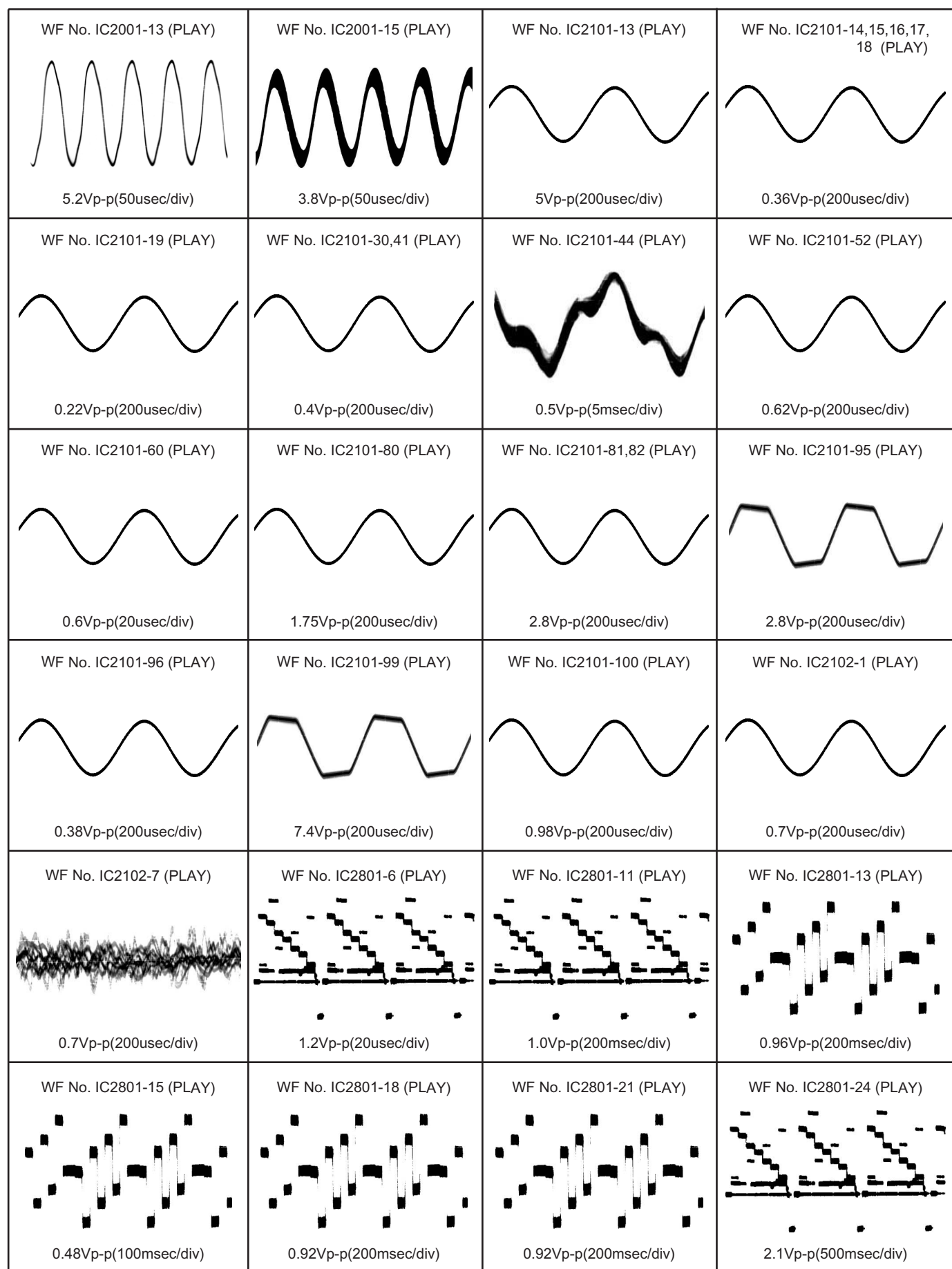
14.8. USB/Setup Mic P.C.B.

REF NO.	IC6531																		
MODE	1	2	3	4	5	6	7	8											
CD PLAY	0	0	0	-6.1	0	0	0	6.9											
STANDBY	0	0	0	-6.9	0	0	0	7											
REF NO.	Q6531			Q6532			Q6533			Q6534									
MODE	E	C	B		E	C	B		E	C	B		E	C	B				
CD PLAY	0	0	0.7		5.3	5.2	4.6		4.8	-	4.5		4.8	-	4.5				
STANDBY	0	0	0.7		5.3	5.2	4.6		4.9	-	4.5		4.9	-	4.5				

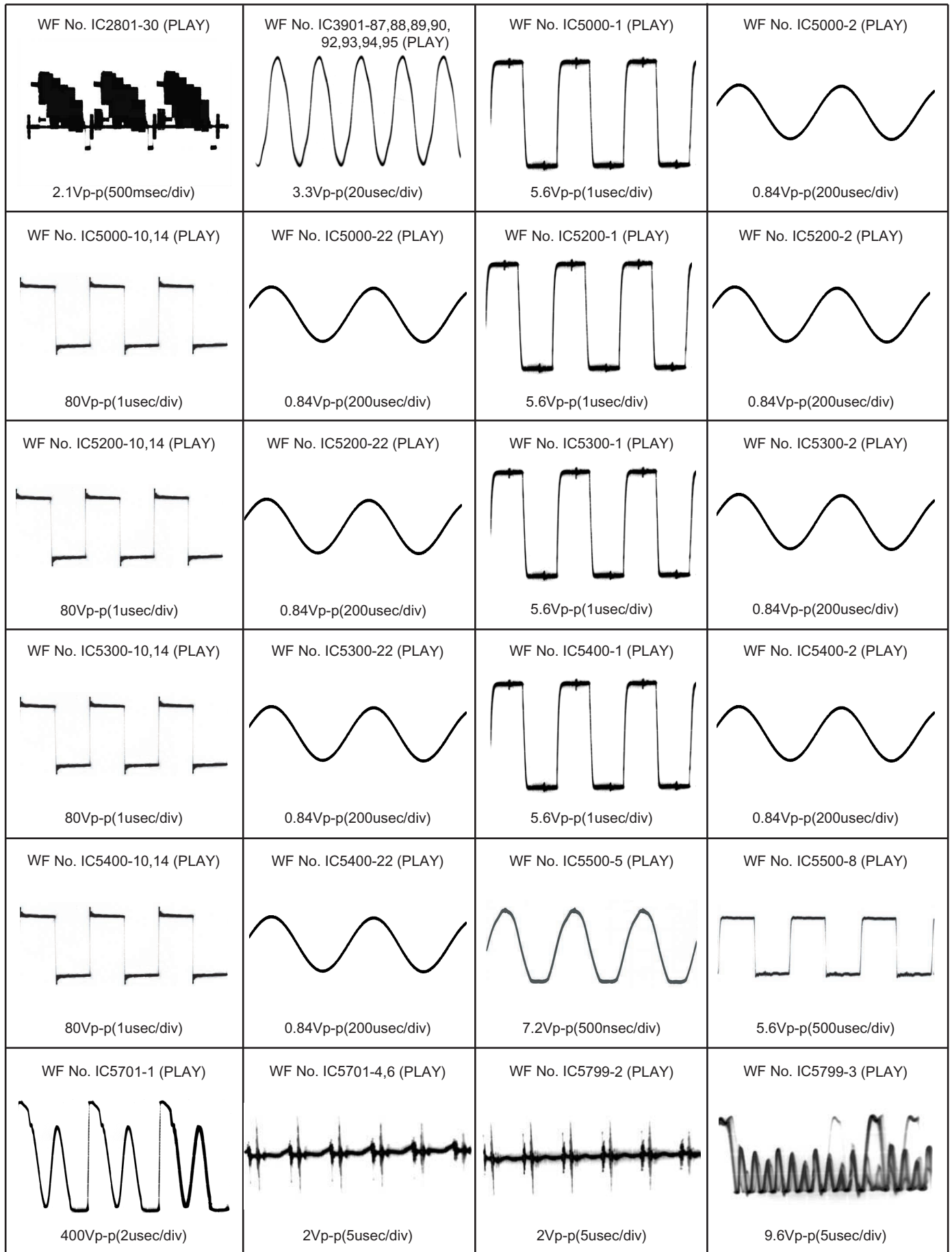
PT860GC/GCS/GCT/GS USB/SETUP MIC P.C.B.

14.9. Waveform Chart

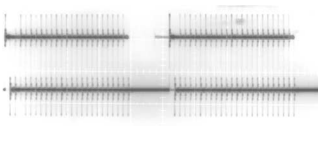
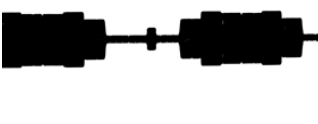
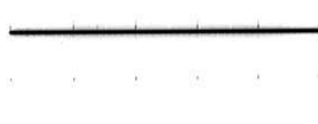
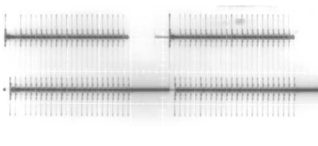
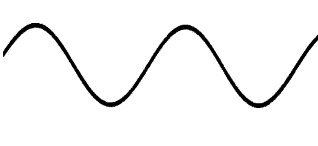
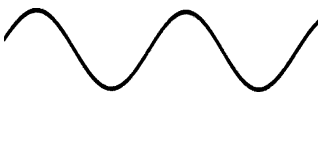
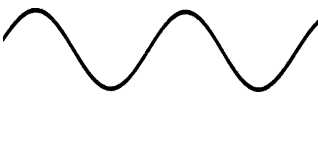
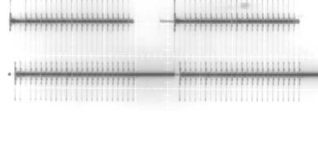
14.9.1. Waveform 1



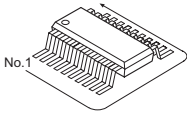
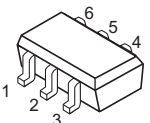
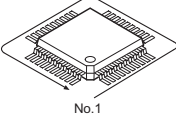
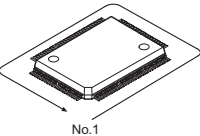
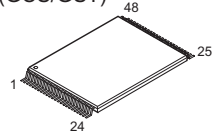
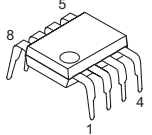
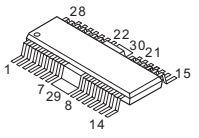
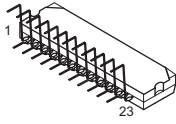
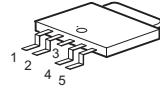
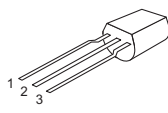
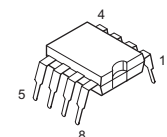
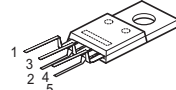
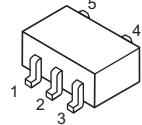
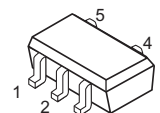
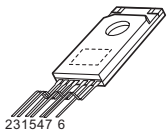
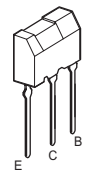
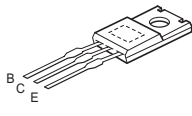
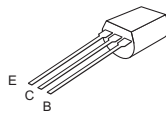
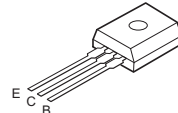
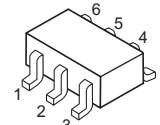
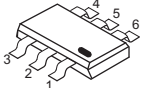
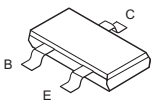
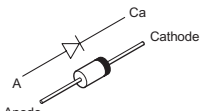
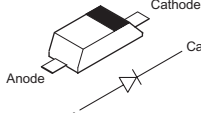
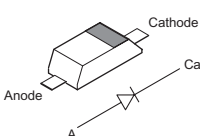
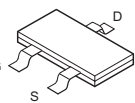
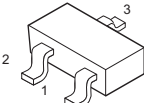
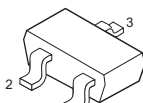
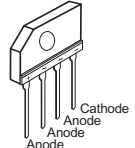
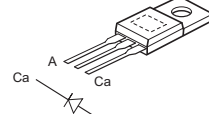
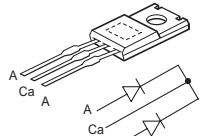
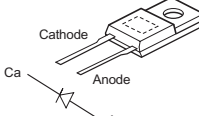
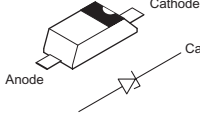
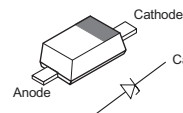
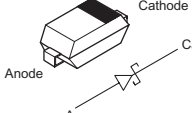
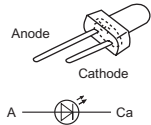
14.9.2. Waveform 2



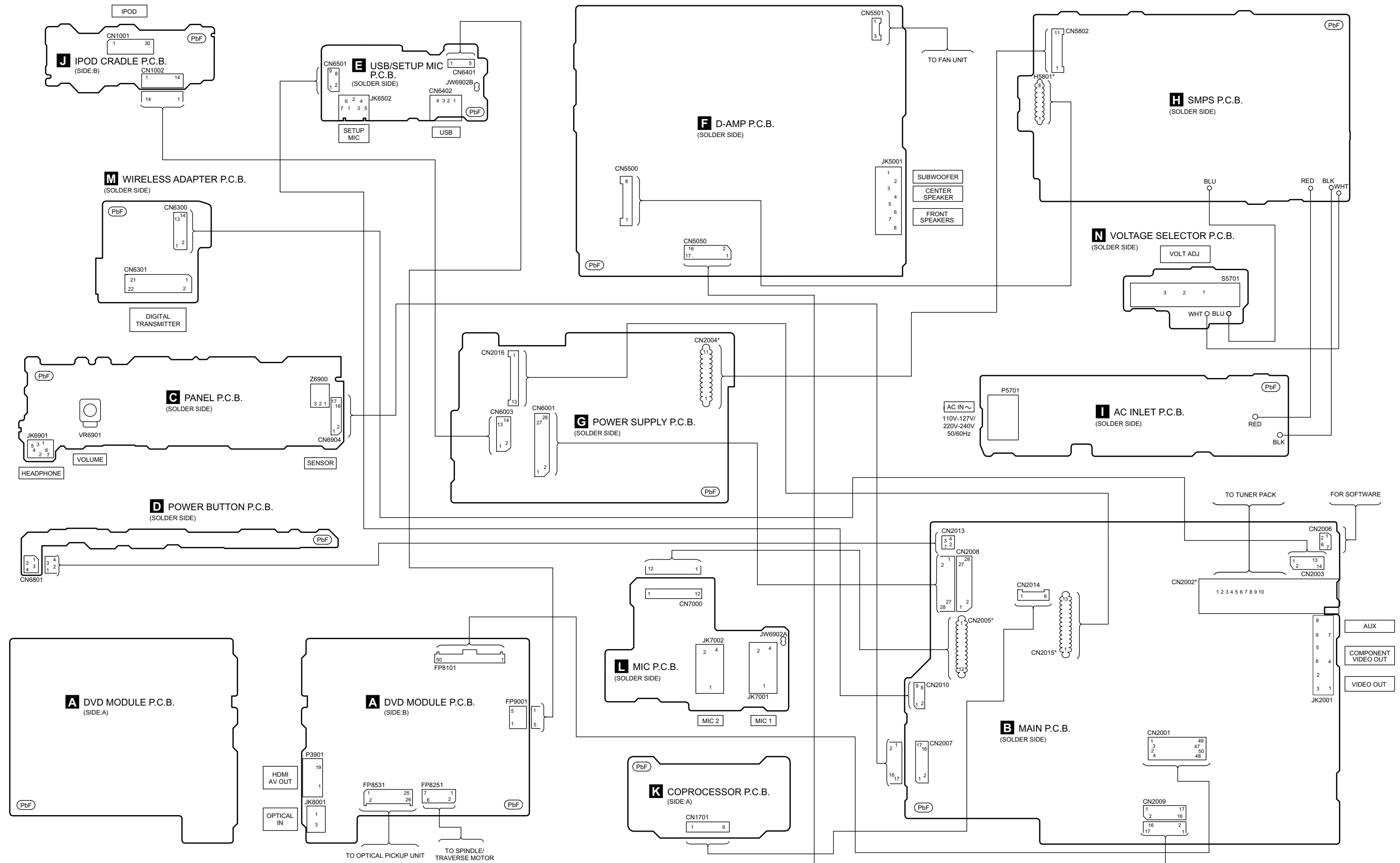
14.9.3. Waveform 3

WF No. IC5799-5 (PLAY)  240Vp-p(50usec/div)	WF No. IC5899-1,2,3 (PLAY)  1.65Vp-p(5msec/div)	WF No. IC6901-5 (PLAY)  2.15Vp-p(2usec/div)	WF No. IC6901-8 (PLAY)  5.6Vp-p(2usec/div)
WF No. IC8001-59,62,63,64 (PLAY)  6Vp-p(2usec/div)	WF No. IC8001-138 (PLAY)  1.05Vp-p(20usec/div)	WF No. IC8001-139 (PLAY)  0.95Vp-p(10usec/div)	WF No. IC8001-144,146 (PLAY)  5.2Vp-p(500usec/div)
WF No. IC8421-9,10,11 (PLAY)  7.2Vp-p(2usec/div)	WF No. IC8421-17 (PLAY)  2Vp-p(5msec/div)	WF No. IC8421-18,19,20,21,22 (PLAY)  3.6Vp-p(200usec/div)	WF No. IC8421-24 (PLAY)  3.6Vp-p(200usec/div)
WF No. IC8421-25 (PLAY)  0.5Vp-p(200usec/div)	WF No. IC8422-1 (PLAY)  2.9Vp-p(200usec/div)	WF No. IC8422-2 (PLAY)  0.4Vp-p(200usec/div)	WF No. IC8422-9 (PLAY)  7.2Vp-p(2usec/div)

15 Illustration of IC's, Transistors and Diodes

	C0ABBB000230 (8p) C0ABCB000088 (14p) C0DBZYY00018 (8p) C0DBZYY00266 (8p) C0FBAK000026 (16p) C0FBBK000044 (30p) C0JBAB000902 (14p)	C0JBAF000716 (14p) C0JBZ001251 (20p) C3ABPY000011 (54p) C9ZB00000461 (32p) C1AB00002773 (16p)		 No.1	C0HBB0000057 (44p) RFKWPT460E (100p) MFI341S2095 (40p) MN2DS0018MP (216p) MN864702A (128p)
C1AB00002735 (100p)  No.1	RFKWMH32B323 (48p) (GC/GS) RFKWMH32D320 (48p) (GCS/GST) 	C0AABB000125 (8P) C0ABBA000168 (8P) C3EBGC000056 (8P) 	C0GBG0000048 (28P) 	C1BA00000487 (23P) 	C0CBCDG00003 (5p) C0DBEHG00006 (5p) 
C0DABFC00002 (3p) C0DAEMZ00001 (3p) 	MIP4110MSSCF (8P) 	C0DAAMH00012 (5p) C0DAAYY00042 (5p) 	 C0ABAA000114 (5p) C0CBCBC00140 (5p) C0CBCDC00063 (5p) C0EBA0000039 (5p) C0EBE0000456 (5p)	C0JBAA000501 (5p) C0JBAA000502 (5p) C0JBAB000907 (5p) 	
C5HACYY00003 (7p) 	B1BABK000001 	B1BACG000023 B1BCCG000002 	2SC3940ARA 	B1BACD000018 	B1HBECA00004 
XP0621400L 	B1ABCF000176 B1ABEB000002 B1ADCE000012 	B1ADCF000001 B1ADGB000008 B1GBCFJJ0051 B1GBCFJN0033 B1GBCFLL0037 B1GDCE000018	UNR221400L UNR521100L 2SA207700L 2SB1218ARL 2SC584500L 2SD0601AHL 2SD1819A0L	B0EAKM000117 B0EAMM000057 B0HAMP000094 B0JAME000029 	B0ACCK000005 
MA2J11100L MA2J72800L 	B1CFHA000002 	B1GDCE000012 	B1CFG0000004 	B0FBAR000041 	B0ZAZ0000052 
B0HBSM000043 	B0HFRJ000012 	 B0BC010A0007 B0BC019A0007 B0BC035A0007 B0BC2R4A0006 B0BC3R400001 B0BC5R000009 B0BC6R100010 B0BC7R500001		 MAZ80510ML MAZ80750ML MAZ81200ML MAZ82400HL	
B0JCPD000025 B0HCMM000019 	B3AAA0000803 B3ABA0000397 				

16 Wiring Connection Diagram

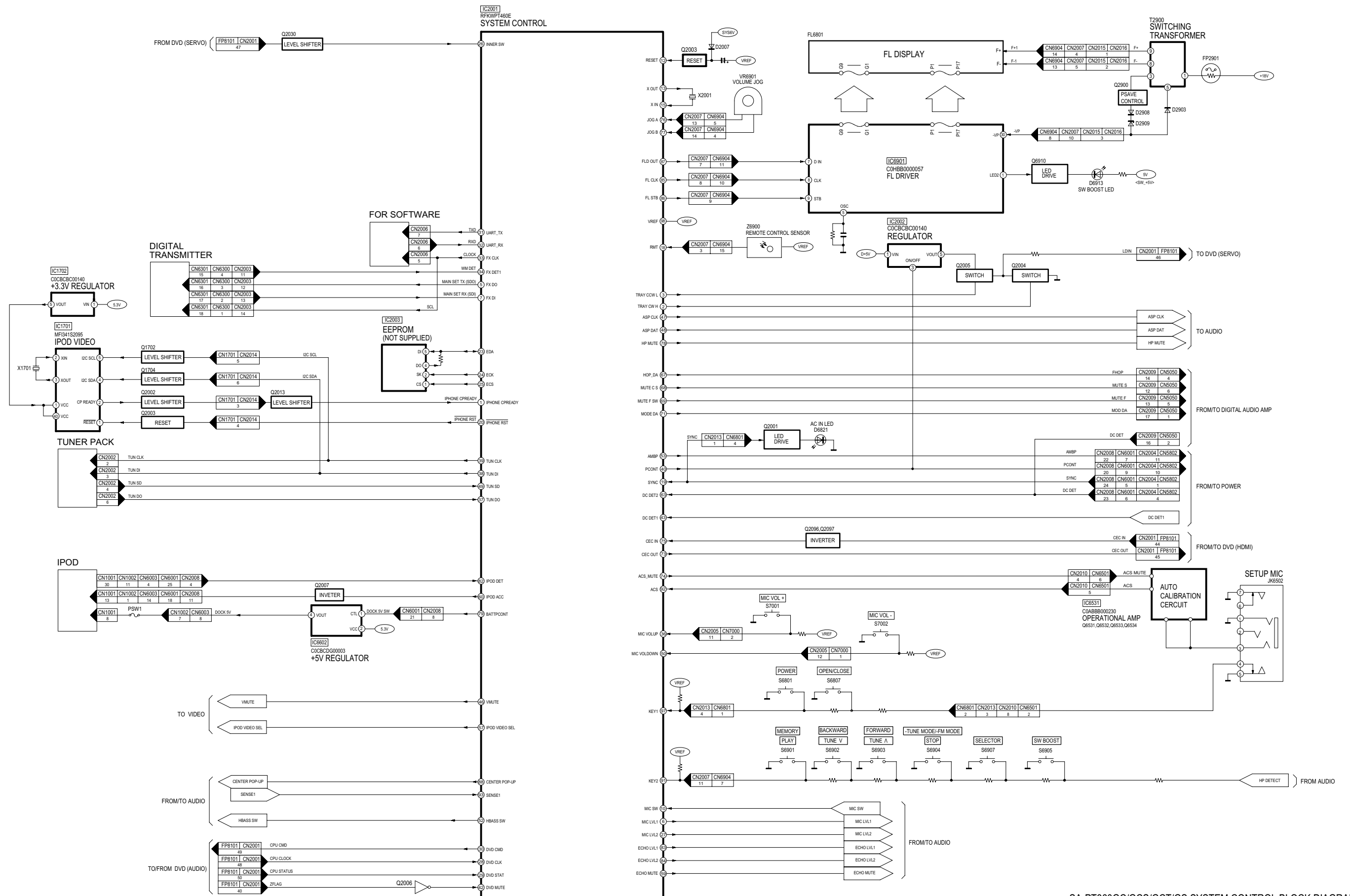


* FOR INDICATION ONLY

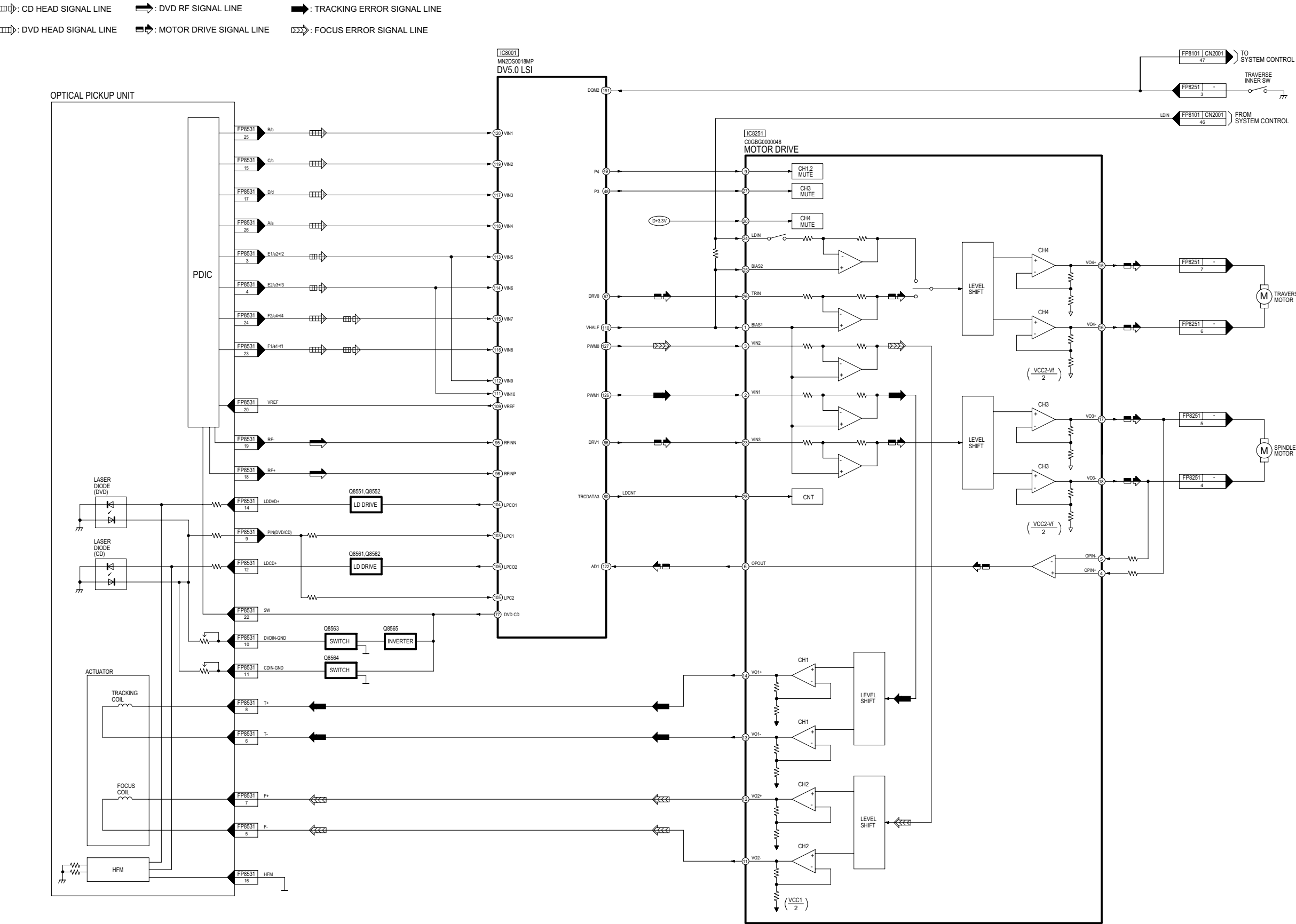
SA-PT860GC/GCS/GCT/GS WIRING CONNECTION

17 Block Diagram

17.1. System Control



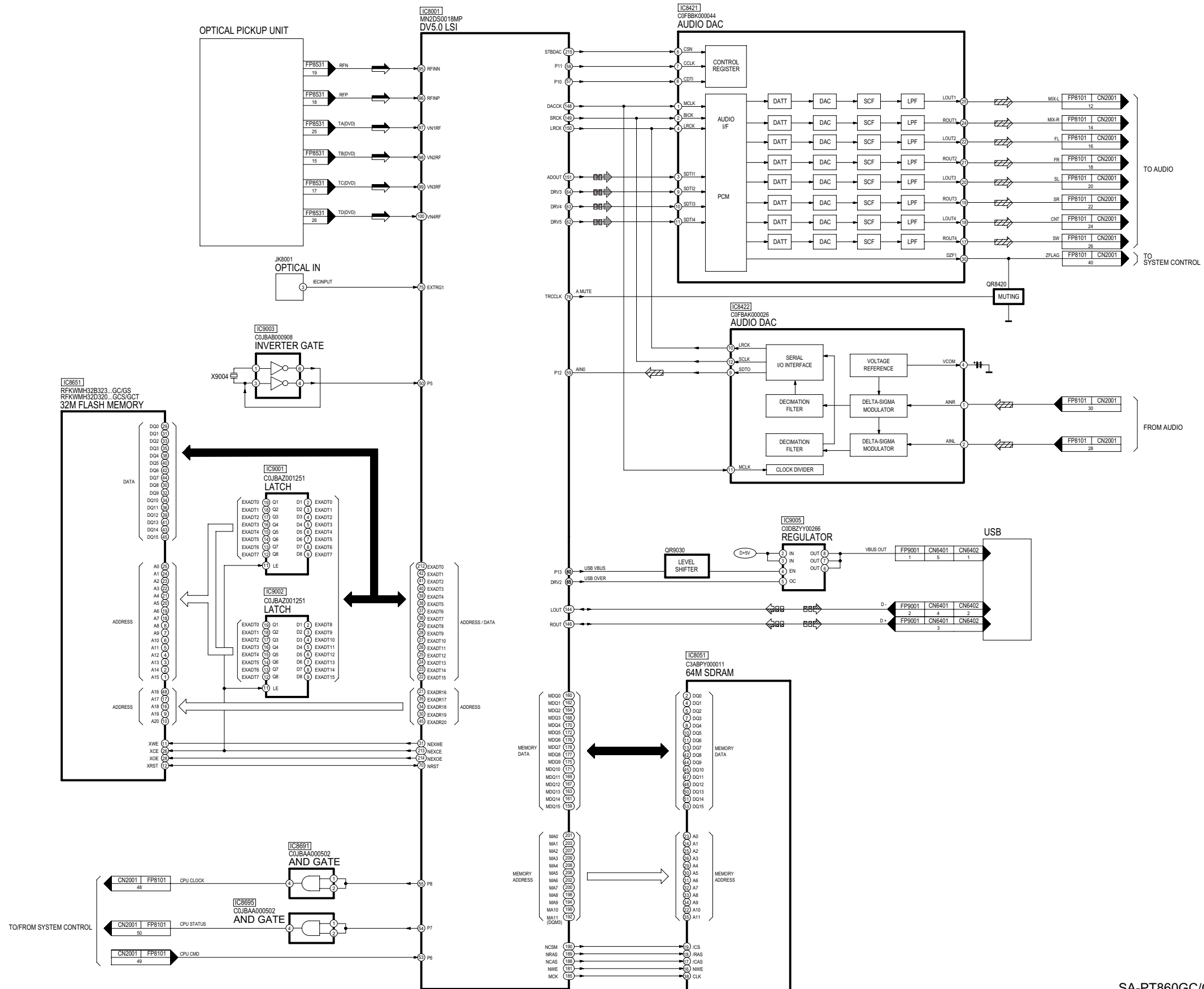
17.2. DVD (Servo)



SA-PT860GC/GCS/GCT/GS DVD (SERVO) BLOCK DIAGRAM

17.3. DVD (Audio)

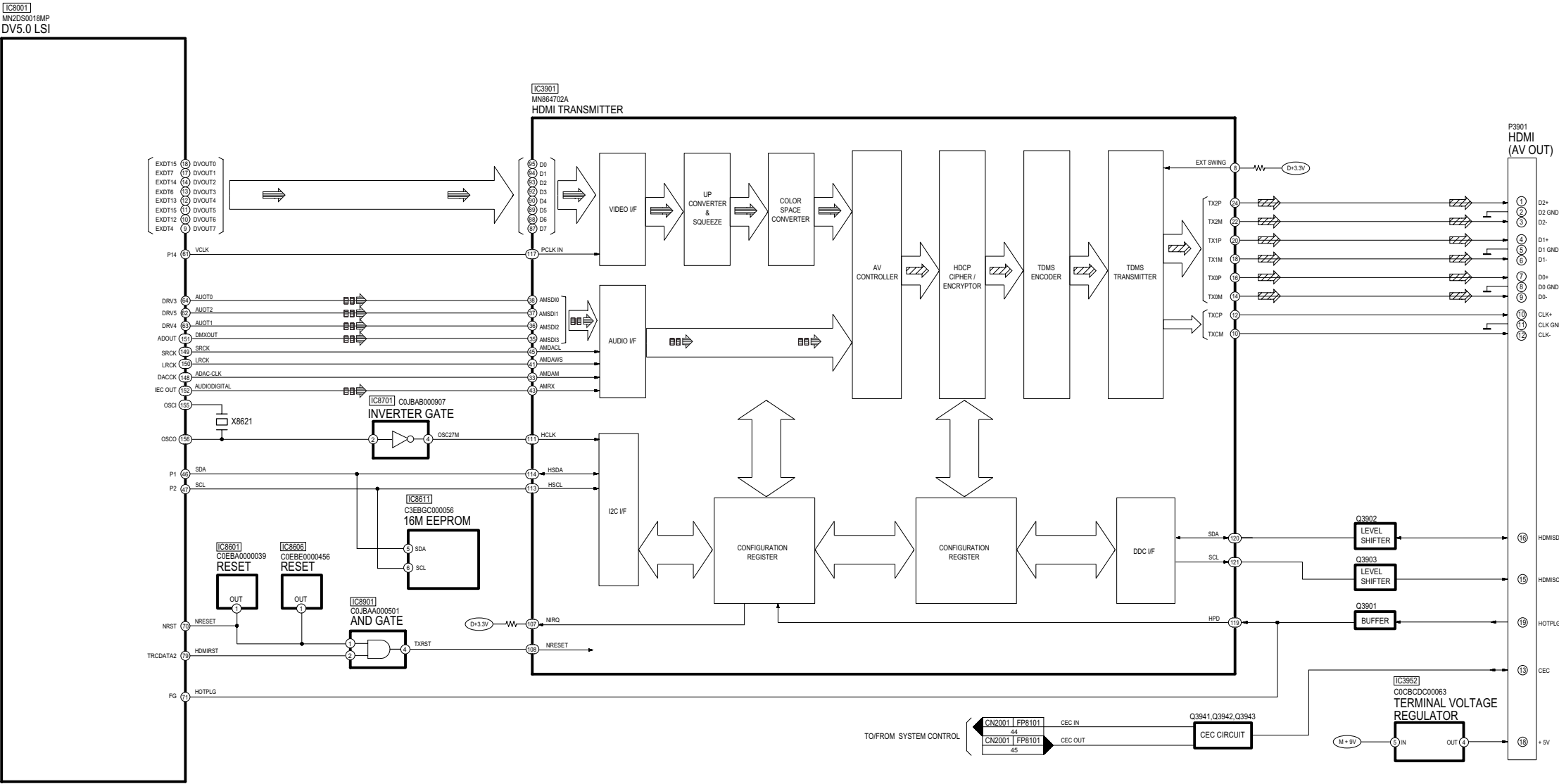
 : DVD RF SIGNAL LINE
  : DVD AUDIO SIGNAL LINE
  : MAIN SIGNAL LINE
  : USB SIGNAL LINE



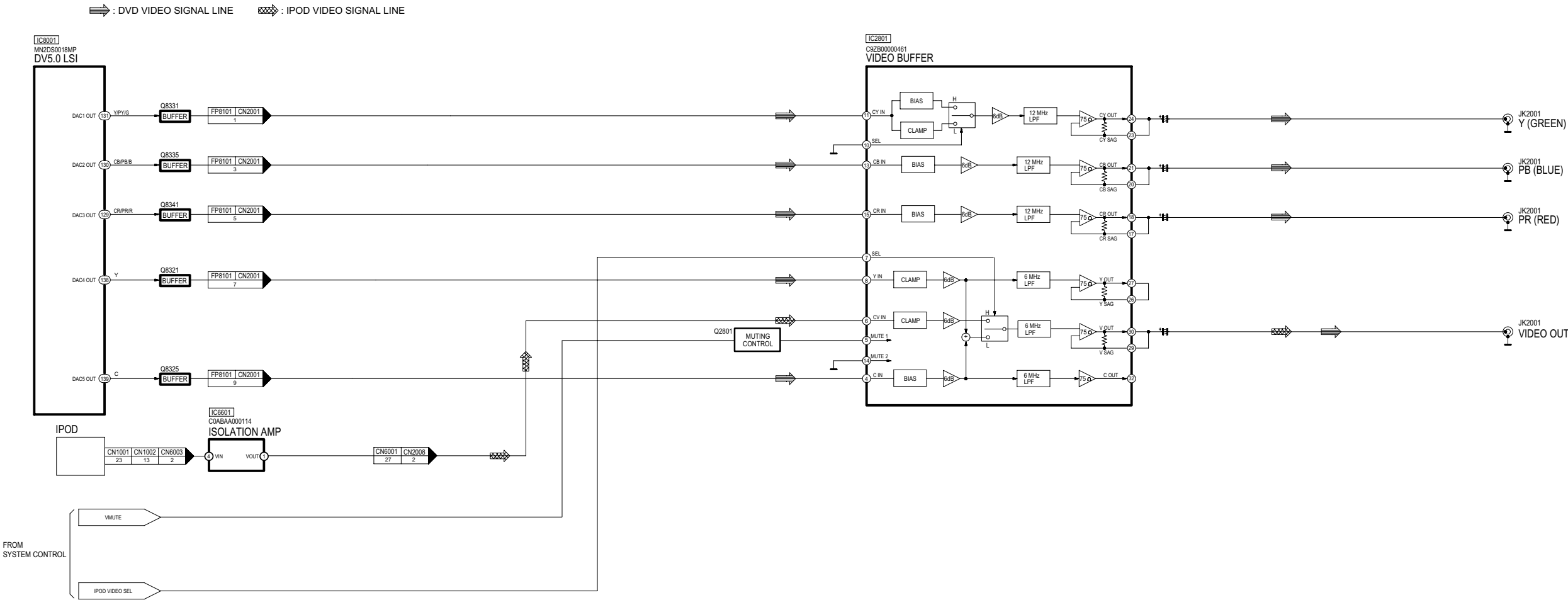
SA-PT860GC/GCS/GCT/GS DVD (AUDIO) BLOCK DIAGRAM

17.4. DVD (HDMI)

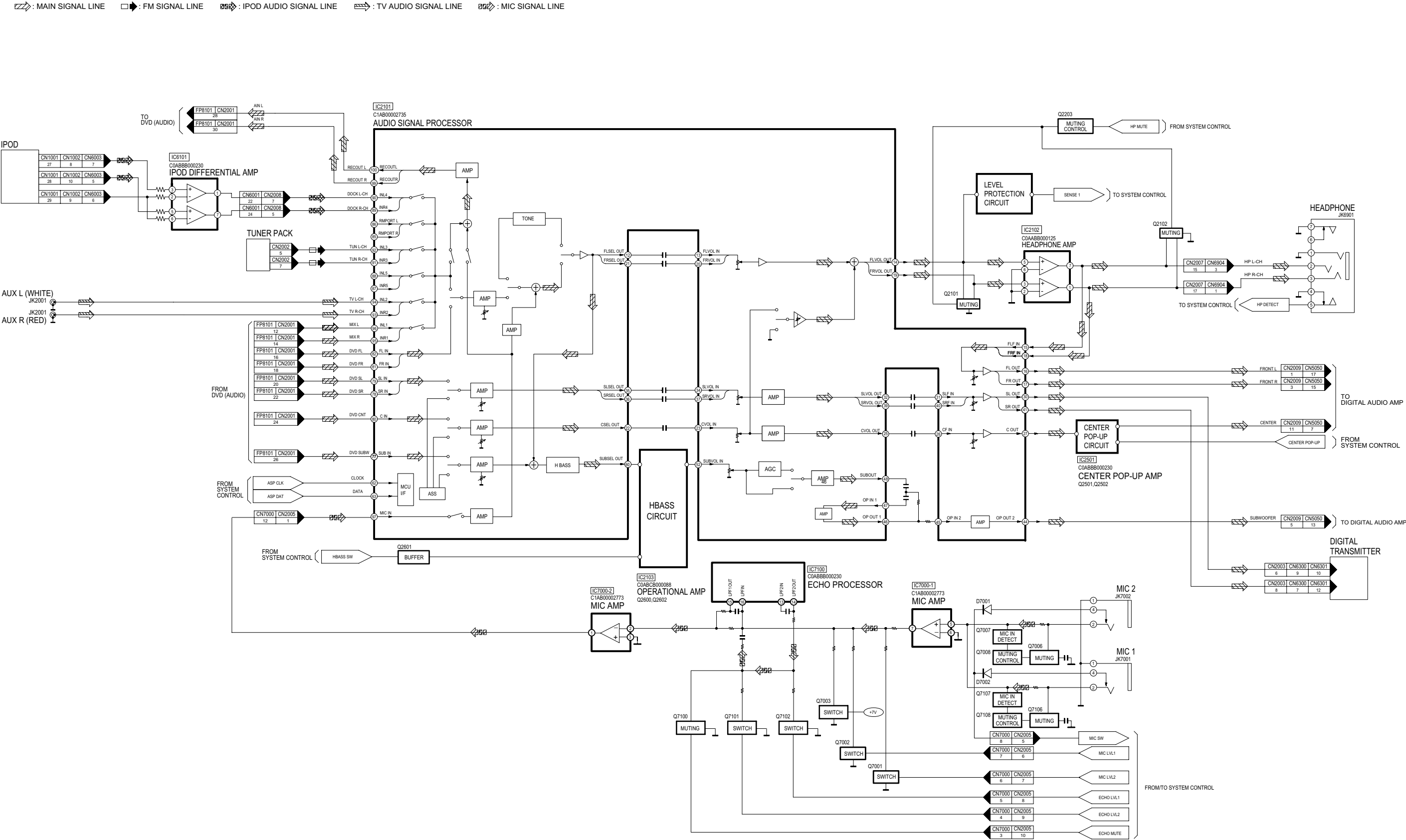
⏏ : DVD AUDIO SIGNAL LINE ➡ : DVD VIDEO SIGNAL LINE ⚡ : MAIN SIGNAL LINE



17.5. VIDEO

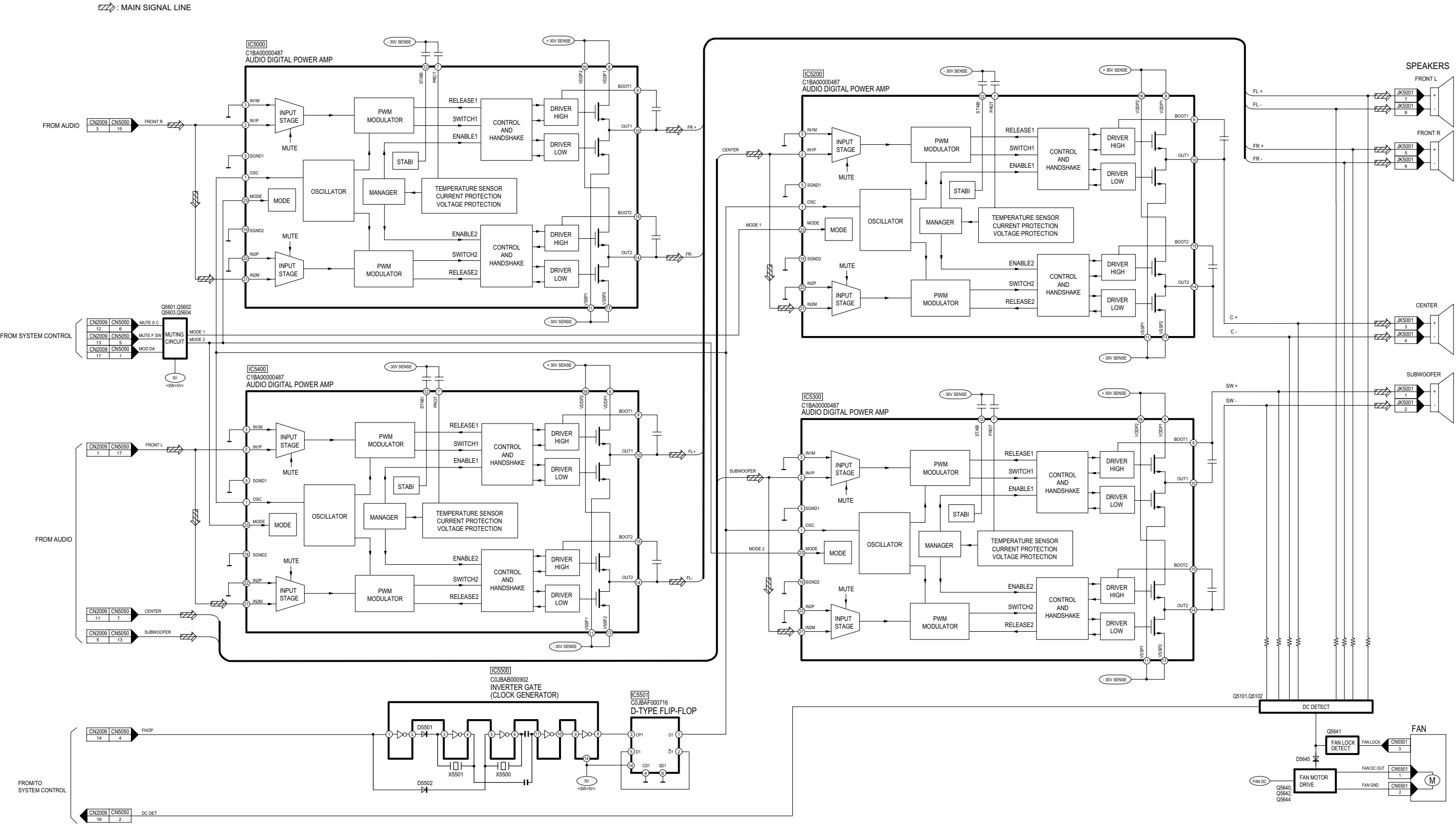


17.6. Audio



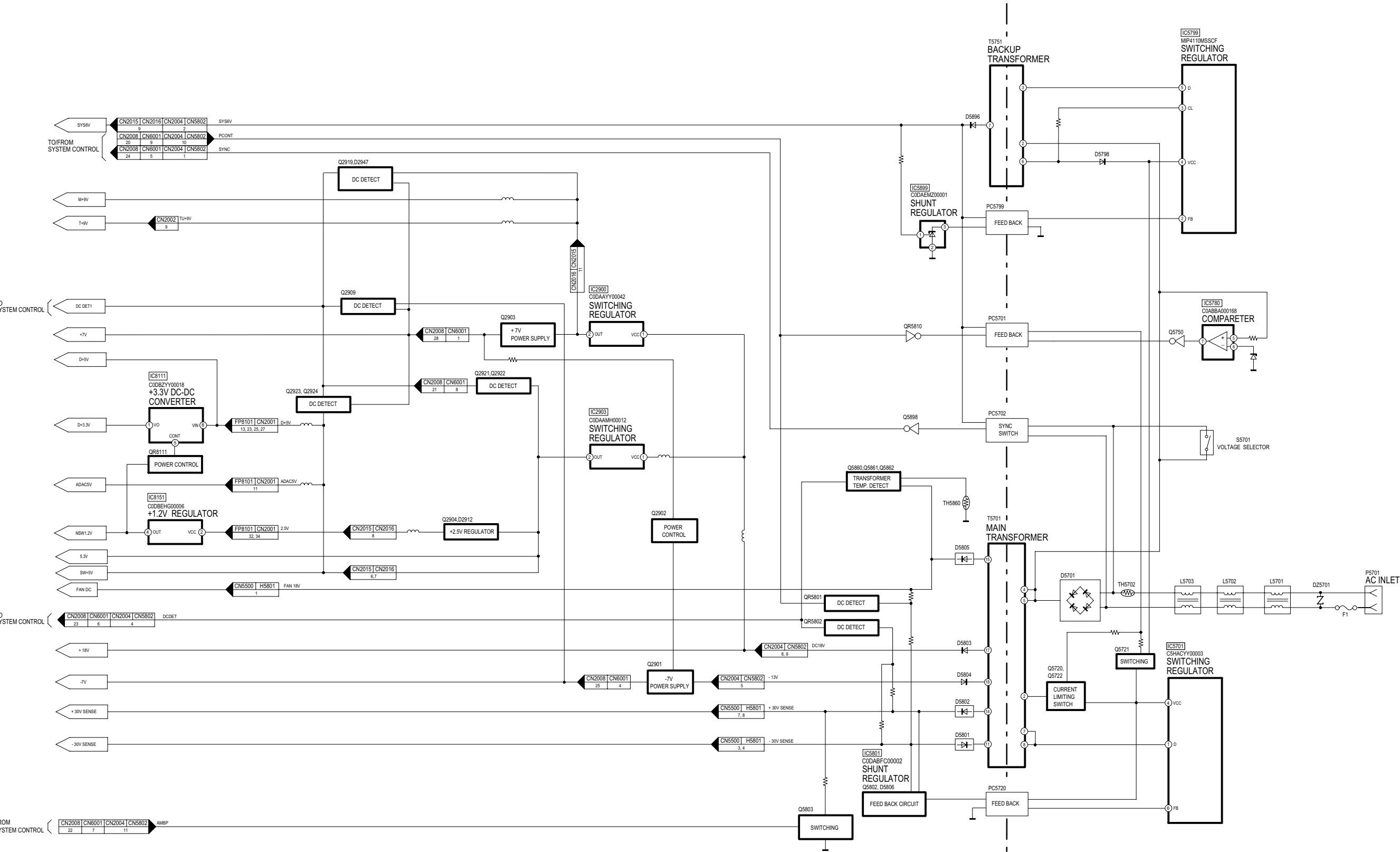
SA-PT860GC/GCS/GCT/GS AUDIO BLOCK DIAGRAM

17.7. Digital Audio Amp



SA-PT860GC/GCS/GCT/GS DIGITAL AUDIO AMP BLOCK DIAGRAM

17.8. Power



SA-PT860GC/GCS/GCT/GS POWER BLOCK DIAGRAM

18 Schematic Diagram Notes

- This schematic diagram may be modified at any time with the development of new technology.

Notes:

S5701:	Voltage Selector switch.
S6801:	Power switch ().
S6807:	Open/Close switch ().
S6901:	Play/Memory switch ().
S6902:	Backward/Tune  switch ( / ).
S6903:	Forward/Tune  switch ( / ).
S6904:	Stop/-Tune mode/—FM mode switch ().
S6905:	SW Boost switch.
S6907:	Selector switch.
S7001:	Mic Vol switch (+).
S7002:	Mic Vol switch (-).
VR6901:	VR volume jog.

- Important safety notice:

Components identified by  mark have special characteristics important for safety.

Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.

When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.

- In case of AC rated voltage Capacitor, the part no. and values will be indicated in the Schematic Diagram.

AC rated voltage capacitor:

C5700, C5701, C5703, C5704, C5705, C5706, C5707,

• Resistor

Unit of resistance is OHM [Ω] (K=1,000, M=1,000,000).

• Capacitor

Unit of capacitance is μ F, unless otherwise noted. F=Farad, pF=Pico-Farad

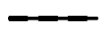
• Coil

Unit of inductance is H, unless otherwise noted.

• *

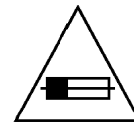
For indication only.

• Voltage and signal line

	: +B signal line
	: -B signal line
	: USB signal line
	: DVD RF signal line
	: Motor Drive signal line

	: DVD Audio signal line
	: DVD Video signal line
	: CD Head signal line
	: DVD Head signal line
	: Main signal line
	: Tracking Error signal line
	: Focus Error signal line
	: FM signal line
	: Ipod Video signal line
	: Ipod Audio signal line
	: TV Audio signal line
	: Mic signal line

CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE F1 T8AH 250V FUSE



RISK OF FIRE-REPLACE FUSE AS MARKED.

FUSE CAUTION



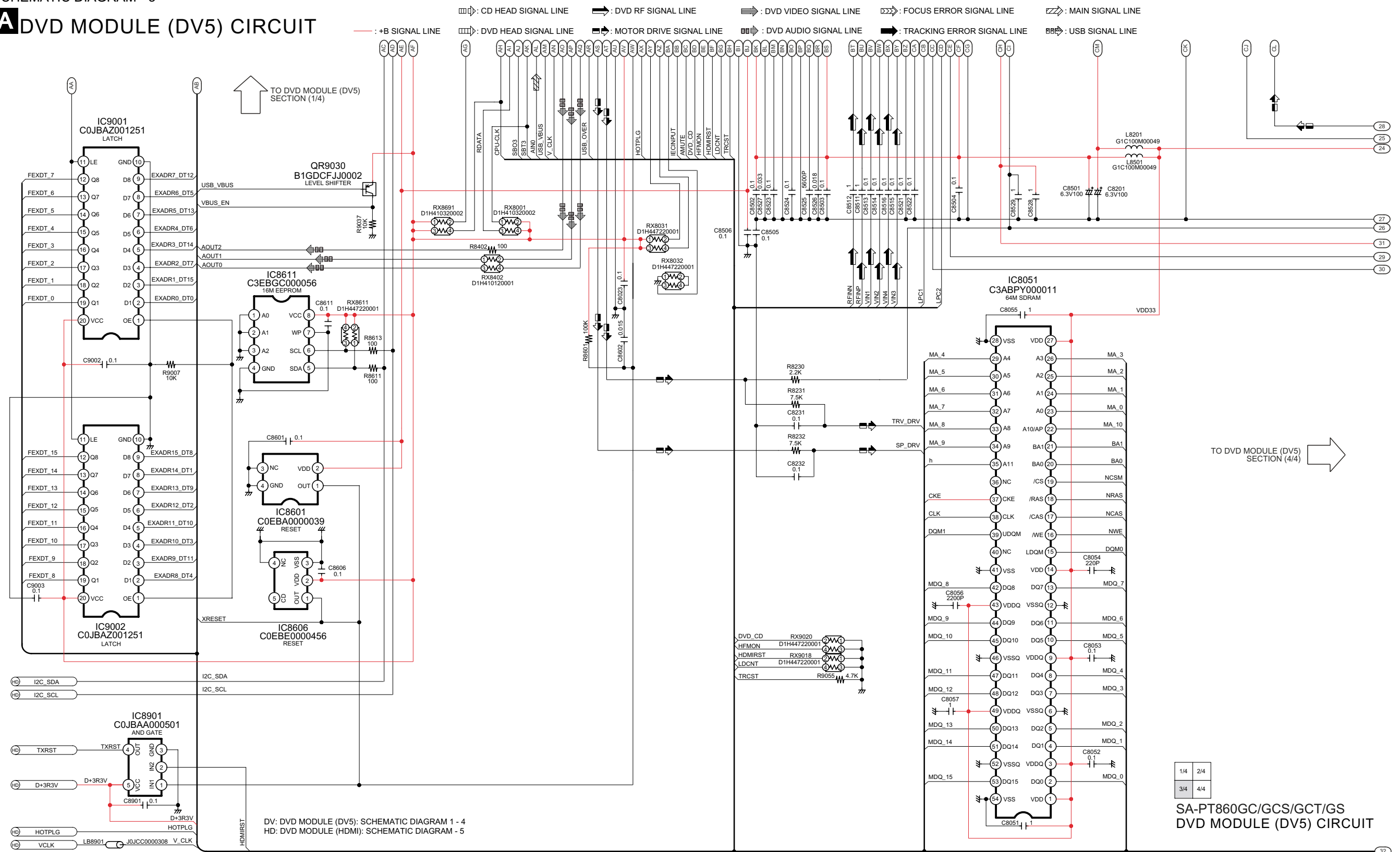
These symbols located near the fuse indicates that the fuse used is a fast operating type. For continued protection against fire hazard, replace with the same type fuse. For rating, refer to the marking adjacent to the symbol.

A DVD MODULE (DV5) CIRCUIT



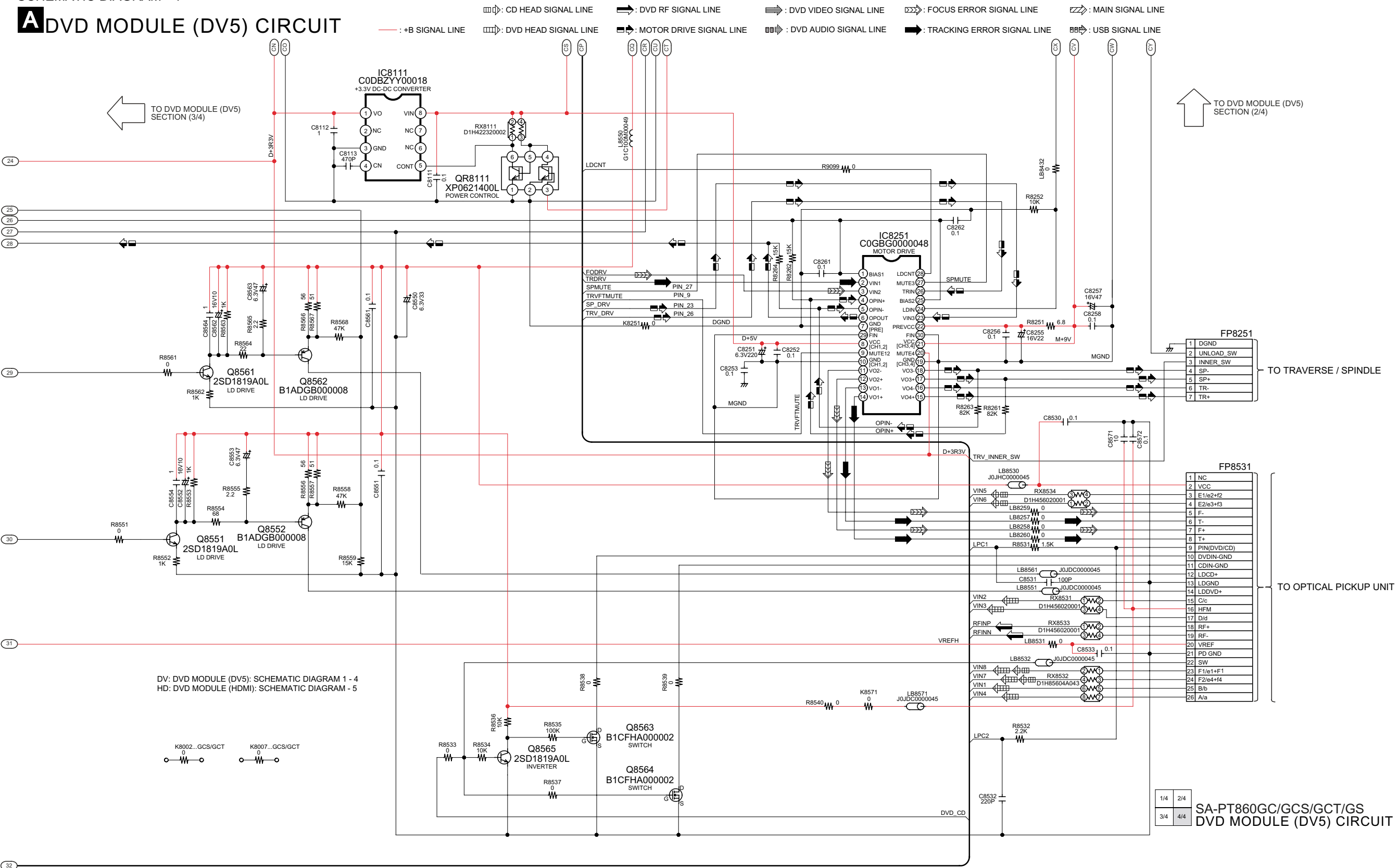
SCHEMATIC DIAGRAM - 3

A DVD MODULE (DV5) CIRCUIT

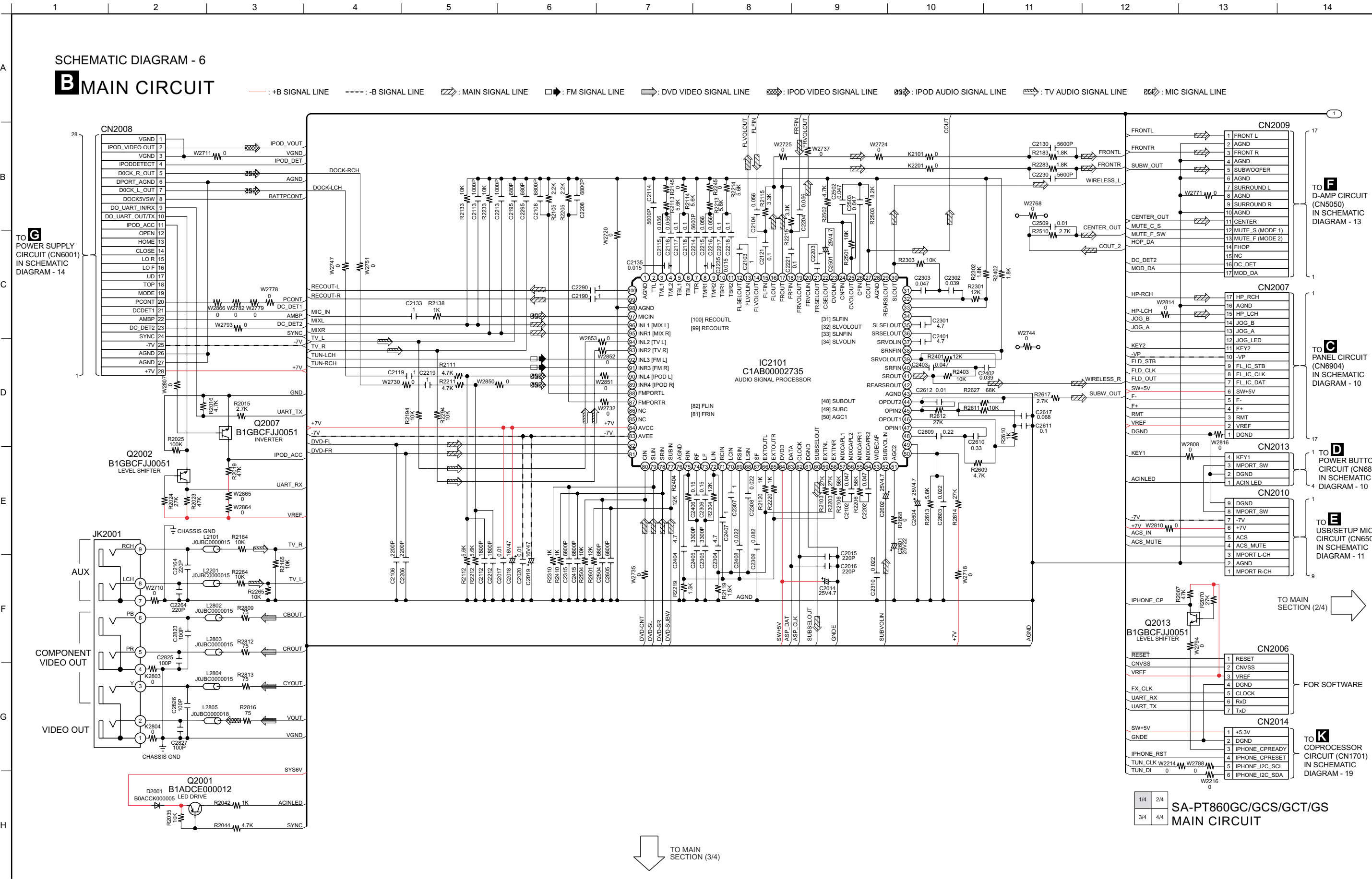


SCHEMATIC DIAGRAM - 4

A DVD MODULE (DV5) CIRCUIT



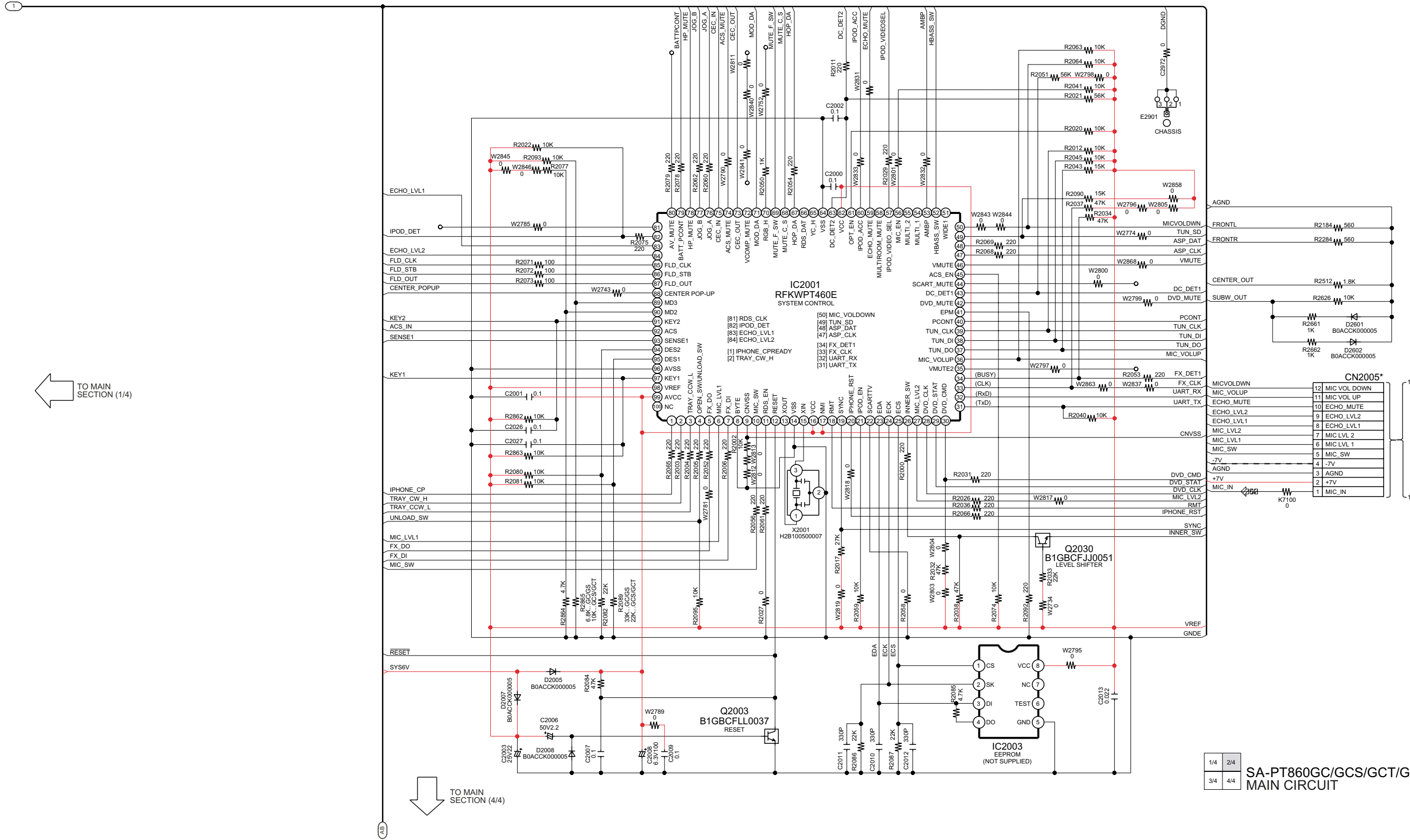
19.2. Main Circuit



SCHEMATIC DIAGRAM - 7

B MAIN CIRCUIT

— : +B SIGNAL LINE --- : -B SIGNAL LINE  : MAIN SIGNAL LINE  : FM SIGNAL LINE  : DVD VIDEO SIGNAL LINE  : IPOD VIDEO SIGNAL LINE  : IPOD AUDIO SIGNAL LINE  : TV AUDIO SIGNAL LINE  : MIC SIGNAL LINE



TO MAIN SECTION (1/4)

TO MAIN SECTION (4/4)

SA-PT860GC/GCS/GCT/GS
MAIN CIRCUIT

SCHEMATIC DIAGRAM - 8

B MAIN CIRCUIT

— : +B SIGNAL LINE - - - : -B SIGNAL LINE ≡ : MAIN SIGNAL LINE ◻ : FM SIGNAL LINE ≡ : DVD VIDEO SIGNAL LINE ≡ : IPOD VIDEO SIGNAL LINE ≡ : IPOD AUDIO SIGNAL LINE ≡ : TV AUDIO SIGNAL LINE ≡ : MIC SIGNAL LINE

TO **A**
DVD MODULE (DV5)
CIRCUIT (FP8101)
IN SCHEMATIC
DIAGRAM - 2

TO TUNER PACK
(ENG06841QRF)

↑
TO MAIN
SECTION (1/4)

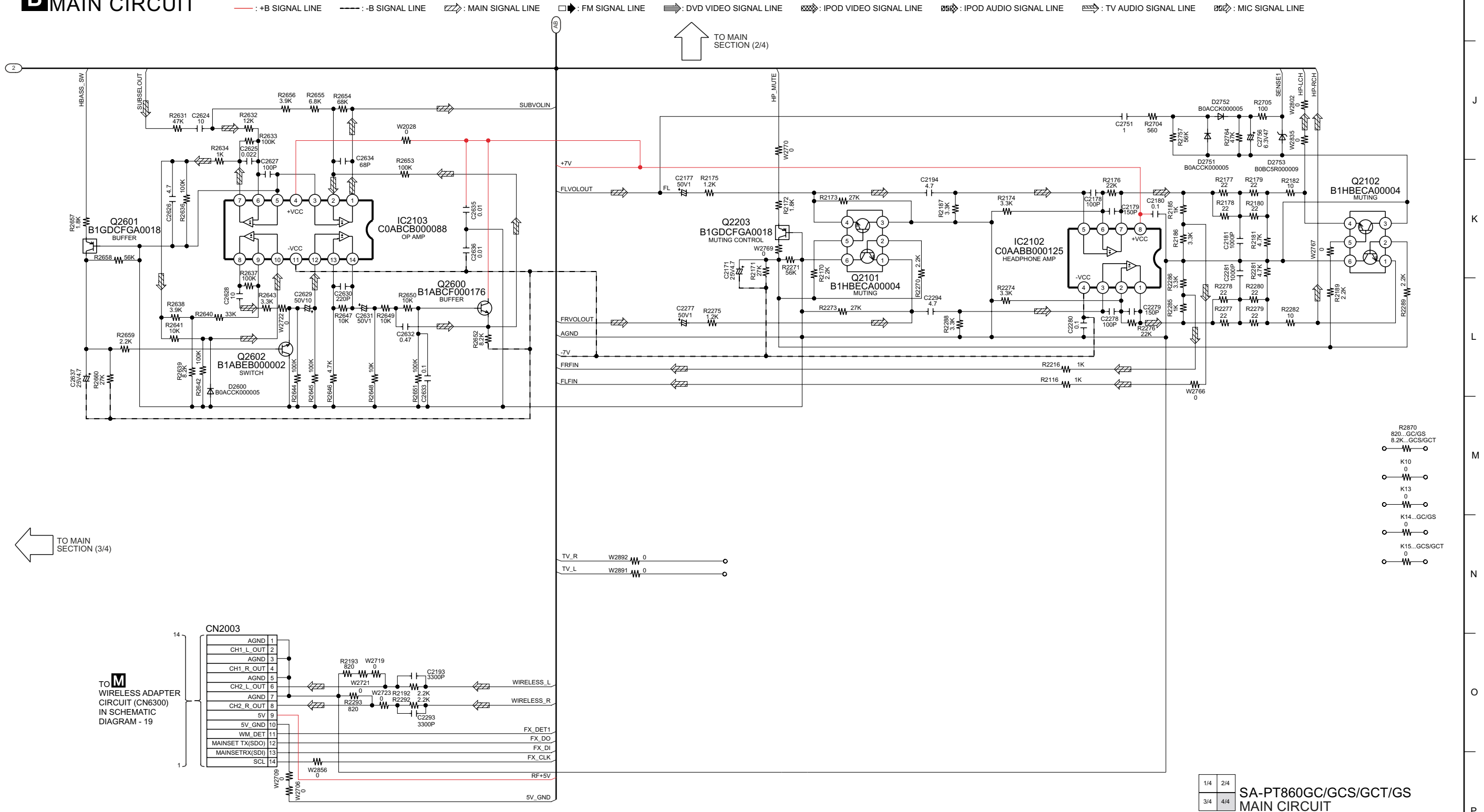
→
TO MAIN
SECTION (4/4)

TO **C**
POWER SUPPLY
CIRCUIT (CN2016)
IN SCHEMATIC
DIAGRAM - 14

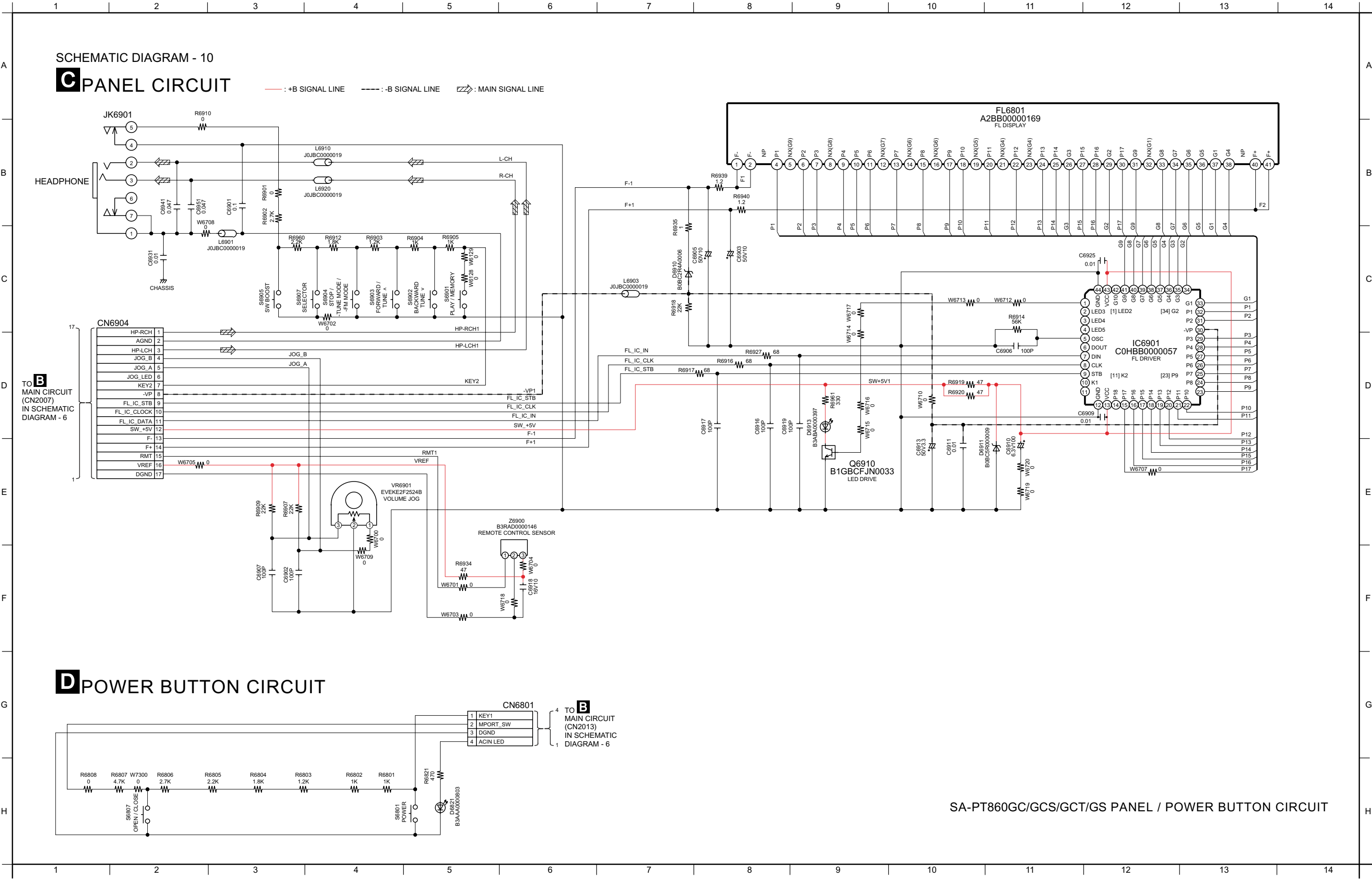
1/4 2/4
3/4 4/4
SA-PT860GC/GCS/GCT/GS
MAIN CIRCUIT

SCHEMATIC DIAGRAM - 9

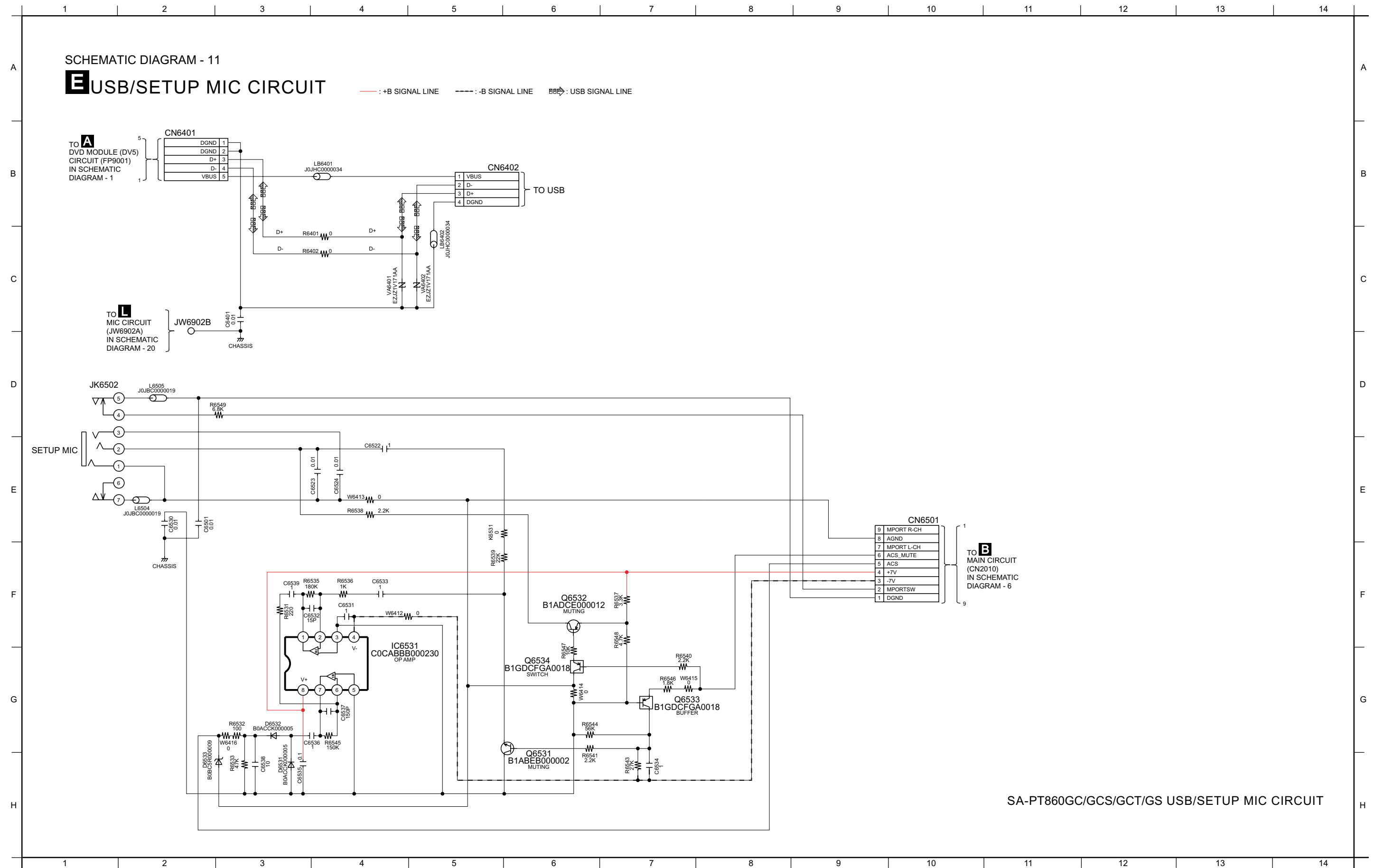
B MAIN CIRCUIT



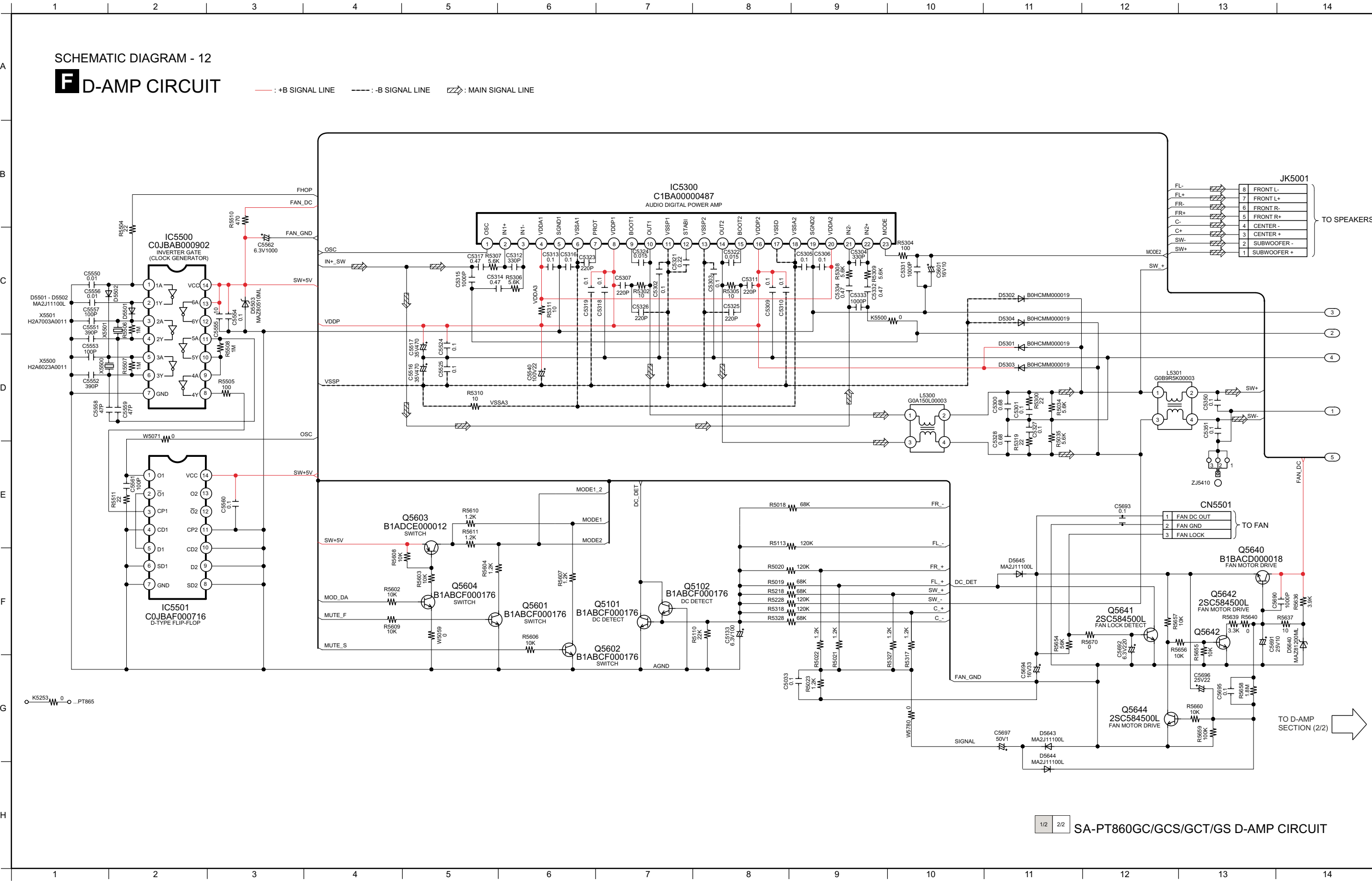
19.3. Panel, Power Button Circuit



19.4. USB/Setup Mic Circuit



19.5. D-Amp Circuit



F D-AMP CIRCUIT

TO **H**
SMPS CIRCUIT
(H5801*)
IN SCHEMATIC
DIAGRAM - 16

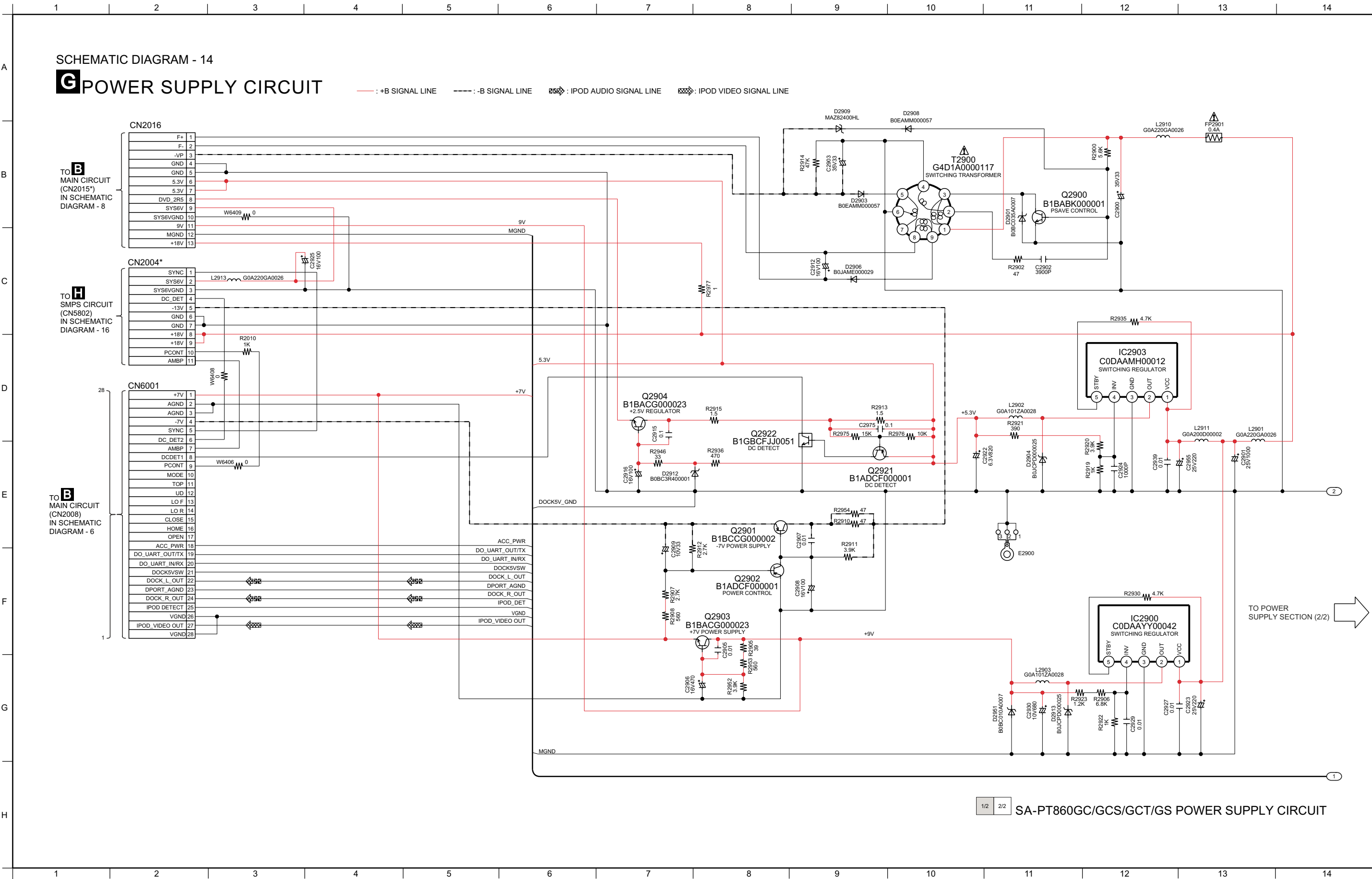
TO D-AMP
SECTION (1/2)

TO **B**
MAIN CIRCUIT
(CN2009)
IN SCHEMATIC
DIAGRAM - 6

17

15	16	17	18	19	20	21	22	23	24	25	26	27	28
----	----	----	----	----	----	----	----	----	----	----	----	----	----

19.6. Power Supply Circuit



POWER SUPPLY CIRCUIT

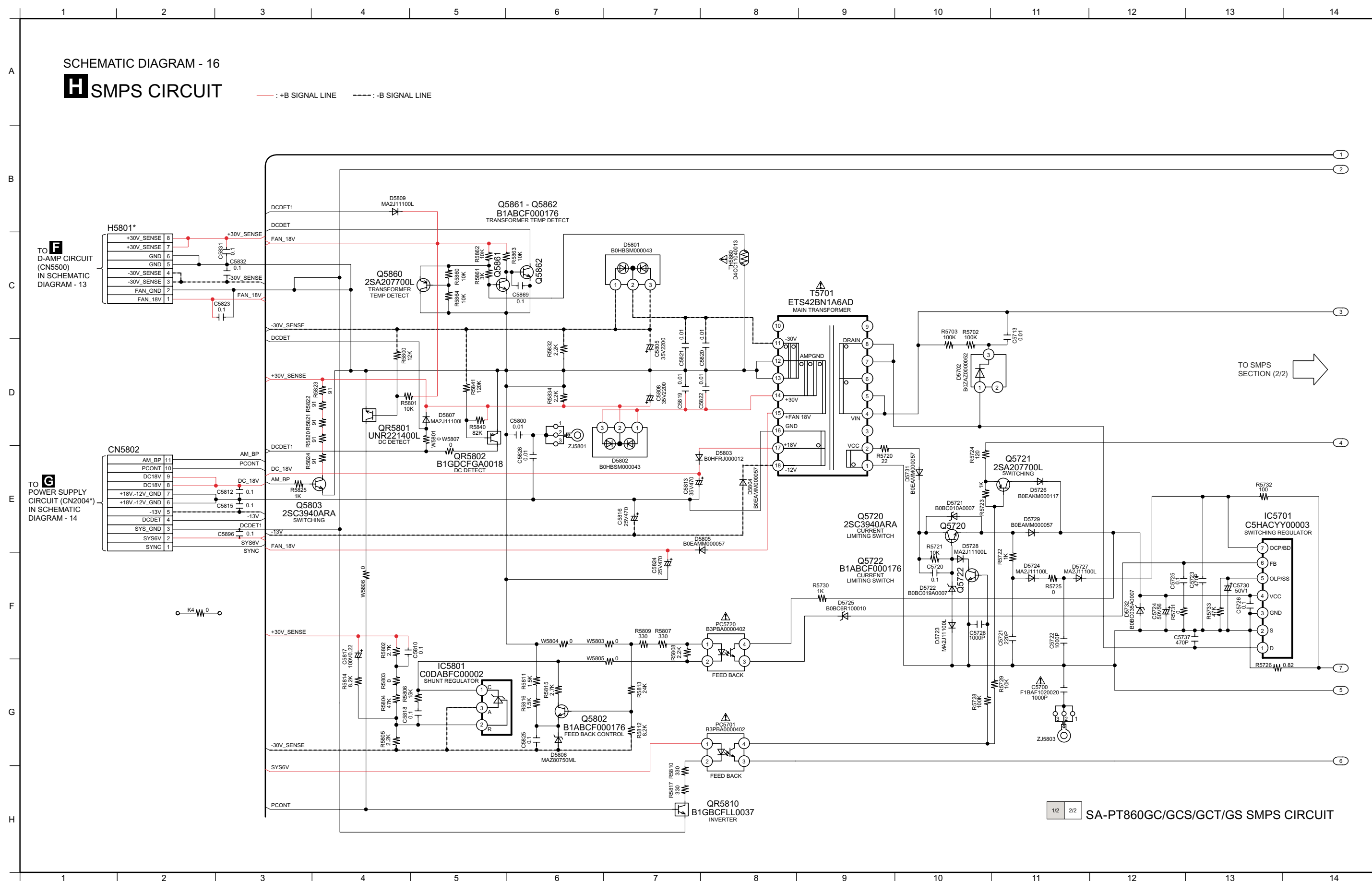
The schematic diagram illustrates the electrical connections for the iPod dock board. Key components and their connections are as follows:

- IC6101 (C0ABBB000230) IPOD DIFFERENTIAL AMP:** This operational amplifier is configured with feedback resistors R6101 (10K) and R6102 (10K). Its non-inverting input (+B) is connected to the DOCK5V line through a network of resistors (R6104, R6103, R6102) and capacitors (C6103, C6102, C6104). The inverting input (GND) is connected to ground through a network of resistors (R6201, R6202, R6203) and capacitors (C6201, C6202, C6203). The output is connected to the DOCK5V line through a network of resistors (R6401, R6402, R6403) and capacitors (C6401, C6402, C6403).
- IC6601 (C0ABAA000114) ISOLATION AMP:** This isolation amplifier is configured with feedback resistors R6301 (10K) and R6302 (10K). Its non-inverting input (+B) is connected to the DOCK5V line through a network of resistors (R6301, R6302) and capacitors (C6301, C6302). The inverting input (GND) is connected to ground through a network of resistors (R6401, R6402, R6403) and capacitors (C6401, C6402, C6403). The output is connected to the DOCK5V line through a network of resistors (R6401, R6402, R6403) and capacitors (C6401, C6402, C6403).
- IC6602 (C0CBGD000003) +5V REGULATOR:** This voltage regulator is configured with feedback resistors R6601 (10K) and R6602 (10K). Its non-inverting input (+B) is connected to the DOCK5V line through a network of resistors (R6601, R6602) and capacitors (C6601, C6602). The inverting input (GND) is connected to ground through a network of resistors (R6401, R6402, R6403) and capacitors (C6401, C6402, C6403). The output is connected to the DOCK5V line through a network of resistors (R6401, R6402, R6403) and capacitors (C6401, C6402, C6403).
- CN6003 (IPOD CRADLE CIRCUIT):** This 14-pin connector is connected to the dock board. The connections are as follows:
 - Pin 14: ACC_PWR
 - Pin 13: DO_UART_OUT/TX
 - Pin 12: DO_UART_IN/RX
 - Pin 11: DOCK5V_GND
 - Pin 10: DOCK5V_GND
 - Pin 9: IPOD ACC
 - Pin 8: DOCK5V
 - Pin 7: DOCK_L_OUT
 - Pin 6: DPORT_AGND
 - Pin 5: DOCK_R_OUT
 - Pin 4: IPOD DETECT
 - Pin 3: VGND
 - Pin 2: VIDEO
 - Pin 1: VGND

The diagram also shows the connection of various passive components, including resistors (R6101, R6102, R6103, R6104, R6201, R6202, R6203, R6301, R6302, R6401, R6402, R6403, R6601, R6602) and capacitors (C6101, C6102, C6103, C6104, C6201, C6202, C6203, C6301, C6302, C6401, C6402, C6403, C6601, C6602).

115

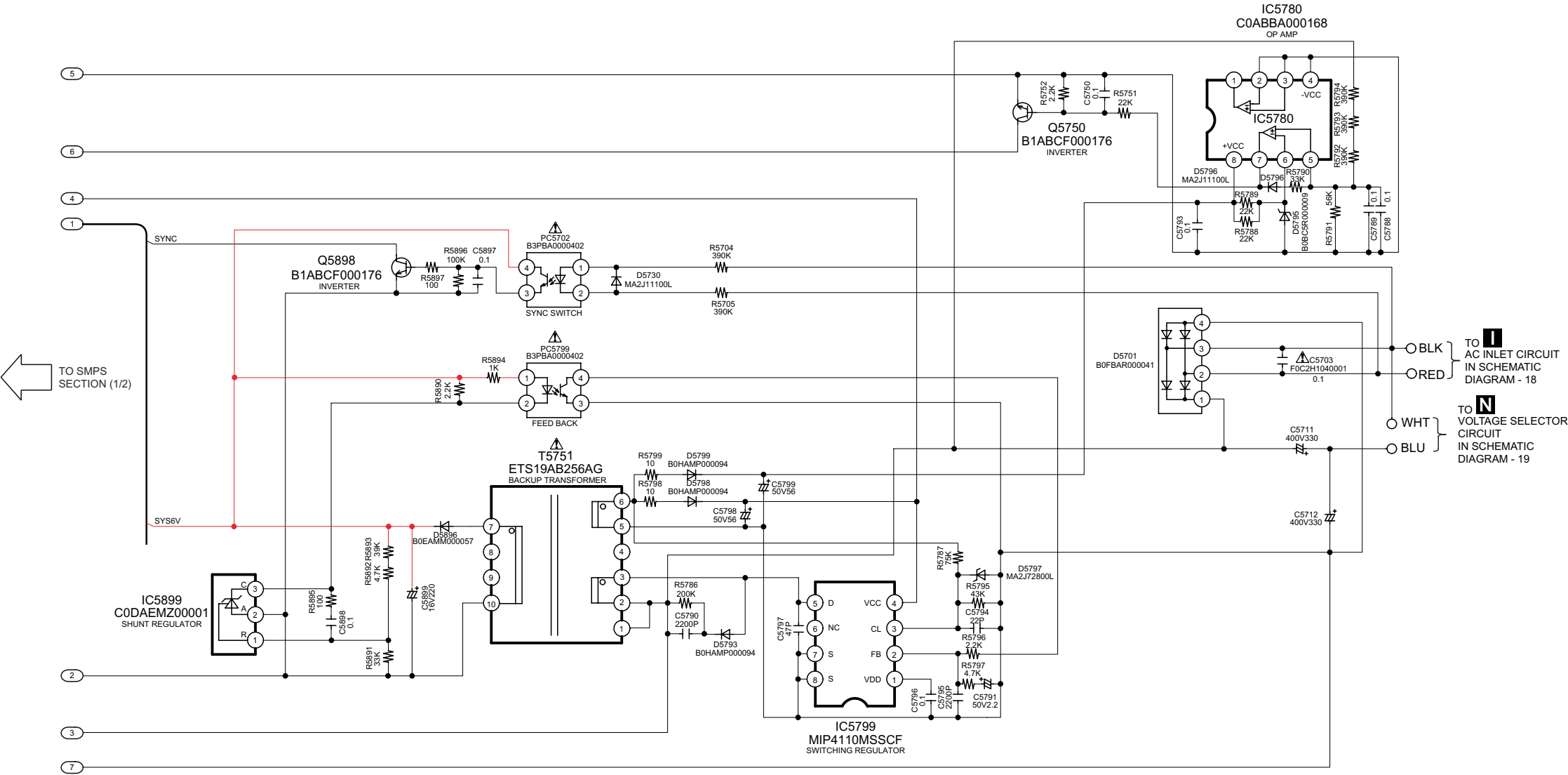
19.7. SMPS Circuit



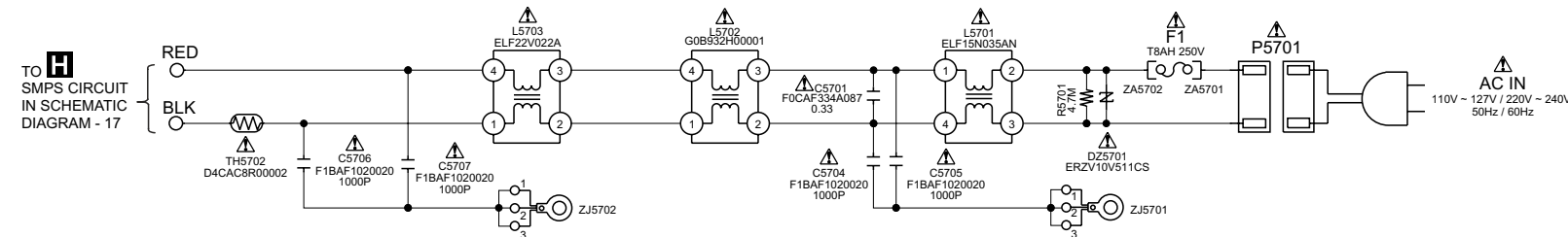
SCHEMATIC DIAGRAM - 17

H SMPS CIRCUIT

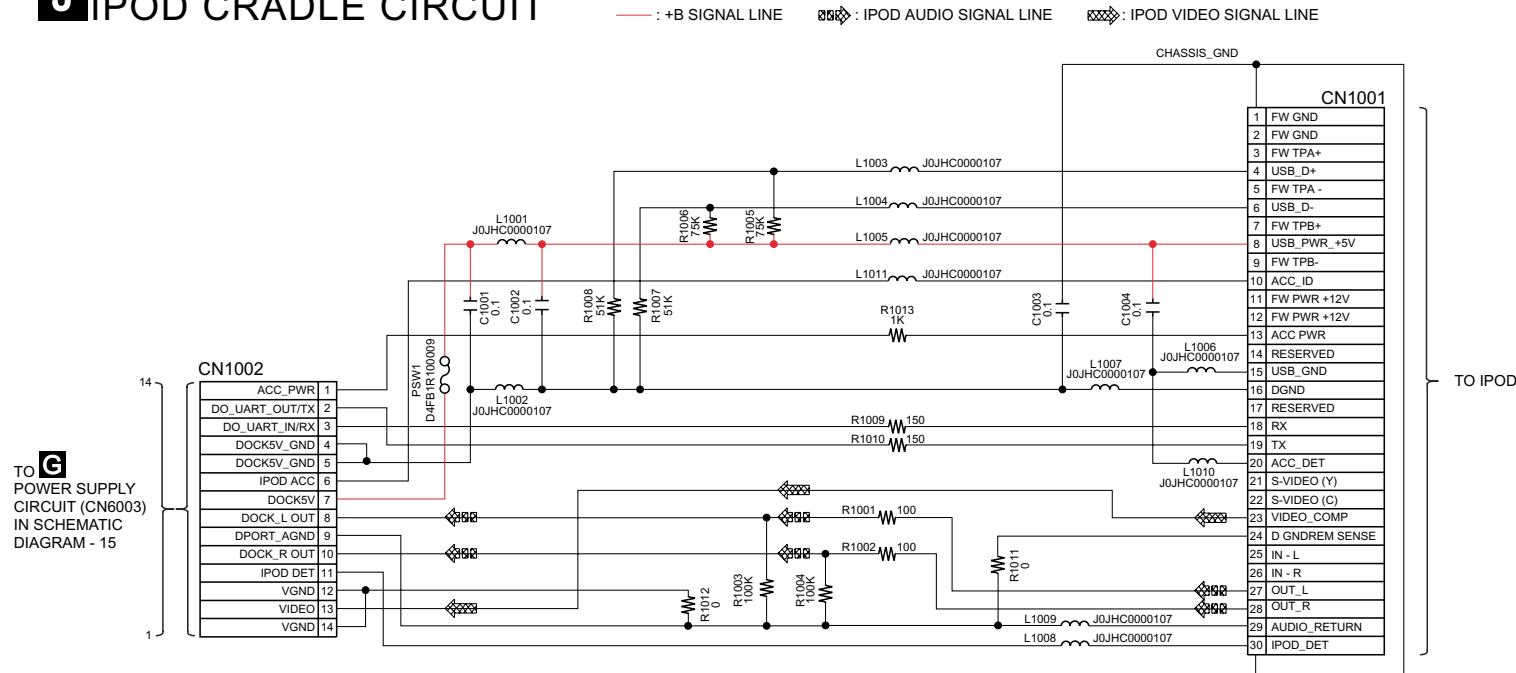
— : +B SIGNAL LINE - - - - : -B SIGNAL LINE



I AC INLET CIRCUIT



J IPOD CRADLE CIRCUIT

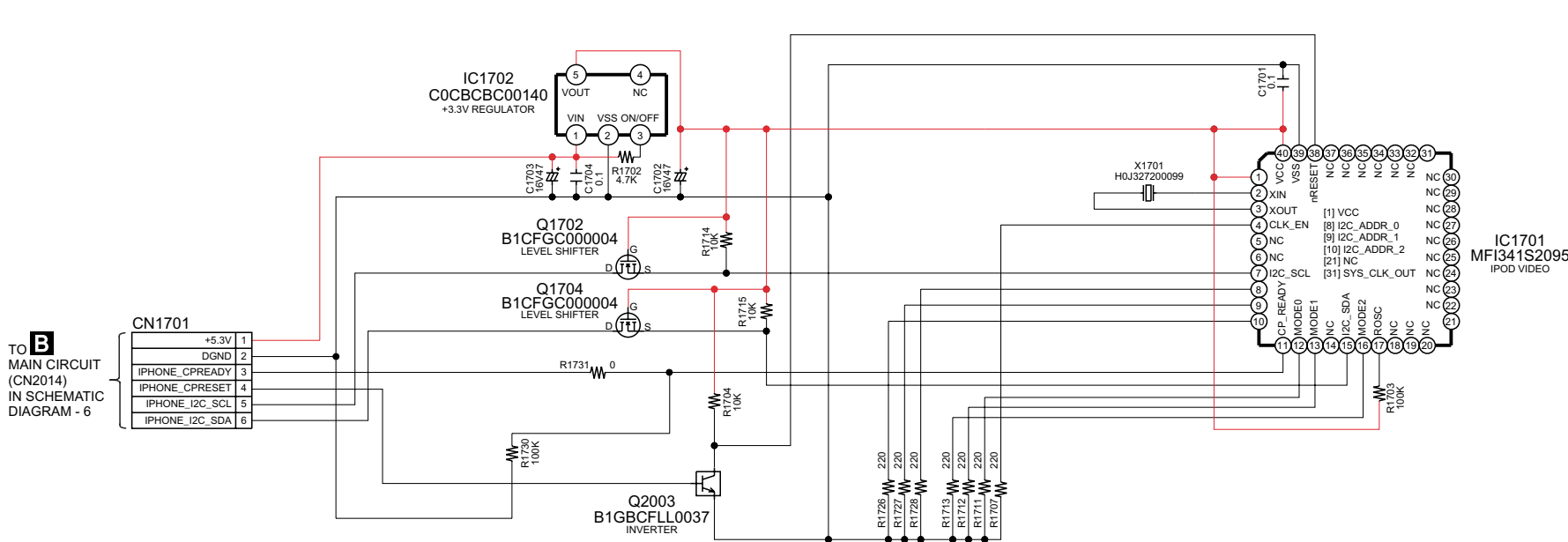


SA-PT860GC/GCS/GCT/GS AC INLET / IPOD CRADLE CIRCUIT

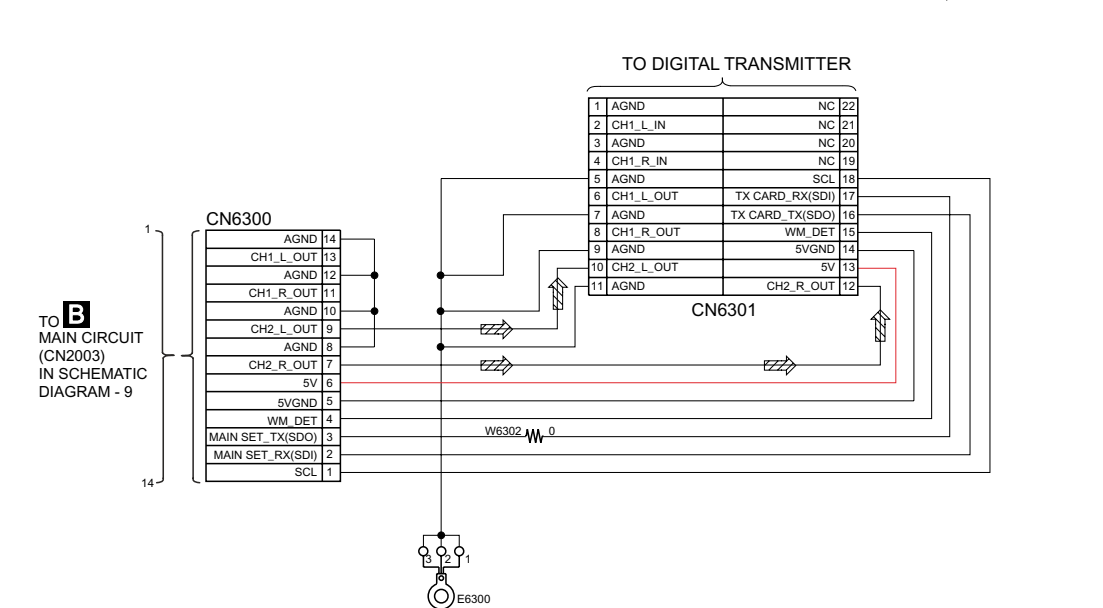
19.9. Coprocessor Circuit, Wireless Adapter, Voltage Selector Circuit

SCHEMATIC DIAGRAM - 19

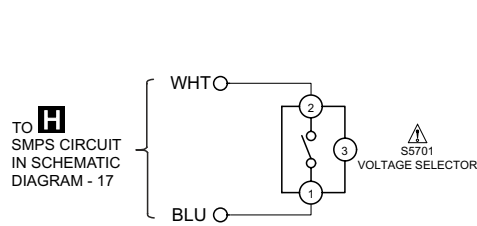
K COPROCESSOR CIRCUIT



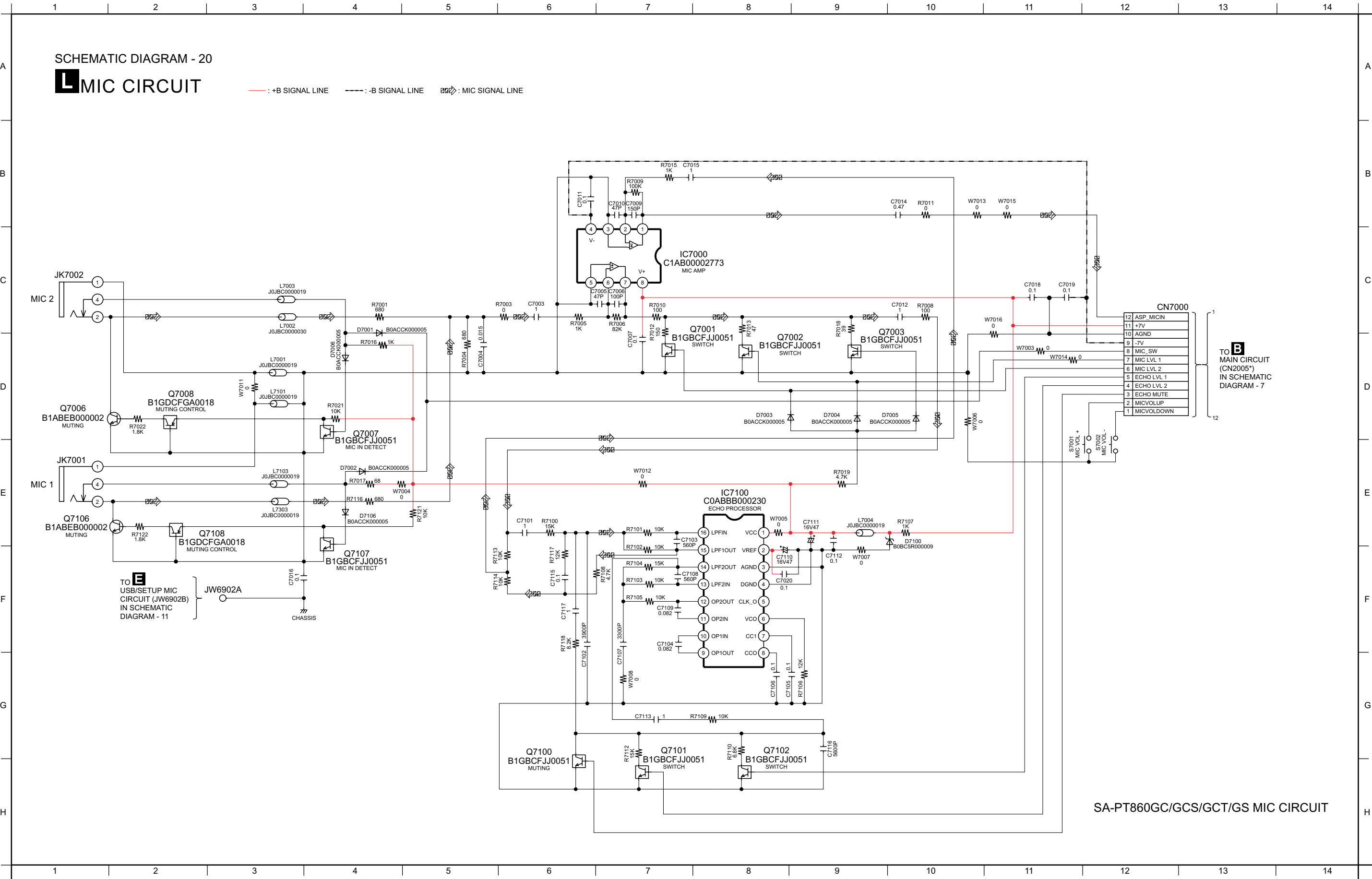
M WIRELESS ADAPTER CIRCUIT



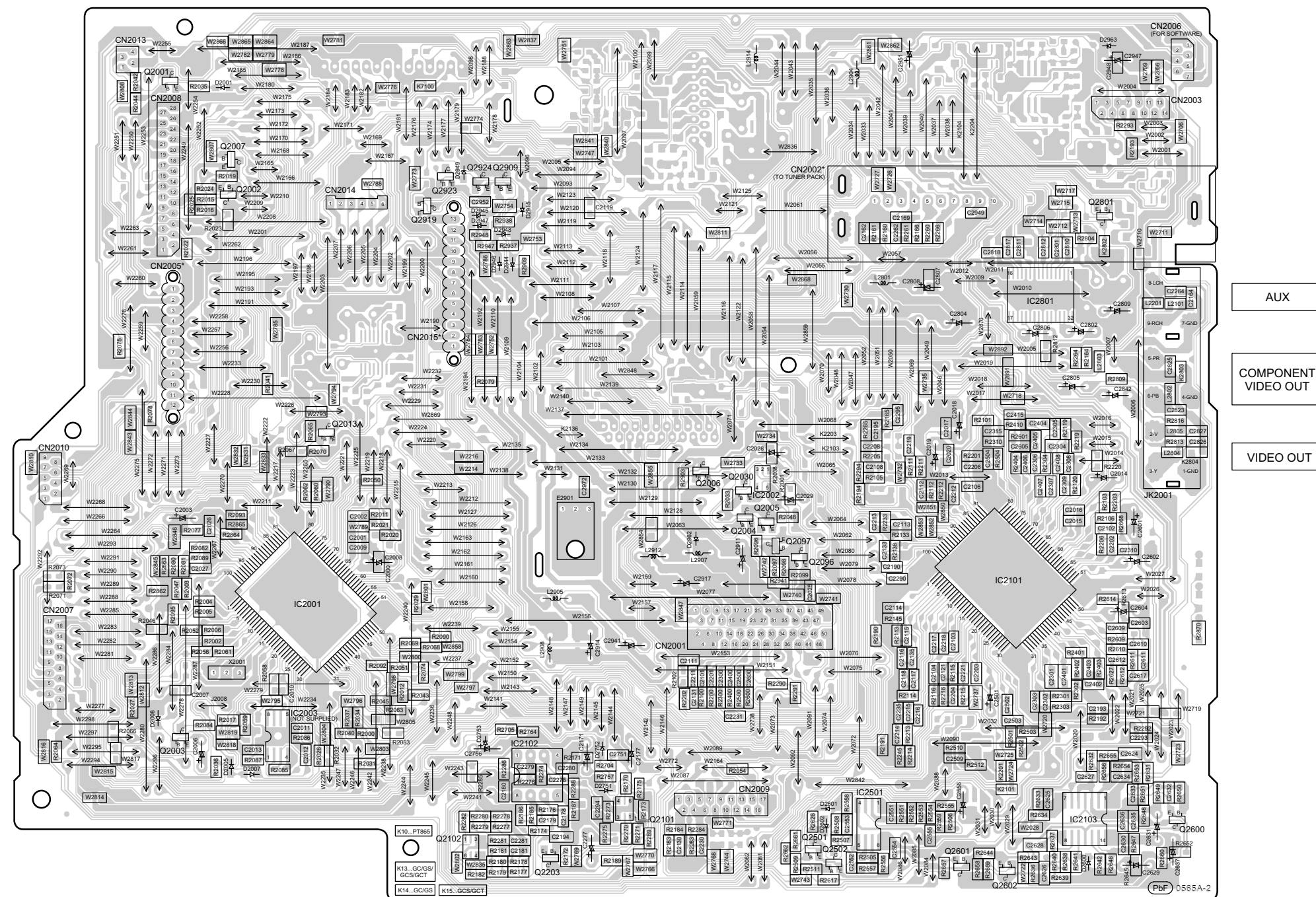
N VOLTAGE SELECTOR CIRCUIT



19.10. Mic Circuit



B MAIN P.C.B. (REPX0628F...GC/GS)
(REPX0628G...GCS/GCT)

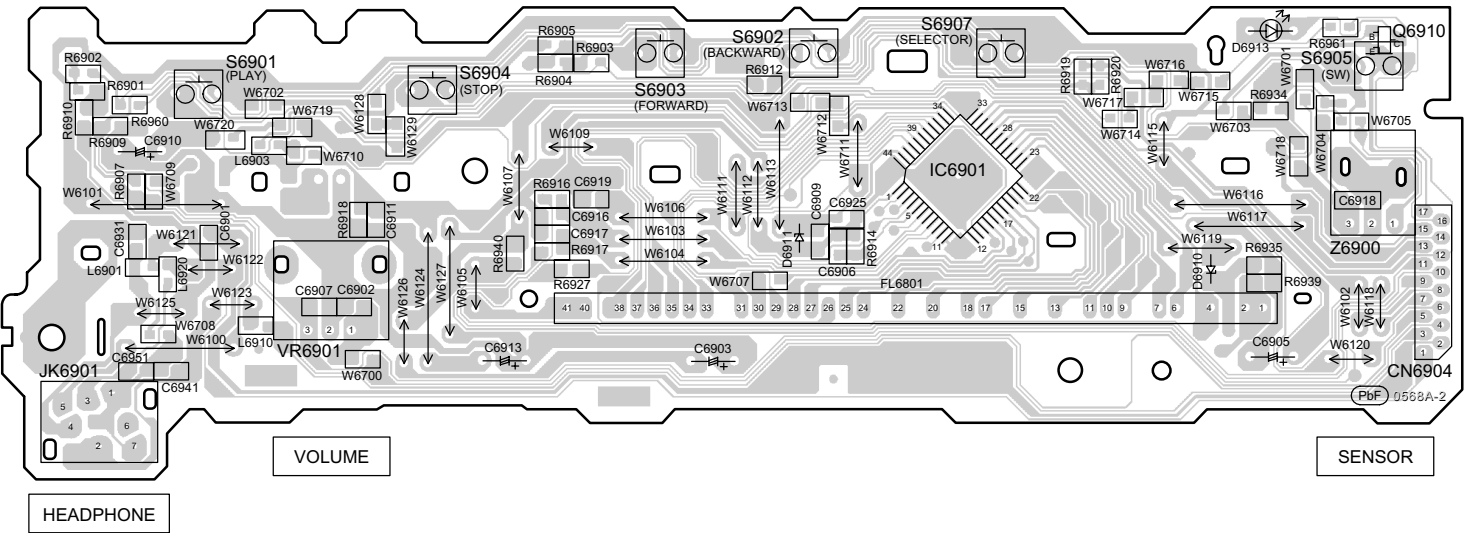


* FOR INDICATION ONLY

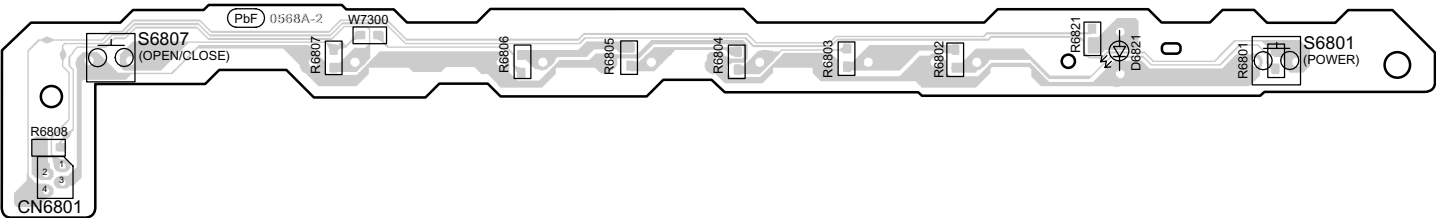
SA-PT860GC/GCS/GCT/GS
MAIN P.C.B.

20.3. Panel, Power Button, USB/Setup Mic, Power Supply & AC Inlet P.C.B.

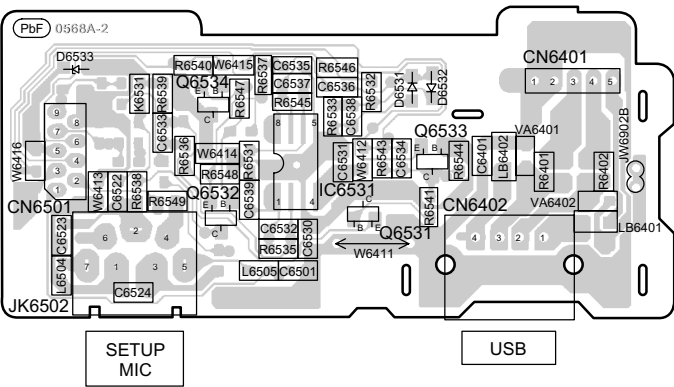
C PANEL P.C.B. (REPX0655H)



D POWER BUTTON P.C.B. (REPX0655H)

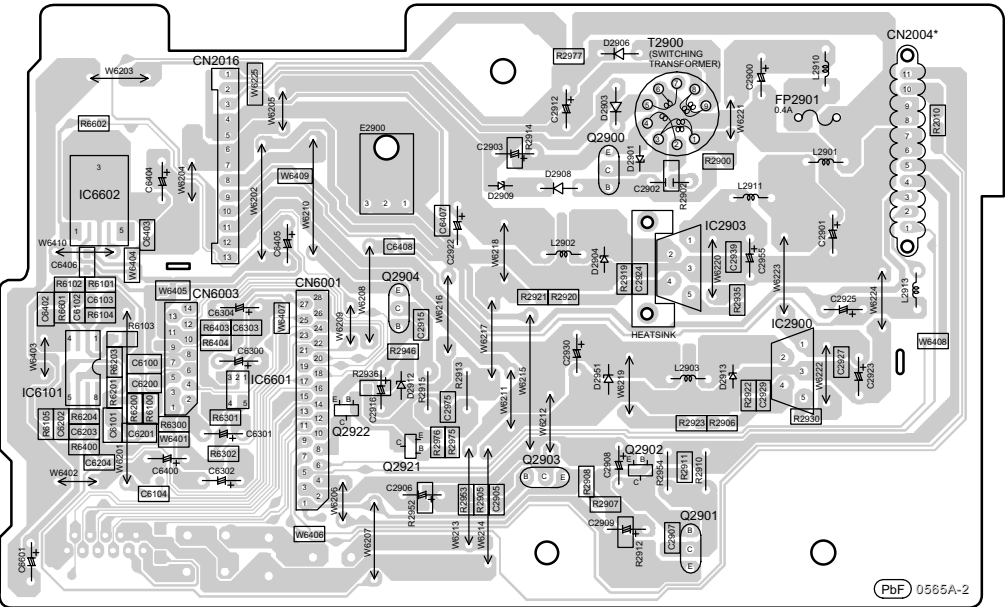


E USB/SETUP MIC P.C.B. (REPX0655H)

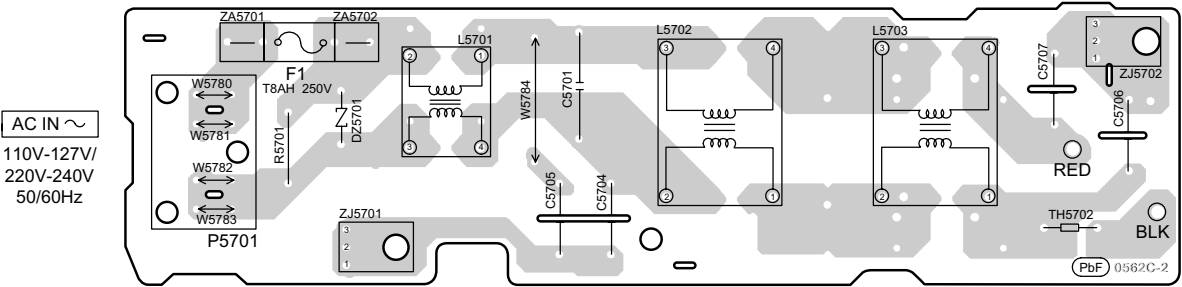


* FOR INDICATION ONLY

G POWER SUPPLY P.C.B. (REPX0628F...GC/GS)
(REPX0628G...GCS/GCT)



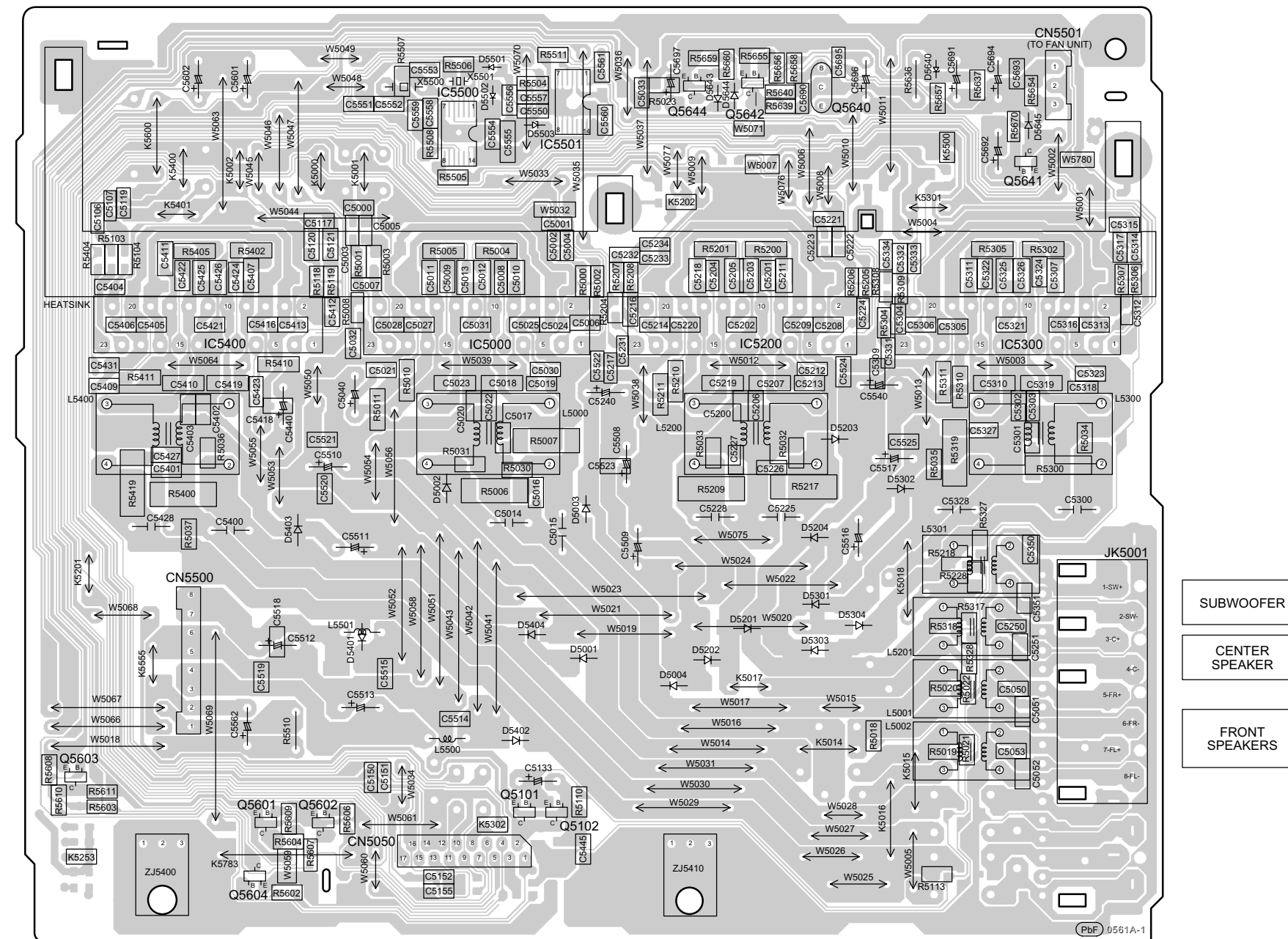
I AC INLET P.C.B. (REPX0622D)



SA-PT860GC/GCS/GCT/GS
PANEL/POWER BUTTON/USB/SETUP MIC/POWER SUPPLY/AC INLET P.C.B.

20.4. D-Amp P.C.B.

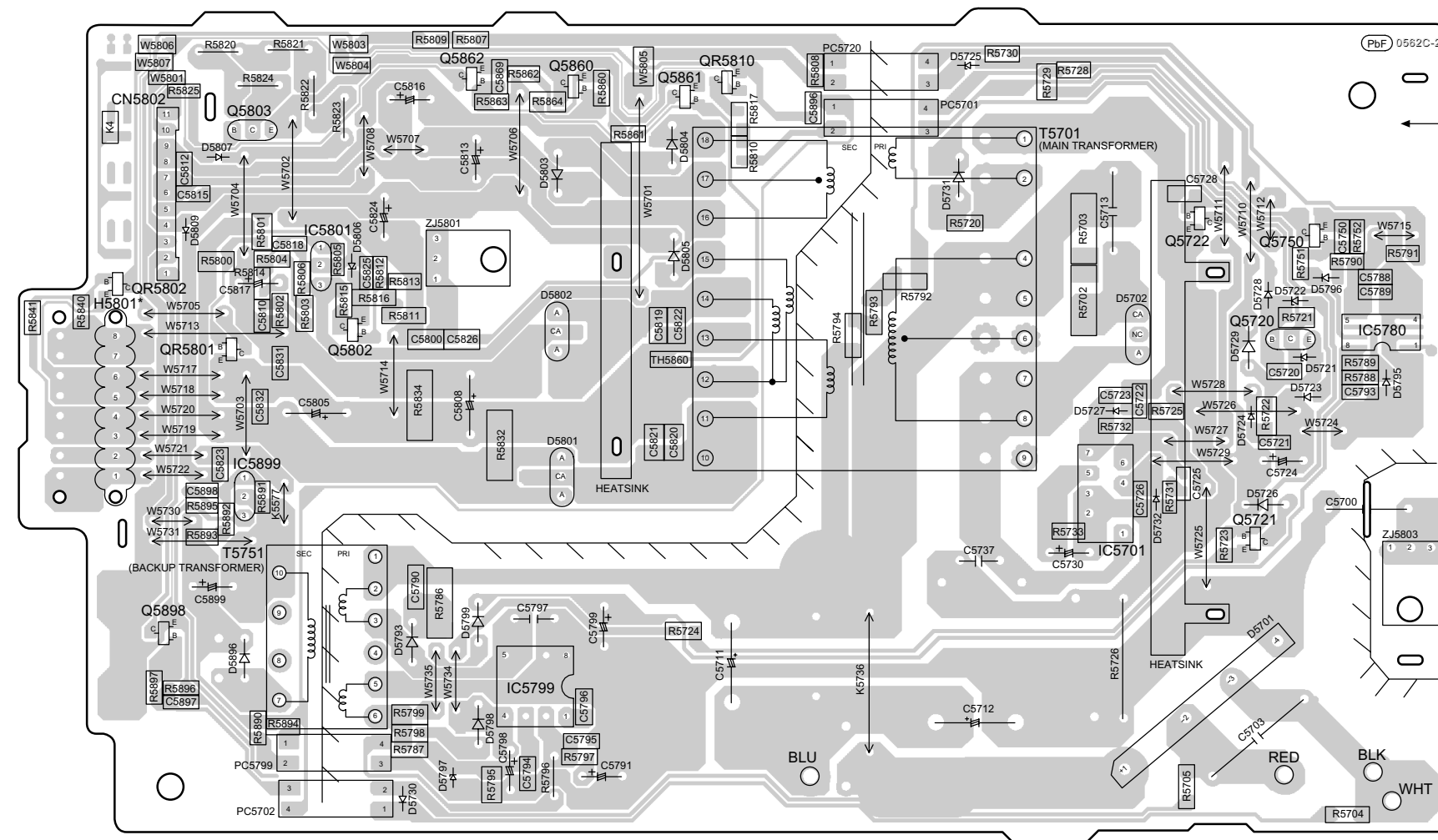
F D-AMP P.C.B. (REPX0621E)



SA-PT860GC/GCS/GCT/GS
D-AMP P.C.B.

20.5. SMPS P.C.B.

H SMPS P.C.B. (REPX0622D)



CAUTION
RISK OF ELECTRIC SHOCK
AC VOLTAGE LINE.
PLEASE DO NOT TOUCH THIS P.C.B

* FOR INDICATION ONLY

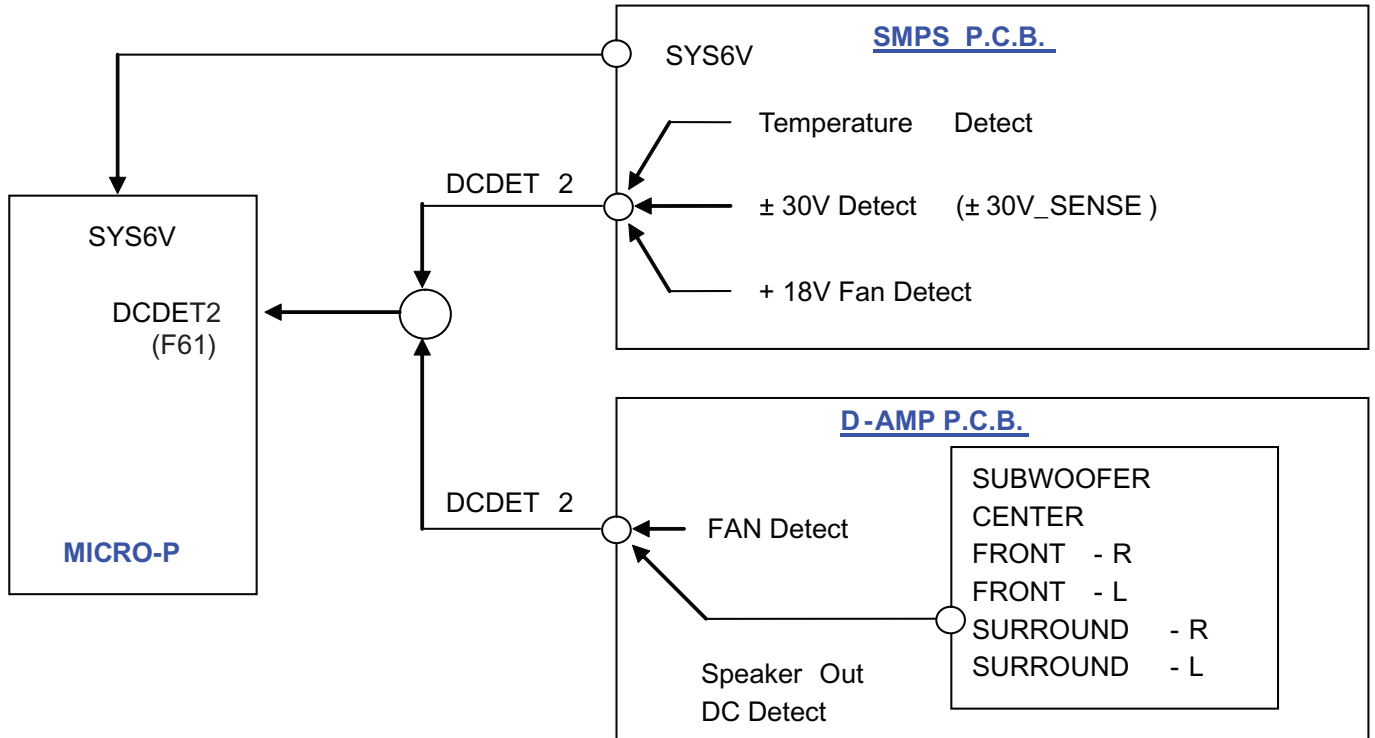
SA-PT860GC/GCS/GCT/GS
SMPS P.C.B.

21 Basic Troubleshooting Guide

21.1. Troubleshooting Guide for F61 and/or F76

This section illustrates the checking procedures when upon detecting the error of “F61” and/or “F76” after power up of the unit. It is for purpose of troubleshooting and checking in SMPS, D-Amp & Power Supply P.C.B.

21.1.1. Block Diagram



21.1.2. Troubleshooting Guide

Symptom	Checking Items	Repair Items	Remarks
FL display blinking with abnormal segment when power ON the set or "F61"	Check the soldering of the SMPS P.C.B. - Is there any solder crack at area (Q5860, Q5861, Q5862, TH5860, QR5801) - Check all the supply line $\pm 30V$ - Is there any solderability at area of feedback circuit - Check feedback circuit (IC5801, Q5802, D5806, PC5720, D5725)	Touch-up the solder crack area/ Change the defective parts. - Q5860, Q5861, Q5862, TH5860 (Temperature Detect) - QR5801 & QR5802 ($\pm 30V$ Detect) - Touch-up the necessary areas - IC5801, D5806, PC5720, D5725	SMPS P.C.B. Refer to Fig. 1
First Power ON Display immediate show "F61".	Check Speaker output by using multi-meter, - If there is a DC Voltage around $\pm 30V$ - Check Output IC (Pin 10 & 14) which have DC Voltage at Speaker output short to $\pm V_{dd}/V_{ss}$ - If shorted that means D-Amp damage already.	Change the defective parts. D-AMP IC: IC5000/IC5200/IC5300/IC5400 P/N = C1BA00000487 For Configuration Refer to Table 1	D-AMP P.C.B. Refer to Fig. 2
Power ON for a while then only trigger "F61". (Symptom always happen)	Check the fan connection & feedback loop: - If the fan not proper connected, "F61" will trigger when the volume increase. - If the fan is not working, check for fan circuit. Check the soldering of the SMPS P.C.B. - Is there any solder crack at area (Q5860, Q5861, Q5862, TH5860, QR5801) - Check all the supply line $\pm 30V$	Re-connect the Fan to CN5501 Fan circuit: Q5640, Q5641, Q5642, Q5644 Touch-up the solder crack area/ Change the defective parts. - Q5860, Q5861, Q5862, TH5860 (Temperature Detect) - QR5801 & QR5802 ($\pm 30V$ Detect) Feedback Circuit: IC5801, PC5720, D5725	D-AMP P.C.B. Refer to Fig. 3
Power ON for a while and then trigger "F76"	Check all supply voltages as follows: Step 1: Check for supply voltages from SMPS P.C.B to Power Supply P.C.B at pin 8 & 9 of CN2004. If there are supply voltages, proceed to Step 2. If no voltages detected, check wire connection and circuitry connection from SMPS P.C.B. Step 2: Check if there is supply voltages for $-V_p$, $F+$ & $F-$ at CN2016 - If there is supply voltages of +5.3V, +2.5V (For DVD), +6V (SYS6V), +9V & +18V at CN2016 - If there is supply voltages of $\pm 7V$ at CN6001	Check and change the possible defective parts. - FP2901 (Fuse Protector), T2900, D2901, D2906, D2908, D2909 - IC2903 (DC-DC Converter IC) & related regulator circuit components - IC2900 (DC-DC Converter IC) & related regulator circuit components	Power Supply P.C.B Refer to Fig. 4

21.1.3. Part Location

21.1.3.1. SMPS P.C.B.

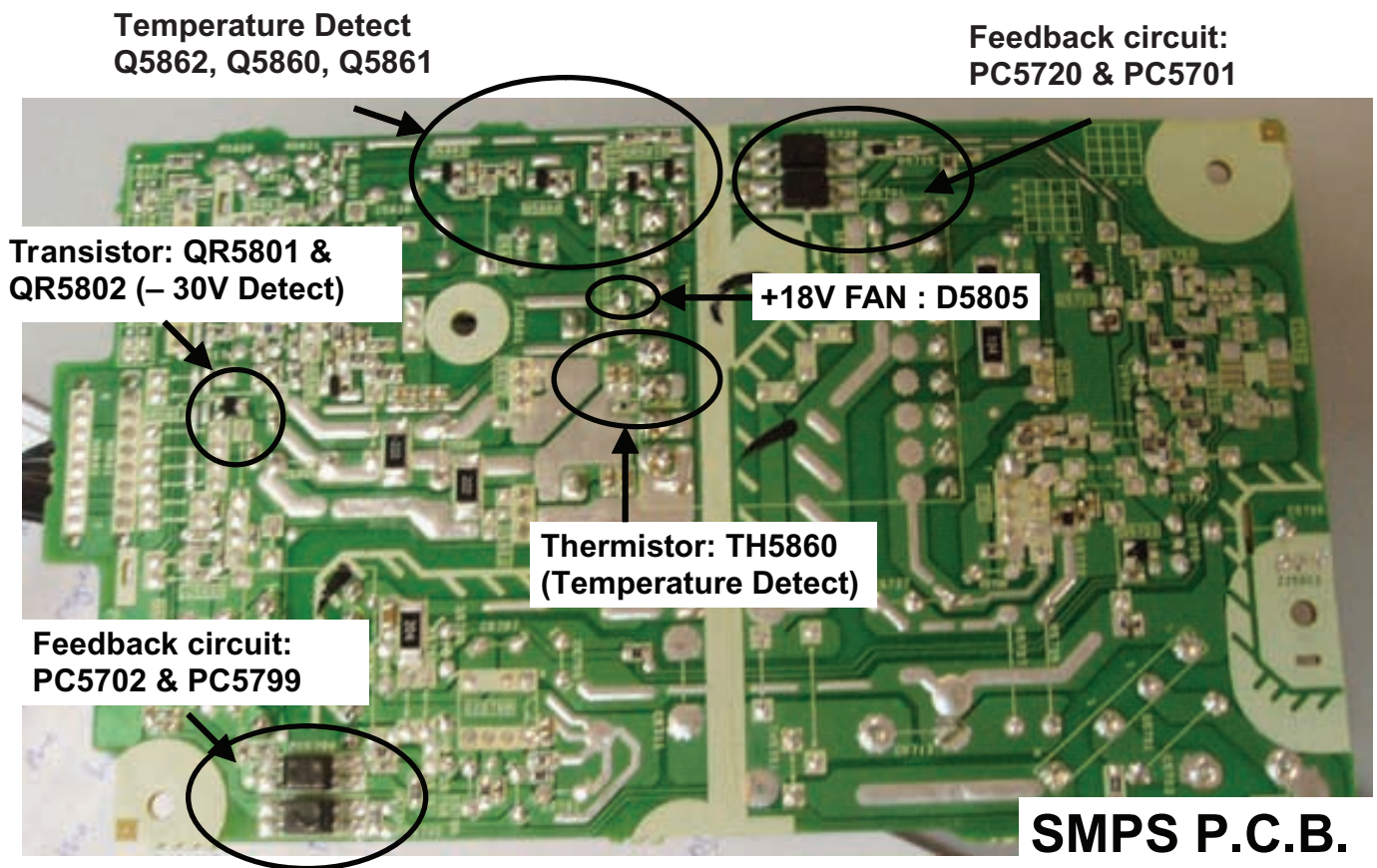


Fig. 1 SMPS P.C.B.

21.1.3.2. D-Amp P.C.B.

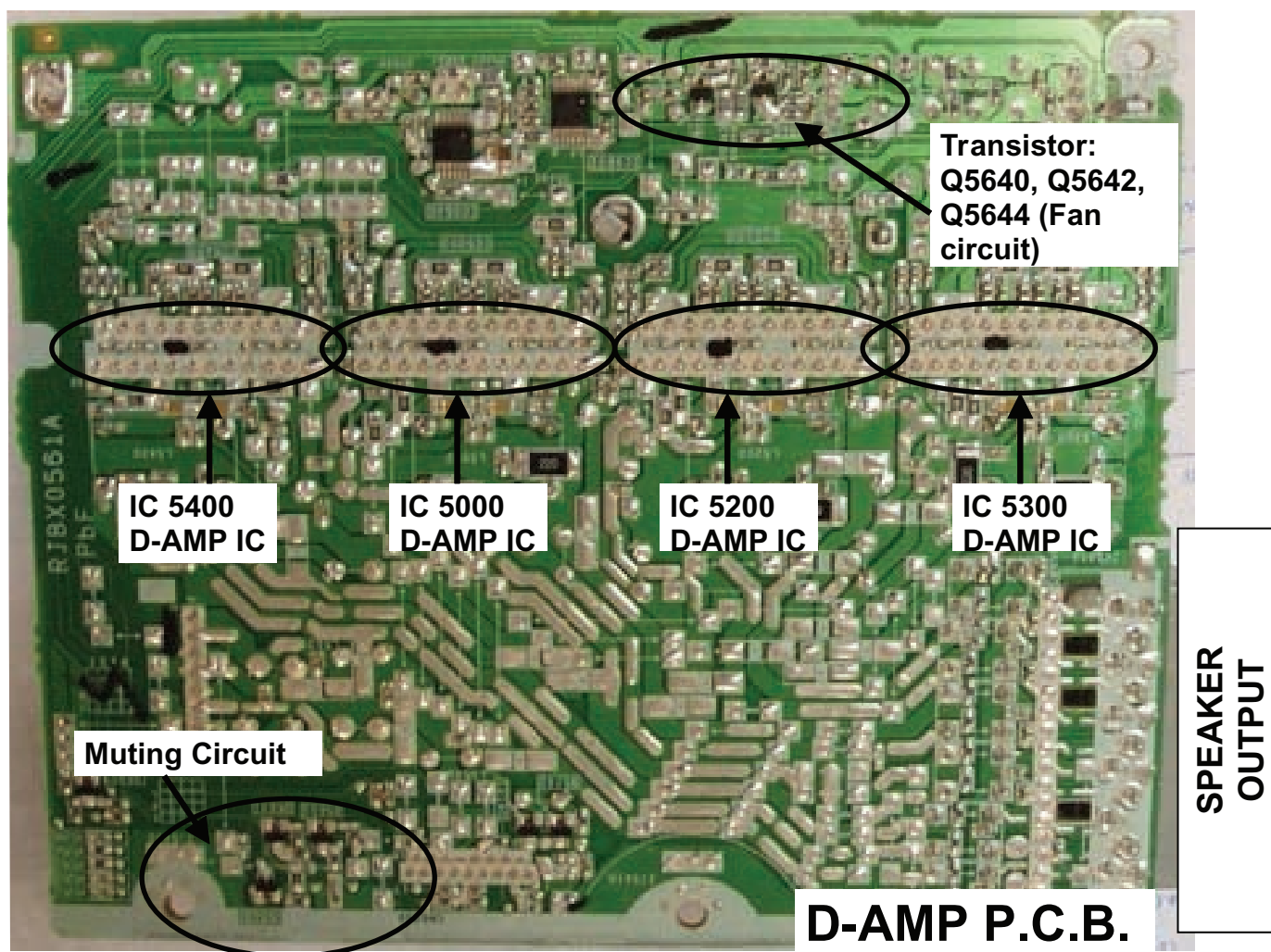


Fig. 2 D-Amp P.C.B

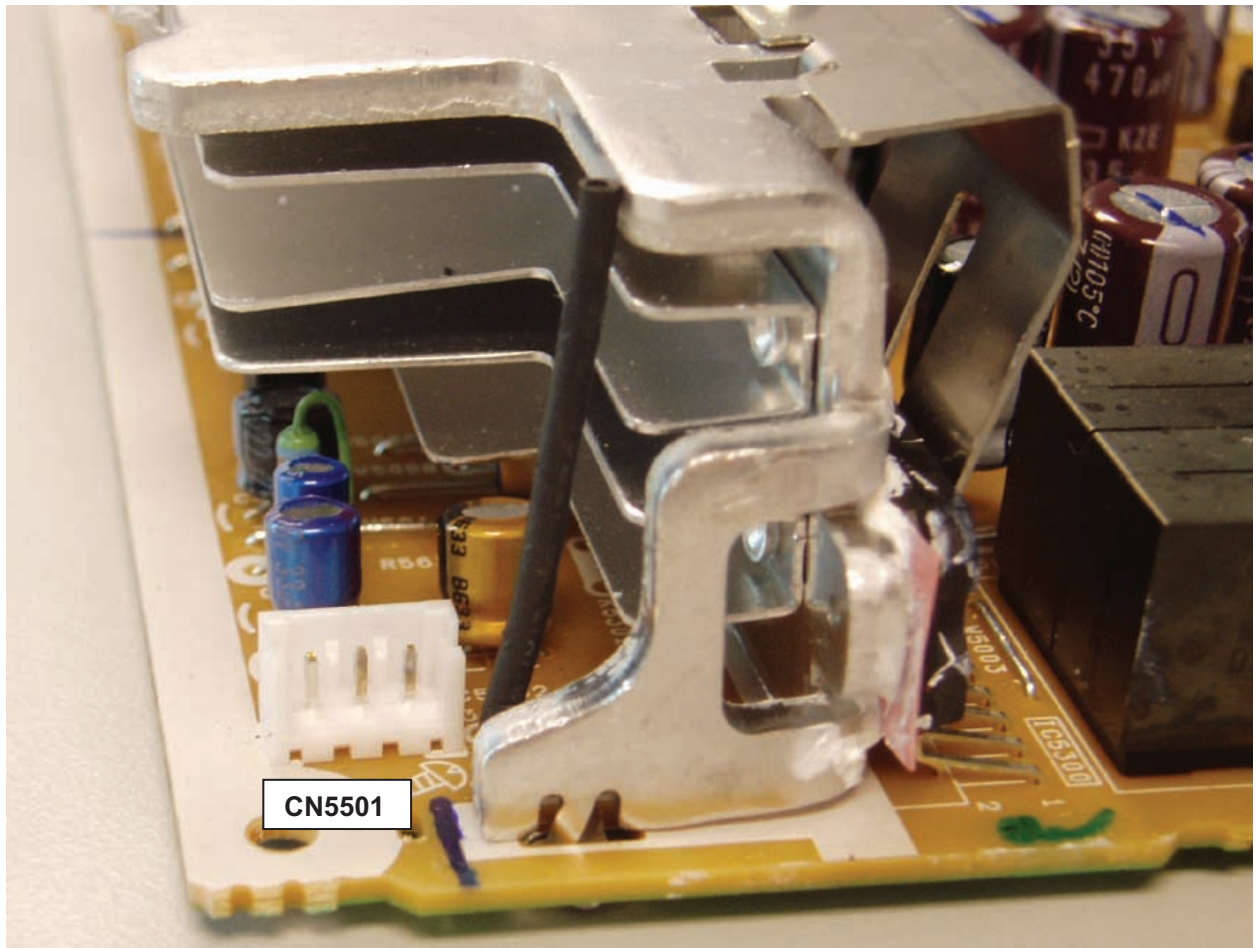


Fig. 3 Fan Connector

21.1.3.3. Power Supply P.C.B.

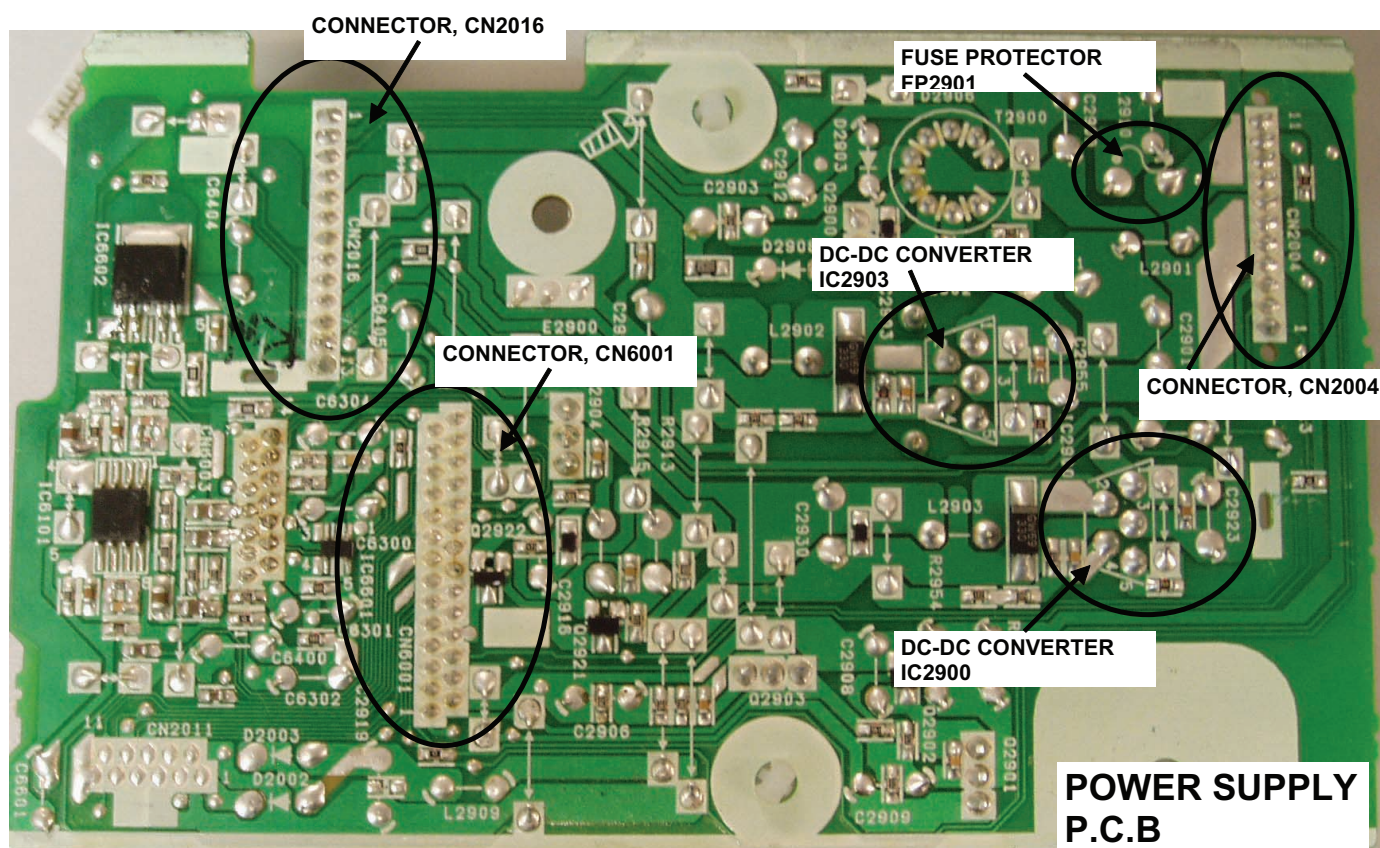


Fig. 4 Power Supply P.C.B.

21.1.3.4. D-Amp IC Configuration

		PT860GC/GCS/GCT/GS
IC5300	Pin (10)	Sub-Woofer +
	Pin (14)	Sub-Woofer -
IC5200	Pin (10)	Center +
	Pin (14)	Center -
IC5000	Pin (10)	Front Right
	Pin (14)	Front Left
IC5400	Pin (10)	Surround Right
	Pin (14)	Surround Left

Table 1

21.2. Basic Troubleshooting Guide for Traverse Unit (DVD Module P.C.B.)

Problems	Checking Points	Checking components
1) Distorted picture or abnormal sound is heard during the initialization	a) Check SDRAM address, data bus, CLK and other control signals waveform	IC8051
	b) Check video signals (Y,C)	LB8301, R8321, R8323, LB8302, R8325, R8327
	c) Check audio DAC circuitry * Compare the above with OK condition DVD Module P.C.B	IC8421 (Pin 9 to 11 & 17 to 22) LB8425, LB8426, LB8427, LB8428, LB8429, LB8431 *Check for solder short and/or component missing/damaged
2) No TOC/Long TOC	a) Check motor driver circuitry (+5V)	IC8251 Pin 8, 21
	b) Check laser drive circuitry (Voltages & current)	Q8551, Q8552 (For DVD), Q8561, Q8562 (For CD)
	c) Check LSI IC connection to motor drive circuitry * Compare the above with OK condition DVD Module P.C.B.	IC8001 Pin 66, 67 IC8251 Pin 15 to 16 * Check for solder short and/or component missing/damaged
3) Disc not spinning 4) Traverse not moving 5) Traverse and spindle abnormal movement	a) Check connection from DVD Module to Traverse unit	FP8251
	b) Check motor driver circuitry on the voltages and control signals * Compare the above with OK condition DVD Module P.C.B.	IC8251 * Check for solder short and/or component damaged
6) Cannot read the disc but spindle motor is spinning - Cannot read CD/DVD	a) Check laser drive circuitry (voltages and current) - Check CD Laser Drive - Check DVD Laser Drive * Check voltages and LD current and compare with OK condition DVD Module P.C.B.	Q8551, Q8552, LB8551 (For DVD Laser Drive current) Q8561, Q8562, LB8561 (For CD Laser Drive current)
7) Block Noise during play	a) Check SDRAM address and data bus signal	IC8051
8) Jitter out of specification	a) Check LD current b) Check OPU (Change to other unit and confirmed operating condition)	OPU Unit (Traverse unit), FPC connection (FP8531 & FP8251)

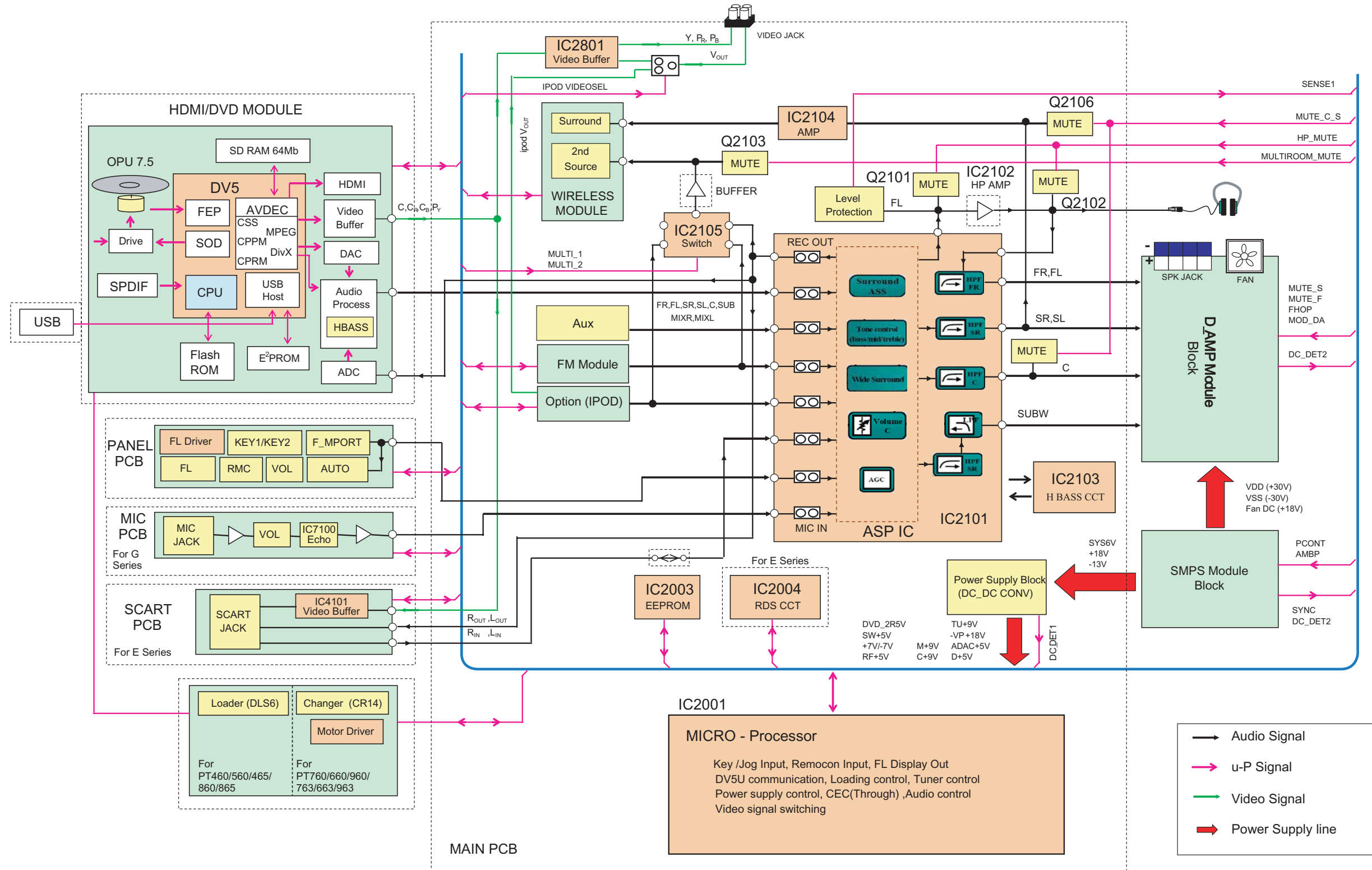
21.3. Basic Troubleshooting Guide for HDMI AV Output

Problems	Checking Points	Checking components
1) TV does not have any display. Set FL display shows U702/U703	1) Check setting of the set in Setup Menu whether the HDMI Video output is turned ON	* This year HDMI always ON. No need check Setup Menu. If no resolution selection GUI, then only check SETUP.
	2) +5V Supply to the TV	IC3952 (Pin 4)
	3) HDMI Connector Solderability condition	P3901
	4) HDMI Output TDMS signal lines (IC3901) - Data (TX0P/M => 14, 16) - Data (TX1P/M => 18, 20) - Data (TX2P/M => Pin 22, 24) - Clock (TXCP/TXCM => Pin 10, 12)	L3905 L3904 L3903 L3906
	5) HDMI Transmitter communication lines to TV - Data, SDA (Pin 120, IC3901) - Clock, SCL (Pin 121, IC3901)	LB3905, R3905, Q3902, R3904 LB3904, R3907, Q3903, R3906
	6) HDMI Transmitter communication from LSI (IC8001) (I2C_SCL/I2C_SDA signals)	RX3901
	7) Local Port Slave Address setting resistor at Pin 99 of HDMI Transmitter LSI IC (IC3901) for LPSA signal	R3921
	8) HDMI Transmitter LSI IC (IC3901) +3.3V Supply	LB3901, LB3902, IC3901 (Pin 9, 13, 17, 21, 25, 124)
	9) HDMI Transmitter LSI IC (IC3901) +1.2V Supply	IC3901 (Pin 5, 26, 42, 47, 55, 75, 85, 102, 109, 116, 123), LB3908, IC8151 (Pin 4), LB8001, IC8001 (Pin 20, 44, 83, 158, 187, 211)
	10) HDMI Up-Con +3.3V Supply	LB3901
	11) HDMI Pixel Clock Output from Up-Con to HDMI Transmitter (VCLK)	LB8901
	12) Up-Con IC I2C Data and Clock Line	RX3901

Problems	Checking Points	Checking components
1) TV does not have any display. Set FL display shows U702/U703	13) Hot-Plug Signal	LB3906, R3902, R3903, Q3901, D3901
	14) TDMS Output swing amplitude control resistor	R3901
	15) Host Interface External Input Clock from LSI (IC8001) to Up-Con IC (IC3901) - OSC27M	LB8702
	16) Video Data Lines from LSI (IC8001) to Up-Con (IC3901)	RX3707, RX3708, IC3901 (Pin 92 to 95, Pin 87 to 90)
2) When switching the video output mode from 480P to 720p/1080i, TV display becomes blank	1) Supply for Up-Con (IC3901) - Pin 9,124 2) GND for Up-Con - Pin 7,125 3) Check for capacitor short to GND	LB3902 C3902, C3928, C3925
3) Color Problem. TV Screen is White/Blue/Purple	1) Check digital video data line from LSI(IC8001) to Up-Converter (IC3901), VOUT0-VOUT7.	RX3707, RX3708
4) HDMI got no audio output	1) Audio data lines 2) Check setting of the set in Setup Menu whether the HDMI Audio output is turned On	R8402, RX8402 * Check for solder short and/or component missing/damaged as well as signal condition.

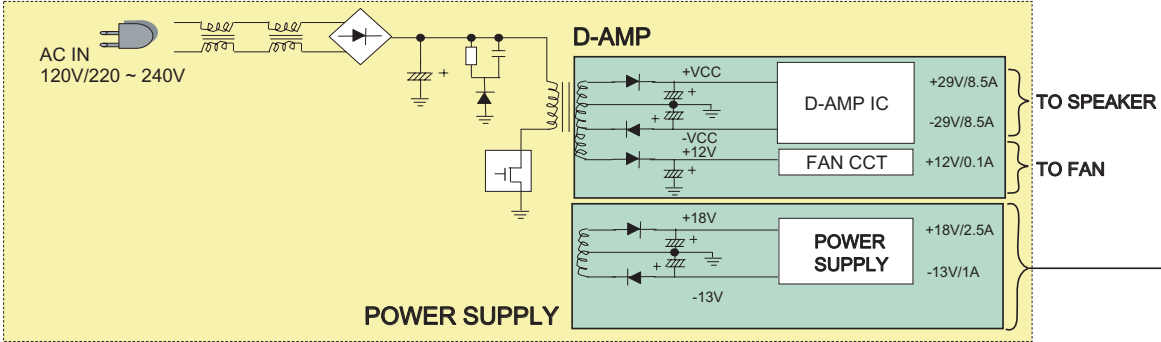
22 Overall Simplified Block for PT860

Overall Block Diagram

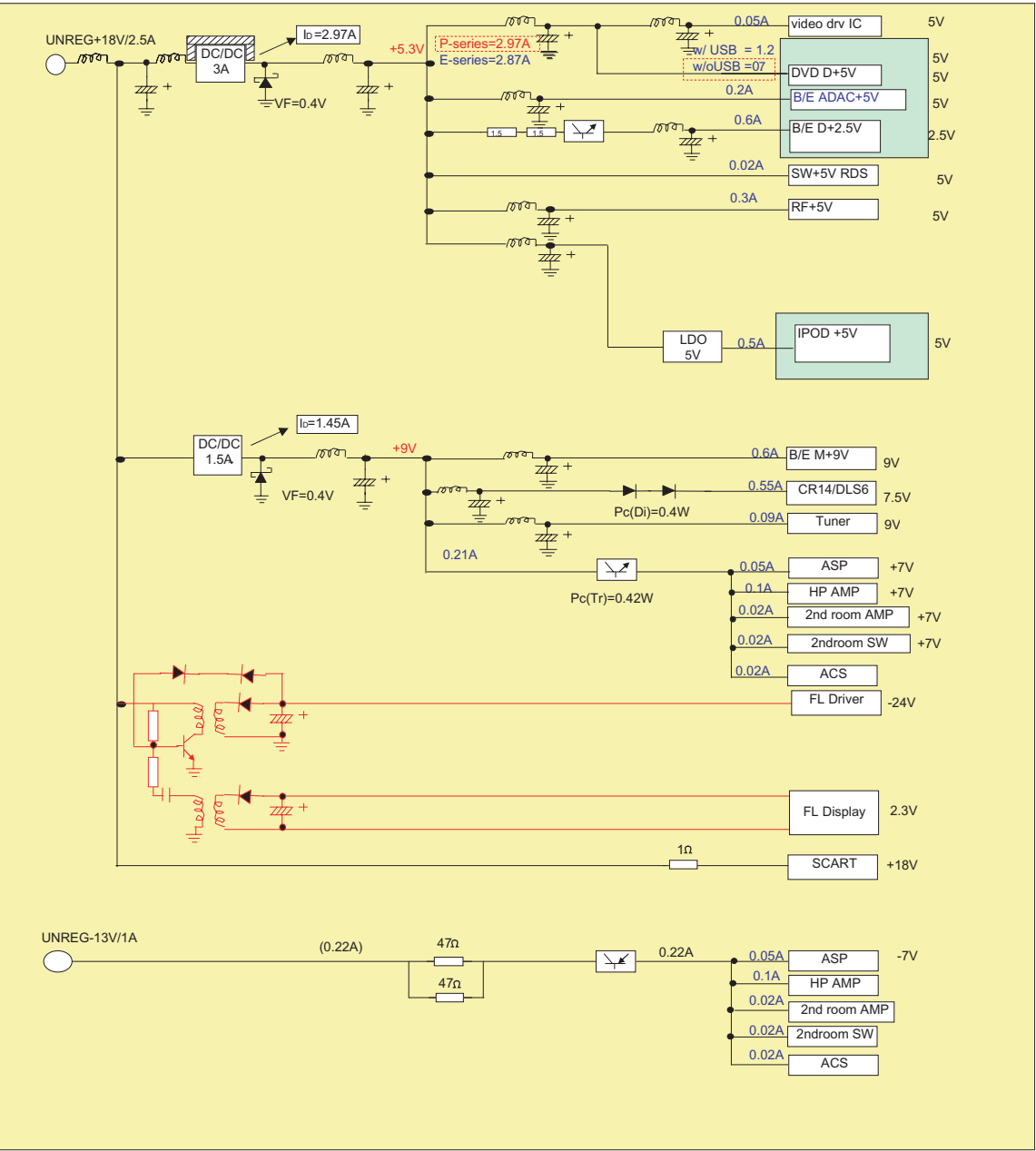


22.1. SMPS Module & Power Supply Block

SMPS MODULE BLOCK



POWER SUPPLY BLOCK



23 Terminal Function of ICs

23.1. IC2001 (RFKWPT460E): IC System Control

Pin No.	Terminal Name	I/O	Function
1	IPHONE_CPREADY	I	IPhone Detect Control Signal
2	TRAY_CW_H	O	Tray Control Signal 1
3	TRAY_CCW_L	O	Tray Control Signal 2
4	OPEN_SW / UNLOAD_SW	I	Open/Unload Signal
5	FX_DO	-	Wireless Data Output Signal
6	MIC_LVL1	O	MIC Volume Level Control Signal 1
7	FX_DI	-	Wireless Data Input Signal
8	BYTE	I	VSS (GND)
9	CNVSS	I	VSS (GND)
10	MIC_SW	-	Mic Detect Signal
11	RDS_EN	I	RDS Enable (H: Enable L: Disable)
12	RESET	I	System Reset Input
13	XOUT	-	Main Clock Output (10MHz)
14	VSS	-	GND (0V)
15	XIN	-	Main Clock Input (10MHz)
16	VCC	-	Power Supply (+5V)
17	NMI	I	Connect to VCC External Interrupt I/P
18	RMT	I	Remote Control Input
19	SYNC	I	AC Failure Detect Input
20	IPHONE_RST	O	IPhone Reset Output
21	IPOD_EN	O	IPhone Enable Output
22	SCARTTV	I	Scart TV Selector Enable Signal Input
23	EDA	O	Data Signal for EEPROM IC
24	ECK	O	Clock Signal for EEPROM IC
25	ECS	O	Latch Signal for EEPROM IC
26	INNER_SW	O	Control Signal
27	MIC_LVL2	-	Mic Volume Level Control Signal 2
28	DVD_CLK	O	Clock Signal for DVD
29	DVD_STAT	I	Status Signal for DVD
30	DVD_CMD	O	Command Signal for DVD
31	UART_TX	O	UART Transmitter Output Signal (For Software)
32	UART_RX	I	UART Receiver Input Signal (For Software)
33	FX_CLK	O	Wireless Output Clock (For Software)
34	FX_DET1	I	Wireless Detect Signal
35	VMUTE2	O	Video Muting Control Signal
36	MIC_VOLUP	I	MIC Volume Up Control Signal
37	TUN_DO	O	Tuner Stereo Detect Signal
38	TUN_DI	O	Tuner I2C Data Signal
39	TUN_CLK	O	Tuner I2C Clock Output Signal
40	PCONT	O	System Power Control
41	EPM	I	For Flash Programming
42	DVD_MUTE	I	DVD Muting Control Signal
43	DC_DET1	I	DC Detect Signal 1
44	SCART_MUTE	O	Scart Muting Control Signal (Line-Out)
45	ACS_EN	I	Wide Sound Surround Enable Signal
46	VMUTE	O	Video Muting Control Signal
47	ASP_CLK	O	Clock Signal for ASP IC
48	ASP_DAT	O	Data Signal for ASP IC
49	TUN_SD	I	Tuner Station Detect Signal
50	MIC_VOLDOWN	O	Mic Volume Down Control Signal
51	WIDE1	I	No Connection

Pin No.	Terminal Name	I/O	Function
52	HBASS_SW	O	Harmonic Bass Control Signal
53	AMBP	O	AM Beatproof
54	MULTI_1	O	No Connection
55	MULTI_2	O	No Connection
56	MIC_EN	I	MIC Enable Input Signal
57	IPOD_VIDEO_SEL	O	IPod Video Selector Signal
58	MULTIROOM_MUTE	-	No Connection
59	ECHO_MUTE	O	Echo Muting Control Signal
60	IPOD_ACC	I	IPod Power Supply Control Signal
61	OPT_EN	I	Optical Enable Input Signal
62	VCC	-	Voltage Supply (+5V)
63	DC_DET2	I	DC Detect Signal 2
64	VSS	-	GND (0V)
65	YC_H	O	No Connection
66	RDS_DAT	O	No Connection
67	HOP_DA	O	Frequency Hopping for Digital-Amp
68	MUTE_C_S	O	Muting Control for Center & Surround
69	MUTE_F_SW	O	Muting Control for Front & Subwoofer
70	RGB_H	O	Video Output Muting Signal
71	MOD_DA	O	Mode Control for D-Amp
72	VCOMP_MUTE	-	No Connection
73	CEC_OUT	O	HDMI/CEC Output Control
74	ACS_MUTE	O	ACS Muting Control
75	CEC_IN	I	HDMI/CEC Input Control
76	JOG_A	I	Volume Jog Signal A
77	JOG_B	I	Volume Jog Signal B
78	HP_MUTE	O	Headphone Muting Control Signal
79	BATT_PCONT	O	Battery Power Control for IPOD
80	AV_MUTE	O	Power Control Signal for DVD
81	RDS_CLK	I	No Connection
82	IPOD_DET	I	IPod Detect Signal
83	ECHO_LVL1	-	ECHO Level Control 1
84	ECHO_LVL2	-	ECHO Level Control 2
85	FLD_CLK	O	FL Driver Strobe Signal
86	FLD_STB	O	FL Driver Standby Signal
87	FLD_OUT	O	FL Driver Data Out
88	CENTER_POP-UP	O	Control Signal
89	MD3	I	Model Code 3
90	MD2	I	Model Code 2
91	KEY2	I	Key 2 Line Input
92	ACS	-	Auto Calibration Signal
93	SENSE1	I	D-Amp Sense Input Signal 1
94	DES2	I	DVD Region Setting
95	DES1	I	Tuner Region Setting
96	AVSS	-	GND (0V)
97	KEY1	I	Key 1 Line Input
98	VREF	-	Voltage Supply (+5V)
99	AVCC	-	Voltage Supply (+5V)
100	NC	-	No Connection

23.2. IC1701 (MFI341S2095): IC Ipod Video

Pin No.	Terminal Name	I/O	Function
1	VCC	-	Supply Voltage, Positive Terminal
2	XIN	I	32.768 kHz Crystal Oscillator

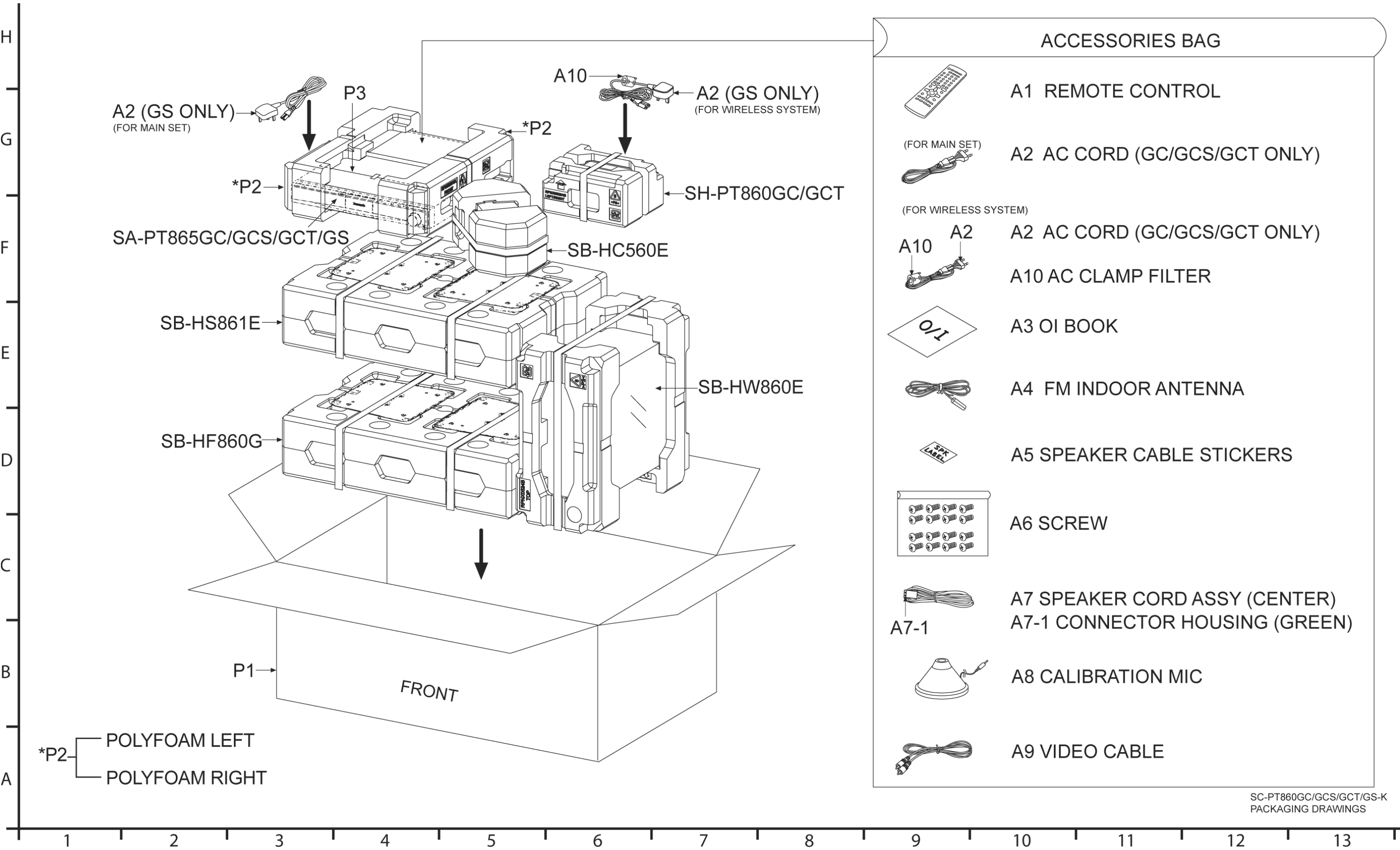
Pin No.	Terminal Name	I/O	Function
3	XOUT	O	32.768 kHz External Clock Source
4	CLK_EN	I	CLOCK_OUT Enable (Active High)
5	NC	-	No Connection
6	NC	-	No Connection
7	I2C_SCL	I/O	I2C Clock
8	I2C_ADDR_0	I	I2C Clock Slave Address Selection
9	I2C_ADDR_1	I	I2C Clock Slave Address Selection
10	I2C_ADDR_2	I	I2C Clock Slave Address Selection
11	CP_READY	O	CP Ready to Receive Next Instruction (Active High)
12	MODE0	I	Operating Voltage Selection
13	MODE1	I	Communication Mode Selection
14	NC	-	No Connection
15	I2C_SDA	I/O	I2C Data
16	MODE2	I	Communication Mode Selection
17	ROSC	I	Connect via 100 k Ω 1% resistor to VCC
18	NC	-	No Connection
19	NC	-	No Connection
20	NC	-	No Connection
21	NC	-	No Connection
22	NC	-	No Connection
23	NC	-	No Connection
24	NC	-	No Connection
25	NC	-	No Connection
26	NC	-	No Connection
27	NC	-	No Connection
28	NC	-	No Connection
29	NC	-	No Connection
30	NC	-	No Connection
31	SYS_CLK_OUT	-	No Connection
32	NC	-	No Connection
33	NC	-	No Connection
34	NC	-	No Connection
35	NC	-	No Connection
36	NC	-	No Connection
37	NC	-	No Connection
38	nRESET	I	CP Reset (Active Low)
39	VSS	-	Supply Voltage, Negative Terminal
40	VCC	-	Supply Voltage, Positive Terminal

Pin No.	Terminal Name	I/O	Function
14	P18	O	Segment Output 18
15	P17	O	Segment Output 17
16	P16	O	Segment Output 16
17	P15	O	Segment Output 15
18	P14	O	Segment Output 14
19	P13	O	Segment Output 13
20	P12	O	Segment Output 12
21	P11	O	Segment Output 11
22	P10	O	Segment Output 10
23	P9	O	Segment Output 9
24	P8	O	Segment Output 8
25	P7	O	Segment Output 7
26	P6	O	Segment Output 6
27	P5	O	Segment Output 5
28	P4	O	Segment Output 4
29	P3	O	Segment Output 3
30	-VP	-	Voltage Supply
31	P2	O	Segment Output 2
32	P1	O	Segment Output 1
33	G1	O	Grid Segment Output 1
34	G2	O	Grid Segment Output 2
35	G3	O	Grid Segment Output 3
36	G4	O	Grid Segment Output 4
37	G5	O	Grid Segment Output 5
38	G6	O	Grid Segment Output 6
39	G7	O	Grid Segment Output 7
40	G8	O	Grid Segment Output 8
41	G9	O	Grid Segment Output 9
42	G10	O	Grid Segment Output 10
43	VCC	-	Voltage Supply (+5V)
44	GND	-	GND

23.3. IC6901(C0HBB0000057): IC FL Driver

Pin No.	Terminal Name	I/O	Function
1	LED2	O	Led Drive Output
2	LED3	-	Led Drive Output
3	LED4	-	Led Drive Output
4	LED5	-	Led Drive Output
5	OSC	I	Oscillator Input
6	DOUT	-	Data Output
7	DIN	I	Data Input
8	CLK	I	Clock Input
9	STB	I	Serial Interface Strobe
10	K1	-	Key Data Input 1 (No Connection)
11	K2	-	Key Data Input 2 (No Connection)
12	GND	-	GND
13	VCC	-	Power Supply (+5V)

24.2. Packaging



25 Replacement Parts List

Notes:

- Important safety notice:
Components identified by $\triangle$ mark have special characteristics important for safety purpose.
Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.
When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.
- Warning: This product uses a laser diode. Refer to caution statements.
- Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM), 1M=1,000K (OHM).
- The parenthesized indications in the Remarks columns specify the model names and areas. (Refer to the cover page)
- The marking (RTL) indicates the retention time is limited for this item. After the discontinuation of this assembly in production, it will no longer be available.
- Parts mentioned [M] are supplied from PAVCSG.
- Parts mentioned [SPG] are supplied from PAVC.
- Reference for O/I book languages are as follows:

Ar: Arabic	Du: Dutch	It: Italian	Sp: Spanish
Cf: Canadian French	En: English	Ko: Korean	Sw: Swedish
Cz: Czech	Fr: French	Po: Polish	Co: Traditional Chinese
Da: Danish	Ge: German	Ru: Russian	Cn: Simplified Chinese
Pe: Persian	Ur: Ukrainian	Pr: Portuguese	

25.1. Component Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET AND CHASSIS	
1	L6FAJCCH0007	FAN MOTOR	[M]
3	REEX0814	50P FFC CABLE (MN-DVD)	[M]
4	REEX0815	17P FFC CABLE (MN-DAMP)	[M]
5	REEX0817	7P FFC CABLE (OPU-DVD)	[M]
6	REEX0820	17P FFC CABLE (PAN-MN)	[M]
7	REEX0821	14P FFC CABLE (IPOD-PWRSUPP)	[M]
8	REEX0822	28P FFC CABLE (PWRSUPP-MN)	[M]
9	REEX0823	4P FFC WIRE (PWRBUT-MN)	[M]
10	RGUX0744-K	SUBWOOFER BUTTON	[M]
11	REXX0636-J	USB WIRE	[M]
12	REXX0640-J	BLACK WIRE (AC INLET - SMPS)	[M] △
13	REXX0641-J	RED WIRE (AC INLET - SMPS)	[M] △
14	REXX0651	8P WIRE (SMPS-DAMP)	[M]
15	RGB0164-S	PANASONIC BADGE	[M]
16	RGKX0443A-K	DVD LID	[M]
17	RGKX0489A-S1	FRONT ORNAMENT	[M]
18	VHD1224-1	SCREW	[M]
19	RYPX0258-K1	CRADLE UNIT	[M]
20	RGLX0160-Q	LIGHTING CHIP	[M]
21	RGPX0334M-K3	FRONT PANEL	[M]
22	RGPX0335A-K2	CRADLE CHASSIS	[M]
23	RGRX0067E-AA	REAR PANEL	[M] GC/GS △
23	RGRX0067E-CA	REAR PANEL	[M] GCT △
23	RGRX0067EB1A	REAR PANEL	[M] GCS △
24	RGUX0741-K1	OPEN/CLOSE BUTTON	[M]
25	RGUX0742-K	POWER BUTTON	[M]
26	RXXX0085-1J	HEAT SINK UNIT A	[M]
27	RGUX0745-K	OPERATION BUTTON	[M]
28	RGWX0104-K	VOLUME KNOB	[M]
29	RHD26046	SCREW	[M]
30	RHD30007-K2J	SCREW	[M]
31	RHD30090-1	SCREW	[M]
32	RHD30111-3	SCREW	[M]
33	RHD30119-S	SCREW	[M]
34	ENG06841QRF	TUNER PACK	[M]
35	RHDX03001	SCREW	[M]
36	RKA0059-K	LEG FELT	[M]
37	RKWX0279A-Q	FL WINDOW	[M]
38	RMAX0118-1	PCB BRACKET	[M]
39	RMAX0129-4	PANEL ANGLE	[M]
40	RMAX0130	DVD LID HOLDER	[M]
41	RMAX0131	MAIN PCB BRACKET B	[M]
42	RMAX0132	MECHA CHASSIS	[M]
43	RMBX0075-1	DOOR SPRING	[M]
44	RMC0465	TR SPRING	[M]
45	RM CX0042	EARTH SPRING	[M]
46	RM CX0055	SPRING PLATE	[M]
47	RM CX0057	SPRING	[M]
48	RM GX0050	CRADLE RUBBER	[M]
49	RM NX0207	SMPS PCB INSULATOR (TOP)	[M]
50	RXQX0077-1	FL SHIELD PLATE UNIT	[M]
51	RM NX0254	USB BRACKET	[M]
52	RM NX0260	FL HOLDER	[M]
53	RM NX0282A	AC-IN PC SHEET A	[M]
54	RM NX0282B	AC-IN PC SHEET B	[M]
55	RXXX0104	HEATSINK UNIT B	[M]
56	RXQX0041	CUSHION ASS'Y	[M]
57	RM NX0286	HDMI PC SHEET	[M]
58	RM QX0233-K	FAN COVER	[M]
59	RM R0502A-W	PCB SUPPORT	[M]
60	RXXX0105	HEATSINK UNIT C	[M]
61	RM VX0117-K	CONNECTOR COVER	[M]
62	RM X0302	DAMPER RUBBER	[M]
63	RM YX0191	HEATSINK EXTRUSSION	[M]
64	RM ZX0038	IC INSULATOR	[M]
65	RSCX0188	AC-IN SHIELD PLATE	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
66	RKM X0141-K1	TOP CABINET	[M] △
67	RSCX0191	HDMI SHIELD PLATE	[M]
68	RM KX0144-2	BOTTOM CHASSIS	[M]
69	XSN3+4FJ	SCREW	[M]
70	XTB3+10JFJ	SCREW	[M]
71	XTB3+8JFJ	SCREW	[M]
72	XTW3+8TFJ	SCREW	[M]
73	REXX0653-J	13P WIRE (MAIN-RELAY)	[M]
74	REXX0639-J	12P WIRE (RELAY-SMPS)	[M]
75	REEX0811-1	14P FFC CABLE (WIRELESSMAIN)	[M]
76	RM KX0127-K1	TRANSMITTER CHASSIS	[M]
78	REEX0819	9P FFC CABLE (MAIN-ASS)	[M]
79	RGUX0747-K	MIC BUTTON	[M]
80	REXX0652	12P WIRE (MAIN-MIC PCB)	[M]
81	REXX0643-J	VOLTAGE SELECTOR WIRE 2 (BLUE)	[M] △
82	REXX0642-J	VOLTAGE SELECTOR WIRE 1 (WHITE)	[M] △
		PACKING MATERIALS	
P1	RPGX1851	PACKING CASE	[M] GC
P1	RPGX1852	PACKING CASE	[M] GS
P1	RPGX1853	PACKING CASE	[M] GCS/GCT
P1	RPGX1854	PACKING CASE	[M] GCT
P2	RPNX0514-1	POLYFOAM	[M]
P3	RPF X0058-1J	MIRAMAT BAG	[M]
		ACCESSORIES	
A1	N2QAYB000209	REMOTE CONTROL	[M]
A1-1	RKK-HTR0051K	R/C BATTERY COVER	[M]
A2	K2CP2YY00001	AC CORD	[M] GCT △
A2	K2CQ2CA00007	AC CORD	[M] GC/GCS/GS △
A2	K2CT3CA00004	AC CORD	[M] GS △
A3	RQTX0099-1B	O/I BOOK (En)	[M]
A3	RQTX0103-1G	O/I BOOK (Ar/Pr)	[M] GC/GS
A3	RQTX0104-K	O/I BOOK (Cn)	[M] GCS/GCT
A4	RSA0007-M	FM INDOOR ANTENNA	[M]
A5	RQCA0968	SPEAKER LABEL	[M]
A6	XTN5+10FFJK	SCREW	[M]
A7	REEX0858	SPEAKER CORD (CTR)	[M]
A7-1	RFKVBPT760-G	CONNECTOR HOUSING (GREEN)	[M]
A8	L0CBAB000125	CALIBRATION MICRO-PHONE	[M]
A9	K2KA2BA00001	VIDEO CABLE	[M]
A10	J0KG00000037	AC CLAMP FILTER	[M] △
		PRINTED CIRCUIT BOARDS	
PCB1	REPX0620A	DVD MODULE P.C.B.	[M] (RTL) GC/GS
	REPX0620C	DVD MODULE P.C.B.	[M] (RTL) GCS/GCT
PCB2	REPX0621E	D-AMP P.C.B.	[M] (RTL)
PCB3	REPX0622D	SMPS INLET P.C.B.	[M] (RTL) △
PCB4	REPX0622D	AC INLET P.C.B	[M] (RTL) △
PCB5	REPX0628F	MAIN P.C.B	[M] (RTL) GC/GS
	REPX0628G	MAIN P.C.B	[M] (RTL) GCS/GCT
PCB6	REPX0628F	POWER SUPPLY P.C.B	[M] (RTL) GC/GS

Ref. No.	Part No.	Part Name & Description	Remarks
	REPX0628G	POWER SUPPLY P.C.B	[M] (RTL) GCS/GCT
PCB7	REPX0655H	PANEL P.C.B	[M] (RTL)
PCB8	REPX0655H	POWER BUTTON P.C.B	[M] (RTL)
PCB9	REPX0655H	USB/SETUP MIC P.C.B	[M] (RTL)
PCB10	REPX0655H	MIC P.C.B	[M] (RTL)
PCB11	REPX0631A	I-POD CRADLE P.C.B	[M] (RTL)
PCB12	REPX0657B	CO-PROCESSOR P.C.B	[M] (RTL)
PCB13	REPX0622D	VOLTAGE SELECTOR P.C.B	[M] (RTL) △
PCB14	REPX0628F	WIRELESS ADAPTER P.C.B	[M] (RTL) GC/GS
	REPX0628G	WIRELESS ADAPTER P.C.B	[M] (RTL) GCS/GCT
		INTERGRATED CIRCUITS	
IC1701	MFI341S2095	IC IPOD VIDEO	[M]
IC1702	C0CBCBC00140	IC +3.3V REGULATOR	[M]
IC2001	RFKWP7460E	IC MICRO-PROCESSOR	[M]
IC2002	C0CBCBC00140	IC REGULATOR	[M]
IC2101	C1AB00002735	IC AUDIO SIGNAL PROCESSOR	[M]
IC2102	C0AABB000125	IC HEADPHONE AMP	[M]
IC2103	C0ABCB000088	IC OP-AMP	[M]
IC2501	C0ABBB000230	IC CENTER POP-UP AMP	[M]
IC2801	C9ZB00000461	IC VIDEO BUFFER	[M]
IC2900	C0DAAYY00042	IC SWITCHING REGULATOR	[M]
IC2903	C0DAAMH00012	IC SWITCHING REGULATOR	[M]
IC3901	MN864702A	IC HDMI TRANSMITTER	[M]
IC3952	C0CBCDC00063	IC TERMINAL VOLTAGE REGULATOR	[M]
IC5000	C1BA00000487	IC AUDIO DIGITAL POWER AMP	[M]
IC5200	C1BA00000487	IC AUDIO DIGITAL POWER AMP	[M]
IC5300	C1BA00000487	IC AUDIO DIGITAL POWER AMP	[M]
IC5400	C1BA00000487	IC AUDIO DIGITAL POWER AMP	[M]
IC5500	C0JBAB0000902	IC INVERTER GATE	[M]
IC5501	C0JBAF000716	IC D-TYPE FLIP-FLOP	[M]
IC5701	C5HACY000003	IC SWITCHING REGULATOR	[M]
IC5780	C0ABBA000168	IC OP-AMP	[M]
IC5799	MIP4110MSSCF	IC SWITCHING REGULATOR	[M]
IC5801	C0DABFC00002	IC SHUNT REGULATOR	[M]
IC5899	C0DAEMZ00001	IC SHUNT REGULATOR	[M]
IC6101	C0ABBB000230	IC IPOD DIFFERENTIAL AMP	[M]
IC6531	C0ABBB000230	IC OP-AMP	[M]
IC6601	C0ABAA000114	IC ISOLATION AMP	[M]
IC6602	C0CBCDG00003	IC +5V REGULATOR	[M]
IC6901	C0HBB0000057	IC FL DRIVER	[M]
IC7000	C0ABBB000230	IC MIC AMP	[M]
IC7100	C1AB00002773	IC ECHO PROCESSOR	[M]
IC8001	MN2DS0018MP	IC DV5.0 LSI	[M]
IC8051	C3ABPY000011	IC 64M SDRAM	[M]
IC8111	C0DBZYY00018	IC +3.3V DC-DC CONVERTER	[M]
IC8151	C0DBEHG00006	IC +1.2V REGULATOR	[M]
IC8251	C0GBG0000048	IC MOTOR DRIVE	[M]
IC8421	C0FBBK000044	IC AUDIO DAC	[M]
IC8422	C0FBAK000026	IC AUDIO DAC	[M]
IC8601	C0EBA0000039	IC RESET	[M]
IC8606	C0EBE0000456	IC RESET	[M]
IC8611	C3EBGC000056	IC EEPROM	[M]
IC8651	RFKWMH32B323	IC FLASH ROM	[SPG] GC/GS
IC8651	RFKWMH32D320	IC FLASH ROM	[SPG] GCS/GCT
IC8691	C0JBAA0000502	IC AND GATE	[M]
IC8695	C0JBAA0000502	IC AND GATE	[M]
IC8701	C0JBAB0000907	IC INVERTER GATE	[M]
IC8901	C0JBAA0000501	IC AND GATE	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
IC9001	C0JBAZ001251	IC LATCH	[M]
IC9002	C0JBAZ001251	IC LATCH	[M]
IC9003	C0JBAB0000908	IC INVERTER GATE	[M]
IC9005	C0DBZYY00266	IC REGULATOR	[M]
		TRANSISTORS	
Q1702	B1CFG0000004	TRANSISTOR	[M]
Q1704	B1CFG0000004	TRANSISTOR	[M]
Q2001	B1ADCE000012	TRANSISTOR	[M]
Q2002	B1GBCFJJ0051	TRANSISTOR	[M]
Q2003	B1GBCFLL0037	TRANSISTOR	[M]
Q2004	2SD0601AHL	TRANSISTOR	[M]
Q2005	B1ADCE000012	TRANSISTOR	[M]
Q2006	B1GBCFJN0033	TRANSISTOR	[M]
Q2007	B1GBCFJJ0051	TRANSISTOR	[M]
Q2013	B1GBCFJJ0051	TRANSISTOR	[M]
Q2030	B1GBCFJJ0051	TRANSISTOR	[M]
Q2096	2SD0601AHL	TRANSISTOR	[M]
Q2097	2SD0601AHL	TRANSISTOR	[M]
Q2101	B1HBECA00004	TRANSISTOR	[M]
Q2102	B1HBECA00004	TRANSISTOR	[M]
Q2203	B1GDCFGA0018	TRANSISTOR	[M]
Q2501	B1GBCFLL0037	TRANSISTOR	[M]
Q2502	B1GBCFLL0037	TRANSISTOR	[M]
Q2600	B1ABCF000176	TRANSISTOR	[M]
Q2601	B1GDCFGA0018	TRANSISTOR	[M]
Q2602	B1ABEB000002	TRANSISTOR	[M]
Q2801	B1GBCFJN0033	TRANSISTOR	[M]
Q2900	B1BARK000001	TRANSISTOR	[M]
Q2901	B1BCCG000002	TRANSISTOR	[M]
Q2902	B1ADCF000001	TRANSISTOR	[M]
Q2903	B1BACG000023	TRANSISTOR	[M]
Q2904	B1BACG000023	TRANSISTOR	[M]
Q2909	B1ABCF000176	TRANSISTOR	[M]
Q2919	B1ABCF000176	TRANSISTOR	[M]
Q2921	B1ADCF000001	TRANSISTOR	[M]
Q2922	B1GBCFJJ0051	TRANSISTOR	[M]
Q2923	B1GBCFJJ0051	TRANSISTOR	[M]
Q2924	B1GBCFJJ0051	TRANSISTOR	[M]
Q3901	2SD1819A0L	TRANSISTOR	[M]
Q3902	B1CFHA000002	TRANSISTOR	[M]
Q3903	B1CFHA000002	TRANSISTOR	[M]
Q3941	2SD1819A0L	TRANSISTOR	[M]
Q3942	2SD1819A0L	TRANSISTOR	[M]
Q3943	2SD1819A0L	TRANSISTOR	[M]
Q5101	B1ABCF000176	TRANSISTOR	[M]
Q5102	B1ABCF000176	TRANSISTOR	[M]
Q5601	B1ABCF000176	TRANSISTOR	[M]
Q5602	B1ABCF000176	TRANSISTOR	[M]
Q5603	B1ADCE000012	TRANSISTOR	[M]
Q5604	B1ABCF000176	TRANSISTOR	[M]
Q5640	B1BACD000018	TRANSISTOR	[M]
Q5641	2SC584500L	TRANSISTOR	[M]
Q5642	2SC584500L	TRANSISTOR	[M]
Q5644	2SC584500L	TRANSISTOR	[M]
Q5720	2SC3940ARA	TRANSISTOR	[M]
Q5721	2SA207700L	TRANSISTOR	[M]
Q5722	B1ABCF000176	TRANSISTOR	[M]
Q5750	B1ABCF000176	TRANSISTOR	[M]
Q5802	B1ABCF000176	TRANSISTOR	[M]
Q5803	2SC3940ARA	TRANSISTOR	[M]
Q5860	2SA207700L	TRANSISTOR	[M]
Q5861	B1ABCF000176	TRANSISTOR	[M]
Q5862	B1ABCF000176	TRANSISTOR	[M]
Q5898	B1ABCF000176	TRANSISTOR	[M]
Q6531	B1ABEB000002	TRANSISTOR	[M]
Q6532	B1ADCE000012	TRANSISTOR	[M]
Q6533	B1GDCFGA0018	TRANSISTOR	[M]
Q6534	B1GDCFGA0018	TRANSISTOR	[M]
Q6910	B1GBCFJN0033	TRANSISTOR	[M]
Q7001	B1GBCFJJ0051	TRANSISTOR	[M]
Q7002	B1GBCFJJ0051	TRANSISTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
Q7003	B1GBCFJJ0051	TRANSISTOR	[M]
Q7006	B1ABEB000002	TRANSISTOR	[M]
Q7007	B1GBCFJJ0051	TRANSISTOR	[M]
Q7008	B1GDCFGA0018	TRANSISTOR	[M]
Q7100	B1GBCFJJ0051	TRANSISTOR	[M]
Q7101	B1GBCFJJ0051	TRANSISTOR	[M]
Q7102	B1GBCFJJ0051	TRANSISTOR	[M]
Q7106	B1ABEB000002	TRANSISTOR	[M]
Q7107	B1GBCFJJ0051	TRANSISTOR	[M]
Q7108	B1GDCFGA0018	TRANSISTOR	[M]
Q8321	2SB1218ARL	TRANSISTOR	[M]
Q8325	2SB1218ARL	TRANSISTOR	[M]
Q8331	2SB1218ARL	TRANSISTOR	[M]
Q8335	2SB1218ARL	TRANSISTOR	[M]
Q8341	2SB1218ARL	TRANSISTOR	[M]
Q8551	2SD1819A0L	TRANSISTOR	[M]
Q8552	B1ADGB000008	TRANSISTOR	[M]
Q8561	2SD1819A0L	TRANSISTOR	[M]
Q8562	B1ADGB000008	TRANSISTOR	[M]
Q8563	B1CFHA000002	TRANSISTOR	[M]
Q8564	B1CFHA000002	TRANSISTOR	[M]
Q8565	2SD1819A0L	TRANSISTOR	[M]
QR5801	UNR221400L	TRANSISTOR	[M]
QR5802	B1GDCFGA0018	TRANSISTOR	[M]
QR5810	B1GBCFLL0037	TRANSISTOR	[M]
QR8111	XP0621400L	TRANSISTOR	[M]
QR8420	UNR521100L	TRANSISTOR	[M]
QR9030	B1GDCFJJ0002	TRANSISTOR	[M]
		DIODES	
D2001	B0ACCK000005	DIODE	[M]
D2005	B0ACCK000005	DIODE	[M]
D2007	B0ACCK000005	DIODE	[M]
D2008	B0ACCK000005	DIODE	[M]
D2600	B0ACCK000005	DIODE	[M]
D2601	B0ACCK000005	DIODE	[M]
D2602	B0ACCK000005	DIODE	[M]
D2751	B0ACCK000005	DIODE	[M]
D2752	B0ACCK000005	DIODE	[M]
D2753	B0BC5R000009	DIODE	[M]
D2901	B0BC035A0007	DIODE	[M]
D2903	B0EAMM000057	DIODE	[M]
D2904	B0JCPD000025	DIODE	[M]
D2906	B0JAME000029	DIODE	[M]
D2908	B0EAMM000057	DIODE	[M]
D2909	MAZ82400HL	DIODE	[M]
D2912	B0BC3R400001	DIODE	[M]
D2913	B0JCPD000025	DIODE	[M]
D2915	B0ACCK000005	DIODE	[M]
D2944	B0ACCK000005	DIODE	[M]
D2945	B0ACCK000005	DIODE	[M]
D2946	B0BC7R500001	DIODE	[M]
D2947	B0BC010A0007	DIODE	[M]
D2948	B0BC7R500001	DIODE	[M]
D2949	B0BC5R000009	DIODE	[M]
D2951	B0BC010A0007	DIODE	[M]
D2962	B0BC5R000009	DIODE	[M]
D2963	B0BC5R000009	DIODE	[M]
D3901	MA2J72800L	DIODE	[M]
D5001	B0HCMM000019	DIODE	[M]
D5002	B0HCMM000019	DIODE	[M]
D5003	B0HCMM000019	DIODE	[M]
D5004	B0HCMM000019	DIODE	[M]
D5201	B0HCMM000019	DIODE	[M]
D5202	B0HCMM000019	DIODE	[M]
D5203	B0HCMM000019	DIODE	[M]
D5204	B0HCMM000019	DIODE	[M]
D5301	B0HCMM000019	DIODE	[M]
D5302	B0HCMM000019	DIODE	[M]
D5303	B0HCMM000019	DIODE	[M]
D5304	B0HCMM000019	DIODE	[M]
D5401	B0HCMM000019	DIODE	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
D5402	B0HCMM000019	DIODE	[M]
D5403	B0HCMM000019	DIODE	[M]
D5404	B0HCMM000019	DIODE	[M]
D5501	MA2J11100L	DIODE	[M]
D5502	MA2J11100L	DIODE	[M]
D5503	MAZ80510ML	DIODE	[M]
D5640	MAZ81200ML	DIODE	[M]
D5643	MA2J11100L	DIODE	[M]
D5644	MA2J11100L	DIODE	[M]
D5645	MA2J11100L	DIODE	[M]
D5701	B0FBAR000041	DIODE	[M]
D5702	B0ZAZ0000052	DIODE	[M]
D5721	B0BC010A0007	DIODE	[M]
D5722	B0BC019A0007	DIODE	[M]
D5723	MA2J11100L	DIODE	[M]
D5724	MA2J11100L	DIODE	[M]
D5725	B0BC6R100010	DIODE	[M]
D5726	B0EAKM000117	DIODE	[M]
D5727	MA2J11100L	DIODE	[M]
D5728	MA2J11100L	DIODE	[M]
D5729	B0EAMM000057	DIODE	[M]
D5730	MA2J11100L	DIODE	[M]
D5731	B0EAMM000057	DIODE	[M]
D5732	B0BC035A0007	DIODE	[M]
D5793	B0HAMP000094	DIODE	[M]
D5795	B0BC5R000009	DIODE	[M]
D5796	MA2J11100L	DIODE	[M]
D5797	MA2J72800L	DIODE	[M]
D5798	B0HAMP000094	DIODE	[M]
D5799	B0HAMP000094	DIODE	[M]
D5801	B0HBSM000043	DIODE	[M]
D5802	B0HBSM000043	DIODE	[M]
D5803	B0HFRJ000012	DIODE	[M]
D5804	B0EAMM000057	DIODE	[M]
D5805	B0EAMM000057	DIODE	[M]
D5806	MAZ80750ML	DIODE	[M]
D5807	MA2J11100L	DIODE	[M]
D5809	MA2J11100L	DIODE	[M]
D5896	B0EAMM000057	DIODE	[M]
D6531	B0ACCK000005	DIODE	[M]
D6532	B0ACCK000005	DIODE	[M]
D6533	B0BC5R000009	DIODE	[M]
D6821	B3AAA0000803	DIODE	[M]
D6910	B0BC2R4A0006	DIODE	[M]
D6911	B0BC5R000009	DIODE	[M]
D6913	B3ABA0000397	DIODE	[M]
D7001	B0ACCK000005	DIODE	[M]
D7002	B0ACCK000005	DIODE	[M]
D7003	B0ACCK000005	DIODE	[M]
D7004	B0ACCK000005	DIODE	[M]
D7005	B0ACCK000005	DIODE	[M]
D7006	B0ACCK000005	DIODE	[M]
D7100	B0BC5R000009	DIODE	[M]
D7106	B0ACCK000005	DIODE	[M]
D8211	MA2J11100L	DIODE	[M]
DZ5701	ERZV10V511CS	ZNR	[M] △
		VARISTORS	
VA3901	EZAEG2A50AX	ESD SUPRESSOR	[M]
VA3902	EZAEG2A50AX	ESD SUPRESSOR	[M]
VA3903	EZAEG2A50AX	ESD SUPRESSOR	[M]
VA3904	EZAEG2A50AX	ESD SUPRESSOR	[M]
VA3905	EZAEG2A50AX	ESD SUPRESSOR	[M]
VA3906	EZAEG2A50AX	ESD SUPRESSOR	[M]
VA3907	EZAEG2A50AX	ESD SUPRESSOR	[M]
VA3908	EZAEG2A50AX	ESD SUPRESSOR	[M]
VA3909	EZJZ0V800AA	VARISTOR	[M]
VA3910	EZJZ0V800AA	VARISTOR	[M]
VA3911	EZJZ0V800AA	VARISTOR	[M]
VA3912	EZJZ0V800AA	VARISTOR	[M]
VA3913	EZJZ0V800AA	VARISTOR	[M]
VA6401	EZJZ1V171AA	VARISTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
VA6402	EZJZ1V171AA	VARISTOR	[M]
		VARIABLE RESISTOR	
VR6901	EVEKE2F2524B	VOLUME JOG	[M]
		SWITCHES	
S5701	K0ABCA000007	VOLTAGE SELECTOR	[M] △
S6801	EVQ21405R	SW POWER	[M]
S6807	EVQ21405R	SW OPEN/CLOSE	[M]
S6901	EVQ21405R	SW PLAY/MEMORY	[M]
S6902	EVQ21405R	SW BACKWARD TUNE DOWN	[M]
S6903	EVQ21405R	SW FORWARD TUNE UP	[M]
S6904	EVQ21405R	SW STOP/- TUNE MODE/- FM MODE	[M]
S6905	EVQ21405R	SW BOOST	[M]
S6907	EVQ21405R	SW SELECTOR	[M]
S7001	EVQPC105K	SW	[M]
S7002	EVQPC105K	SW	[M]
PSW1	D4FB1R100009	SW	[M]
		CONNECTORS	
CN1001	MFI514S0117	30P CONNECTOR	[M]
CN1002	K1MN14BA0141	14P CONNECTOR	[M]
CN1701	K1KB06B00038	6P CONNECTOR	[M]
CN2001	K1MY50AA0029	50P CONNECTOR	[M]
CN2003	K1MN14AA0003	14P CONNECTOR	[M]
CN2006	K1MN07BA0004	7P CONNECTOR	[M]
CN2007	K1MN17BA0005	17P FFC CONNECTOR	[M]
CN2008	K1MN28AA0004	28P CONNECTOR	[M]
CN2009	K1MN17AA0004	17P CONNECTOR	[M]
CN2010	K1MN09B00038	9P CONNECTOR	[M]
CN2013	K1MN04B00022	4P FFC CONNECTOR	[M]
CN2014	K1KA06AA0031	6P CONNECTOR	[M]
CN2016	K1KA13AA0194	13P CONNECTOR	[M]
CN5050	K1MN17AA0004	17P CONNECTOR	[M]
CN5500	K1KA08AA0180	8P CONNECTOR	[M]
CN5501	K1KA03AA0301	3P CONNECTOR	[M]
CN5802	K1KA11AA0194	11P CONNECTOR	[M]
CN6001	K1MN28AA0004	28P CONNECTOR	[M]
CN6003	K1MN14AA0003	14P CONNECTOR	[M]
CN6300	K1MN14AA0003	14P CONNECTOR	[M]
CN6301	K1MY22A00003	22P CONNECTOR	[M]
CN6401	K1KA05BA0061	5P CONNECTOR	[M]
CN6402	K1FY104B0011	USB CONNECTOR	[M]
CN6501	K1MN09B00038	9P CONNECTOR	[M]
CN6801	K1MN04AA0003	4P CONNECTOR	[M]
CN6904	K1MN17AA0004	17P CONNECTOR	[M]
CN7000	K1KA12B00122	12P CONNECTOR	[M]
P3901	K1FY119E0002	HDMI CONNECTOR	[M]
FP8101	K1MN50AA0082	50P CONNECTOR	[M]
FP8251	K1MN07AA0076	7P CONNECTOR	[M]
FP8531	K1MY26AA0021	26P CONNECTOR	[M]
FP9001	K1KA05BA0014	5P CONNECTOR	[M]
		COILS & INDUCTORS	
L1001	J0JHC0000107	INDUCTOR	[M]
L1002	J0JHC0000107	INDUCTOR	[M]
L1003	J0JHC0000107	INDUCTOR	[M]
L1004	J0JHC0000107	INDUCTOR	[M]
L1005	J0JHC0000107	INDUCTOR	[M]
L1006	J0JHC0000107	INDUCTOR	[M]
L1007	J0JHC0000107	INDUCTOR	[M]
L1008	J0JHC0000107	INDUCTOR	[M]
L1009	J0JHC0000107	INDUCTOR	[M]
L1010	J0JHC0000107	INDUCTOR	[M]
L1011	J0JHC0000107	INDUCTOR	[M]
L2101	J0JBC0000015	INDUCTOR	[M]
L2201	J0JBC0000015	INDUCTOR	[M]
L2801	G0A101EA0017	CHOKE COIL	[M]
L2802	J0JBC0000015	INDUCTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
L2803	J0JBC0000015	INDUCTOR	[M]
L2804	J0JBC0000015	INDUCTOR	[M]
L2805	J0JBC0000015	INDUCTOR	[M]
L2901	G0A220GA0026	CHOKE COIL	[M]
L2902	G0A101ZA0028	CHOKE COIL	[M]
L2903	G0A101ZA0028	CHOKE COIL	[M]
L2904	G0A101EA0017	CHOKE COIL	[M]
L2905	G0A100HA0023	CHOKE COIL	[M]
L2907	G0A220GA0026	CHOKE COIL	[M]
L2908	G0A220GA0026	CHOKE COIL	[M]
L2910	G0A220GA0026	CHOKE COIL	[M]
L2911	G0A200D00002	CHOKE COIL	[M]
L2912	G0A220GA0026	CHOKE COIL	[M]
L2913	G0A220GA0026	CHOKE COIL	[M]
L2914	G0A220GA0026	CHOKE COIL	[M]
L3903	G1BYYC000026	COMMON MODE EMI FILTER	[M]
L3904	G1BYYC000026	COMMON MODE EMI FILTER	[M]
L3905	G1BYYC000026	COMMON MODE EMI FILTER	[M]
L3906	G1BYYC000026	COMMON MODE EMI FILTER	[M]
L5000	G0A150L00003	CHOKE COIL	[M]
L5001	G0B9R5K00003	LINE FILTER	[M]
L5002	G0B9R5K00003	LINE FILTER	[M]
L5200	G0A150L00003	CHOKE COIL	[M]
L5201	G0B9R5K00003	LINE FILTER	[M]
L5300	G0A150L00003	CHOKE COIL	[M]
L5301	G0B9R5K00003	LINE FILTER	[M]
L5400	G0A150L00003	CHOKE COIL	[M]
L5500	J0JKB0000020	INDUCTOR	[M]
L5501	J0JKB0000020	INDUCTOR	[M]
L5701	ELF15N035AN	LINE FILTER	[M] △
L5702	G0B932H00001	LINE FILTER	[M] △
L5703	ELF22V022A	LINE FILTER	[M] △
L6504	J0JBC0000019	INDUCTOR	[M]
L6505	J0JBC0000019	INDUCTOR	[M]
L6901	J0JBC0000019	INDUCTOR	[M]
L6903	J0JBC0000019	INDUCTOR	[M]
L6910	J0JBC0000019	INDUCTOR	[M]
L6920	J0JBC0000019	INDUCTOR	[M]
L7001	J0JBC0000019	INDUCTOR	[M]
L7002	J0JBC0000030	INDUCTOR	[M]
L7003	J0JBC0000019	INDUCTOR	[M]
L7004	J0JBC0000019	INDUCTOR	[M]
L7101	J0JBC0000019	INDUCTOR	[M]
L7103	J0JBC0000019	INDUCTOR	[M]
L7303	J0JBC0000019	INDUCTOR	[M]
L8001	G1C100M00049	INDUCTOR	[M]
L8201	G1C100M00049	INDUCTOR	[M]
L8301	G1C100M00049	INDUCTOR	[M]
L8302	G1C100M00049	INDUCTOR	[M]
L8303	G1C100M00049	INDUCTOR	[M]
L8330	G1C100M00049	INDUCTOR	[M]
L8501	G1C100M00049	INDUCTOR	[M]
L8550	G1C100M00049	INDUCTOR	[M]
L9004	G1BYYC000026	COMMON MODE EMI FILTER	[M]
LB3901	J0JHC0000045	INDUCTOR	[M]
LB3902	J0JHC0000045	INDUCTOR	[M]
LB3903	J0JCC0000042	INDUCTOR	[M]
LB3904	J0JCC0000042	INDUCTOR	[M]
LB3905	J0JCC0000042	INDUCTOR	[M]
LB3906	J0JCC0000042	INDUCTOR	[M]
LB3907	J0JHC0000045	INDUCTOR	[M]
LB3908	J0JHC0000045	INDUCTOR	[M]
LB6401	J0JHC0000034	INDUCTOR	[M]
LB6402	J0JHC0000034	INDUCTOR	[M]
LB8001	J0JHC0000045	INDUCTOR	[M]
LB8011	J0JHC0000045	INDUCTOR	[M]
LB8401	J0JCC0000308	INDUCTOR	[M]
LB8530	J0JHC0000045	INDUCTOR	[M]
LB8532	J0JDC0000045	INDUCTOR	[M]
LB8551	J0JDC0000045	INDUCTOR	[M]
LB8561	J0JDC0000045	INDUCTOR	[M]
LB8571	J0JDC0000045	INDUCTOR	[M]
LB8701	J0JCC0000308	INDUCTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
LB8702	J0JCC0000308	INDUCTOR	[M]
LB8901	J0JCC0000308	INDUCTOR	[M]
LB9001	J0JCC0000042	INDUCTOR	[M]
		TRANSFORMERS	
T2900	G4D1A0000117	SWITCHING TRANSFORMER	[M] △
T5701	ETS42BN1A6AD	SWITCHING TRANSFORMER	[M] △
T5751	ETS19AB256AG	SWITCHING TRANSFORMER	[M] △
		COMPONENT COMBINATION	
ZA5701	K3GE1ZZ00001	FUSE HOLDER	[M]
ZA5702	K3GE1ZZ00001	FUSE HOLDER	[M]
Z6900	B3RAD0000146	REMOTE CONTROL SENSOR	[M]
		PHOTO COUPLERS	
PC5701	B3PBA0000402	PHOTO COUPLER	[M] △
PC5702	B3PBA0000402	PHOTO COUPLER	[M] △
PC5720	B3PBA0000402	PHOTO COUPLER	[M] △
PC5799	B3PBA0000402	PHOTO COUPLER	[M] △
		OSCILLATORS	
X1701	H0J327200099	CRYSTAL OSCILLATOR	[M]
X2001	H2B100500007	CRYSTAL OSCILLATOR	[M]
X5500	H2A6023A0011	CRYSTAL OSCILLATOR	[M]
X5501	H2A7003A0011	CRYSTAL OSCILLATOR	[M]
X8621	H0J270500085	CRYSTAL OSCILLATOR	[M]
X9004	H1A4805B0027	CRYSTAL OSCILLATOR	[M]
		FL DISPLAY	
FL6801	A2BB00000169	LCD DISPLAY	[M]
		FUSE	
F1	K5D802BNA005	FUSE	[M] △
		FUSE PROTECTOR	
FP2901	K5G401A00008	FUSE PROTECTOR	[M] △
		THERMISTORS	
TH5702	D4CAC8R00002	THERMISTOR	[M] △
TH5860	D4CC11040013	THERMISTOR	[M] △
		JACKS	
JK2001	K2HA6YYG0001	JK AV VIDEO	[M]
JK5001	K4AL08B00001	JK SPEAKER	[M]
JK6502	K2HC1YYB0033	JK SETUP MIC	[M]
JK6901	K2HC103A0031	JK HEADPHONE	[M]
JK7001	K2HC1YYA0018	JK MIC1	[M]
JK7002	K2HC1YYA0018	JK MIC2	[M]
JK8001	B3RAB0000056	JK OPTICAL IN	[M]
P5701	K2AA2B000017	AC INLET	[M] △
		EARTH TERMINALS	
E2900	K4CZ01000027	TERMINAL	[M]
E2901	K4CZ01000027	TERMINAL	[M]
E6300	K4CZ01000027	TERMINAL	[M]
ZJ5400	K4CZ01000027	TERMINAL	[M]
ZJ5410	K4CZ01000027	TERMINAL	[M]
ZJ5701	K4CZ01000027	TERMINAL	[M]
ZJ5702	K4CZ01000027	TERMINAL	[M]
ZJ5801	K4CZ01000027	TERMINAL	[M]
ZJ5803	K4CZ01000027	TERMINAL	[M]
		CHIP JUMPERS	

Ref. No.	Part No.	Part Name & Description	Remarks
K4	ERJ3GEY0R00V	0 1/10W	[M]
K10	ERJ3GEY0R00V	0 1/10W	[M]
K13	ERJ3GEY0R00V	0 1/10W	[M]
K14	ERJ3GEY0R00V	0 1/10W	[M] GC/GS
K15	ERJ3GEY0R00V	0 1/10W	[M] GCS/GCT
K2101	ERJ3GEY0R00V	0 1/10W	[M]
K2201	ERJ3GEY0R00V	0 1/10W	[M]
K2802	ERJ3GEY0R00V	0 1/10W	[M]
K2803	ERJ3GEY0R00V	0 1/10W	[M]
K2804	ERJ3GEY0R00V	0 1/10W	[M]
K3903	ERJ3GEY0R00V	0 1/10W	[M]
K3905	ERJ2GE0R00X	0 1/16W	[M]
K3906	D0GBR00JA008	0 1/16W	[M]
K3907	D0GBR00JA008	0 1/16W	[M]
K5202	ERJ3GEY0R00V	0 1/10W	[M]
K5253	ERJ3GEY0R00V	0 1/10W	[M]
K5302	ERJ3GEY0R00V	0 1/10W	[M]
K5500	ERJ3GEY0R00V	0 1/10W	[M]
K6531	ERJ3GEY0R00V	0 1/10W	[M]
K7100	ERJ3GEY0R00V	0 1/10W	[M]
K8002	ERJ3GEY0R00V	0 1/10W	[M] GCS/GCT
K8007	ERJ3GEY0R00V	0 1/10W	[M] GCS/GCT
K8100	ERJ3GEY0R00V	0 1/10W	[M]
K8251	ERJ3GEY0R00V	0 1/10W	[M]
K8571	D0GBR00JA008	0 1/16W	[M]
LB8257	ERJ3GEY0R00V	0 1/10W	[M]
LB8258	ERJ3GEY0R00V	0 1/10W	[M]
LB8259	ERJ3GEY0R00V	0 1/10W	[M]
LB8260	ERJ3GEY0R00V	0 1/10W	[M]
LB8301	ERJ2GE0R00X	0 1/16W	[M]
LB8302	ERJ2GE0R00X	0 1/16W	[M]
LB8303	ERJ2GE0R00X	0 1/16W	[M]
LB8304	ERJ2GE0R00X	0 1/16W	[M]
LB8305	ERJ2GE0R00X	0 1/16W	[M]
LB8421	ERJ2GE0R00X	0 1/16W	[M]
LB8422	ERJ2GE0R00X	0 1/16W	[M]
LB8423	ERJ2GE0R00X	0 1/16W	[M]
LB8424	ERJ2GE0R00X	0 1/16W	[M]
LB8425	ERJ2GE0R00X	0 1/16W	[M]
LB8426	ERJ2GE0R00X	0 1/16W	[M]
LB8427	ERJ2GE0R00X	0 1/16W	[M]
LB8428	ERJ2GE0R00X	0 1/16W	[M]
LB8429	ERJ2GE0R00X	0 1/16W	[M]
LB8430	ERJ2GE0R00X	0 1/16W	[M]
LB8431	ERJ2GE0R00X	0 1/16W	[M]
LB8432	ERJ2GE0R00X	0 1/16W	[M]
LB8531	ERJ2GE0R00X	0 1/16W	[M]
LB8690	ERJ2GE0R00X	0 1/16W	[M]
LB9002	D0GBR00JA008	0 1/16W	[M]
LB9003	D0GBR00JA008	0 1/16W	[M]
W2028	ERJ6GEY0R00V	0 1/8W	[M]
W2214	ERJ8GEY0R00V	0 1/4W	[M]
W2216	ERJ8GEY0R00V	0 1/4W	[M]
W2706	ERJ6GEY0R00V	0 1/8W	[M]
W2709	ERJ6GEY0R00V	0 1/8W	[M]
W2710	ERJ3GEY0R00V	0 1/10W	[M]
W2711	ERJ6GEY0R00V	0 1/8W	[M]
W2712	ERJ6GEY0R00V	0 1/8W	[M]
W2713	ERJ3GEY0R00V	0 1/10W	[M]
W2714	ERJ3GEY0R00V	0 1/10W	[M]
W2715	ERJ6GEY0R00V	0 1/8W	[M]
W2717	ERJ3GEY0R00V	0 1/10W	[M]
W2718	ERJ6GEY0R00V	0 1/8W	[M]
W2719	ERJ3GEY0R00V	0 1/10W	[M]
W2720	ERJ6GEY0R00V	0 1/8W	[M]
W2721	ERJ6GEY0R00V	0 1/8W	[M]
W2722	ERJ3GEY0R00V	0 1/10W	[M]
W2723	ERJ6GEY0R00V	0 1/8W	[M]
W2724	ERJ3GEY0R00V	0 1/10W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
W2725	ERJ3GEY0R00V	0 1/10W	[M]
W2726	ERJ6GEY0R00V	0 1/8W	[M]
W2727	ERJ6GEY0R00V	0 1/8W	[M]
W2730	ERJ6GEY0R00V	0 1/8W	[M]
W2732	ERJ3GEY0R00V	0 1/10W	[M]
W2733	ERJ6GEY0R00V	0 1/8W	[M]
W2734	ERJ3GEY0R00V	0 1/10W	[M]
W2735	ERJ6GEY0R00V	0 1/8W	[M]
W2737	ERJ6GEY0R00V	0 1/8W	[M]
W2740	ERJ6GEY0R00V	0 1/8W	[M]
W2741	ERJ6GEY0R00V	0 1/8W	[M]
W2742	ERJ3GEY0R00V	0 1/10W	[M]
W2743	ERJ3GEY0R00V	0 1/10W	[M]
W2744	ERJ6GEY0R00V	0 1/8W	[M]
W2747	ERJ6GEY0R00V	0 1/8W	[M]
W2751	ERJ6GEY0R00V	0 1/8W	[M]
W2752	ERJ3GEY0R00V	0 1/10W	[M]
W2753	ERJ6GEY0R00V	0 1/8W	[M]
W2754	ERJ6GEY0R00V	0 1/8W	[M]
W2766	ERJ6GEY0R00V	0 1/8W	[M]
W2767	ERJ3GEY0R00V	0 1/10W	[M]
W2768	ERJ6GEY0R00V	0 1/8W	[M]
W2769	ERJ3GEY0R00V	0 1/10W	[M]
W2770	ERJ6GEY0R00V	0 1/8W	[M]
W2771	ERJ3GEY0R00V	0 1/10W	[M]
W2773	ERJ6GEY0R00V	0 1/8W	[M]
W2774	ERJ3GEY0R00V	0 1/10W	[M]
W2776	ERJ6GEY0R00V	0 1/8W	[M]
W2778	ERJ6GEY0R00V	0 1/8W	[M]
W2779	ERJ6GEY0R00V	0 1/8W	[M]
W2781	ERJ3GEY0R00V	0 1/10W	[M]
W2782	ERJ6GEY0R00V	0 1/8W	[M]
W2783	ERJ3GEY0R00V	0 1/10W	[M]
W2784	ERJ3GEY0R00V	0 1/10W	[M]
W2785	ERJ6GEY0R00V	0 1/8W	[M]
W2786	ERJ6GEY0R00V	0 1/8W	[M]
W2788	ERJ3GEY0R00V	0 1/10W	[M]
W2789	ERJ3GEY0R00V	0 1/10W	[M]
W2790	ERJ6GEY0R00V	0 1/8W	[M]
W2793	ERJ3GEY0R00V	0 1/10W	[M]
W2794	ERJ3GEY0R00V	0 1/10W	[M]
W2795	ERJ3GEY0R00V	0 1/10W	[M]
W2796	ERJ6GEY0R00V	0 1/8W	[M]
W2797	ERJ6GEY0R00V	0 1/8W	[M]
W2798	ERJ6GEY0R00V	0 1/8W	[M]
W2799	ERJ6GEY0R00V	0 1/8W	[M]
W2800	ERJ3GEY0R00V	0 1/10W	[M]
W2801	ERJ3GEY0R00V	0 1/10W	[M]
W2802	ERJ3GEY0R00V	0 1/10W	[M]
W2803	ERJ6GEY0R00V	0 1/8W	[M]
W2804	ERJ6GEY0R00V	0 1/8W	[M]
W2805	ERJ6GEY0R00V	0 1/8W	[M]
W2807	ERJ3GEY0R00V	0 1/10W	[M]
W2808	ERJ3GEY0R00V	0 1/10W	[M]
W2810	ERJ6GEY0R00V	0 1/8W	[M]
W2811	ERJ3GEY0R00V	0 1/10W	[M]
W2812	ERJ6GEY0R00V	0 1/8W	[M]
W2813	ERJ6GEY0R00V	0 1/8W	[M]
W2814	ERJ6GEY0R00V	0 1/8W	[M]
W2815	ERJ6GEY0R00V	0 1/8W	[M]
W2816	ERJ6GEY0R00V	0 1/8W	[M]
W2817	ERJ3GEY0R00V	0 1/10W	[M]
W2818	ERJ3GEY0R00V	0 1/10W	[M]
W2819	ERJ6GEY0R00V	0 1/8W	[M]
W2831	ERJ3GEY0R00V	0 1/10W	[M]
W2832	ERJ3GEY0R00V	0 1/10W	[M]
W2833	ERJ3GEY0R00V	0 1/10W	[M]
W2835	ERJ3GEY0R00V	0 1/10W	[M]
W2837	ERJ6GEY0R00V	0 1/8W	[M]
W2840	ERJ3GEY0R00V	0 1/10W	[M]
W2841	ERJ6GEY0R00V	0 1/8W	[M]
W2843	ERJ6GEY0R00V	0 1/8W	[M]
W2844	ERJ6GEY0R00V	0 1/8W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
W2845	ERJ3GEY0R00V	0 1/10W	[M]
W2846	ERJ6GEY0R00V	0 1/8W	[M]
W2847	ERJ6GEY0R00V	0 1/8W	[M]
W2850	ERJ3GEY0R00V	0 1/10W	[M]
W2851	ERJ3GEY0R00V	0 1/10W	[M]
W2852	ERJ3GEY0R00V	0 1/10W	[M]
W2853	ERJ3GEY0R00V	0 1/10W	[M]
W2854	ERJ6GEY0R00V	0 1/8W	[M]
W2855	ERJ6GEY0R00V	0 1/8W	[M]
W2856	ERJ6GEY0R00V	0 1/8W	[M]
W2858	ERJ3GEY0R00V	0 1/10W	[M]
W2861	ERJ6GEY0R00V	0 1/8W	[M]
W2862	ERJ6GEY0R00V	0 1/8W	[M]
W2863	ERJ6GEY0R00V	0 1/8W	[M]
W2864	ERJ6GEY0R00V	0 1/8W	[M]
W2865	ERJ6GEY0R00V	0 1/8W	[M]
W2866	ERJ3GEY0R00V	0 1/10W	[M]
W2868	ERJ8GEY0R00V	0 1/4W	[M]
W2891	ERJ8GEY0R00V	0 1/4W	[M]
W2892	ERJ8GEY0R00V	0 1/4W	[M]
W5007	ERJ6GEY0R00V	0 1/8W	[M]
W5032	ERJ8GEY0R00V	0 1/4W	[M]
W5059	ERJ6GEY0R00V	0 1/8W	[M]
W5071	ERJ3GEY0R00V	0 1/10W	[M]
W5780	ERJ6GEY0R00V	0 1/8W	[M]
W5801	ERJ3GEY0R00V	0 1/10W	[M]
W5803	ERJ6GEY0R00V	0 1/8W	[M]
W5804	ERJ3GEY0R00V	0 1/10W	[M]
W5805	ERJ6GEY0R00V	0 1/8W	[M]
W5806	ERJ6GEY0R00V	0 1/8W	[M]
W5807	ERJ6GEY0R00V	0 1/8W	[M]
W6128	ERJ6GEY0R00V	0 1/8W	[M]
W6129	ERJ6GEY0R00V	0 1/8W	[M]
W6225	ERJ8GEY0R00V	0 1/4W	[M]
W6302	ERJ6GEY0R00V	0 1/8W	[M]
W6401	ERJ3GEY0R00V	0 1/10W	[M]
W6404	ERJ6GEY0R00V	0 1/8W	[M]
W6405	ERJ6GEY0R00V	0 1/8W	[M]
W6406	ERJ3GEY0R00V	0 1/10W	[M]
W6407	ERJ3GEY0R00V	0 1/10W	[M]
W6408	ERJ3GEY0R00V	0 1/10W	[M]
W6409	ERJ6GEY0R00V	0 1/8W	[M]
W6412	ERJ3GEY0R00V	0 1/10W	[M]
W6413	ERJ3GEY0R00V	0 1/10W	[M]
W6414	ERJ6GEY0R00V	0 1/8W	[M]
W6415	ERJ3GEY0R00V	0 1/10W	[M]
W6416	ERJ3GEY0R00V	0 1/10W	[M]
W6700	ERJ3GEY0R00V	0 1/10W	[M]
W6701	ERJ6GEY0R00V	0 1/8W	[M]
W6702	ERJ6GEY0R00V	0 1/8W	[M]
W6703	ERJ3GEY0R00V	0 1/10W	[M]
W6704	ERJ3GEY0R00V	0 1/10W	[M]
W6705	ERJ3GEY0R00V	0 1/10W	[M]
W6707	ERJ3GEY0R00V	0 1/10W	[M]
W6708	ERJ3GEY0R00V	0 1/10W	[M]
W6709	ERJ3GEY0R00V	0 1/10W	[M]
W6710	ERJ3GEY0R00V	0 1/10W	[M]
W6712	ERJ6GEY0R00V	0 1/8W	[M]
W6713	ERJ6GEY0R00V	0 1/8W	[M]
W6714	ERJ3GEY0R00V	0 1/10W	[M]
W6715	ERJ6GEY0R00V	0 1/8W	[M]
W6716	ERJ6GEY0R00V	0 1/8W	[M]
W6717	ERJ6GEY0R00V	0 1/8W	[M]
W6718	ERJ6GEY0R00V	0 1/8W	[M]
W6719	ERJ6GEY0R00V	0 1/8W	[M]
W6720	ERJ3GEY0R00V	0 1/10W	[M]
W7003	ERJ6GEY0R00V	0 1/8W	[M]
W7004	ERJ3GEY0R00V	0 1/10W	[M]
W7005	ERJ3GEY0R00V	0 1/10W	[M]
W7006	ERJ3GEY0R00V	0 1/10W	[M]
W7007	ERJ3GEY0R00V	0 1/10W	[M]
W7008	ERJ3GEY0R00V	0 1/10W	[M]
W7011	ERJ6GEY0R00V	0 1/8W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
W7012	ERJ3GEY0R00V	0 1/10W	[M]
W7013	ERJ3GEY0R00V	0 1/8W	[M]
W7014	D0GBR00JA008	0 1/16W	[M]
W7015	D0GBR00JA008	0 1/16W	[M]
W7016	D0GBR00JA008	0 1/16W	[M]
W7300	ERJ3GEY0R00V	0 1/10W	[M]
		WIRE	
JW6902	RWJ1102055SS	2P WIRE	[M]
		RESISTORS	
LB8691	ERJ2GEJ101X	100 1/16W	[M]
LB8692	ERJ2GEJ101X	100 1/16W	[M]
LB8693	ERJ2GEJ101X	100 1/16W	[M]
R1001	ERJ3GEYJ101V	100 1/10W	[M]
R1002	ERJ3GEYJ101V	100 1/10W	[M]
R1003	ERJ3GEYJ104V	100K 1/10W	[M]
R1004	ERJ3GEYJ104V	100K 1/10W	[M]
R1005	ERJ3GEYF753V	75K 1/10W	[M]
R1006	ERJ3GEYF753V	75K 1/10W	[M]
R1007	ERJ3GEYF513V	51K 1/10W	[M]
R1008	ERJ3GEYF513V	51K 1/10W	[M]
R1009	ERJ3GEYJ151V	150 1/10W	[M]
R1010	ERJ3GEYJ151V	150 1/10W	[M]
R1011	ERJ3GEY0R00V	0 1/10W	[M]
R1012	ERJ3GEY0R00V	0 1/10W	[M]
R1013	ERJ3GEYJ102V	1K 1/10W	[M]
R1702	ERJ3GEYJ472V	4.7K 1/10W	[M]
R1703	ERJ3GEYF104V	100K 1/10W	[M]
R1704	ERJ3GEYJ103V	10K 1/10W	[M]
R1707	ERJ3GEYJ221V	220 1/10W	[M]
R1711	ERJ3GEYJ221V	220 1/10W	[M]
R1712	ERJ3GEYJ221V	220 1/10W	[M]
R1713	ERJ3GEYJ221V	220 1/10W	[M]
R1714	ERJ3GEYJ103V	10K 1/10W	[M]
R1715	ERJ3GEYJ103V	10K 1/10W	[M]
R1726	ERJ3GEYJ221V	220 1/10W	[M]
R1727	ERJ3GEYJ221V	220 1/10W	[M]
R1728	ERJ3GEYJ221V	220 1/10W	[M]
R1730	D0GB104JA008	100K 1/16W	[M]
R1731	ERJ3GEY0R00V	0 1/10W	[M]
R2000	ERJ3GEYJ221V	220 1/10W	[M]
R2001	ERJ3GEYJ102V	1K 1/10W	[M]
R2002	ERJ3GEYJ103V	10K 1/10W	[M]
R2003	ERJ3GEYJ221V	220 1/10W	[M]
R2004	ERJ3GEYJ221V	220 1/10W	[M]
R2005	ERJ3GEYJ221V	220 1/10W	[M]
R2006	ERJ3GEYJ221V	220 1/10W	[M]
R2010	ERJ3GEYJ102V	1K 1/10W	[M]
R2011	ERJ3GEYJ221V	220 1/10W	[M]
R2012	ERJ3GEYJ103V	10K 1/10W	[M]
R2015	ERJ3GEYJ272V	2.7K 1/10W	[M]
R2016	ERJ3GEYJ472V	4.7K 1/10W	[M]
R2017	ERJ3GEYJ273V	27K 1/10W	[M]
R2019	ERJ3GEYJ473V	47K 1/10W	[M]
R2020	ERJ3GEYJ103V	10K 1/10W	[M]
R2021	ERJ3GEYJ563V	56K 1/10W	[M]
R2022	ERJ3GEYJ103V	10K 1/10W	[M]
R2023	ERJ3GEYJ473V	47K 1/10W	[M]
R2024	ERJ3GEYJ273V	27K 1/10W	[M]
R2025	ERJ3GEYJ104V	100K 1/10W	[M]
R2026	ERJ3GEYJ221V	220 1/10W	[M]
R2027	ERJ3GEY0R00V	0 1/10W	[M]
R2029	ERJ3GEYJ221V	220 1/10W	[M]
R2031	ERJ3GEYJ221V	220 1/10W	[M]
R2032	ERJ3GEYJ473V	47K 1/10W	[M]
R2033	ERJ3GEYJ223V	22K 1/10W	[M]
R2034	ERJ3GEYJ473V	47K 1/10W	[M]
R2035	ERJ3GEYJ103V	10K 1/10W	[M]
R2036	ERJ3GEYJ221V	220 1/10W	[M]
R2037	ERJ3GEYJ473V	47K 1/10W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R2038	ERJ3GEYJ473V	47K 1/10W	[M]
R2040	ERJ3GEYJ103V	10K 1/10W	[M]
R2041	ERJ3GEYJ103V	10K 1/10W	[M]
R2042	ERJ3GEYJ102V	1K 1/10W	[M]
R2043	ERJ3GEYJ153V	15K 1/10W	[M]
R2044	ERJ3GEYJ472V	4.7K 1/10W	[M]
R2045	ERJ3GEYJ103V	10K 1/10W	[M]
R2046	ERJ3GEYJ222V	2.2K 1/10W	[M]
R2047	ERJ3GEYJ222V	2.2K 1/10W	[M]
R2048	ERJ3GEYJ203V	20K 1/10W	[M]
R2050	ERJ3GEYJ102V	1K 1/10W	[M]
R2051	ERJ3GEYJ563V	56K 1/10W	[M]
R2052	ERJ3GEYJ221V	220 1/10W	[M]
R2053	ERJ3GEYJ221V	220 1/10W	[M]
R2054	ERJ3GEYJ221V	220 1/10W	[M]
R2056	ERJ3GEYJ221V	220 1/10W	[M]
R2058	ERJ3GEY0R00V	0 1/10W	[M]
R2059	ERJ3GEYJ103V	10K 1/10W	[M]
R2060	ERJ3GEYJ221V	220 1/10W	[M]
R2061	ERJ3GEYJ221V	220 1/10W	[M]
R2062	ERJ3GEYJ221V	220 1/10W	[M]
R2063	ERJ3GEYJ103V	10K 1/10W	[M]
R2064	ERJ3GEYJ103V	10K 1/10W	[M]
R2065	ERJ3GEYJ221V	220 1/10W	[M]
R2066	ERJ3GEYJ221V	220 1/10W	[M]
R2067	ERJ3GEYJ473V	47K 1/10W	[M]
R2068	ERJ3GEYJ221V	220 1/10W	[M]
R2069	ERJ3GEYJ221V	220 1/10W	[M]
R2070	ERJ3GEYJ273V	27K 1/10W	[M]
R2071	ERJ3GEYJ101V	100 1/10W	[M]
R2072	ERJ3GEYJ101V	100 1/10W	[M]
R2073	ERJ3GEYJ101V	100 1/10W	[M]
R2074	ERJ3GEYJ103V	10K 1/10W	[M]
R2075	ERJ3GEYJ221V	220 1/10W	[M]
R2077	ERJ3GEYJ103V	10K 1/10W	[M]
R2078	ERJ3GEYJ221V	220 1/10W	[M]
R2079	ERJ3GEYJ221V	220 1/10W	[M]
R2080	ERJ3GEYJ103V	10K 1/10W	[M]
R2081	ERJ3GEYJ103V	10K 1/10W	[M]
R2082	ERJ3GEYJ223V	22K 1/10W	[M]
R2084	ERJ3GEYJ473V	47K 1/10W	[M]
R2085	ERJ3GEYJ472V	4.7K 1/10W	[M]
R2086	ERJ3GEYJ223V	22K 1/10W	[M]
R2087	ERJ3GEYJ223V	22K 1/10W	[M]
R2089	ERJ3GEYJ223V	22K 1/10W	[M] GCS/GCT
R2089	ERJ3GEYJ333V	33K 1/10W	[M] GC/GS
R2090	ERJ3GEYJ153V	15K 1/10W	[M]
R2092	ERJ3GEYJ221V	220 1/10W	[M]
R2093	ERJ3GEYJ103V	10K 1/10W	[M]
R2095	ERJ3GEYJ103V	10K 1/10W	[M]
R2096	ERJ3GEYJ473V	47K 1/10W	[M]
R2097	ERJ3GEYJ472V	4.7K 1/10W	[M]
R2098	ERJ3GEYJ225V	2.2M 1/10W	[M]
R2099	ERJ3GEYJ104V	100K 1/10W	[M]
R2100	ERJ3GEYJ332V	3.3K 1/10W	[M]
R2101	ERJ3GEYJ103V	10K 1/10W	[M]
R2102	ERJ3GEYJ332V	3.3K 1/10W	[M]
R2103	ERJ3GEYJ273V	27K 1/10W	[M]
R2105	ERJ3GEYJ222V	2.2K 1/10W	[M]
R2106	ERJ3GEYJ563V	56K 1/10W	[M]
R2111	ERJ3GEYJ472V	4.7K 1/10W	[M]
R2112	ERJ3GEYJ562V	5.6K 1/10W	[M]
R2113	ERJ3GEYJ562V	5.6K 1/10W	[M]
R2114	ERJ3GEYJ562V	5.6K 1/10W	[M]
R2115	ERJ3GEYJ332V	3.3K 1/10W	[M]
R2116	ERJ3GEYJ102V	1K 1/10W	[M]
R2119	ERJ3GEYJ152V	1.5K 1/10W	[M]
R2120	ERJ3GEYJ102V	1K 1/10W	[M]
R2133	ERJ3GEYJ103V	10K 1/10W	[M]
R2138	ERJ3GEYJ102V	1K 1/10W	[M]
R2145	ERJ3GEY0R00V	0 1/10W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R2160	ERJ3GEYJ102V	1K 1/10W	[M]
R2161	ERJ3GEYJ473V	47K 1/10W	[M]
R2164	ERJ3GEYJ103V	10K 1/10W	[M]
R2165	ERJ3GEYJ103V	10K 1/10W	[M]
R2166	ERJ3GEY0R00V	0 1/10W	[M]
R2170	ERJ3GEYJ222V	2.2K 1/10W	[M]
R2171	ERJ3GEYJ273V	27K 1/10W	[M]
R2172	ERJ3GEYJ182V	1.8K 1/10W	[M]
R2173	ERJ3GEYJ273V	27K 1/10W	[M]
R2174	ERJ3GEYJ332V	3.3K 1/10W	[M]
R2175	ERJ3GEYJ122V	1.2K 1/10W	[M]
R2176	ERJ3GEYJ223V	22K 1/10W	[M]
R2177	ERJ3GEYJ220V	22 1/10W	[M]
R2178	ERJ3GEYJ220V	22 1/10W	[M]
R2179	ERJ3GEYJ220V	22 1/10W	[M]
R2180	ERJ3GEYJ220V	22 1/10W	[M]
R2181	ERJ3GEYJ472V	4.7K 1/10W	[M]
R2182	ERJ3GEYJ100V	10 1/10W	[M]
R2183	ERJ3GEYJ182V	1.8K 1/10W	[M]
R2184	ERJ3GEYJ561V	560 1/10W	[M]
R2185	ERJ3GEYJ102V	1K 1/10W	[M]
R2186	ERJ3GEYJ332V	3.3K 1/10W	[M]
R2187	ERJ3GEYJ332V	3.3K 1/10W	[M]
R2189	ERJ3GEYJ222V	2.2K 1/10W	[M]
R2190	ERJ3GEYJ472V	4.7K 1/10W	[M]
R2191	ERJ3GEYJ332V	3.3K 1/10W	[M]
R2192	ERJ3GEYJ222V	2.2K 1/10W	[M]
R2193	ERJ3GEYJ821V	820 1/10W	[M]
R2194	ERJ3GEYJ103V	10K 1/10W	[M]
R2200	ERJ3GEYJ332V	3.3K 1/10W	[M]
R2201	ERJ3GEYJ103V	10K 1/10W	[M]
R2202	ERJ3GEYJ332V	3.3K 1/10W	[M]
R2203	ERJ3GEYJ273V	27K 1/10W	[M]
R2205	ERJ3GEYJ222V	2.2K 1/10W	[M]
R2206	ERJ3GEYJ563V	56K 1/10W	[M]
R2211	ERJ3GEYJ472V	4.7K 1/10W	[M]
R2212	ERJ3GEYJ562V	5.6K 1/10W	[M]
R2213	ERJ3GEYJ562V	5.6K 1/10W	[M]
R2214	ERJ3GEYJ562V	5.6K 1/10W	[M]
R2215	ERJ3GEYJ332V	3.3K 1/10W	[M]
R2216	ERJ3GEYJ102V	1K 1/10W	[M]
R2219	ERJ3GEYJ152V	1.5K 1/10W	[M]
R2220	ERJ3GEYJ102V	1K 1/10W	[M]
R2233	ERJ3GEYJ103V	10K 1/10W	[M]
R2245	ERJ3GEY0R00V	0 1/10W	[M]
R2260	ERJ3GEYJ102V	1K 1/10W	[M]
R2261	ERJ3GEYJ473V	47K 1/10W	[M]
R2264	ERJ3GEYJ103V	10K 1/10W	[M]
R2265	ERJ3GEYJ103V	10K 1/10W	[M]
R2266	ERJ3GEY0R00V	0 1/10W	[M]
R2270	ERJ3GEYJ222V	2.2K 1/10W	[M]
R2271	ERJ3GEYJ563V	56K 1/10W	[M]
R2273	ERJ3GEYJ273V	27K 1/10W	[M]
R2274	ERJ3GEYJ332V	3.3K 1/10W	[M]
R2275	ERJ3GEYJ122V	1.2K 1/10W	[M]
R2276	ERJ3GEYJ223V	22K 1/10W	[M]
R2277	ERJ3GEYJ220V	22 1/10W	[M]
R2278	ERJ3GEYJ220V	22 1/10W	[M]
R2279	ERJ3GEYJ220V	22 1/10W	[M]
R2280	ERJ3GEYJ220V	22 1/10W	[M]
R2281	ERJ3GEYJ472V	4.7K 1/10W	[M]
R2282	ERJ3GEYJ100V	10 1/10W	[M]
R2283	ERJ3GEYJ182V	1.8K 1/10W	[M]
R2284	ERJ3GEYJ561V	560 1/10W	[M]
R2285	ERJ3GEYJ102V	1K 1/10W	[M]
R2286	ERJ3GEYJ332V	3.3K 1/10W	[M]
R2288	ERJ3GEYJ332V	3.3K 1/10W	[M]
R2289	ERJ3GEYJ222V	2.2K 1/10W	[M]
R2290	ERJ3GEYJ472V	4.7K 1/10W	[M]
R2291	ERJ3GEYJ332V	3.3K 1/10W	[M]
R2292	ERJ3GEYJ222V	2.2K 1/10W	[M]
R2293	ERJ3GEYJ821V	820 1/10W	[M]
R2294	ERJ3GEYJ103V	10K 1/10W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R2300	ERJ3GEYJ122V	1.2K 1/10W	[M]
R2301	ERJ3GEYJ123V	12K 1/10W	[M]
R2302	ERJ3GEYJ182V	1.8K 1/10W	[M]
R2303	ERJ3GEYJ103V	10K 1/10W	[M]
R2304	ERJ3GEYJ123V	12K 1/10W	[M]
R2310	ERJ3GEYJ102V	1K 1/10W	[M]
R2400	ERJ3GEYJ122V	1.2K 1/10W	[M]
R2401	ERJ3GEYJ123V	12K 1/10W	[M]
R2402	ERJ3GEYJ182V	1.8K 1/10W	[M]
R2403	ERJ3GEYJ103V	10K 1/10W	[M]
R2404	ERJ3GEYJ123V	12K 1/10W	[M]
R2410	ERJ3GEYJ102V	1K 1/10W	[M]
R2500	ERJ3GEYJ103V	10K 1/10W	[M]
R2501	ERJ3GEYJ183V	18K 1/10W	[M]
R2502	ERJ3GEYJ472V	4.7K 1/10W	[M]
R2503	ERJ3GEYJ822V	8.2K 1/10W	[M]
R2504	ERJ3GEYJ103V	10K 1/10W	[M]
R2505	ERJ3GEY0R00V	0 1/10W	[M]
R2506	ERJ3GEYJ821V	820 1/10W	[M]
R2507	ERJ3GEYJ821V	820 1/10W	[M]
R2508	ERJ3GEYJ821V	820 1/10W	[M]
R2509	ERJ3GEYJ821V	820 1/10W	[M]
R2510	ERJ3GEYJ272V	2.7K 1/10W	[M]
R2511	ERJ3GEYJ821V	820 1/10W	[M]
R2512	ERJ3GEYJ182V	1.8K 1/10W	[M]
R2551	ERJ3GEYJ182V	1.8K 1/10W	[M]
R2552	ERJ3GEYJ473V	47K 1/10W	[M]
R2553	ERJ3GEYJ102V	1K 1/10W	[M]
R2554	ERJ3GEYJ102V	1K 1/10W	[M]
R2555	ERJ3GEYJ473V	47K 1/10W	[M]
R2556	ERJ3GEYJ684V	680K 1/10W	[M]
R2557	ERJ3GEYJ271V	270 1/10W	[M]
R2558	ERJ3GEYJ821V	820 1/10W	[M]
R2559	ERJ3GEYJ223V	22K 1/10W	[M]
R2600	ERJ3GEYJ102V	1K 1/10W	[M]
R2601	ERJ3GEYJ123V	12K 1/10W	[M]
R2609	ERJ3GEYJ472V	4.7K 1/10W	[M]
R2610	ERJ3GEYJ102V	1K 1/10W	[M]
R2611	ERJ3GEYJ103V	10K 1/10W	[M]
R2612	ERJ3GEYJ273V	27K 1/10W	[M]
R2613	ERJ3GEYJ562V	5.6K 1/10W	[M]
R2614	ERJ3GEYJ273V	27K 1/10W	[M]
R2617	ERJ3GEYJ272V	2.7K 1/10W	[M]
R2626	ERJ3GEYJ103V	10K 1/10W	[M]
R2627	ERJ3GEYJ683V	68K 1/10W	[M]
R2631	ERJ3GEYJ473V	47K 1/10W	[M]
R2632	ERJ3GEYJ123V	12K 1/10W	[M]
R2633	ERJ3GEYJ104V	100K 1/10W	[M]
R2634	ERJ3GEYJ102V	1K 1/10W	[M]
R2636	ERJ3GEYJ104V	100K 1/10W	[M]
R2637	ERJ3GEYJ104V	100K 1/10W	[M]
R2638	ERJ3GEYJ392V	3.9K 1/10W	[M]
R2639	ERJ3GEYJ822V	8.2K 1/10W	[M]
R2640	ERJ3GEYJ333V	33K 1/10W	[M]
R2641	ERJ3GEYJ103V	10K 1/10W	[M]
R2642	ERJ3GEYJ104V	100K 1/10W	[M]
R2643	ERJ3GEYJ332V	3.3K 1/10W	[M]
R2644	ERJ3GEYJ104V	100K 1/10W	[M]
R2645	ERJ3GEYJ104V	100K 1/10W	[M]
R2646	ERJ3GEYJ472V	4.7K 1/10W	[M]
R2647	ERJ3GEYJ103V	10K 1/10W	[M]
R2648	ERJ3GEYJ103V	10K 1/10W	[M]
R2649	ERJ3GEYJ103V	10K 1/10W	[M]
R2650	ERJ3GEYJ103V	10K 1/10W	[M]
R2651	ERJ3GEYJ104V	100K 1/10W	[M]
R2652	ERJ3GEYJ822V	8.2K 1/10W	[M]
R2653	ERJ3GEYJ104V	100K 1/10W	[M]
R2654	ERJ3GEYJ683V	68K 1/10W	[M]
R2655	ERJ3GEYJ682V	6.8K 1/10W	[M]
R2656	ERJ3GEYJ392V	3.9K 1/10W	[M]
R2657	ERJ3GEYJ182V	1.8K 1/10W	[M]
R2658	ERJ3GEYJ563V	56K 1/10W	[M]
R2659	ERJ3GEYJ222V	2.2K 1/10W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R2660	ERJ3GEYJ273V	27K 1/10W	[M]
R2661	ERJ3GEYJ102V	1K 1/10W	[M]
R2662	ERJ3GEYJ102V	1K 1/10W	[M]
R2668	ERJ3GEY0R00V	0 1/10W	[M]
R2704	ERJ3GEYJ561V	560 1/10W	[M]
R2705	ERJ3GEYJ101V	100 1/10W	[M]
R2757	ERJ3GEYJ563V	56K 1/10W	[M]
R2764	ERJ3GEYJ473V	47K 1/10W	[M]
R2804	ERJ3GEYJ102V	1K 1/10W	[M]
R2809	ERJ3GEYJ750V	75 1/10W	[M]
R2812	ERJ3GEYJ750V	75 1/10W	[M]
R2813	ERJ3GEYJ750V	75 1/10W	[M]
R2816	ERJ3GEYJ750V	75 1/10W	[M]
R2862	ERJ3GEYJ103V	10K 1/10W	[M]
R2863	ERJ3GEYJ103V	10K 1/10W	[M]
R2864	ERJ3GEYJ472V	4.7K 1/10W	[M]
R2865	ERJ3GEYJ103V	10K 1/10W	[M] GCS/GCT
R2865	ERJ3GEYJ682V	6.8K 1/10W	[M] GC/GS
R2870	ERJ6GEYJ821V	820 1/8W	[M] GC/GS
R2870	ERJ6GEYJ822V	8.2K 1/8W	[M] GCS/GCT
R2900	ERJ3GEYJ562V	5.6K 1/10W	[M]
R2902	ERJ3GEYJ470V	47 1/10W	[M]
R2903	ERJ3GEYJ182V	1.8K 1/10W	[M]
R2905	ERJ3GEYJ390V	39 1/10W	[M]
R2906	ERJ3GEYF682V	6.8K 1/10W	[M]
R2907	ERJ3GEYJ272V	2.7K 1/10W	[M]
R2908	ERJ3GEYJ561V	560 1/10W	[M]
R2909	ERJ3GEYJ393V	39K 1/10W	[M]
R2910	ER62SJ470E	47 2W	[M]
R2911	ERJ3GEYJ392V	3.9K 1/10W	[M]
R2912	ERJ3GEYJ272V	2.7K 1/10W	[M]
R2913	ERX2SJ1R5E	1.5 2W	[M]
R2914	ERJ3GEYJ473V	47K 1/10W	[M]
R2915	ERX2SJ1R5E	1.5 2W	[M]
R2919	ERJ3GEYJ102V	1K 1/10W	[M]
R2920	ERJ3GEYJ392V	3.9K 1/10W	[M]
R2921	ERJ3GEYJ391V	390 1/10W	[M]
R2922	ERJ3GEYF102V	1K 1/10W	[M]
R2923	ERJ3GEYF122V	1.2K 1/10W	[M]
R2930	ERJ3GEYJ472V	4.7K 1/10W	[M]
R2935	ERJ3GEYJ472V	4.7K 1/10W	[M]
R2936	ERJ3GEYJ471V	470 1/10W	[M]
R2937	ERJ3GEYJ393V	39K 1/10W	[M]
R2938	ERJ3GEYJ333V	33K 1/10W	[M]
R2941	ERJ3GEYJ223V	22K 1/10W	[M]
R2946	ERJ3GEYJ330V	33 1/10W	[M]
R2947	ERJ3GEYJ472V	4.7K 1/10W	[M]
R2948	ERJ3GEYJ472V	4.7K 1/10W	[M]
R2952	ERJ3GEYJ392V	3.9K 1/10W	[M]
R2953	ERJ3GEYJ561V	560 1/10W	[M]
R2954	ER62SJ470E	47 2W	[M]
R2975	ERJ3GEYJ153V	15K 1/10W	[M]
R2976	ERJ3GEYJ103V	10K 1/10W	[M]
R2977	ERJ3GEYJ1R0V	1.0 1/10W	[M]
R3901	ERJ2GEJ511X	510 1/16W	[M]
R3902	ERJ2GEJ103X	10K 1/16W	[M]
R3903	ERJ2GEJ103X	10K 1/16W	[M]
R3904	ERJ2GEJ472X	4.7K 1/16W	[M]
R3905	ERJ2GEJ202X	2.0K 1/16W	[M]
R3906	ERJ2GEJ472X	4.7K 1/16W	[M]
R3907	ERJ2GEJ222X	2.2K 1/16W	[M]
R3921	ERJ2GE0R00X	0 1/16W	[M]
R3924	ERJ2GE0R00X	0 1/16W	[M]
R3925	ERJ2GEJ103X	10K 1/16W	[M]
R3941	ERJ2GEJ273X	27K 1/16W	[M]
R3942	ERJ2GEJ224X	220K 1/16W	[M]
R3943	ERJ2GEJ104X	100K 1/16W	[M]
R3944	ERJ2GEJ221X	220 1/16W	[M]
R3945	ERJ2GEJ103X	10K 1/16W	[M]
R3946	ERJ2GEJ272X	2.7K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R3947	ERJ2GEJ103X	10K 1/16W	[M]
R5000	ERJ3GEYJ562V	5.6K 1/10W	[M]
R5001	ERJ3GEYJ562V	5.6K 1/10W	[M]
R5002	ERJ3GEYJ562V	5.6K 1/10W	[M]
R5003	ERJ3GEYJ562V	5.6K 1/10W	[M]
R5004	D0GF100JA014	10 1/8W	[M]
R5005	D0GF100JA014	10 1/8W	[M]
R5006	D0GZ220JA012	22 1W	[M]
R5007	D0GZ220JA012	22 1W	[M]
R5008	ERJ3GEYJ101V	100 1/10W	[M]
R5010	D0GF100JA014	10 1/8W	[M]
R5011	D0GF100JA014	10 1/8W	[M]
R5018	D0GB683JA008	68K 1/16W	[M]
R5019	D0GB683JA008	68K 1/16W	[M]
R5020	D0GB124JA008	120K 1/16W	[M]
R5021	D0GB122JA007	1.2K 1/10W	[M]
R5022	D0GB122JA007	1.2K 1/10W	[M]
R5023	D0GB122JA007	1.2K 1/10W	[M]
R5030	ERJ3GEYJ562V	5.6K 1/10W	[M]
R5031	ERJ3GEYJ562V	5.6K 1/10W	[M]
R5032	ERJ3GEYJ562V	5.6K 1/10W	[M]
R5033	ERJ3GEYJ562V	5.6K 1/10W	[M]
R5034	ERJ3GEYJ562V	5.6K 1/10W	[M]
R5035	ERJ3GEYJ562V	5.6K 1/10W	[M]
R5036	ERJ3GEYJ562V	5.6K 1/10W	[M]
R5037	ERJ3GEYJ562V	5.6K 1/10W	[M]
R5103	ERJ3GEYJ562V	5.6K 1/10W	[M]
R5104	ERJ3GEYJ562V	5.6K 1/10W	[M]
R5110	ERJ3GEYJ223V	22K 1/10W	[M]
R5113	D0GB124JA008	120K 1/16W	[M]
R5118	ERJ3GEYJ562V	5.6K 1/10W	[M]
R5119	ERJ3GEYJ562V	5.6K 1/10W	[M]
R5200	D0GF100JA014	10 1/8W	[M]
R5201	D0GF100JA014	10 1/8W	[M]
R5204	ERJ3GEYJ101V	100 1/10W	[M]
R5205	ERJ3GEYJ562V	5.6K 1/10W	[M]
R5206	ERJ3GEYJ562V	5.6K 1/10W	[M]
R5207	ERJ3GEYJ562V	5.6K 1/10W	[M]
R5208	ERJ3GEYJ562V	5.6K 1/10W	[M]
R5209	D0GZ220JA012	22 1W	[M]
R5210	D0GF100JA014	10 1/8W	[M]
R5211	D0GF100JA014	10 1/8W	[M]
R5217	D0GZ220JA012	22 1W	[M]
R5218	D0GB683JA008	68K 1/16W	[M]
R5228	D0GB124JA008	120K 1/16W	[M]
R5300	D0GZ220JA012	22 1W	[M]
R5302	D0GF100JA014	10 1/8W	[M]
R5304	ERJ3GEYJ101V	100 1/10W	[M]
R5305	D0GF100JA014	10 1/8W	[M]
R5306	ERJ3GEYJ562V	5.6K 1/10W	[M]
R5307	ERJ3GEYJ562V	5.6K 1/10W	[M]
R5308	ERJ3GEYJ562V	5.6K 1/10W	[M]
R5309	ERJ3GEYJ562V	5.6K 1/10W	[M]
R5310	D0GF100JA014	10 1/8W	[M]
R5311	D0GF100JA014	10 1/8W	[M]
R5317	D0GB122JA007	1.2K 1/10W	[M]
R5318	D0GB124JA008	120K 1/16W	[M]
R5319	D0GZ220JA012	22 1W	[M]
R5327	D0GB122JA007	1.2K 1/10W	[M]
R5328	D0GB683JA008	68K 1/16W	[M]
R5400	D0GZ220JA012	22 1W	[M]
R5402	D0GF100JA014	10 1/8W	[M]
R5404	ERJ3GEYJ101V	100 1/10W	[M]
R5405	D0GF100JA014	10 1/8W	[M]
R5410	D0GF100JA014	10 1/8W	[M]
R5411	D0GF100JA014	10 1/8W	[M]
R5419	D0GZ220JA012	22 1W	[M]
R5504	ERJ3GEYJ220V	22 1/10W	[M]
R5505	ERJ3GEYJ101V	100 1/10W	[M]
R5506	ERJ3GEYJ105V	1M 1/10W	[M]
R5507	ERJ3GEYJ105V	1M 1/10W	[M]
R5508	ERJ3GEYJ105V	1M 1/10W	[M]
R5510	ER62SJ471E	470 2W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R5511	ERJ3GEYJ220V	22 1/10W	[M]
R5602	ERJ3GEYJ103V	10K 1/10W	[M]
R5603	ERJ3GEYJ103V	10K 1/10W	[M]
R5604	D0GB122JA007	1.2K 1/10W	[M]
R5606	ERJ3GEYJ103V	10K 1/10W	[M]
R5607	D0GB122JA007	1.2K 1/10W	[M]
R5608	ERJ3GEYJ103V	10K 1/10W	[M]
R5609	ERJ3GEYJ103V	10K 1/10W	[M]
R5610	D0GB122JA007	1.2K 1/10W	[M]
R5611	D0GB122JA007	1.2K 1/10W	[M]
R5636	D0AF392JA039	3.9K	[M]
R5637	ERJ3GEYJ100V	10 1/10W	[M]
R5639	ERJ3GEYJ332V	3.3K 1/10W	[M]
R5640	ERJ3GEY0R00V	0 1/10W	[M]
R5654	D0GB563JA008	56K 1/16W	[M]
R5655	ERJ3GEYJ103V	10K 1/10W	[M]
R5656	ERJ3GEYJ103V	10K 1/10W	[M]
R5657	ERJ3GEYJ103V	10K 1/10W	[M]
R5658	ERJ3GEYJ185V	1.8M 1/10W	[M]
R5659	ERJ3GEYJ104V	100K 1/10W	[M]
R5660	ERJ3GEYJ103V	10K 1/10W	[M]
R5670	ERJ3GEY0R00V	0 1/10W	[M]
R5701	ERDS1TJ475B	4.7K 1/2W	[M]
R5702	ERJ1TYJ104U	100K 1W	[M]
R5703	ERJ1TYJ104U	100K 1W	[M]
R5704	ERJ8GEYJ394V	390K 1/4W	[M]
R5705	ERJ8GEYJ394V	390K 1/4W	[M]
R5720	ERJ6GEYJ220V	22 1/8W	[M]
R5721	ERJ6GEYJ103V	10K 1/8W	[M]
R5722	ERJ6GEYJ102V	1K 1/8W	[M]
R5723	ERJ3GEYJ102V	1K 1/10W	[M]
R5724	ERJ6GEYJ121V	120 1/8W	[M]
R5725	ERJ3GEY0R00V	0 1/10W	[M]
R5726	ERX2LJ82MP	82m 2W	[M]
R5728	ERJ3GEYJ104V	100K 1/10W	[M]
R5729	ERJ6GEYJ103V	10K 1/8W	[M]
R5730	ERJ3GEYJ102V	1K 1/10W	[M]
R5731	ERJ3GEY0R00V	0 1/10W	[M]
R5732	ERJ3GEYJ101V	100 1/10W	[M]
R5733	ERJ3GEYJ473V	47K 1/10W	[M]
R5751	ERJ3GEYJ223V	22K 1/10W	[M]
R5752	ERJ3GEYJ222V	2.2K 1/10W	[M]
R5786	ERJ1TYJ204U	200K 1W	[M]
R5787	ERJ3GEYJ753V	75K 1/10W	[M]
R5788	ERJ3GEYJ223V	22K 1/10W	[M]
R5789	ERJ3GEYJ223V	22K 1/10W	[M]
R5790	ERJ3GEYF333V	33K 1/10W	[M]
R5791	ERJ3GEYF563V	56K 1/10W	[M]
R5792	ERJ8GEYJ394V	390K 1/4W	[M]
R5793	ERJ8GEYJ394V	390K 1/4W	[M]
R5794	ERJ8GEYJ394V	390K 1/4W	[M]
R5795	ERJ6GEYJ433V	43K 1/8W	[M]
R5796	ERDS1FVJ222T	2.2K 1/2W	[M]
R5797	ERJ6GEYJ472V	4.7K 1/8W	[M]
R5798	ERJ6GEYJ100V	10 1/8W	[M]
R5799	ERJ6GEYJ100V	10 1/8W	[M]
R5800	ERJ6GEYJ123V	12K 1/8W	[M]
R5801	ERJ6GEYJ103V	10K 1/8W	[M]
R5802	ERJ3RBD272V	2.7K 1/16W	[M]
R5803	ERJ6GEY0R00V	0 1/8W	[M]
R5804	ERJ6RBD473V	47K 1/10W	[M]
R5805	ERJ3RBD222V	2.2K 1/16W	[M]
R5806	ERJ3GEYJ153V	15K 1/10W	[M]
R5807	ERJ6GEYJ331V	330 1/8W	[M]
R5808	ERJ6GEYJ222V	2.2K 1/8W	[M]
R5809	ERJ6GEYJ331V	330 1/8W	[M]
R5810	ERJ3GEYJ331V	330 1/10W	[M]
R5811	ERJ8GEYJ152V	1.5K 1/4W	[M]
R5812	ERJ3RBD822V	8.2K 1/16W	[M]
R5813	ERJ3RBD243V	24K 1/16W	[M]
R5814	ERJ3GEYJ822V	8.2K 1/10W	[M]
R5815	ERJ3GEYJ272V	2.7K 1/10W	[M]
R5816	ERJ8GEYJ152V	1.5K 1/4W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R5817	ERJ3GEYJ331V	330 1/10W	[M]
R5820	ERG2SJ910E	91 2W	[M]
R5821	ERG2SJ910E	91 2W	[M]
R5822	ERG2SJ910E	91 2W	[M]
R5823	ERG2SJ910E	91 2W	[M]
R5824	ERG2SJ910E	91 2W	[M]
R5825	ERJ3GEYJ102V	1K 1/10W	[M]
R5832	ERJ1TYJ222U	2.2K 1W	[M]
R5834	ERJ1TYJ222U	2.2K 1W	[M]
R5840	ERJ3GEYJ823V	82K 1/10W	[M]
R5841	ERJ3GEYJ124V	120K 1/10W	[M]
R5860	ERJ3GEYF103V	10K 1/10W	[M]
R5861	ERJ3GEYF302V	3K 1/10W	[M]
R5862	ERJ6GEYJ103V	10K 1/8W	[M]
R5863	ERJ6GEYJ103V	10K 1/8W	[M]
R5864	ERJ6GEYF103V	10K 1/8W	[M]
R5890	ERJ3GEYJ222V	2.2K 1/10W	[M]
R5891	ERJ3RBD333V	33K 1/16W	[M]
R5892	ERJ3RBD472V	4.7K 1/16W	[M]
R5893	ERJ3RBD393V	39K 1/16W	[M]
R5894	ERJ3GEYJ102V	1K 1/10W	[M]
R5895	ERJ3GEYJ101V	100 1/10W	[M]
R5896	ERJ3GEYJ104V	100K 1/10W	[M]
R5897	ERJ3GEYJ101V	100 1/10W	[M]
R6100	ERJ3GEYJ473V	47K 1/10W	[M]
R6101	ERJ3GEYJ103V	10K 1/10W	[M]
R6102	ERJ3GEYJ103V	10K 1/10W	[M]
R6103	ERJ3GEYJ103V	10K 1/10W	[M]
R6104	ERJ3GEYJ103V	10K 1/10W	[M]
R6105	ERJ3GEYJ103V	10K 1/10W	[M]
R6200	ERJ3GEYJ473V	47K 1/10W	[M]
R6201	ERJ3GEYJ103V	10K 1/10W	[M]
R6203	ERJ3GEYJ103V	10K 1/10W	[M]
R6204	ERJ3GEYJ103V	10K 1/10W	[M]
R6300	ERJ3GEYJ750V	75 1/10W	[M]
R6301	ERJ3GEYJ100V	10 1/10W	[M]
R6302	ERJ3GEYJ100V	10 1/10W	[M]
R6400	ERJ3GEYJ102V	1K 1/10W	[M]
R6401	ERJ3GEY0R00V	0 1/10W	[M]
R6402	ERJ3GEY0R00V	0 1/10W	[M]
R6403	ERJ3GEYF334V	330K 1/10W	[M]
R6404	ERJ3GEYF224V	220K 1/10W	[M]
R6531	ERJ3GEYJ221V	220 1/10W	[M]
R6532	ERJ3GEYJ101V	100 1/10W	[M]
R6533	ERJ3GEYJ473V	47K 1/10W	[M]
R6535	ERJ3GEYJ184V	180K 1/10W	[M]
R6536	ERJ3GEYJ102V	1K 1/10W	[M]
R6537	ERJ3GEYJ332V	3.3K 1/10W	[M]
R6538	ERJ3GEYJ222V	2.2K 1/10W	[M]
R6539	ERJ3GEYJ223V	22K 1/10W	[M]
R6540	ERJ3GEYJ222V	2.2K 1/10W	[M]
R6541	ERJ3GEYJ222V	2.2K 1/10W	[M]
R6543	ERJ3GEYJ273V	27K 1/10W	[M]
R6544	ERJ3GEYJ563V	56K 1/10W	[M]
R6545	ERJ3GEYJ154V	150K 1/10W	[M]
R6546	ERJ3GEYJ182V	1.8K 1/10W	[M]
R6547	ERJ3GEYJ103V	10K 1/10W	[M]
R6548	ERJ3GEYJ472V	4.7K 1/10W	[M]
R6549	ERJ3GEYJ682V	6.8K 1/10W	[M]
R6601	ERJ3GEYJ102V	1K 1/10W	[M]
R6602	ERJ3GEYJ102V	1K 1/10W	[M]
R6801	ERJ3GEYJ102V	1K 1/10W	[M]
R6802	ERJ3GEYJ102V	1K 1/10W	[M]
R6803	ERJ3GEYJ122V	1.2K 1/10W	[M]
R6804	ERJ3GEYJ182V	1.8K 1/10W	[M]
R6805	ERJ3GEYJ222V	2.2K 1/10W	[M]
R6806	ERJ3GEYJ272V	2.7K 1/10W	[M]
R6807	ERJ3GEYJ472V	4.7K 1/10W	[M]
R6808	ERJ3GEY0R00V	0 1/10W	[M]
R6821	ERJ3GEYJ471V	470 1/10W	[M]
R6901	ERJ3GEY0R00V	0 1/10W	[M]
R6902	ERJ3GEYJ272V	2.7K 1/10W	[M]
R6903	ERJ3GEYJ122V	1.2K 1/10W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R6904	ERJ3GEYJ102V	1K 1/10W	[M]
R6905	ERJ3GEYJ102V	1K 1/10W	[M]
R6907	ERJ3GEYJ223V	22K 1/10W	[M]
R6909	ERJ3GEYJ223V	22K 1/10W	[M]
R6910	ERJ3GEY0R00V	0 1/10W	[M]
R6912	ERJ3GEYJ182V	1.8K 1/10W	[M]
R6914	ERJ3GEYJ563V	56K 1/10W	[M]
R6916	ERJ3GEYJ680V	68 1/10W	[M]
R6917	ERJ3GEYJ680V	68 1/10W	[M]
R6918	ERJ3GEYJ223V	22K 1/10W	[M]
R6919	ERJ3GEYJ470V	47 1/10W	[M]
R6920	ERJ3GEYJ470V	47 1/10W	[M]
R6927	ERJ3GEYJ680V	68 1/10W	[M]
R6934	ERJ3GEYJ470V	47 1/10W	[M]
R6935	ERJ3GEYJ1R0V	1.0 1/10W	[M]
R6939	ERJ6GEYJ1R2V	1.2 1/8W	[M]
R6940	ERJ6GEYJ1R2V	1.2 1/8W	[M]
R6960	ERJ3GEYJ222V	2.2K 1/10W	[M]
R6961	ERJ3GEYJ331V	330 1/10W	[M]
R7001	ERJ3GEYJ681V	680 1/10W	[M]
R7003	ERJ3GEY0R00V	0 1/10W	[M]
R7004	ERJ3GEYJ681V	680 1/10W	[M]
R7005	ERJ3GEYJ102V	1K 1/10W	[M]
R7006	ERJ3GEYJ823V	82K 1/10W	[M]
R7008	ERJ3GEYJ101V	100 1/10W	[M]
R7009	ERJ3GEYJ104V	100K 1/10W	[M]
R7010	ERJ3GEYJ101V	100 1/10W	[M]
R7011	ERJ3GEY0R00V	0 1/10W	[M]
R7012	ERJ3GEYJ151V	150 1/10W	[M]
R7013	ERJ3GEYJ470V	47 1/10W	[M]
R7015	ERJ3GEYJ102V	1K 1/10W	[M]
R7016	ERJ3GEYJ102V	1K 1/10W	[M]
R7017	ERJ3GEYJ102V	1K 1/10W	[M]
R7018	ERJ3GEYJ390V	39 1/10W	[M]
R7019	ERJ3GEYJ472V	4.7K 1/10W	[M]
R7021	ERJ3GEYJ103V	10K 1/10W	[M]
R7022	ERJ3GEYJ182V	1.8K 1/10W	[M]
R7100	ERJ3GEYJ153V	15K 1/10W	[M]
R7101	ERJ3GEYJ103V	10K 1/10W	[M]
R7102	ERJ3GEYJ103V	10K 1/10W	[M]
R7103	ERJ3GEYJ103V	10K 1/10W	[M]
R7104	ERJ3GEYJ153V	15K 1/10W	[M]
R7105	ERJ3GEYJ103V	10K 1/10W	[M]
R7106	ERJ3GEYJ123V	12K 1/10W	[M]
R7107	ERJ3GEYJ680V	68 1/10W	[M]
R7108	ERJ3GEYJ472V	4.7K 1/10W	[M]
R7109	ERJ3GEYJ103V	10K 1/10W	[M]
R7110	ERJ3GEYJ682V	6.8K 1/10W	[M]
R7112	ERJ3GEYJ153V	15K 1/10W	[M]
R7113	ERJ3GEYJ103V	10K 1/10W	[M]
R7114	ERJ3GEYJ103V	10K 1/10W	[M]
R7116	ERJ3GEYJ681V	680 1/10W	[M]
R7117	ERJ3GEYJ123V	12K 1/10W	[M]
R7118	ERJ3GEYJ822V	8.2K 1/10W	[M]
R7121	ERJ3GEYJ103V	10K 1/10W	[M]
R7122	ERJ3GEYJ182V	1.8K 1/10W	[M]
R8001	ERJ2GEJ103X	10K 1/16W	[M]
R8003	ERJ2GEJ103X	10K 1/16W	[M]
R8011	ERJ2GEJ220X	22 1/16W	[M]
R8012	ERJ2GEJ220X	22 1/16W	[M]
R8013	ERJ2GEJ220X	22 1/16W	[M]
R8025	ERJ3GEY0R00V	0 1/10W	[M]
R8153	ERJ2RHD621X	620 1/16W	[M]
R8154	ERJ2RHD102X	1K 1/16W	[M]
R8211	ERJ2GEJ103X	10K 1/16W	[M]
R8221	ERJ2GEJ822X	8.2K 1/16W	[M]
R8225	ERJ2GEJ822X	8.2K 1/16W	[M]
R8230	ERJ2GEJ222X	2.2K 1/16W	[M]
R8231	ERJ2GEJ752X	7.5K 1/16W	[M]
R8232	ERJ2GEJ752X	7.5K 1/16W	[M]
R8251	ERJ6GEYJ6R8V	6.8 1/8W	[M]
R8252	ERJ2GEJ103X	10K 1/16W	[M]
R8261	ERJ2GEJ823X	82K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R8262	ERJ2GEJ153X	15K 1/16W	[M]
R8263	ERJ2GEJ823X	82K 1/16W	[M]
R8264	ERJ2GEJ153X	15K 1/16W	[M]
R8311	ERJ2RHD242X	2.4K 1/16W	[M]
R8312	ERJ2RHD102X	1K 1/16W	[M]
R8313	ERJ2RHD153X	15K 1/16W	[M]
R8314	ERJ2RHD153X	15K 1/16W	[M]
R8315	ERJ2RKD240X	24 1/16W	[M]
R8316	ERJ2RKD240X	24 1/16W	[M]
R8317	ERJ2GEJ153X	15K 1/16W	[M]
R8318	ERJ2GEJ153X	15K 1/16W	[M]
R8321	ERJ3RBD201V	200 1/16W	[M]
R8323	ERJ2GEJ330X	33 1/16W	[M]
R8324	ERJ2GEJ102X	1K 1/16W	[M]
R8325	ERJ3RBD201V	200 1/16W	[M]
R8327	ERJ2GEJ330X	33 1/16W	[M]
R8328	ERJ2GEJ102X	1K 1/16W	[M]
R8331	ERJ3RBD201V	200 1/16W	[M]
R8333	ERJ2GEJ330X	33 1/16W	[M]
R8334	ERJ2GEJ102X	1K 1/16W	[M]
R8335	ERJ3RBD201V	200 1/16W	[M]
R8336	ERJ2GEJ330X	33 1/16W	[M]
R8337	ERJ2GEJ102X	1K 1/16W	[M]
R8341	ERJ3RBD201V	200 1/16W	[M]
R8342	ERJ2GEJ330X	33 1/16W	[M]
R8343	ERJ2GEJ102X	1K 1/16W	[M]
R8401	ERJ2GEJ101X	100 1/16W	[M]
R8402	ERJ2GEJ101X	100 1/16W	[M]
R8403	ERJ2GEJ101X	100 1/16W	[M]
R8404	ERJ2GEJ101X	100 1/16W	[M]
R8420	ERJ2GEJ222X	2.2K 1/16W	[M]
R8421	ERJ2GEJ100X	10 1/16W	[M]
R8531	ERJ2GEJ152X	1.5K 1/16W	[M]
R8532	ERJ2GEJ222X	2.2K 1/16W	[M]
R8533	ERJ2GE0R00X	0 1/16W	[M]
R8534	ERJ2GEJ103X	10K 1/16W	[M]
R8535	ERJ2GEJ104X	100K 1/16W	[M]
R8536	ERJ2GEJ103X	10K 1/16W	[M]
R8537	ERJ2GE0R00X	0 1/16W	[M]
R8538	ERJ2GE0R00X	0 1/16W	[M]
R8539	ERJ2GE0R00X	0 1/16W	[M]
R8540	ERJ3GEY0R00V	0 1/10W	[M]
R8541	ERJ2GEJ153X	15K 1/16W	[M]
R8551	ERJ2GE0R00X	0 1/16W	[M]
R8552	ERJ2GEJ102X	1K 1/16W	[M]
R8553	ERJ2GEJ102X	1K 1/16W	[M]
R8554	ERJ2GEJ680X	68 1/16W	[M]
R8555	ERJ2GEJ2R2X	2.2 1/16W	[M]
R8556	ERJ3GEYJ560V	56 1/10W	[M]
R8557	ERJ3GEYJ510V	51 1/10W	[M]
R8558	ERJ2GEJ473X	47K 1/16W	[M]
R8559	ERJ2GEJ153X	15K 1/16W	[M]
R8561	ERJ2GE0R00X	0 1/16W	[M]
R8562	ERJ2GEJ102X	1K 1/16W	[M]
R8563	ERJ2GEJ102X	1K 1/16W	[M]
R8564	ERJ2GEJ220X	22 1/16W	[M]
R8565	ERJ2GEJ2R2X	2.2 1/16W	[M]
R8566	ERJ3GEYJ560V	56 1/10W	[M]
R8567	ERJ3GEYJ510V	51 1/10W	[M]
R8568	ERJ2GEJ473X	47K 1/16W	[M]
R8601	ERJ2GEJ104X	100K 1/16W	[M]
R8611	ERJ2GEJ101X	100 1/16W	[M]
R8613	ERJ2GEJ101X	100 1/16W	[M]
R8621	ERJ2GEJ105X	1M 1/16W	[M]
R8622	ERJ2RHD102X	1K 1/16W	[M]
R9007	ERJ2GEJ103X	10K 1/16W	[M]
R9008	ERJ2GEJ105X	1M 1/16W	[M]
R9009	ERJ2GEJ102X	1K 1/16W	[M]
R9023	ERJ2GEJ103X	10K 1/16W	[M]
R9036	ERJ2GEJ103X	10K 1/16W	[M]
R9037	ERJ2GEJ103X	10K 1/16W	[M]
R9040	ERJ2GEJ103X	10K 1/16W	[M]
R9041	ERJ2GEJ103X	10K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R9042	ERJ2GEJ103X	10K 1/16W	[M]
R9043	ERJ2GEJ103X	10K 1/16W	[M]
R9044	ERJ2GEJ103X	10K 1/16W	[M]
R9045	ERJ2GEJ103X	10K 1/16W	[M]
R9046	ERJ2GEJ103X	10K 1/16W	[M]
R9047	ERJ2GEJ103X	10K 1/16W	[M]
R9048	ERJ2GEJ103X	10K 1/16W	[M]
R9049	ERJ2GEJ103X	10K 1/16W	[M]
R9055	ERJ2GEJ472X	4.7K 1/16W	[M]
R9080	ERJ2GEJ103X	10K 1/16W	[M]
R9083	ERJ2GEJ470X	47 1/16W	[M]
R9084	ERJ2GEJ470X	47 1/16W	[M]
R9085	ERJ2GEJ470X	47 1/16W	[M]
R9086	ERJ2GEJ470X	47 1/16W	[M]
R9087	ERJ2GEJ470X	47 1/16W	[M]
R9088	ERJ2GEJ470X	47 1/16W	[M]
R9099	ERJ2GE0R00X	0 1/16W	[M]
RX3707	D1H84714A043	CHIP RESISTOR	[M]
RX3708	D1H84714A043	CHIP RESISTOR	[M]
RX3901	D1H410120001	CHIP RESISTOR	[M]
RX8001	D1H410320002	CHIP RESISTOR	[M]
RX8011	D1H88204A043	CHIP RESISTOR	[M]
RX8012	D1H88204A043	CHIP RESISTOR	[M]
RX8013	D1H88204A043	CHIP RESISTOR	[M]
RX8014	D1H88204A043	CHIP RESISTOR	[M]
RX8015	D1H88204A043	CHIP RESISTOR	[M]
RX8016	D1H88204A043	CHIP RESISTOR	[M]
RX8017	D1H88204A043	CHIP RESISTOR	[M]
RX8018	D1H422020001	CHIP RESISTOR	[M]
RX8019	D1H422020001	CHIP RESISTOR	[M]
RX8020	D1H422020001	CHIP RESISTOR	[M]
RX8031	D1H447220001	CHIP RESISTOR	[M]
RX8032	D1H447220001	CHIP RESISTOR	[M]
RX8111	D1H422320002	CHIP RESISTOR	[M]
RX8401	D1H410120001	CHIP RESISTOR	[M]
RX8402	D1H410120001	CHIP RESISTOR	[M]
RX8531	D1H456020001	CHIP RESISTOR	[M]
RX8532	D1H85604A043	CHIP RESISTOR	[M]
RX8533	D1H456020001	CHIP RESISTOR	[M]
RX8534	D1H456020001	CHIP RESISTOR	[M]
RX8611	D1H447220001	CHIP RESISTOR	[M]
RX8691	D1H410320002	CHIP RESISTOR	[M]
RX9014	D1H85604A043	CHIP RESISTOR	[M]
RX9015	D1H85604A043	CHIP RESISTOR	[M]
RX9016	D1H85604A043	CHIP RESISTOR	[M]
RX9017	D1H85604A043	CHIP RESISTOR	[M]
RX9018	D1H447220001	CHIP RESISTOR	[M]
RX9020	D1H447220001	CHIP RESISTOR	[M]
		CAPACITORS	
C1001	F1H1H104A013	0.1uF 50V	[M]
C1002	F1H1H104A013	0.1uF 50V	[M]
C1003	F1H1H104A013	0.1uF 50V	[M]
C1004	F1H1H104A013	0.1uF 50V	[M]
C1701	F1H1H104A013	0.1uF 50V	[M]
C1702	F2G1C470A076	47uF 16V	[M]
C1703	F2G1C470A076	47uF 16V	[M]
C1704	F1H1H104A013	0.1uF 50V	[M]
C2000	ECJ1VB1H104K	0.1uF 50V	[M]
C2001	ECJ1VB1H104K	0.1uF 50V	[M]
C2002	ECJ1VB1H104K	0.1uF 50V	[M]
C2003	ECEA1EKS220B	22uF 25V	[M]
C2006	ECEA1HKS2R2B	2.2uF 50V	[M]
C2007	ECJ1VB1H104K	0.1uF 50V	[M]
C2008	ECEA0JKS101B	100uF 6.3V	[M]
C2009	ECJ1VB1H104K	0.1uF 50V	[M]
C2010	ECJ1VB1H331K	330pF 50V	[M]
C2011	ECJ1VB1H331K	330pF 50V	[M]
C2012	ECJ1VB1H331K	330pF 50V	[M]
C2013	ECJ1VB1H223K	0.022uF 50V	[M]
C2014	ECEA1EKS4R7B	4.7uF 25V	[M]
C2015	ECJ1VB1H221K	220pF 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C2016	ECJ1VB1H221K	220pF 50V	[M]
C2017	ECJ1VB1H103K	0.01uF 50V	[M]
C2018	ECEA1CKS470B	47uF 16V	[M]
C2019	ECEA1CKS470B	47uF 16V	[M]
C2020	ECJ1VB1H103K	0.01uF 50V	[M]
C2025	ECJ1VB1H221K	220pF 50V	[M]
C2026	ECJ1VB1H104K	0.1uF 50V	[M]
C2027	ECJ1VB1H104K	0.1uF 50V	[M]
C2028	ECEA1CKA100B	10uF 16V	[M]
C2029	ECEA1CKA100B	10uF 16V	[M]
C2101	ECJ1VB1C105K	1uF 16V	[M]
C2102	ECJ1VB1C473K	0.047uF 16V	[M]
C2103	ECJ1VB1C105K	1uF 16V	[M]
C2104	ECJ1VB1C563K	0.056uF 16V	[M]
C2106	ECJ1VB1H222K	2200pF 50V	[M]
C2108	ECJ1VB1H682K	6800pF 50V	[M]
C2111	ECJ1VB1C105K	1uF 16V	[M]
C2112	ECJ1VB1H182K	1800pF 50V	[M]
C2113	ECJ1VB1H102K	1000pF 50V	[M]
C2114	ECJ1VB1H562K	5600pF 50V	[M]
C2115	ECJ1VB1C563K	0.056uF 16V	[M]
C2116	ECJ1VB1C563K	0.056uF 16V	[M]
C2117	ECJ1VB1H104K	0.1uF 50V	[M]
C2118	ECJ1VB1H104K	0.1uF 50V	[M]
C2119	ECJ1VB1C105K	1uF 16V	[M]
C2121	ECJ1VB1H104K	0.1uF 50V	[M]
C2130	ECJ1VB1H562K	5600pF 50V	[M]
C2131	ECJ1VB1H682K	6800pF 50V	[M]
C2133	ECJ1VB1C105K	1uF 16V	[M]
C2135	ECJ1VB1H153K	0.015uF 50V	[M]
C2162	ECJ1VB1H332K	3300pF 50V	[M]
C2164	ECJ1VB1H221K	220pF 50V	[M]
C2169	ECJ1VB1H103K	0.01uF 50V	[M]
C2171	ECEA1EKS4R7B	4.7uF 25V	[M]
C2177	ECEA1HKA010B	1uF 50V	[M]
C2178	ECJ1VC1H101J	100pF 50V	[M]
C2179	ECJ1VC1H151K	150pF 50V	[M]
C2180	ECJ1VB1H104K	0.1uF 50V	[M]
C2181	ECJ1VB1H102K	1000pF 50V	[M]
C2190	ECJ1VB1C105K	1uF 16V	[M]
C2193	ECJ1VB1H332K	3300pF 50V	[M]
C2194	ECJ2YB0J475K	4.7uF 6.3V	[M]
C2195	ECJ1VB1H681K	680pF 50V	[M]
C2201	ECJ1VB1C105K	1uF 16V	[M]
C2202	ECJ1VB1C473K	0.047uF 16V	[M]
C2203	ECJ1VB1C105K	1uF 16V	[M]
C2204	ECJ1VB1C563K	0.056uF 16V	[M]
C2206	ECJ1VB1H222K	2200pF 50V	[M]
C2208	ECJ1VB1H682K	6800pF 50V	[M]
C2211	ECJ1VB1C105K	1uF 16V	[M]
C2212	ECJ1VB1H182K	1800pF 50V	[M]
C2213	ECJ1VB1H102K	1000pF 50V	[M]
C2214	ECJ1VB1H562K	5600pF 50V	[M]
C2215	ECJ1VB1C563K	0.056uF 16V	[M]
C2216	ECJ1VB1C563K	0.056uF 16V	[M]
C2217	ECJ1VB1H104K	0.1uF 50V	[M]
C2218	ECJ1VB1H104K	0.1uF 50V	[M]
C2219	ECJ1VB1C105K	1uF 16V	[M]
C2221	ECJ1VB1H104K	0.1uF 50V	[M]
C2230	ECJ1VB1H562K	5600pF 50V	[M]
C2231	ECJ1VB1H682K	6800pF 50V	[M]
C2235	ECJ1VB1H153K	0.015uF 50V	[M]
C2262	ECJ1VB1H332K	3300pF 50V	[M]
C2264	ECJ1VB1H221K	220pF 50V	[M]
C2277	ECEA1HKA010B	1uF 50V	[M]
C2278	ECJ1VC1H101J	100pF 50V	[M]
C2279	ECJ1VC1H151K	150pF 50V	[M]
C2280	ECJ1VB1H104K	0.1uF 50V	[M]
C2281	ECJ1VB1H102K	1000pF 50V	[M]
C2290	ECJ1VB1C105K	1uF 16V	[M]
C2293	ECJ1VB1H332K	3300pF 50V	[M]
C2294	ECJ2YB0J475K	4.7uF 6.3V	[M]
C2295	ECJ1VB1H681K	680pF 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C2300	ECJ1VB1C105K	1uF 16V	[M]
C2301	ECJ2YB0J475K	4.7uF 6.3V	[M]
C2302	ECJ1VB1C393K	0.039uF 16V	[M]
C2303	ECJ1VB1H473K	0.047uF 50V	[M]
C2304	ECJ2YB0J475K	4.7uF 6.3V	[M]
C2305	ECJ1VB1H332K	3300pF 50V	[M]
C2306	ECJ1VB1A154K	0.15uF 10V	[M]
C2307	ECJ1VB1C105K	1uF 16V	[M]
C2308	ECJ1VB1H223K	0.022uF 50V	[M]
C2309	ECJ1VB1C823K	0.082uF 16V	[M]
C2310	ECJ1VB1H223K	0.022uF 50V	[M]
C2315	ECJ1VB1H682K	6800pF 50V	[M]
C2400	ECJ1VB1C105K	1uF 16V	[M]
C2401	ECJ2YB0J475K	4.7uF 6.3V	[M]
C2402	ECJ1VB1C393K	0.039uF 16V	[M]
C2403	ECJ1VB1H473K	0.047uF 50V	[M]
C2404	ECJ2YB0J475K	4.7uF 6.3V	[M]
C2405	ECJ1VB1H332K	3300pF 50V	[M]
C2406	ECJ1VB1A154K	0.15uF 10V	[M]
C2407	ECJ1VB1C105K	1uF 16V	[M]
C2408	ECJ1VB1H223K	0.022uF 50V	[M]
C2415	ECJ1VB1H682K	6800pF 50V	[M]
C2500	ECJ1VB1C105K	1uF 16V	[M]
C2501	ECEA1EKS4R7B	4.7uF 25V	[M]
C2502	ECJ1VB1H473K	0.047uF 50V	[M]
C2503	ECJ1VB1C473K	0.047uF 16V	[M]
C2504	ECJ1VB1H681K	680pF 50V	[M]
C2509	ECJ1VB1H103K	0.01uF 50V	[M]
C2551	ECJ1VC1H560J	56pF 50V	[M]
C2552	ECJ1VB1H152K	1500pF 50V	[M]
C2553	ECJ1VB1H152K	1500pF 50V	[M]
C2554	ECJ1VB1H104K	0.1uF 50V	[M]
C2555	ECJ1VB1H104K	0.1uF 50V	[M]
C2556	ECEA1HKS2R2B	2.2uF 50V	[M]
C2600	ECJ1VB1C105K	1uF 16V	[M]
C2601	ECEA1EKS220B	22uF 25V	[M]
C2602	ECEA1EKS4R7B	4.7uF 25V	[M]
C2603	ECJ1VB1H223K	0.022uF 50V	[M]
C2604	ECEA1EKS4R7B	4.7uF 25V	[M]
C2605	ECJ1VB1H682K	6800pF 50V	[M]
C2609	ECJ1VB1A224K	0.22uF 10V	[M]
C2610	ECJ1VB1A334K	0.33uF 10V	[M]
C2611	ECJ1VB1H104K	0.1uF 50V	[M]
C2612	ECJ1VB1H103K	0.01uF 50V	[M]
C2617	ECJ1VB1C683K	0.068uF 16V	[M]
C2624	F1J0J106A014	10uF 6.3V	[M]
C2625	ECJ1VB1H223K	0.022uF 50V	[M]
C2626	ECJ2YB0J475K	4.7uF 6.3V	[M]
C2627	ECJ1VC1H101J	100pF 50V	[M]
C2628	F1J0J106A014	10uF 6.3V	[M]
C2629	ECEA1HKA100B	10uF 50V	[M]
C2630	ECJ1VC1H221J	220pF 50V	[M]
C2631	ECEA1HKA010B	1uF 50V	[M]
C2632	ECJ1VB1A474K	0.47uF 10V	[M]
C2633	ECJ1VB1H104K	0.1uF 50V	[M]
C2634	ECJ1VC1H680J	68pF 50V	[M]
C2635	ECJ1VB1E103K	0.01uF 25V	[M]
C2636	ECJ1VB1E103K	0.01uF 25V	[M]
C2637	ECEA1EKS4R7B	4.7uF 25V	[M]
C2751	ECJ1VB1C105K	1uF 16V	[M]
C2756	ECEA0JKA470B	47uF 6.3V	[M]
C2801	ECJ1VB1C105K	1uF 16V	[M]
C2802	ECA0JM102B	1000uF 6.3V	[M]
C2804	ECA1AM331B	330uF 10V	[M]
C2805	ECA0JM471B	470uF 6.3V	[M]
C2806	ECA0JM471B	470uF 6.3V	[M]
C2807	ECJ1VB1H103K	0.01uF 50V	[M]
C2808	F2A1A2210063	220uF 10V	[M]
C2809	ECEA1EKS220B	22uF 25V	[M]
C2810	ECJ1VB1H103K	0.01uF 50V	[M]
C2811	ECJ1VB1H104K	0.1uF 50V	[M]
C2812	ECJ1VB1H104K	0.1uF 50V	[M]
C2817	ECJ1VB1C105K	1uF 16V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C2818	ECJ1VB1C105K	1uF 16V	[M]
C2823	ECJ1VC1H101J	100pF 50V	[M]
C2825	ECJ1VC1H101J	100pF 50V	[M]
C2826	ECJ1VC1H101J	100pF 50V	[M]
C2827	ECJ1VC1H101J	100pF 50V	[M]
C2842	ECA0JM102B	1000uF 6.3V	[M]
C2900	F2A1V330A379	33uF 35V	[M]
C2901	ECA1EM102B	1000uF 25V	[M]
C2902	ECQB1H392KF3	3900pF 50V	[M]
C2903	F2A1V330A379	33uF 35V	[M]
C2905	ECJ1VB1H103K	0.01uF 50V	[M]
C2906	EEUFC1C471B	470uF 16V	[M]
C2907	ECJ1VB1H103K	0.01uF 50V	[M]
C2908	ECEA1CKA101B	100uF 16V	[M]
C2909	ECEA1AKA330B	33uF 10V	[M]
C2911	F2A0J102A551	1000uF 6.3V	[M]
C2912	ECEA1CKS101B	100uF 16V	[M]
C2914	ECA0JAK221XB	220uF 6.3V	[M]
C2915	ECJ1VB1H104K	0.1uF 50V	[M]
C2916	ECEA1CKA101B	100uF 16V	[M]
C2917	ECA0JM101B	100uF 6.3V	[M]
C2922	EEUFC0J821B	820uF 6.3V	[M]
C2923	ECA1EM221B	220uF 25V	[M]
C2924	ECJ1VB1H102K	1000pF 50V	[M]
C2925	EEUFC1C101B	100uF 16V	[M]
C2927	ECJ1VB1H103K	0.01uF 50V	[M]
C2929	ECJ1VB1H103K	0.01uF 50V	[M]
C2930	EEUFM1A681B	680uF 10V	[M]
C2939	ECJ1VB1H103K	0.01uF 50V	[M]
C2941	ECA1CM221B	220uF 16V	[M]
C2947	EEUFM1A681B	680uF 10V	[M]
C2948	ECJ1VB1H104K	0.1uF 50V	[M]
C2949	ECJ1VB1H104K	0.1uF 50V	[M]
C2951	ECEA1CKA101B	100uF 16V	[M]
C2952	ECJ1VB1C105K	1uF 16V	[M]
C2955	ECA1EM221B	220uF 25V	[M]
C2972	ERJ3GEY0R00V	0 1/10W	[M]
C2975	ECJ1VB1H104K	0.1uF 50V	[M]
C3901	EEE0GA331WP	330uF 4V	[M]
C3902	EEE0GA331WP	330uF 4V	[M]
C3904	EEE0GA331WP	330uF 4V	[M]
C3906	EEE0GA331WP	330uF 4V	[M]
C3907	ECJ0EB1A104K	0.1uF 10V	[M]
C3908	ECJ0EB1A104K	0.1uF 10V	[M]
C3909	ECJ1VB0J105K	1uF 6.3V	[M]
C3910	ECJ0EB1A104K	0.1uF 10V	[M]
C3911	ECJ1VB0J105K	1uF 6.3V	[M]
C3913	ECJ0EB1A104K	0.1uF 10V	[M]
C3914	ECJ0EB1A104K	0.1uF 10V	[M]
C3915	ECJ1VB0J105K	1uF 6.3V	[M]
C3916	ECJ0EB1A104K	0.1uF 10V	[M]
C3917	ECJ1VB0J105K	1uF 6.3V	[M]
C3918	ECJ0EB1A104K	0.1uF 10V	[M]
C3919	ECJ1VB0J105K	1uF 6.3V	[M]
C3920	ECJ1VB0J105K	1uF 6.3V	[M]
C3921	ECJ0EB1A104K	0.1uF 10V	[M]
C3922	ECJ0EB1A104K	0.1uF 10V	[M]
C3923	ECJ1VB0J105K	1uF 6.3V	[M]
C3924	ECJ1VB0J105K	1uF 6.3V	[M]
C3925	ECJ0EB1A104K	0.1uF 10V	[M]
C3926	ECJ0EB1A104K	0.1uF 10V	[M]
C3927	ECJ1VB0J105K	1uF 6.3V	[M]
C3928	ECJ0EB1A104K	0.1uF 10V	[M]
C3929	ECJ0EB1A104K	0.1uF 10V	[M]
C3930	ECJ1VB0J105K	1uF 6.3V	[M]
C3932	ECJ1VB0J105K	1uF 6.3V	[M]
C3940	ECJ0EB1A104K	0.1uF 10V	[M]
C3941	F1G1H221A444	220pF 50V	[M]
C3954	ECJ0EF1C104Z	0.1uF 16V	[M]
C3955	ECJ0EB1C103K	0.01uF 16V	[M]
C3956	ECJ1VB0J105K	1uF 6.3V	[M]
C3964	ECJ0EB1A104K	0.1uF 10V	[M]
C5000	ECJ1VB1H102K	1000pF 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C5001	ECJ1VB1H102K	1000pF 50V	[M]
C5002	F1H1A474A001	0.47uF 10V	[M]
C5003	F1H1A474A001	0.47uF 10V	[M]
C5004	F1H1A474A001	0.47uF 10V	[M]
C5005	F1H1A474A001	0.47uF 10V	[M]
C5006	F1H1H331A013	330pF 50V	[M]
C5007	F1H1H331A013	330pF 50V	[M]
C5008	F1H1H153A219	0.015uF 50V	[M]
C5009	F1H1H153A219	0.015uF 50V	[M]
C5010	ECJ2VC2A221J	220pF 100V	[M]
C5011	ECJ2VC2A221J	220pF 100V	[M]
C5012	ECJ2VC2A221J	220pF 100V	[M]
C5013	ECJ2VC2A221J	220pF 100V	[M]
C5014	ECQV1H684JL3	0.68uF 50V	[M]
C5015	ECQV1H684JL3	0.68uF 50V	[M]
C5016	ECJ1VB1H104K	0.1uF 50V	[M]
C5017	ECJ1VB1H104K	0.1uF 50V	[M]
C5018	F1K2A1040007	0.1uF 100V	[M]
C5019	ECJ1VB1H104K	0.1uF 50V	[M]
C5020	ECJ1VB1H104K	0.1uF 50V	[M]
C5021	ECJ1VB1H104K	0.1uF 50V	[M]
C5022	ECJ1VB1H104K	0.1uF 50V	[M]
C5023	F1K2A1040007	0.1uF 100V	[M]
C5024	ECJ1VB1H104K	0.1uF 50V	[M]
C5025	ECJ1VB1H104K	0.1uF 50V	[M]
C5027	ECJ1VB1H104K	0.1uF 50V	[M]
C5028	ECJ1VB1H104K	0.1uF 50V	[M]
C5030	ECJ1VC1H221J	220pF 50V	[M]
C5031	F1H1C224A068	0.22uF 16V	[M]
C5032	ECJ1VB1H102K	1000pF 50V	[M]
C5033	ECJ1VB1H104K	0.1uF 50V	[M]
C5040	F2A2A2200035	22uF 100V	[M]
C5050	ECJ1VB1H104K	0.1uF 50V	[M]
C5051	ECJ1VB1H104K	0.1uF 50V	[M]
C5052	ECJ1VB1H104K	0.1uF 50V	[M]
C5053	ECJ1VB1H104K	0.1uF 50V	[M]
C5106	F1H1A474A001	0.47uF 10V	[M]
C5107	F1H1A474A001	0.47uF 10V	[M]
C5117	ECJ1VB1H102K	1000pF 50V	[M]
C5119	ECJ1VB1H102K	1000pF 50V	[M]
C5120	F1H1A474A001	0.47uF 10V	[M]
C5121	F1H1A474A001	0.47uF 10V	[M]
C5133	F2A0J101A245	100uF 6.3V	[M]
C5150	F1H1H332A013	3300pF 50V	[M]
C5151	F1H1H332A013	3300pF 50V	[M]
C5152	ECJ1VB1H102K	1000pF 50V	[M]
C5155	ECJ1VB1H102K	1000pF 50V	[M]
C5200	ECJ1VB1H104K	0.1uF 50V	[M]
C5201	F1H1H153A219	0.015uF 50V	[M]
C5202	F1H1C224A068	0.22uF 16V	[M]
C5203	ECJ2VC2A221J	220pF 100V	[M]
C5204	F1H1H153A219	0.015uF 50V	[M]
C5205	ECJ2VC2A221J	220pF 100V	[M]
C5206	ECJ1VB1H104K	0.1uF 50V	[M]
C5207	F1K2A1040007	0.1uF 100V	[M]
C5208	ECJ1VB1H104K	0.1uF 50V	[M]
C5209	ECJ1VB1H104K	0.1uF 50V	[M]
C5211	ECJ2VC2A221J	220pF 100V	[M]
C5212	ECJ1VC1H221J	220pF 50V	[M]
C5213	ECJ1VB1H104K	0.1uF 50V	[M]
C5214	ECJ1VB1H104K	0.1uF 50V	[M]
C5216	F1H1H331A013	330pF 50V	[M]
C5217	ECJ1VB1H104K	0.1uF 50V	[M]
C5218	ECJ2VC2A221J	220pF 100V	[M]
C5219	F1K2A1040007	0.1uF 100V	[M]
C5220	ECJ1VB1H104K	0.1uF 50V	[M]
C5221	ECJ1VB1H102K	1000pF 50V	[M]
C5222	F1H1A474A001	0.47uF 10V	[M]
C5223	F1H1A474A001	0.47uF 10V	[M]
C5224	F1H1H331A013	330pF 50V	[M]
C5225	ECQV1H684JL3	0.68uF 50V	[M]
C5226	ECJ1VB1H104K	0.1uF 50V	[M]
C5227	ECJ1VB1H104K	0.1uF 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C5228	ECQV1H684JL3	0.68uF 50V	[M]
C5231	ECJ1VB1H102K	1000pF 50V	[M]
C5232	F1H1A474A001	0.47uF 10V	[M]
C5233	F1H1A474A001	0.47uF 10V	[M]
C5234	ECJ1VB1H102K	1000pF 50V	[M]
C5240	F2A2A2200035	22uF 100V	[M]
C5250	ECJ1VB1H104K	0.1uF 50V	[M]
C5251	ECJ1VB1H104K	0.1uF 50V	[M]
C5300	ECQV1H684JL3	0.68uF 50V	[M]
C5301	ECJ1VB1H104K	0.1uF 50V	[M]
C5302	ECJ1VB1H104K	0.1uF 50V	[M]
C5303	ECJ1VB1H104K	0.1uF 50V	[M]
C5304	F1H1H331A013	330pF 50V	[M]
C5305	ECJ1VB1H104K	0.1uF 50V	[M]
C5306	ECJ1VB1H104K	0.1uF 50V	[M]
C5307	ECJ2VC2A221J	220pF 100V	[M]
C5309	ECJ1VB1H104K	0.1uF 50V	[M]
C5310	F1K2A1040007	0.1uF 100V	[M]
C5311	ECJ2VC2A221J	220pF 100V	[M]
C5312	F1H1H331A013	330pF 50V	[M]
C5313	ECJ1VB1H104K	0.1uF 50V	[M]
C5314	F1H1A474A001	0.47uF 10V	[M]
C5315	ECJ1VB1H102K	1000pF 50V	[M]
C5316	ECJ1VB1H104K	0.1uF 50V	[M]
C5317	F1H1A474A001	0.47uF 10V	[M]
C5318	ECJ1VB1H104K	0.1uF 50V	[M]
C5319	F1K2A1040007	0.1uF 100V	[M]
C5321	F1H1C224A068	0.22uF 16V	[M]
C5322	F1H1H153A219	0.015uF 50V	[M]
C5323	ECJ1VC1H221J	220pF 50V	[M]
C5324	F1H1H153A219	0.015uF 50V	[M]
C5325	ECJ2VC2A221J	220pF 100V	[M]
C5326	ECJ2VC2A221J	220pF 100V	[M]
C5327	ECJ1VB1H104K	0.1uF 50V	[M]
C5328	ECQV1H684JL3	0.68uF 50V	[M]
C5331	ECJ1VB1H102K	1000pF 50V	[M]
C5332	F1H1A474A001	0.47uF 10V	[M]
C5333	ECJ1VB1H102K	1000pF 50V	[M]
C5334	F1H1A474A001	0.47uF 10V	[M]
C5350	ECJ1VB1H104K	0.1uF 50V	[M]
C5351	ECJ1VB1H104K	0.1uF 50V	[M]
C5400	ECQV1H684JL3	0.68uF 50V	[M]
C5401	ECJ1VB1H104K	0.1uF 50V	[M]
C5402	ECJ1VB1H104K	0.1uF 50V	[M]
C5403	ECJ1VB1H104K	0.1uF 50V	[M]
C5404	F1H1H331A013	330pF 50V	[M]
C5405	ECJ1VB1H104K	0.1uF 50V	[M]
C5406	ECJ1VB1H104K	0.1uF 50V	[M]
C5407	ECJ2VC2A221J	220pF 100V	[M]
C5409	ECJ1VB1H104K	0.1uF 50V	[M]
C5410	F1K2A1040007	0.1uF 100V	[M]
C5411	ECJ2VC2A221J	220pF 100V	[M]
C5412	F1H1H331A013	330pF 50V	[M]
C5413	ECJ1VB1H104K	0.1uF 50V	[M]
C5416	ECJ1VB1H104K	0.1uF 50V	[M]
C5418	ECJ1VB1H104K	0.1uF 50V	[M]
C5419	F1K2A1040007	0.1uF 100V	[M]
C5421	F1H1C224A068	0.22uF 16V	[M]
C5422	F1H1H153A219	0.015uF 50V	[M]
C5423	ECJ1VC1H221J	220pF 50V	[M]
C5424	F1H1H153A219	0.015uF 50V	[M]
C5425	ECJ2VC2A221J	220pF 100V	[M]
C5426	ECJ2VC2A221J	220pF 100V	[M]
C5427	ECJ1VB1H104K	0.1uF 50V	[M]
C5428	ECQV1H684JL3	0.68uF 50V	[M]
C5431	ECJ1VB1H102K	1000pF 50V	[M]
C5440	F2A2A2200035	22uF 100V	[M]
C5445	ECJ1VB1H104K	0.1uF 50V	[M]
C5508	F2A1V4710074	470uF 35V	[M]
C5509	F2A1V4710074	470uF 35V	[M]
C5510	F2A1V4710074	470uF 35V	[M]
C5511	F2A1V4710074	470uF 35V	[M]
C5512	F2A1V4710074	470uF 35V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C5513	F2A1V4710074	470uF 35V	[M]
C5514	ECJ1VB1H104K	0.1uF 50V	[M]
C5515	ECJ1VB1H104K	0.1uF 50V	[M]
C5516	F2A1V4710074	470uF 35V	[M]
C5517	F2A1V4710074	470uF 35V	[M]
C5518	ECJ1VB1H104K	0.1uF 50V	[M]
C5519	ECJ1VB1H104K	0.1uF 50V	[M]
C5520	ECJ1VB1H104K	0.1uF 50V	[M]
C5521	ECJ1VB1H104K	0.1uF 50V	[M]
C5522	ECJ1VB1H104K	0.1uF 50V	[M]
C5523	ECJ1VB1H104K	0.1uF 50V	[M]
C5524	ECJ1VB1H104K	0.1uF 50V	[M]
C5525	ECJ1VB1H104K	0.1uF 50V	[M]
C5540	F2A2A2200035	22uF 100V	[M]
C5550	ECJ1VB1H103K	0.01uF 50V	[M]
C5551	ECJ1VB1H391K	390pF 50V	[M]
C5552	ECJ1VB1H391K	390pF 50V	[M]
C5553	ECJ1VC1H101J	100pF 50V	[M]
C5554	ECJ1VB1H104K	0.1uF 50V	[M]
C5555	F1K1C1060001	10uF 16V	[M]
C5556	ECJ1VB1H103K	0.01uF 50V	[M]
C5557	ECJ1VC1H101J	100pF 50V	[M]
C5558	F1H1H470A004	47pF 50V	[M]
C5559	F1H1H470A004	47pF 50V	[M]
C5560	ECJ1VB1H104K	0.1uF 50V	[M]
C5561	ECJ1VC1H101J	100pF 50V	[M]
C5562	F2A0J102A016	1000uF 6.3V	[M]
C5601	F2A1C100A234	10uF 16V	[M]
C5602	F2A1C100A234	10uF 16V	[M]
C5690	ECJ1VB1H102K	1000pF 50V	[M]
C5691	F2A1E100A202	10uF 25V	[M]
C5692	F2A0J221A245	220uF 6.3V	[M]
C5693	ECJ1VB1H104K	0.1uF 50V	[M]
C5694	ECA1CAK330XB	33uF 16V	[M]
C5695	ECJ1VB1H104K	0.1uF 50V	[M]
C5696	ECEA1EKS220B	22uF 25V	[M]
C5697	ECA1HAK010XB	1uF 50V	[M]
C5700	F1BAF1020020	1000pF	[M] △
C5701	F0CAF334A087	0.33uF	[M] △
C5703	F0C2H1040001	0.1uF 500V	[M] △
C5704	F1BAF1020020	1000pF	[M] △
C5705	F1BAF1020020	1000pF	[M] △
C5706	F1BAF1020020	1000pF	[M] △
C5707	F1BAF1020020	1000pF	[M] △
C5711	F2B2G331A084	330uF 400V	[M]
C5712	F2B2G331A084	330uF 400V	[M]
C5713	F0C2J1030005	0.01uF 630V	[M]
C5720	ECJ1VB1H104K	0.1uF 50V	[M]
C5721	ECJ1VB1H221K	220pF 50V	[M]
C5722	ECJ1VB1H102K	1000pF 50V	[M]
C5723	ECJ1VB1H471K	470pF 50V	[M]
C5724	F2A1H5600009	56uF 50V	[M]
C5725	ECJ1VB1H104K	0.1uF 50V	[M]
C5726	ECJ1VB1H104K	0.1uF 50V	[M]
C5728	ECJ1VB1H102K	1000pF 50V	[M]
C5730	ECEA1HKS010B	1uF 50V	[M]
C5737	F1A3A471A035	470pF 1000V	[M]
C5750	ECJ1VB1H104K	0.1uF 50V	[M]
C5788	ECJ1VB1H104K	0.1uF 50V	[M]
C5789	ECJ1VB1H104K	0.1uF 50V	[M]
C5790	ECJ3YB2J222K	2200pF 630V	[M]
C5791	ECEA1HKA2R2B	2.2uF 50V	[M]
C5793	ECJ1VB1H104K	0.1uF 50V	[M]
C5794	ECJ1VC1H220J	22pF 50V	[M]
C5795	ECJ2VC1H222J	2200pF 50V	[M]
C5796	F1J1H104A717	0.1uF 50V	[M]
C5797	F1A3A470A023	47pF 1000V	[M]
C5798	F2A1H5600009	56uF 50V	[M]
C5799	F2A1H5600009	56uF 50V	[M]
C5800	F1J2E1030004	0.01uF 250V	[M]
C5805	F2B1V222A007	2200uF 35V	[M]
C5808	F2B1V222A007	2200uF 35V	[M]
C5810	ECJ1VB1H104K	0.1uF 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C5812	ECJ1VB1H104K	0.1uF 50V	[M]
C5813	F2A1V4710035	470uF 35V	[M]
C5815	ECJ1VB1H104K	0.1uF 50V	[M]
C5816	F2A1E471A652	470uF 25V	[M]
C5817	F2A2AR22A358	0.22uF 100V	[M]
C5818	ECJ1VB1H104K	0.1uF 50V	[M]
C5819	F1J2E1030004	0.01uF 250V	[M]
C5820	F1J2E1030004	0.01uF 250V	[M]
C5821	F1J2E1030004	0.01uF 250V	[M]
C5822	F1J2E1030004	0.01uF 250V	[M]
C5823	ECJ1VB1H104K	0.1uF 50V	[M]
C5824	F2A1E471A652	470uF 25V	[M]
C5825	ECJ1VB1H104K	0.1uF 50V	[M]
C5826	F1J2E1030004	0.01uF 250V	[M]
C5831	ECJ1VB1H104K	0.1uF 50V	[M]
C5832	ECJ1VB1H104K	0.1uF 50V	[M]
C5869	ECJ1VB1H104K	0.1uF 50V	[M]
C5896	ECJ1VB1H104K	0.1uF 50V	[M]
C5897	ECJ1VB1H104K	0.1uF 50V	[M]
C5898	ECJ1VB1H104K	0.1uF 50V	[M]
C5899	F2A1C221A104	220uF 16V	[M]
C6100	ECJ2FB0J106K	10uF 6.3V	[M]
C6101	ECJ2FB0J106K	10uF 6.3V	[M]
C6102	ECJ1VC1H470J	47pF 50V	[M]
C6103	ECJ1VB1H681K	680pF 50V	[M]
C6104	ECJ1VB0J105K	1uF 6.3V	[M]
C6200	ECJ2FB0J106K	10uF 6.3V	[M]
C6201	ECJ2FB0J106K	10uF 6.3V	[M]
C6202	ECJ1VC1H470J	47pF 50V	[M]
C6203	ECJ1VB1H681K	680pF 50V	[M]
C6204	ECJ1VB0J105K	1uF 6.3V	[M]
C6300	ECA1AM470B	47uF 10V	[M]
C6301	ECEA1EKS4R7B	4.7uF 25V	[M]
C6302	ECEA1EKS4R7B	4.7uF 25V	[M]
C6303	ECJ1VB1H104K	0.1uF 50V	[M]
C6304	ECEA1HKA100B	10uF 50V	[M]
C6400	ECEA1CKA470B	47uF 16V	[M]
C6401	ECJ1VB1H103K	0.01uF 50V	[M]
C6402	F1J0J106A014	10uF 6.3V	[M]
C6403	ECJ1VB1H104K	0.1uF 50V	[M]
C6404	ECEA0JKA470B	47uF 6.3V	[M]
C6405	ECEA1AKA330B	33uF 10V	[M]
C6406	ECJ1VB1H104K	0.1uF 50V	[M]
C6407	ECJ1VB1H104K	0.1uF 50V	[M]
C6408	ECJ1VB1H104K	0.1uF 50V	[M]
C6501	ECJ1VB1H103K	0.01uF 50V	[M]
C6522	ECJ1VB1C105K	1uF 16V	[M]
C6523	ECJ1VB1H103K	0.01uF 50V	[M]
C6524	ECJ1VB1H103K	0.01uF 50V	[M]
C6530	ECJ1VB1H103K	0.01uF 50V	[M]
C6531	ECJ1VB1C105K	1uF 16V	[M]
C6532	ECJ1VC1H150J	15pF 50V	[M]
C6533	ECJ1VB1C105K	1uF 16V	[M]
C6534	ECJ1VB1C105K	1uF 16V	[M]
C6535	ECJ1VB1H104K	0.1uF 50V	[M]
C6536	ECJ1VB1C105K	1uF 16V	[M]
C6537	ECJ1VC1H151K	150pF 50V	[M]
C6538	ECJ2YB0J106M	10uF 6.3V	[M]
C6539	ECJ1VB1C105K	1uF 16V	[M]
C6601	ECEA1AKA330B	33uF 10V	[M]
C6901	ECJ1VB1H104K	0.1uF 50V	[M]
C6902	ECJ1VC1H101K	100pF 50V	[M]
C6903	ECEA1HKA100B	10uF 50V	[M]
C6905	ECEA1HKA100B	10uF 50V	[M]
C6906	ECJ1VC1H101K	100pF 50V	[M]
C6907	ECJ1VC1H101K	100pF 50V	[M]
C6909	ECJ1VB1H103K	0.01uF 50V	[M]
C6910	ECEA0JKS101B	100uF 6.3V	[M]
C6911	ECJ1VB1H103K	0.01uF 50V	[M]
C6913	ECEA1HKS3R3B	3.3uF 50V	[M]
C6916	ECJ1VC1H101K	100pF 50V	[M]
C6917	ECJ1VC1H101K	100pF 50V	[M]
C6918	ECJ3YB1C106K	10uF 16V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C6919	ECJ1VC1H101K	100pF 50V	[M]
C6925	ECJ1VB1H103K	0.01uF 50V	[M]
C6931	ECJ1VB1H103K	0.01uF 50V	[M]
C6941	ECJ1VB1H473K	0.047uF 50V	[M]
C6951	ECJ1VB1H473K	0.047uF 50V	[M]
C7003	ECJ1VB1C105K	1uF 16V	[M]
C7004	ECJ1VB1C153K	0.015uF 16V	[M]
C7005	ECJ1VC1H470J	47pF 50V	[M]
C7006	ECJ1VC1H101K	100pF 50V	[M]
C7007	ECJ1VB1H104K	0.1uF 50V	[M]
C7009	ECJ1VB1H151K	150pF 50V	[M]
C7010	ECJ1VC1H470J	47pF 50V	[M]
C7011	ECJ1VB1H104K	0.1uF 50V	[M]
C7012	ECJ1VB1A105K	1uF 10V	[M]
C7014	ECJ1VB1C474K	0.47uF 16V	[M]
C7015	ECJ1VB1C105K	1uF 16V	[M]
C7016	F1H1H104A013	0.1 50V	[M]
C7018	ECJ1VB1H104K	0.1uF 50V	[M]
C7019	ECJ1VB1H104K	0.1uF 50V	[M]
C7020	ECJ1VB1H104K	0.1uF 50V	[M]
C7101	ECJ1VB1C105K	1uF 16V	[M]
C7102	ECJ1VB1H392K	3900pF 50V	[M]
C7103	ECJ1VB1H561K	560pF 50V	[M]
C7104	ECJ1VB1C823K	0.082uF 16V	[M]
C7105	ECJ1VB1H104K	0.1uF 50V	[M]
C7106	ECJ1VB1H104K	0.1uF 50V	[M]
C7107	ECJ1VB1H332K	3300pF 50V	[M]
C7108	ECJ1VB1H561K	560pF 50V	[M]
C7109	ECJ1VB1C823K	0.082uF 16V	[M]
C7110	ECEA1CKS470B	47uF 16V	[M]
C7111	ECEA1CKS470B	47uF 16V	[M]
C7112	ECJ1VB1H104K	0.1uF 50V	[M]
C7113	ECJ1VB1C105K	1uF 16V	[M]
C7115	ECJ1VB1C104K	0.1uF 16V	[M]
C7116	ECJ1VB1H562K	5600pF 50V	[M]
C7117	ECJ1VB1C105K	1uF 16V	[M]
C8001	EEE0GA331WP	330uF 4V	[M]
C8002	F2G0J330A031	33uF 6.3V	[M]
C8003	ECJ0EF1C104Z	0.1uF 16V	[M]
C8004	ECJ0EF1C104Z	0.1uF 16V	[M]
C8005	ECJ0EF1C104Z	0.1uF 16V	[M]
C8006	ECJ0EF1C104Z	0.1uF 16V	[M]
C8007	ECJ0EF1C104Z	0.1uF 16V	[M]
C8010	F1G1H221A444	220pF 50V	[M]
C8011	F2G0J101A031	100uF 6.3V	[M]
C8012	ECJ0EF1C104Z	0.1uF 16V	[M]
C8013	ECJ0EF1C104Z	0.1uF 16V	[M]
C8014	ECJ0EF1C104Z	0.1uF 16V	[M]
C8015	ECJ0EF1C104Z	0.1uF 16V	[M]
C8016	ECJ0EF1C104Z	0.1uF 16V	[M]
C8018	ECJ0EF1C104Z	0.1uF 16V	[M]
C8020	ECJ0EF1C104Z	0.1uF 16V	[M]
C8021	ECJ0EF1C104Z	0.1uF 16V	[M]
C8022	ECJ0EF1C104Z	0.1uF 16V	[M]
C8023	ECJ0EF1C104Z	0.1uF 16V	[M]
C8026	ECJ0EF1C104Z	0.1uF 16V	[M]
C8051	ECJ1VB0J105K	1uF 6.3V	[M]
C8052	ECJ0EB1A104K	0.1uF 10V	[M]
C8053	ECJ0EF1C104Z	0.1uF 16V	[M]
C8054	F1G1H221A444	220pF 50V	[M]
C8055	ECJ1VB0J105K	1uF 6.3V	[M]
C8056	ECJ0EB1E222K	2200pF 25V	[M]
C8057	ECJ1VB0J105K	1uF 6.3V	[M]
C8111	ECJ0EB1A104K	0.1uF 10V	[M]
C8112	ECJ1VB0J105K	1uF 6.3V	[M]
C8113	ECJ0EB1E471K	470pF 25V	[M]
C8151	ECJ1VB0J475K	4.7uF 6.3V	[M]
C8152	ECJ1VB1C105K	1uF 16V	[M]
C8201	F2G0J101A031	100uF 6.3V	[M]
C8202	ECJ0EB1A104K	0.1uF 10V	[M]
C8203	ECJ0EB1A104K	0.1uF 10V	[M]
C8211	F1G1E1220001	1200pF 25V	[M]
C8221	ECJ0EB1E102K	1000pF 25V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C8222	F1G1E8210002	820pF 25V	[M]
C8225	ECJ0EB1E102K	1000pF 25V	[M]
C8226	ECJ0EB1E102K	1000pF 25V	[M]
C8231	ECJ0EB1A104K	0.1uF 10V	[M]
C8232	ECJ0EB1A104K	0.1uF 10V	[M]
C8251	F2G0J221A031	220uF 6.3V	[M]
C8252	ECJ0EF1C104Z	0.1uF 16V	[M]
C8253	ECJ0EF1C104Z	0.1uF 16V	[M]
C8255	F2G1C220A037	22uF 16V	[M]
C8256	ECJ0EF1C104Z	0.1uF 16V	[M]
C8257	F2G1C470A076	47uF 16V	[M]
C8258	ECJ0EF1C104Z	0.1uF 16V	[M]
C8261	ECJ0EF1C104Z	0.1uF 16V	[M]
C8262	ECJ0EF1C104Z	0.1uF 16V	[M]
C8301	F2G0J221A031	220uF 6.3V	[M]
C8302	F2G0J330A031	33uF 6.3V	[M]
C8303	ECJ0EB1A104K	0.1uF 10V	[M]
C8304	ECJ0EB1A104K	0.1uF 10V	[M]
C8305	ECJ0EB1A104K	0.1uF 10V	[M]
C8306	ECJ0EB1A104K	0.1uF 10V	[M]
C8311	ECJ0EB1A104K	0.1uF 10V	[M]
C8312	ECJ1VB0J105K	1uF 6.3V	[M]
C8313	ECJ1VB0J105K	1uF 6.3V	[M]
C8320	ECJ0EF1C104Z	0.1uF 16V	[M]
C8321	ECJ0EB1A104K	0.1uF 10V	[M]
C8325	ECJ0EB1A104K	0.1uF 10V	[M]
C8330	F2G0J470A031	47uF 6.3V	[M]
C8331	ECJ0EB1A104K	0.1uF 10V	[M]
C8335	ECJ0EB1A104K	0.1uF 10V	[M]
C8340	ECJ0EF1C104Z	0.1uF 16V	[M]
C8341	ECJ0EB1A104K	0.1uF 10V	[M]
C8401	ECJ0EC1H150J	15pF 50V	[M]
C8421	F2G0J221A031	220uF 6.3V	[M]
C8422	ECJ0EF1C104Z	0.1uF 16V	[M]
C8423	F2G0J330A031	33uF 6.3V	[M]
C8424	ECJ0EF1C104Z	0.1uF 16V	[M]
C8425	ECJ0EC1H150J	15pF 50V	[M]
C8426	ECJ0EF1C104Z	0.1uF 16V	[M]
C8428	ECJ0EF1C104Z	0.1uF 16V	[M]
C8429	ECJ0EF1C104Z	0.1uF 16V	[M]
C8431	F2G1C100A072	10uF 16V	[M]
C8432	F2G1C100A072	10uF 16V	[M]
C8433	F2G1C100A072	10uF 16V	[M]
C8501	F2G0J101A031	100uF 6.3V	[M]
C8502	ECJ0EF1C104Z	0.1uF 16V	[M]
C8503	ECJ0EF1C104Z	0.1uF 16V	[M]
C8504	ECJ0EF1C104Z	0.1uF 16V	[M]
C8505	ECJ0EF1C104Z	0.1uF 16V	[M]
C8506	ECJ0EF1C104Z	0.1uF 16V	[M]
C8511	ECJ1VB0J105K	1uF 6.3V	[M]
C8512	ECJ1VB0J105K	1uF 6.3V	[M]
C8513	ECJ0EB1A104K	0.1uF 10V	[M]
C8514	ECJ0EB1A104K	0.1uF 10V	[M]
C8515	ECJ0EB1A104K	0.1uF 10V	[M]
C8516	ECJ0EB1A104K	0.1uF 10V	[M]
C8521	ECJ0EB1A104K	0.1uF 10V	[M]
C8522	ECJ0EB1A104K	0.1uF 10V	[M]
C8523	ECJ0EF1C104Z	0.1uF 16V	[M]
C8524	ECJ0EF1C104Z	0.1uF 16V	[M]
C8525	ECJ0EB1C562K	5600pF 16V	[M]
C8526	F1G1C183A039	0.018uF 16V	[M]
C8527	ECJ0EB1A333K	0.033uF 10V	[M]
C8528	ECJ1VB0J105K	1uF 6.3V	[M]
C8529	ECJ1VB0J105K	1uF 6.3V	[M]
C8530	ECJ0EF1C104Z	0.1uF 16V	[M]
C8531	ECJ0EC1H101J	100pF 50V	[M]
C8532	F1G1H221A444	220pF 50V	[M]
C8533	ECJ0EF1C104Z	0.1uF 16V	[M]
C8541	ECJ0EB1E472K	4700pF 25V	[M]
C8550	F2G0J330A031	33uF 6.3V	[M]
C8551	ECJ0EF1C104Z	0.1uF 16V	[M]
C8552	F2G1C100A072	10uF 16V	[M]
C8553	F2G0J470A031	47uF 6.3V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C8554	ECJ1VB0J105K	1uF 6.3V	[M]
C8561	ECJ0EF1C104Z	0.1uF 16V	[M]
C8562	F2G1C100A072	10uF 16V	[M]
C8563	F2G0J470A031	47uF 6.3V	[M]
C8564	ECJ1VB0J105K	1uF 6.3V	[M]
C8571	F1J1A106A043	10uF 10V	[M]
C8572	ECJ0EF1C104Z	0.1uF 16V	[M]
C8601	ECJ0EF1C104Z	0.1uF 16V	[M]
C8602	ECJ0EB1C153K	0.015uF 16V	[M]
C8606	ECJ0EF1C104Z	0.1uF 16V	[M]
C8611	ECJ0EF1C104Z	0.1uF 16V	[M]
C8621	ECJ0EC1H100D	10pF 50V	[M]
C8622	ECJ0EC1H100D	10pF 50V	[M]
C8651	ECJ0EF1C104Z	0.1uF 16V	[M]
C8652	ECJ0EF1C104Z	0.1uF 16V	[M]
C8691	ECJ0EF1C104Z	0.1uF 16V	[M]
C8695	ECJ0EF1C104Z	0.1uF 16V	[M]
C8701	ECJ0EB1A104K	0.1uF 10V	[M]
C8901	ECJ0EF1C104Z	0.1uF 16V	[M]
C9002	ECJ0EF1C104Z	0.1uF 16V	[M]
C9003	ECJ0EF1C104Z	0.1uF 16V	[M]
C9004	F1G1H7R0A445	7.0pF 50V	[M]
C9005	ECJ0EC1H080D	8pF 50V	[M]
C9006	ECJ0EB1A104K	0.1uF 10V	[M]
C9007	ECJ0EF1C104Z	0.1uF 16V	[M]
C9008	F1G1H221A444	220pF 50V	[M]
FL8101	F1H0J1050018	1uF 6.3V	[M]
FL8102	F1H0J1050018	1uF 6.3V	[M]
FL8103	F1H0J1050018	1uF 6.3V	[M]
FL8104	F1J1E1040022	0.1uF 25V	[M]
FL8421	F1H0J1050018	1uF 6.3V	[M]