ORDER NO. MD0705018CE

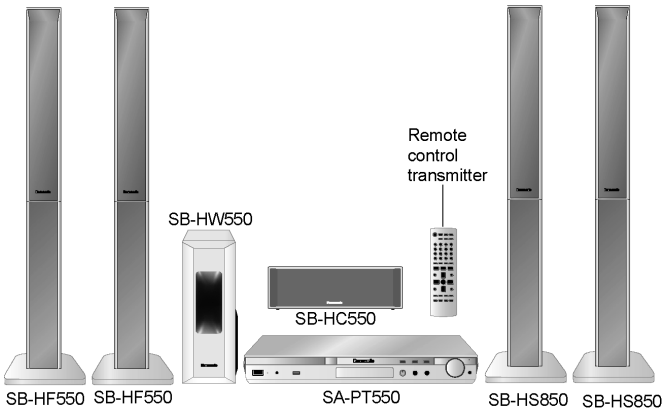
Service Manual

DVD Home Theater Sound System

SA-PT550GC
SA-PT550GCS
SA-PT550GCT
SA-PT550GS

Colour

(S).....Silver Type



Specifications

IGENERAL

Power Supply: AC 110-127 V/220-240 V, 50/60 Hz

Power Consumption: 140 W

Power Consumption in Standby Mode: approx. 0.8 W

Dimensions (W×H×D): 430×60×364.4 mm

Mass: Main unit approx. 3.5 kg

Operating Temperature Range: +5°C to +35°C (+41°F to +95°F)

Operating Humidity Range: 5% to 90% RH (no condensation)

IAMPLIFIER SECTION

RMS Output Power: Dolby Digital Mode

ITotal RMS Dolby Digital mode power: 1000 W

At 1 kHz and total harmonic of 10%

IFront Ch: 125 W / Channel (3 Ω)

ICenter Ch: 250 W / Channel (6 Ω)

ISurround Ch: 125 W / Channel (3 Ω)

At 100 Hz and total harmonic of 10%

ISubwoofer Ch: 250 W / Channel (6 Ω)

PMPO Output Power: 7500 W

DIN Output Power: Dolby Digital Mode

ITotal DIN Dolby Digital mode power: 590 W

At 1 kHz and total harmonic of 1%

IFront Ch: 75 W / Channel (3 Ω)

ICenter Ch: 145 W / Channel (6 Ω)

ISurround Ch: 75 W / Channel (3 Ω)

At 100 Hz and total harmonic of 1%

ISubwoofer Ch: 145 W / Channel (6 Ω)

IFM TUNER, TERMINALS SECTION

Preset Memory: FM 30 stations

Frequency Modulation (FM)

Frequency range: 87.50-108.00 MHz (50-kHz step)

Sensitivity: 1.8 µV (IHF)

S/N 26 dB: 1.4 µV

Antenna terminals: 75 Ω (unbalanced)

Digital Audio Input:

Panasonic®

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, 6.3 mm jack (2 system)

Music Port (Front):

Sensitivity: 100 mV, 1.4 kΩ

Terminal: Stereo, 3.5 mm jack

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 (*6, *7)]

(2) DVD-RAM [DVD-VR, MP3 (*2, *7), JPEG (*4, *7), MPEG4 (*5, *7), DivX (*6, *7)]

(3) DVD-R [DVD-Video, DVD-VR, MP3 (*2, *7), JPEG (*4, *7), MPEG4 (*5, *7), DivX (*6, *7)]

(4) DVD-R DL [DVD-Video, DVD-VR]

(5) DVD-RW [DVD-Video, DVD-VR, MP3 (*2, *7), JPEG (*4, *7), MPEG4 (*5, *7), DivX (*6, *7)]

(6) +R/+RW [Video]

(7) +R DL [Video]

(8) CD, CD-R/RW [CD-DA, Video CD, SVCD (*1), MP3 (*2, *7), WMA (*3, *7), JPEG (*4, *7), MPEG4 (*5, *7), DivX (*6, *7), HighMAT Level 2 (Audio and Image)]

*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 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.

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

Pick Up:

Wavelength:

CD: 785 nm

DVD: 662 nm

Laser power:

CD: CLASS 1M

DVD: CLASS 1

Audio Output (Disc):

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

VIDEO SECTION

Video System: PAL 625/50, PAL 525/60, NTSC

Composite Video Output:

Output level: 1 Vp-p (75 Ω)

Terminal: Pin jack (1 system)

Component Video Output: (NTSC: 480p/480i, PAL: 576p/576i)

Y output level: 1 Vp-p (75 Ω)

P_B output level: 0.7 Vp-p (75 Ω)

P_R output level: 0.7 Vp-p (75 Ω)

Terminal: Pin jack (Y: green, P_B: blue, P_R: red) (1 system)

HDMI AV Output:

Terminal: Type A connector (19 pin)

This unit supports “HDAVI Control 2” 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 DL2S (Single tray) mechanism.

System	Main unit	Speaker system	Subwoofer
SC-PT550GC	SA-PT550GC	SB-PT850E	SB-HW550E*1
SC-PT550GCS	SA-PT550GCS		
SC-PT550GCT	SA-PT550GCT		
SC-PT550GS	SA-PT550GS		

Speaker system	SB-PT850E
Front speakers	SB-HF550E*2
Center speaker	SB-HC550E*3
Surround speakers	SB-HS850E*4

Refer to their respective original service manuals for *1, *2, *3, *4.

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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.

Official DivX® Certified product.

Plays all versions of DivX® video (including DivX®6) with standard playback of DivX® media files.

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HDAVI Control™ is a trademark of Matsushita Electric Industrial Co., Ltd.

■ **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.

CONTENTS

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 1MΩ and 5.2MΩ.
   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 1.5kΩ, 10 watts resistor, in parallel with a 0.15μF 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.

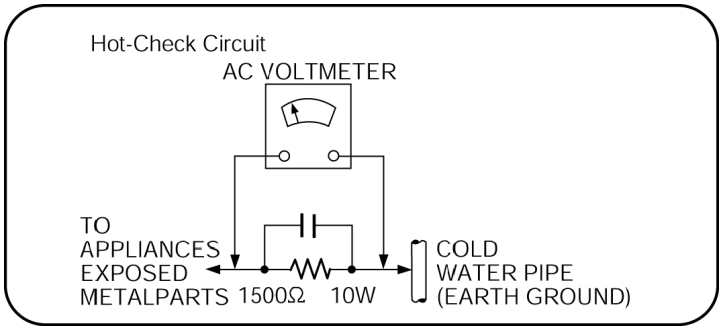


Figure 1

1.2. Before Repair and Adjustment

Disconnect AC power to discharge unit AC Capacitors as such C5700, C5701, C5703, C5704, C5705 through a 10 Ω, 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 127 V/230V~240 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 ⚠ 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

Reference No.	Part No.	Part Name & Description	Remarks
340	RAE2024Z-S	TRAVERSE UNIT	[M] ⚠
PC5701	B3PBA0000402	PHOTO COUPLER	[M] ⚠
PC5702	B3PBA0000402	PHOTO COUPLER	[M] ⚠
PC5720	B3PBA0000402	PHOTO COUPLER	[M] ⚠
PC5799	B3PBA0000402	PHOTO COUPLER	[M] ⚠
D5701	B0FBAR000041	DIODE	[M] ⚠
DZ5701	ERZV10V511CS	ZENER	[M] ⚠
TH5701	D4CAC8R00002	THERMISTOR	[M] ⚠
TH5860	D4CC11040013	THERMISTOR	[M] ⚠
L2101	J0JBC0000015	CHIP INDUCTOR	[M] ⚠
L2201	J0JBC0000015	CHIP INDUCTOR	[M] ⚠
L2802	J0JBC0000015	CHIP INDUCTOR	[M] ⚠
L2803	J0JBC0000015	CHIP INDUCTOR	[M] ⚠
L2804	J0JBC0000015	CHIP INDUCTOR	[M] ⚠
L2805	J0JBC0000015	CHIP INDUCTOR	[M] ⚠
L5001	G0B9R5K00003	LINE CHOKE COIL	[M] ⚠
L5002	G0B9R5K00003	LINE CHOKE COIL	[M] ⚠
L5201	G0B9R5K00003	LINE CHOKE COIL	[M] ⚠
L5301	G0B9R5K00003	LINE CHOKE COIL	[M] ⚠
L5401	G0B9R5K00003	LINE CHOKE COIL	[M] ⚠
L5402	G0B9R5K00003	LINE CHOKE COIL	[M] ⚠
L5701	ELF15N035AN	LINE FILTER	[M] ⚠
L5702	ELF22V035B	COIL	[M] ⚠
L6101	J0JBC0000019	CHIP INDUCTOR	[M] ⚠
L6201	J0JBC0000019	CHIP INDUCTOR	[M] ⚠
L6801	J0JBC0000019	CHIP INDUCTOR	[M] ⚠
L6904	J0JBC0000019	CHIP INDUCTOR	[M] ⚠
L6905	J0JBC0000019	CHIP INDUCTOR	[M] ⚠
L6906	J0JBC0000019	CHIP INDUCTOR	[M] ⚠
L6907	J0JBC0000019	CHIP INDUCTOR	[M] ⚠
L6908	J0JBC0000019	CHIP INDUCTOR	[M] ⚠
L6909	J0JBC0000019	CHIP INDUCTOR	[M] ⚠
T2900	G4D1A0000117	SWITCHING TRANSFORMER	[M] ⚠
T5701	ETS42BN1A6AD	MAIN TRANSFORMER	[M] ⚠
T5751	ETS19AB236AG	BACK-UP TRANSFORMER	[M] ⚠
F1	K5D802BNA005	FUSE	[M] ⚠
FP2900	K5G401A00008	FUSE PROTECTOR	[M] ⚠
P5701	K2AA2B000015	JACK AC INLET	[M] ⚠
A2	K2CQ2CA00002	AC CORD	[M] ⚠ GC/GCS/GCT
A2	K2CT3CA00004	AC CORD	[M] ⚠ GS
C5700	F1BAF1020020	1000P	[M] ⚠
C5701	ECQU2A334MLA	0.33	[M] ⚠
C5703	ECQU2A104MLC	0.1	[M] ⚠
C5704	F1BAF1020020	1000P	[M] ⚠
C5705	F1BAF1020020	1000P	[M] ⚠

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.

Figure A

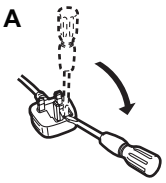
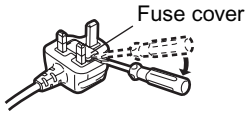


Figure B



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

Figure A

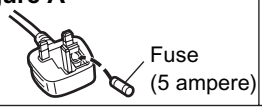
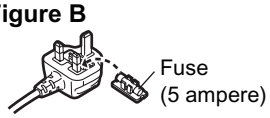


Figure B



2 Prevention of Electro Static 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 electro static 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 :

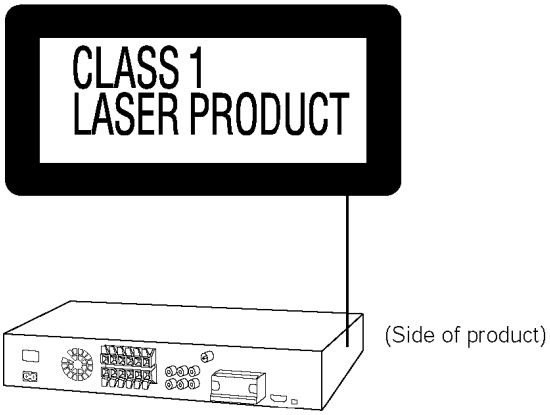
This product utilizes a laser diode with the unit turned on, invisible laser radiation is emitted from the pickup lens.

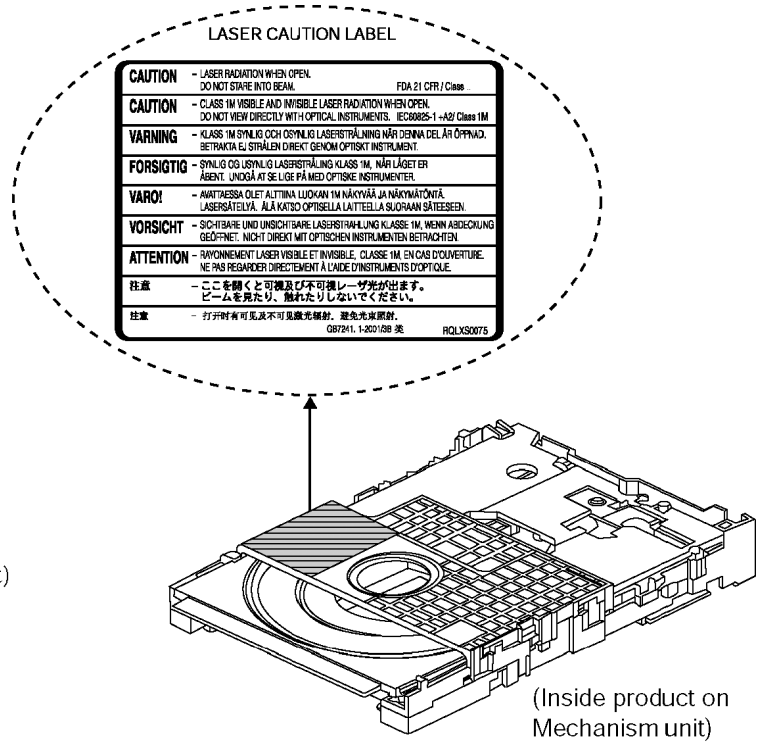
Wavelength : 662nm/785nm

Maximum output radiation power from pickup : 100μW/VDE

Laser radiation from 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.





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%

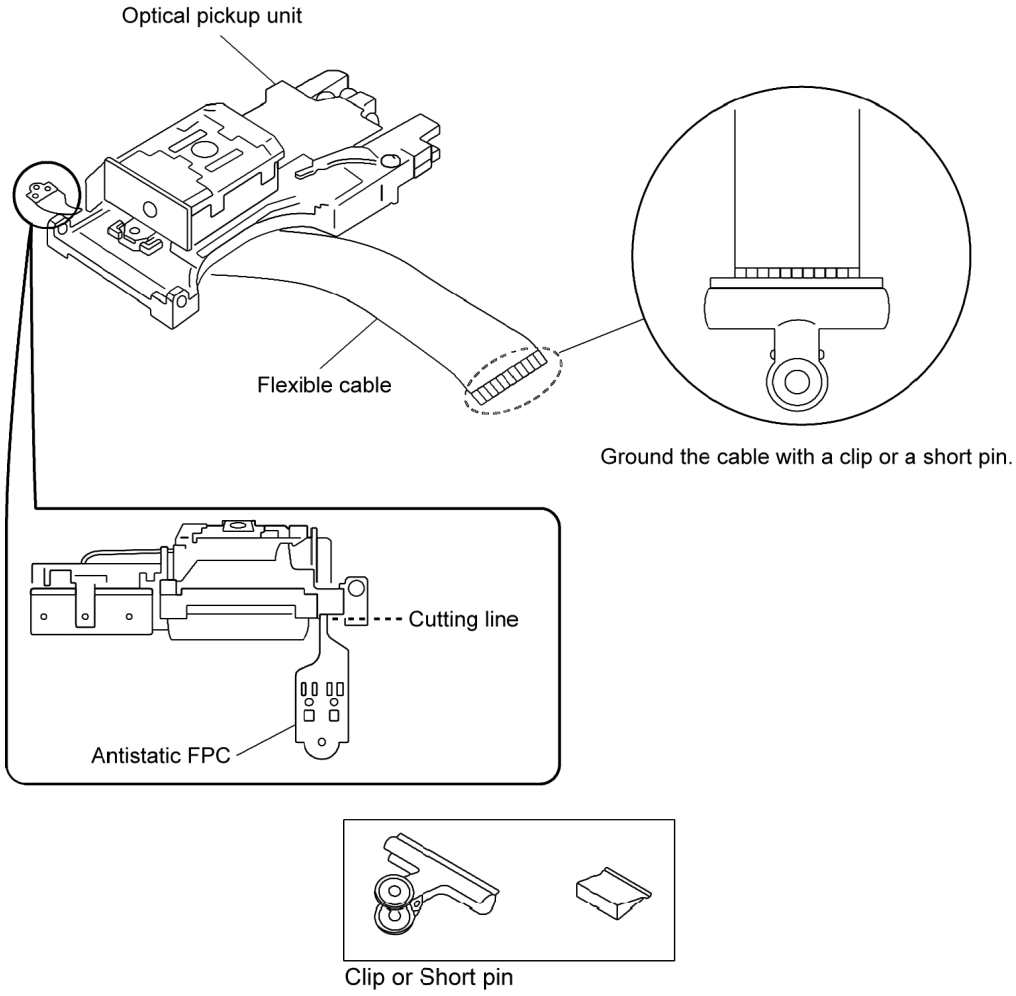
5 Handling Precautions for Traverse Unit

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.

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.



5.2. Grounding for electrostatic breakdown prevention

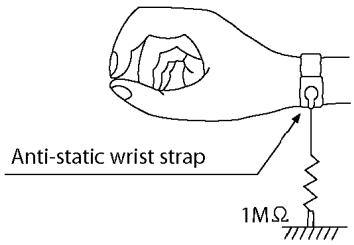
Some devices such as the DVD player use the optical pickup (laser diode) and the optical pickup will be damaged by static electricity in the working environment. Proceed servicing works under the working environment where grounding works is completed.

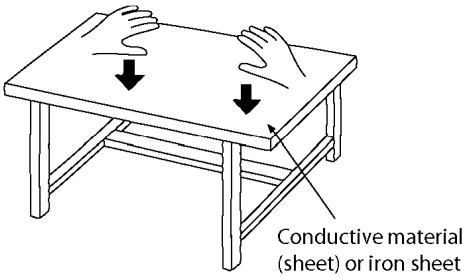
5.2.1. Worktable grounding

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

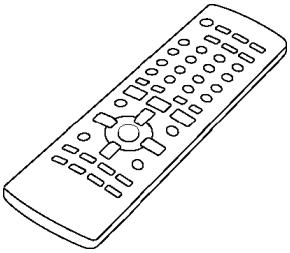
5.2.2. Human body grounding

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

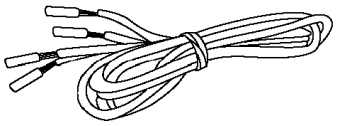

Anti-static wrist strap
1MΩ


Conductive material
(sheet) or iron sheet

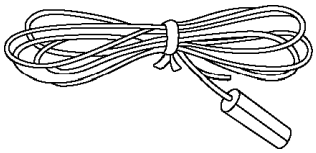
6 Accessories



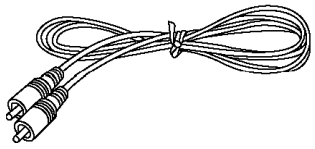
Remote control



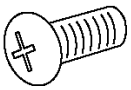
Speaker cord



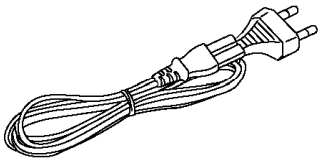
FM antenna



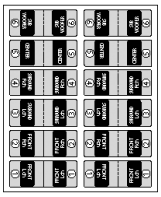
Video cable



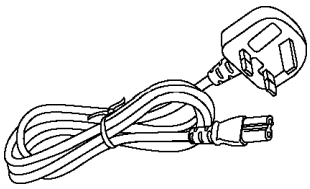
Screw



AC cord
(GC/GCS/GCT)



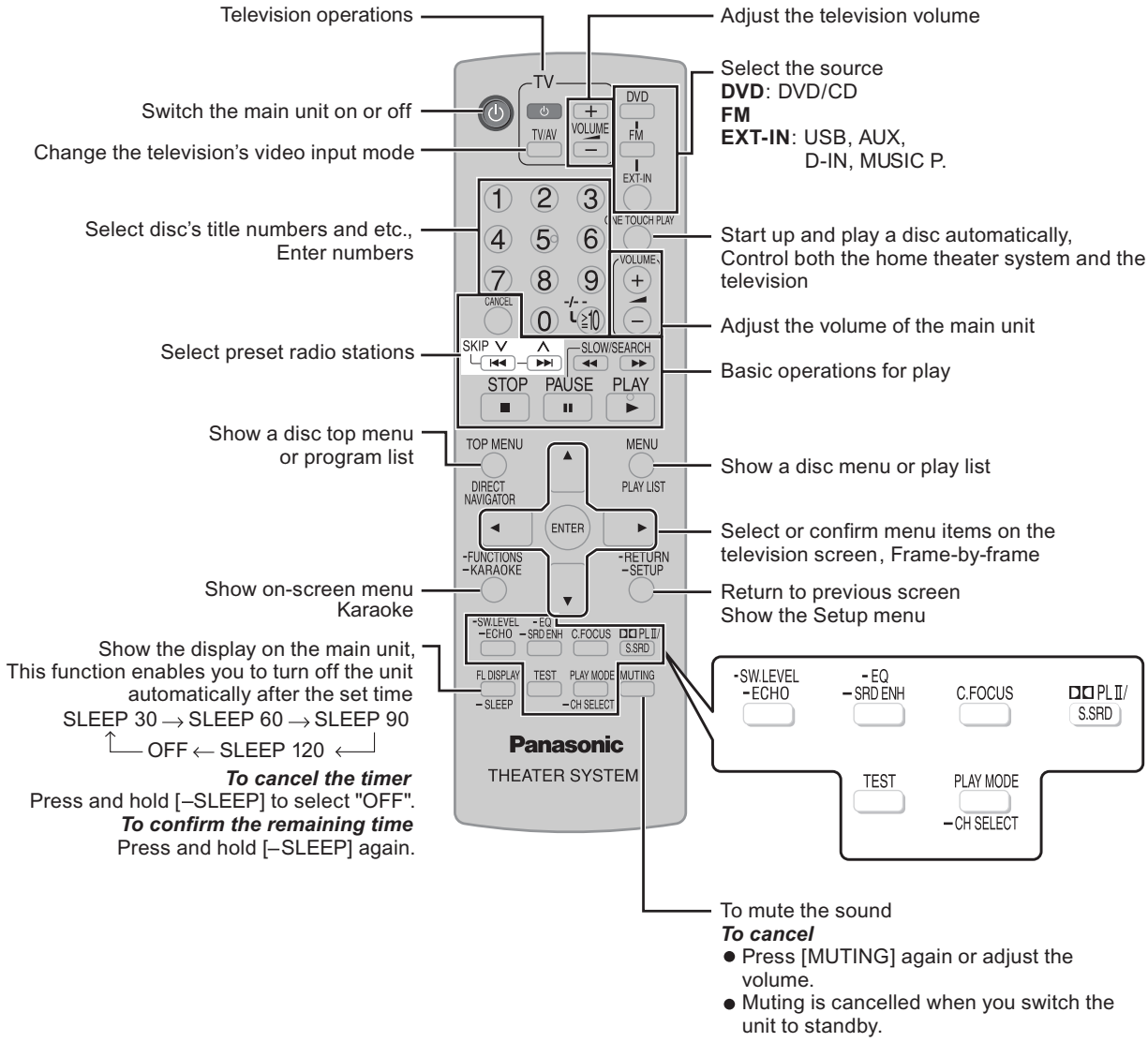
Speaker label



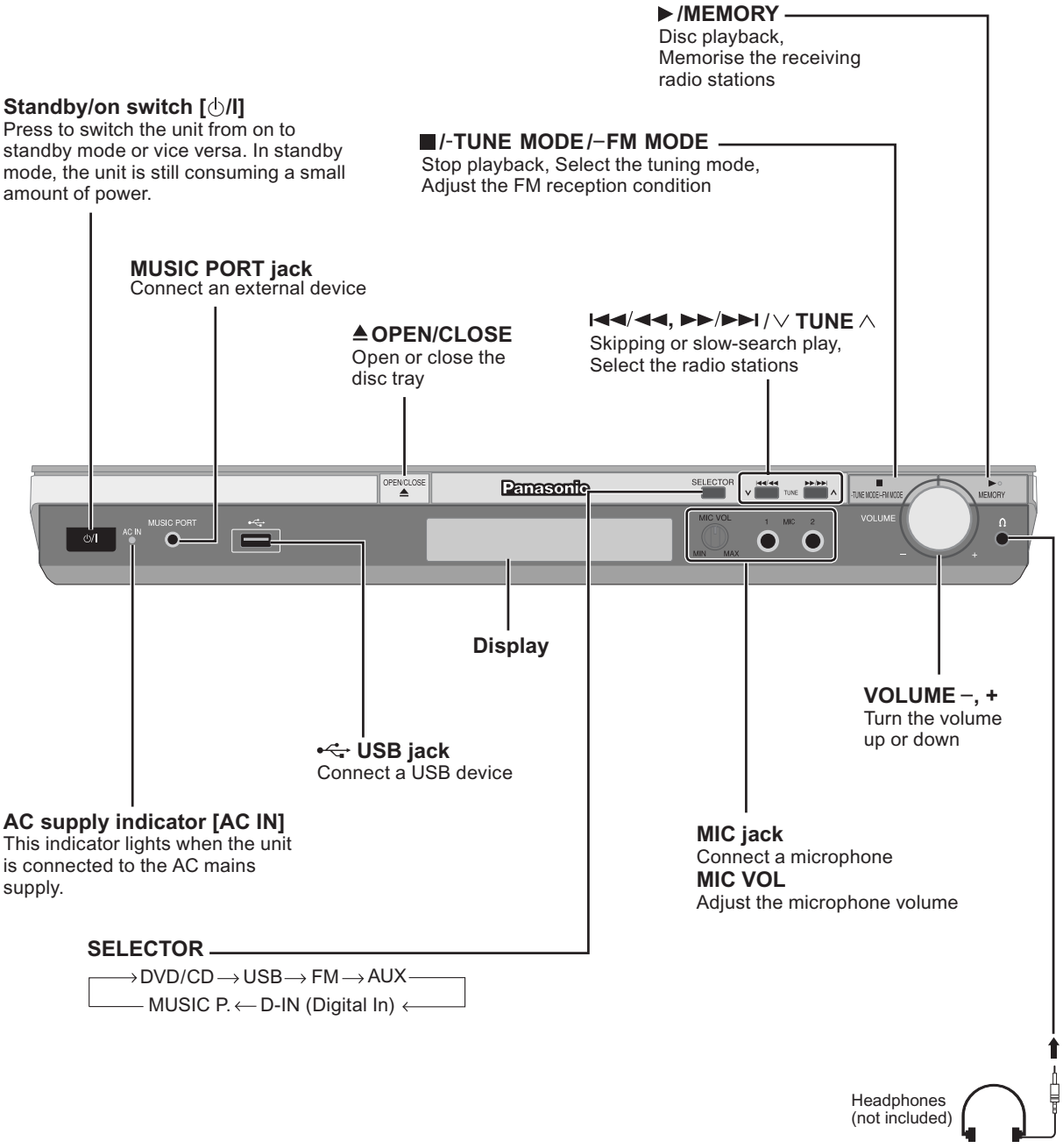
AC cord
(GS only)

7 Operation Procedures

7.1. Remote Control Key Buttons Operations



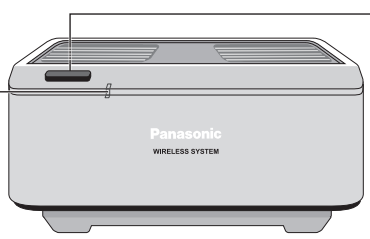
7.2. Main Unit Key Buttons Operations



7.3. Wireless Surround

7.3.1. Wireless System Key Buttons Operations

The illustration shows the wireless system for SH-FX65.



Unit on/off button [I, ⏻]
Use this button to turn the wireless system on and off.
I: The unit is on.
⏻: The unit is off.

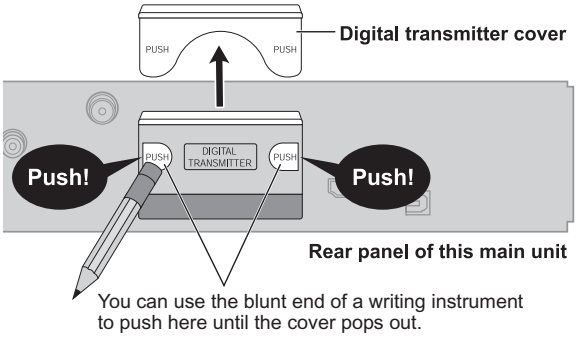
AUTO OPERATION ON/OFF indicator
The indicator lights red when the wireless system is turned on and lights green when the wireless link is activated.
When the wireless link is inactive for a long time, it turns red.

Front panel of this unit

7.3.2. Digital Transmitter Connection (SH-FX65T)

Remove the digital transmitter cover before installing any optional Panasonic wireless accessory.

- Replace the cover when the digital transmitter is not in use.



7.4. Using the VIERA Link “HDAVI Control™”

What is VIERA Link "HDAVI Control"?

VIERA Link "HDAVI Control" is a convenient function that offers linked operation of this unit, and a Panasonic television (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.
This unit supports "HDAVI Control 2" function.
The TV with "HDAVI Control 2" function enables the following operation:
VIERA Link Control only with TV’s remote control (for "HDAVI Control 2") (➡see right)

Preparation

- Confirm that the HDMI connection (O/I page 13) has been made.
- Set "VIERA Link" to "On" (O/I page 28, "HDMI" tab).
- To complete and activate the connection correctly, turn on all VIERA Link "HDAVI Control" compatible equipment and set the television to the corresponding HDMI input mode for the home theater system.

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

One Touch Play

You can turn on the home theater system and television, and start playing the disc in the play position with a single press of a button.

ONE TOUCH PLAY

Theater speakers will be automatically activated (➡see below).

- This function also works if you press [▶, PLAY] on the home theater remote control during home theater standby mode.

Note

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

Auto input switching

When you switch the television input to:
- − TV tuner mode, the home theater system will automatically switch to "AUX※" or "D-IN※".
- − HDMI input mode for the home theater system, the home theater system will automatically switch to "DVD/CD" if it is in "AUX※" or "D-IN※" mode.

When you start disc play, the television will automatically switch to the HDMI input mode for the home theater system.

※ To toggle the mode that this function works with, press [−SETUP] while the main unit is in "AUX" or "D-IN" mode.
− The default setting is "AUX".

Speaker control

You can select whether audio is output from the home theater system or the television speakers by using the television menu settings. For details, refer to the operating instructions of your television.

Home Cinema
Theater speakers are active.

- When the home theater system is in standby mode, changing the television speakers to theater speakers in the television menu will automatically turn the home theater system on and select "AUX※" or "D-IN※" as the source.
- The television 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 the main unit’s FL display.)
- To cancel muting, you can also use the home theater remote control. (O/I page 17)
- If you turn off the home theater system, television speakers will be automatically activated.

TV
Television speakers are active.

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

- When switching between the theater and television speakers, the TV screen may be blank for several seconds.

※ To toggle which input source the main unit will automatically switch to, press [−SETUP] while the main unit is in "AUX" or "D-IN" mode.
− The default setting is "AUX".

Power off link

When the television is turned off, the home theater system goes into standby mode automatically.

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

※ For "AUX" or "D-IN" mode, power off link can be set to work with one or the other. To toggle the mode that this function works with, press [−SETUP] while the main unit is in "AUX" or "D-IN" mode.
− The default setting is "AUX".

Note

Only the home theater system turns off when you press [⏻] for shutting it down. Other connected equipment compatible with VIERA Link HDAVI Control stay on.

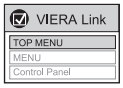
VIERA Link Control only with TV’s remote control (for "HDAVI Control 2")

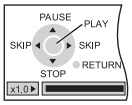
You can control the disc menus of the home theater system with the TV s remote control when using the "DVD/CD" or "USB" source. When operating the TV s remote control, refer to the below illustration for operation buttons.

1. Select the theater operation menu by using the television menu settings.
(For details, refer to the operating instructions of your television.)
   - The home theater system will automatically switch to "DVD/CD" if it is in "AUX※" or "D-IN※".

※ To toggle the mode that this function works with, press [−SETUP] while the main unit is in "AUX" or "D-IN" mode.
−The default setting is "AUX".

2. Select the desired item.
   - **"TOP MENU"** : Shows a disc top menu (O/I page 19,21) or program list (O/I page 22).
   - **"MENU"** : Shows a disc menu (O/I page 19,22) or play list (O/I page 22).
   - **"Control Panel"** : The basic operations for discs are available.





Note

- Depending on the menu, some button operations cannot be performed from the TV’s remote control.
- "Control Panel" can be selected directly by using a button on the TV s remote control (e.g. [OPTION]).

7.5. Music Port Connection and Operation

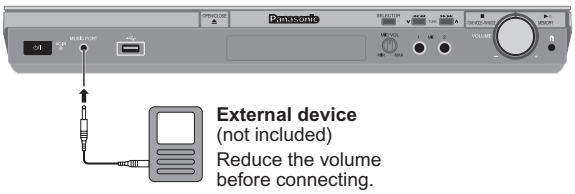
The Music Port allows you to connect and enjoy music from an external device (example: MP3 player) through your home theater system.

Preparation

To avoid distorted sound, make sure that any equalizer function of your external device is turned off.

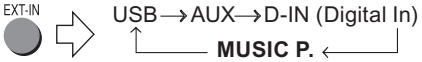
1 **Reduce the volume and connect the external device (not included).**

Plug type: Ø3.5 mm stereo mini plug



External device
(not included)
Reduce the volume before connecting.

2 **To select "MUSIC P.".**



3 **Adjust the external device volume to a normal listening level, and then adjust the volume of the main unit.**

- You can enjoy surround sound when you turn on Super Surround (MOVIE, MUSIC) (O/I page 33).

7.6. USB Connection and Operation

WMA MP3 JPEG MPEG4

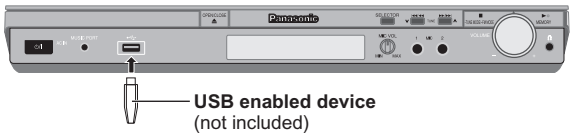
The USB connectivity enables you to connect and play tracks or files from USB mass storage class devices. Typically, USB memory devices. (Bulk only transfer)

Preparation

Before connecting any USB mass storage device to the unit, ensure that the data stored therein has been backed up.

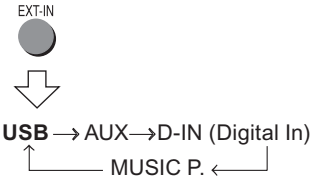
It is not recommended to use a USB extension cable. The USB device is not recognised by this unit.

1 **Connect the USB mass storage device (not included).**

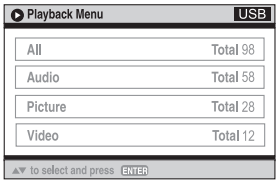


USB enabled device
(not included)
It is not recommended to use a USB extension cable. The device connected via the cable will not be recognised by this unit.

2 **To select "USB" as the source, press several times.**



Example:



3 **Adjust the volume of the main unit.**

4 **Begin playback by selecting the track from the USB mass storage device.**

To return to the previous screen
Press [-RETURN]

For other operating functions, they are similar as those described in "DISC OPERATIONS" (O/I page 18 to 31).

Compatible Devices

- **Devices which are definedas USB mass storage class:**
  - USB devices that support bulk only transfer.
  - USB devices that support USB 2.0 full speed.

Supported Formats

	File name	File extension
Still pictures	JPG	.jpg .jpeg
Music	MP3 WMA	.mp3 .wma
Video	MPEG4 ※	.asf

※ For Panasonic D-Snap/DIGA

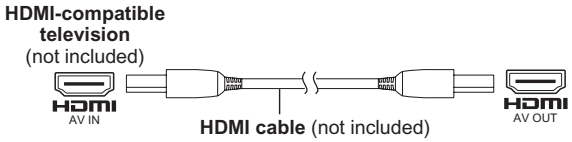
Note

- CBI (Control/Bulk/Interrupt) is not supported.
- Digital Cameras that use PTP protocol or which require additional program installation when connected to a PC are not supported.
- A device using NTFS file system is not supported. [Only FAT 12/16/32 (File Allocation Table 12/16/32) file system is supported].
- Depending on the sector size, some files may not work.
- It will not operate with Janus enabled MTP (Media Transfer Protocol) devices.
- Maximum folder: 400 folders
- Maximum file : 4000 files
- Maximum file name: 44 characters
- Maximum folder name: 44 characters
- Only one memory card will be selected when connecting a multi-port USB card reader. Typically the first memory card inserted.

7.7. Audio & Video Connections

7.7.1. Television with an HDMI Terminal

■ **Television with an HDMI terminal**



Use the HDMI connection to enjoy higher quality audio and video with a single cable.

- Set "Video Mode" to "On" and "Audio Output" to "On" (O/I page 28,"HDMI" tab).
- Set "Video Output Mode" (O/I page 24, Picture Menu).

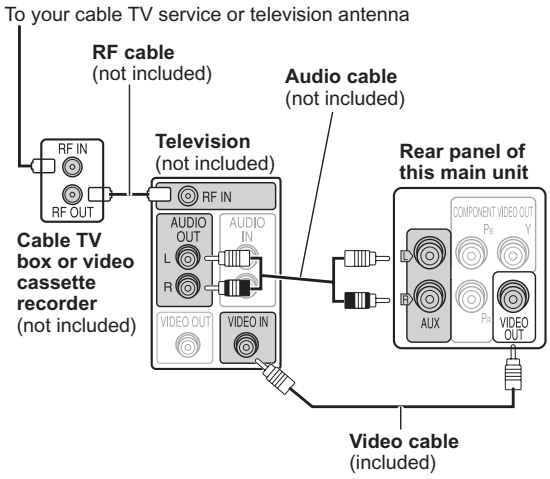
VIERA Link ("HDAVI Control")

If your Panasonic television is a VIERA Link compatible television, you can operate your television synchronising with home theater operations or vice versa (O/I page 39).

Note

- Make the extra audio connection (O/I page 36) when you use HDAVI Control function.
- 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.]
- Non-HDMI-compliant cables cannot be utilised.

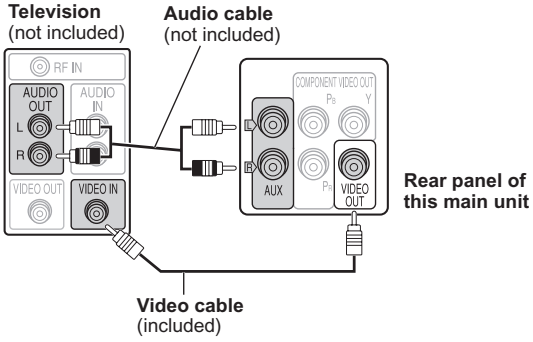
7.7.2. Optional Connection for Set Top Box, Cable TV, or Video Cassette Recorder



7.7.3. Optional Audio Connection for Video Cassette Recorder or Television

Press [EXT-IN] (O/I page 17) to select "AUX" as the source to operate the audio input.

This audio connection will enable you to play audio from your television through your home theater system.



7.8. Disc Information

7.8.1. Disc Playability (Media)

Discs that can be played

■ **Commercial discs**

Disc	Logo	Indicated in these instructions by	Remarks
DVD-Video	DVD VIDEO DVD VIDEO	DVD-V	High quality movie and music discs.
Video CD	COMPACT disc DIGITAL VIDEO COMPACT disc SUPER VIDEO	VCD	Music discs with video. Including SVCD (Conforming to IEC62107).
CD	COMPACT disc DIGITAL AUDIO COMPACT disc DIGITAL AUDIO TEXT	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※8	DivX※9, ※10	
DVD-RAM	DVD RAM RAM4.7	○	—	×	○	○	○	○	Not necessary
DVD-R/RW	DVD R R4.7 DVD RW	○	○	×	○	○	○	○	Necessary
DVD-R DL	DVD R 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 [Item 7.8.2 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.
WMA MP3 JPEG This unit also plays HighMAT discs.

※2 Discs recorded on DVD video 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 video recorders or DVD video cameras using Version 1.2 o f the Video Recording Format (a unfi ed video recording standard).

※4 Discs recorded on DVD video 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 displa yed as "Necessary" on this unit, the disc mustfirst be finalized on the device it was recorded on.

※7 Closing the session will also work.

※8 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].

※9 Functions added with DivX ultra are not supported.

※10 Plays all versions of DivX® video (including DivX®6) with standard playback of DivX® media files. Certified to the DivX Home Theater Profile.

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**

DVD-RW version 1.0, DVD-AUDIO, DVD-ROM, CD-ROM, CDV, CD-G, SACD, 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 television must match the system used on the disc.
- PAL discs cannot be correctly viewed on an NTSC television.
- This unit can convert NTSC signals to PAL 60 for viewing on a PAL television (O/I page 28, "NTSC Disc Output" in "Video" tab).

7.8.2. File Extension Type Support (WMA/MP3/JPEG/MPEG4/DivX)

Tips for making data discs

- When there are more than eight groups, the eighth group onwards will be displayed on one vertical line in the menu screen.
- 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.

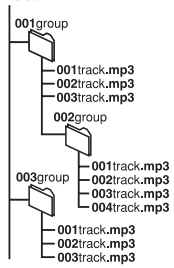
DVD-R/RW
- Discs must conform to UDF bridge (UDF 1.02/ISO9660).
- This unit does not support multi-session. Only the default session is played.

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.

Naming folders and files

Files are treated as contents and folders are treated as groups on this unit.
At the time of recording, prefix folder and file names. This should be with numbers that have an equal number of digits, and should be done in the order you want to play them (this may not work at times). Files must have the extension (➡ see below).

Example: MP3



WMA (Extension: ".WMA" or ".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).

MP3 (Extension: ".MP3" or ".mp3")
- Compatible compression rate: between 32 kbps and 320 kbps.
- This unit does not support ID3 tags.
- Compatible sampling rates:
  – DVD-RAM, DVD-R/RW: 11.02, 12, 22.05, 24, 44.1 and 48 kHz
  – CD-R/RW: 8, 11.02, 12, 16, 22.05, 24, 32, 44.1 and 48 kHz

JPEG (Extension: ".JPG", ".jpg", ".JPEG" or ".jpeg")
- JPEG files taken on a digital camera that conform to DCF Standard (Design rule for Camera F ile system) Version 1.0 are displayed. Files that have been altered, edited or saved with computer picture edi ting software may not be displayed.
- This unit cannot display moving pictures, MOTION JPEG and other such formats, and still pictures other than JPEG (Example: TIFF), or play pictures with attached audio.

MPEG4 (Extension: ".ASF" or ".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 video rec orders with this unit.
- The recording date may differ from that of the actual date.

DivX (Extension: ".DIVX", ".divx", ".AVI" or ".avi")
- You can play 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 720 x 480 (NTSC)/720 x 576 (PAL).
- You can select up to eight types of audio and subtitles on this unit.

8 New Features

8.1. About HDMI

8.1.1. What is HDMI?

AN INTERFACE DESIGNED FOR THE DIGITAL REVOLUTION

From broadcast equipment to TVs, the AV world is going digital. As this digital revolution unfolds, there's a growing need for an interface that digitally transmits signals between connected equipment. The solution: HDMI, or High-Definition Multimedia Interface.

HDMI transmits digital video and audio signals at speeds up to 5 Gps without compressing them. It supports high-definition images up to 1080p and high-quality , multi-channel audio formats such as DVD-Audio. And it provides all this performance with the ease of connecting a single cable.

Also equipped with a copyright protection function, HDMI is a simple, high-performance interface that supports the growing digital age.

HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE

FOUNDERS

HITACHI
Panasonic
PHILIPS
SILICON IMAGE
SONY
THOMSON
TOSHIBA

HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE

1. ADVANCED DIGITAL PICTURES

Digital transmission of video signals helps maximize the quality of HDTV images.

2. ADVANCED DIGITAL SOUND

Digital transmission of multi-channel audio signals, such as DVD-Audio signals, provides an exceptionally pure sound.

3. EASY TO USE

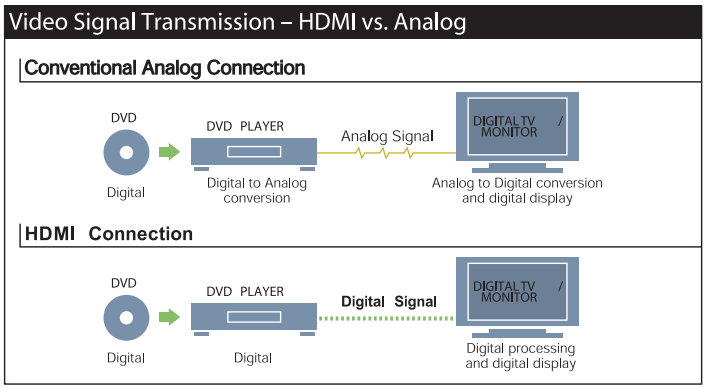
Both video and audio signals are transmitted over a single cable, so connection is easier and there's less clutter.

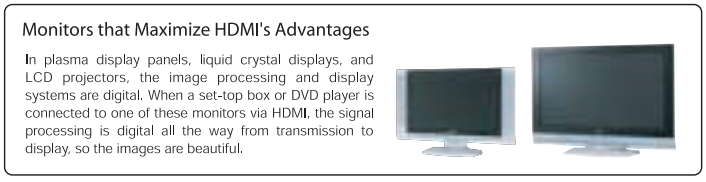
	Video Signal Type	Audio Signal	Copyright Protection	Signal Compression
HDMI	Digital	●	●	Without compression
IEEE 1394	Digital	●	●	Compression
DVI + HDCP	Digital	–	●	Without compression
DVI	Digital	–	–	Without compression

8.1.2. Advanced Digital Pictures

Compare HDMI connection with conventional analog connection, using the DVD player as an example. With an analog connection, the digital signal from the DVD player is converted to analog and sent to the TV, then converted back to digital and displayed. Inevitably, there is some loss of picture quality due to conversion errors and to noise and signal degradation that occurs as the signal travels through the cable.

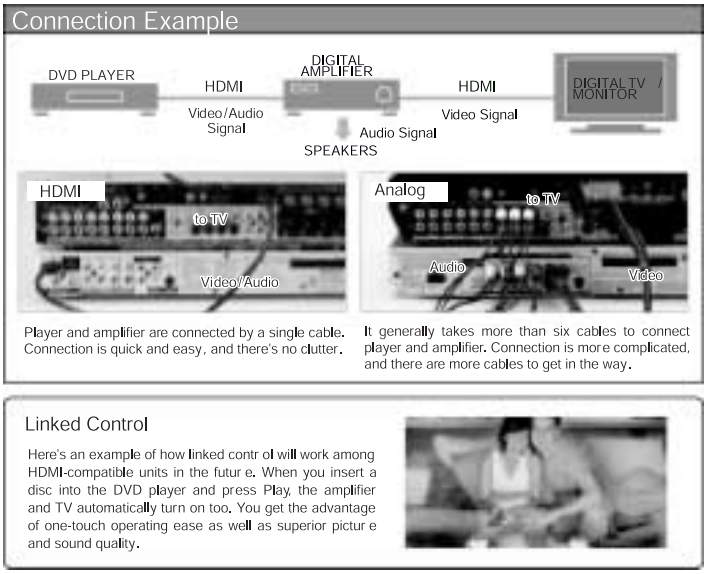
With HDMI, on the other hand, the DVD signal is transmitted to the TV in its original digital form. There is no conversion from digital to analog and back, and thus no quality loss from conversion errors. Image quality is thus higher. Plus, because HDMI supports 480p, 1080i, and up to 1080p high-definition images with copy protection, it produces images with quality that is ideal for large-screen viewing.





8.1.3. Advanced Digital Sound

The super-high-quality linear PCM sound provided by DVD-Audio is not given its full potential when the digital signal is transmitted through an analog cable.
With a conventional analog connection, the digital signal carrying DVD-Audio's detailed audio data is converted to analog before being sent to the amplifier and output. Sound quality is diminished due to noise and signal degradation.
HDMI, on the other hand, transmits the signal in its original digital form, so the sound is extremely pure. HDMI also supports up to eight channels of multi-channel sound. Plus, it connects the player and amplifier with a single cable, rather than the multiple cables needed in conventional connection.



8.1.4. Easy to Use

HDMI transmits both video and audio signals over a single cable, so connection is quick and easy and the area around the TV remains uncluttered. Also, when each of the connected units is HDMI-compatible, control signals can be exchanged among them. This means that, in the future, it will be possible to operate several units from a single remote control, or to operate several units via linked control.

8.1.5. HDMI Compatible Products

8.2. Wireless Features

8.2.1. Function Overview

Year 2007 PT models support wireless which includes FX65/FX66, wireless subwoofer and FX85 as described below:-

8.2.1.1. FX65/FX66

- The FX65/FX66 supports one-way wireless transmission only, that is, it will only transmit wireless audio signal to the rear surround speakers. The FX65/FX66 receiver module includes a D-AMP and SMPS. The transmitter interfaces with the main unit using serial communications to communicate information such as mute command request, link detection and ID setting request. Maximum range attainable is 15 meters.

8.2.1.2. Wireless Subwoofer (For PT1050 Only)

- The wireless subwoofer receiver module is similar in operation with FX65/FX66 in such a way that it only supports one-way wireless transmission. It also includes a D-AMP and SMPS. The difference in the wireless subwoofer receiver module is the way its hardware interprets the audio it receives from the transmitter since it is the same audio received by the FX65/FX66 receiver. Maximum range attainable is 30 meters.

8.2.1.3. FX85

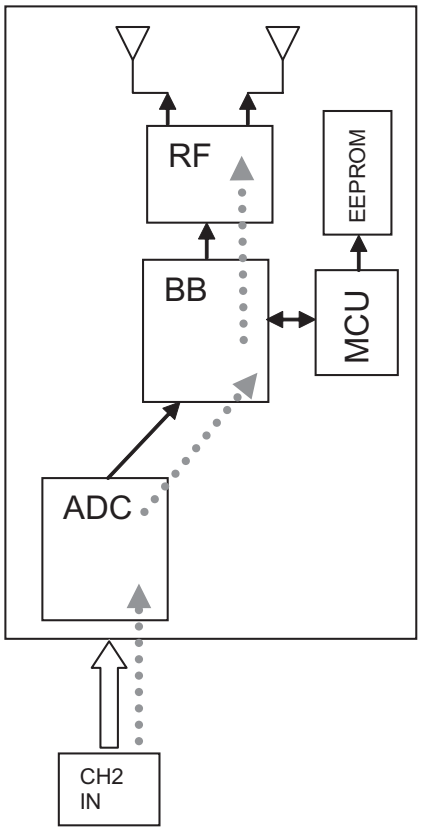
- The FX85 supports the multi-room function wherein it operates as a second room wireless receiver (up to a maximum of two). Maximum range attainable is 30 meters. It can send commands to the main unit to control functions such as Play, Stop, Forward Skip/Channel Up, Reverse Skip/Channel Down. It also has a built-in DAP pocket for stand-alone operation by inserting a DAP device (e.g. iPod) in the DAP pocket to play the device only via the device's own control buttons, FX85 cannot control the device using its own buttons. The transmitter interfaces with the main unit using serial communications to communicate information such as mute command request, link detection, ID setting request and button commands from the FX85 buttons (Play, Stop, Forward Skip/Channel Up, Reverse Skip/Channel Down). The FX85 receiver module has the following functions/terminals/buttons:

FX85 BUTTONS	FX85 FUNCTIONS
FX 85 Power Button	D-Amp
Selector Button	SMPS
Play Button	D-Port Connector
Stop Button	ID Set Switch
Forward Skip/Channel Up	MPort
Reverse Skip/Channel Down	
Volume Control	

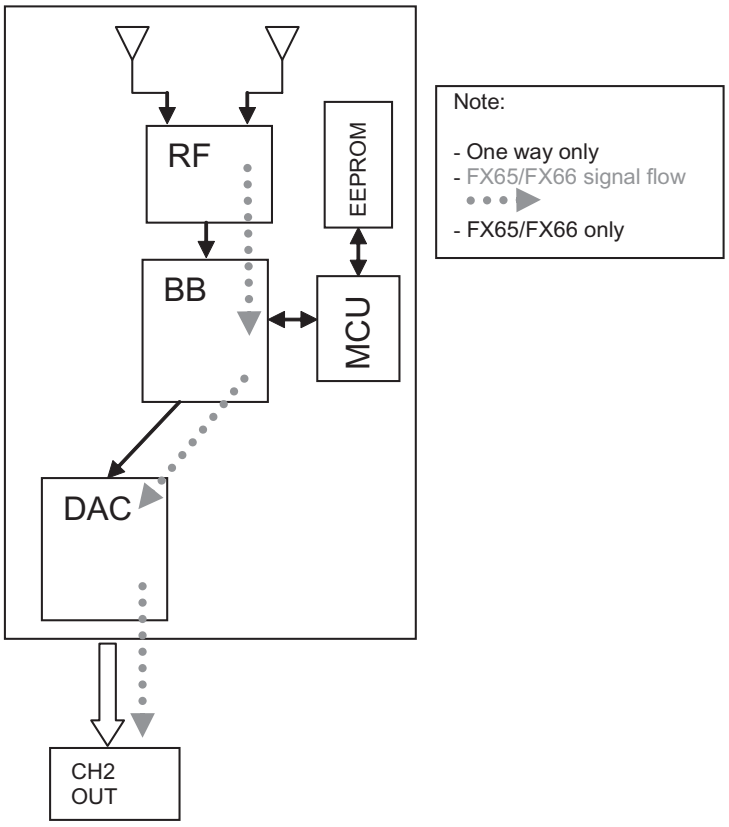
8.2.2. Block Diagram

・There are two types of transmitter cards, Type A and Type B, and two types of receiver modules, Type 1 and Type 2 for the wireless configuration. The block diagrams below describe the differences of each of the types.

8.2.2.1. TX-TYPE A / RX-TYPE 1



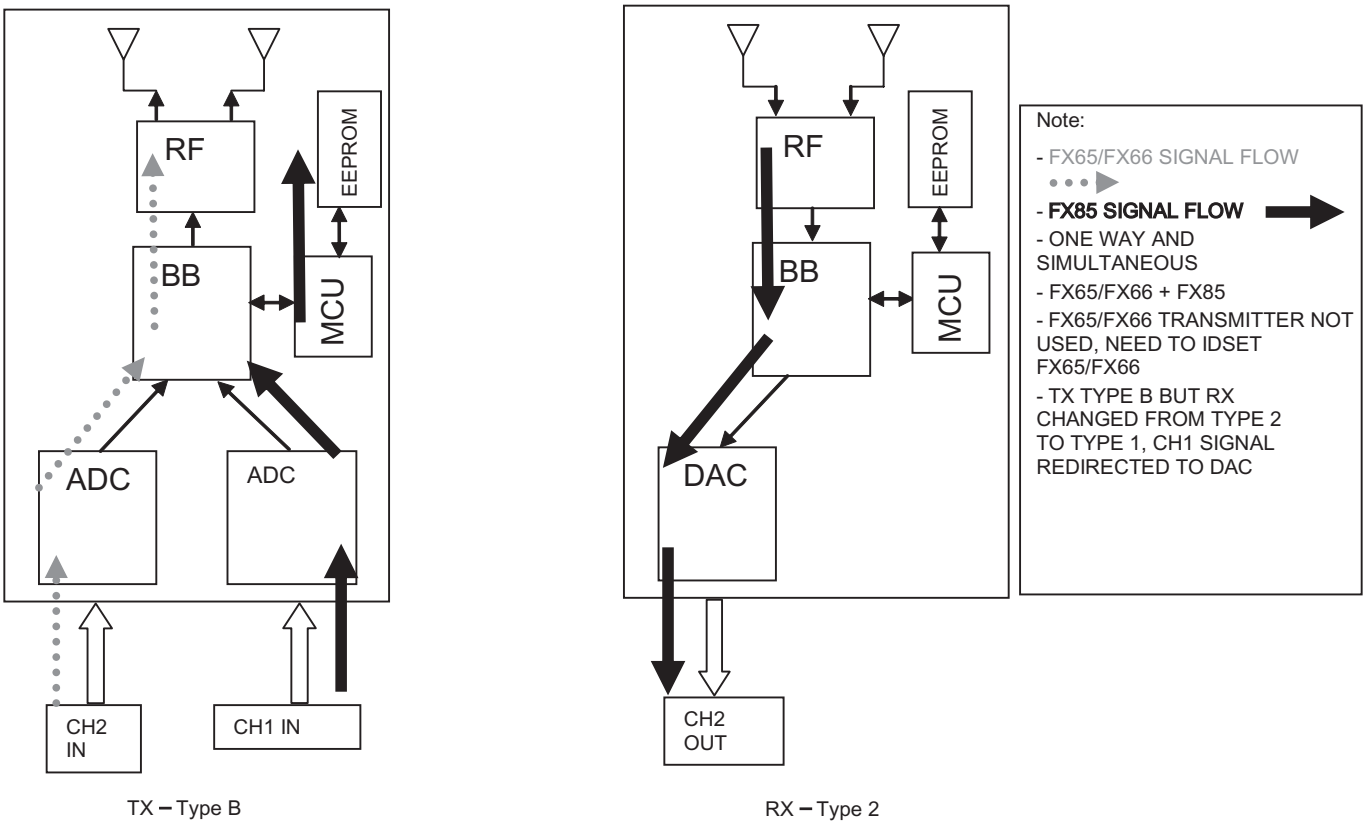
TX – Type A



RX – Type 1

・Type A transmitter uses one ADC (Analog to Digital Converter) and transmits audio through Channel 2. Type 1 receiver (Rx) uses one DAC and output audio through Channel 2. The firmware (that is downloaded to EEPROM IC) multiplexes which channel to listen to (in this case Channel 2 since type A is transmitting from channel 2 In) by setting the baseband accordingly.

8.2.2.2. TX-TYPE B / RX-TYPE 2



TX – Type B

RX – Type 2

· Type B transmitter uses two ADC (Analog to Digital Converter) to send audio streams from Channel 1 and Channel 2 for the FX65/FX66 surround sound and FX85 second room audio, respectively. Type 2 receiver outputs audio through Channel 2. The software multiplexes which channel to listen to by setting the baseband accordingly. For example, if the receiver is configured as an FX85 receiver (Type 2), the baseband is configured to accept Channel 1 audio transmission and redirect it to Channel 2 Out. If the receiver is set as an FX65/FX66 or wireless subwoofer, the baseband is configured to accept channel 2 audio transmission and redirect it to the same Channel 2 Out.

8.2.3. Activation

· FX65/FX66 can be activated in the main unit by using either transmitter Type A or Type B and enabling surround sound by selecting Surround Music, DPL or Super Surround (Music/Movie).

· FX85 Wireless feature is enabled by default when the user uses transmitter type B.

8.2.4. LED Indication

· For FX65/FX66, there will be two-color LED that will be used to indicate Power On and Link. If link, the two-color LED will be green, else, it will be red.

For FX85, the front panel will have LED indicators for Standby,, Wireless Link, Charge, Option and Music Port. During Power On, Standby LED will be OFF. Only during power OFF will this LED be ON (Red). Wireless Link indicator will be ON (Green) when link is established between TX and RX and OFF when link is lost. Pressing the selector button will toggle from any of the selector modes Wireless, Option and Music port. Only the currently selected mode will be ON (Green), the other two will be OFF. Charge LED will be ON (Red) once iPod charging is initiated.

8.2.5. Key Operation (FX85)

· **Selector Button**

This button will be used to select Wireless, Option or M.Port and enabling the corresponding LED indicators for each mode. During Power On, by default, selector mode is set to Wireless when power is initially supplied to the system. But during Power On/OFF button, it will remember the last selector mode setting.

· **Play Button**

This button will send command to the main unit to play CD/DVD as well as the iPod. This function is therefore meaningful only if the second room selector is in Main Source (with the first room user in CD/DVD or iPod) and iPod.

· **Stop Button**

This button will send command to the main unit to stop CD/DVD as well as the iPod. This function is therefore meaningful only if the second room selector is in Main Source (if the first room user is in CD/DVD mode or iPod) and iPod.

· **Forward Skip/Channel Up**

This button depends on the second room source currently selected. It will be interpreted as a Forward Skip by the main unit if the second room source is in Main Source (with the first room user is in CD/DVD or iPod mode) and iPod. It will be interpreted as a Channel Up (preset channels only) if the second room source is in FM, AM, or XM.

· **Reverse Skip/Channel Down**

This button depends on the second room source currently selected. It will be interpreted as a Reverse Skip by the main unit if the second room source is in Main Source (if the first room user is in CD/DVD or mode) and iPod. It will be interpreted as a Channel Down (preset channels only) if the second room source is in FM, AM, or XM.

· **Volume Control**

Volume control will be local to the FX85 module only. Default volume (TBD) will be set every time power is first supplied to the system or during exit from stand by mode.

· **ID-setting Operation**

ID setting operation can be invoked by pressing fast-forward key in the main unit and three [3] key in the remocon. Once ID-setting is triggered, the receiver must press its ID-setting button within 60 seconds. During this period, the transmitter will be in open connect mechanism whereby any receiver can pair with the transmitter. After this period elapsed, the transmitter will revert back to using close connect code whereby only those receivers which have the same ID as the transmitter will be able to link. The user also has the option to exit the ID setting operation by pressing the same keys.

· **iPod Detection and Charging**

iPod is detected once inserted on the FX85 and battery charging automatically starts.

– The iPod Charging in Standby Mode:

lUpon iPod insertion detection and FX85 is in Power OFF (stand by), FX85 set will enter iPod charging Standby Mode.

lThe FX85's CHARGE LED will light up whenever the iPod is charging.

lFX85 will charge the battery up to five hours. After this period, FX85 will not try to recharge the iPod.

lAfter battery full condition, even if the iPod is operated such as play, FX85 will not retry to recharge the iPod (timer will start immediately once iPod is inserted).

lRe - charging of the battery in iPod Charging Standby Mode can be done only by removing and reinserting the iPod to the dock.

– The iPod charging in Power On Mode:

lThe iPod automatically charges its battery whenever it is connected during Power ON.

lThe FX85's CHARGE LED will light up whenever the iPod is charging.

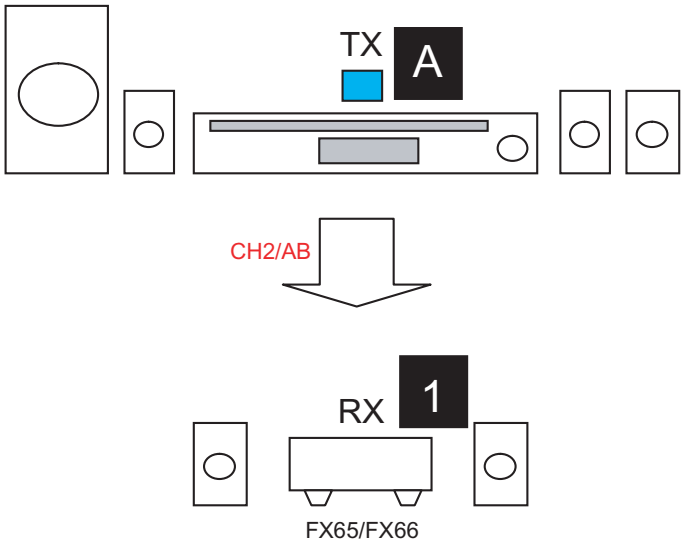
lFX85 will continue charging the iPod as long as it is inserted (no charging time limit of five hours).

8.2.6. FX Configurations

There are four types of configurations for the FX series. This is explained by the following illustrations below:

Case 1: FX65/FX66

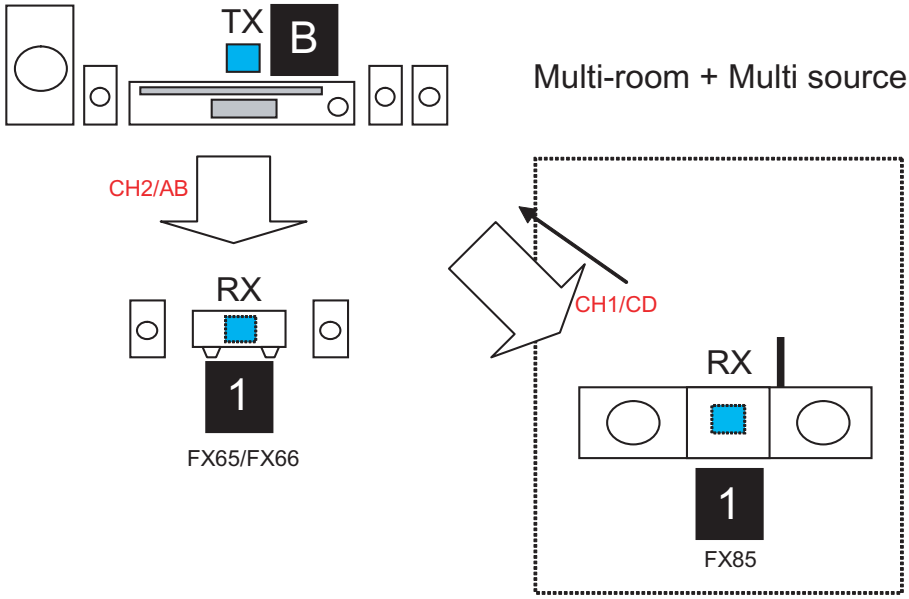
- This is the basic configuration of FX65/FX66 whereby it is only receiving wireless surround audio signal from the main set. This uses a Type A transmitter which is only able to send audio in one direction. Audio is sent using streams AB through Ch 2.



Case 2 A: FX65/FX66 + FX85

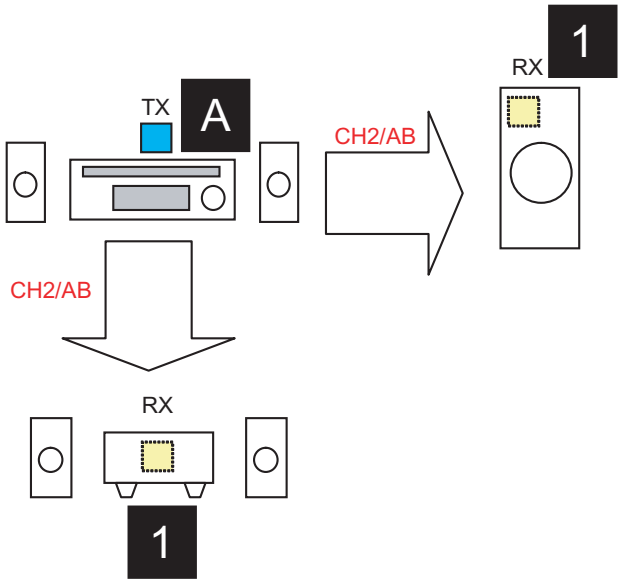
- In this configuration, a second receiver, an FX85, in another room is listening to another audio source from the main set. The FX85 also is able to send command to the main set such as Play, Stop, Skip, and Preset Tuner Channel Up/Down. This configuration uses Type B transmitter which is an upgrade of the Type A and can be used on Type 1 (FX65/FX66). This transmitter is able to send audio signal for second room via Ch 1 and first room via Ch 2.

  In this configuration, streams AB is used to transmit the audio from main unit to the first room Type 1 receiver (FX65/FX66) via Ch 2. While the second room audio is transmitted through stream CD via Ch 1.



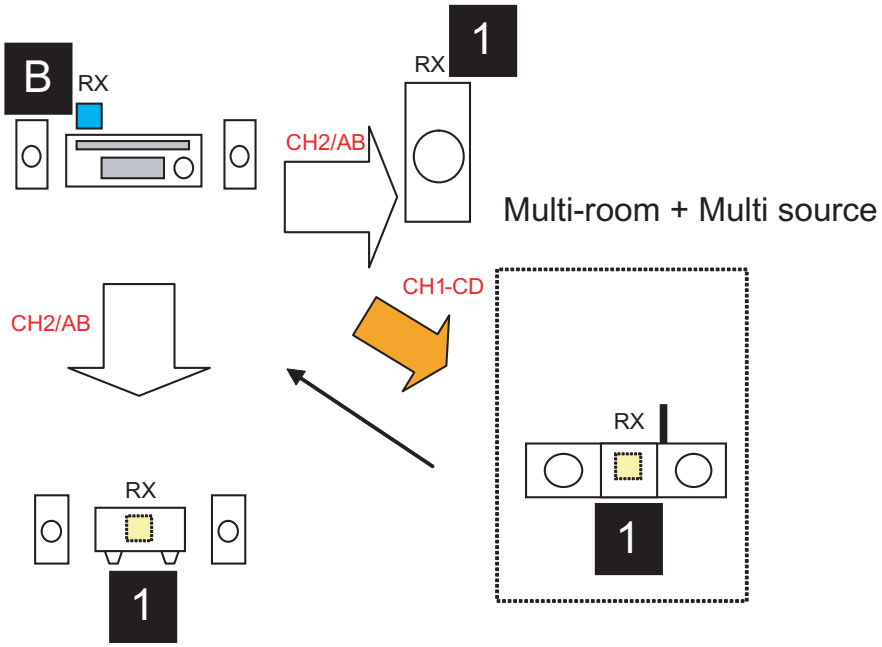
Case 3 A: Wireless Subwoofer

- This configuration, Type A transmitter send signals to subwoofer and Type 1 receiver (FX65/FX66) via channel 2, which is the same audio signals sent to FX65/FX66 as well. The subwoofer only decodes the low frequency signal.

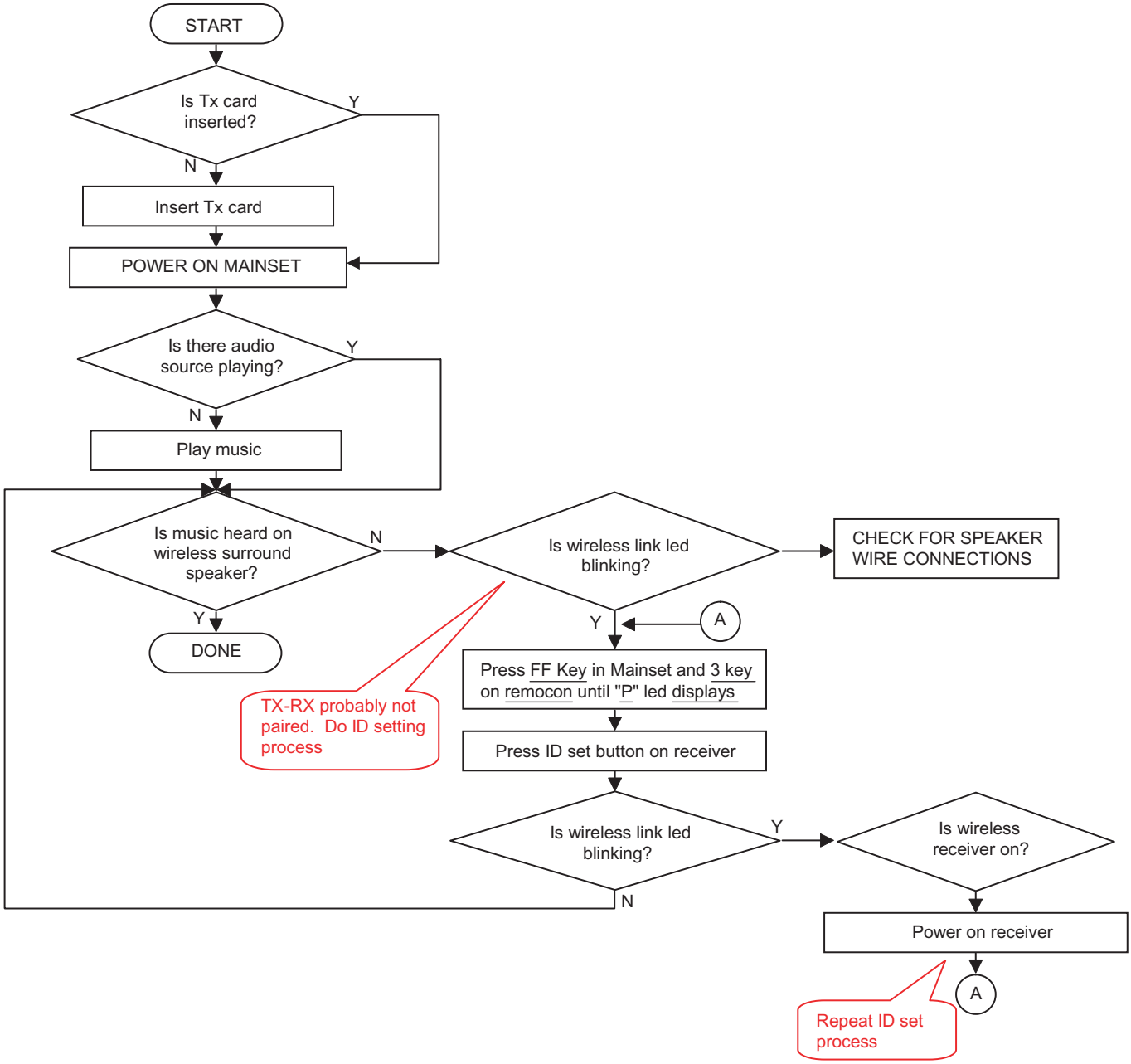


Case 3 B: FX65/FX66 + FX85 + Wireless Subwoofer (for PTX7, PT1050)

- In this configuration, all audio source for the Type 1 subwoofer and Type 1 first room receiver (FX65/FX66) through streams AB via Ch 2 and Type 2 second room receiver (FX85) comes from transmitter B through streams CD via Ch 1. For this configuration, the user must perform ID setting for FX85 if it is sold as an accessory, but for bundled type, it already is paired with the transmitter.



8.2.7. User Operation Flow



8.2.8. Baseband Settings Update from EEPROM IC

· The software will read from an external EEPROM IC to get the selected baseband IC settings. Not all baseband register settings (a total of 512 bytes) will be read from the EEPROM IC, though. Aside from getting the baseband settings from the EEPROM IC, it is also used to enable FCC testing, select the application type and entering into doctor mode (this can be enabled also by sending a command via the main unit).

8.2.9. Doctor Mode

· For normal operation but automatic frequency selection is disabled, it can enter into Doctor Mode. This feature is hidden from normal user and will be used by the service center to fix to a particular RF Channel. With doctor mode, the user can disable frequency automatic allocation and sniffer and be able to select a fix RF Channel (Channels 1, 2 or 3) by a combination or remote control keys. Refer to Section 9.4 for Wireless Doctor Mode.

9 Self-Diagnosis and Special Mode Setting

9.1. 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:

Player buttons	Remote control unit buttons	Application	Note
[STOP]	[0]	Error code check.	(Refer to the section "9.2.1. 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 "9.2.2. Service Mode Table 2" for more information.)
	[1]	ADSC internal RAM data check.	
	[3]	CD laser drive current check.	
	[6]	Region display and mode.	(Refer to the section "9.2.3. 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.	
	[8]	DVD Module P.C.B. firmware version check.	(Refer to the section "9.2.4. Service Mode Table 4" for more information.)
	[MENU]	Communication error display.	
	[TOP MENU]	ECC error check.	
	[EQ]	CPPM/CRM keys check.	
	[ENTER]	DVD Module P.C.B. reset.	
	[▲]	Timer 1 check.	(Refer to the section "9.2.5. Service Mode Table 5" for more information.)
	[▼]	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.

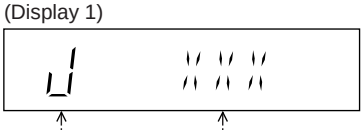
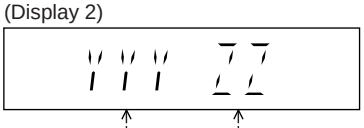
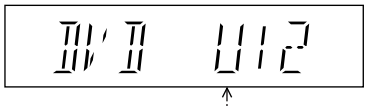
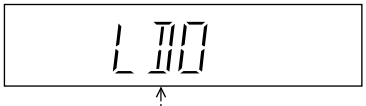
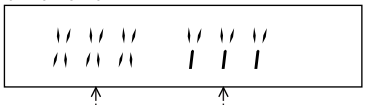
9.2. Service Mode Table

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

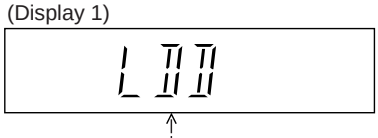
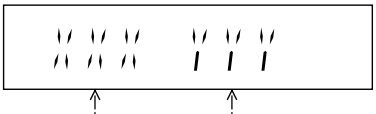
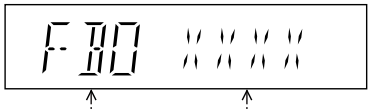
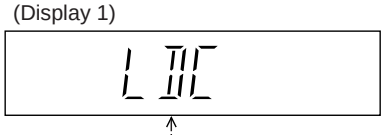
Special Note:

- 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".

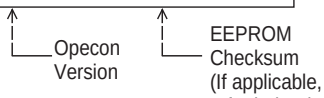
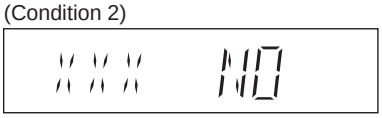
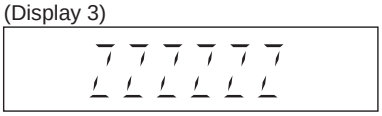
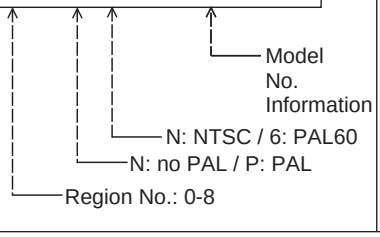
9.2.1. Service Mode Table 1

Item		FL Display	Key Operation
Mode Name	Description		Front Key
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 (no disc) mode, press [STOP] button on the main unit, and [5] button on the remote control unit. Press [POWER] button to exit. Press [FL Display] on remote control unit for next page (FL Display).
Error code check	Error code check The latest error code stored in the EEPROM IC is displayed. Note: Refer to "Section 9.5 DVD Self Diagnostic Function-Error Code" for more detailed information on the error codes.	 U / H / F 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.
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.

9.2.2. 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.
ADSC internal RAM data check	ADSC internal RAM data check. ADSC internal RAM data is read out and displayed.	 Address RAM data for specified address The value is shown in hexadecimal notation. The above example shows the data in ADSC address FBOh is XXXXh.	In STOP (no disc) mode, press [STOP] button on the main unit, and [1] button on the remote To exit, press [POWER] button.
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 0XXmA and the measured value is 0YYmA.	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)

9.2.3. Service Mode Table 3

Item		FL Display	Key Operation
Mode 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)   (Condition1)  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.
Region display	Region code display, TV broadcasting system & the model no. information. Note: Refer to Figure 2 for "Video Design Information".	 	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.

Model Series	Country Region	Region Code	TV Broadcasting System	Product		
				Signal System (Default)	Region Display (Default)	OSD Menu Language
P, PC, PX	USA, Canada, PX	1	NTSC	NTSC (*A)	1PN	English, Spanish, Canadian French
(S)	Japan	2	NTSC	NTSC (*A)	2PN	Japanese, English
E	Europe	2	PAL	PAL (*C)	2P6	English, French, German, Spanish, Polish, Russian, Czech, Hungarian
EB, EG	Europe	2	PAL	PAL (*C)	2P6	English, French, German, Italian, Spanish, Polish, Swedish, Dutch
GC, GS	Middle East	2	PAL	PAL (*C)	2P6	English, French, German, Spanish, Polish, Russian, Czech, Hungarian
GCS, GD, GT, GCT	South East Asia, Korea, Taiwan	3	PAL NTSC	NTSC (*B)	3PN	English, Traditional Chinese
GN	New Zealand, Australia	4	PAL	PAL (*C)	4P6	English, French, German, Italian, Spanish, Polish, Swedish, Dutch
PL, GCP, LB	Central/South/ Latin America	4	NTSC	NTSC (*D)	4PN	English, Spanish, French, Brazilian Portuguese
EE	CIS	5	SECAM	PAL (*C)	5P6	English, French, German, Spanish, Polish, Russian, Czech, Hungarian
GK	China	6	PAL	NTSC (*B)	6PN	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	PAL60

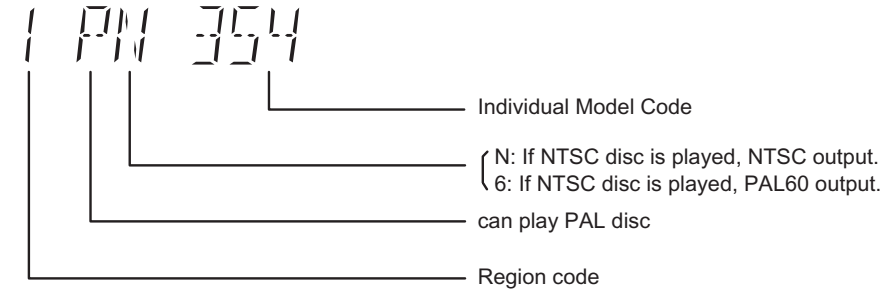
PAL (*C)

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

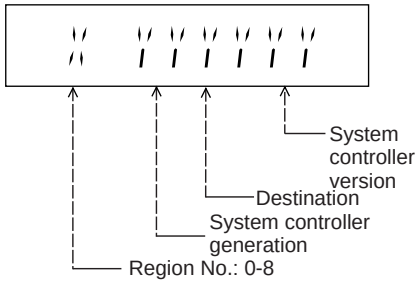
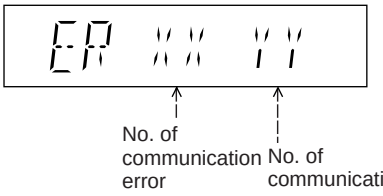
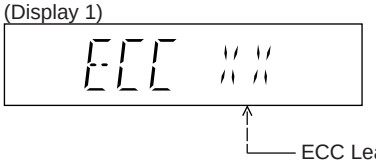
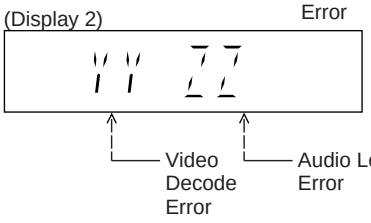
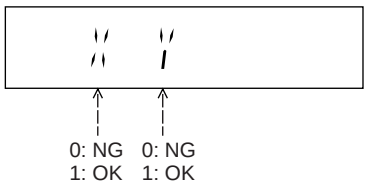
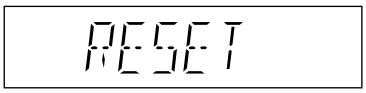
NTSC (*D)

Source	Output
Screen Saver	NTSC
NTSC disc	NTSC
PAL disc	NTSC

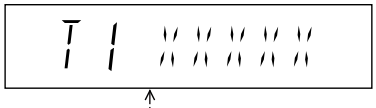
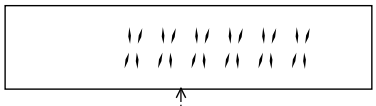
Explanation of Display



9.2.4. Service Mode Table 4

Mode Name	Item: Description	FL Display	Key Operation: 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.
Communication error display	Displays frequency of communication errors between system control IC and mechanism control IC in the DVD Module P.C.B.		In STOP (no disc) mode, press [STOP] button on the main unit, and [MENU] button on the remote control unit. Cancelled automatically 5 seconds later.
ECC Error Check	ECC refers to Error Correction Code. It describes the error correction code that was carried out for the decoding of audio & video. FL Display sequence: Display 1➞2.	(Display 1)  (Display 2) 	In STOP (no disc) mode, press [STOP] button on the main unit, and [TOP MENU] button on the remote control unit. Press [POWER] button to exit. Press [FL Display] on remote control unit for next page (FL Display).
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.		In STOP (no disc) mode, press [STOP] button on the main unit, and [EQ] 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, follow by [ENTER] button on the remote control unit. Cancelled automatically 5 seconds later.

9.2.5. Service Mode Table 5

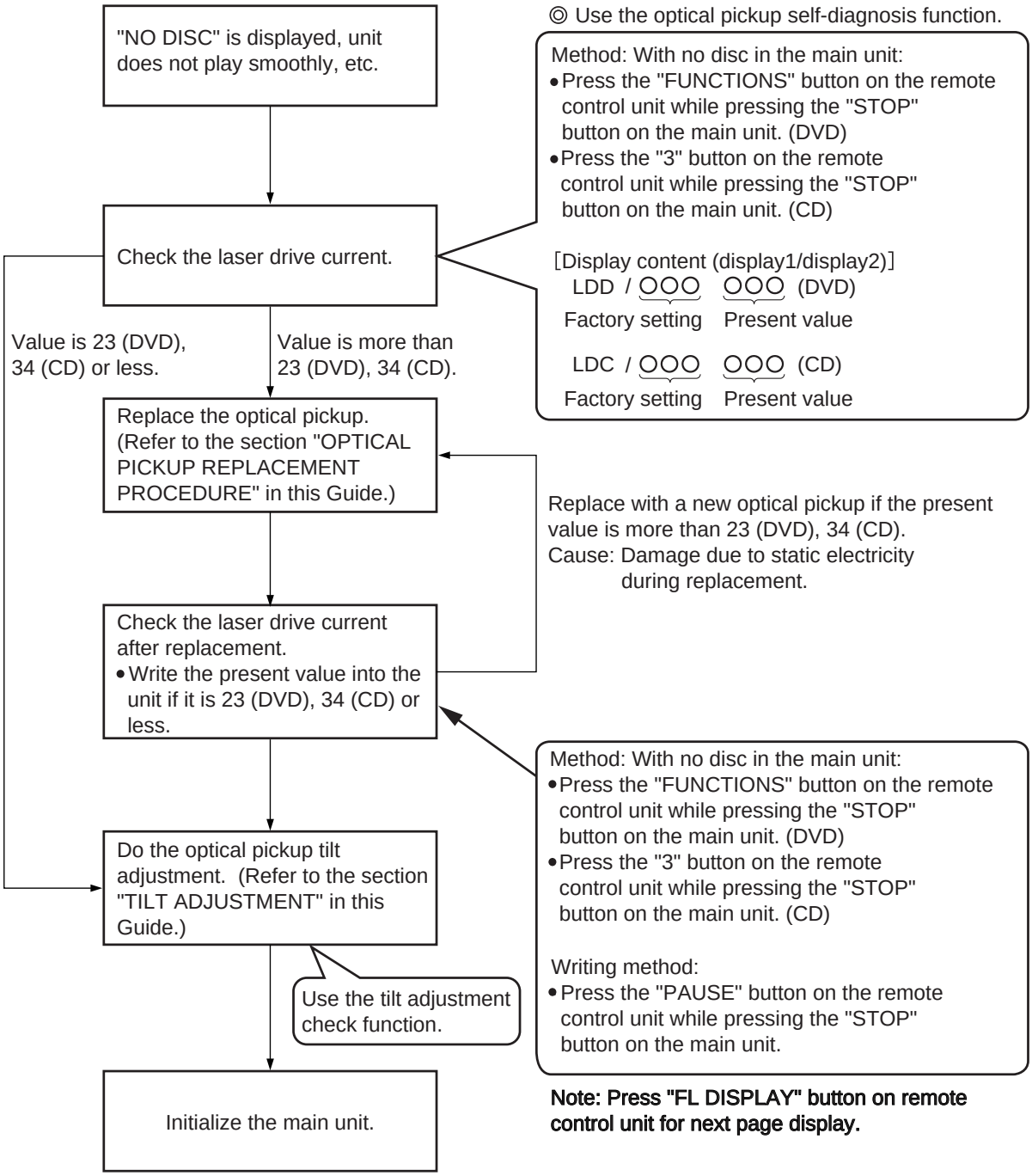
Mode Name	Item Description	FL Display	Key Operation Front Key
Timer 1 check	Timer 1 check Laser operation timer is measured separately for DVD laser and CD laser. FL Display sequence: Display 1→2.	(Display 1)  DVD laser usage time Shown to the above is DVD laser usage time, and to the below is CD laser 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)  CD laser usage time 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.

9.2.6. 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 55.

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.)



9.3. 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:

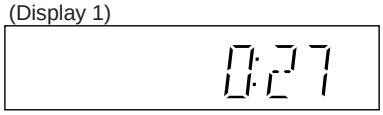
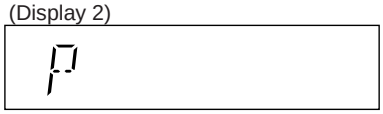
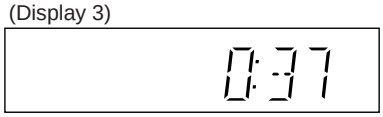
Player buttons	Remote control unit buttons	Application	Note
[FAST FORWARD]	[3]	ID setting	(Refer to the section "9.4.1. Service Mode Table 1" for more information).
[STOP] (only in AUX)	[4]	RF channel 1 display	(Refer to the section "9.4.2. Service Mode Table 2" for more information).
	[5]	RF channel 2 display	
	[6]	RF channel 3 display	
	[7]	Auto RF channel display	

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

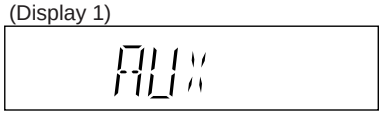
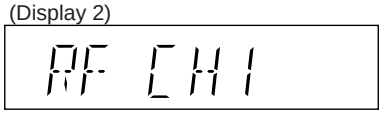
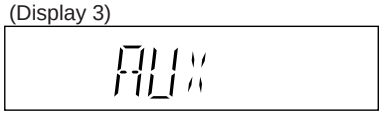
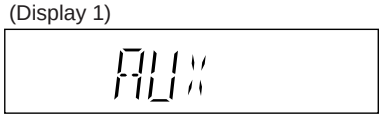
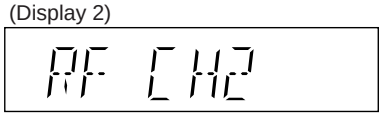
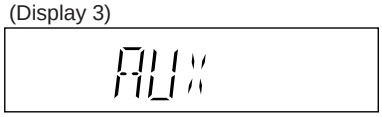
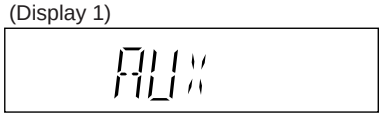
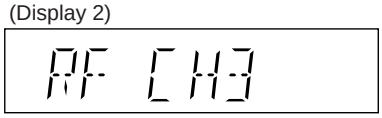
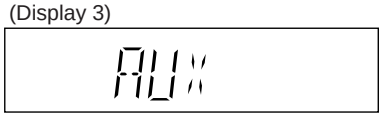
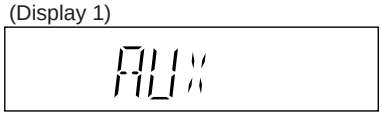
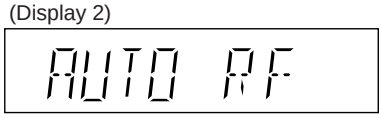
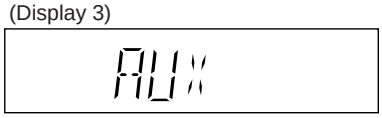
9.4. Service Mode Table (Wireless)

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

9.4.1. 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. FL Display sequence: Display 1→2→3. Note: Carry out pairing when Tx or Rx has been changed.	(Display 1)  (Display 2)  (Display 3) 	Main room is in CD/DVD mode. Press and hold [FAST FORWARD] button on the main unit, and [3] button on the remote control unit. After 10 seconds. To cancel, press the same buttons.

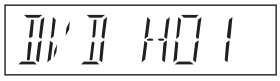
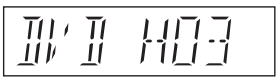
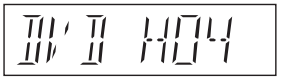
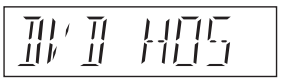
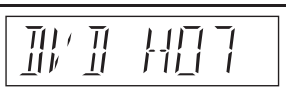
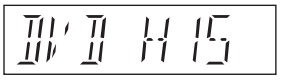
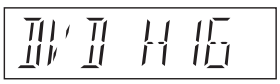
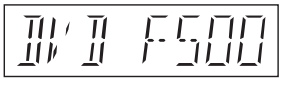
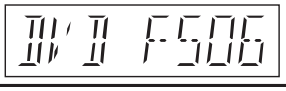
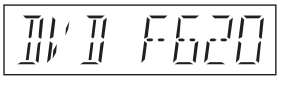
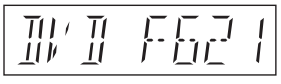
9.4.2. Service Mode Table 2

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

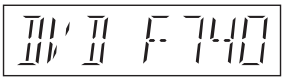
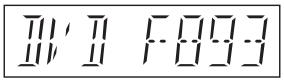
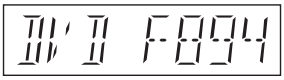
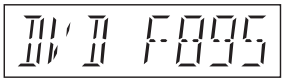
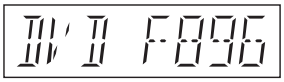
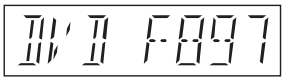
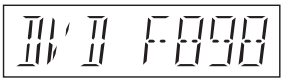
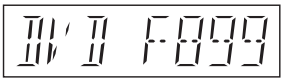
***Note: This mode is for purpose of disabling/enabling the frequency of automatic allocation and be able to select a fixed RF channel (channels 1, 2 or 3).**

9.5. DVD Self Diagnostic Function-Error Code

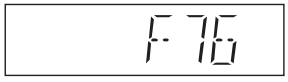
9.5.1. Mechanism Error Code Table

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.
H15	Disc tray open detection switch failure	The disc tray cannot be opened & it closes spontaneously.		Press [■ STOP] on main unit for next error.
H16	Disc tray close detection switch failure	The disc tray cannot be closed & it opens spontaneously.		Press [■ STOP] on main unit for next error.
U11	Focus servo error	Focus coil, FE signal error.		Press [■ STOP] on main unit for next error. (Unfinalized DVD-R is likely to beocme U11.)
U15	Unfinalized DVD-R			
F500	DSC error	DV5 LSI IC (IC8001) stops in the occurance of servo error (startup, focus error, etc)		Press [■ STOP] on main unit for next error.
F506	Invalid media	Disc is flipped over, TOC unreadable, incompatible disc.		Press [■ STOP] on main unit for next error.
F620	OPU unit abnormality temperature	Laser protection at high temperature.		Press [■ STOP] on main unit for next error.
F621	OPU unit circuitry temperature	Laser protection at circuit failure.		Press [■ STOP] on main unit for next error.

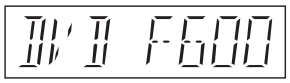
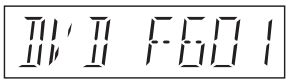
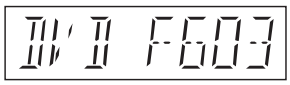
9.5.2. DVD Module Error Code Table

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 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.
F896	No existence model	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.
F898	Disagreement of hardware and software	Unsuitable combination of AV Decoder, SDRAM & FLASH ROM IC (firmware).		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.

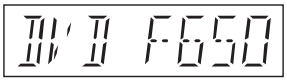
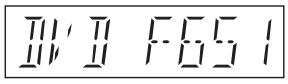
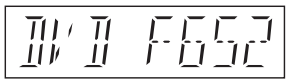
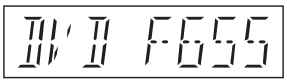
9.5.3. Power Supply Error Code Table

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 FL Display 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 2 seconds 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.) not available.		Press [■ STOP] on main unit for next error.

9.5.4. ECC Error Code Table

Error Code	Diagnosis Contents	Description of error	Automatic FL Display	Remarks
F600	Administrative information cannot be acquired by the recovery error.	It becomes impossible NaviPack etc. were done, and not to be able to acquire necessary information in the navigation's changing due to wound etc. of DISC, and to have done the reproduction transition.		Press [■ STOP] on main unit for next error.
F601	Irregular sector ID was demanded.	It tried to access the position that did not exist on DISC by the recording error etc. of authoring.		Press [■ STOP] on main unit for next error.
F603	KEYDET cannot be acquired by the recovery error.	The data for decoding copyright protection (CSS) cannot be acquired due to wound etc. of DISC, and it is not possible to reproduce.		Press [■ STOP] on main unit for next error.

9.5.5. 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.

9.6. 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.

9.6.1. 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 player for at least three seconds. (The message, "___LOCKED_" appears when the function is activated.)

Note:

OPEN/CLOSE ⏏ is invalid and the player 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 player for at least three seconds. (The message, "___LOCKED_" appears when the function is activated.)

Note:

The following buttons are invalid and the player displays "___LOCKED_" while the lock function mode is entered.

Player	⏏ , ■ , SELECTOR, ▶▶| / , ▶▶ , |◀◀ / ◀◀
Remote controller unit	NUMERIC KEYS 0~9, ≧10 , ■ , ❚❚ , ▶▶|, |◀◀ , ▶▶ , ◀◀ , FUNCTIONS/KARAOKE, TOP MENU/DIRECT NAVIGATOR, RETURN/SETUP, FL DISPLAY/SLEEP, MUTING, MENU/PLAY LIST, TEST, EXT-IN, FM, UP, DOWN, LEFT & RIGHT

9.6.2. 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.)

9.7. Service Precautions

9.7.1. 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.

9.7.2. 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.

9.7.3. 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 “ENTER” 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.

10 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. **The Switch Regulator IC may have high temperature after prolonged use.**
5. **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

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

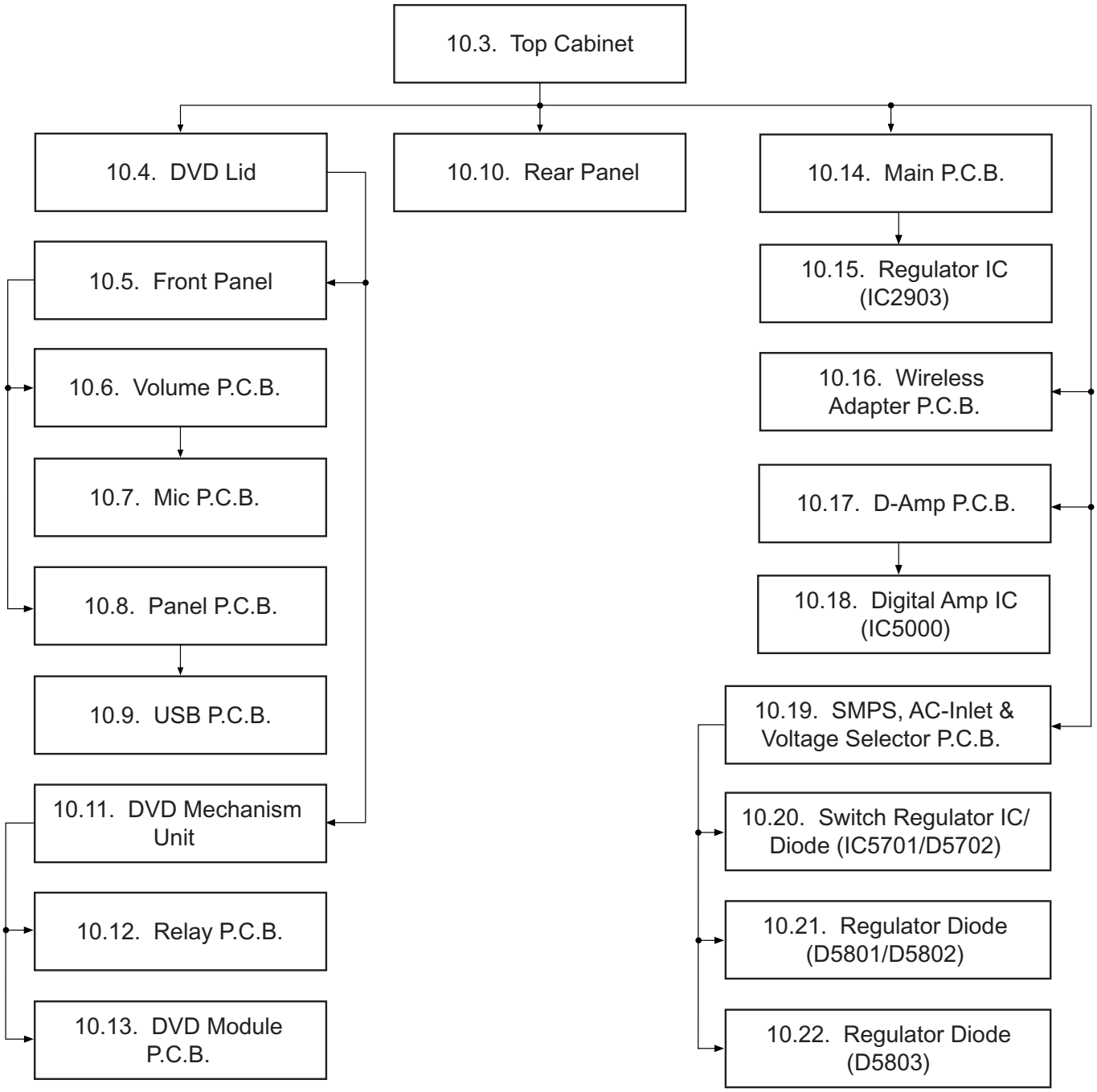
- Disassembly of Top Cabinet
- Disassembly of DVD Lid (When taking out disc manually)
- Disassembly of Front Panel
- Disassembly of Volume P.C.B.
- Disassembly of Mic P.C.B.
- Disassembly of Panel P.C.B.
- Disassembly of USB P.C.B.
- Disassembly of Rear Panel
- Disassembly of DVD Mechanism Unit
- Disassembly of Relay P.C.B.
- Disassembly of DVD Module P.C.B.
- Disassembly of Main P.C.B.
- Replacement of Regulator IC (IC2903)
- Disassembly of Wireless Adapter P.C.B.
- Disassembly of D-Amp P.C.B.
- Replacement of Digital Amp IC (IC5000)
- Disassembly of SMPS, AC-Inlet & Volatge Selector P.C.B.
- Replacement of Switch Regulator IC/Diode (IC5701/D5702)
- Replacement of Regulator Diode (D5801/D5802)
- Replacement of Regulator Diode (D5803)

CAUTION NOTE:
Please use original screw and at correct locations.

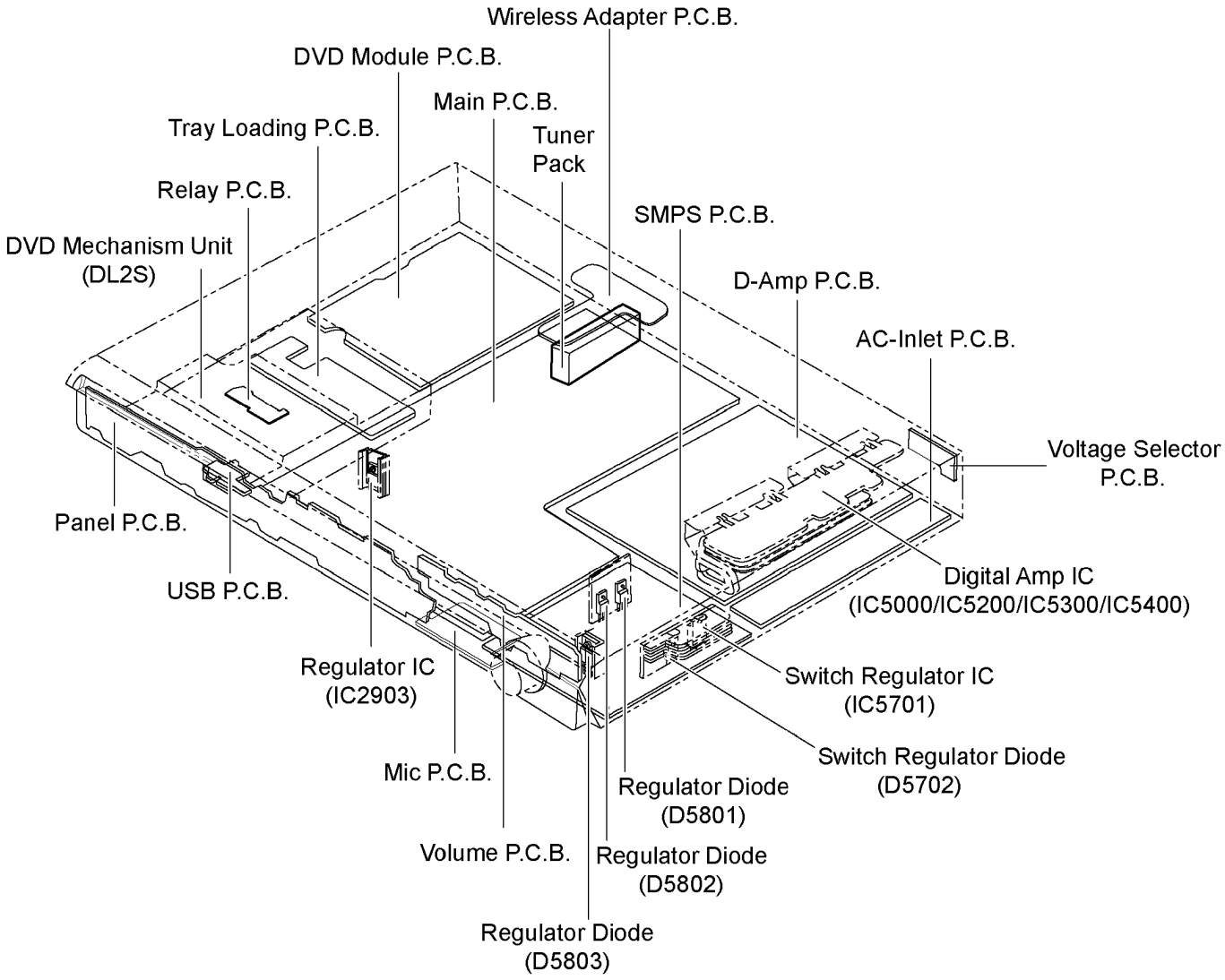
Below shown is part no. of different screw types used:

ⓐ :RHD30007-1SJ
ⓑ :RHD30119-S
ⓒ :RHD26046
ⓓ :RHDC0023
ⓔ :XTV2+6GFJ
ⓕ :RHD30111-3
ⓖ :XTB3+10JFJ
ⓗ :XTW3+8TFJ
ⓘ :XTN26+6GFJ
ⓙ :XTB3+8JFJ
ⓚ :XSN3+4FJ

10.1. Disassembly Flow Chart

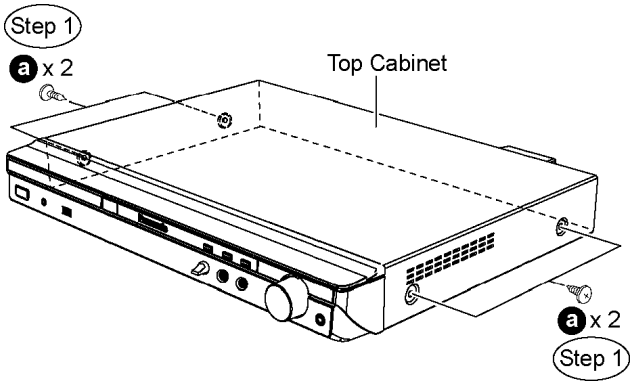


10.2. Main Components and P.C.B. Locations



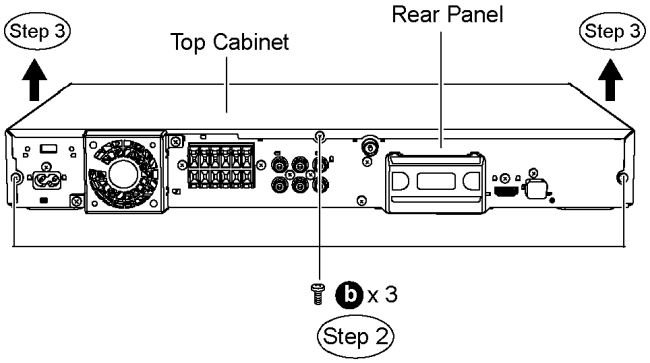
10.3. Disassembly of Top Cabinet

Step 1 Remove 4 screws.



Step 2 Remove 3 screws at the rear panel

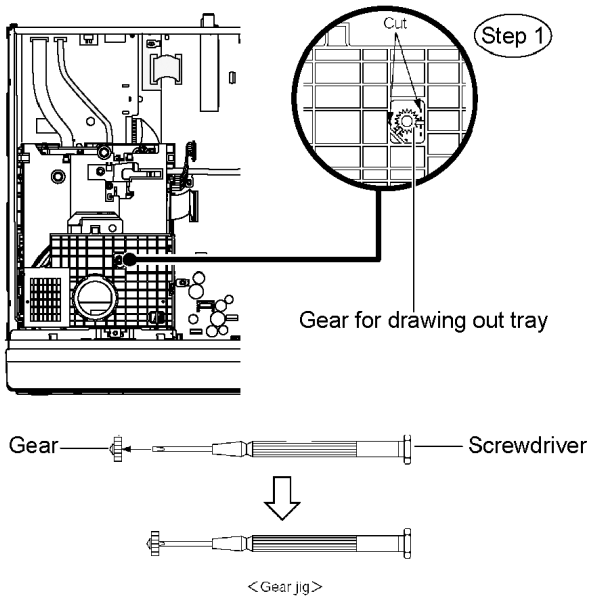
Step 3 Lift up and remove the top cabinet in the direction of arrows.



10.4. Disassembly of the DVD Lid (When taking out disc manually)

・Follow (Step 1) to (Step 3) of Item 10.3.

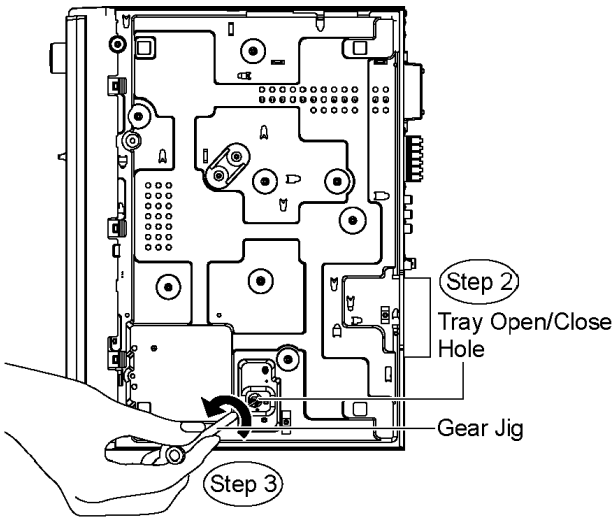
Step 1 Detach the gear (For drawing out tray) from the mechanism unit. It inserts a screw driver in the gear. (The gear jig)



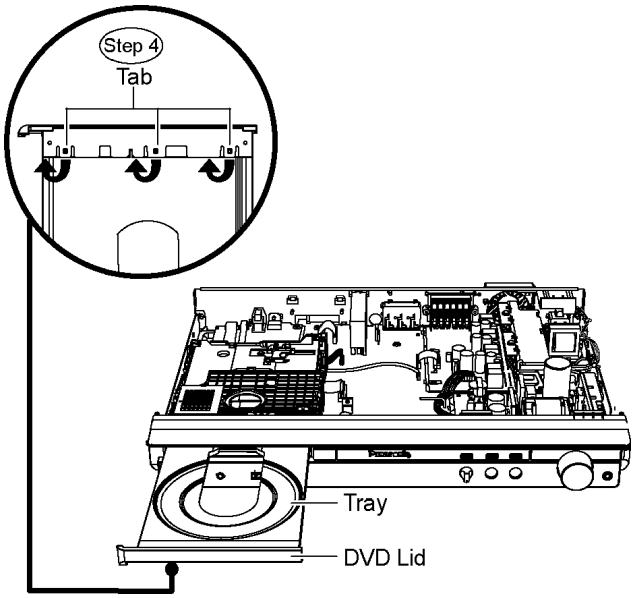
Step 2 Insert the gear jig into the tray open/ close hole.

Step 3 Turn the gear jig counterclockwise to open the tray.

Note : Do not use force to push the tray backwards as it can damage the mechanism unit.



Step 4 Release the tabs in the direction of arrows and remove the DVD lid.



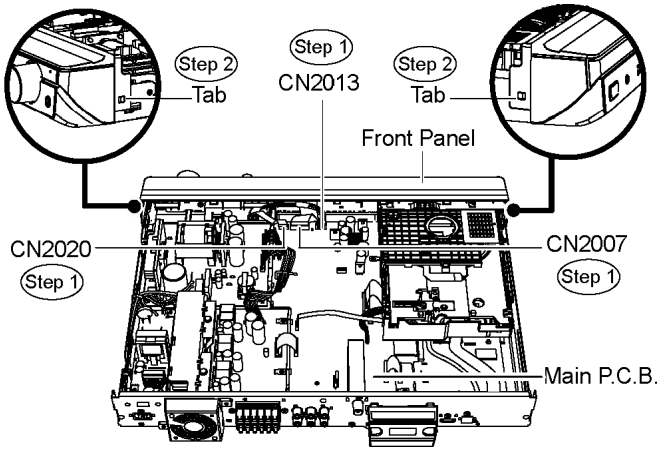
Note : You can return the tray by turning the gear jig clockwise.

10.5. Disassembly of Front Panel

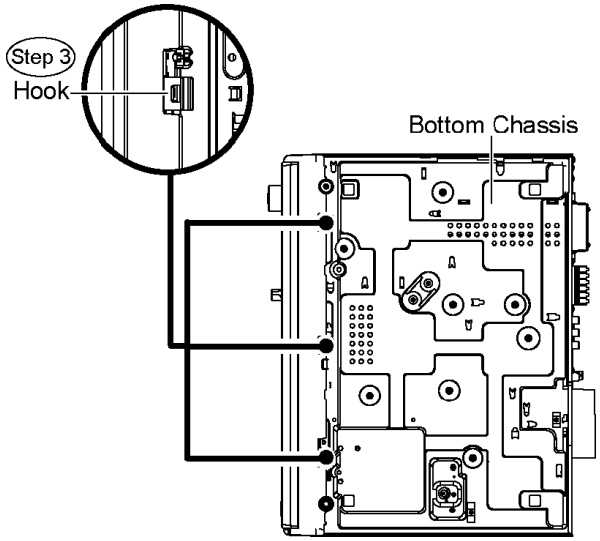
- Follow (Step 1) to (Step 3) of Item 10.3.
- Follow (Step 1) to (Step 4) of Item 10.4.

Step 1 Detach FFC cables from the connectors. (CN2007, CN2013 & CN2020) on Main P.C.B.

Step 2 Release the tab on each side of the front panel.



Step 3 Upset the unit and release 3 hooks at the bottom chassis.



Special Note : Avoid placing the set in a position that might cause damage to the jacks when removing the front panel.

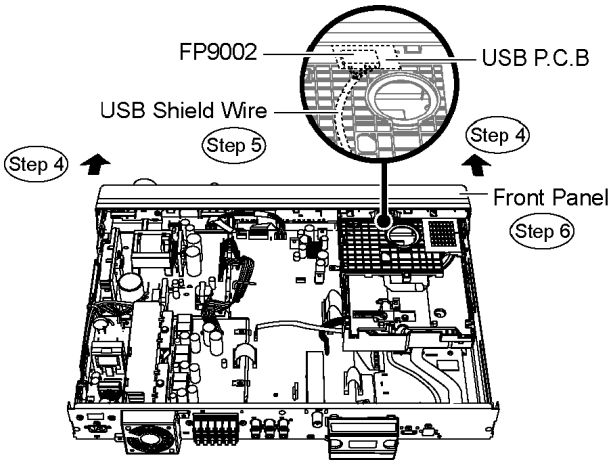
Step 4 Detach the front panel slightly forward in the direction of arrows.

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

Step 5 Detach the USB shield wire from the connector (FP9002) from USB P.C.B.

Caution: Remember to attach USB shield wire during assembling.

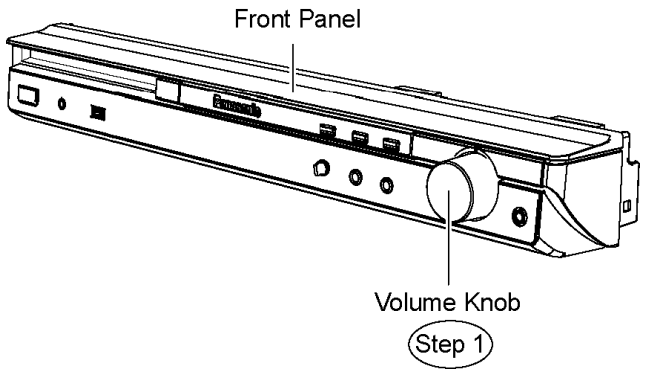
Step 6 Remove the front panel.



10.6. Disassembly of Volume P.C.B.

- Follow (Step 1) to (Step 3) of Item 10.3.
- Follow (Step 1) to (Step 4) of Item 10.4.
- Follow (Step 1) to (Step 6) of Item 10.5.

Step 1 Remove the volume knob from the front panel.



・Disassembly of Earth Spring

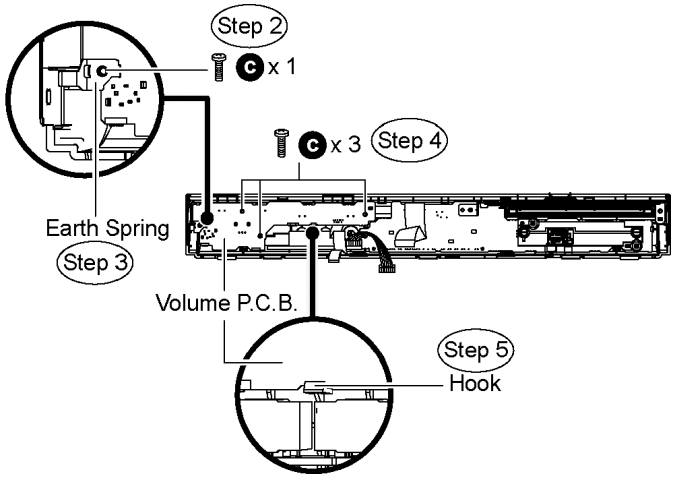
Step 2 Remove 1 screw from the earth spring.

Step 3 Remove the earth spring.

・Disassembly of Volume P.C.B.

Step 4 Remove 3 screws from the Volume P.C.B.

Step 5 Release the hook & remove Volume P.C.B.



10.7. Disassembly of Mic P.C.B.

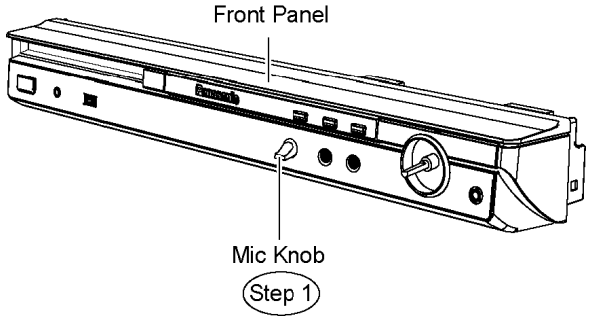
・Follow (Step 1) to (Step 3) of Item 10.3.

・Follow (Step 1) to (Step 4) of Item 10.4.

・Follow (Step 1) to (Step 6) of Item 10.5.

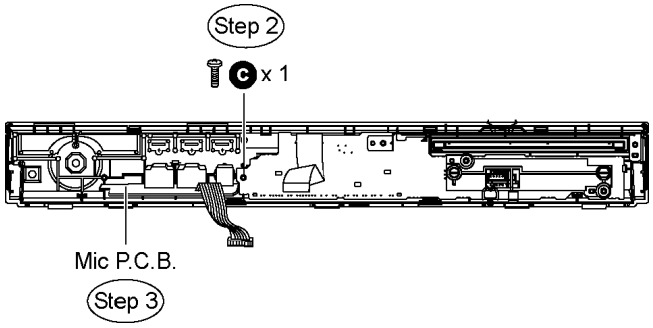
・Follow (Step 1) to (Step 5) of Item 10.6.

Step 1 Remove the mic knob.



Step 2 Remove 1 screw from Panel P.C.B.

Step 3 Remove Mic P.C.B.



10.8. Disassembly of Panel P.C.B.

・Follow (Step 1) to (Step 3) of Item 10.3.

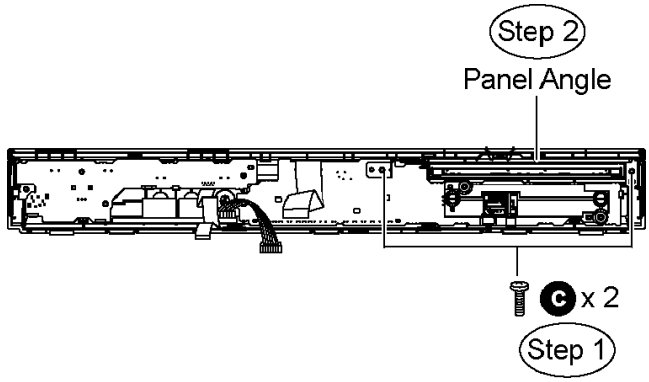
・Follow (Step 1) to (Step 4) of Item 10.4.

・Follow (Step 1) to (Step 6) of Item 10.5.

・Disassembly of Panel Angle

Step 1 Remove 2 screws.

Step 2 Remove the panel angle.



・Disassembly of Mecha Holder

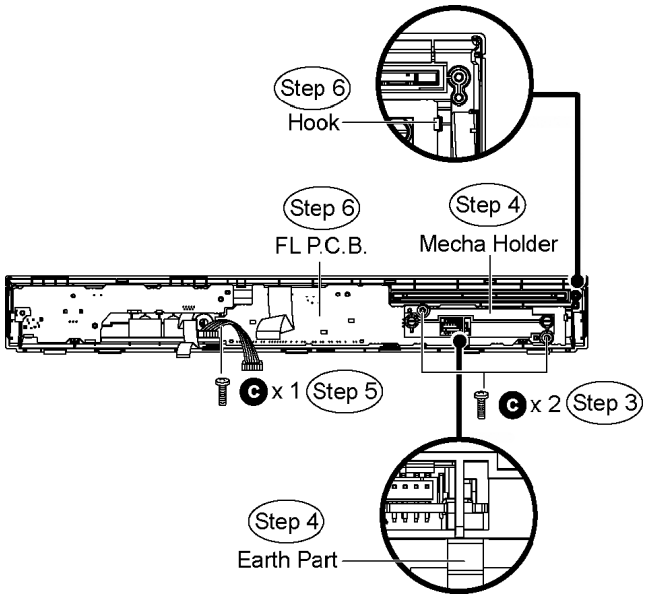
Step 3 Remove 2 screws.

Step 4 Remove the USB earth part & mecha holder.

・Disassembly of Panel P.C.B.

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

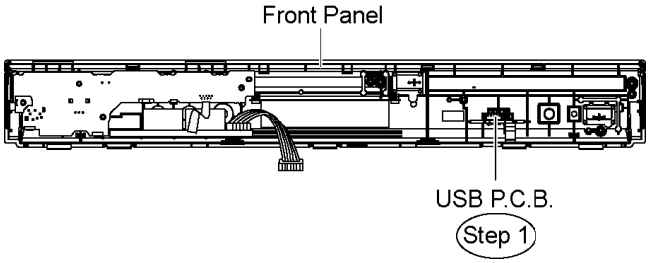
Step 6 Release the hook and remove Panel P.C.B.



10.9. Disassembly of USB P.C.B.

- Follow (Step 1) to (Step 3) of Item 10.3.
- Follow (Step 1) to (Step 4) of Item 10.4.
- Follow (Step 1) to (Step 6) of Item 10.5.
- Follow (Step 1) to (Step 6) of Item 10.8.

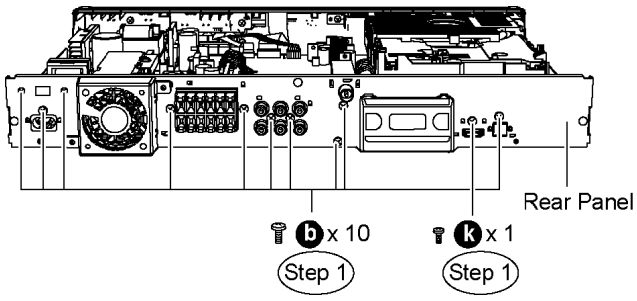
Step 1 Remove USB P.C.B. from the front panel.



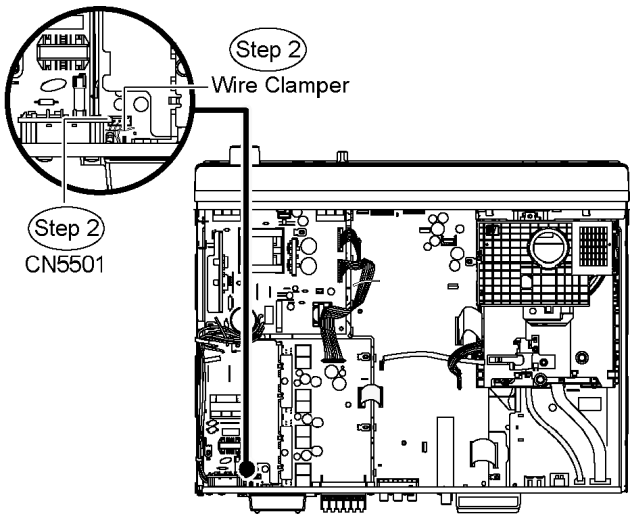
10.10. Disassembly of Rear Panel

- Follow (Step 1) to (Step 3) of Item 10.3.

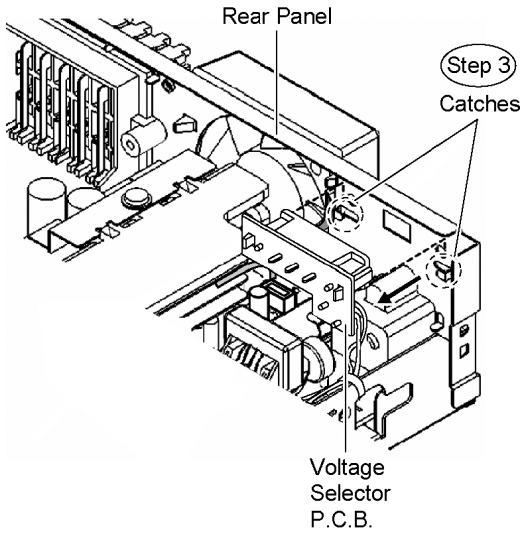
Step 1 Remove 11 screws from the rear panel.



Step 2 Remove the wire clamper to detach the fan unit connector (CN5501) on D-Amp P.C.B.

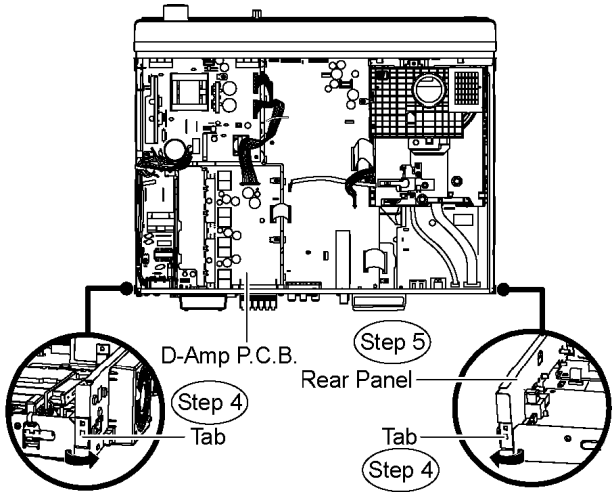


Step 3 Remove Voltage Selector P.C.B. from the catches at the rear panel.



Step 4 Release the tab on each side of the rear panel in the direction of arrows.

Step 5 Remove the rear panel.



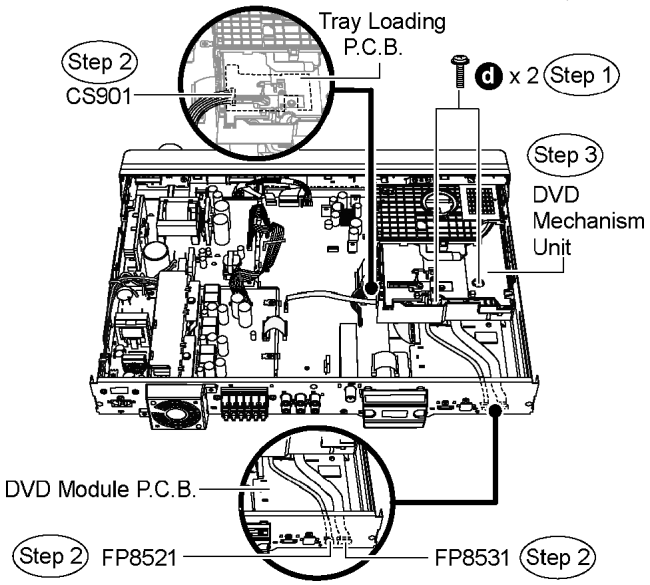
10.11. Disassembly of DVD Mechanism Unit

- Follow (Step 1) to (Step 3) of Item 10.3.
- Follow (Step 1) to (Step 4) of Item 10.4.

Step 1 Remove 2 screws from the DVD mechanism unit.

Step 2 Detach FFC cable from the connectors (FP8251 & FP8531) on DVD Module P.C.B. and (CS901) on Tray Loading P.C.B.

Step 3 Lift up & remove the DVD mechanism unit.



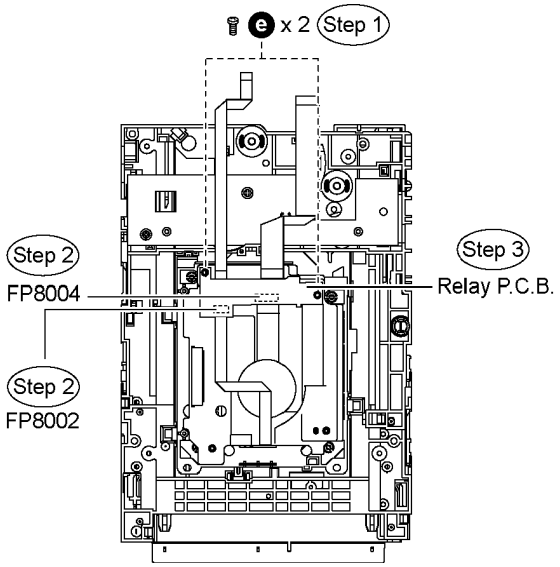
10.12. Disassembly of Relay P.C.B.

- Follow (Step 1) to (Step 3) of Item 10.3.
- Follow (Step 1) to (Step 4) of Item 10.4.
- Follow (Step 1) to (Step 3) of Item 10.11.

Step 1 Remove 2 screws from the Relay P.C.B.

Step 2 Detach FFC cable from the connectors (FP8002 & FP8004)

Step 3 Remove Relay P.C.B.



Caution : Do not use strong or excessive force to avoid damage to FFC cables.

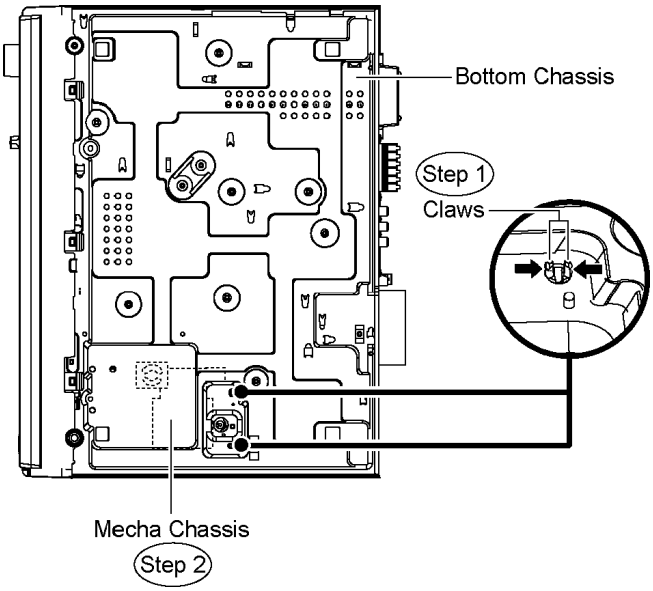
10.13. Disassembly of DVD Module P.C.B.

- Follow (Step 1) to (Step 3) of Item 10.3.
- Follow (Step 1) to (Step 4) of Item 10.4.
- Follow (Step 1) to (Step 3) of Item 10.11.

- Disassembly of Mecha Chassis

Step 1 Release the claws of the mecha chassis in the direction of arrows at the bottom chassis.

Step 2 Remove the mecha chassis.



- Disassembly of DVD Module P.C.B.

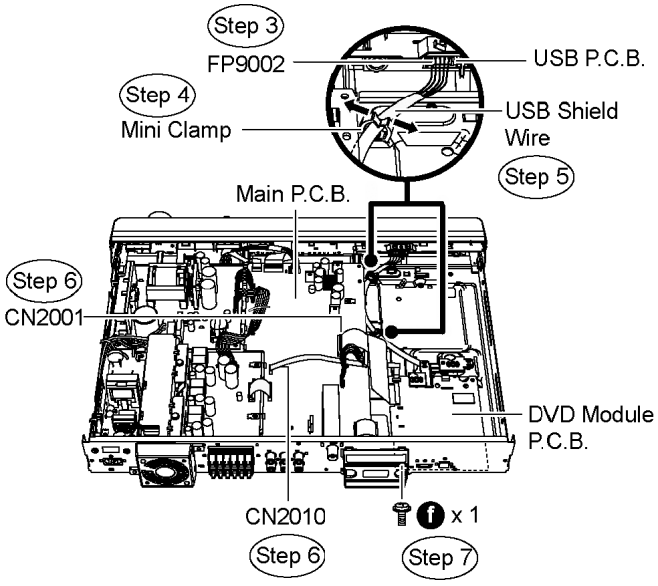
Step 3 Detach the USB shield wire from the connector (FP9002) on USB P.C.B.

Step 4 Release the claws of two mini clamps on the bottom chassis in the direction of arrows.

Step 5 Remove the USB shield wire from the mini clamps.

Step 6 Detach FFC cable from the connectors (CN2001 & CN2010) on Main P.C.B.

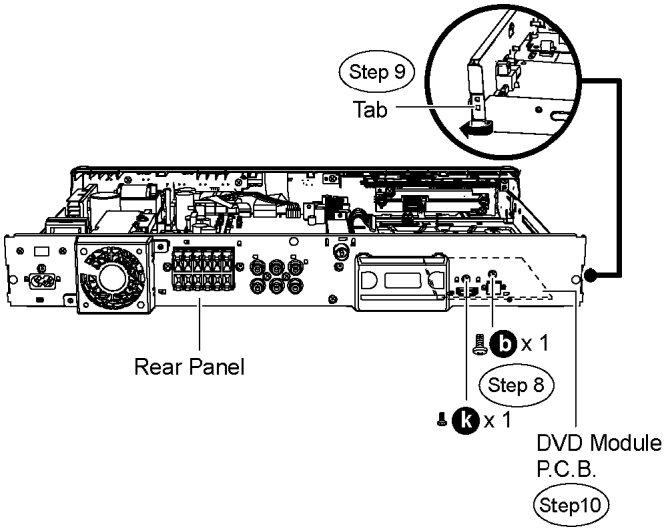
Step 7 Remove 1 screw from DVD Module P.C.B.



Step 8 Remove 2 screws from the rear panel.

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

Step 10 Remove DVD Module P.C.B.



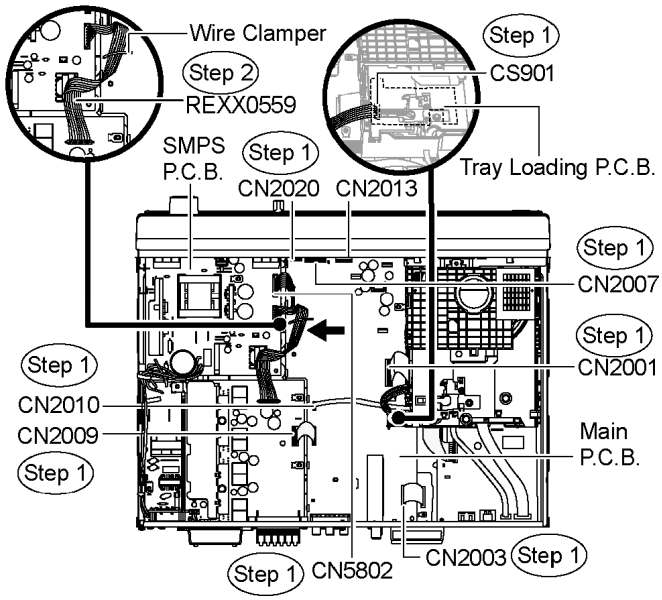
Caution : Do not use strong or excessive force to avoid damage to FFC cables.

10.14. Disassembly of Main P.C.B.

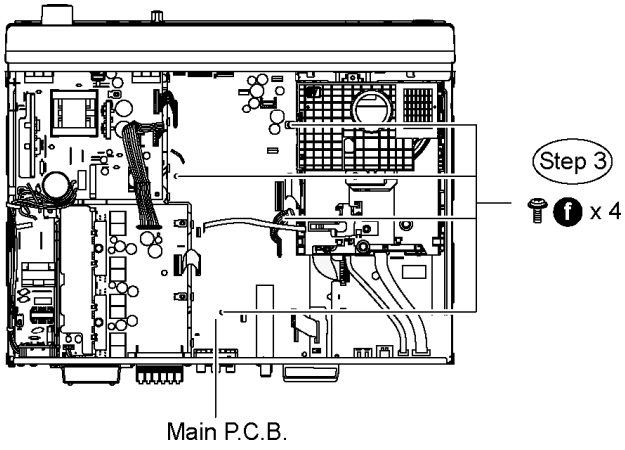
・Follow (Step 1) to (Step 3) of Item 10.3.

Step 1 Detach FFC cable from the connectors (CN2001, CN2003, CN2007, CN2009, CN2010, CN2013 & CN2020) on Main P.C.B., (CS901) on Tray Loading P.C.B. and (CN5802) on SMPS P.C.B.

Step 2 Remove the wire clamper to move aside the FFC cable (REXX0559, SMPS to D-Amp) in the direction of arrow.



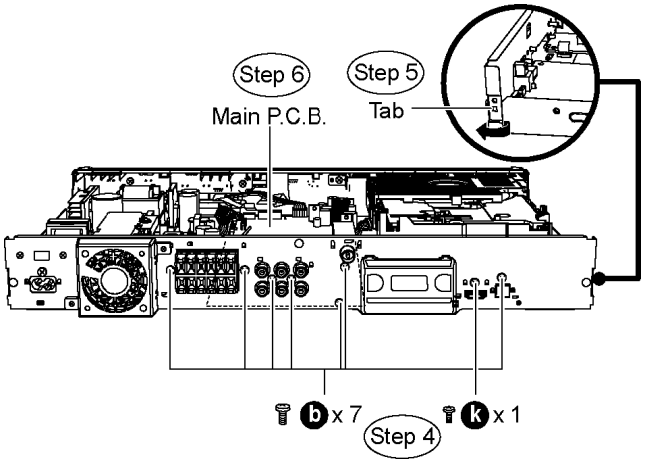
Step 3 Remove 4 screws from Main P.C.B.



Step 4 Remove 8 screws from the rear panel.

Step 5 Release the tab of the rear panel in the direction of arrow.

Step 6 Remove Main P.C.B.

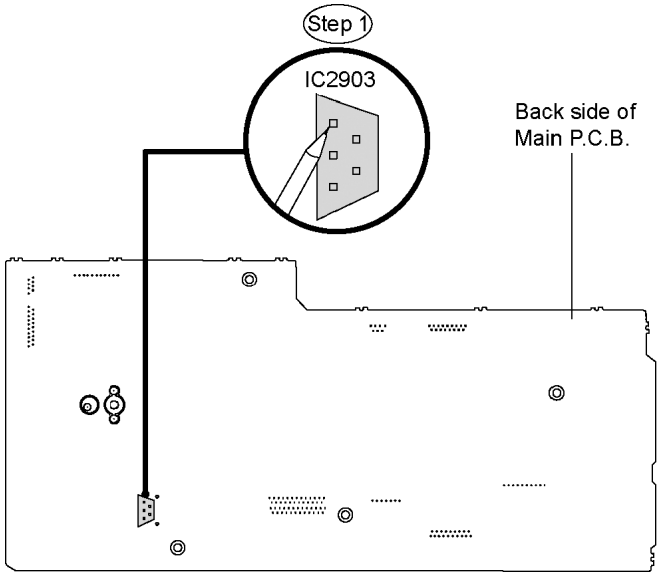


10.15. Replacement of Regulator IC (IC2903)

・Follow (Step 1) to (Step 3) of Item 10.3.

・Follow (Step 1) to (Step 6) of Item 10.14.

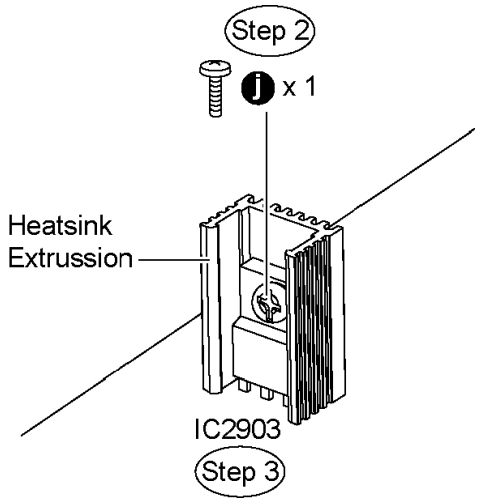
Step 1 Desolder pins of the regulator IC (IC2903) on the back side of Main P.C.B.



Step 2 Remove 1 screw from the regulator IC (IC2903).

Step 3 Remove the regulator IC (IC2903) from the heatsink extrussion.

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



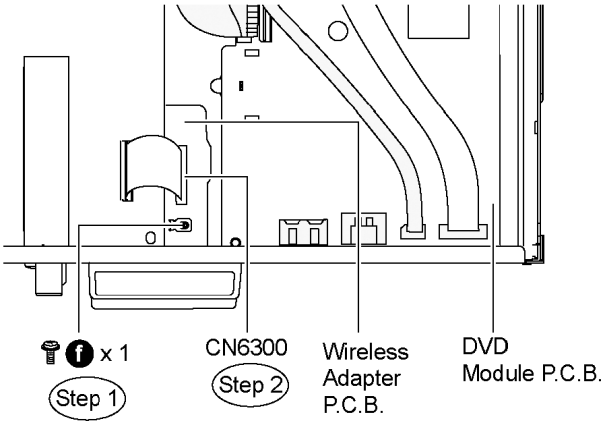
Note: Refer to the diagrams of Main P.C.B. (Item 10.14) for the location of the part.

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

・Follow (Step 1) to (Step 3) of Item 10.3.

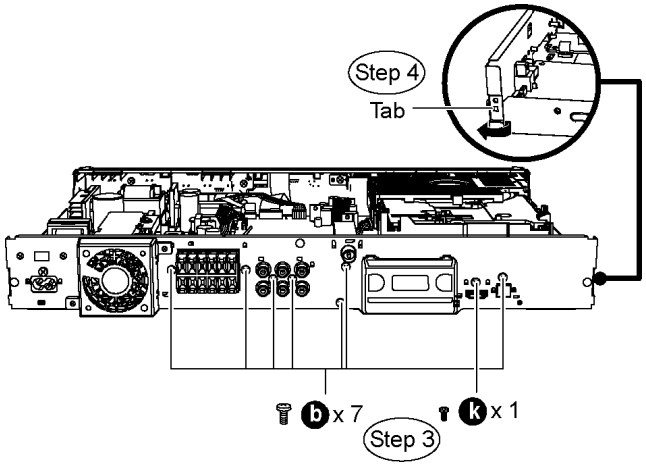
Step 1 Remove 1 screw from Wireless Adapter P.C.B.

Step 2 Detach FFC cable from the connector (CN6300) on Wireless Adapter P.C.B.

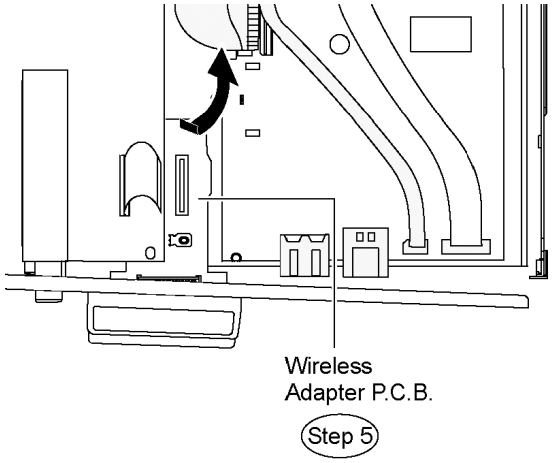


Step 3 Remove 8 screws.

Step 4 Release the tab of the rear panel in the direction of arrow.



Step 5 Remove Wireless Adapter P.C.B. in the direction of arrow.



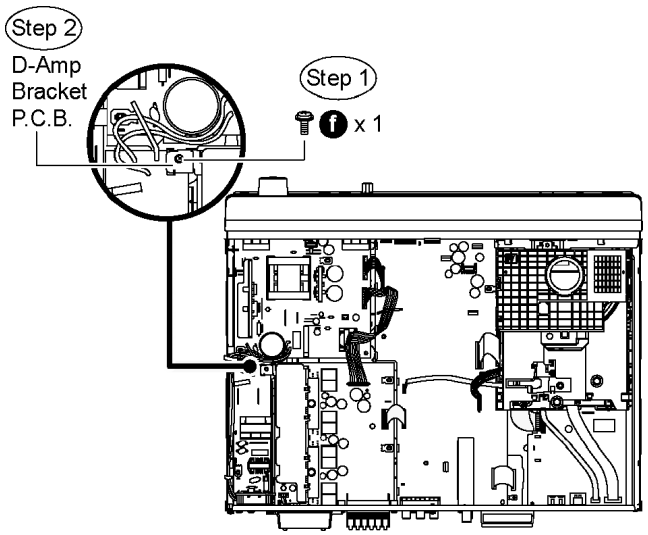
10.17. Disassembly of D-Amp P.C.B.

・Follow (Step 1) to (Step 3) of Item 10.3.

・Disassembly of D-Amp P.C.B. Bracket.

Step 1 Remove 1 screw from AC-Inlet P.C.B.

Step 2 Remove the D-Amp P.C.B. bracket.



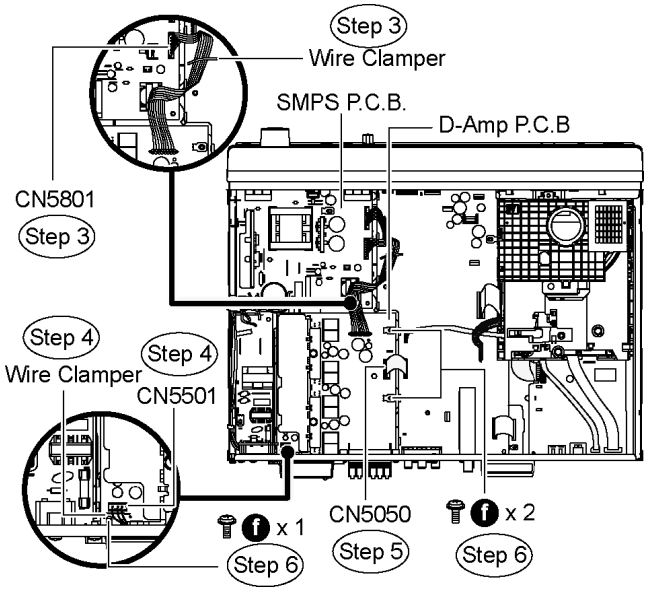
・Disassembly of D-Amp P.C.B.

Step 3 Remove the wire clamper to detach FFC cable from the connector (CN5801) on SMPS P.C.B.

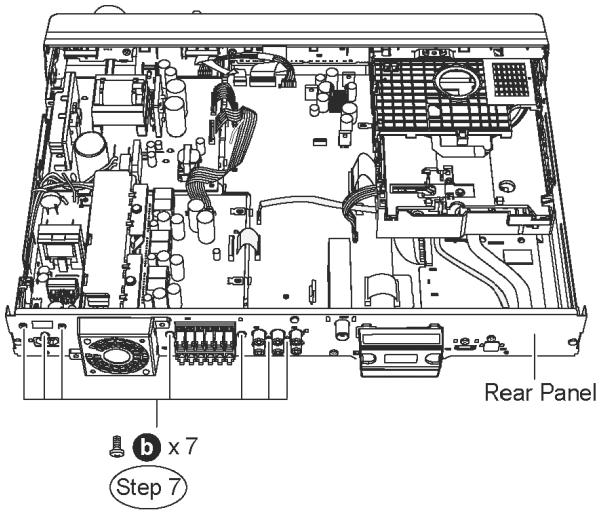
Step 4 Remove the wire clamper to detach FFC cable from the connector (CN5501) of fan unit on D-Amp P.C.B.

Step 5 Detach FFC cable from the connector (CN5050) on D-Amp P.C.B.

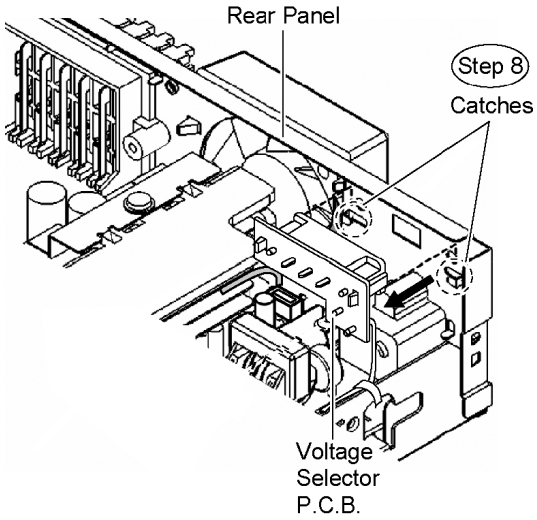
Step 6 Remove 3 screws from D-Amp P.C.B.



Step 7 Remove 7 screws from the rear panel.

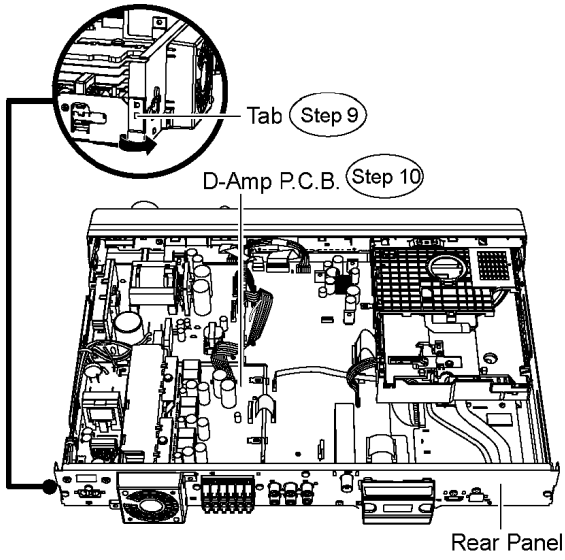


Step 8 Remove Voltage Selector P.C.B. from the catches at the rear panel.



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

Step 10 Remove D-Amp P.C.B.

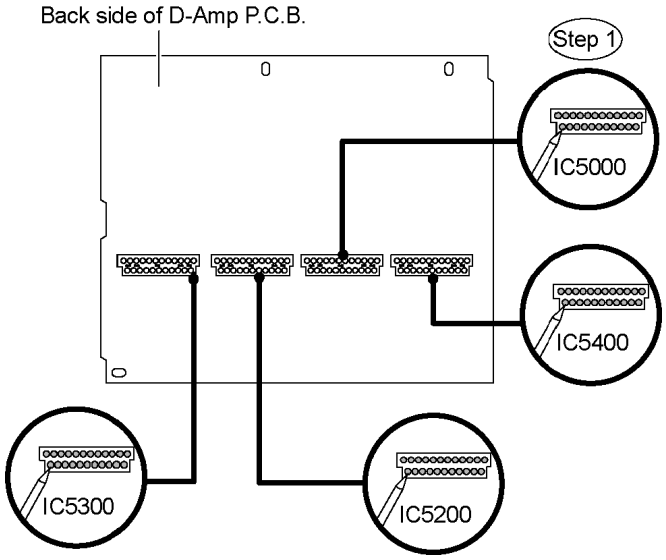


10.18. Replacement of Digital Amp IC (IC5000)

・Follow (Step 1) to (Step 3) of Item 10.3.

・Follow (Step 1) to (Step 10) of Item 10.17.

Step 1 Desolder pins of the digital amp IC (IC5000) on the back side of D-Amp P.C.B.

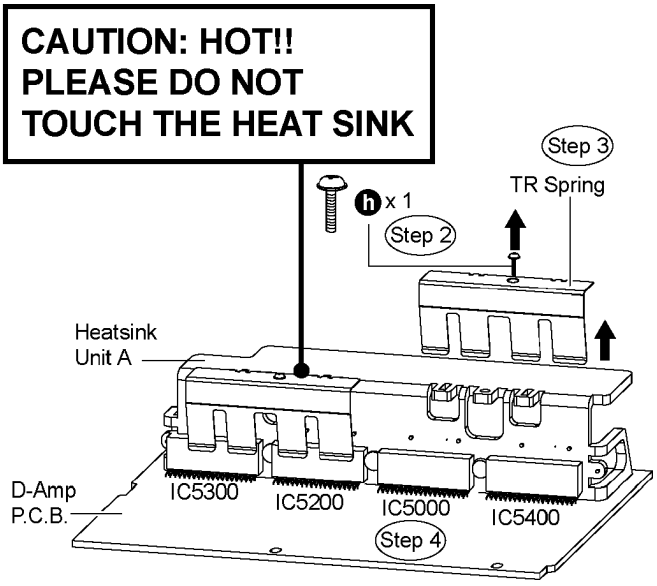


Step 2 Remove 1 screw from the top of the heatsink unit A.

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

Step 4 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.



Note : For replacement of IC5200, IC5300 & IC5400, repeat the (Step 1) to (Step 4). Refer to the diagrams of D-Amp P.C.B. (Item 10.17) for location of the parts.

10.19. Disassembly of SMPS, AC-Inlet & Voltage Selector P.C.B.

・Follow (Step 1) to (Step 3) of Item 10.3.

・Follow (Step 1) to (Step 2) of Item 10.17. for Disassembly of D-Amp P.C.B. Bracket.

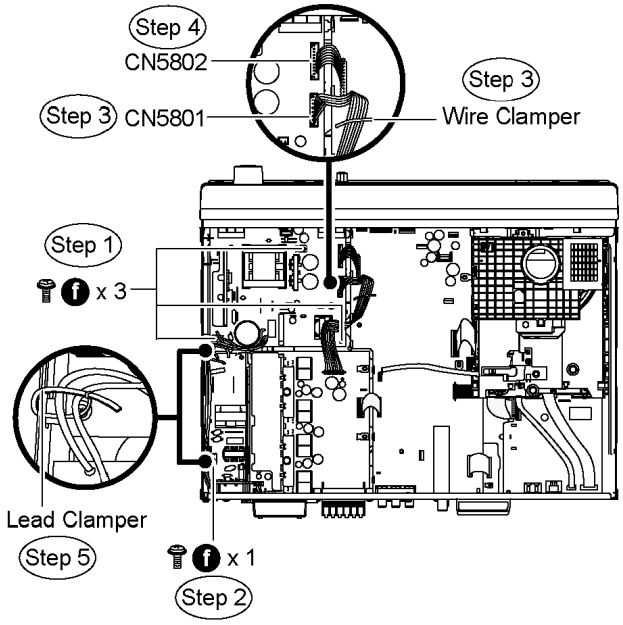
Step 1 Remove 3 screws from SMPS P.C.B.

Step 2 Remove 1 screw from AC-Inlet P.C.B.

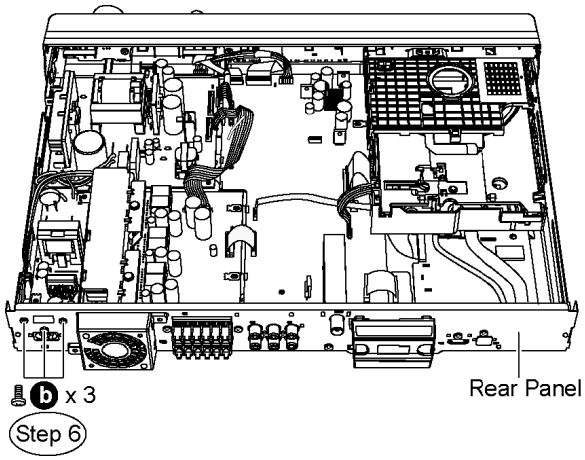
Step 3 Remove the wire clamper to detach FFC cable from the connector (CN5801) on SMPS P.C.B.

Step 4 Detach FFC cable from the connector (CN5802) on SMPS P.C.B.

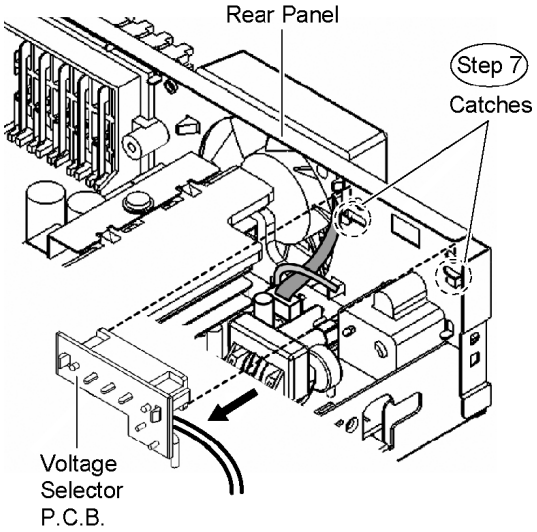
Step 5 Remove the lead clampers.



Step 6 Remove 3 screws from the rear panel.

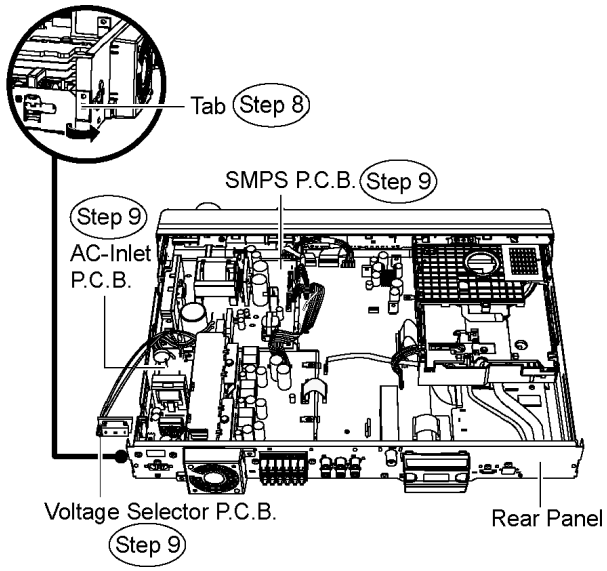


Step 7 Remove Volatge Selector P.C.B. from the catches at the rear panel.



Step 8 Release the tab of the rear panel in the direction of arrow.

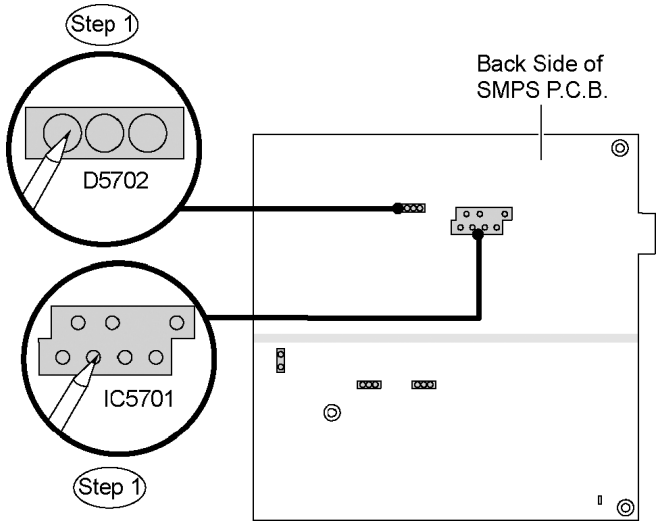
Step 9 Remove SMPS, AC-Inlet & Voltage Selector P.C.B.



10.20. Replacement of Switch Regulator IC/Diode (IC5701/D5702)

- Follow (Step 1) to (Step 3) of Item 10.3.
- Follow (Step 1) to (Step 9) of Item 10.19.

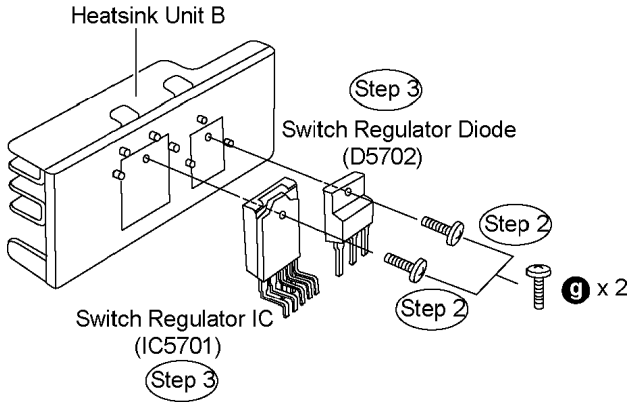
Step 1 Desolder pins of the switch regulator IC (IC5701) or diode (D5702) on the back side of SMPS P.C.B.



Step 2 Remove 1 screw from the switch regulator IC (IC5701) or diode (D5702).

Step 3 Remove the switch regulator IC (IC5701) or 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.

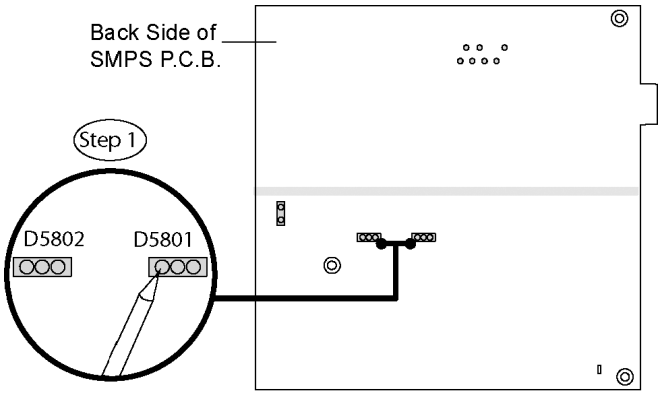


Note : Refer to the diagrams of SMPS P.C.B. (Item 10.19) for location of the parts.

10.21. Replacement of Regulator Diode (D5801/D5802)

- Follow (Step 1) to (Step 3) of Item 10.3.
- Follow (Step 1) to (Step 9) of Item 10.19.

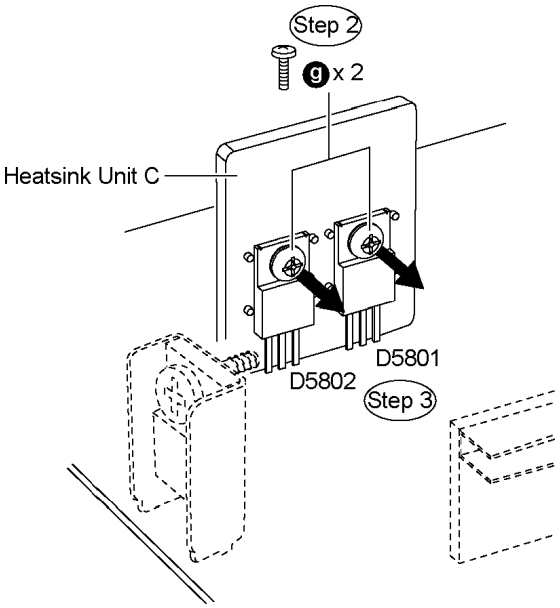
Step 1 Desolder pins of the regulator diode (D5801/ D5802) on the back side of SMPS P.C.B.



Step 2 Remove 1 screw from the regulator diode (D5801/D5802).

Step 3 Remove the regulator diode (D5801/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.

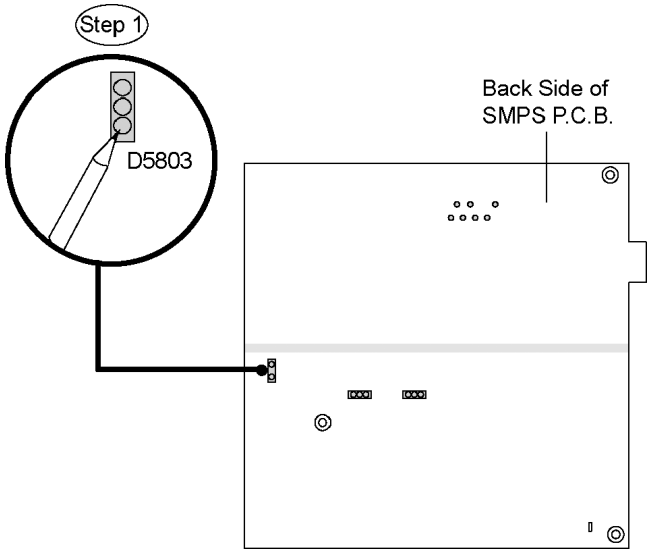


Note : Refer to the diagrams of SMPS P.C.B. (Item 10.19) for location of the parts.

10.22. Replacement of Regulator Diode (D5803)

- Follow (Step 1) to (Step 3) of Item 10.3.
- Follow (Step 1) to (Step 9) of Item 10.19.

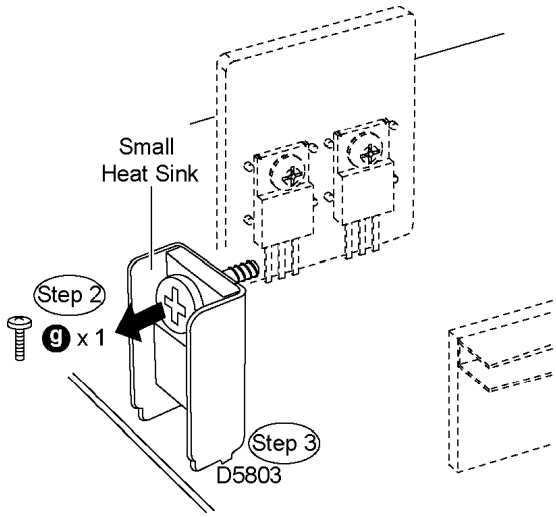
Step 1 Desolder pins of the regulator diode (D5803) on the back side of SMPS P.C.B.



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

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

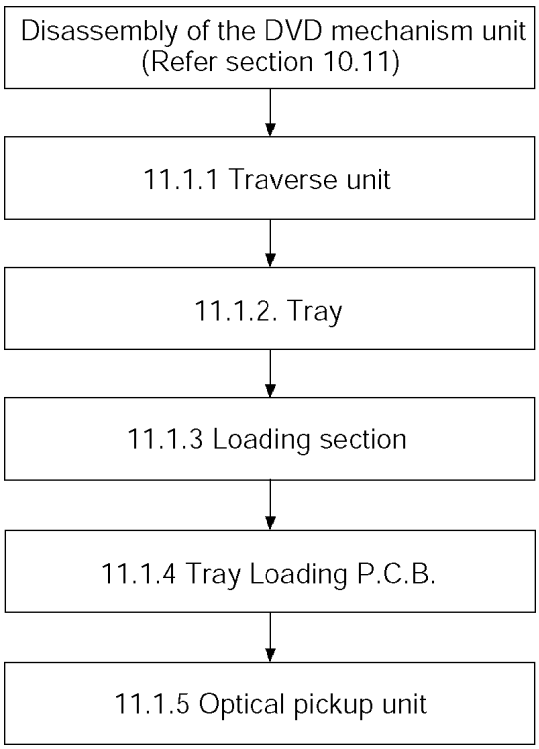
Caution : Handle the small heatsink with caution due to its high temperature after prolonged use. Touching it may lead to injuries.



Note : Refer to the diagrams of SMPS P.C.B. (Item 10.19) for location of the part.

11 Assembly and Disassembly of DVD Mechanism Unit

11.1. Disassembly Procedure

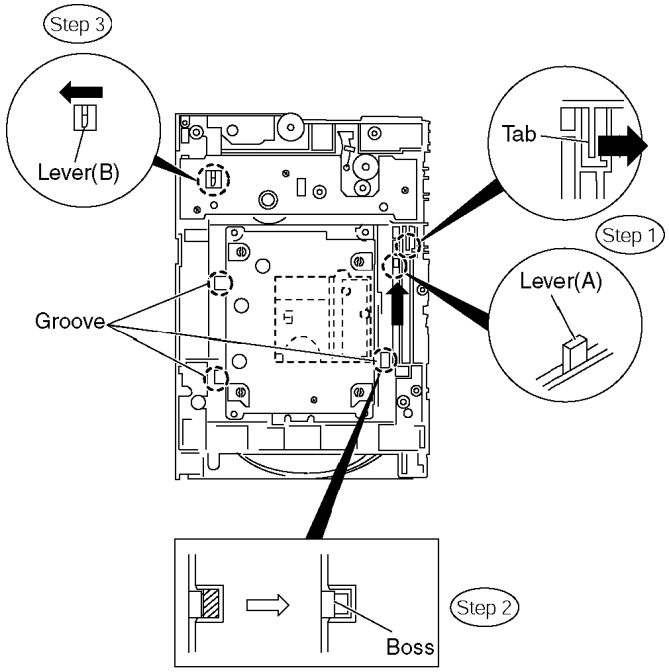


11.1.1. Disassembly of Traverse Unit (with Middle Chassis)

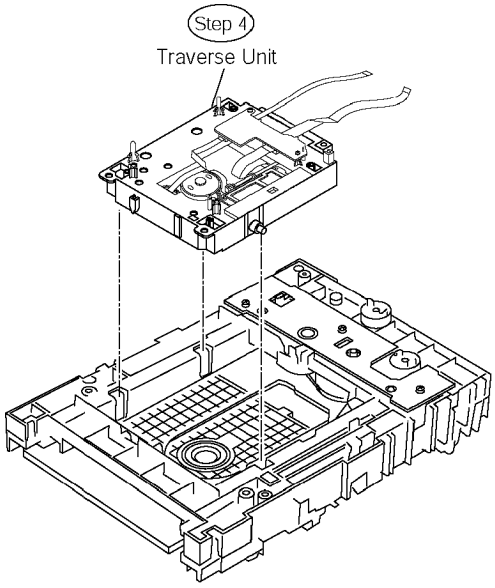
Step 1 Slide the lever (A) in the arrow direction (to the opposite side) till it stops.

Step 2 Slide the lever (A) further by bending the tab at the right side of the lever A in the right direction. (The right groove opens and the boss becomes seen.)

Step 3 Open the lever (B) to left. (The 2 grooves at the left side open.).

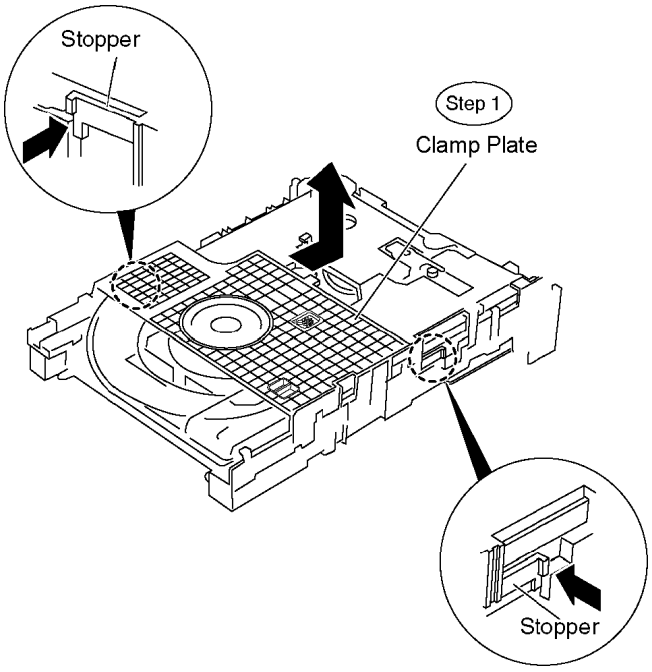


Step 4 Remove the traverse unit.



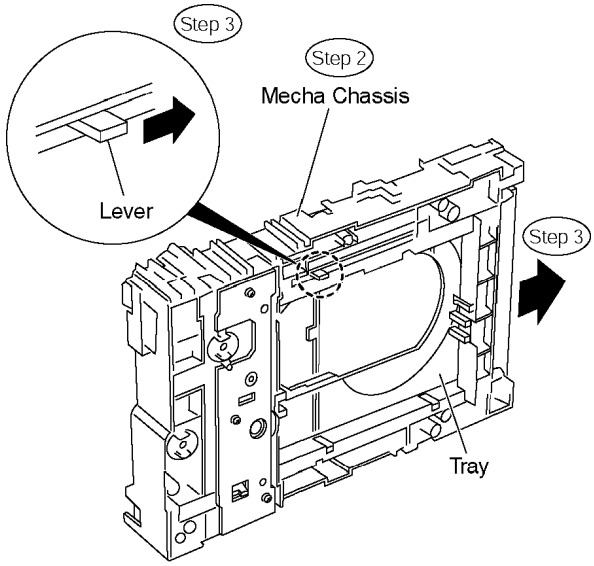
11.1.2. Disassembly of Tray

Step 1 Slide the clamp plate while pressing the stopper in the arrow direction, and remove the clamp plate.

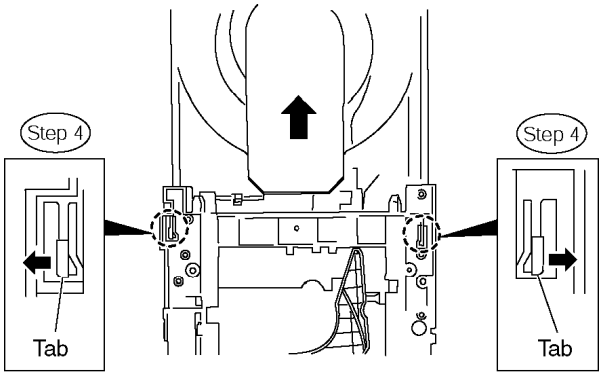


Step 2 Raise the mecha chassis vertically.

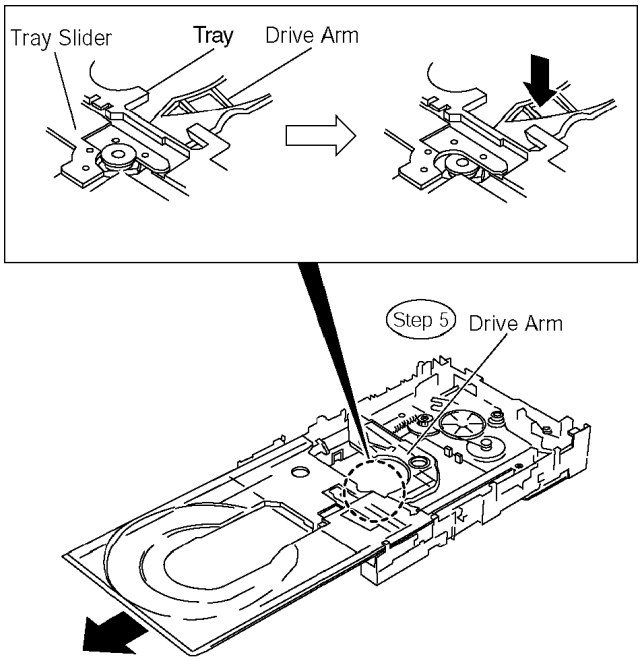
Step 3 Slide the lever in the arrow direction till it stops and pull the tray out.



Step 4 Spread the tabs at the both sides and pull the tray out. (The tray slides a little forword and stops.).



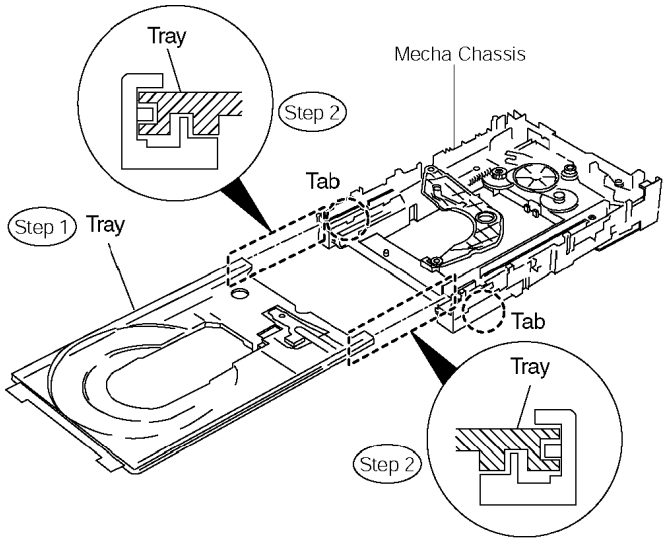
Step 5 Remove the drive arm concave phase from the tray slider and tray.



I(Assembly of the tray unit)

Step 1 Insert a part of the tray into the unit sliding over the groove on the mecha chassis.

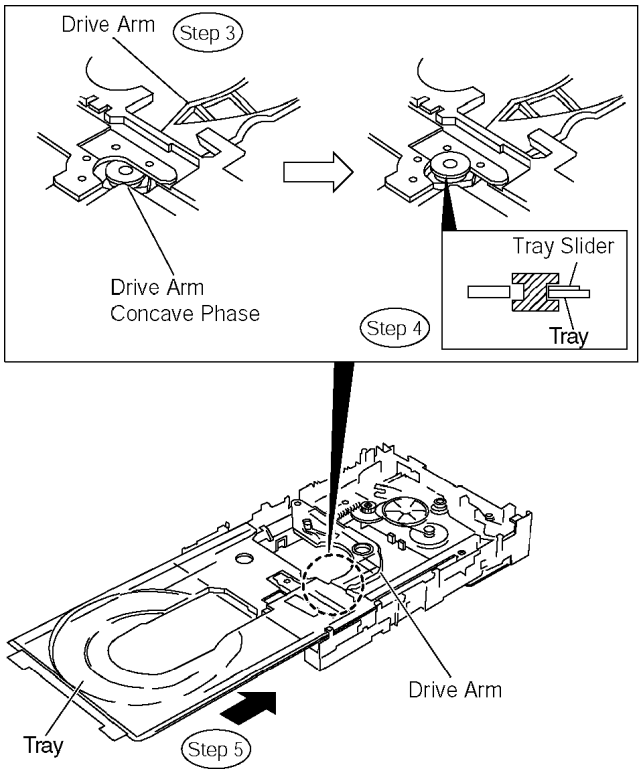
Step 2 Insert the tray to the point before the tab of the mecha chassis.



Step 3 Hook the drive arm concave phase over the tray and the tray slider.

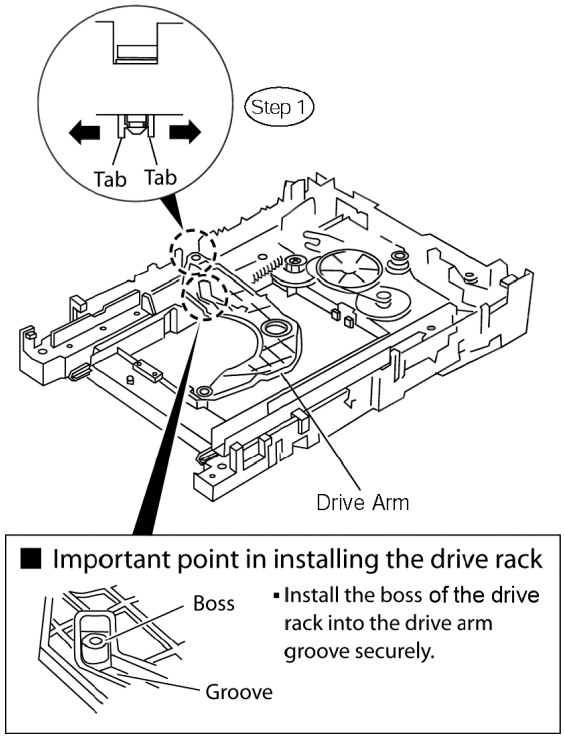
Step 4 Press in the tray.

Step 5 Make sure that the tray and the drive arm move smoothly.



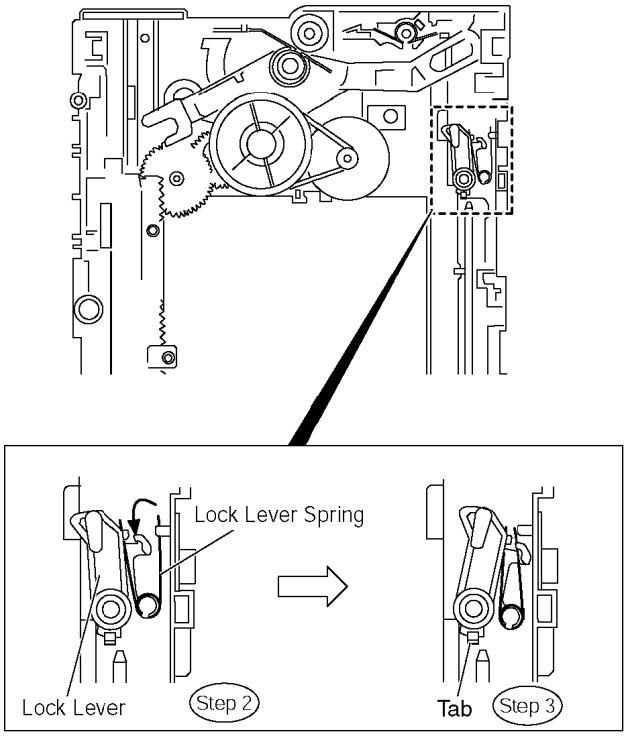
11.1.3. Disassembly of Loading Section

Step 1 Spread the tabs at the both sides and push out the drive arm.



Step 2 Hook the lock lever spring on the lock lever projection part temporarly.

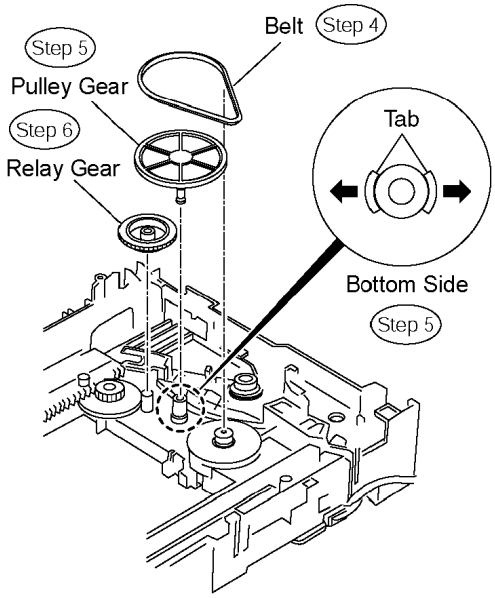
Step 3 Unlock the tab and remove the lock lever.



Step 4 Remove the belt.

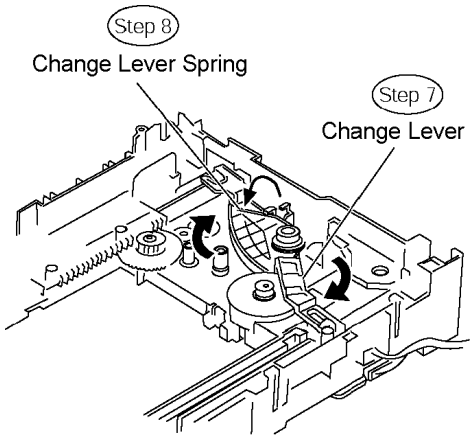
Step 5 Unlock the tab and remove the pulley gear.

Step 6 Remove the relay gear.

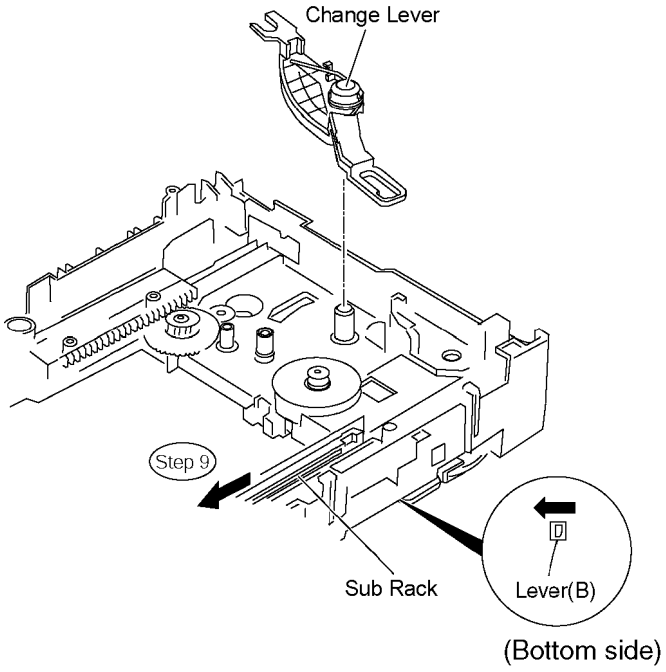


Step 7 Turn the change lever in the arrow direction till it stops.

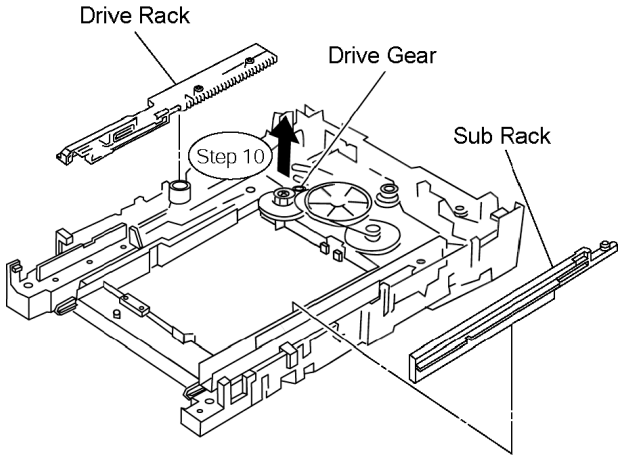
Step 8 Hook the change lever spring on the change lever project part temporarily.



Step 9 Pull the lever (B) at the bottom side in the direction of arrow and remove the change lever.



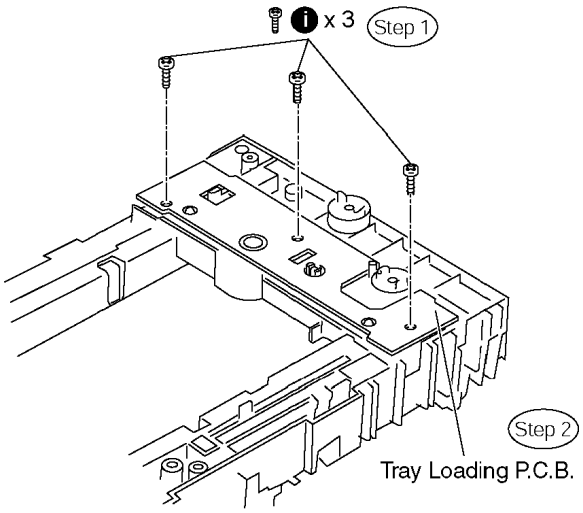
Step 10 Remove the drive rack, the sub rack and the drive gear in the direction of arrow.



11.1.4. Disassembly of Tray Loading P.C.B.

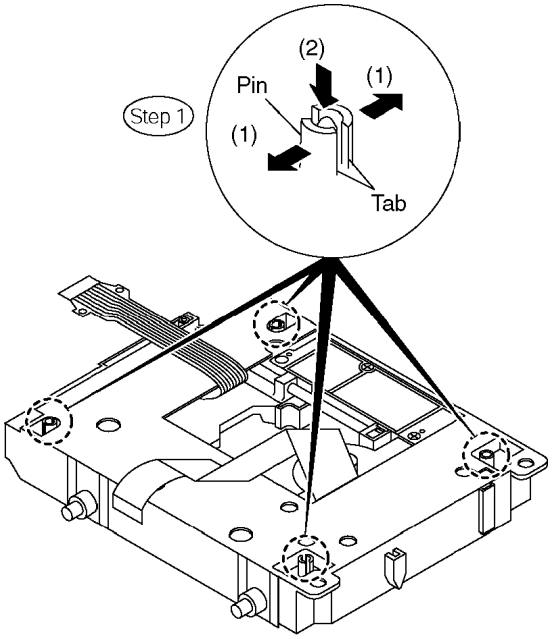
Step 1 Remove 3 screws

Step 2 Remove Tray Loading P.C.B.

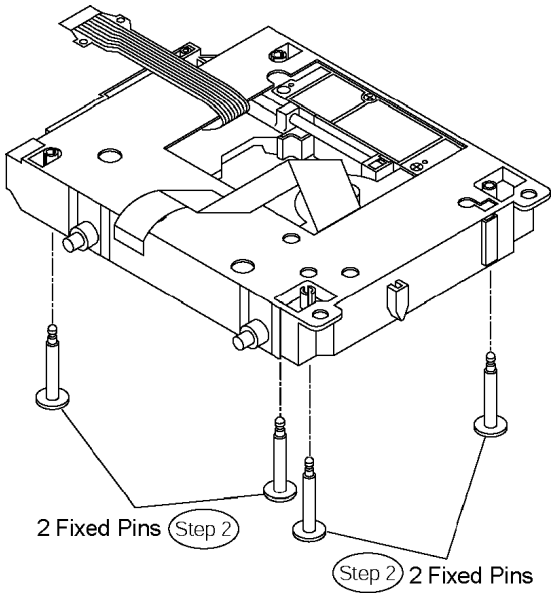


11.1.5. Disassembly of Traverse Unit

Step 1 Spread the tabs to push in the pin in the direction of arrows.

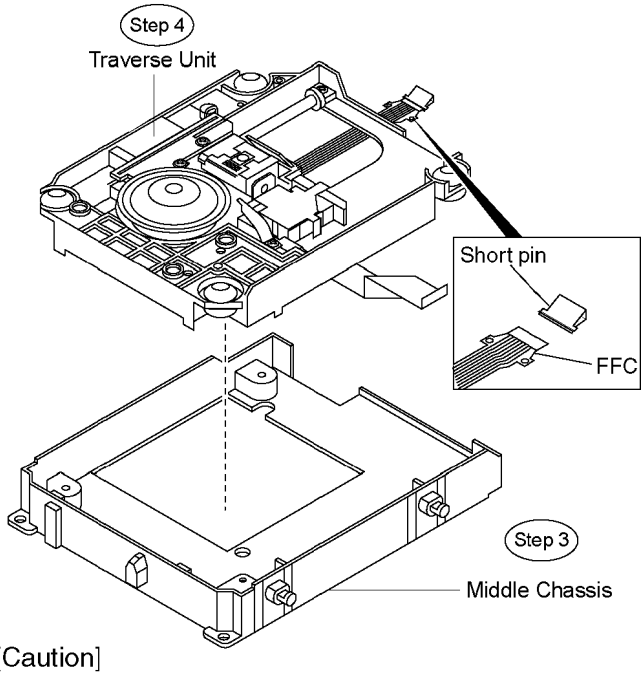


Step 2 Remove 4 fixed pins.



Step 3 Remove the middle chassis.

Step 4 Remove the traverse unit.



[Caution]

Insert the short pin into the FFC of the optical pickup unit. [See "Caution to be taken in handling the optical pickup unit"]

12 Service Position

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

Step 1 Remove the top cabinet.

Step 2 Remove the DVD lid.

Step 3 Disassemble the front panel.

Step 4 Disassemble Panel P.C.B.

Step 5 Disassemble Volume P.C.B.

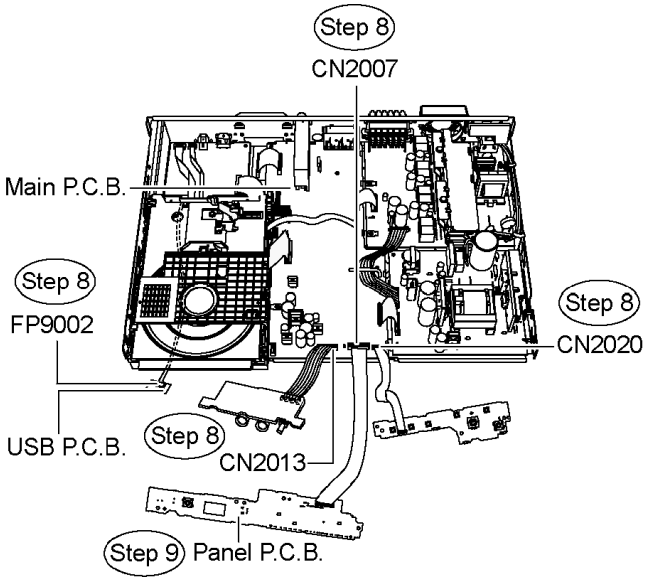
Step 6 Disassemble Mic P.C.B.

Step 7 Disassemble USB P.C.B.

・Servicing Position of Panel P.C.B.

Step 8 Connect FFC cable at the connectors (CN2020, CN2013 & CN2007) on Main P.C.B and (FP9002) on USB P.C.B.

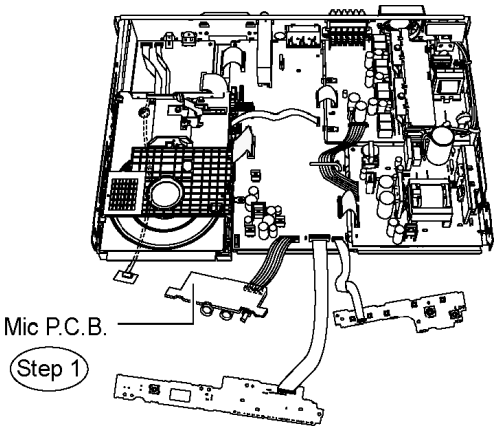
Step 9 Turn over Panel P.C.B horizontally and place it according to the diagram shown below.



12.2. Checking & Repairing Mic P.C.B.

・Follow (Step 1) to (Step 8) of Item 12.1.

Step 1 Turn over Mic P.C.B horizontally and place it according to the diagram shown below.



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

Step 1 Remove the top cabinet.

Step 2 Remove the DVD lid.

Step 3 Disassemble the front panel.

Step 4 Disassemble Volume P.C.B.

Step 5 Disassemble Mic P.C.B.

Step 6 Disassemble Panel P.C.B.

Step 7 Disassemble USB P.C.B.

Step 8 Disassemble Wireless Adapter P.C.B.

Step 9 Disassemble the rear panel.

Step 10 Disassemble the DVD mechanism unit.

Step 11 Disassemble DVD Module P.C.B.

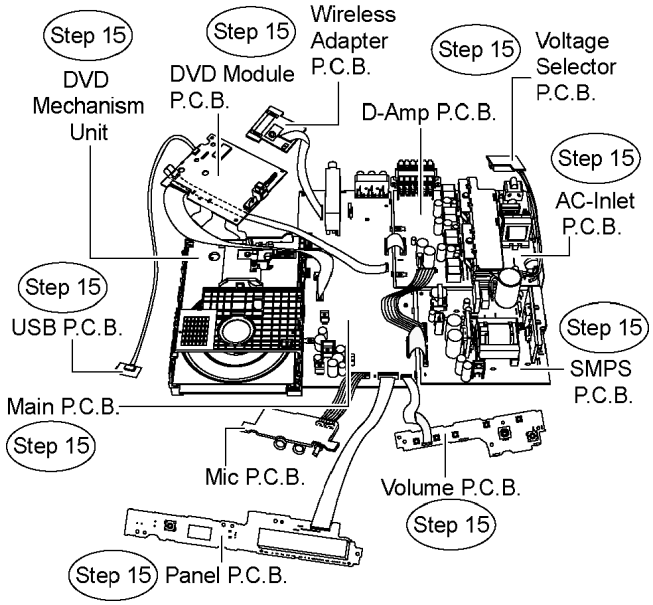
Step 12 Disassemble Main P.C.B.

Step 13 Disassemble D-Amp P.C.B.

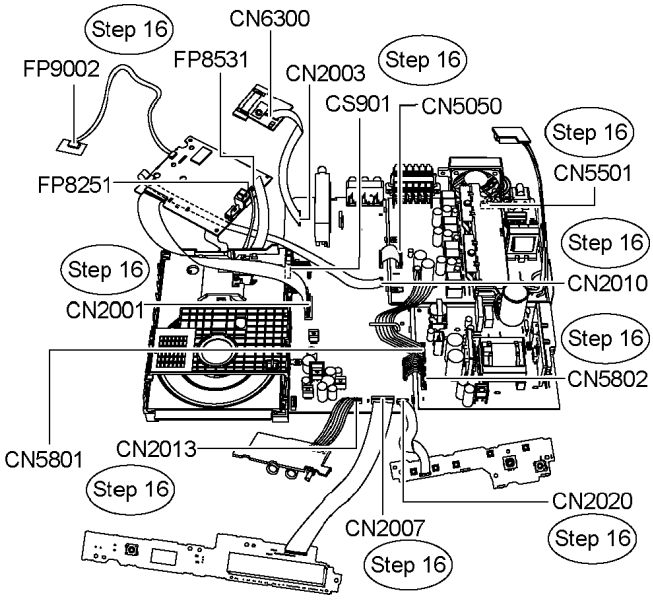
Step 14 Disassemble SMPS, AC-Inlet & Voltage Selector P.C.B.

・Servicing Position of Main P.C.B.

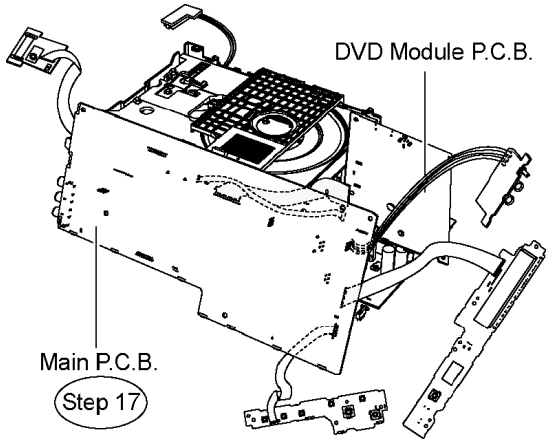
Step 15 Position Volume P.C.B., Mic P.C.B., Panel P.C.B., USB P.C.B., Wireless Adapter P.C.B., DVD mechanism unit, DVD Module P.C.B., Main P.C.B., D-Amp P.C.B., SMPS P.C.B., AC-Inlet & Voltage Selector P.C.B. according to to diagram shown below.



Step 16 Connect FFC cable at the connectors (CN2001, CN2003, CN2007, CN2010, CN2013 & CN2020) on Main P.C.B., (CN5050 & CN5501) on D-Amp P.C.B., (CN5801 & CN5802) on SMPS P.C.B. (CS901) on Tray Loading P.C.B., (FP8251 & FP8531) on DVD Module P.C.B., (CN6300) on Wireless Adapter P.C.B. and (FP9002) on USB P.C.B.



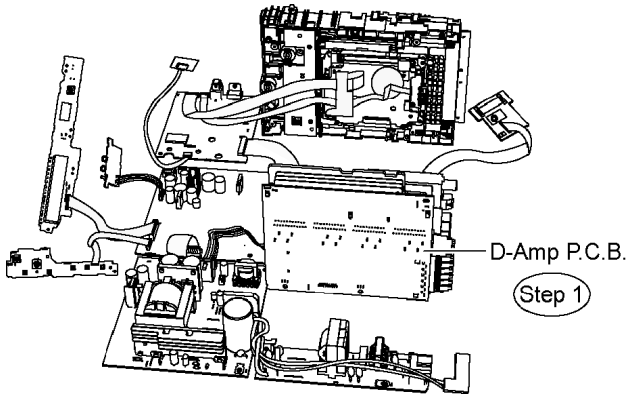
Step 17 Turn over Main P.C.B vertically and place it according to the diagram shown below.



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

・Follow (Step 1) to (Step 16) of Item 12.3.

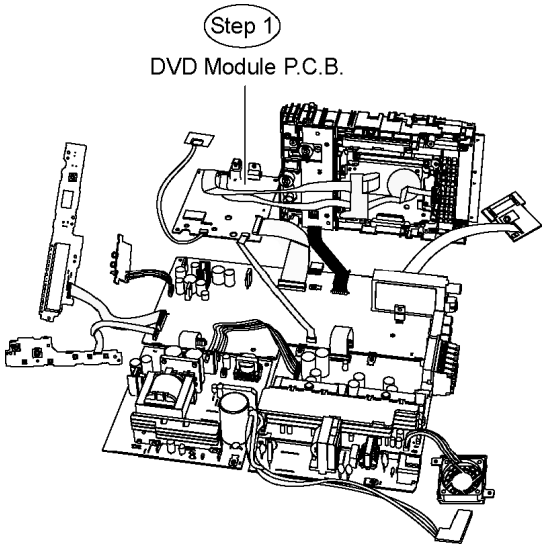
Step 1 Turn over D-Amp P.C.B vertically and place it according to the diagram shown below.



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

・Follow (Step 1) to (Step 16) of Item 12.3.

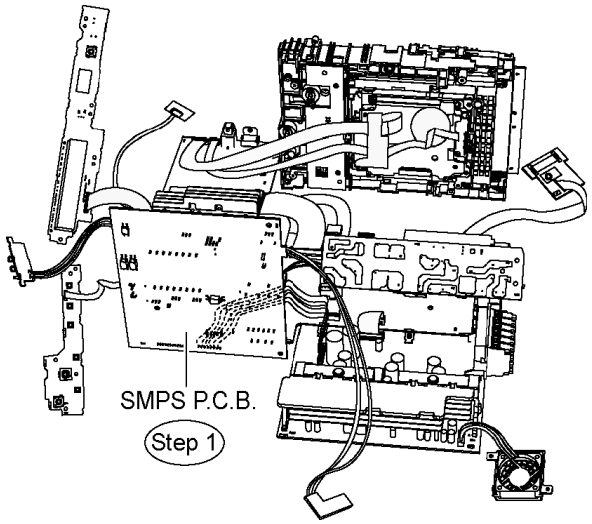
Step 1 Turn over DVD Module P.C.B vertically and place it according to the diagram shown below.



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

・Follow (Step 1) to (Step 16) of Item 12.3.

Step 1 Turn over SMPS P.C.B vertically and place it according to the diagram shown below.


SMPS P.C.B.
Step 1

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" (display1/display2) is shown on the front display.

   For your information:

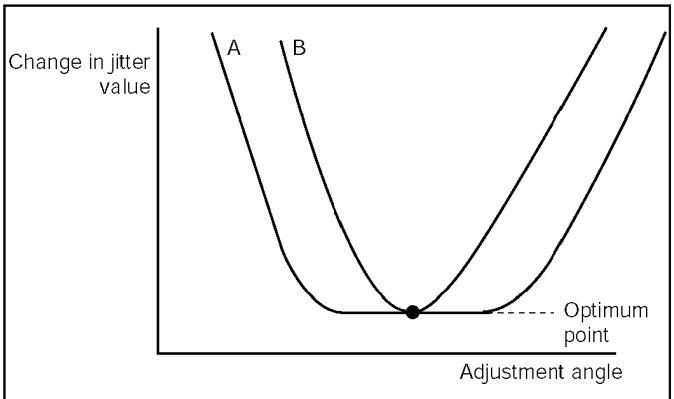
   "yyy" and "zz" shown to the right have nothing to do with the jitter value. "yyy" is the error counter, while "zz" is the focus drive value.

   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.

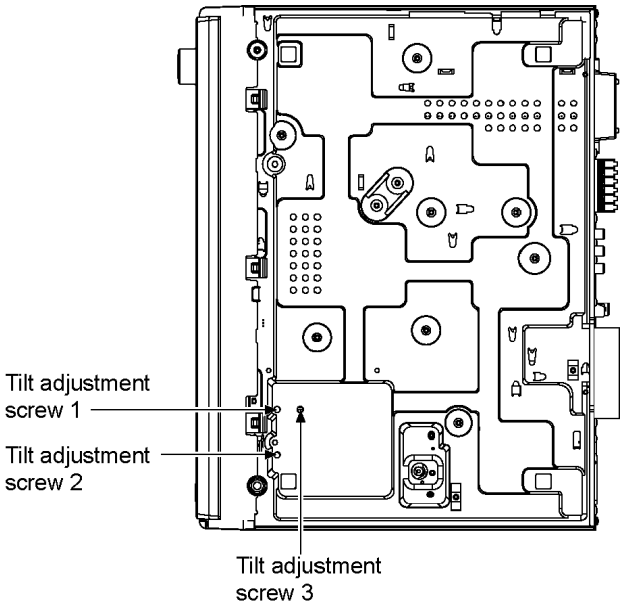
13.4.1.2. Important points

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.



Jitter value depends on the model:

1. If the jitter value changes like B, the optimum point is easy to find.
2. If the jitter value changes like A, set the optimum point near the middle.

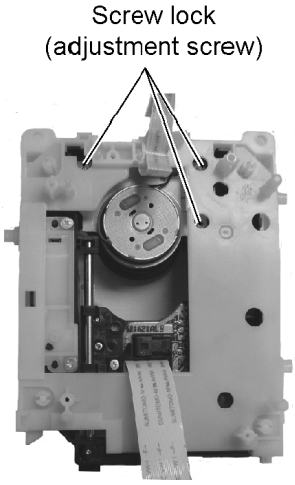


13.4.1.3. Check after adjustment

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, clamper 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, clamper base, tray and top cover.



14 Abbreviations

INITIAL/LOGO		ABBREVIATIONS
A	A0~UP	ADDRESS
	ACLK	AUDIO CLOCK
	AD0~UP	ADDRESS BUS
	ADATA	AUDIO PES PACKET DATA
	ALE	ADDRESS LATCH ENABLE
	AMUTE	AUDIO MUTE
	AREQ	AUDIO PES PACKET REQUEST
	ARF	AUDIO RF
	ASI	SERVO AMP INVERTED INPUT
	ASO	SERVO AMP OUTPUT
	ASYNC	AUDIO WORD DISTINCTION SYNC
B	BCK	BIT CLOCK (PCM)
	BCKIN	BIT CLOCK INPUT
	BDO	BLACK DROP OUT
	BLKCK	SUB CODE BLOCK CLOCK
	BOTTOM	CAP. FOR BOTTOM HOLD
	BYP	BYPATH
	BYTCK	BYTE CLOCK
C	CAV	CONSTANT ANGULAR VELOCITY
	CBDO	CAP. BLACK DROP OUT
	CD	COMPACT DISC
	CDSCK	CD SERIAL DATA CLOCK
	CDSRDATA	CD SERIAL DATA
	CDRF	CD RF (EFM) SIGNAL
	CDV	COMPACT DISC-VIDEO
	CHNDATA	CHANNEL DATA
	CKSL	SYSTEM CLOCK SELECT
	CLV	CONSTANT LINEAR VELOCITY
	COFTR	CAP. OFF TRACK
	CPA	CPU ADDRESS
	CPCS	CPU CHIP SELECT
	CPDT	CPU DATA
	CPUADR	CPU ADDRESS LATCH
	CPUADT	CPU ADDRESS DATA BUS
	CPUIRQ	CPU INTERRUPT REQUEST
	CPRD	CPU READ ENABLE
	CPWR	CPU WRITE ENABLE
	CS	CHIP SELECT
	CSYNCIN	COMPOSITE SYNC IN
	CSYNCOUT	COMPOSITE SYNC OUT
D	DACCK	D/A CONVERTER CLOCK
	DEEMP	DEEMPHASIS BIT ON/OFF
	DEMPH	DEEMPHASIS SWITCHING
	DIG0~UP	FL DIGIT OUTPUT
	DIN	DATA INPUT
	DMSRCK	DM SERIAL DATA READ CLOCK
	DMUTE	DIGITAL MUTE CONTROL
	DO	DROP OUT
	DOUT0~UP	DATA OUTPUT
	DRF	DATA SLICE RF (BIAS)
	DRPOUT	DROP OUT SIGNAL
	DREQ	DATA REQUEST
	DRESP	DATA RESPONSE
	DSC	DIGITAL SERVO CONTROLLER
	DSLF	DATA SLICE LOOP FILTER
	DVD	DIGITAL VIDEO DISC

INITIAL/LOGO		ABBREVIATIONS
E	EC	ERROR TORQUE CONTROL
	ECR	ERROR TORQUE CONTROL REFERENCE
	ENCSEL	ENCODER SELECT
	ETMCLK	EXTERNAL M CLOCK (81MHz/40.5MHz)
	ETSCLK	EXTERNAL S CLOCK (54MHz)
F	FBAL	FOCUS BALANCE
	FCLK	FRAME CLOCK
	FE	FOCUS ERROR
	FFI	FOCUS ERROR AMP INVERTED INPUT
	FEO	FOCUS ERROR AMP OUTPUT
	FG	FREQUENCY GENERATOR
	FSC	FREQUENCY SUB CARRIER
	FSCK	FS (384 OVER SAMPLING) CLOCK
G	GND	COMMON GROUNDING (EARTH)
H	HA0~UP	HOST ADDRESS
	HD0~UP	HOST DATA
	HINT	HOST INTERRUPT
	HRXW	HOST READ/WRITE
I	IECOUT	IEC958 FORMAT DATA OUTPUT
	IPFRAG	INTERPOLATION FLAG
	IREF	I (CURRENT) REFERENCE
	ISEL	INTERFACE MODE SELECT
L	LDON	LASER DIODE CONTROL
	LPC	LASER POWER CONTROL
	LRCK	L CH/R CH DISTINCTION CLOCK
M	MA0~UP	MEMORY ADDRESS
	MCK	MEMORY CLOCK
	MCKI	MEMORY CLOCK INPUT
	MCLK	MEMORY SERIAL COMMAND CLOCK
	MDATA	MEMORY SERIAL COMMAND DATA
	MDQ0~UP	MEMORY DATA INPUT/OUTPUT
	MDQM	MEMORY DATA I/O MASK
	MLD	MEMORY SERIAL COMMAND LOAD
	MPEG	MOVING PICTURE EXPERTS GROUP
O	ODC	OPTICAL DISC CONTROLLER
	OFTR	OFF TRACKING
	OSCI	OSCILLATOR INPUT
	OSCO	OSCILLATOR OUTPUT
	OSD	ON SCREEN DISPLAY
P	P1~UP	PORT
	PCD	CD TRACKING PHASE DIFFERENCE
	PCK	PLL CLOCK
	PDVD	DVD TRACKING PHASE DIFFERENCE
	PEAK	CAP. FOR PEAK HOLD
	PLLCLK	CHANNEL PLL CLOCK
	PLLOK	PLL LOCK
	PWMCTL	PWM OUTPUT CONTROL
	PWMDA	PULSE WAVE MOTOR DRIVE A
	PWMOA, B	PULSE WAVE MOTOR OUT A, B

INITIAL/LOGO		ABBREVIATIONS
R	RE	READ ENABLE
	RFENV	RF ENVELOPE
	RFO	RF PHASE DIFFERENCE OUTPUT
	RS	(CD-ROM) REGISTER SELECT
	RSEL	RF POLARITY SELECT
	RST	RESET
	RSV	RESERVE
S	SBI0, 1	SERIAL DATA INPUT
	SBO0	SERIAL DATA OUTPUT
	SBT0, 1	SERIAL CLOCK
	SCK	SERIAL DATA CLOCK
	SCKR	AUDIO SERIAL CLOCK RECEIVER
	SCL	SERIAL CLOCK
	SCLK	SERIAL CLOCK
	SDA	SERIAL DATA
	SEG0~UP	FL SEGMENT OUTPUT
	SELCLK	SELECT CLOCK
	SEN	SERIAL PORT ENABLE
	SIN1, 2	SERIAL DATA IN
	SOUT1, 2	SERIAL DATA OUT
	SPDI	SERIAL PORT DATA INPUT
	SPDO	SERIAL PORT DATA OUTPUT
	SPEN	SERIAL PORT R/W ENABLE
	SPRCLK	SERIAL PORT READ CLOCK
	SPWCLK	SERIAL PORT WRITE CLOCK
	SQCK	SUB CODE Q CLOCK
	SQCX	SUB CODE Q DATA READ CLOCK
	SRDATA	SERIAL DATA
	SRMADR	SRAM ADDRESS BUS
	SRMDT0~7	SRAM DATA BUS 0~7
	SS	START/STOP
	STAT	STATUS
	STCLK	STREAM DATA CLOCK
	STD0~UP	STREAM DATA
	STENABLE	STREAM DATA INPUT ENABLE
	STSEL	STREAM DATA POLARITY SELECT
	STVALID	STREAM DATA VALIDITY
	SUBC	SUB CODE SERIAL
	SBCK	SUB CODE CLOCK
	SUBQ	SUB CODE Q DATA
	SYSCLK	SYSTEM CLOCK
T	TE	TRACKING ERROR
	TIBAL	BALANCE CONTROL
	TID	BALANCE OUTPUT 1
	TIN	BALANCE INPUT
	TIP	BALANCE INPUT
	TIS	BALANCE OUTPUT 2
	TPSN	OP AMP INPUT
	TPSO	OP AMP OUTPUT
	TPSP	OP AMP INVERTED INPUT
	TRCRS	TRACK CROSS SIGNAL
	TRON	TRACKING ON
	TRSON	TRAVERSE SERVO ON

INITIAL/LOGO		ABBREVIATIONS
V	VBLANK	V BLANKING
	VCC	COLLECTOR POWER SUPPLY VOLTAGE
	VCDCONT	VIDEO CD CONTROL (TRACKING BALANCE)
	VDD	DRAIN POWER SUPPLY VOLTAGE
	VFB	VIDEO FEED BACK
	VREF	VOLTAGE REFERENCE
	VSS	SOURCE POWER SUPPLY VOLTAGE
W	WAIT	BUS CYCLE WAIT
	WDCK	WORD CLOCK
	WEH	WRITE ENABLE HIGH
	WSR	WORD SELECT RECEIVER
X	X	X´ TAL
	XALE	X ADDRESS LATCH ENABLE
	XAREQ	X AUDIO DATA REQUEST
	XCDROM	X CD ROM CHIP SELECT
	XCS	X CHIP SELECT
	XCSYNC	X COMPOSITE SYNC
	XDS	X DATA STROBE
	XHSYNCO	X HORIZONTAL SYNC OUTPUT
	XHINT	XH INTERRUPT REQUEST
	XI	X´ TAL OSCILLATOR INPUT
	XINT	X INTERRUPT
	XMW	X MEMORY WRITE ENABLE
	XO	X´ TAL OSCILLATOR OUTPUT
	XRE	X READ ENABLE
	XSRMCE	X SRAM CHIP ENABLE
	XSRMOE	X SRAM OUTPUT ENABLE
	XSRMWE	X SRAM WRITE ENABLE
	XVCS	X V-DEC CHIP SELECT
	XVDS	X V-DEC CONTROL BUS STROBE
	XVSYNCO	X VERTICAL SYNC OUTPUT

15 Voltage and Waveform Chart

15.1. 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	0.2	3.4	0	0	0	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	3.4	0	0	0	3.4	1.3	0	3.4	-	-	-	-	1.6	3.4	0.9	0.1	0.1	0.9	0	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	1.7	0	1.3	0	0	0	0	3.4	0	0	1.3	0	0	0	0	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	0	0	0	3.4	0	0	0	0	1.3	0	0	0	0	0
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	0	0	3.4	1.3	0	1.0	0.7	0.8	2.3	0	1.3	1.3	1.8	1.2	-	-	-	0	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	1.3	0	0	0	3.4	3.4	3.4	1.3	0	1.8	0	3.3	3.2	3.4	1.3	1.6	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	1.6	-	-												
Ref No.	IC3952																			
MODE	1	2	3	4	5															
CD PLAY	8.5	0	1.3	5.1	8.9															
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	1.2	1.4	1.5	0	0	3.4	1.8	1.3	1.4	1.2	1.3	0	1.1	1	0	3.4	1.3	1.1	1.9	0.7
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	0.6	0.4	2.3	0.5	1.4	2.6	2	0.8	1.8	0.7	3.4	0	3.4	0.7	1.1	1.5	1.6	1.8	1.4	2
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	1.8	0	0	1.3	0	3.4	3.4	3.4	3.4	1.7	0	3.4	2.8	2.8	3	3.4	3.2	3.2	0	3.2
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	0.1	0	0	0.8	0.1	1.9	1.6	0	3.2	3.2	0	3.2	3.2	0	0.1	0	0	0	0	0
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	0	1.2	3.2	0.8	2.3	0	1.8	0	0.5	1.8	3.3	2.2	2.2	1.8	1.8	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	0.4	0.1	0.2	1.9	3.3	0	2.2	1.7	2.6	2.6	2.6	2.6	2.7	2.7	2.4	2.5	2.5	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	1.8	2.0	2	1.7	0	1.7	1.7	3.4	0.9	0.9	0.4	3.3	2.4	1	1	2.4	0	0.4	0.9	0
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	3.4	3.4	0	0	0	0	3.4	1.5	1.7	1.7	0.9	1.7	0	3.4	1.5	1.6	0	1.3	3	3.1
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	2.9	3.2	2.9	3.1	0	3.4	3.2	3.1	3	3	3.1	3	0	3.4	3.2	3	3.1	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	0	1.6	3.4	1.6	0	1.3	3.3	3.3	3.2	3.1	0.1	2.1	0	0	3	1.5	0	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	3.4	0.1	2.2	0.1	0	3.4	0.3	1.6	1.6	0	1.2	1.8	2.7	2.5	1.4	1				
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	2.9	3.3	3.1	3.0	0.1	3.1	3.3	3.3	3	3	0	2.9	3.3	2.6	3.3	3.2	3.2	3.1	1.8
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	0.1	0.1	0.2	0.2	1.4	3.3	0	1.6	1.6	1.7	1.6	0.1	0.1	0.1	-	3.3	1.6	2.6	-
Ref No.	IC8051																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54						
CD PLAY	0	2.9	3.3	3.1	3	0	2.9	3.2	3.3	2.8	2.8	0	3.0	0						
Ref No.	IC8111																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	3.2	-	0	-	4.6	-	-	5												
Ref No.	IC8151																			
MODE	1	2	3	4	5															
CD PLAY	2.5	2.5	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	1.8	0	5.1	3.3	0	2.4	2.8	2.6	2.6	4.1	4.3	4.8	3.7	0	3.3
Ref No.	IC8251																			
MODE	21	22	23	24	25	26	27	28	29	30										
CD PLAY	8.9	8.8	1.7	1.7	1.7	1.7	3.3	5.1	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	0	3.3	2.9	3.3	1.6	0.9	1.7	1.7	5.2	0	0.9	0.1	0.1	0	2.5	2.5	5.2	0	2.5	2.5
Ref No.	IC8421																			
MODE	21	22	23	24	25	26	27	28												
CD PLAY	2.5	2.5	5.2	0	2.6	2.5	2.6	5.1												
Ref No.	IC8601																			
MODE	1	2	3	4																
CD PLAY	1.2	3.3	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	3.3	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	1.1	1.0	1.8	1.0	1.7	2.3	1.3	1.8	1.2	0.1	3.3	3.3	3.3	3.3	1.6	1.6	0.6	1.2	1.5	1.7
Ref No.	IC8651																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33		35	36	37	38	39	40
CD PLAY	1.8	1.8	2	1.9	0	2	0	2.5	1.7	1.1	0.8	1.6	1.0	1.6	2.3	1.4	3.3	1.7	1.1	1.4
Ref No.	IC8651																			
MODE	41	42	43	44	45	46	47	48												
CD PLAY	1.6	1.7	1.7	2	1.9	0	3.3	0.8												
Ref No.	IC8691						IC8695						IC8701							
MODE	1	2	3	4	5		1	2	3	4	5		1	2	3	4	5			
CD PLAY	3	3	0	4.6	5.1		2.7	2.7	0	4.2	5.1		-	1.5	0	1.7	3.3			
Ref No.	IC8901																			
MODE	1	2	3	4	5															
CD PLAY	3.3	3.3	0	3.4	3.4															
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	0.1	2.7	1.8	2	1.7	1.7	1.6	1.5	1.1	0	2	1.1	1.5	1.7	1.8	1.8	2	1.9	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	1.7	1.3	2.2	1.7	1.0	1.6	0.8	1.1	0	2	1	0.9	1.8	1	1.7	2.3	1.3	1.8	3.3
Ref No.	IC9003							IC9005												
MODE	1	2	3	4	5	6		1	2	3	4	5	6	7	8					
CD PLAY	1.6	0.1	1.6	1.7	3.3	1.6		0.1	5.1	5.1	3.3	2.2	3.3	0.1	3.4					
Ref No.	Q3901				Q3902				Q3903				Q3941				Q3942			
MODE	E	C	B		S	D	G		S	D	G		E	C	B		E	C	B	
CD PLAY	0.1	4.2	-0.5		3.4	5.1	3.4		3.4	5.1	3.4		3.6	3.5	3.6		0	3.5	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	5.6	4.3		1.1	0	0.4		1.5	0	0.9		1.1	0	0.4		1.6	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		0.1	5.1	0.1		5.1	0	5.1		1.3	3.9	1.9		4.5	2.3	3.9	
Ref No.	QR8111							QR8420				QR8571								
MODE	1	2	3	4	5	6		E	C	B		E	C	B						
CD PLAY	0	0	1.3	0.1	0.1	4.8		0	4.3	0.1		3.4	3.3	0.1						

SA-PT550GC/GCS/GCT/GS DVD MODULE P.C.B.

15.2. Main P.C.B.

Ref No.	IC2001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0	5.1	0	5.1	1.2	0	0	0	0	0	5.1	5.1	2.5	0	2.5	5.1	5.1	5	3.3	0
STANDBY	0	5	5	5	2.2	0	0	0	0	0	5	5	2.4	0	2.3	5	5	5	3.3	0
Ref No.	IC2001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	0	0	0	0	0	0	0	0.1	4.1	2.8	5.1	2.3	5.1	5.1	5.1	5.1	5.1	5.1	0	5.1
STANDBY	0	0	0	0	0	5.1	0	4.6	4.2	2.7	0	2.2	5.1	5.1	5.1	5.1	5.1	5.1	0	5
Ref No.	IC2001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
CD PLAY	0	0	5	0	0	0	5.1	0	0	0	0	0	0	0	0	5.1	0	0	0.4	0
STANDBY	0	5.1	5	4.9	0	0	5	0	0	0	0	0	0	0	0	0.1	0	0	0.4	0
Ref No.	IC2001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
CD PLAY	5.1	5.1	5	0	0	0	0	5	5	0	5	5.1	0	5.1	0.2	0	0	0	2.7	5
STANDBY	5.1	5.1	5.1	0	0	0	0	5	5	0	5	5	0	5	5.3	0	0	4.9	2.7	5
Ref No.	IC2001																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
CD PLAY	2.5	0	0	0	3.9	2.2	1.8	0	0.5	0.4	5.1	2.4	0.8	2.1	1.3	0	0.9	5.1	5.1	5
STANDBY	2.5	0	0	0	3.9	2.2	1.9	0	0.8	0.4	5.1	2	0.8	2.1	1.3	0	0.9	5.1	5.1	5
Ref No.	IC2003																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	-	5.1	0	0	0	0	0	-												
STANDBY	-	5.1	0	0	0	0	0	-												
Ref No.	IC2101																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0	0	0	0	0	0	0	0
STANDBY	0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0	0	0	0	0	0	0	0
Ref No.	IC2101																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	0.3	0.7	0.7	0	0	0	6.1	0	0	0	0	0	0	0	0.7	0.7	0	0	0	0
STANDBY	0.3	0.7	0.7	0	0	0	6.1	0	0	0	0	0	0	0	0.8	0.7	0	0	0	0
Ref No.	IC2101																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
CD PLAY	0	0	0	0	0	0	0	0.1	0.1	1.4	0	0	0	0.7	0	0.7	0	0.3	0.3	-1.1
STANDBY	0	0	0	0	0	0	0	0.1	0.1	1.4	0	0	0	0.7	0	0.8	0	0.3	0	0
Ref No.	IC2101																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
CD PLAY	0	5.1	0	5	0.3	0.3	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.2	0.1
STANDBY	0	5	0	5	0.3	0.3	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1
Ref No.	IC2101																			
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	-6.8	6.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.3
STANDBY	0	0	-6.8	6.9	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0	0	0.2	0.2
Ref No.	IC2102									IC2751										
MODE	1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8			
CD PLAY	0	0	0	-6.8	0	0	0.2	6.9		-5.3	1.2	0	-6.8	0	2.5	-5.3	5.1			
STANDBY	0	0	0	-6.8	0	0	0	7		-5.3	1.2	0	-6.8	0	2.5	-5.3	5.1			
Ref No.	IC2801																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	4.9	0	2.1	4.8	1.6	0	1.6	2.1	0	0	0	2.1	4.8	2.1	4.9	2.2	2.2	0	2.2	2.2
STANDBY	4.9	0	2.1	4.8	1.5	0	1.5	2.1	0	1.5	0	2.1	4.8	2.1	4.9	2.2	2.2	0	2.2	2.2
Ref No.	IC2801												IC2900							
MODE	21	22	23	24	25	26	27	28	29	30	31		1	2	3	4	5			
CD PLAY	0	1.3	1.3	0	1.3	1.3	0	1.4	1.6	0	2.2		16.8	5.3	0	1	16.3			
STANDBY	0	1.3	1.3	0	1.3	1.3	0	1.4	1.6	0	2.2		16.9	8.9	0	1	16.3			
Ref No.	IC2901				IC2903															
MODE	1	2	3		1	2	3	4	5											
CD PLAY	0	0	5		16.8	8.9	0	1	16.2											
STANDBY	0	0	0		16.9	5.3	0	1	16.4											
Ref No.	Q2003				Q2006				Q2007				Q2008				Q2030			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	0	5	0		0	0	4.2		5.6	-4.6	5.5		0	5.5	0		0	0	4.9	
STANDBY	0	5	0		0	5.1	0		4.4	4.3	0		0	0	4.4		0	0	4.8	
Ref No.	Q2096				Q2097				Q2101											
MODE	E	C	B		E	C	B		1	2	3	4	5	6						
CD PLAY	0	0.1	0.6		0	5.2	0.1		0	-4.6	0	0	-4.6	0						
STANDBY	0	0.1	0.6		0	5.3	0.1		0	0.7	0	0	0.7	0						
Ref No.	Q2102							Q2103							Q2201					
MODE	1	2	3	4	5	6		1	2	3	4	5	6		E	C	B			
CD PLAY	0	-4.6	0	0	-4.6	0		0	-4.6	0	0	-4.6	0		0	-4.6	0			
STANDBY	0	0.7	0	0	0.7	0		0	0.7	0	0	0.7	0		1.5	1.5	0			
Ref No.	Q2202				Q2302							Q2502								
MODE	E	C	B		1	2	3	4	5	6		1	2	3	4	5	6			
CD PLAY	0	-4.6	0		0	-4.6	0	0	-4.6	0		0	-4.6	0	0	-4.6	0			
STANDBY	1.5	1.5	0		0	0.7	0	0	0.7	0		0	0.7	0	0	0.7	0			
Ref No.	Q2801				Q2900				Q2901				Q2902				Q2903			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	0	4.8	0		0	16.7	-0.6		-6.9	-10.9	-7.4		0	-7.4	-0.6		6.9	8.7	7.6	
STANDBY	0	4.6	2		0	16.8	-0.6		-6.9	-11	-7.5		0	-7.5	-0.6		7	8.7	7.6	
Ref No.	Q2904				Q2906				Q2907				Q2908				Q2909			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	2.7	4.7	3.4		4.5	4.5	5.1		4.4	4.5	5.1		5.3	5.2	4.5		0	5.1	-2.5	
STANDBY	2.7	4.7	3.4		4.5	4.5	5.1		4.4	4.5	5.1		5.3	5.2	4.5		0	4.9	-2.4	
Ref No.	Q2910				Q2911				Q2916				Q2919				Q2921			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	5.3	5.1	4.5		4.9	8.9	5.6		8.7	14	9.6		0	5.1	0.1		5.3	0	5.1	
STANDBY	5.3	5.1	4.5		5	8.9	5.6		9	14.4	9.7		0	5.1	0.2		5.3	0	5.2	
Ref No.	Q2922																			
MODE	E	C	B																	
CD PLAY	0	5	0																	
STANDBY	0	5.1	0																	

SA-PT550GC/GCS/GCT/GS MAIN P.C.B.

15.3. 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	0	29.1	0	-29.2	-21.2	29.4	10.8	-0.1	-29.4	-17.3	-29.4	-0.1	10.8	29.4	-29.2	-29.2	0	29.1
STANDBY	2.5	0	0	29.1	0	-29.2	-21.2	29.4	11	-0.1	-29.4	-17.2	-29.4	-0.1	11	29.4	-29.2	-29.2	0	29.1
Ref No.	IC5000																			
MODE	21	22	23																	
CD PLAY	0	0	2.6																	
STANDBY	0	0	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	0	27.9	0	-29.2	-28.3	29.4	0	0	-29.4	-29.4	-29.4	0	0	29.4	-29.2	-29.2	0	27.9
STANDBY	2.5	0	0	29.1	0	-29.2	-21.3	29.4	11.1	0	-29.4	-17.1	-29.4	0.1	11	-29.4	-29.2	-29.2	29.1	0
Ref No.	IC5200																			
MODE	21	22	23																	
CD PLAY	0	0	2.6																	
STANDBY	0	0	2.6																	
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	2.54	0	0	29.1	0	-29.2	-21	29.4	10.8	-0.1	-29.4	-17.3	-29.4	-0.1	10.8	29.4	-29.2	-29.2	0	29.1
STANDBY	2.5	0	0	29.1	0	-29.1	-21.2	29.4	11	-0.1	-29.4	-17.2	-29.4	0	11	29.4	-29.2	-29.2	0	29.1
Ref No.	IC5300																			
MODE	21	22	23																	
CD PLAY	0	0	2.6																	
STANDBY	0	0	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	0	29.1	0	-29.2	-21.2	29.4	11.3	-0.1	-29.4	-16.8	-29.4	-0.1	11.3	29.4	-29.2	-29.2	0	29.1
STANDBY	2.5	0	0	29.1	0	-29.2	-21.3	29.4	11.1	-0.1	-29.4	-17	-29.4	-0.1	11.1	29.4	-29.2	-29.2	0	29.1
Ref No.	IC5400																			
MODE	21	22	23																	
CD PLAY	0	0	2.6																	
STANDBY	0	0	2.5																	
Ref No.	IC5500																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
CD PLAY	0	5.3	4.8	0	2.5	2.5	0	2.6	2.6	2.6	2.5	0	5.3	5.3						
STANDBY	0	5	4.6	0	2.4	2.4	0	2.5	2.5	2.5	2.4	0	5.1	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	2.6	0	2.6	0	0	0	0	0	0	0	5.3	5.3						
STANDBY	2.5	2.7	2.6	0	2.7	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	0		0	5	0		0.7	0	0		0.7	0	0		5.3	5.2	4.6	
STANDBY	0	5	0		0	5	0		0.7	0	0		0.7	0	0		5.3	5.2	4.6	
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		7	16.9	7.6		0	5	0		0	0	0.7		0	3.9	0.4	
STANDBY	0	0	0.7		7	16.9	7.6		0	5	0		0	0.1	0.7		0	3.8	0.2	

SA-PT550GC/GCS/GCT/GS D-AMP P.C.B.

15.4. SMPS P.C.B.

Ref No.	IC5701								IC5799								IC5801			
MODE	1	2	3	4	5	6	7		1	2	3	4	5	6	7		1	2	3	
CD PLAY	14	-11.3	-14.4	-14.6	-14.7	-14.6	-14.6		-13.7	-14.4	-14.1	-10.8	14.4	-14.7	-14.2		-27.1	-29.8	-2	
STANDBY	14.1	-11.2	-14.4	-14.7	-14.7	-14.7	-14.6		-13.6	-14.4	-14.1	-10.9	14.4	-14.8	-14.2		-27.1	-29.8	-2	
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.	Q5720				Q5721				Q5722				Q5750				Q5802			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	-14	-13.4	-14.2		-11	-11	-11.2		-14.8	-2.6	-14.8		0	0	0.7		-22	-2	-22.2	
STANDBY	-14	-13.4	-14.3		-11.1	-11	-11.2		-14.8	-2.6	-14.8		0	0	0.7		-22	-2	-22.2	
Ref No.	Q5860				Q5861				Q5862				Q5898				Q5899			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	1.3	0	0.7		0	0	0.7		0	5.1	0		0	3.3	0.5		3.6	4.5	4.2	
STANDBY	1.3	0	0.7		0	0	0.7		0	5.1	0		0	3.3	0.5		3.6	4.5	4.2	
Ref No.	QR5801				QR5810															
MODE	E	C	B		E	C	B													
CD PLAY	0	5.1	-2.5		0	0.1	4.9													
STANDBY	0	5.1	-2.4		0	0.1	4.8													

SA-PT550GC/GCS/GCT/GS SMPS P.C.B.

15.5. Panel & Tray Loading P.C.B.

Ref No.	IC6107																			
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.	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	2.9	2.2	1.8	4	2.3	2.2	2.2	0	5	-24.4	-22	-24.4	-24.4	-19.6	-19.8	-15
STANDBY	0	0	0	0	2.9	2.1	1.9	4	2.2	2.2	2.2	0	5	-24.4	-24.4	-22	-24.4	-14.9	-19.6	-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	-24.3	-17.2	-14.8	-24.4	-24.4	-24.4	14.8	-24.8	-15	-22	-22.3	-22.2	-22.2	-22.2	-22.2	-22.2	-22.2	-22.2
STANDBY	-24.3	-24.3	-24.3	-17.2	-14.9	-24.3	-24.3	-24.3	-17.2	-24.8	-15	-15	-22.2	-22.2	-22.2	-22.2	-22.2	-22.2	-22.2	-22.2
Ref No.	IC6901																			
MODE	41	42	43	44																
CD PLAY	-22.2	-22.2	5	0																
STANDBY	-22.2	-22.2	5	0																
Ref No.	Q6201																			
MODE	E	C	B																	
CD PLAY	4.8	-	4.5																	
STANDBY	4.9	-	4.5																	

SA-PT550GC/GCS/GCT/GS PANEL P.C.B.

Ref No.	IC904																			
MODE	1	2	3	4	5	6	7	8	9											
CD PLAY	5.1	7.5	0.6	7.5	0	7.5	0.6	2.8	5.1											
STANDBY	5.1	7.6	0.6	7.6	0	7.6	0.6	2.8	5.1											

SA-PT550GC/GCS/GCT/GS TRAY LOADING P.C.B.

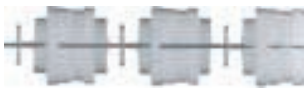
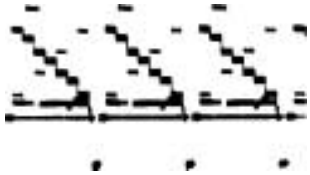
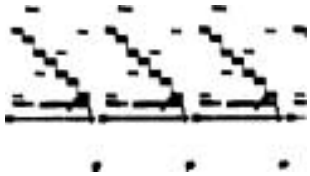
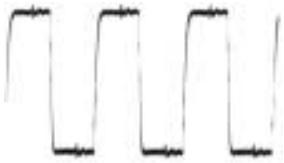
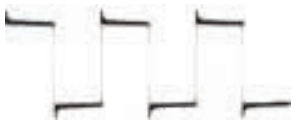
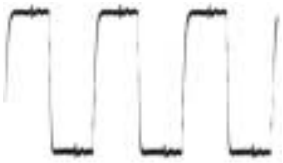
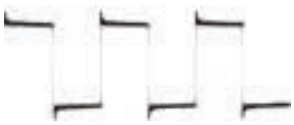
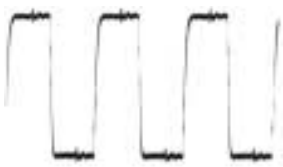
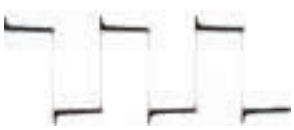
15.6. Mic P.C.B.

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.	IC7200																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	6.6	0	0	-6.9	0	0	0.1	6.9												
STANDBY	6.6	0	0	-6.9	0	0	0.1	7												
Ref No.	Q7100				Q7101				Q7102											
MODE	E	C	B		E	C	B		E	C	B									
CD PLAY	0	0	0		0	0	5		0	0	0									
STANDBY	0	0	0		0	0	5		0	0	0									

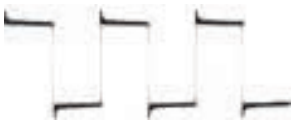
SA-PT550GC/GCS/GCT/GS MIC P.C.B.

15.7. Waveform Chart

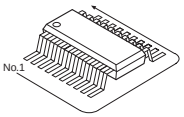
15.7.1. Waveform 1

WF No. IC2001-13 (PLAY)  5.2Vp-p(100nsec/div)	WF No. IC2001-15 (PLAY)  2.8Vp-p(100sec/div)	WF No. IC2101-14,19 (PLAY)  2.4Vp-p(200usec/div)	WF No. IC2101-15,16,17, 18 (PLAY)  8Vp-p(200usec/div)
WF No. IC2101-80 (PLAY)  1.5Vp-p(200usec/div)	WF No. IC2101-81,82 (PLAY)  3.2Vp-p(200usec/div)	WF No. IC2101-95, 96 (PLAY)  3.2Vp-p(200usec/div)	WF No. IC2102-1 (PLAY)  6.8Vp-p(200usec/div)
WF No. IC2102- 7(PLAY)  1.5Vp-p(200usec/div)	WF No. IC2801-4 (PLAY)  0.7Vp-p(20usec/div)	WF No. IC2801-6 (PLAY)  1.2Vp-p(20usec/div)	WF No. IC2801-8,11 (PLAY)  1.3Vp-p(100nsec/div)
WF No. IC2801-13,15 (PLAY)  3.4Vp-p(2usec/div)	WF No. IC2801-18,21 (PLAY)  0.25Vp-p(20usec/div)	WF No. IC2801-24 (PLAY)  3.4Vp-p(20usec/div)	WF No. IC2801-30 (PLAY)  3.4Vp-p(20usec/div)
WF No. IC5000- 1 (PLAY)  5.8Vp-p(1usec/div)	WF No. IC5000-10,14 (PLAY)  76Vp-p(1usec/div)	WF No. IC5000- 2,22 (PLAY)  0.6Vp-p(200usec/div)	WF No. IC5200- 1 (PLAY)  5.8Vp-p(1usec/div)
WF No. IC5200-10,14 (PLAY)  76Vp-p(1usec/div)	WF No. IC5200-2,22 (PLAY)  0.6Vp-p(200usec/div)	WF No. IC5300- 1 (PLAY)  5.8Vp-p(1usec/div)	WF No. IC5300-10,14 (PLAY)  76Vp-p(1usec/div)

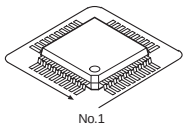
15.7.2. Waveform 2

WF No. IC5300-2,22 (PLAY)  0.6Vp-p(200usec/div)	WF No. IC5400- 1 (PLAY)  5.8Vp-p(1usec/div)	WF No. IC5400-10,14 (PLAY)  76Vp-p(1usec/div)	WF No. IC5400-2,22 (PLAY)  0.6Vp-p(200usec/div)
WF No. IC5500-5 (PLAY)  7.2Vp-p(500nsec/div)	WF No. IC5500-8 (PLAY)  5.6Vp-p(500nsec/div)	WF No. IC5701-1,4 (PLAY)  170Vp-p(5msec/div)	WF No. IC5799-2,3,5 (PLAY)  180Vp-p(5msec/div)
WF No. IC5801-1,2,3 (PLAY)  0.5Vp-p(2usec/div)	WF No. IC6901-5 (PLAY)  2.8Vp-p(100nsec/div)		

16 Illustration of IC's, Transistors and Diodes

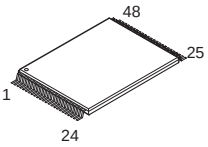


C0ABBA000168 (8p)
C0ABBB000230 (8p)
C0ABBB000350 (8p)
C0DBZYE00002 (8p)
C0DBZYY00018 (8p)
C0EBA0000029 (4p)
C0FBBK000050 (28p)
C0JBAB000902 (14p)
C0JBAB000908 (6p)
C0JBAF000716 (14p)
C0JBAZ001251 (20p)
C1BB00001061 (16p)
C3ABPG000145 (54p)
C9ZB00000461 (32p)

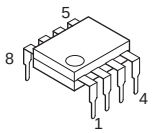


C0HBB0000057 (44p)
C1AB00002735 (100p)
C2CBYY000418 (100p)
MN2DS0018MP (216P)
MN864702A (128P)

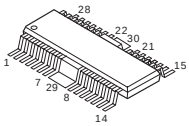
RFKWMHB0E321
RFKWMHB0F320



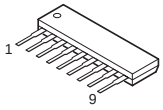
C0AABB000125



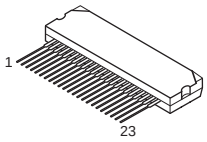
C0GBG0000048



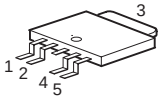
C0GAY0000013



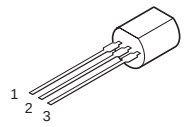
C1BA00000487



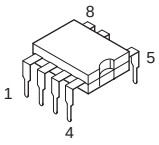
C0DBEHG00006



C0DABFC00002



MIP4110MSSCF



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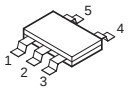
C0JBAA000502
C0JBAB000907



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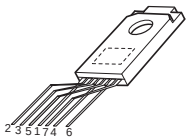

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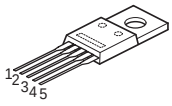

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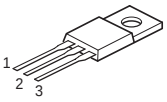

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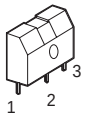

B1AAKD000012
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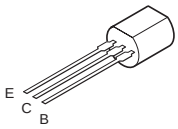
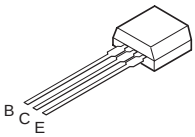
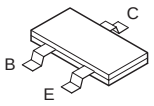
2SC3940ARA



B1BACD000018





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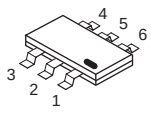
B1ADCE000012
B1ADCF000001
B1ADGB000008
B1CFHA000002
B1GBCFLL0037
B1GBCFJN0033

B1GDCFGA0018
B1GBCFJJ0051
UNR211H00L
UNR511V00L
UNR521100L
2SD1819A0L
2SB1218ARL
2SD0601AHL

B1GFGCAA0001
XP0621400L



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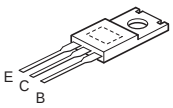

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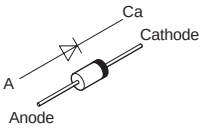
B0JAME000029
B0EAKB000004



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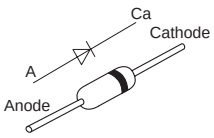

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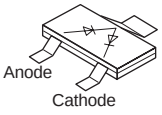

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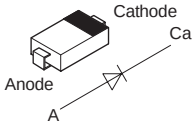

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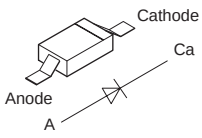
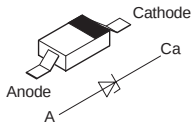
B0BC3R400001
B0BC4R600016
B0BC6R100010
B0BC7R500001
B0JCAE000001
B0JCPD000025

MA2J11100L
MAZ82400HL





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B0BC3R700004
B0BC5R000009
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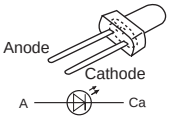
B3AAA0000803



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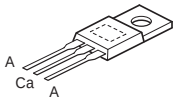

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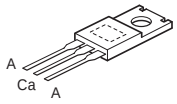
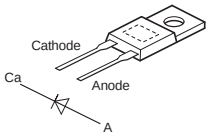


B0HFRJ000012



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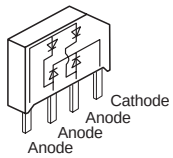
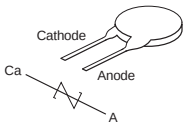
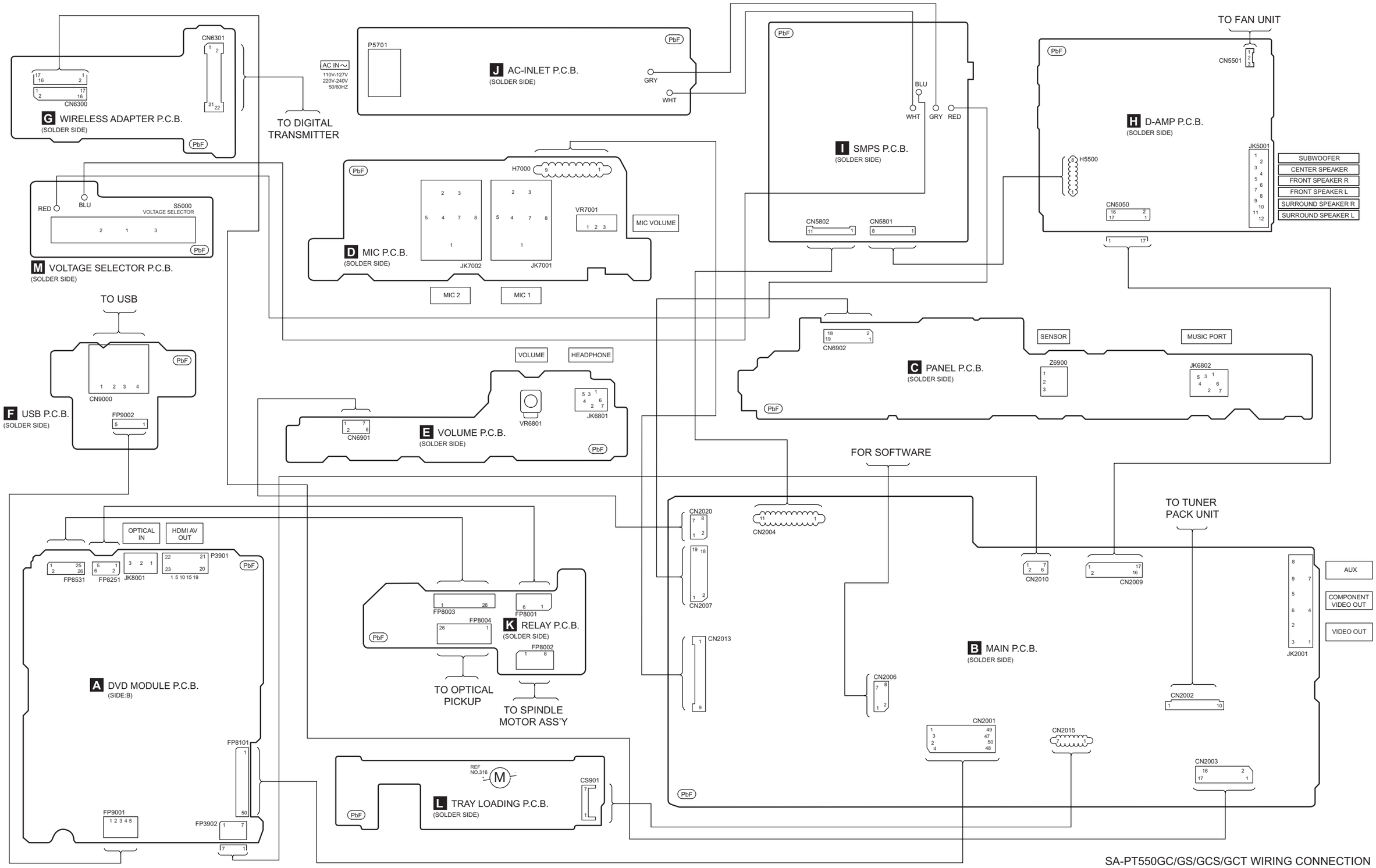


ERZV10V511CS



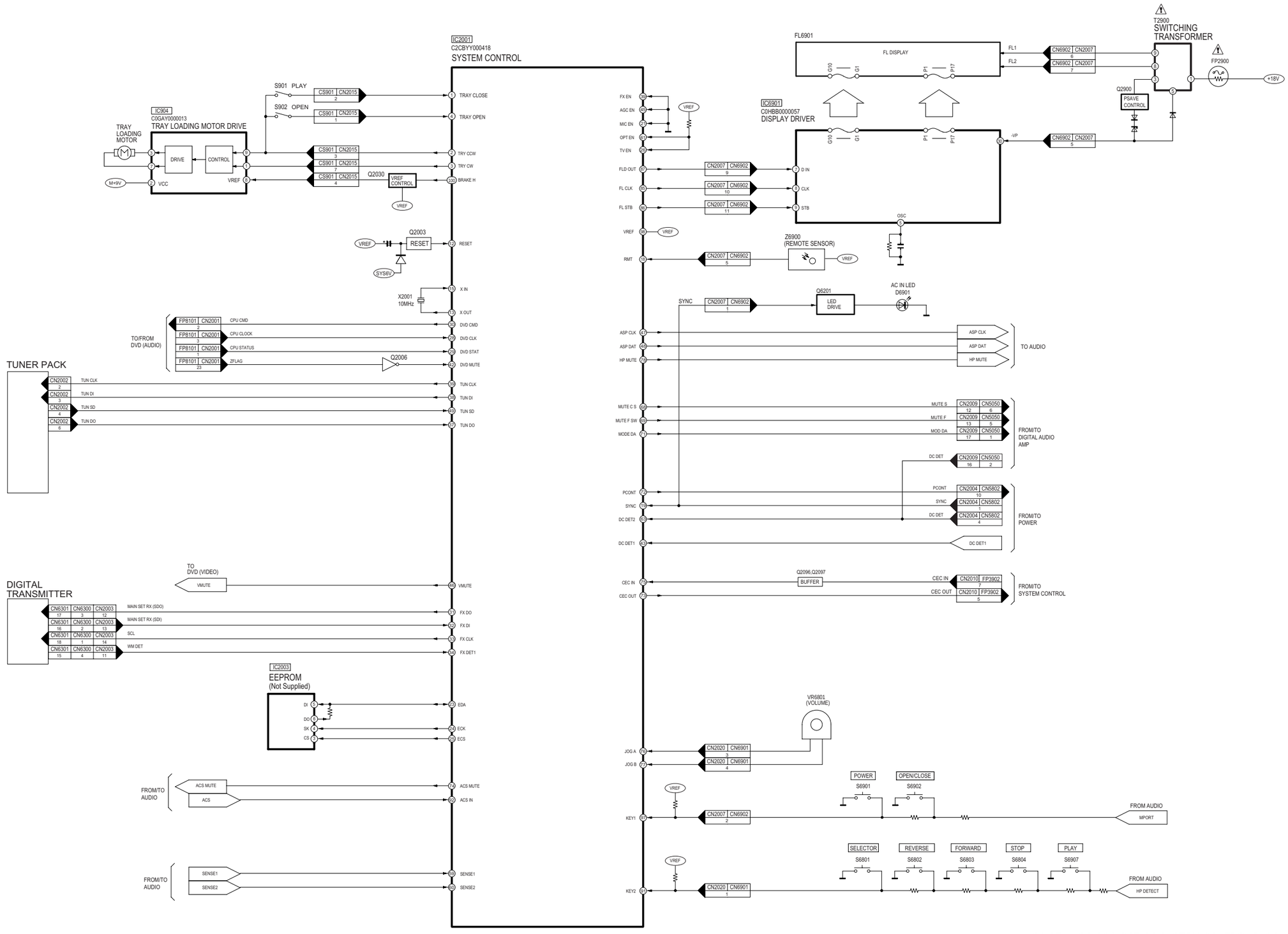
17 Wiring Connection Diagram



SA-PT550GC/GS/GCS/GCT WIRING CONNECTION

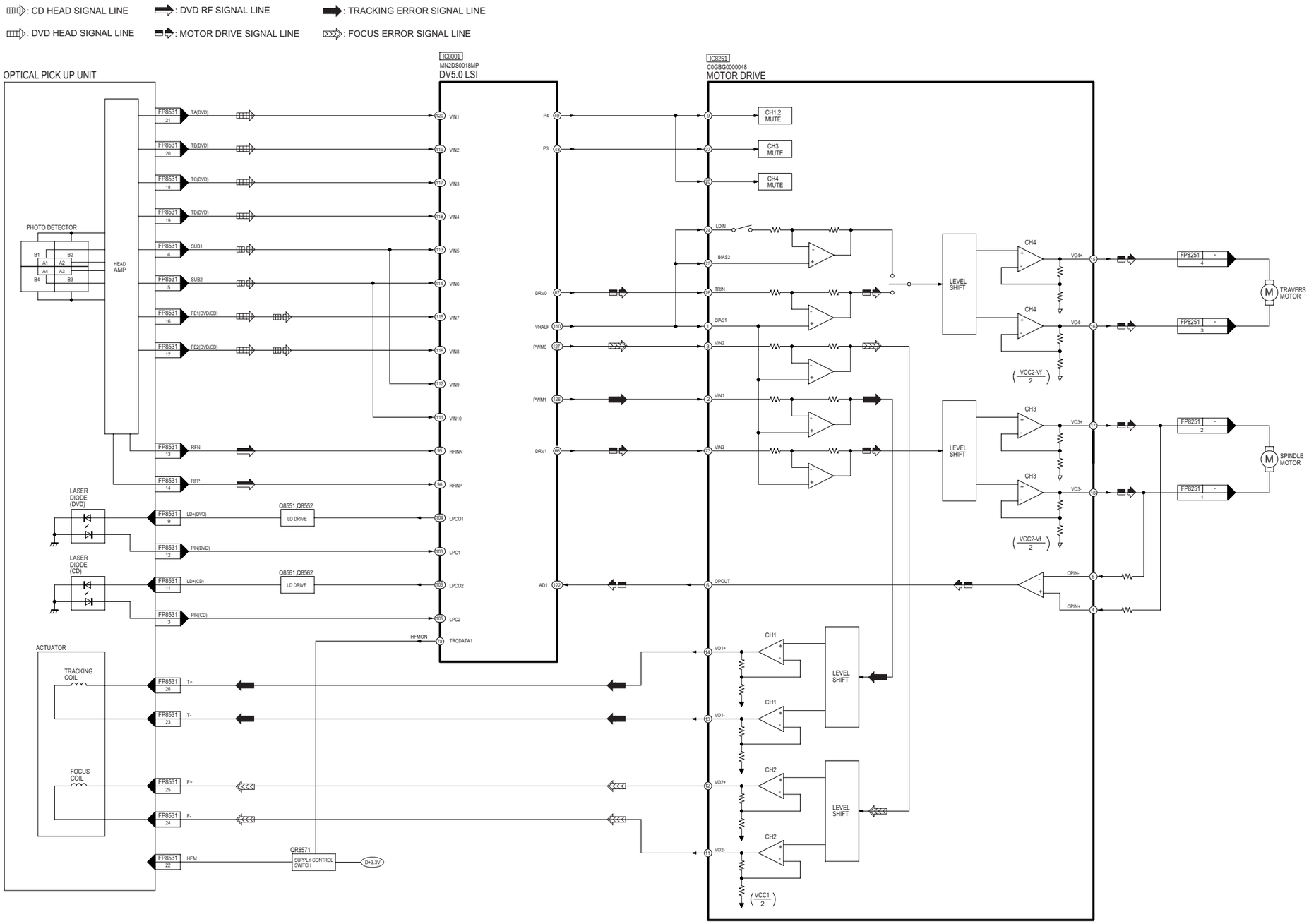
18 Block Diagram

18.1. System Control



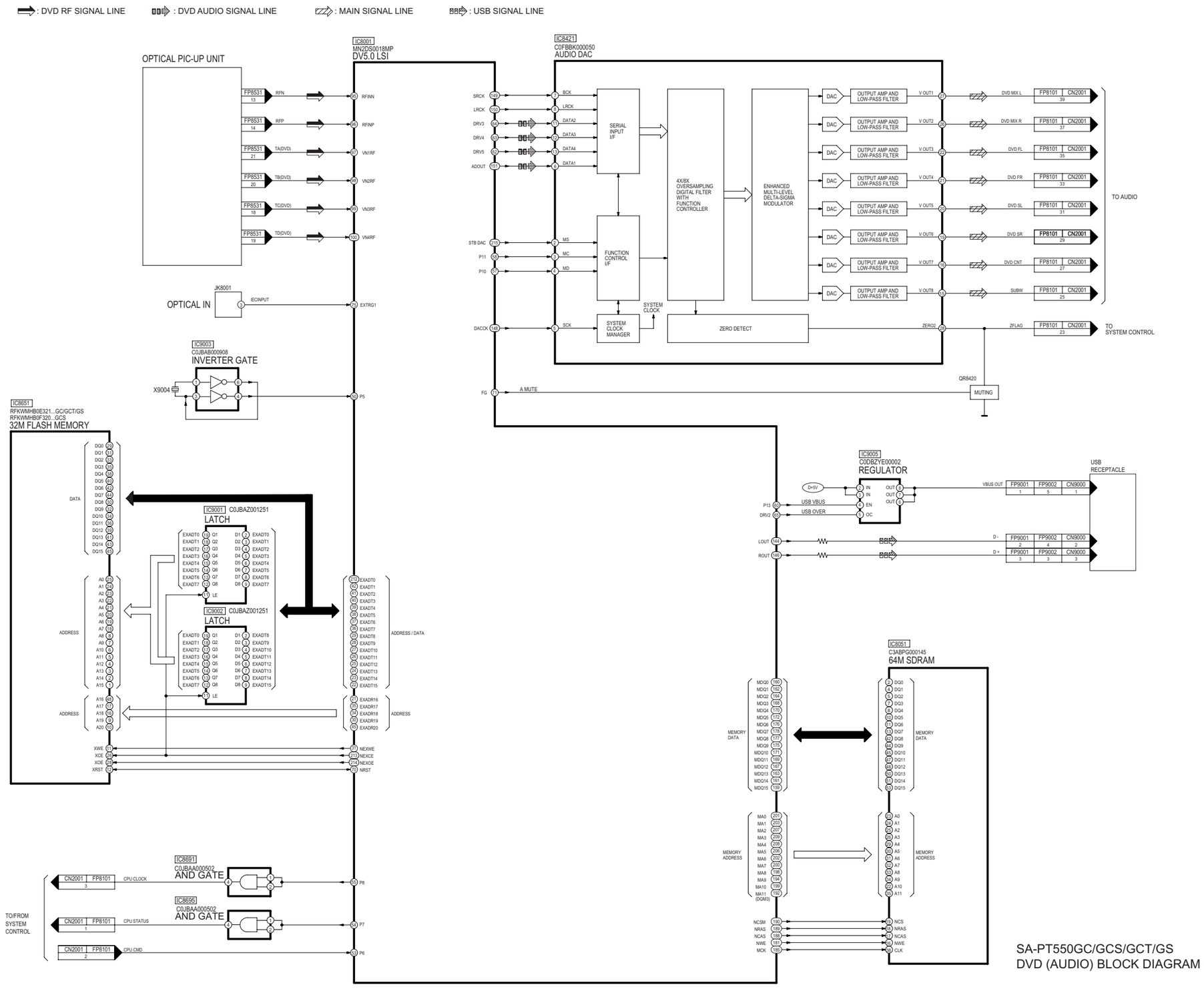
SA-PT550GC/GCS/GCT/GS SYSTEM CONTROL BLOCK DIAGRAM

18.2. DVD (Servo)



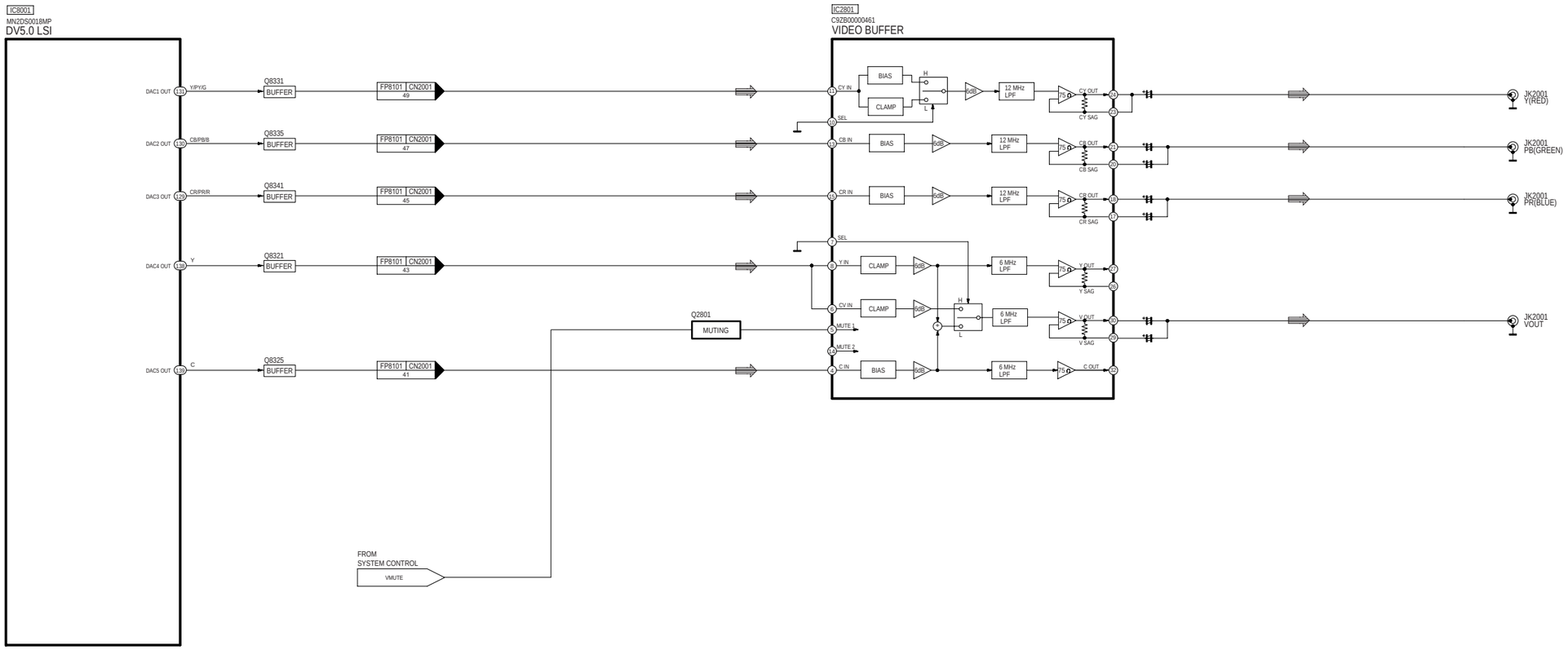
SA-PT550GC/GCS/GCT/GS DVD (SERVO) BLOCK DIAGRAM

18.3. DVD (Audio)



SA-PT550GC/GCS/GCT/GS
DVD (AUDIO) BLOCK DIAGRAM

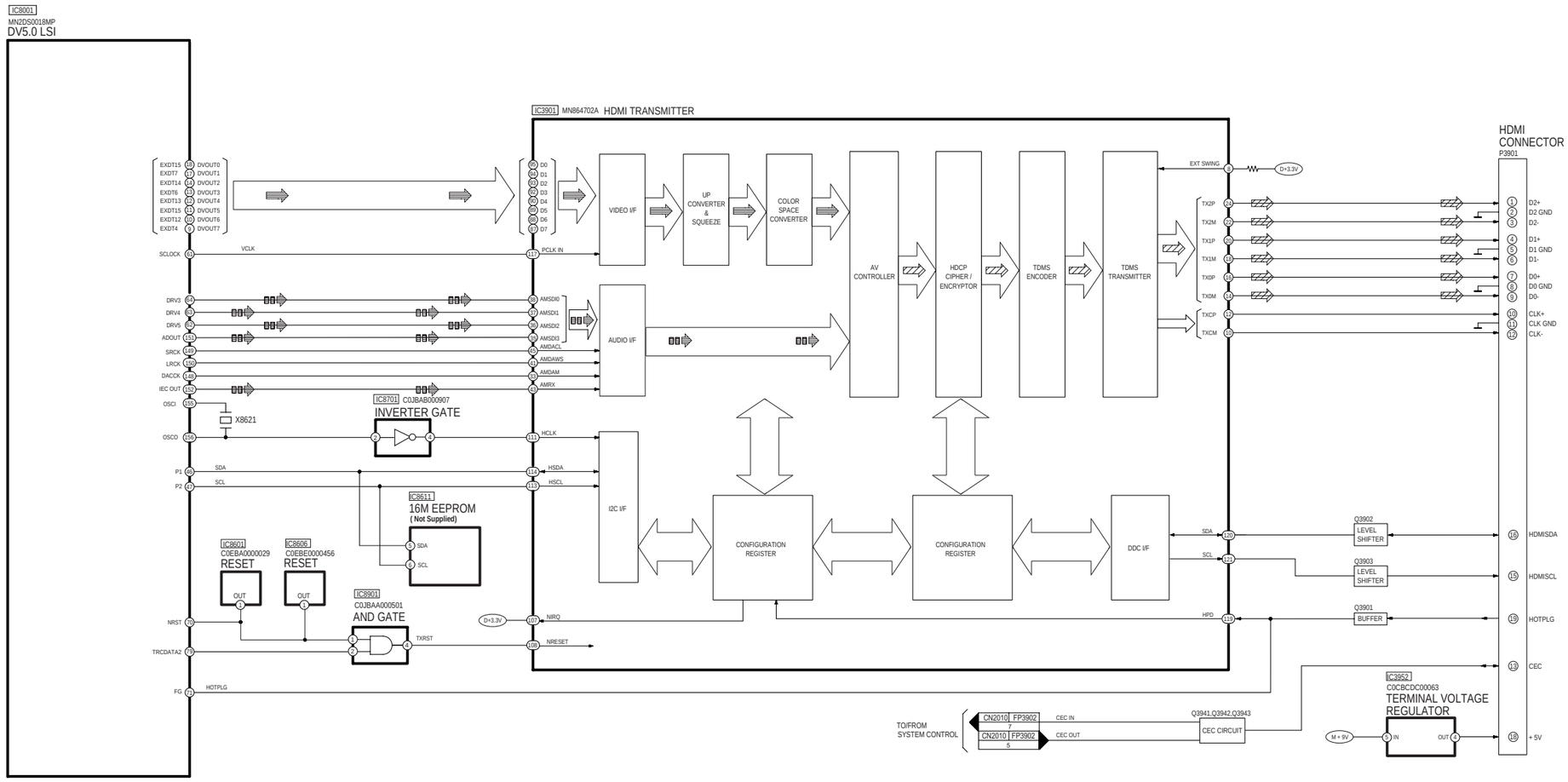
18.4. DVD (Video)



SA-PT550GC/GCS/GCT/GS DVD (VIDEO) BLOCK DIAGRAM

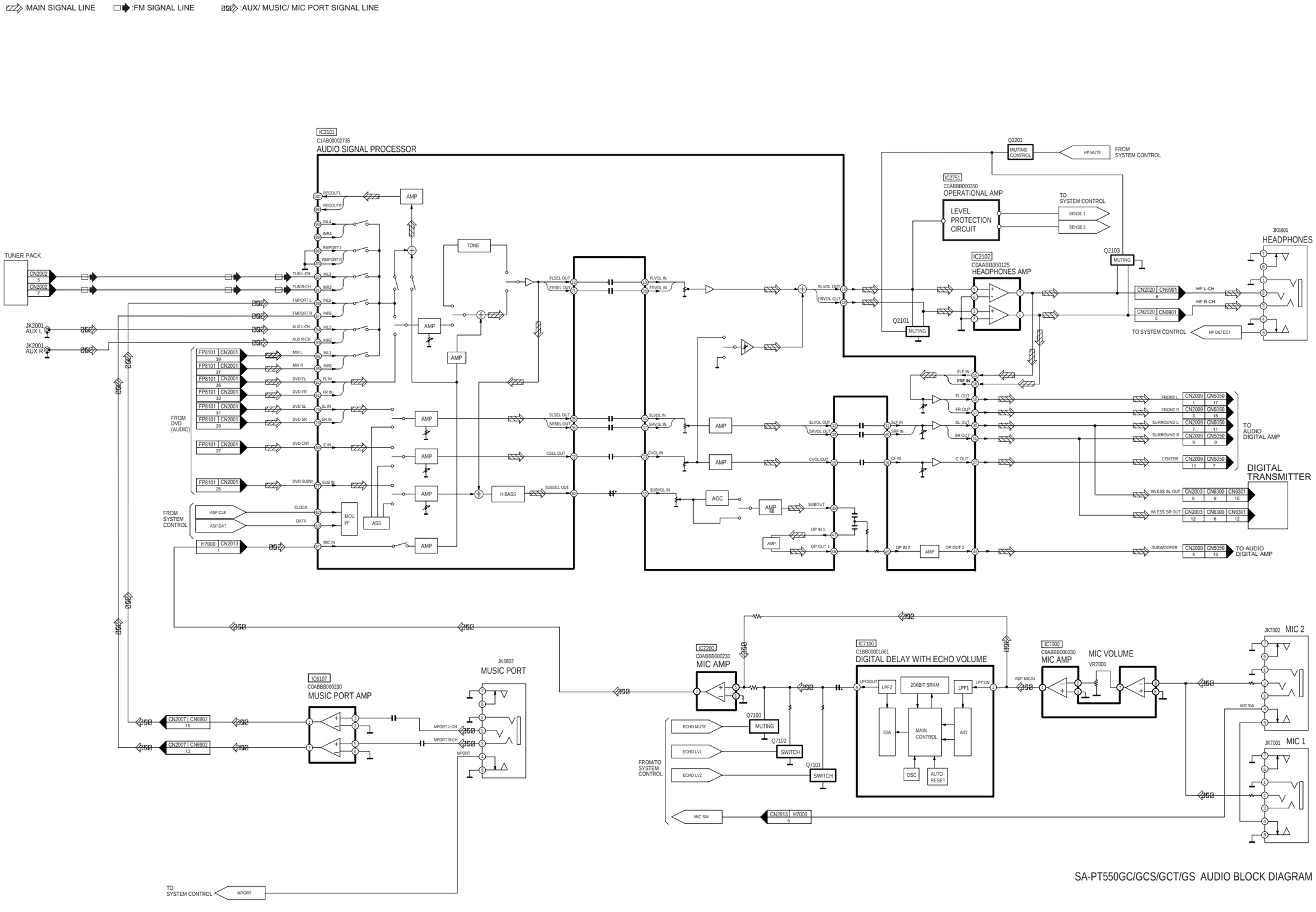
18.5. DVD (HDMI)

: DVD AUDIO SIGNAL LINE : DVD VIDEO SIGNAL LINE : MAIN SIGNAL LINE



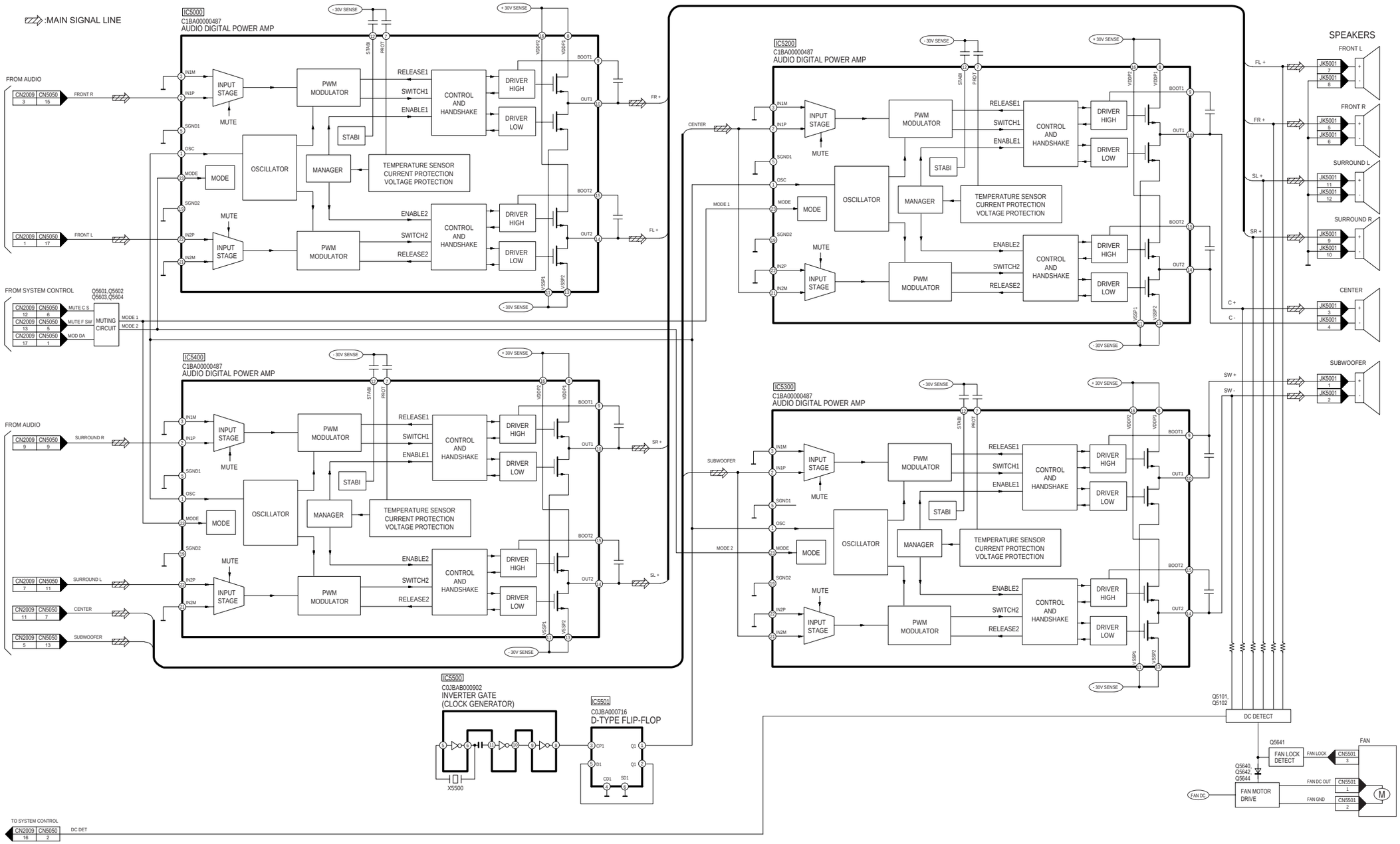
SA-PT550GC/GCS/GCT/GS DVD (HDMI) BLOCK DIAGRAM

18.6. Audio



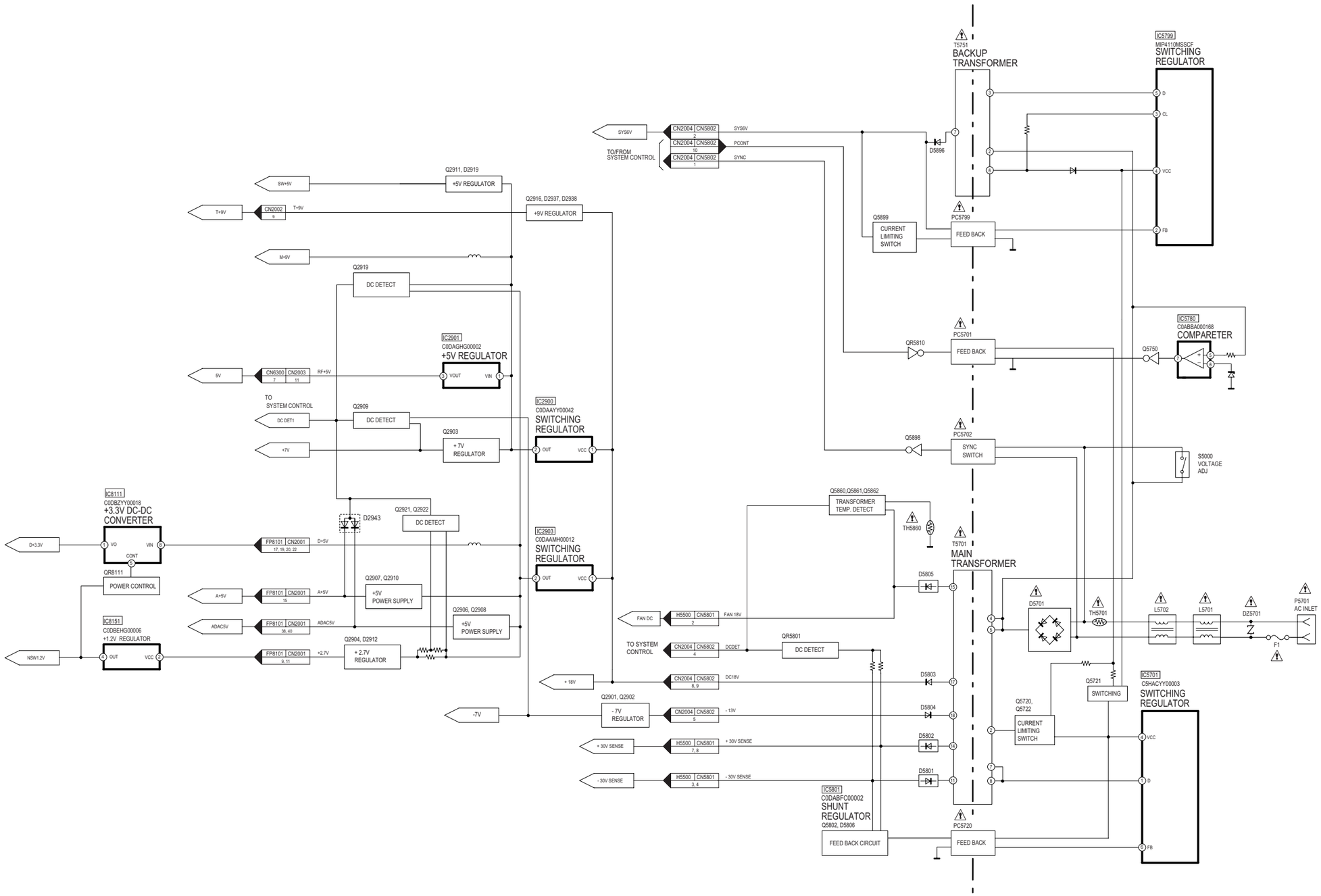
SA-PT550GC/GCS/GCT/GS AUDIO BLOCK DIAGRAM

18.7. Audio Digital Amp



SA-PT550GC/GCS/GCT/GS AUDIO DIGITAL AMP BLOCK DIAGRAM

18.8. Power



SA-PT550GC/GCS/GCT/GS POWER BLOCK DIAGRAM

19 Schematic Diagram Notes

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

Notes:

S901:	Play switch.
S902:	Open switch.
S5000:	Voltage selector switch.
S6801:	Selector switch.
S6802:	Reverse switch ⏮ / ◀◀ / TUNING ∨).
S6803:	Forward switch (▶▶ / ▶▶⏭ / TUNING ∧).
S6804:	Stop switch (■ / -TUNE MODE/— FM MODE).
S6901:	Power switch (⏻/| AC IN).
S6902:	Open / close switch (⏏ OPEN / CLOSE).
S6907:	Play switch (▶ / MEMORY).
VR6801:	Volume jog.
VR7001:	Mic volume.

· 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

· **Resistor**

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

· **Capacitor**

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

· **Coil**

Unit of inductance is H, unless otherwise noted.

· 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

: Aux/ Music Port/ Mic signal line

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

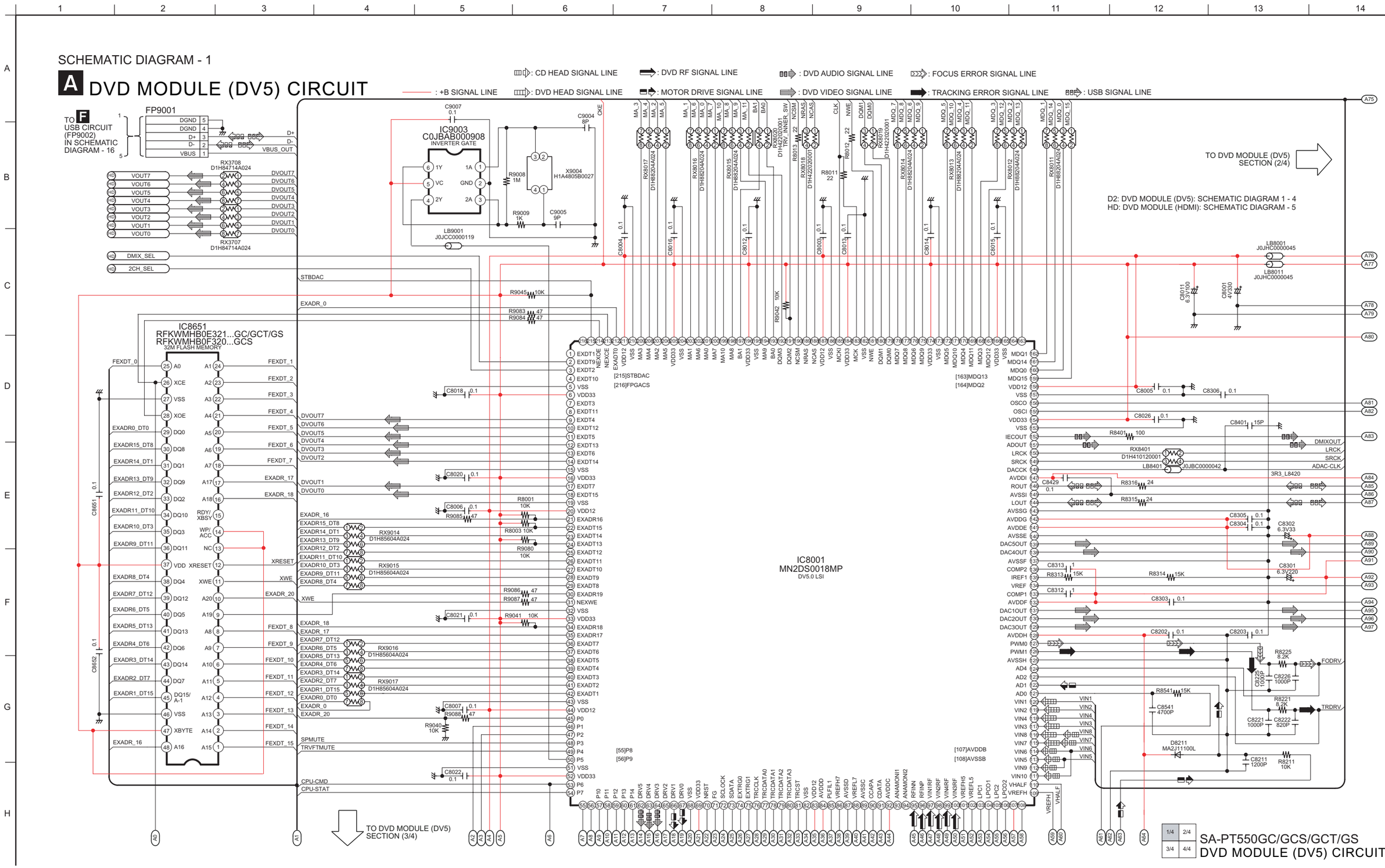
RISK OF FIRE-REPLACE FUSE AS MARKED.

FUSE CAUTION

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

20 Schematic Diagram

20.1. DVD Module (DV5/HDMI) Circuit



SCHEMATIC DIAGRAM - 2

A DVD MODULE (DV5) CIRCUIT

: +B SIGNAL LINE : DVD AUDIO SIGNAL LINE : DVD VIDEO SIGNAL LINE : MAIN SIGNAL LINE : USB SIGNAL LINE

D2: DVD MODULE (DV5): SCHEMATIC DIAGRAM 1 - 4
HD: DVD MODULE (HDMI): SCHEMATIC DIAGRAM - 5

TO DVD MODULE (DV5) SECTION (1/4)

JK8001 OPTICAL IN

IC8421 C0FBBK000050 AUDIO DAC

IC9005 C0DBZYE00002 REGULATOR

IC8701 C0JBAB000907 INVERTER GATE

IC8151 C0DBEHG00006 +1.2V REGULATOR

IC8691 C0JBAA000502 AND GATE

IC8695 C0JBAA000502 AND GATE

QR8420 UNR521100L MUTING

Q8325 2SB1218ARL BUFFER

Q8321 2SB1218ARL BUFFER

Q8331 2SB1218ARL BUFFER

Q8335 2SB1218ARL BUFFER

Q8341 2SB1218ARL BUFFER

FP8101

TO B MAIN CIRCUIT (CN2001) IN SCHEMATIC DIAGRAM - 8

TO DVD MODULE (DV5) SECTION (4/4)

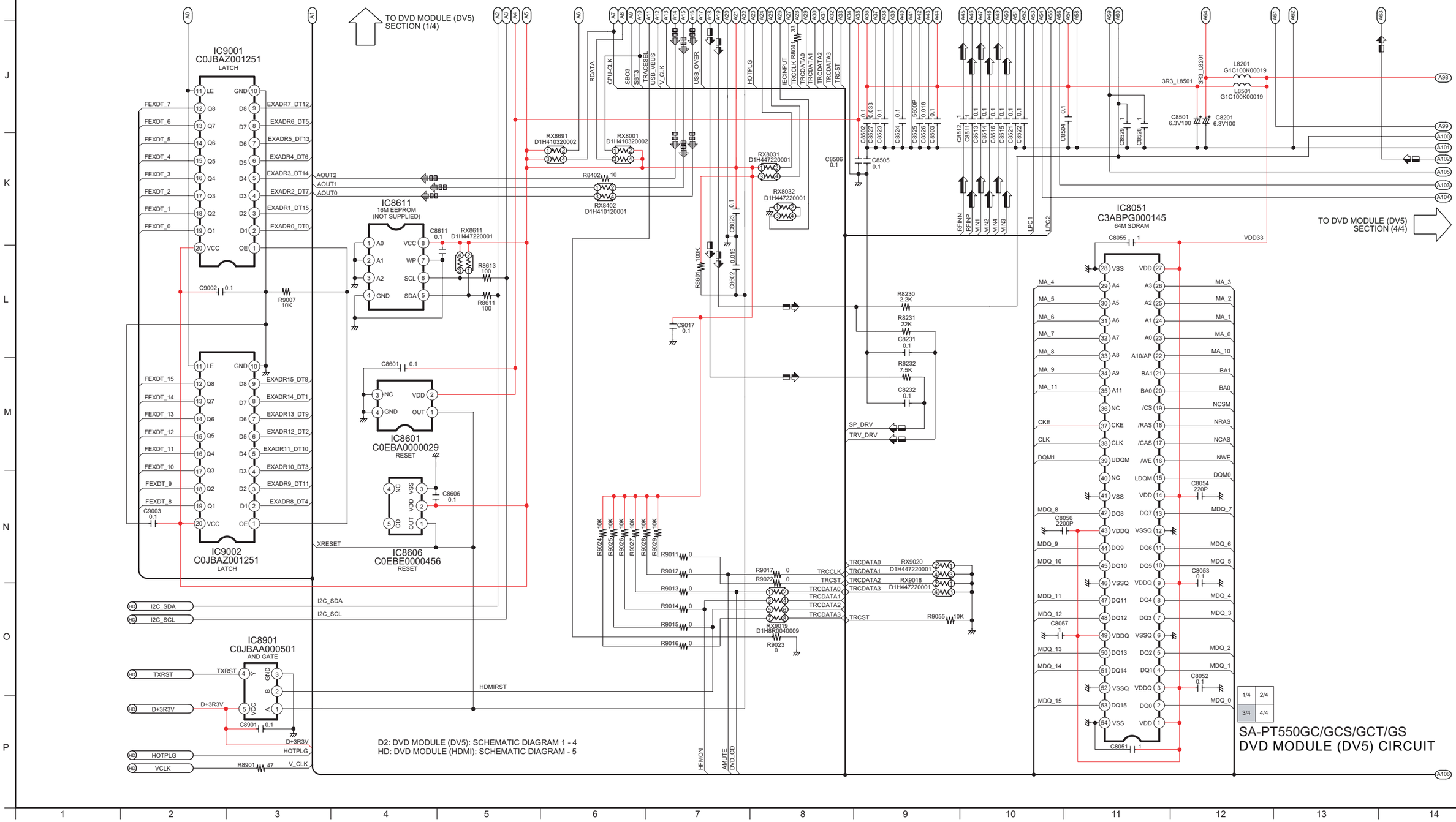
1/4	2/4
3/4	4/4

SA-PT550GC/GCS/GCT/GS
DVD MODULE (DV5) CIRCUIT

SCHEMATIC DIAGRAM - 3

A DVD MODULE (DV5) CIRCUIT

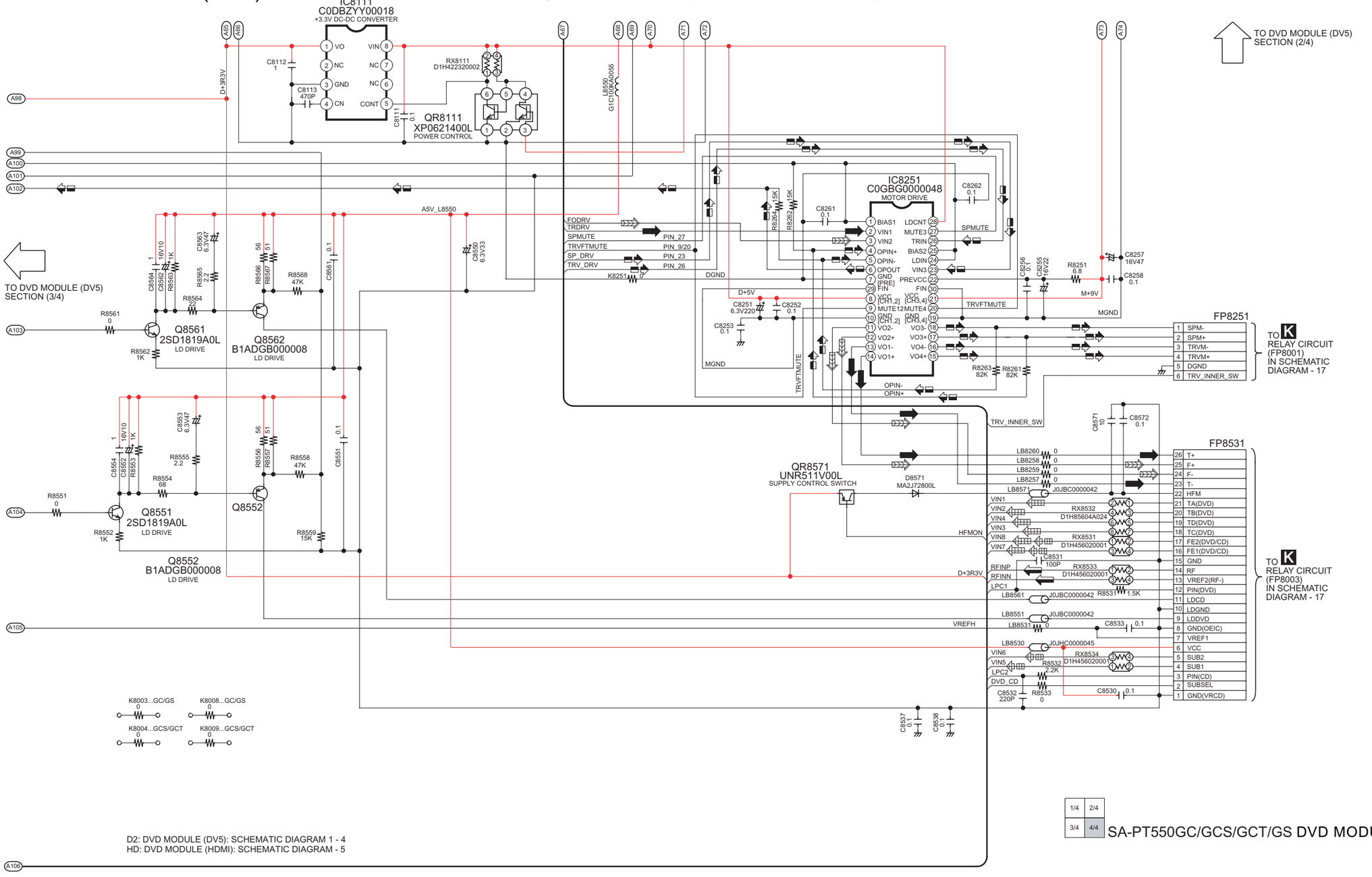
: +B SIGNAL LINE : MOTOR DRIVE SIGNAL LINE : DVD RF SIGNAL LINE : DVD AUDIO SIGNAL LINE



SCHEMATIC DIAGRAM - 4

A DVD MODULE (DV5) CIRCUIT

: +B SIGNAL LINE
: CD HEAD SIGNAL LINE
: DVD HEAD SIGNAL LINE
: MOTOR DRIVE SIGNAL LINE
: TRACKING ERROR SIGNAL LINE
: DVD RF SIGNAL LINE
: FOCUS ERROR SIGNAL LINE



D2: DVD MODULE (DV5): SCHEMATIC DIAGRAM 1 - 4
HD: DVD MODULE (HDMI): SCHEMATIC DIAGRAM - 5

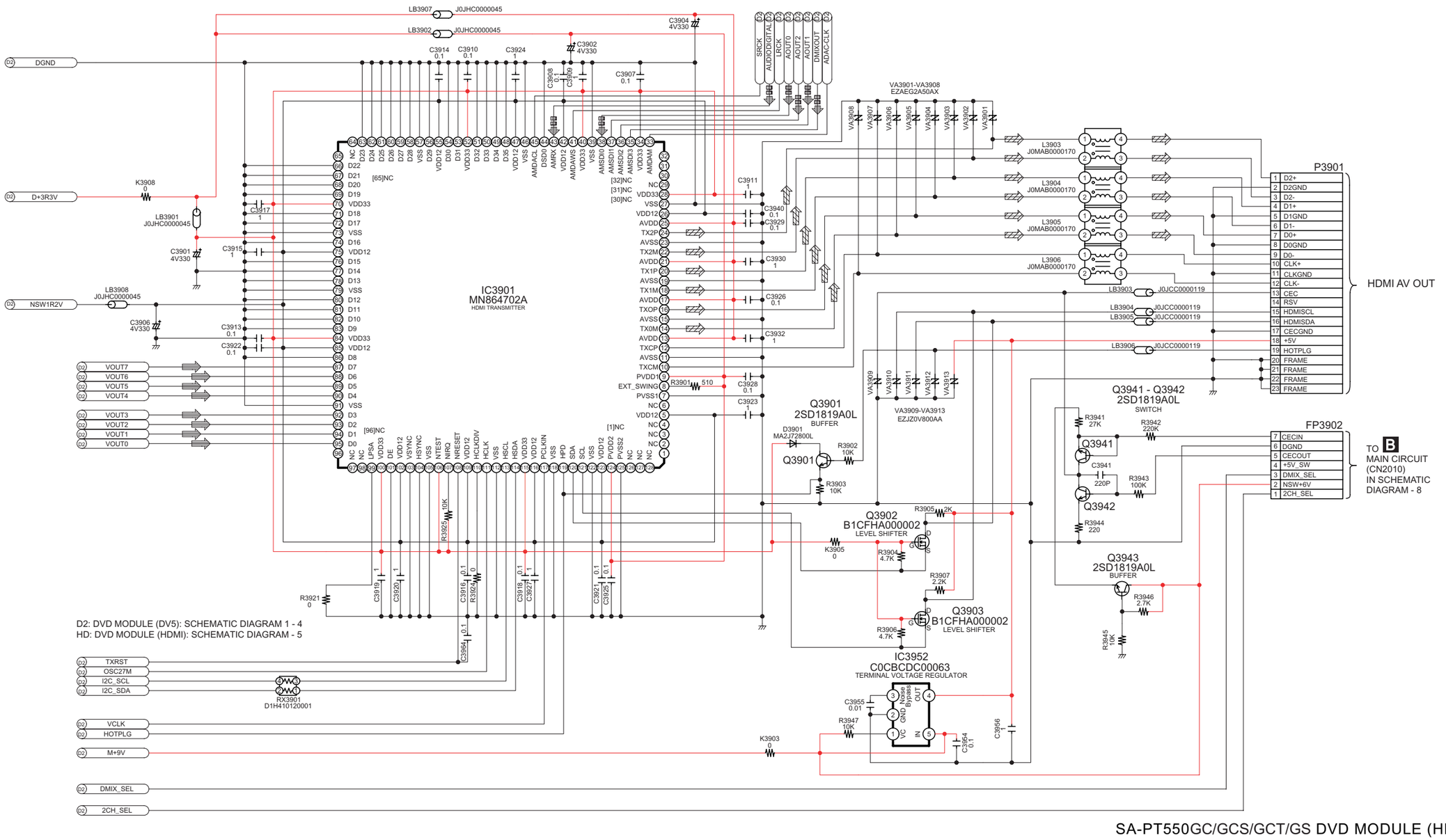
1/4	2/4
3/4	4/4

SA-PT550GC/GCS/GCT/GS DVD MODULE (DV5) CIRCUIT

SCHEMATIC DIAGRAM - 5

A DVD MODULE(HDMI) CIRCUIT

: +B SIGNAL LINE : DVD AUDIO SIGNAL LINE : DVD VIDEO SIGNAL LINE : MAIN SIGNAL LINE



SA-PT550GC/GCS/GCT/GS DVD MODULE (HDMI) CIRCUIT

20.2. Main, Panel & Mic Circuit

SCHEMATIC DIAGRAM - 6

B MAIN CIRCUIT

:-B SIGNAL LINE
:+B SIGNAL LINE
:MAIN SIGNAL LINE
:FM SIGNAL LINE
:DVD VIDEO SIGNAL LINE

TO TUNER PACK (J3CBBB000001)

CN2002
TUNERGND 10
T+9V 9
RDS DETECT 8
TUNER RCH 7
TUNER DO/ST 6
TUNER LCH 5
TUNER SD 4
TUNER DI 3
TUNER CLK 2
PORT_SEL 1

C2960 1 TU+9V
W2303 0
C2261 0 R2260 1K TUN-RCH
C2161 0 R2160 1K TUN_DO
TUN-LCH
TUN_SD
TUN_DI
TUN_CLK
C2169 0.01
R2161 47K
W2611 0
C2262 680P
R2262 47K
C2262 680P
AGND
CHASSIS GND

TO G WIRELESS ADAPTER CIRCUIT (CN6300) IN SCHEMATIC DIAGRAM - 16

CN2003
CH1_L_IN 1
AGND 2
CH1_R_IN 3
AGND 4
CH1_L_OUT 5
AGND 6
CH1_R_OUT 7
AGND 8
CH2_L_OUT 9
AGND 10
5V 11
CH2_R_OUT 12
5V_GND 13
WM_DET 14
SDO 15
SDI 16
SCL 17

C2321 1 WLESS_SL_OUT
RF+5V
C2421 1 WLESS_SR_OUT
-7V
5V_GND
AGND
FX_DET1
FX_DO
FX_DI
FX_CLK

IC2801
C9ZB00000461
VIDEO BUFFER

VGND CR CB PY Y C
W2609 0
W2578 0
W2572 0
W2571 0
C2818 1
C2817 1
C2811 0.1
C2809 25V22
W2615 0
C2812 0.1
C2810 0.01
C2807 0.01
C2808 10V220
L2801 GNC220JA0055
DVD_A+5V
K2811
VMUTE
W2593 0
W2618 0
W2616 0
VIDEO_+5V
R2804 1K
R2803 1K
D2810 BOJCAE000001
Q2801 B1GBCFJN0033 MUTING
C2838 0.1
C2837 0.1
C2833 0.1
C2806 6.3V100
C2835 25V22
C2805 6.3V1000
C2834 25V22
C2802 6.3V100
C2814 25V22
R2810 0
W2573 0
C2801 6.3V1000
CROUT CBOUT CYOUT VOUT
TO MAIN SECTION (3/4)

+7V SENSE1 SENSE2
R2751 470
D2751 B0BC5R000009
C2752 0.01
R2752 10K
D2752 B0ACCK000005
C2754 100P
R2760 820K
R2758 22K
6dB Clip
R2762 10K
R2764 470K
C2756 0.1
R2765 470K
C2757 0.1
3dB Clip
R2763 10K
R2761 820K
R2759 22K
D2753 B0ACCK000005
C2755 100P
R2755 4.7K
R2756 100
C2753 0.01
+VCC -VCC
IC2751
C0ABBB000350
OP AMP
R2753 47K
R2754 47K
R2757 47K
C2751 1
HP-LCH HP-RCH HP_MUTE
C2197 0
C2297 0

W2540 0
FL
C2177 50V1
R2172 1.8K
R2196 2.2K
W2868 0
Q2201 B1GDCFGA0018 MUTING CONTROL
R2271 56K
C2171 25V4.7
R2171 27K
Q2101 B1GFGCAA0001 MUTING
R2170 2.2K
R2270 2.2K
C2277 50V1
FR
R2296 2.2K
R2297 100K
C2294 1
R2175 1.2K
R2192 3.3K
C2194 1
R2275 1.2K
R2176 22K
C2178 100P
C2179 150P
R2191 3.9K
C2180 0.1
IC2102 C0AABB000125 HEADPHONE AMP
R2291 3.9K
C2280 0.1
W2632 0
R2292 3.3K
C2278 100P
C2279 150P
R2276 22K
R2177 22
R2179 22
R2178 22
R2180 22
R2185 1.2K
C2196 16V100
R2182 10
R2186 1.5K
C2181 1000P
R2181 4.7K
W2860 0
Q2103
R2286 1.5K
C2281 1000P
R2281 4.7K
R2278 22
R2280 22
R2277 22
R2279 22
R2198 2.2K
C2296 16V100
R2282 10
R2298 2.2K
-7V
Q2103 B1GFGCAA0001 MUTING
TO MAIN SECTION (2/4)

B16 B1 B7 B8 B8 B11 B12

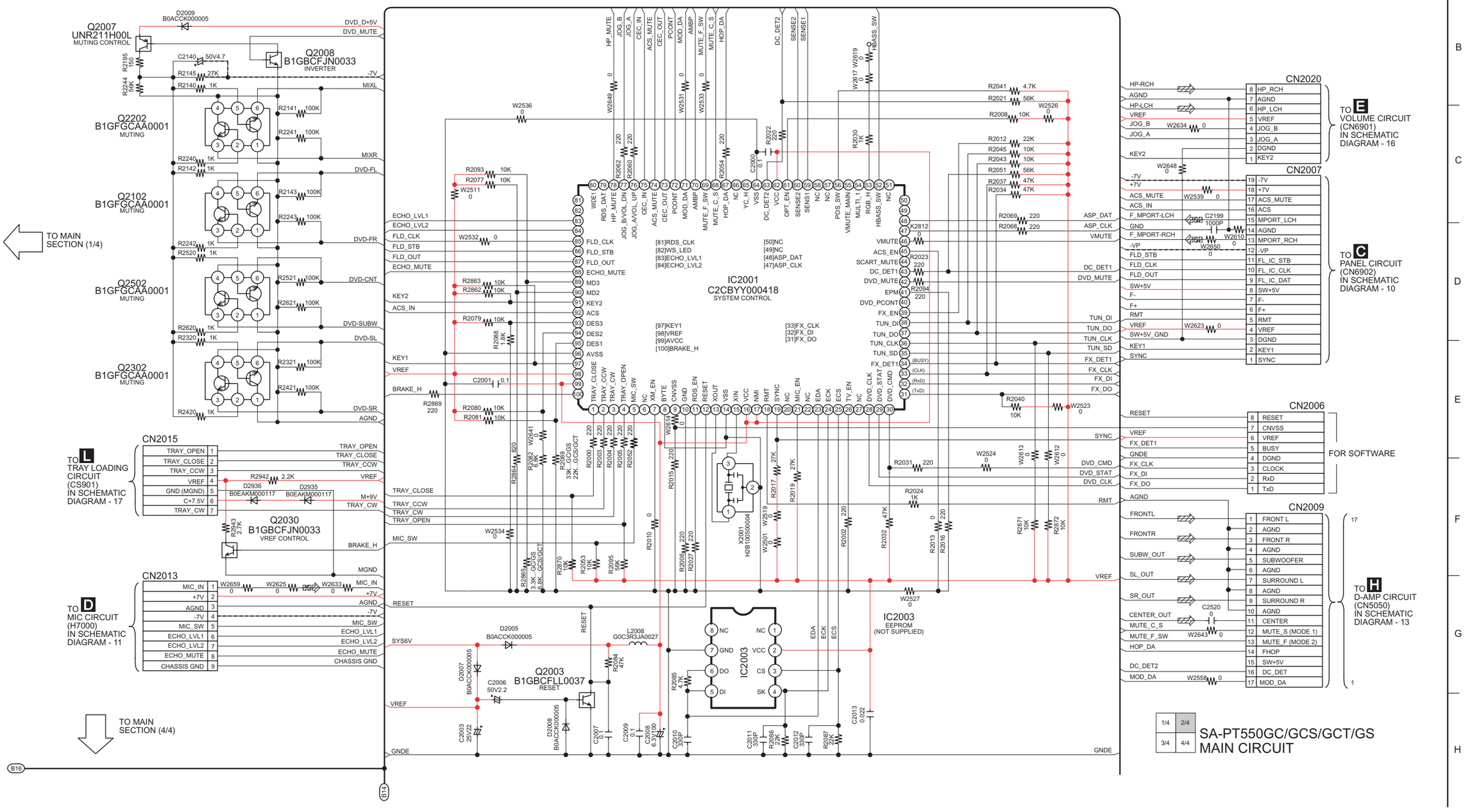
1/4	2/4
3/4	4/4

SA-PT550GC/GCS/GCT/GS MAIN CIRCUIT

SCHEMATIC DIAGRAM - 7

B MAIN CIRCUIT

:-B SIGNAL LINE
:+B SIGNAL LINE
:MAIN SIGNAL LINE
:AUX / MUSIC PORT / MIC SIGNAL LINE



SCHEMATIC DIAGRAM - 8

B MAIN CIRCUIT

--- :-B SIGNAL LINE

— :+B SIGNAL LINE

:MAIN SIGNAL LINE

:FM SIGNAL LINE

:DVD VIDEO SIGNAL LINE

:AUX / MUSIC PORT / MIC SIGNAL LINE

TO A DVD MODULE (HDMI) CIRCUIT (FP3902) IN SCHEMATIC DIAGRAM - 5

CN2010

2CH_SEL 1, NSW+6V 2, DMIX_SEL 3, +5V_SW 4, CECOUT 5, DGND 6, CECIN 7

SYS6V, CEC_OUT, CEC_IN, GNDE

D2010 B0ACCK000005

W2637 0, W2653 0, W2652 0, W2542 0, W2557 0

R2941 22K, R2096 47K, R2097 4.7K, R2098 2.2M, R2099 100K, C2305 220P

Q2096-Q2097 2SD0601AHL BUFFER

Q2096, Q2097

CN2001

DOP_CPU_STAT 1, DOP_CPU_CMD 2, DOP_CPU_CLK 3, MGND 4, M+9V 5, MGND 6, M+9V 7, DGND 8, +2.7V 9, DGND 10, +2.7V 11, AGND 12, A+5V 13, AGND 14, A+5V 15, DGND 16, D+5V 17, DGND 18, D+5V 19, D+5V 20, AUDIODIGITAL 21, D+5V 22, ZFLAG&AMUT 23, A-REF 24, SW 25, ADGND 26, CNT 27, ADGND 28, SR 29, ADGND 30, SL 31, ADGND 32, FR 33, ADGND 34, FL 35, ADGND 36, MIX-R 37, ADAC5V 38, MIX-L 39, ADAC5V 40, C 41, VGND 42, Y 43, VGND 44, CR/PR/R 45, VGND 46, CB/PB/B 47, VGND 48, Y/PY/G 49, VGND 50

W2647 0

DVD_STAT, DVD_CMD, DVD_CLK, MGND, M+9V, DGND_1, DVD_2R7, AGND, DVD_A+5V, DVD_D+5V, DVD_MUTE, DGND, DVD-SUBW, DVD-CNT, DVD-SR, DVD-SL, DVD-FR, DVD-FL, ADGND, MIXR, MIXL, DVD_ADAC+5V, C, VGND, Y, VGND, CR, CB, PY, VGND

C2921 0.1, C2301 10/220, L2009 G0C220JA0055

R2903 1.8K, Q2006 B1GBCFJN0033 INVERTER

C2600 1, R2600 1K, C2500 1, R2500 12K, C2400 1, R2400 12K, C2300 1, R2300 12K, R2201 10K, C2201 1, R2200 3.3K, R2101 10K, C2101 1, R2100 3.3K, C2211 1, R2202 3.3K, C2111 1, R2102 3.3K

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

MIC_IN, MIXL, MIXR, AUX-LCH, AUX-RCH, TUN-LCH, TUN-RCH

C2198 1, R2193 150, C2193 1, C2293 1

F_MPORT-LCH, F_MPORT-RCH

C2191 1, R2104 2.7K, C2291 1, R2204 2.7K

DVD-FL, DVD-FR

C2192 0, C2292 0

W2606 0

R2992 0, R2991 0, R2990 0, R2995 0, R2993 0

E2901 CHASSIS

TO MAIN SECTION (1/4)

C2195 1, W2599 0, C2295 1, W2577 0

R2299 0, R2199 0, W2642 0

R2190 10K, R2290 10K, R2133 10K, R2233 10K, C2113 680P, C2213 680P, C2108 2200P, R2105 1.5K, R2205 1.5K, C2208 2200P

C2114 5600P, C2115 330P, R2113 0, C2117 0.1, C2118 0.1, C2214 5600P, C2215 330P, R2213 0, C2217 0.1, C2218 0.1, C2103 1, R2114 5.6K, R2214 5.6K

C2104 0.039, R2115 2.7K, C2204 0.039, R2215 2.7K, C2212 0.1, C2221 0.1, C2205 1, R2502 5.6K, C2502 0.047, C2503 0.047, R2500 8.2K, C2501 4.7, R2501 8.2K

R2303 8.2K, C2303 0.068, C2302 0.047, R2301 8.2K, R2302 3.3K, R2402 3.3K

[100]RECOUTL, [99]RECOUTR

[31]SLFIN, [32]SLVOLOUT, [33]SLNFIN, [34]SLVOLIN

IC2101 C1AB00002735 AUDIO SIGNAL PROCESSOR

AGND, TTL, TML1, TML2, TBL1, TBL2, TTR, TMR1, TMR2, TBR1, TBR2, FLSELOUT, FLVOLIN, FLVOLOUT, FLFIN, FLOUT, FROUT, FRFIN, FRVOLOUT, FRVOLIN, FRSELOUT, CSELOUT, CVOLIN, CNFIN, CVOLOUT, CFIN, COUT, AGND, REARSLOUT, SLOUT

AGND, MICIN, INL1 [MIX L], INR1 [MIX R], INL2 [AUX L], INR2 [AUX R], INL3 [FM L], INR3 [FM R], INL4 [TV L], INR4 [TV R], FMPORTL, FMPORTR, RMPORTL, RMPORTR, AVCC, AVEE

[82]FLIN, [81]FRIN

[48]SUBOUT, [49]SUBC, [50]AGC1

SLSELOUT, SRSELOUT, SRVOLIN, SRNFIN, SRVOLOUT, SRFIN, SROUT, REARSROUT, AGND, OPOUT2, OPIN2, OPOUT1, OPIN1, W2579 0

R2627 47K, R2611 27K, R2612 56K, C2617 0.18, C2619 50V10, C2611 0.22, C2609 0.33, C2610 0.47, R2609 1.2K, R2610 1K

C2412 1, C2612 5600P, R2401 8.2K, C2403 0.068, C2402 0.047, R2403 8.2K, C2301 4.7, C2401 4.7

C2506, C2282, C2182 1, W2654 0, K2311 0, C2312 1

WLESS_SR_OUT, WLESS_SL_OUT

CIN, SLIN, SRIN, SUBIN, AGND, RIN, RF, LF, LIN, RCIN, LCIN, RSIN, LSIN, SF, EXTOUTL, EXTOUTR, DVDD, DATA, CLOCK, DGND, SUBSELOUT, EXTINL, EXTINR, MIXCAPL1, MIXCAPL2, MIXCAPR1, MIXCAPR2, WIDECAP, SUBVOLIN, AGC2

C2515 0, C2320 0, C2420 0, C2640 0, R2404 12K, C2307 1, C2308 0.022, R2120 1K, R2220 1K, C2309 0.062, C2408 0.022, C2404 10, C2405 3300P, C2305 3300P, C2304 10, R2304 12K, C2407 1, R2103 27K, R2203 27K, R2106 56K, R2206 56K, C2102 0.047, C2202 0.047, R2102 56K, R2202 56K, C2602 25V4.7, R2602 0, K2600 0, W2626 0, C2015 220P, C2016 220P, C2014 50V10, C2310 0.022, C2601 50V22, R2664 0, W2574 0, W2631 0, W2629 0

R2613 6.8K, C2603 0.022, R2614 27K

D2602 B0ACCK000005, R2662 68, W2651 0, R2661 68, D2601 B0ACCK000005, W2640 0, R2626 3.9K, W2265 0

R2512 2.2K, R2439 1.8K, R2339 1.8K, W2415 0, R2284 4.7K, R2184 4.7K

CENTER_OUT, SR_OUT, SL_OUT, SUBW_OUT, FRONTR, FRONTL

C2191 1, R2104 2.7K, C2291 1, R2204 2.7K

C2192 0, C2292 0

C2112 4.7K, R2212 4.7K, C2206 680P, C2106 680P, W2576 0, R2310 10K, C2315 680P, R2410 10K, C2415 680P, R2504 10K, C2504 680P, R2601 12K, C2605 6800P, W2622 0

C2017 0.01, 10V47, C2018 0.01, 10V47, C2020 0.01, 10V47, C2019 0.01, 10V47

R2219 3.9K, R2119 3.9K

W2630 0

+7V, -7V, SW+5V, ASP_DAT, ASP_CLK, DVD-CNT, DVD-SL, DVD-SR, DVD-SUBW

TO MAIN SECTION (4/4)

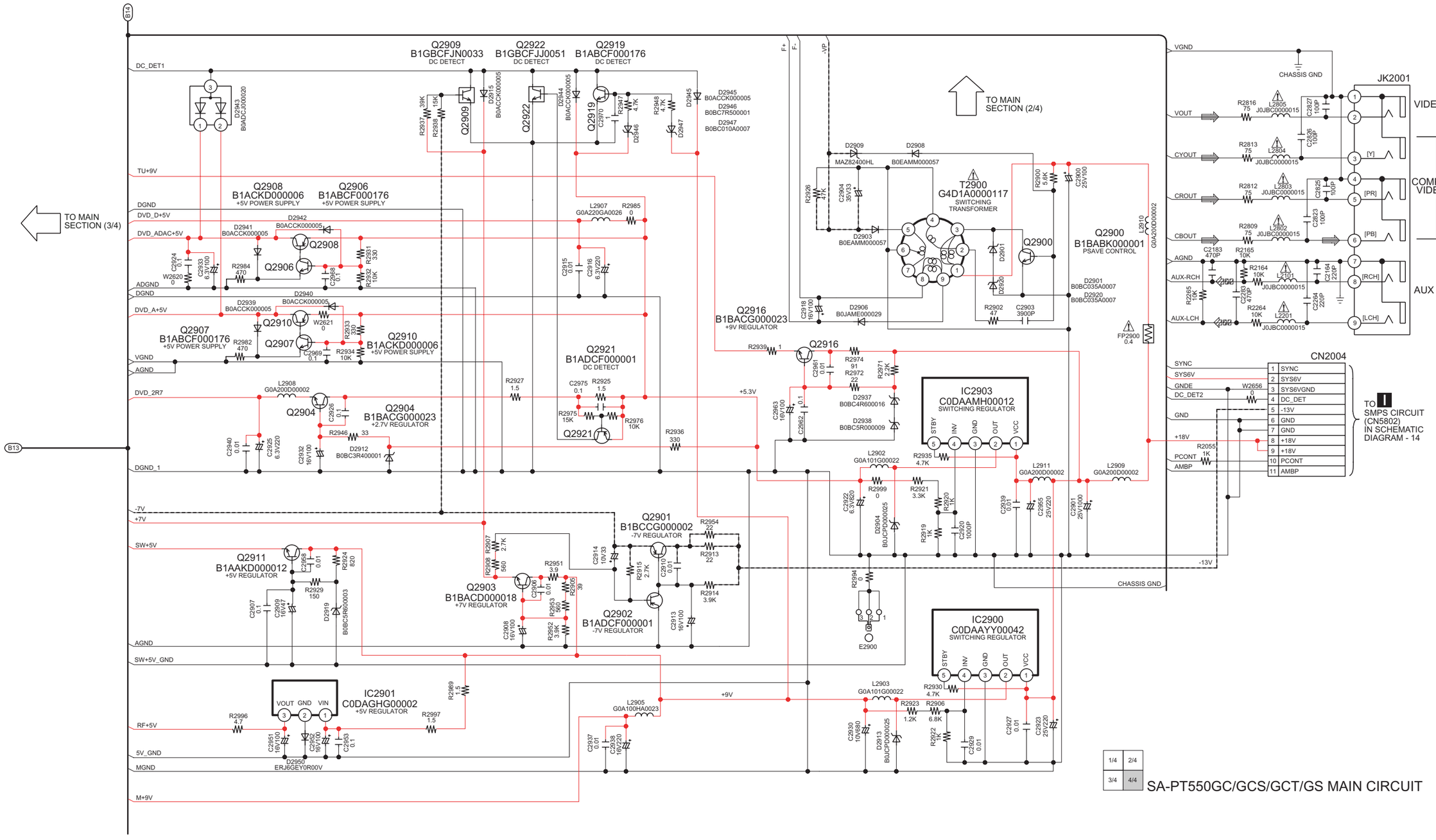
1/4	2/4
3/4	4/4

SA-PT550GC/GCS/GCT/GS MAIN CIRCUIT

SCHEMATIC DIAGRAM - 9

B MAIN CIRCUIT

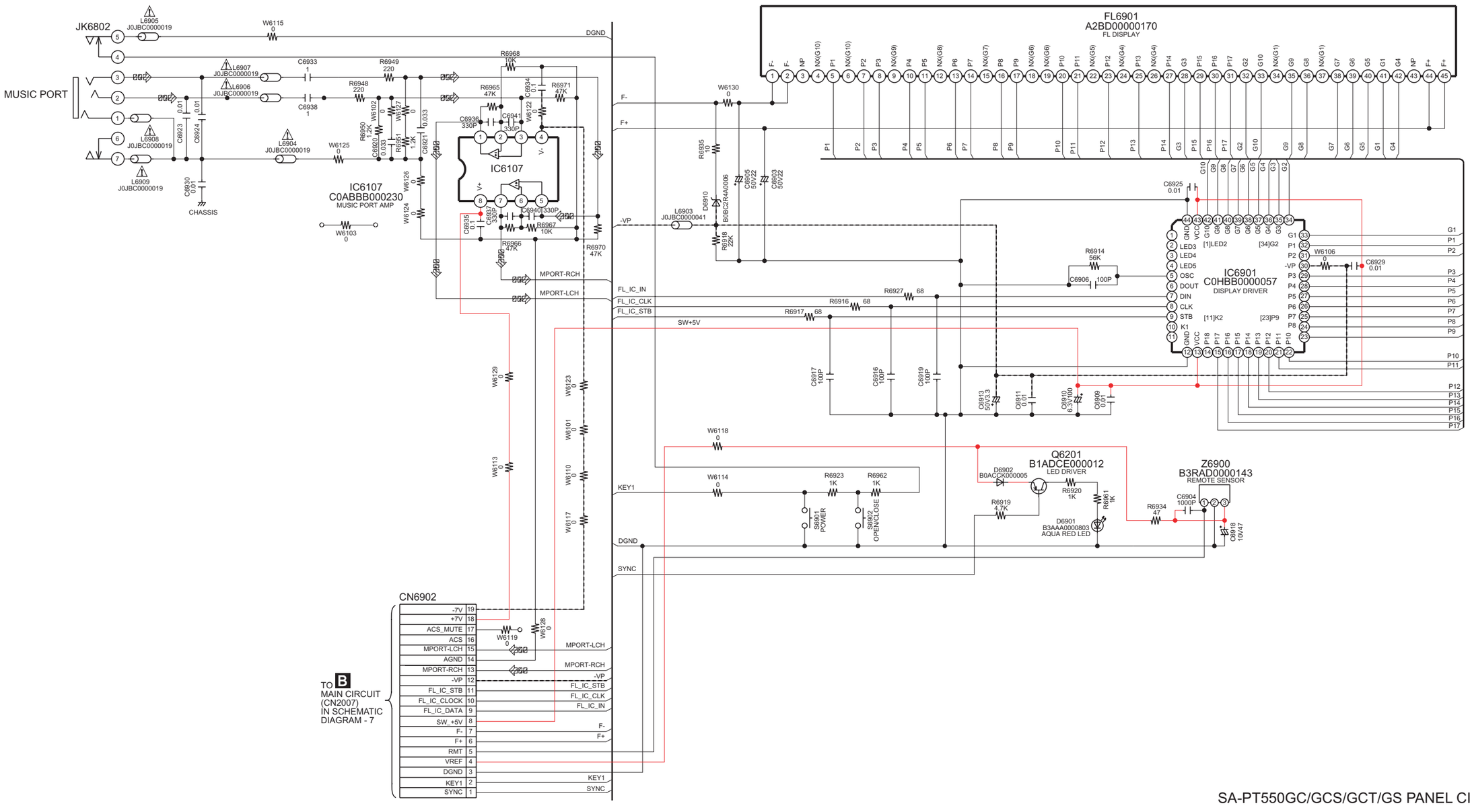
:-B SIGNAL LINE
:+B SIGNAL LINE
:MAIN SIGNAL LINE
:DVD VIDEO SIGNAL LINE
:AUX / MUSIC PORT / MIC SIGNAL LINE
:FM SIGNAL LINE



SCHEMATIC DIAGRAM - 10

C PANEL CIRCUIT

:+B SIGNAL LINE :-B SIGNAL LINE :MUSIC PORT SIGNAL LINE

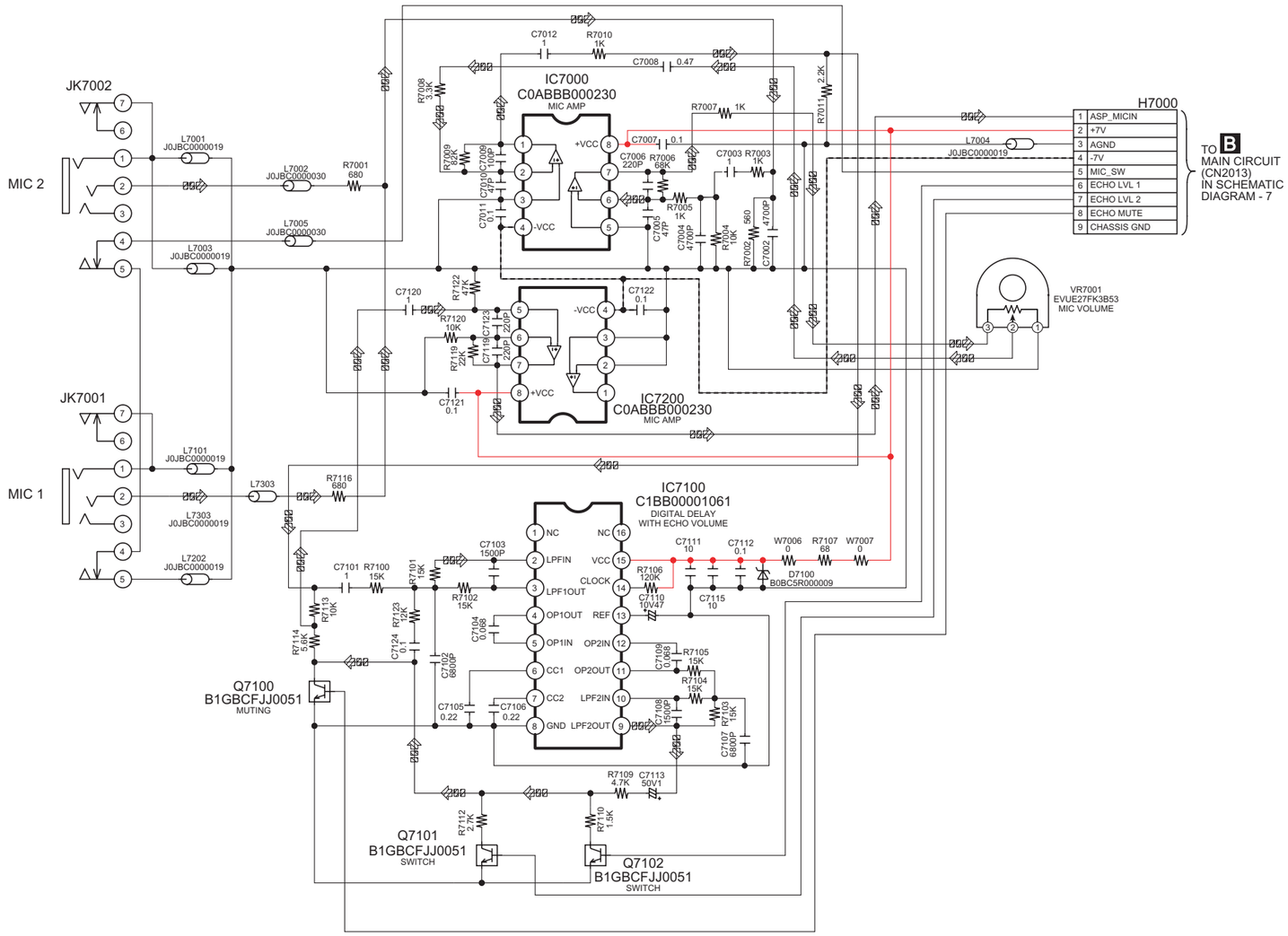


SA-PT550GC/GCS/GCT/GS PANEL CIRCUIT

SCHEMATIC DIAGRAM - 11

D MIC CIRCUIT

:+B SIGNAL LINE :-B SIGNAL LINE :MIC SIGNAL LINE



SA-PT550GC/GCS/GCT/GS MIC CIRCUIT

20.3. D-Amp & SMPS Circuit

SCHEMATIC DIAGRAM - 12

H D-AMP CIRCUIT

—— :+B SIGNAL LINE - - - :-B SIGNAL LINE ⇉ :MAIN SIGNAL LINE

IC5500
C1BA00000487
AUDIO DIGITAL POWER AMP

IC5500
C0JBAB000902
INVERTER GATE
(CLOCK GENERATOR)

IC5501
C0JBAF000716
D-TYPE FLIP-FLOP

Q5603
B1ADCE000012
MUTING

Q5601 - Q5602
B1ABCF000176
MUTING

Q5604
B1ABCF000176
MUTING

Q5601

Q5602

Q5101
B1ABCF000176
DC DETECT

Q5102
B1ABCF000176
DC DETECT

Q5640
B1BACD000018
FAN MOTOR DRIVE

Q5641
B1ABCF000011
FAN LOCK DETECT

Q5642
B1ABCF000011
FAN MOTOR DRIVE

Q5644
B1ABCF000011
FAN MOTOR DRIVE

CN5501
1 FAN DC OUT
2 FAN GND
3 FAN LOCK
TO FAN

JK5001
12 SURROUND L-
11 SURROUND L+
10 SURROUND R-
9 SURROUND R+
8 FRONT L-
7 FRONT L+
6 FRONT R-
5 FRONT R+
4 CENTER -
3 CENTER +
2 SUBWOOFER -
1 SUBWOOFER +
TO SPEAKERS

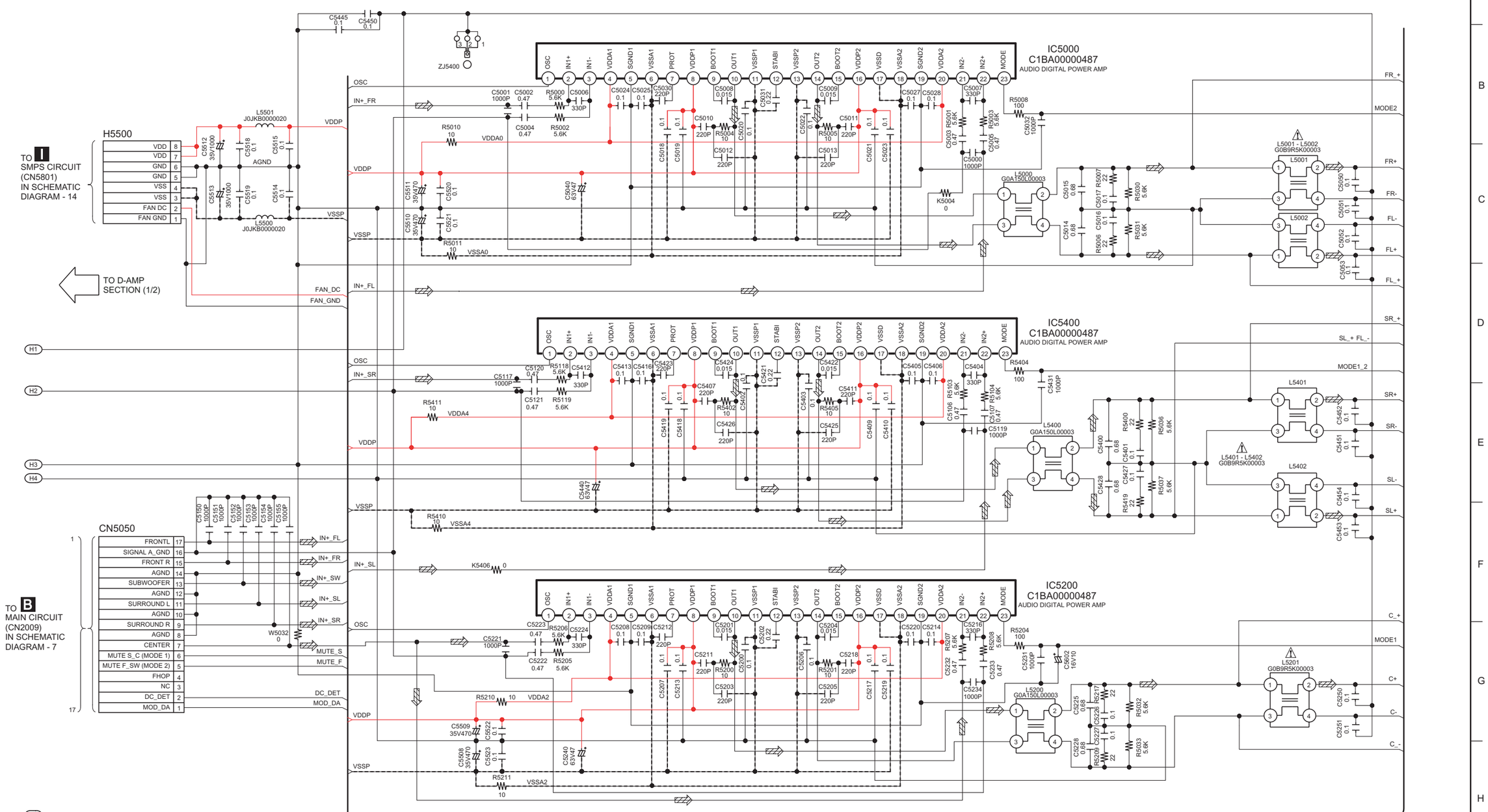
TO D-AMP SECTION (2/2)

1/2 | 2/2 SA-PT550GC/GCS/GCT/GS D-AMP CIRCUIT

SCHEMATIC DIAGRAM - 13

H D-AMP CIRCUIT

:+B SIGNAL LINE :-B SIGNAL LINE :MAIN SIGNAL LINE



1/2 2/2 SA-PT550GC/GCS/GCT/GS D-AMP CIRCUIT

SCHEMATIC DIAGRAM - 14

I SMPS CIRCUIT

:+B SIGNAL LINE :-B SIGNAL LINE

TO H D-AMP CIRCUIT (H5500) IN SCHEMATIC DIAGRAM - 13

CN5801: +30V_SENSE 8, +30V_SENSE 7, GND 6, GND 5, -30V_SENSE 4, -30V_SENSE 3, FAN_13V 2, FAN_GND 1

TO B MAIN CIRCUIT (CN2004) IN SCHEMATIC DIAGRAM - 9

CN5802: AM_BP 11, PCONT 10, DC18V 9, DC18V 8, +18V,-12V_GND 7, +18V,-12V_GND 6, -13V 5, DCDET 4, SYS_GND 3, SYS6V 2, SYNC 1

Q5861 - Q5862
B1ABCF000176
TRANSFORMER TEMP DETECT

Q5860
B1ADCF000001
TRANSFORMER TEMP DETECT

QR5801
B1GBCFJN0033
DC DETECT

T5701
EST42BN1A6AD
MAIN TRANSFORMER

IC5801
C0DABFC00002
SHUNT REGULATOR

Q5802
B1ABCF000176
FEED BACK CONTROL

QR5810
B1GBCFLL0037
INVERTER

Q5720
2SC3940ARA
CURRENT LIMITING SWITCH

Q5721
B1ADCF000001
SWITCHING

Q5722
B1ABCF000176
CURRENT LIMITING SWITCH

IC5701
C5HACYY00003
SWITCHING REGULATOR

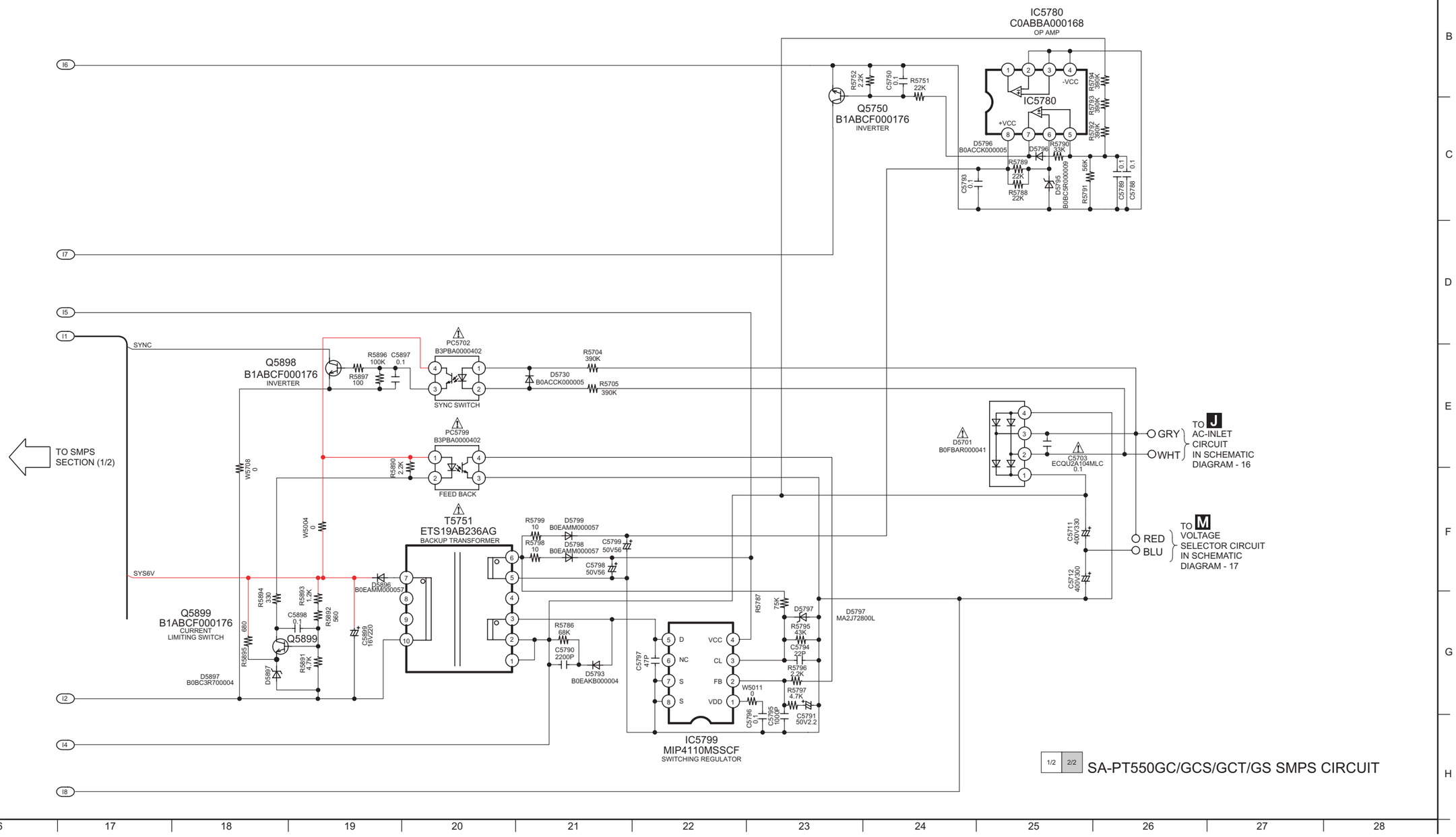
TO SMPS SECTION (2/2)

1/2 2/2 SA-PT550GC/GCS/GCT/GS SMPS CIRCUIT

SCHEMATIC DIAGRAM - 15

I SMPS CIRCUIT

:+B SIGNAL LINE :-B SIGNAL LINE

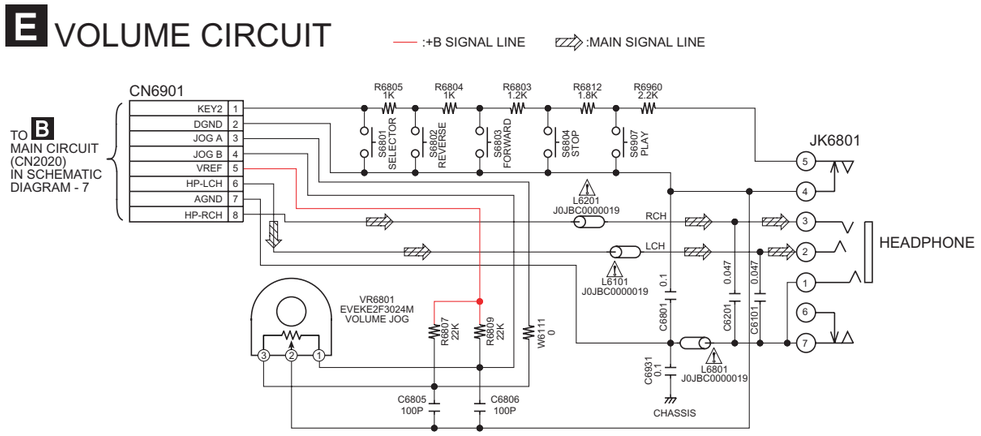


1/2 2/2 SA-PT550GC/GCS/GCT/GS SMPS CIRCUIT

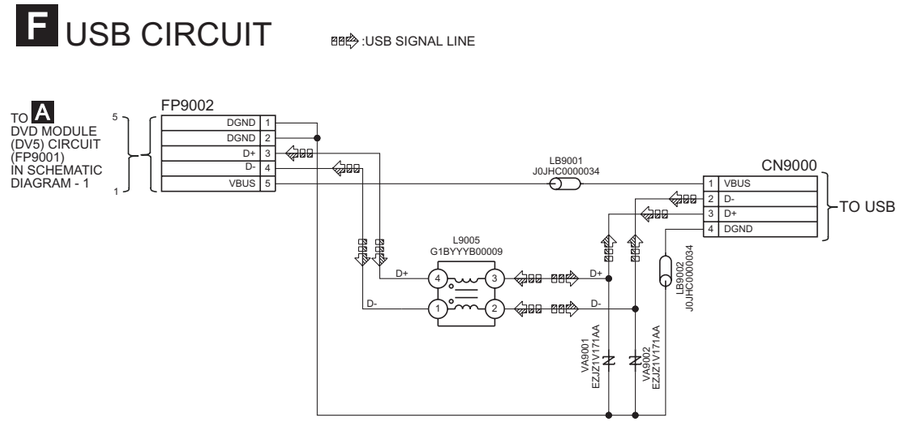
20.4. Volume, USB, Wireless Adapter & AC-Inlet Circuit

SCHEMATIC DIAGRAM - 16

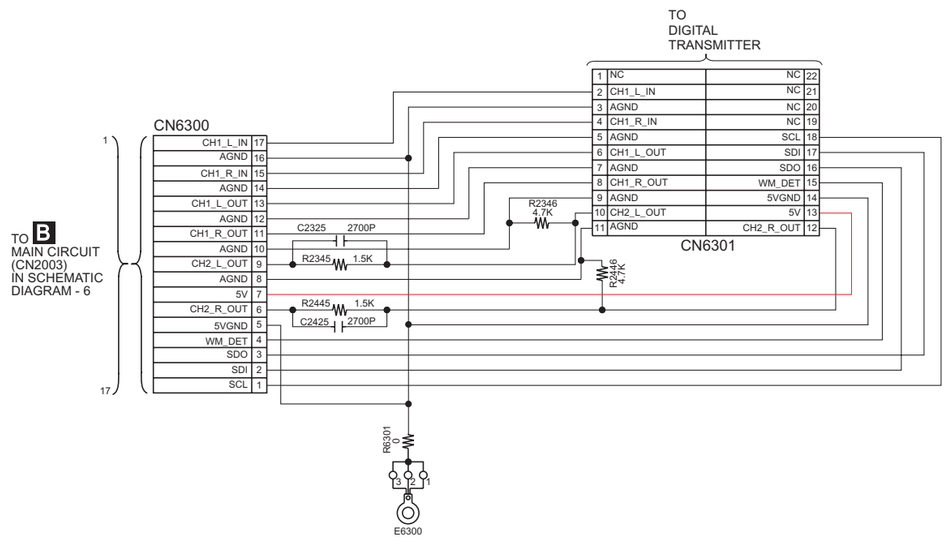
E VOLUME CIRCUIT



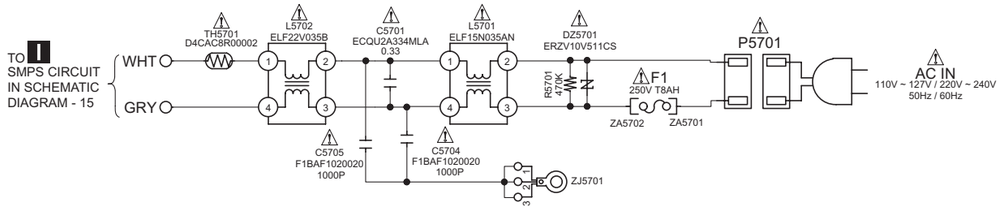
F USB CIRCUIT



G WIRELESS ADAPTER CIRCUIT



J AC-INLET CIRCUIT



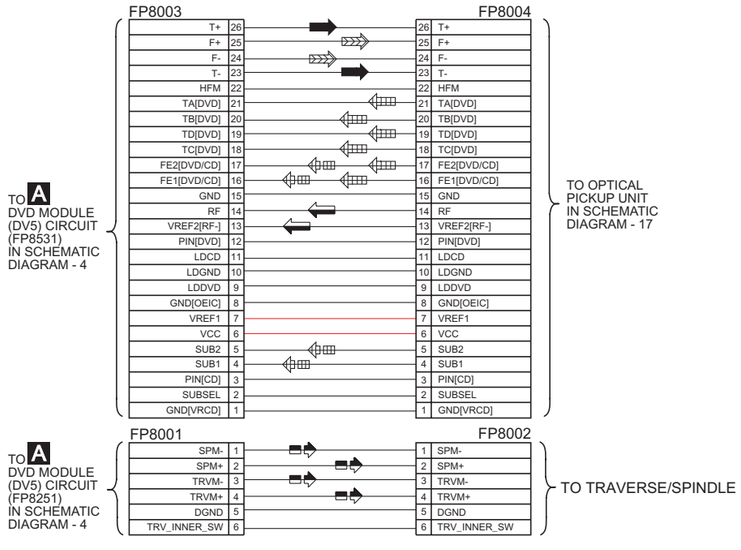
SA-PT550GC/GCS/GCT/GS VOLUME / USB / WIRELESS ADAPTER / AC-INLET CIRCUIT

20.5. Relay, Tray Loading, Voltage Selector & Optical Pickup Unit Circuit

SCHEMATIC DIAGRAM - 17

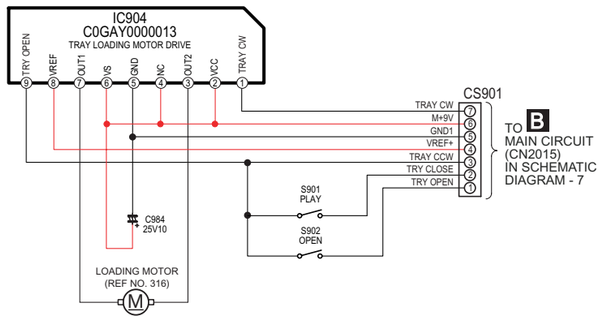
K RELAY CIRCUIT

: FOCUS ERROR SIGNAL LINE
: DVD RF SIGNAL LINE
: CD HEAD SIGNAL LINE
:+B SIGNAL LINE
: TRACKING ERROR SIGNAL LINE
: MOTOR DRIVE SIGNAL LINE
: DVD HEAD SIGNAL LINE

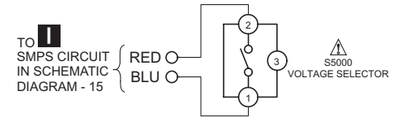


L TRAY LOADING CIRCUIT

:+B SIGNAL LINE

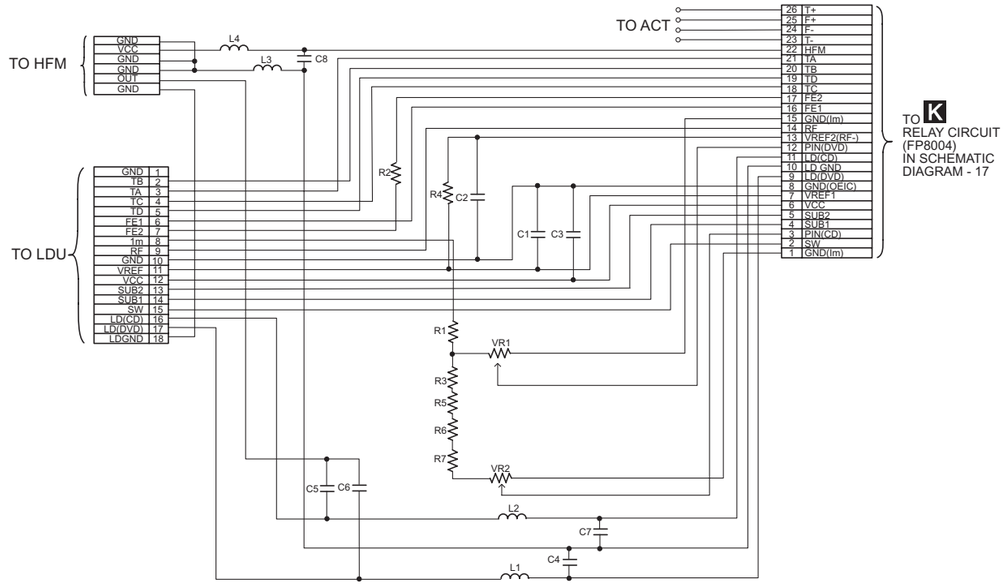


M VOLTAGE SELECTOR CIRCUIT



OPTICAL PICKUP UNIT CIRCUIT

(FOR REFERENCE ONLY)

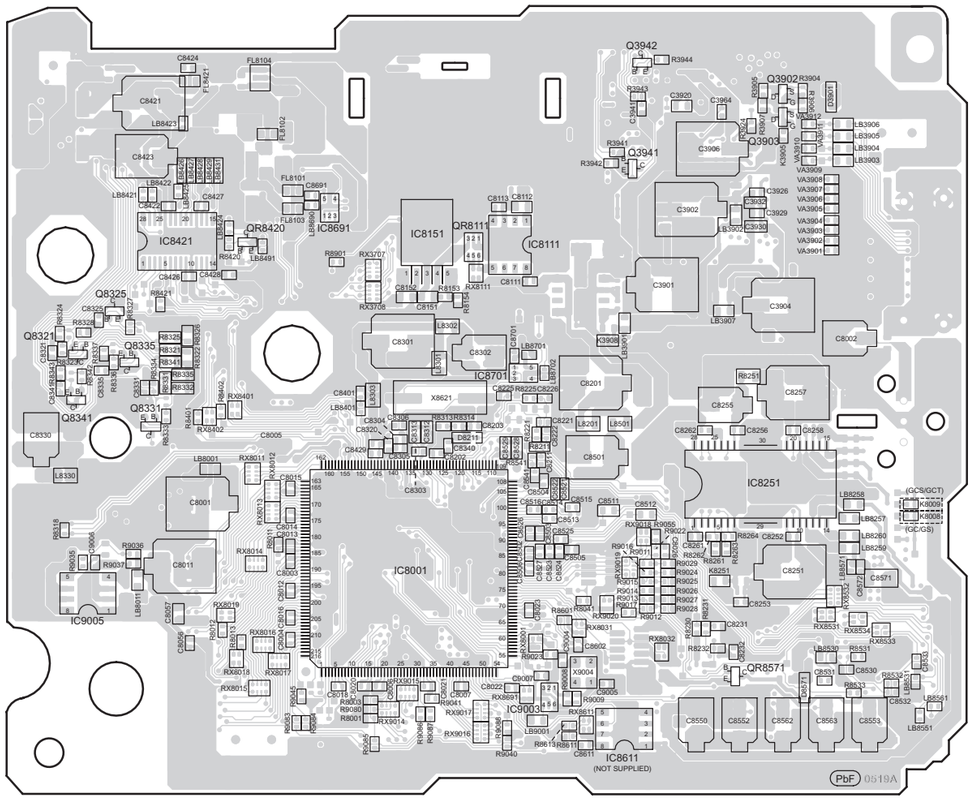


SA-PT550GC/GCS/GCT/GS RELAY / TRAY LOADING / VOLTAGE SELECTOR / OPTICAL PICKUP UNIT CIRCUIT

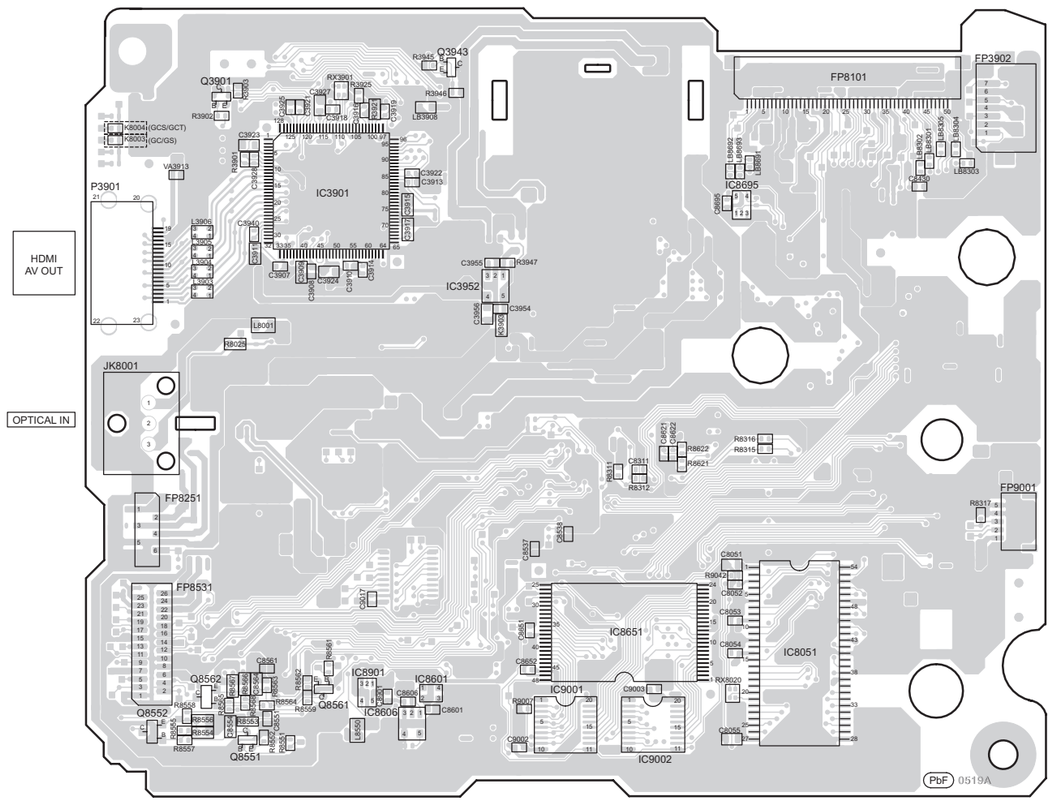
21 Printed Circuit Board

21.1. DVD Module P.C.B.

A DVD MODULE P.C.B (REPX0563D...GC/GS)
(REPX0563E...GCS/GCT)



(SIDE A)

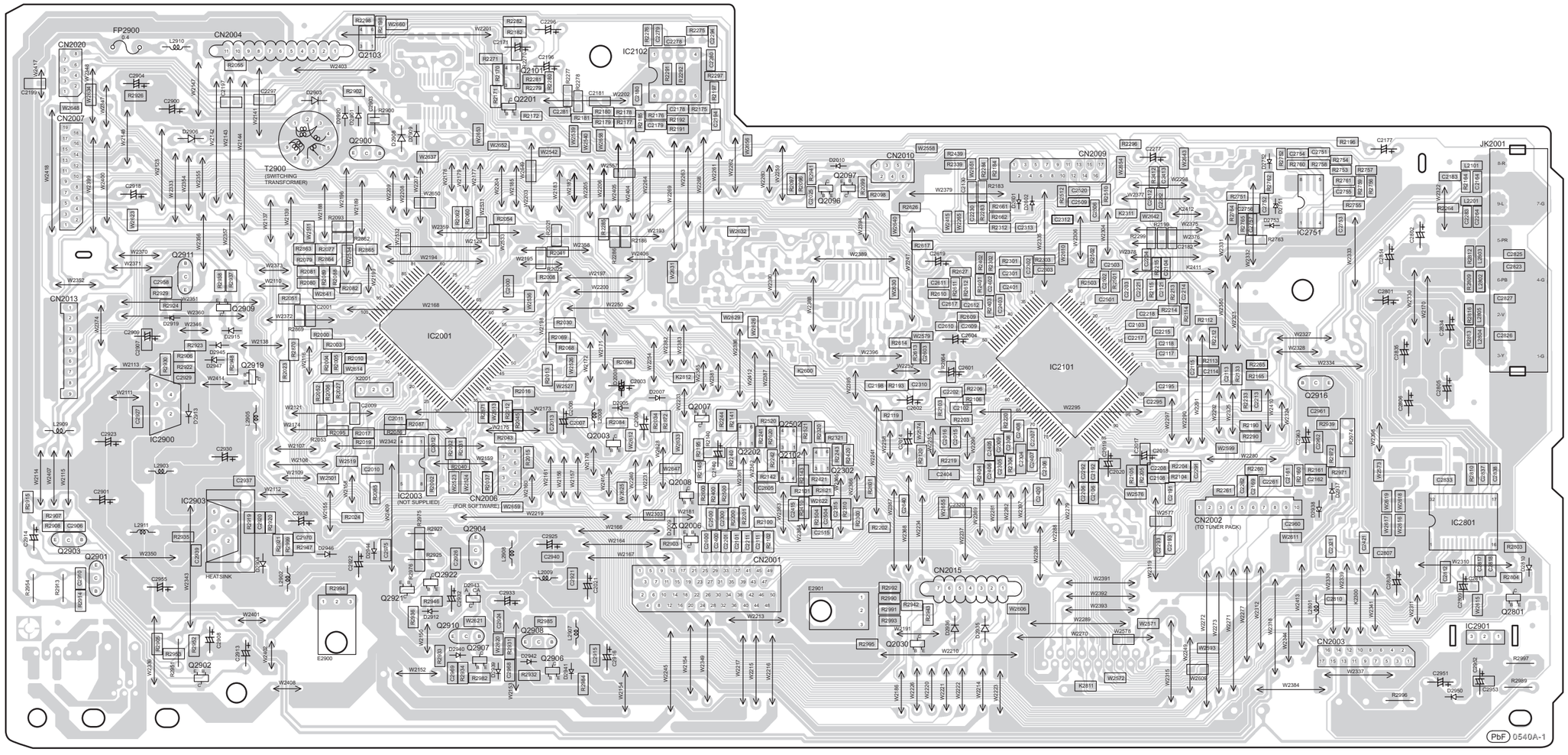


(SIDE B)

SA-PT550GC/GS/GCS/GCT
DVD MODULE P.C.B.

21.2. Main P.C.B.

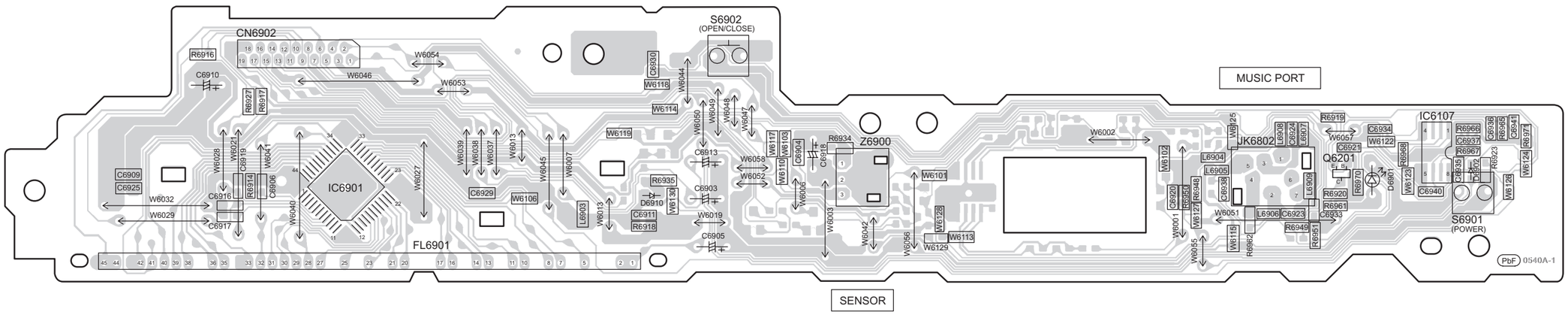
B MAIN P.C.B. (REPX0578C...GC/GS)
(REPX0578D...GCS/GCT)



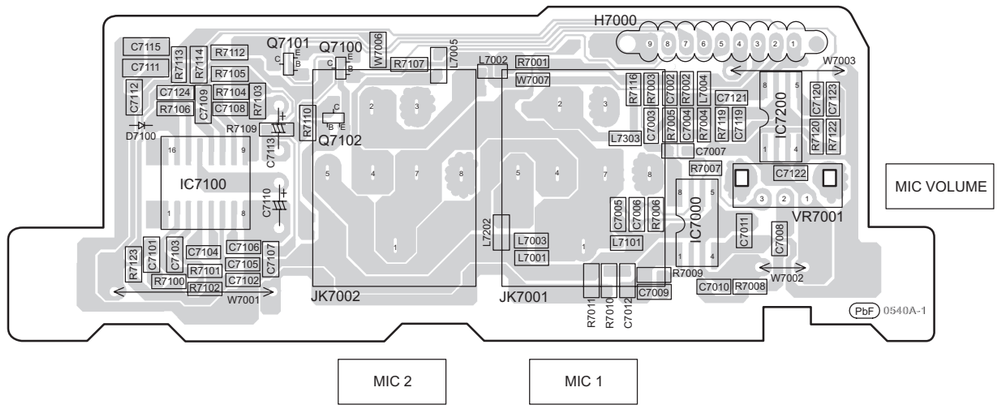
SA-PT550GC/GS/GCS/GCT
MAIN P.C.B.

21.3. Panel & Mic P.C.B.

C PANEL P.C.B. (REPX0578C...GC/GS)
(REPX0578D...GCS/GCT)



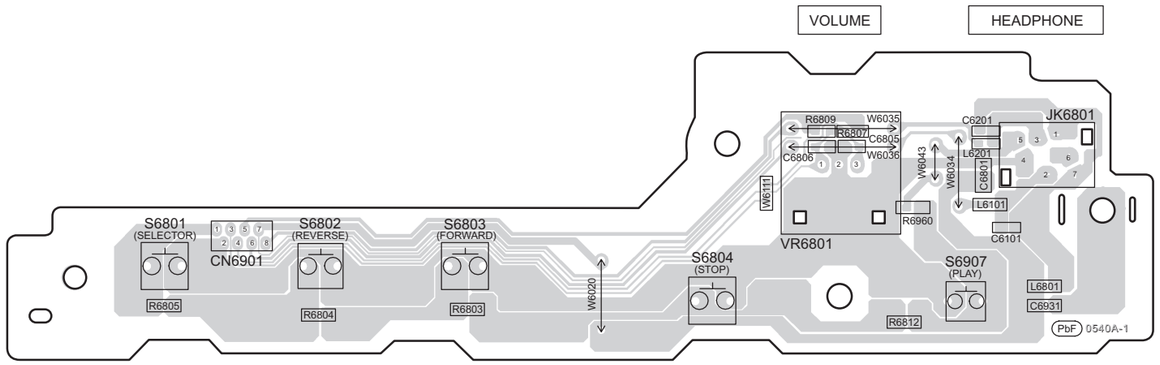
D MIC P.C.B. (REPX0578C...GC/GS)
(REPX0578D...GCS/GCT)



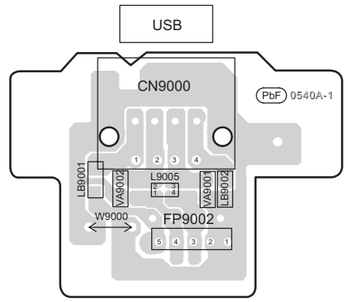
SA-PT550GC/GS/GCS/GCT
PANEL/MIC P.C.B.

21.4. Volume, USB & Wireless Adapter P.C.B.

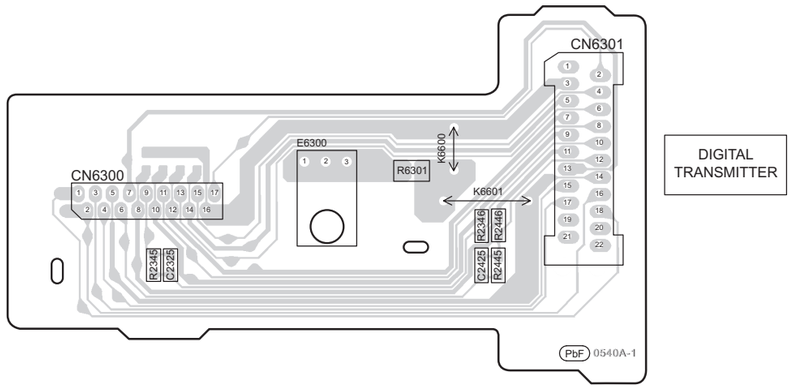
E VOLUME P.C.B. (REPX0578C...GC/GS) (REPX0578D...GCS/GCT)



F USB P.C.B. (REPX0578C...GC/GS) (REPX0578D...GCS/GCT)



G WIRELESS ADAPTER P.C.B. (REPX0578C...GC/GS) (REPX0578D...GCS/GCT)

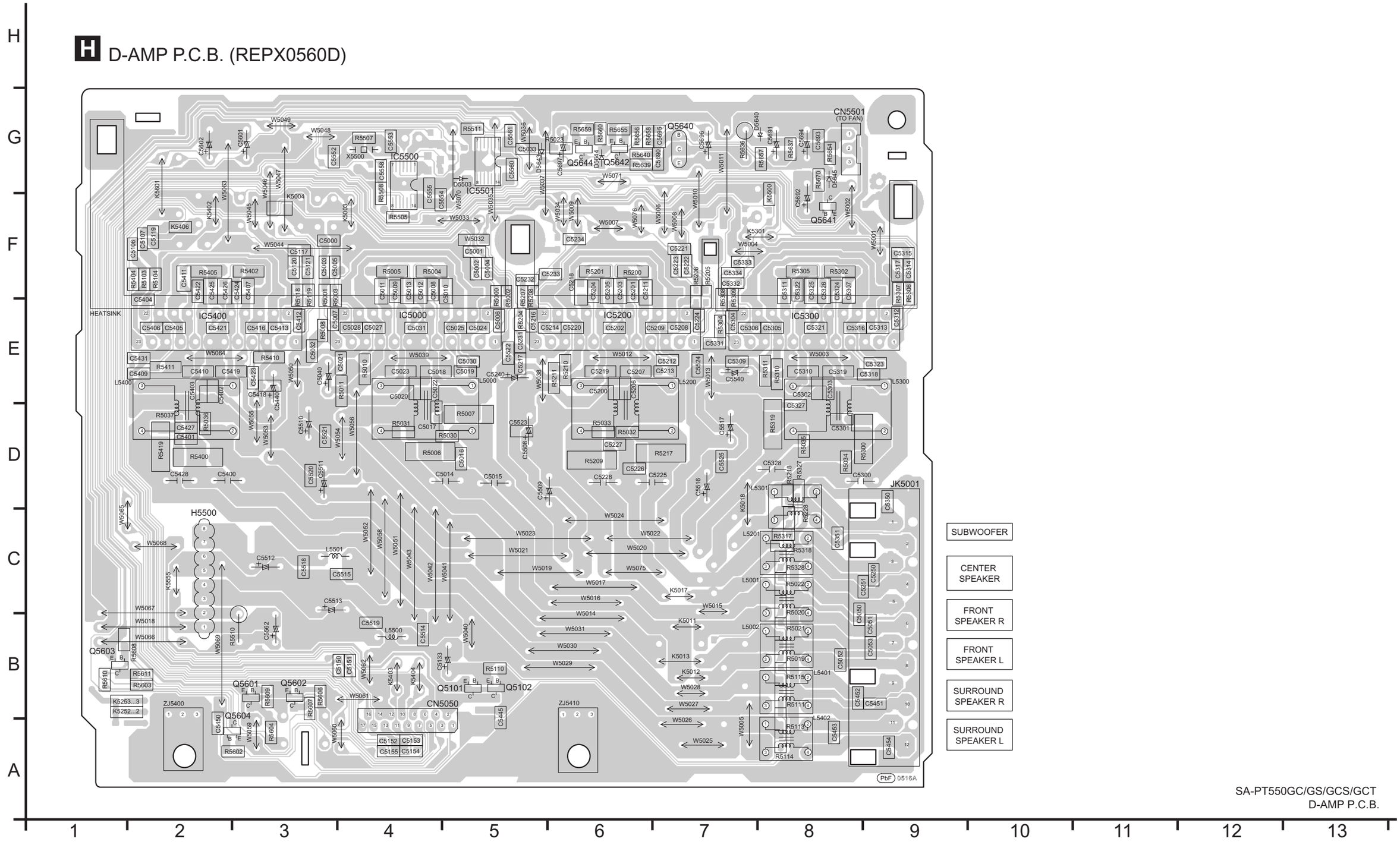


DIGITAL TRANSMITTER

SA-PT550GC/GS/GCS/GCT
VOLUME/USB/WIRELESS ADAPTER P.C.B.

21.5. D-Amp P.C.B.

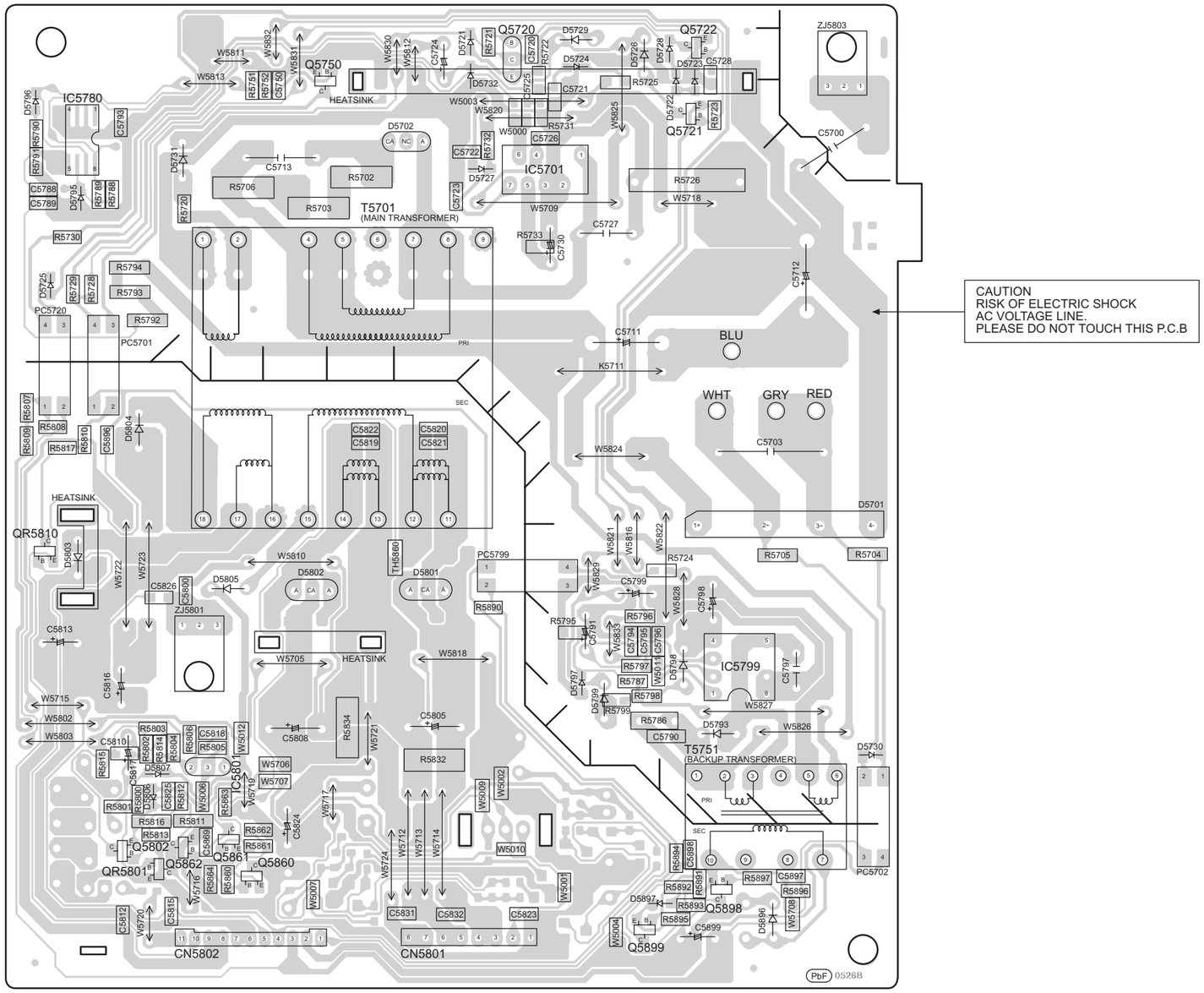
H D-AMP P.C.B. (REPX0560D)



SA-PT550GC/GS/GCS/GCT
D-AMP P.C.B.

21.6. SMPS P.C.B.

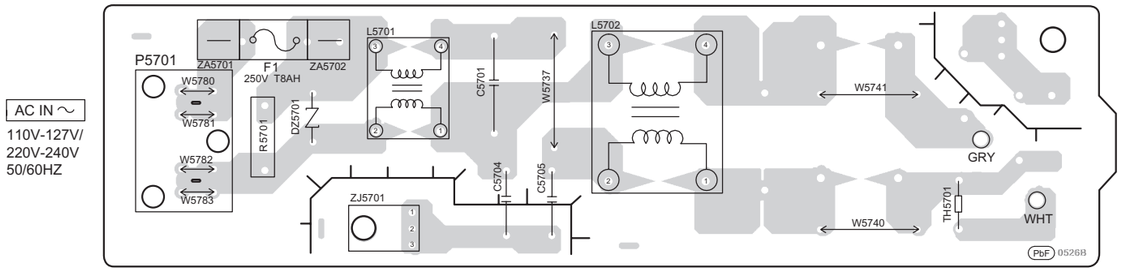
SMPS P.C.B. (REPX0569B)



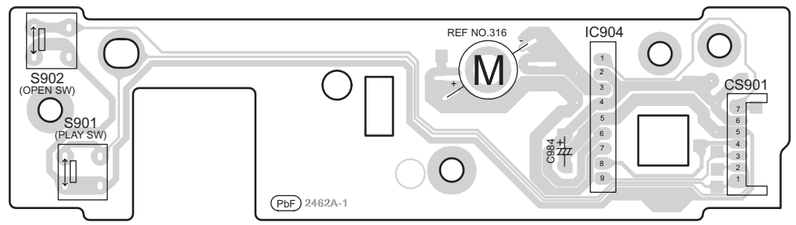
SA-PT550GC/GS/GCS/GCT
SMPS P.C.B.

21.7. AC-Inlet, Wireless Adapter, Relay & Voltage Selector P.C.B.

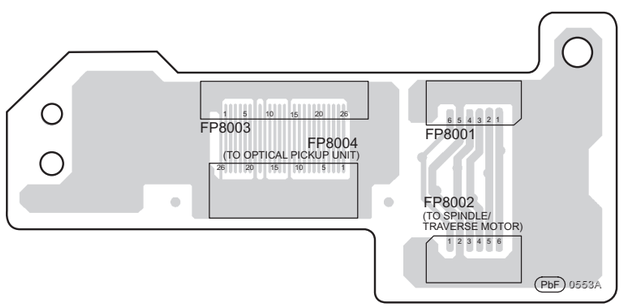
J AC-INLET P.C.B. (REPX0569B)



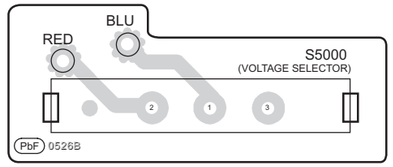
L TRAY LOADING P.C.B. (REP4238A)



K RELAY P.C.B. (REPX0604A)



M VOLTAGE SELECTOR P.C.B. (REPX0569B)



SA-PT550GC/GS/GCS/GCT
AC-INLET/RELAY/TRAY LOADING/VOLTAGE SELECTOR P.C.B.

22 Basic Troubleshooting Guide

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

Problems	Checking Points	Checking Components
1) Distorted picture or abnormal sound is head during the initialization	a) Check SDRAM address, data bus, CLK and other control signals waveform	IC8051
	b) Check video signals	LB8301, R8321, R8322, LB8302, R8325, R8326
	c) Check audio DAC circuitry * Compare the above with OK condition HDMI module P.C.B.	IC8421 *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, Q8561, Q8562
	c) Check LSI IC connection to motor drive circuitry *Compare the above with OK condition HDMI Module P.C.B.	IC8001 Pin 144 ,145 * 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 HDMI Module to Traverse unit	FP8251
	b) Check motor driver circuitry on the voltages and control signals *Compare the above with OK condition HDMI 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 HDMI Module P.C.B.	Q8551, Q8552, LB8531 (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
9) Cannot read data from USB	a) Check USB connector & FFC b) Check LSI O/P c) Check IC supply (+5V)	FP9001 IC8001 Pin 144, 146 IC9005 Pin 2, 3

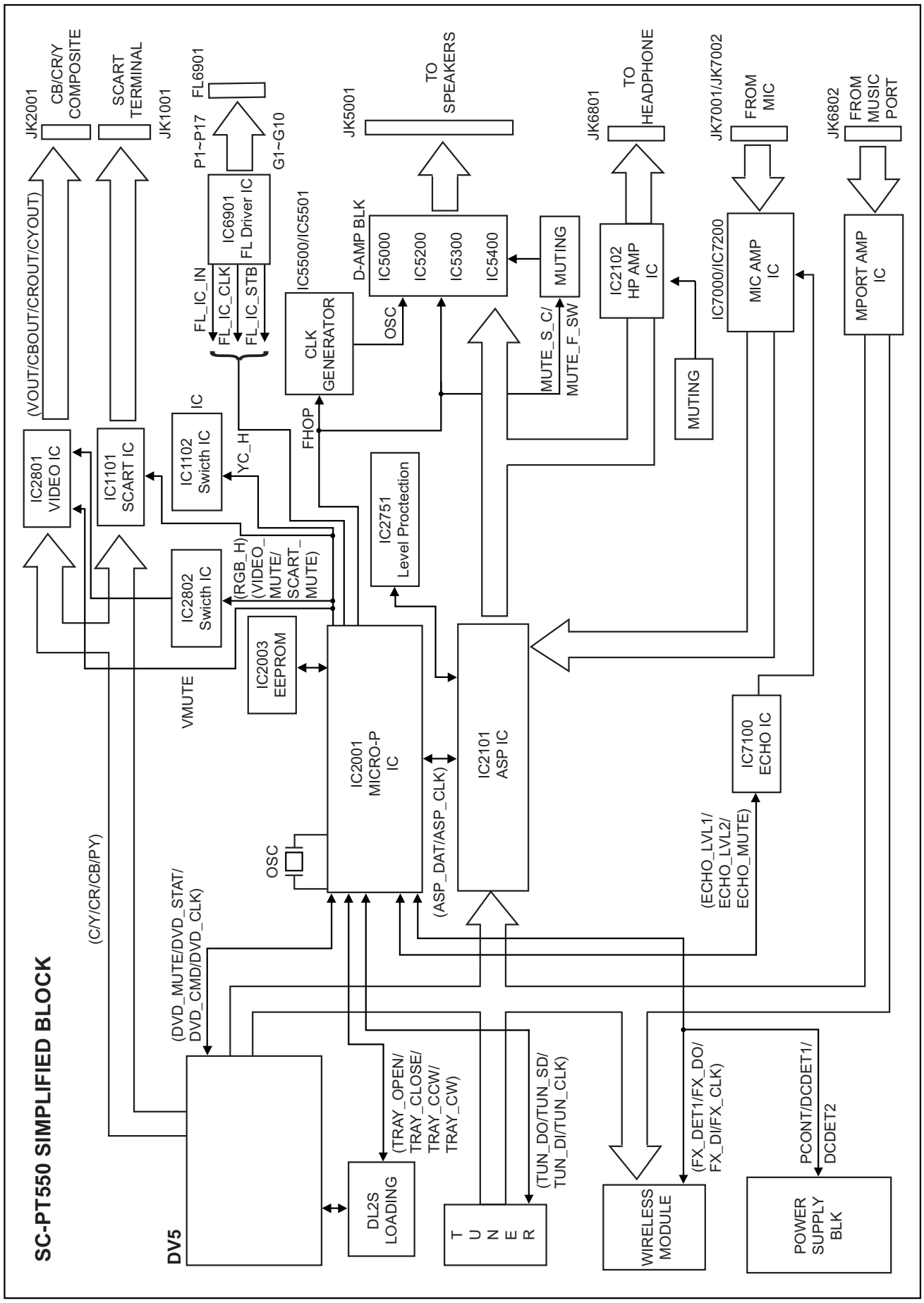
22.2. Basic Troubleshooting Guide for HDMI AV output

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 (Pin 72, 73, 76, 77, 80, 81) - Clock (Pin 10,12)	 L3903, L3904, L3905, L3906
	5) HDMI Transmitter communication lines to TV - Data, SDA (Pin 120, IC8001) - Clock, SCL (Pin 121, IC8001)	 LB3905, R3905, Q3902, R3904 LB3904, R3907, Q3903, R3906
	6) HDMI Transmitter communications from LSI (IC8001)	RX3901
	7) Local Port Slave Address setting resistor	R3921
	8) HDMI Transmitter +3.3V Supply	LB3901, IC3901 (Pin 26, 42, 47, 52, 70, 84, 100, 106, 115)
	9) HDMI Transmitter +1.2V Supply	IC3901 (Pin 5, 26, 47, 42, 55, 75, 85, 102, 109, 116, 123), LB3908, IC8151 (Pin 2, 4)
	10) HDMI Up-Con +3.3V Supply	LB3901
	11) HDMI Pixel Clock Output from Up-Con to HDMI Transmitter	R8902
	12) Up-Con IC I2C Data and Clock Line	RX3706
	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

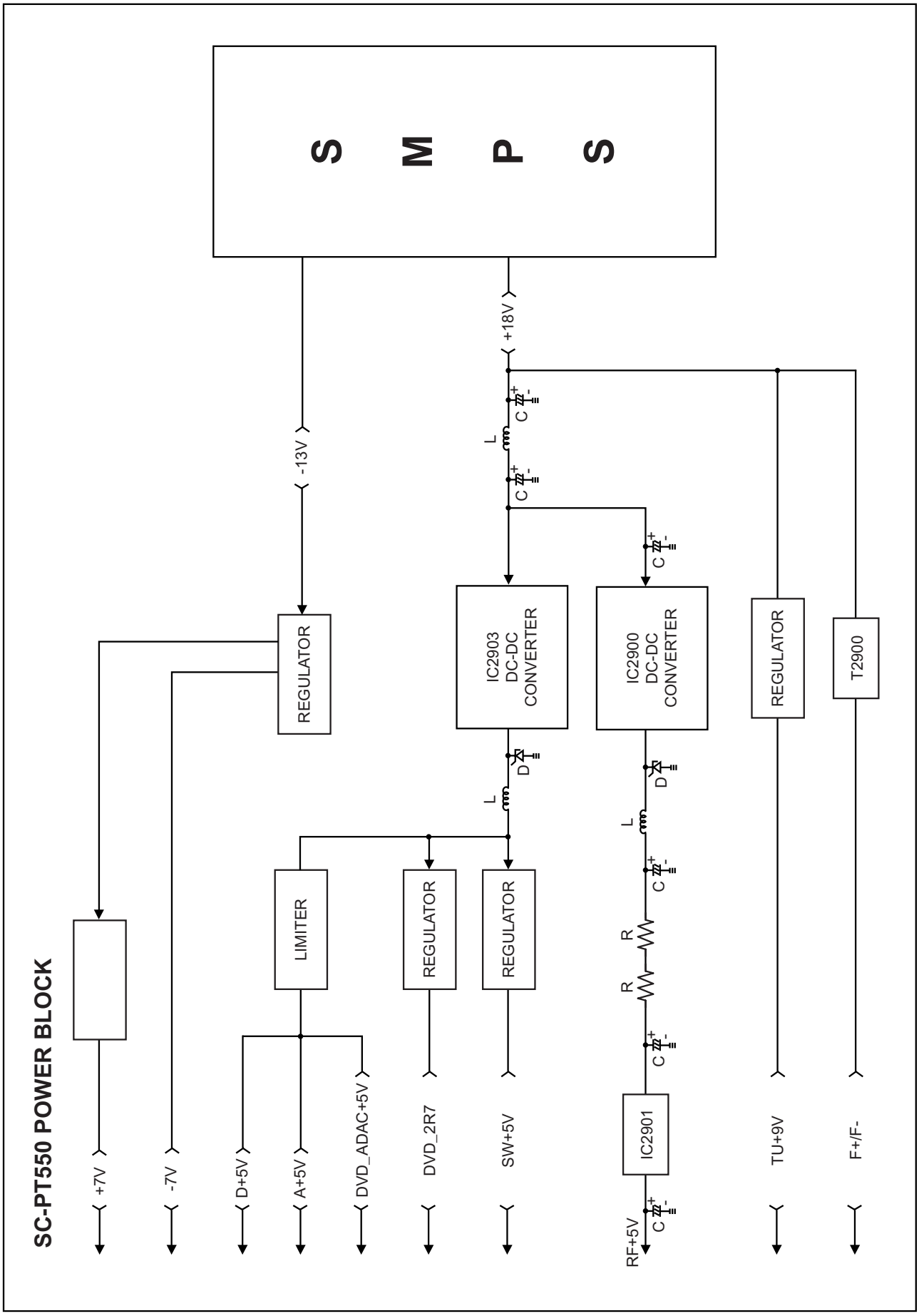
Problems	Checking Points	Checking Components
2) When switching the video output mode from 480P to 720p/1080i, TV display becomes blank	1) Supply for Up-Con (IC3901) - Pin 9, 124 2) GND for Up-Con - Pin 7, 125 3) Check for capacitor short to GND	LB3902 C3902, C3928, C3925
3) Color Problem. TV screen is 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.

23 Overall Block Diagram for PT550

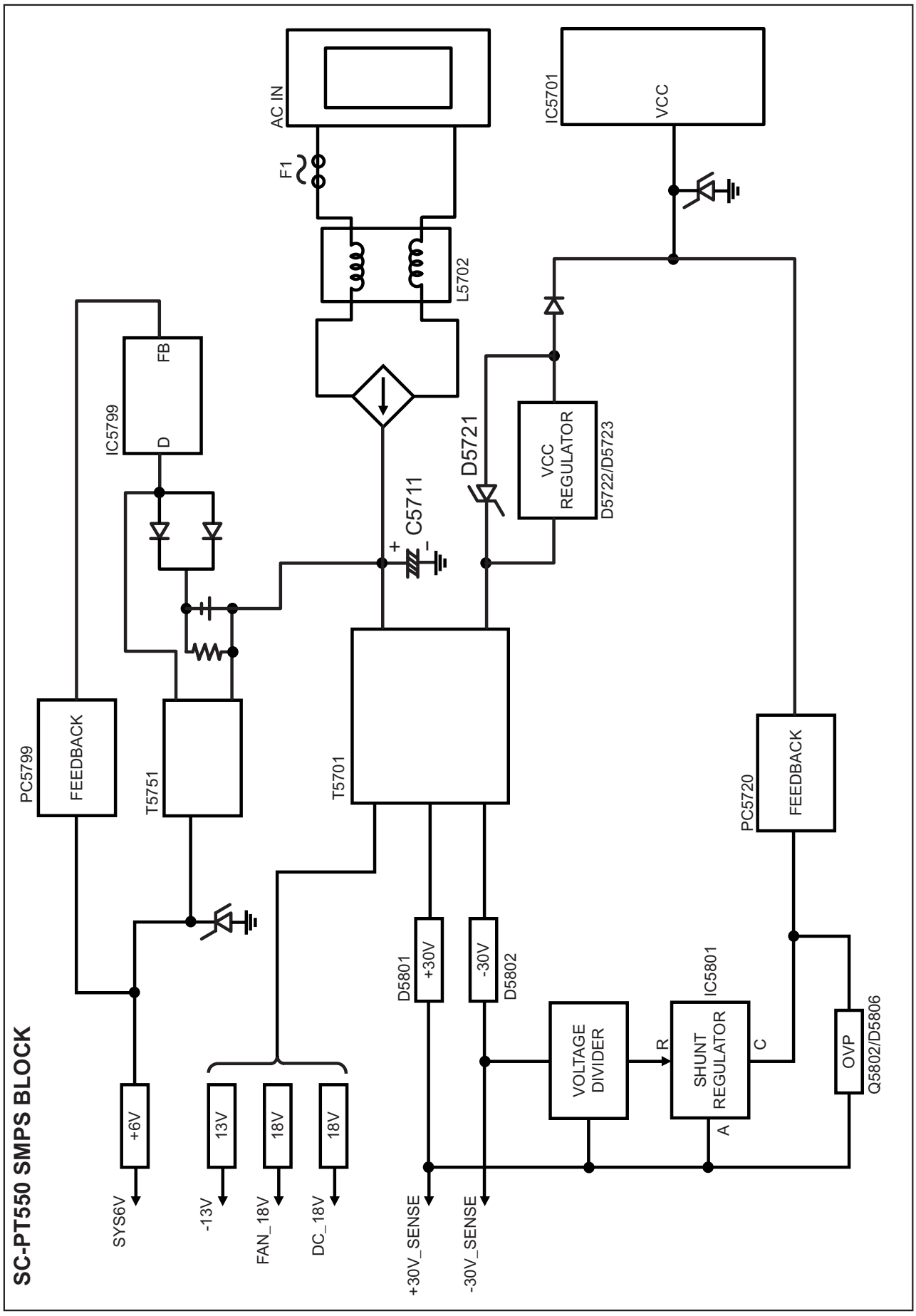
23.1. SC-PT550 Simplified Block



23.2. SC-PT550 Power Block



23.3. SC-PT550 SMPS Block



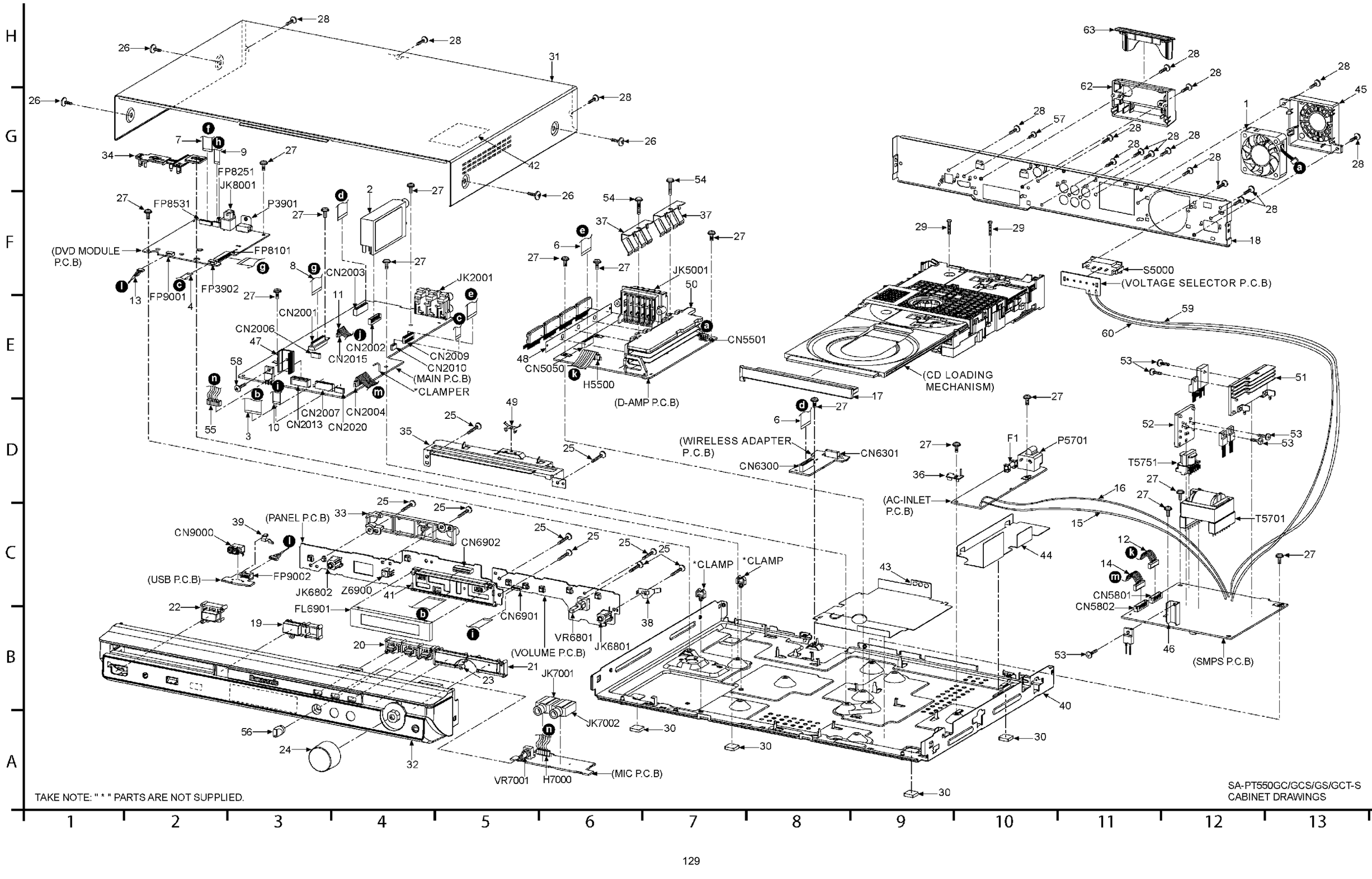
24 Terminal Function of ICs

24.1. IC2001 (C2CBYY000418): System Control IC

Pin No.	Terminal Name	I/O	Function
1	TRAY_CLOSE	I	LOADING MECHA CLOSE SW (L: SW ON)
2	TRAY_CCW	O	Terminal for tray control 1
3	TRAY_CW	O	Terminal for tray control 2
4	TRAY_OPEN	I	LOADING MECHA OPEN SW (L: SW ON)
5	MIC_SW	I	MIC Insertion Detect (if MIC_EN=1)
6	NC	-	No Connection
7	XM_EN	I	Wireless Data Input (Disable)
8	BYTE	-	VSS (GND)
9	CNVSS	-	VSS (GND)
10	GND	-	GND (0V)
11	RDS_EN	I	RDS Enable (H=Enable, L=Disable)
12	RESET	I	SYSTEM RESET INPUT
13	XOUT	-	MAIN CLOCK OUTPUT (10.0MHZ)
14	VSS	-	GND (0V)
15	XIN	-	MAIN CLOCK INPUT (10 MHZ)
16	VCC	-	POWER SUPPLY (5V)
17	NMI	I	CONNECT TO VCC, EXTERNAL INTERRUPT I/P
18	RMT	I	REMOCON INPUT
19	SYNC	I	AC FAILURE DETECT INPUT
20	NC	-	No Connection
21	MIC_EN	I	Microphone Enable (L=Disable, H=Enable)
22	NC	-	No Connection
23	EDA	I/O	DATA signal for the EEPROM
24	ECK	O	CLOCK signal for the EEPROM
25	ECS	O	LAT signal for the EEPROM
26	TV_EN	I	Disable/Enable for TV Selector
27	NC	-	No Connection
28	DVD_CLK	I	CLK signal for the DVD Module
29	DVD_STAT	I	STATUS signal from the DVD Module
30	DVD_CMD	O	CMD signal for the DVD Module
31	FX_DO	O	Wireless Data Output
32	FX_DI	I	Wireless Data Input
33	FX_CLK	O	Wireless Clock
34	FX_DET1	O	RF Change Direction (Wireless Module)
35	TUN_SD	I	Tuner Station Detect
36	TUN_CLK	0	I2C Clock for Tuner
37	TUN_DO	I	Stereo Detect
38	TUN_DI	O	I2C Data for Tuner
39	FX_EN	I	Wireless Enable
40	DVD_PCONT	O	Control Signal for the Power for the DVD MODULE
41	EPM	I	[Flash Connector]
42	DVD_MUTE	I	Signal from DVD module control mute circuit
43	DC_DET1	I	DC Detection circuit 1
44	SCART_MUTE	O	Line out for SCART terminal
45	ACS_EN	I	Wide Surround Enable
46	VMUTE	O	Video Mute Control
47	ASP_CLK	O	Clock signal for 6ch VOL ASP
48	ASP_DAT	O	Data signal for 6ch VOL ASP
49	NC	-	No Connection
50	NC	-	No Connection
51	NC	-	No Connection
52	HBASS_SW	O	HBASS Control
53	RGB_H	O	Mute signal 1 for video output
54	MULTI_1	O	Multi Room selector 1
55	VMUTE_MAIN	-	No connection
56	POS_SW	I	Position Sensor
57	NC	-	No Connection
58	NC	-	No Connection
59	SENS1	I	Digital Amp Output Sensor 1
60	SENSE2	I	Digital Amp Output Sensor 2
61	OPT_EN	I	Optical IN Enable (L=Disble, H=Enable)
62	VCC	-	POWER SUPPLY 5.0V
63	DC_DET2	I	DC Detection Circuit 2
64	VSS	-	GND (0V)
65	YC_H	O	Control signal for the video signal Mix
66	NC	-	No Connection
67	HOP_DA	O	Frequency Hop Control DA
68	MUTE_C_S	O	Center and Surround L & R Mute
69	MUTE_F_SW	O	Front L & R Mute and SubWoofer Mute
70	AMBP	O	AM Beat Proof for SMPS
71	MOD_DA	O	Digital Amp Standby Control
72	PCONT	O	System Power Control
73	CEC_OUT	I	Output Port for HDMI/CEC
74	ACS_MUTE	O	ACS Mute Control
75	CEC_IN	I	HDMI/CEC Input
76	JOG_A/VOL_UP	I	Signal A from Volume JOG / Volume Up Button
77	JOG_B/VOL_DN	I	Signal B from Volume JOG / Volume Down Button
78	HP_MUTE	O	Head Phone Mute signal
79	RDS_DAT	I	Data signal from the RDS decoder
80	WIDE1	O	Control Signal for the WIDE function
81	RDS_CLK	I	Clock signal from the RDS decoder
82	WS_LED	O	Wide Surround LED
83	ECHO_LVL1	O	Echo Level 1 Control
84	ECHO_LVL2	O	Echo Level 2 Control
85	FLD_CLK	O	Clock Signal for the FL Driver
86	FLD_STB	O	FL Strobe
87	FLD_OUT	O	FL Data Out
88	ECHO_MUTE	O	Echo Mute
89	MD3	I	Model Code 3
90	MD2	I	Model Code 2
91	KEY 2	I	Key 2 line input
92	ACS	I	Auto Calibration
93	DES3	I	DVD Region Setting
94	DES2	I	Model Selector
95	DES1	I	REGION Setting for Tuner
96	AVSS	-	Analog Power Supply Input
97	KEY1	I	Key 1 Line input
98	VREF	-	Reference Voltage Input
99	AVCC	-	Analog Power Supply Input
100	BRAKE_H	O	Terminal for tray control 3

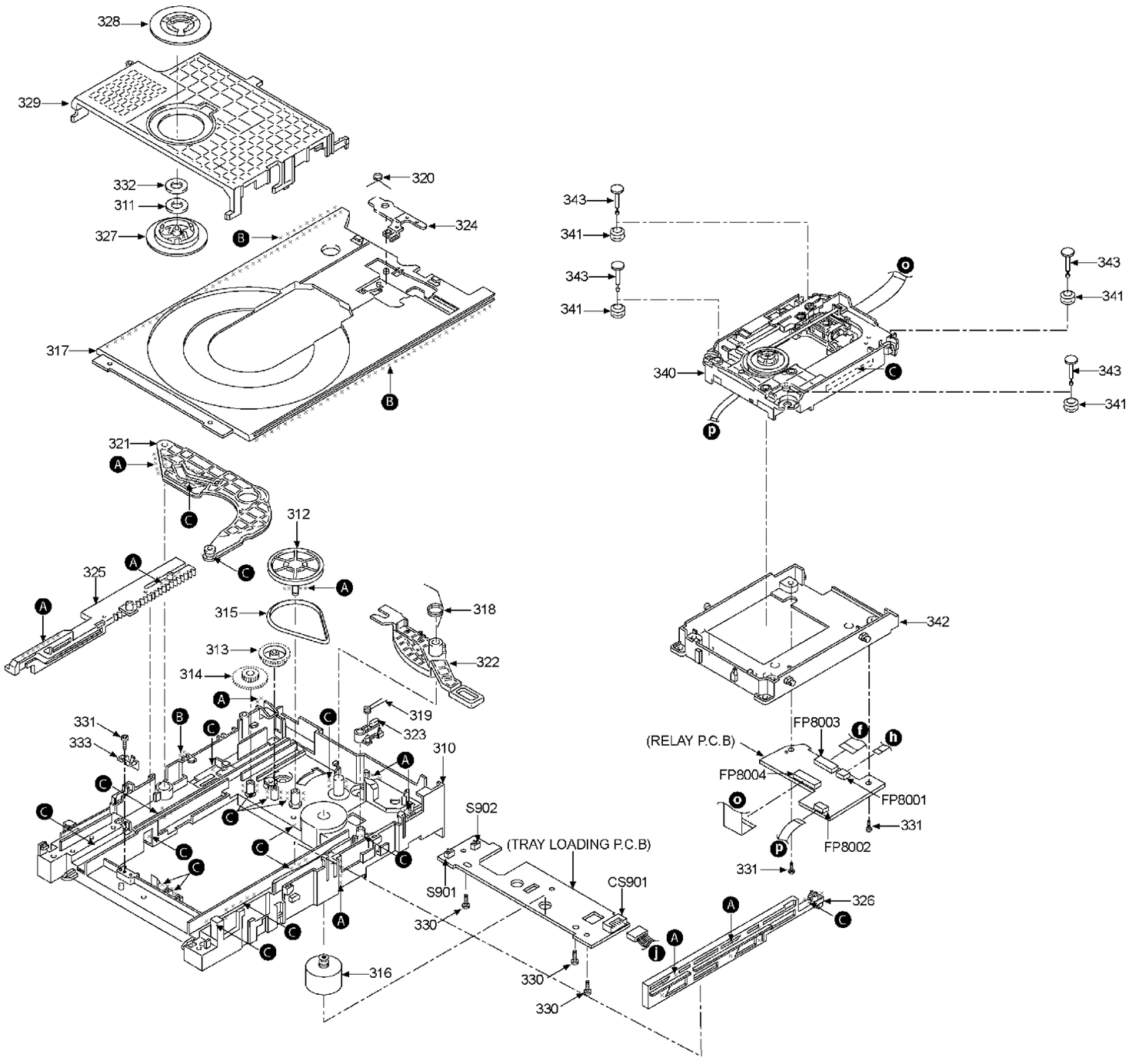
25 Exploded Views

25.1. Cabinet Parts Location



TAKE NOTE: " * " PARTS ARE NOT SUPPLIED.

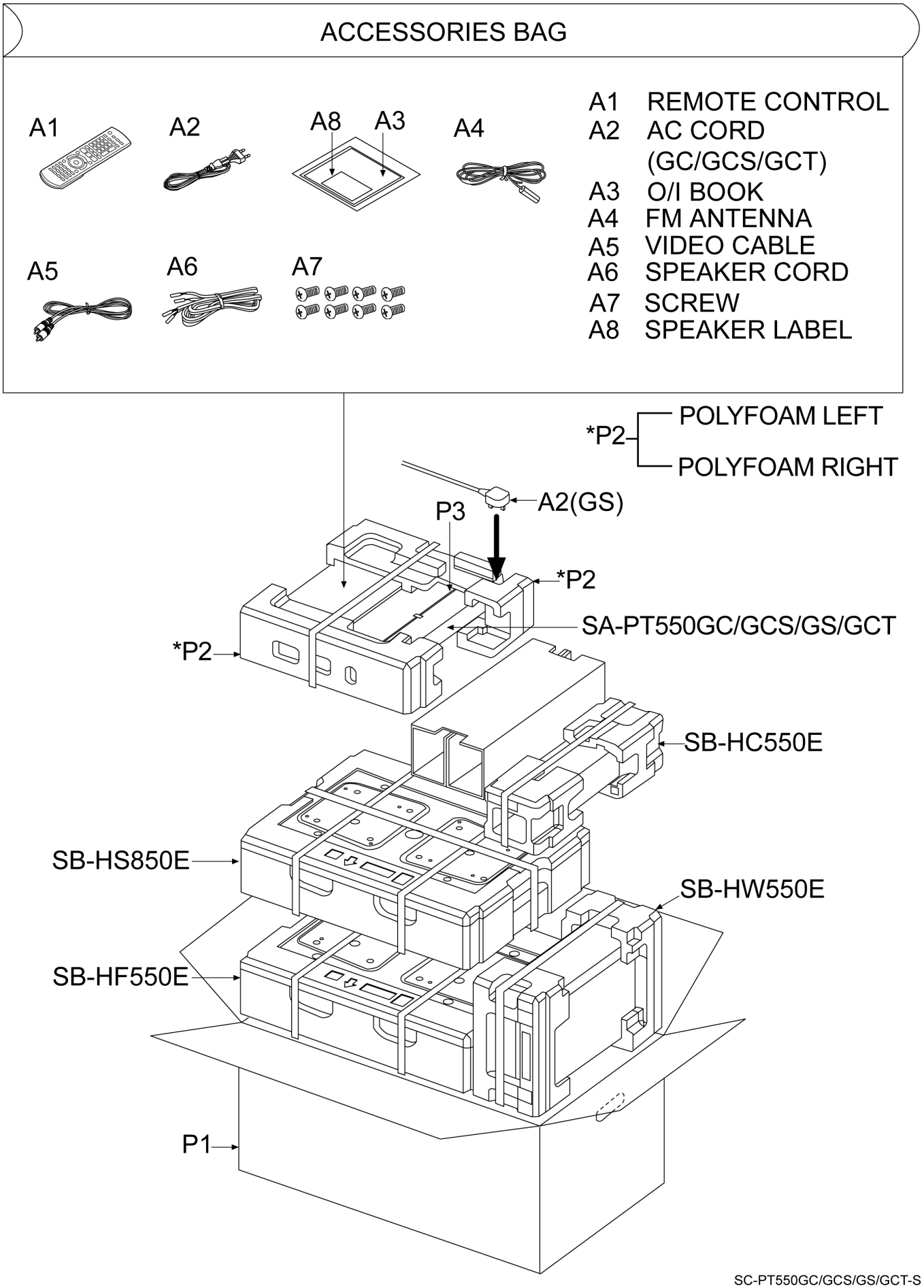
SA-PT550GC/GCS/GS/GCT-S
CABINET DRAWINGS



		PART NUMBER
A	GREASE	RFKXPG641
B	HANARL	VFK1784
C	DRYSURF	RFKXGUD24

SA-PT550GC/GCS/GS/GCT-S
CD LOADING MECHANISM DRAWINGS

25.2. Packaging



SC-PT550GC/GCS/GS/GCT-S
PACKAGING DRAWINGS

26 Replacement Parts List

Notes:

- Important safety notice:

  Components identified by ⚠ 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 manufacture's specified parts shown in the parts list.
- Warning: This product uses a laser diode. Refer to caution statements.
- Capacity values are in microfarads (μF) unless specified otherwise, P=Pico-farads (pF), F=Farads (F).
- 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:	Arablic	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		

26.1. Component Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET AND CHASSIS	
1	L6FAJCCH0007	SMALL DC FAN MOTOR	[M]
2	J3CBBB000001	TUNER PACK	[M]
3	REEX0671	19P FFC (PANEL)	[M]
4	REEX0672	7P FFC (HDMI)	[M]
6	REEX0675	17P FFC (D-AMP)	[M]
7	REEX0676	26P FFC WIRE (MECHA)	[M]
8	REEX0677	50P FFC (HDMI)	[M]
9	REEX0678	6P FFC (MECHA)	[M]
10	REEX0758	8P FFC WIRE (VOLUME)	[M]
11	REXX0384	7P FLAT WIRE (DVD)	[M]
12	REXX0559	8P FLAT WIRE (D-AMP)	[M]
13	REXX0560-1	USB SHIELD WIRE	[M]
14	REXX0561	11P FLAT WIRE (MAIN)	[M]
15	REXX0563-J	WIRE (WHITE)	[M]
16	REXX0564-J	WIRE (GREY)	[M]
17	RGKX0383-S	DVD LID	[M]
18	RGRX0060C-A1	REAR PANEL	[M]GC/GS
18	RGRX0060C-B	REAR PANEL	[M]GCS
18	RGRX0060C-C1	REAR PANEL	[M]GCT
19	RGUX0692-S	OPEN CLOSE BUTTON	[M]
20	RGUX0693-S	REV/FWD BUTTON	[M]
21	RGUX0694-S	PLAY/STOP BUTTON	[M]
22	RGUX0702-K	POWER BUTTON	[M]
23	RGUX0728-S	STOP BUTTON	[M]
24	RGWX0106-S	VOLUME KNOB	[M]
25	RHD26046	SCREW	[M]
26	RHD30007-1SJ	SCREW	[M]
27	RHD30111-3	SCREW	[M]
28	RHD30119-S	SCREW	[M]
29	RHDC0023	SCREW	[M]
30	RKA0059-K	LEG RUBBER	[M]
31	RKMX0107A-S3	TOP CABINET	[M]
32	RFKGAPT550GC	FRONT PANEL ASS'Y	[M]
33	RMAX0102	MECHA HOLDER	[M]
34	RMAX0103	MECHA CHASSIS	[M]
35	RMAX0104	PANEL ANGLE	[M]
36	RMAX0109	D-AMP PCB BRACKET	[M]
37	RMC0465	TR SPRING	[M]
38	RMCX0042	EARTH SPRING	[M]
39	RMCX0046	USB EARTH SPRING	[M]
40	RMKX0125	BOTTOM CHASSIS	[M]
41	RMNX0149	FL HOLDER	[M]
42	RMNX0207	SMPS PCB INSULATOR	[M]
43	RMNX0208	SMPS PCB INSULATOR	[M]
44	RMNX0209	AC-IN PCB INSULATOR	[M]
45	RMQX0233-K	FAN COVER	[M]
46	RMY0285A	SMALL HEATSINK	[M]
47	RMYX0191	HEATSINK EXTRUSSION	[M]
48	RMZX0038	IC INSULATOR	[M]
49	RSC0706	EARTH SPRING	[M]
50	RXXX0085-J	HEATSINK UNIT A	[M]
51	RXXX0088	HEATSINK UNIT B	[M]
52	RXXX0089	HEATSINK UNIT C	[M]
53	XTB3+10JFJ	SCREW	[M]
54	XTW3+8TFJ	SCREW	[M]
55	REXX0562	9P FLAT WIRE (MIC)	[M]
56	RGW0352A-K	MIC KNOB	[M]
57	XSN3+4FJ	SCREW	[M]
58	XTB3+8JFJ	SCREW	[M]
59	REXX0565-J	VOLTAGE SELECTOR WIRE (RED)	[M]
60	REXX0566-J	VOLTAGE SELECTOR WIRE (BLUE)	[M]
62	RMKX0127-K1	TRANSMITTER CHASSIS	[M]
63	RMVX0109-K	TRANSMITTER COVER	[M]
		TRAVERSE DECK	
310	RMK0591A	MECHA CHASSIS	[M]
311	RHM0003-J	MAGNET	[M]
312	RDG0547	PULLEY GEAR	[M]
313	RDG0548-1	RELAY GEAR	[M]
314	RDG0549	DRIVE GEAR	[M]
315	RDV0070	BELT	[M]
316	REM0133	MOTOR UNIT	[M]
317	RGQ0395-K1	TRAY	[M]
318	RME0350	CHANGE LEVER SPRING	[M]
319	RME0351A	LOCK LEVER SPRING	[M]
320	RME0353	TRAY SLIDER SPRING	[M]
321	RML0627-2	DRIVE ARM	[M]
322	RML0628	CHANGE LEVER	[M]
323	RML0629	LOCK LEVER	[M]
324	RML0631	TRAY SLIDER	[M]
325	RMM0247-3	DRIVE RACK	[M]
326	RMM0248	SUB RACK	[M]
327	RMR1446-X	CLAMPER	[M]
328	RMR1447-X	MAGNET HOLDER	[M]
329	RMR1468-K	CLAMP PLATE	[M]
330	XTN26+6GFJ	SCREW	[M]
331	XTV2+6GFJ	SCREW	[M]
332	XWG6FFJ	WASHER	[M]
333	RMC0387	SUPPORT SPRING	[M]
340	RAE2024Z-S	TRAVERSE UNIT	[M] ⚠
341	RMG0598A-K	FLOATING RUBBER	[M]
342	RMR1596-X2	MIDDLE CHASSIS	[M]
343	RMS0789	FIXED PIN	[M]
		PRINTED CIRCUIT BOARDS	
	REPX0563D	DVD MODULE P.C.B.	[M](RTL)GC/GS
	REPX0563E	DVD MODULE P.C.B.	[M](RTL)GCS/GCT
	REPX0578C	MAIN/PANEL/VOLUME/MIC/USB/WIRELESS ADAPTER P.C.B.	[M](RTL)GC/GS
	REPX0578D	MAIN/PANEL/VOLUME/MIC/USB/WIRELESS ADAPTER P.C.B.	[M](RTL)GCS/GCT
	REPX0560D	D-AMP P.C.B.	[M](RTL)
	REPX0569B	SMPS/AC-INLET/VOLTAGE SELECTOR P.C.B.	[M](RTL)
	REPX0604A	RELAY P.C.B.	[M](RTL)
	REP4238A	TRAY LOADING P.C.B.	[M](RTL)
		INTEGRATED CIRCUITS	
IC904	C0GAY0000013	IC TRAY LOADING MOTOR DRIVE	[M]
IC2001	C2CBYY000418	IC SYSTEM CONTROL	[M]
IC2101	C1AB00002735	IC AUDIO SIGNAL PROCESSOR	[M]
IC2102	C0AABB000125	IC HEADPHONE AMP	[M]
IC2751	C0ABBB000350	IC OP AMP	[M]
IC2801	C9ZB00000461	IC VIDEO BUFFER	[M]
IC2900	C0DAAYY00042	IC SWITCHING REGULATOR	[M]
IC2901	C0DAGHG00002	IC +5V 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	C0JBAB000902	IC INVERTER GATE (CLOCK GENERATOR)	[M]
IC5501	C0JBAF000716	IC D-TYPE FLIP-FLOP	[M]
IC5701	C5HACYY00003	IC SWITCHING REGULATOR	[M]
IC5780	C0ABBA000168	IC OP AMP	[M]
IC5799	MIP4110MSSCF	IC SWITCHING REGULATOR	[M]
IC5801	C0DABFC00002	IC SHUNT REGULATOR	[M]
IC6107	C0ABBB000230	IC XM AUDIO AMP	[M]
IC6901	C0HBB0000057	IC DISPLAY DRIVER	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
IC7000	C0ABBB000230	IC MIC AMP	[M]
IC7100	C1BB00001061	IC DIGITAL DELAY WITH ECHO VOLUME	[M]
IC7200	C0ABBB000230	IC MIC AMP	[M]
IC8001	MN2DS0018MP	IC DV5.0 LSI	[M]
IC8051	C3ABPG000145	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	C0FBBK000050	IC AUDIO DAC	[M]
IC8601	C0EBA0000029	IC RESET	[M]
IC8606	C0EBE0000456	IC RESET	[M]
IC8651	RFKWMHB0E321	IC 32M FLASH MEMORY	[SPG]GC /GCT/GS
IC8651	RFKWMHB0F320	IC 32M FLASH MEMORY	[SPG]GC S
IC8691	C0JBAA000502	IC AND GATE	[M]
IC8695	C0JBAA000502	IC AND GATE	[M]
IC8701	C0JBAB000907	IC INVERTER GATE	[M]
IC8901	C0JBAA000501	IC AND GATE	[M]
IC9001	C0JBAZ001251	IC LATCH	[M]
IC9002	C0JBAZ001251	IC LATCH	[M]
IC9003	C0JBAB000908	IC INVERTER GATE	[M]
IC9005	C0DBZYE00002	IC REGULATOR	[M]
		TRANSISTORS	
Q2003	B1GBCFLL0037	TRANSISTOR	[M]
Q2006	B1GBCFJN0033	TRANSISTOR	[M]
Q2007	UNR211H00L	TRANSISTOR	[M]
Q2008	B1GBCFJN0033	TRANSISTOR	[M]
Q2030	B1GBCFJN0033	TRANSISTOR	[M]
Q2096	2SD0601AHL	TRANSISTOR	[M]
Q2097	2SD0601AHL	TRANSISTOR	[M]
Q2101	B1GFGCAA0001	TRANSISTOR	[M]
Q2102	B1GFGCAA0001	TRANSISTOR	[M]
Q2103	B1GFGCAA0001	TRANSISTOR	[M]
Q2201	B1GDCFGA0018	TRANSISTOR	[M]
Q2202	B1GFGCAA0001	TRANSISTOR	[M]
Q2302	B1GFGCAA0001	TRANSISTOR	[M]
Q2502	B1GFGCAA0001	TRANSISTOR	[M]
Q2801	B1GBCFJN0033	TRANSISTOR	[M]
Q2900	B1BABK000001	TRANSISTOR	[M]
Q2901	B1BCCG000002	TRANSISTOR	[M]
Q2902	B1ADCF000001	TRANSISTOR	[M]
Q2903	B1BACD000018	TRANSISTOR	[M]
Q2904	B1BACG000023	TRANSISTOR	[M]
Q2906	B1ABCF000176	TRANSISTOR	[M]
Q2907	B1ABCF000176	TRANSISTOR	[M]
Q2908	B1ACKD000006	TRANSISTOR	[M]
Q2909	B1GBCFJN0033	TRANSISTOR	[M]
Q2910	B1ACKD000006	TRANSISTOR	[M]
Q2911	B1AAKD000012	TRANSISTOR	[M]
Q2916	B1BACG000023	TRANSISTOR	[M]
Q2919	B1ABCF000176	TRANSISTOR	[M]
Q2921	B1ADCF000001	TRANSISTOR	[M]
Q2922	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	B1ABCF000011	TRANSISTOR	[M]
Q5642	B1ABCF000011	TRANSISTOR	[M]
Q5644	B1ABCF000011	TRANSISTOR	[M]
Q5720	2SC3940ARA	TRANSISTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
Q5721	B1ADCF000001	TRANSISTOR	[M]
Q5722	B1ABCF000176	TRANSISTOR	[M]
Q5750	B1ABCF000176	TRANSISTOR	[M]
Q5802	B1ABCF000176	TRANSISTOR	[M]
Q5860	B1ADCF000001	TRANSISTOR	[M]
Q5861	B1ABCF000176	TRANSISTOR	[M]
Q5862	B1ABCF000176	TRANSISTOR	[M]
Q5898	B1ABCF000176	TRANSISTOR	[M]
Q5899	B1ABCF000176	TRANSISTOR	[M]
Q6201	B1ADCE000012	TRANSISTOR	[M]
Q7100	B1GBCFJJ0051	TRANSISTOR	[M]
Q7101	B1GBCFJJ0051	TRANSISTOR	[M]
Q7102	B1GBCFJJ0051	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]
QR5801	B1GBCFJN0033	TRANSISTOR	[M]
QR5810	B1GBCFLL0037	TRANSISTOR	[M]
QR8111	XP0621400L	CHIP TRANSISTOR	[M]
QR8420	UNR521100L	CHIP TRANSISTOR	[M]
QR8571	UNR511V00L	CHIP TRANSISTOR	[M]
PC5701	B3PBA0000402	PHOTO COUPLER	[M] ⚠
PC5702	B3PBA0000402	PHOTO COUPLER	[M] ⚠
PC5720	B3PBA0000402	PHOTO COUPLER	[M] ⚠
PC5799	B3PBA0000402	PHOTO COUPLER	[M] ⚠
		DIODES	
D2005	B0ACCK000005	DIODE	[M]
D2007	B0ACCK000005	DIODE	[M]
D2008	B0ACCK000005	DIODE	[M]
D2009	B0ACCK000005	DIODE	[M]
D2010	B0ACCK000005	DIODE	[M]
D2601	B0ACCK000005	DIODE	[M]
D2602	B0ACCK000005	DIODE	[M]
D2751	B0BC5R000009	DIODE	[M]
D2752	B0ACCK000005	DIODE	[M]
D2753	B0ACCK000005	DIODE	[M]
D2810	B0JCAE000001	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]
D2919	B0BC5R600003	DIODE	[M]
D2920	B0BC035A0007	DIODE	[M]
D2935	B0EAKM000117	DIODE	[M]
D2936	B0EAKM000117	DIODE	[M]
D2937	B0BC4R600016	DIODE	[M]
D2938	B0BC5R000009	DIODE	[M]
D2939	B0ACCK000005	DIODE	[M]
D2940	B0ACCK000005	DIODE	[M]
D2941	B0ACCK000005	DIODE	[M]
D2942	B0ACCK000005	DIODE	[M]
D2943	B0ADCJ000020	DIODE	[M]
D2944	B0ACCK000005	DIODE	[M]
D2945	B0ACCK000005	DIODE	[M]
D2946	B0BC7R500001	DIODE	[M]
D2947	B0BC010A0007	DIODE	[M]
D2950	ERJ6GEY0R00V	DIODE	[M]
D3901	MA2J72800L	DIODE	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
D5503	B0BC5R000009	DIODE	[M]
D5640	B0BC01200019	DIODE	[M]
D5643	B0ACCK000005	DIODE	[M]
D5644	B0ACCK000005	DIODE	[M]
D5645	B0ACCK000005	DIODE	[M]
D5701	B0FBAR000041	DIODE	[M] ⚠
D5702	B0ZAZ0000052	DIODE	[M]
D5721	B0BC010A0007	DIODE	[M]
D5722	B0BC01700015	DIODE	[M]
D5723	B0ACCK000005	DIODE	[M]
D5724	B0ACCK000005	DIODE	[M]
D5725	B0BC6R100010	DIODE	[M]
D5726	B0EAKM000117	DIODE	[M]
D5727	B0ACCK000005	DIODE	[M]
D5728	B0ACCK000005	DIODE	[M]
D5729	B0EAMM000057	DIODE	[M]
D5730	B0ACCK000005	DIODE	[M]
D5731	B0EAMM000057	DIODE	[M]
D5732	B0BC035A0007	DIODE	[M]
D5793	B0EAKB000004	DIODE	[M]
D5795	B0BC5R000009	DIODE	[M]
D5796	B0ACCK000005	DIODE	[M]
D5797	MA2J72800L	DIODE	[M]
D5798	B0EAMM000057	DIODE	[M]
D5799	B0EAMM000057	DIODE	[M]
D5801	B0HBSM000043	DIODE	[M]
D5802	B0HBSM000043	DIODE	[M]
D5803	B0HFRJ000012	DIODE	[M]
D5804	B0EAMM000057	DIODE	[M]
D5805	B0EAMM000057	DIODE	[M]
D5806	B0BC7R500001	DIODE	[M]
D5807	B0ACCK000005	DIODE	[M]
D5896	B0EAMM000057	DIODE	[M]
D5897	B0BC3R700004	DIODE	[M]
D6901	B3AAA0000803	DIODE	[M]
D6902	B0ACCK000005	DIODE	[M]
D6910	B0BC2R4A0006	DIODE	[M]
D7100	B0BC5R000009	DIODE	[M]
D8211	MA2J11100L	DIODE	[M]
D8571	MA2J72800L	DIODE	[M]
DZ5701	ERZV10V511CS	ZENER	[M] ⚠
		VARIABLE RESISTORS	
VR6801	EVEKE2F3024M	VR VOLUME JOG	[M]
VR7001	EVUE27FK3B53	VR MIC VOLUME	[M]
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]
VA9001	EZJZ1V171AA	CHIP VARISTOR	[M]
VA9002	EZJZ1V171AA	CHIP VARISTOR	[M]
		SWITCHES	
S901	RSH1A044-1A	SW PLAY	[M]
S902	RSH1A044-1A	SW OPEN	[M]
S5000	K0ABCA000006	SW VOLTAGE SELECTOR	[M]
S6801	EVQ21405R	SW SELECTOR	[M]
S6802	EVQ21405R	SW REVERSE	[M]
S6803	EVQ21405R	SW FORWARD	[M]
S6804	EVQ21405R	SW STOP	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
S6901	EVQ21405R	SW POWER	[M]
S6902	EVQ21405R	SW OPEN/CLOSE	[M]
S6907	EVQ21405R	SW PLAY	[M]
		CONNECTORS	
CN2001	K1MY50AA0029	50P CONNECTOR	[M]
CN2002	K1KA10AA0031	50P CONNECTOR	[M]
CN2003	K1MN17AA0004	17P CONNECTOR	[M]
CN2004	K1YZ11000002	11P CABLE HOLDER	[M]
CN2006	K1MN08AA0003	8P CONNECTOR	[M]
CN2007	K1MN19AA0004	19P CONNECTOR	[M]
CN2009	K1MN17AA0004	17P CONNECTOR	[M]
CN2010	K1MN07AA0003	7P CONNECTOR	[M]
CN2013	K1KA09A00150	9P CONNECTOR	[M]
CN2015	K1YZ07000001	7P WIRE HOLDER	[M]
CN2020	K1MN08AA0003	8P CONNECTOR	[M]
CN5050	K1MN17AA0004	17P CONNECTOR	[M]
CN5501	K1KA03AA0301	3P CONNECTOR	[M]
CN5801	K1KA08AA0180	8P CONNECTOR	[M]
CN5802	K1KA11AA0194	11P CONNECTOR	[M]
CN6300	K1MN17AA0004	17P CONNECTOR	[M]
CN6301	K1MY22A00003	22P CONNECTOR (FOR TRANSMITTER CARD)	[M]
CN6901	K1MN08AA0003	8P CONNECTOR	[M]
CN6902	K1MN19AA0004	19P CONNECTOR	[M]
CN9000	K1FY104B0011	4P CONNECTOR	[M]
CS901	K1KA07BA0061	7P CONNECTOR	[M]
FP3902	K1MN07BA0148	7P CONNECTOR	[M]
FP8001	K1MN06BA0147	6P CONNECTOR	[M]
FP8002	K1MN06BA0148	6P CONNECTOR	[M]
FP8003	K1MY26BA0053	26P CONNECTOR	[M]
FP8004	K1MY26BA0030	26P FFC CONNECTOR	[M]
FP8101	K1MN50BA0173	50P CONNECTOR	[M]
FP8251	K1MN06AA0076	6P CONNECTOR	[M]
FP8531	K1MY26AA0021	26P CONNECTOR	[M]
FP9001	K1KA05BA0014	5P CONNECTOR	[M]
FP9002	K1KA05BA0061	5P CONNECTOR	[M]
		THERMISTORS	
TH5701	D4CAC8R00002	THERMISTOR	[M] ⚠
TH5860	D4CC11040013	THERMISTOR	[M] ⚠
		COILS & TRANSFORMERS	
L2008	G0C3R3JA0027	COIL	[M]
L2009	G0C220JA0055	COIL	[M]
L2101	J0JBC0000015	CHIP INDUCTOR	[M] ⚠
L2201	J0JBC0000015	CHIP INDUCTOR	[M] ⚠
L2801	G0C220JA0055	COIL	[M]
L2802	J0JBC0000015	CHIP INDUCTOR	[M] ⚠
L2803	J0JBC0000015	CHIP INDUCTOR	[M] ⚠
L2804	J0JBC0000015	CHIP INDUCTOR	[M] ⚠
L2805	J0JBC0000015	CHIP INDUCTOR	[M] ⚠
L2902	G0A101G00022	COIL	[M]
L2903	G0A101G00022	COIL	[M]
L2905	G0A100HA0023	INDUCTOR	[M]
L2907	G0A220GA0026	INDUCTOR	[M]
L2908	G0A200D00002	COIL	[M]
L2909	G0A200D00002	COIL	[M]
L2910	G0A200D00002	COIL	[M]
L2911	G0A200D00002	COIL	[M]
L3903	J0MAB0000170	FILTER	[M]
L3904	J0MAB0000170	FILTER	[M]
L3905	J0MAB0000170	FILTER	[M]
L3906	J0MAB0000170	FILTER	[M]
L5000	G0A150L00003	LINE CHOKE COIL	[M]
L5001	G0B9R5K00003	LINE CHOKE COIL	[M] ⚠
L5002	G0B9R5K00003	LINE CHOKE COIL	[M] ⚠
L5200	G0A150L00003	LINE CHOKE COIL	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
L5201	G0B9R5K00003	LINE CHOKE COIL	[M] ⚠
L5300	G0A150L00003	LINE CHOKE COIL	[M]
L5301	G0B9R5K00003	LINE CHOKE COIL	[M] ⚠
L5400	G0A150L00003	LINE CHOKE COIL	[M]
L5401	G0B9R5K00003	LINE CHOKE COIL	[M] ⚠
L5402	G0B9R5K00003	LINE CHOKE COIL	[M] ⚠
L5500	J0JKB0000020	EMI BEAD CORE	[M]
L5501	J0JKB0000020	EMI BEAD CORE	[M]
L5701	ELF15N035AN	LINE FILTER	[M] ⚠
L5702	ELF22V035B	COIL	[M] ⚠
L6101	J0JBC0000019	CHIP INDUCTOR	[M] ⚠
L6201	J0JBC0000019	CHIP INDUCTOR	[M] ⚠
L6801	J0JBC0000019	CHIP INDUCTOR	[M] ⚠
L6903	J0JBC0000041	CHIP INDUCTOR	[M]
L6904	J0JBC0000019	CHIP INDUCTOR	[M] ⚠
L6905	J0JBC0000019	CHIP INDUCTOR	[M] ⚠
L6906	J0JBC0000019	CHIP INDUCTOR	[M] ⚠
L6907	J0JBC0000019	CHIP INDUCTOR	[M] ⚠
L6908	J0JBC0000019	CHIP INDUCTOR	[M] ⚠
L6909	J0JBC0000019	CHIP INDUCTOR	[M] ⚠
L7001	J0JBC0000019	CHIP INDUCTOR	[M]
L7002	J0JBC0000030	CHIP BEEZ	[M]
L7003	J0JBC0000019	CHIP INDUCTOR	[M]
L7004	J0JBC0000019	CHIP INDUCTOR	[M]
L7005	J0JBC0000030	CHIP BEEZ	[M]
L7101	J0JBC0000019	CHIP INDUCTOR	[M]
L7202	J0JBC0000019	CHIP INDUCTOR	[M]
L7303	J0JBC0000019	CHIP INDUCTOR	[M]
L8001	G1C100K00019	CHIP COIL	[M]
L8201	G1C100K00019	CHIP COIL	[M]
L8301	G1C100K00019	CHIP COIL	[M]
L8302	G1C100K00019	CHIP COIL	[M]
L8303	G1C100K00019	CHIP COIL	[M]
L8330	G1C100K00019	CHIP COIL	[M]
L8501	G1C100K00019	CHIP COIL	[M]
L8550	G1C100KA0055	CHIP INDUCTOR	[M]
L9005	G1BYYYB00009	MODE CHOKE COIL	[M]
		CHIP INDUCTORS	
LB3901	J0JHC0000045	CHIP INDUCTOR	[M]
LB3902	J0JHC0000045	CHIP INDUCTOR	[M]
LB3903	J0JCC0000119	CHIP INDUCTOR	[M]
LB3904	J0JCC0000119	CHIP INDUCTOR	[M]
LB3905	J0JCC0000119	CHIP INDUCTOR	[M]
LB3906	J0JCC0000119	CHIP INDUCTOR	[M]
LB3907	J0JHC0000045	CHIP INDUCTOR	[M]
LB3908	J0JHC0000045	CHIP INDUCTOR	[M]
LB8001	J0JHC0000045	CHIP INDUCTOR	[M]
LB8011	J0JHC0000045	CHIP INDUCTOR	[M]
LB8257	ERJ3GEY0R00V	CHIP RESISTOR	[M]
LB8258	ERJ3GEY0R00V	CHIP RESISTOR	[M]
LB8259	ERJ3GEY0R00V	CHIP RESISTOR	[M]
LB8260	ERJ3GEY0R00V	CHIP RESISTOR	[M]
LB8301	J0JBC0000042	CHIP BEAD	[M]
LB8302	J0JBC0000042	CHIP BEAD	[M]
LB8303	J0JBC0000042	CHIP BEAD	[M]
LB8304	J0JBC0000042	CHIP BEAD	[M]
LB8305	J0JBC0000042	CHIP BEAD	[M]
LB8401	J0JBC0000042	CHIP BEAD	[M]
LB8421	ERJ2GE0R00X	CHIP RESISTOR	[M]
LB8422	ERJ2GE0R00X	CHIP RESISTOR	[M]
LB8423	ERJ2GE0R00X	CHIP RESISTOR	[M]
LB8424	ERJ2GE0R00X	CHIP RESISTOR	[M]
LB8425	ERJ2GE0R00X	CHIP RESISTOR	[M]
LB8426	ERJ2GE0R00X	CHIP RESISTOR	[M]
LB8427	ERJ2GE0R00X	CHIP RESISTOR	[M]
LB8428	ERJ2GE0R00X	CHIP RESISTOR	[M]
LB8429	ERJ2GE0R00X	CHIP RESISTOR	[M]
LB8431	ERJ2GE0R00X	CHIP RESISTOR	[M]
LB8491	ERJ2GE0R00X	CHIP RESISTOR	[M]
LB8530	J0JHC0000045	CHIP INDUCTOR	[M]
LB8531	ERJ2GE0R00X	CHIP RESISTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
LB8551	J0JBC0000042	CHIP BEAD	[M]
LB8561	J0JBC0000042	CHIP BEAD	[M]
LB8571	J0JBC0000042	CHIP BEAD	[M]
LB8690	J0JBC0000044	HIGH LOSS INDUCTOR	[M]
LB8691	ERJ2GEJ101X	CHIP RESISTOR	[M]
LB8692	ERJ2GEJ101X	CHIP RESISTOR	[M]
LB8693	ERJ2GEJ101X	CHIP RESISTOR	[M]
LB8701	J0JBC0000044	HIGH LOSS INDUCTOR	[M]
LB8702	J0JBC0000044	HIGH LOSS INDUCTOR	[M]
LB9001	J0JCC0000119	CHIP INDUCTOR	[M]
LB9001	J0JHC0000034	CHIP FERRITE BEAD	[M]
LB9002	J0JHC0000034	CHIP FERRITE BEAD	[M]
		TRANSFORMERS	
T2900	G4D1A0000117	SWITCHING TRANSFORMER	[M]
T5701	ETS42BN1A6AD	MAIN TRANSFORMER	[M]
T5751	ETS19AB236AG	BACK-UP TRANSFORMER	[M]
		COMPONENT COMBINATION	
Z6900	B3RAD0000143	CRYSTAL	[M]
		FUSE HOLDERS	
ZA5701	EYF52BCY	FUSE HOLDER	[M]
ZA5702	EYF52BCY	FUSE HOLDER	[M]
		TERMINALS	
ZJ5400	K4CZ01000027	TERMINAL	[M]
ZJ5410	K4CZ01000027	TERMINAL	[M]
ZJ5701	K4CZ01000027	TERMINAL	[M]
ZJ5801	K4CZ01000027	TERMINAL	[M]
ZJ5803	K4CZ01000027	TERMINAL	[M]
		OSCILLATORS	
X2001	H2B100500004	CERAMIC RESONATOR	[M]
X5500	H2A6023A0011	CERAMIC RESONATOR	[M]
X8621	H0J270500085	CRYSTAL	[M]
X9004	H1A4805B0027	CRYSTAL	[M]
		DISPLAY TUBE	
FL6901	A2BD00000170	FL DISPLAY	[M]
FL8101	F1H0J1050018	INDUCTOR	[M]
FL8102	F1H0J1050018	INDUCTOR	[M]
FL8103	F1H0J1050018	INDUCTOR	[M]
FL8104	F1J1E1040022	INDUCTOR	[M]
FL8421	F1H0J1050018	INDUCTOR	[M]
		FUSE	
F1	K5D802BNA005	FUSE	[M] ⚠
		FUSE PROTECTOR	
FP2900	K5G401A00008	FUSE PROTECTOR	[M] ⚠
		HOLDERS	
H5500	K1YF08000003	WIRE HOLDER	[M]
H7000	K1YZ09000002	WIRE HOLDER	[M]
		JACKS	
JK2001	K2HA306B0070	JACK COMPONENT VIDEO OUT	[M]
JK5001	K4AC12B00010	JACK SPEAKER	[M]
JK6801	K2HC103A0024	JACK HEADPHONE	[M]
JK6802	K2HC103A0024	JACK MUSIC PORT	[M]
JK7001	K2HB102J0038	JACK MIC 1	[M]
JK7002	K2HB102J0038	JACK MIC 2	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
JK8001	B3RAB0000056	JACK OPTICAL IN	[M]
P3901	K1FY119E0002	JACK HDMI CONNECTOR	[M]
P5701	K2AA2B000015	JACK AC INLET	[M] ⚠
		EARTH TERMINALS	
E2900	K4CZ01000027	EARTH TERMINAL	[M]
E2901	K4CZ01000027	EARTH TERMINAL	[M]
E6300	K4CZ01000027	EARTH TERMINAL	[M]
		PACKING MATERIALS	
P1	RPGX1716	PACKING CASE	[M]GC
P1	RPGX1717	PACKING CASE	[M]GS
P1	RPGX1718	PACKING CASE	[M]GCS
P1	RPGX1719	PACKING CASE	[M]GCT
P2	RPNX0460	POLYFOAM	[M]
P3	RPFX0058-1J	MIRAMAT	[M]
		ACCESSORIES	
A1	N2QAYB000094	REMOTE CONTROL	[M]
A1-1	RKK-HTR0051K	R/C BATTERY COVER	[M]
A2	K2CQ2CA00002	AC CORD	[M]GC/GCS/GCT
A2	K2CT3CA00004	AC CORD	[M]GS
A3	RQTX0038-2B	OI BOOK (EN)	[M]
A3	RQTX0039-G	OI BOOK (AR/PE)	[M]GC/GS
A3	RQTX0040-K	OI BOOK (CN)	[M]GCS/GCT
A4	RSA0007-M	ANTENNA WIRE	[M]
A5	K2KA2BA00001	VIDEO CABLE	[M]
A6	REEX0449B-2L	SPEAKER CORD	[M]
A7	XSN5+12FJ	SCREW	[M]
A8	RQCXA0013-1	SPEAKER LABEL	[M]
		RESISTORS	
R2000	ERJ3GEYJ221V	220 1/16W	[M]
R2002	ERJ3GEYJ221V	220 1/16W	[M]
R2003	ERJ3GEYJ221V	220 1/16W	[M]
R2004	ERJ3GEYJ221V	220 1/16W	[M]
R2005	ERJ3GEYJ221V	220 1/16W	[M]
R2006	ERJ3GEYJ221V	220 1/16W	[M]
R2008	ERJ3GEYJ103V	10K 1/16W	[M]
R2010	ERJ3GEY0R00V	0 1/16W	[M]
R2012	ERJ3GEYJ223V	22K 1/16W	[M]
R2013	ERJ3GEY0R00V	0 1/16W	[M]
R2015	ERJ3GEYJ221V	220 1/16W	[M]
R2016	ERJ3GEYJ221V	220 1/16W	[M]
R2017	ERJ3GEYJ273V	27K 1/16W	[M]
R2019	ERJ3GEYJ273V	27K 1/16W	[M]
R2021	ERJ3GEYJ563V	56K 1/16W	[M]
R2022	ERJ3GEYJ221V	220 1/16W	[M]
R2023	ERJ3GEYJ221V	220 1/16W	[M]
R2024	ERJ3GEYJ102V	1K 1/16W	[M]
R2027	ERJ3GEYJ221V	220 1/16W	[M]
R2030	ERJ3GEYJ102V	1K 1/16W	[M]
R2031	ERJ3GEYJ221V	220 1/16W	[M]
R2032	ERJ3GEYJ473V	47K 1/16W	[M]
R2034	ERJ3GEYJ473V	47K 1/16W	[M]
R2037	ERJ3GEYJ473V	47K 1/16W	[M]
R2040	ERJ3GEYJ103V	10K 1/16W	[M]
R2041	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2043	ERJ3GEYJ103V	10K 1/16W	[M]
R2045	ERJ3GEYJ103V	10K 1/16W	[M]
R2051	ERJ3GEYJ563V	56K 1/16W	[M]
R2052	ERJ3GEYJ221V	220 1/16W	[M]
R2053	ERJ3GEYJ103V	10K 1/16W	[M]
R2054	ERJ3GEYJ221V	220 1/16W	[M]
R2055	ERJ3GEYJ102V	1K 1/16W	[M]
R2060	ERJ3GEYJ221V	220 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R2062	ERJ3GEYJ221V	220 1/16W	[M]
R2068	ERJ3GEYJ221V	220 1/16W	[M]
R2069	ERJ3GEYJ221V	220 1/16W	[M]
R2077	ERJ3GEYJ103V	10K 1/16W	[M]
R2079	ERJ3GEYJ103V	10K 1/16W	[M]
R2080	ERJ3GEYJ103V	10K 1/16W	[M]
R2081	ERJ3GEYJ103V	10K 1/16W	[M]
R2082	ERJ3GEYJ682V	6.8K 1/16W	[M]
R2084	ERJ3GEYJ473V	47K 1/16W	[M]
R2085	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2086	ERJ3GEYJ223V	22K 1/16W	[M]
R2087	ERJ3GEYJ223V	22K 1/16W	[M]
R2088	ERJ3GEYJ182V	1.8K 1/16W	[M]
R2089	ERJ3GEYJ223V	22K 1/16W	[M]GCS/GCT
R2089	ERJ3GEYJ333V	33K 1/16W	[M]GC/GS
R2093	ERJ3GEYJ103V	10K 1/16W	[M]
R2094	ERJ3GEYJ221V	220 1/16W	[M]
R2095	ERJ3GEYJ563V	56K 1/16W	[M]
R2096	ERJ3GEYJ473V	47K 1/16W	[M]
R2097	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2098	ERJ3GEYJ225V	2.2M 1/16W	[M]
R2099	ERJ3GEYJ104V	100K 1/16W	[M]
R2100	ERJ3GEYJ332V	3.3K 1/16W	[M]
R2101	ERJ3GEYJ103V	10K 1/16W	[M]
R2102	ERJ3GEYJ332V	3.3K 1/16W	[M]
R2103	ERJ3GEYJ273V	27K 1/16W	[M]
R2104	ERJ3GEYJ272V	2.7K 1/16W	[M]
R2105	ERJ3GEYJ152V	1.5K 1/16W	[M]
R2106	ERJ3GEYJ563V	56K 1/16W	[M]
R2112	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2113	ERJ3GEY0R00V	0 1/16W	[M]
R2114	ERJ3GEYJ562V	5.6K 1/16W	[M]
R2115	ERJ3GEYJ272V	2.7K 1/16W	[M]
R2119	ERJ3GEYJ392V	3.9K 1/16W	[M]
R2120	ERJ3GEYJ102V	1K 1/16W	[M]
R2133	ERJ3GEYJ103V	10K 1/16W	[M]
R2140	ERJ3GEYJ102V	1K 1/16W	[M]
R2141	ERJ3GEYJ104V	100K 1/16W	[M]
R2142	ERJ3GEYJ102V	1K 1/16W	[M]
R2143	ERJ3GEYJ104V	100K 1/16W	[M]
R2145	ERJ3GEYJ273V	27K 1/16W	[M]
R2160	ERJ3GEYJ102V	1K 1/16W	[M]
R2161	ERJ3GEYJ473V	47K 1/16W	[M]
R2164	ERJ3GEYJ103V	10K 1/16W	[M]
R2165	ERJ3GEYJ103V	10K 1/16W	[M]
R2170	ERJ3GEYJ222V	2.2K 1/16W	[M]
R2171	ERJ3GEYJ273V	27K 1/16W	[M]
R2172	ERJ3GEYJ182V	1.8K 1/16W	[M]
R2175	ERJ3GEYJ122V	1.2K 1/16W	[M]
R2176	ERJ3GEYJ223V	22K 1/16W	[M]
R2177	ERJ3GEYJ220V	22 1/16W	[M]
R2178	ERJ3GEYJ220V	22 1/16W	[M]
R2179	ERJ3GEYJ220V	22 1/16W	[M]
R2180	ERJ3GEYJ220V	22 1/16W	[M]
R2181	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2182	ERJ3GEYJ100V	10 1/16W	[M]
R2183	ERJ3GEYJ102V	1K 1/16W	[M]
R2184	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2185	ERJ3GEYJ122V	1.2K 1/16W	[M]
R2186	ERJ3GEYJ152V	1.5K 1/16W	[M]
R2190	ERJ3GEYJ103V	10K 1/16W	[M]
R2191	ERJ3GEYJ392V	3.9K 1/16W	[M]
R2192	ERJ3GEYJ332V	3.3K 1/16W	[M]
R2193	ERJ3GEYJ152V	1.5K 1/16W	[M]
R2195	ERJ3GEYJ151V	150 1/16W	[M]
R2196	ERJ3GEYJ222V	2.2K 1/16W	[M]
R2197	ERJ3GEYJ104V	100K 1/16W	[M]
R2198	ERJ3GEYJ222V	2.2K 1/16W	[M]
R2199	ERJ3GEY0R00V	0 1/16W	[M]
R2200	ERJ3GEYJ332V	3.3K 1/16W	[M]
R2201	ERJ3GEYJ103V	10K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R2202	ERJ3GEYJ332V	3.3K 1/16W	[M]
R2203	ERJ3GEYJ273V	27K 1/16W	[M]
R2204	ERJ3GEYJ272V	2.7K 1/16W	[M]
R2205	ERJ3GEYJ152V	1.5K 1/16W	[M]
R2206	ERJ3GEYJ563V	56K 1/16W	[M]
R2212	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2213	ERJ3GEY0R00V	0 1/16W	[M]
R2214	ERJ3GEYJ562V	5.6K 1/16W	[M]
R2215	ERJ3GEYJ272V	2.7K 1/16W	[M]
R2219	ERJ3GEYJ392V	3.9K 1/16W	[M]
R2220	ERJ3GEYJ102V	1K 1/16W	[M]
R2233	ERJ3GEYJ103V	10K 1/16W	[M]
R2240	ERJ3GEYJ102V	1K 1/16W	[M]
R2241	ERJ3GEYJ104V	100K 1/16W	[M]
R2242	ERJ3GEYJ102V	1K 1/16W	[M]
R2243	ERJ3GEYJ104V	100K 1/16W	[M]
R2244	ERJ3GEYJ563V	56K 1/16W	[M]
R2260	ERJ3GEYJ102V	1K 1/16W	[M]
R2261	ERJ3GEYJ473V	47K 1/16W	[M]
R2264	ERJ3GEYJ103V	10K 1/16W	[M]
R2265	ERJ3GEYJ103V	10K 1/16W	[M]
R2270	ERJ3GEYJ222V	2.2K 1/16W	[M]
R2271	ERJ3GEYJ563V	56K 1/16W	[M]
R2275	ERJ3GEYJ122V	1.2K 1/16W	[M]
R2276	ERJ3GEYJ223V	22K 1/16W	[M]
R2277	ERJ3GEYJ220V	22 1/16W	[M]
R2278	ERJ3GEYJ220V	22 1/16W	[M]
R2279	ERJ3GEYJ220V	22 1/16W	[M]
R2280	ERJ3GEYJ220V	22 1/16W	[M]
R2281	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2282	ERJ3GEYJ100V	10 1/16W	[M]
R2283	ERJ3GEYJ102V	1K 1/16W	[M]
R2284	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2285	ERJ3GEYJ122V	1.2K 1/16W	[M]
R2286	ERJ3GEYJ152V	1.5K 1/16W	[M]
R2290	ERJ3GEYJ103V	10K 1/16W	[M]
R2291	ERJ3GEYJ392V	3.9K 1/16W	[M]
R2292	ERJ3GEYJ332V	3.3K 1/16W	[M]
R2296	ERJ3GEYJ222V	2.2K 1/16W	[M]
R2297	ERJ3GEYJ104V	100K 1/16W	[M]
R2298	ERJ3GEYJ222V	2.2K 1/16W	[M]
R2299	ERJ3GEY0R00V	0 1/16W	[M]
R2300	ERJ3GEYJ123V	12K 1/16W	[M]
R2301	ERJ3GEYJ822V	8.2K 1/16W	[M]
R2302	ERJ3GEYJ332V	3.3K 1/16W	[M]
R2303	ERJ3GEYJ822V	8.2K 1/16W	[M]
R2304	ERJ3GEYJ123V	12K 1/16W	[M]
R2310	ERJ3GEYJ103V	10K 1/16W	[M]
R2312	ERJ3GEYJ152V	1.5K 1/16W	[M]
R2320	ERJ3GEYJ102V	1K 1/16W	[M]
R2321	ERJ3GEYJ104V	100K 1/16W	[M]
R2339	ERJ3GEYJ182V	1.8K 1/16W	[M]
R2345	ERJ3GEYJ152V	1.5K 1/16W	[M]
R2346	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2400	ERJ3GEYJ123V	12K 1/16W	[M]
R2401	ERJ3GEYJ822V	8.2K 1/16W	[M]
R2402	ERJ3GEYJ332V	3.3K 1/16W	[M]
R2403	ERJ3GEYJ822V	8.2K 1/16W	[M]
R2404	ERJ3GEYJ123V	12K 1/16W	[M]
R2410	ERJ3GEYJ103V	10K 1/16W	[M]
R2412	ERJ3GEYJ152V	1.5K 1/16W	[M]
R2420	ERJ3GEYJ102V	1K 1/16W	[M]
R2421	ERJ3GEYJ104V	100K 1/16W	[M]
R2439	ERJ3GEYJ182V	1.8K 1/16W	[M]
R2445	ERJ3GEYJ152V	1.5K 1/16W	[M]
R2446	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2500	ERJ3GEYJ123V	12K 1/16W	[M]
R2501	ERJ3GEYJ822V	8.2K 1/16W	[M]
R2502	ERJ3GEYJ562V	5.6K 1/16W	[M]
R2503	ERJ3GEYJ822V	8.2K 1/16W	[M]
R2504	ERJ3GEYJ103V	10K 1/16W	[M]
R2510	ERJ3GEYJ272V	2.7K 1/16W	[M]
R2512	ERJ3GEYJ222V	2.2K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R2520	ERJ3GEYJ102V	1K 1/16W	[M]
R2521	ERJ3GEYJ104V	100K 1/16W	[M]
R2600	ERJ3GEYJ102V	1K 1/16W	[M]
R2601	ERJ3GEYJ123V	12K 1/16W	[M]
R2609	ERJ3GEYJ122V	1.2K 1/16W	[M]
R2610	ERJ3GEYJ153V	15K 1/16W	[M]
R2611	ERJ3GEYJ273V	27K 1/16W	[M]
R2612	ERJ3GEYJ563V	56K 1/16W	[M]
R2613	ERJ3GEYJ682V	6.8K 1/16W	[M]
R2614	ERJ3GEYJ273V	27K 1/16W	[M]
R2617	ERJ3GEYJ332V	3.3K 1/16W	[M]
R2620	ERJ3GEYJ102V	1K 1/16W	[M]
R2621	ERJ3GEYJ104V	100K 1/16W	[M]
R2626	ERJ3GEYJ392V	3.9K 1/16W	[M]
R2627	ERJ3GEYJ473V	47K 1/16W	[M]
R2661	ERJ3GEYJ680V	68 1/16W	[M]
R2662	ERJ3GEYJ680V	68 1/16W	[M]
R2664	ERJ3GEY0R00V	0 1/16W	[M]
R2751	ERJ3GEYJ471V	470 1/16W	[M]
R2752	ERJ3GEYJ103V	10K 1/16W	[M]
R2753	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2754	ERJ3GEYJ102V	1K 1/16W	[M]
R2755	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2756	ERJ3GEYJ101V	100 1/16W	[M]
R2757	ERJ3GEYJ473V	47K 1/16W	[M]
R2758	ERJ3GEYJ223V	22K 1/16W	[M]
R2759	ERJ3GEYJ223V	22K 1/16W	[M]
R2760	ERJ3GEYJ824V	820K 1/16W	[M]
R2761	ERJ3GEYJ824V	820K 1/16W	[M]
R2762	ERJ3GEYJ103V	10K 1/16W	[M]
R2763	ERJ3GEYJ103V	10K 1/16W	[M]
R2764	ERJ3GEYJ474V	470K 1/16W	[M]
R2765	ERJ3GEYJ474V	470K 1/16W	[M]
R2803	ERJ3GEYJ102V	1K 1/16W	[M]
R2804	ERJ3GEYJ102V	1K 1/16W	[M]
R2809	ERJ3GEYJ750V	75 1/16W	[M]
R2810	ERJ3GEY0R00V	0 1/16W	[M]
R2812	ERJ3GEYJ750V	75 1/16W	[M]
R2813	ERJ3GEYJ750V	75 1/16W	[M]
R2816	ERJ3GEYJ750V	75 1/16W	[M]
R2862	ERJ3GEYJ103V	10K 1/16W	[M]
R2863	ERJ3GEYJ103V	10K 1/16W	[M]
R2864	ERJ3GEYJ821V	820 1/16W	[M]
R2865	ERJ3GEYJ332V	3.3K 1/16W	[M]GC/GS
R2865	ERJ3GEYJ682V	6.8K 1/16W	[M]GCS/GCT
R2869	ERJ3GEYJ221V	220 1/16W	[M]
R2870	ERJ3GEYJ103V	10K 1/16W	[M]
R2871	ERJ3GEYJ103V	10K 1/16W	[M]
R2872	ERJ3GEYJ103V	10K 1/16W	[M]
R2900	ERJ3GEYJ562V	5.6K 1/16W	[M]
R2902	ERJ3GEYJ470V	47 1/16W	[M]
R2903	ERJ3GEYJ182V	1.8K 1/16W	[M]
R2905	ERJ3GEYJ390V	39 1/16W	[M]
R2906	ERJ3GEYF682V	6.8K 1/16W	[M]
R2907	ERJ3GEYJ272V	2.7K 1/16W	[M]
R2908	ERJ3GEYJ561V	560 1/16W	[M]
R2913	ERG2SJ220E	22 1/32W	[M]
R2914	ERJ3GEYJ392V	3.9K 1/16W	[M]
R2915	ERJ3GEYJ272V	2.7K 1/16W	[M]
R2919	ERJ3GEYF102V	1K 1/16W	[M]
R2920	ERJ3GEYF102V	1K 1/16W	[M]
R2921	ERJ3GEYF332V	3.3K 1/16W	[M]
R2922	ERJ3GEYF102V	1K 1/16W	[M]
R2923	ERJ3GEYF122V	1.2K 1/16W	[M]
R2924	ERJ3GEYJ821V	820 1/16W	[M]
R2925	ERX2SJ1R5E	1.5 1/32W	[M]
R2926	ERJ3GEYJ473V	47K 1/16W	[M]
R2927	ERX2SJ1R5E	1.5 1/32W	[M]
R2929	ERJ3GEYJ151V	150 1/16W	[M]
R2930	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2931	ERJ3GEYJ331V	330 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R2932	ERJ3GEYJ103V	10K 1/16W	[M]
R2933	ERJ3GEYJ331V	330 1/16W	[M]
R2934	ERJ3GEYJ103V	10K 1/16W	[M]
R2935	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2936	ERJ3GEYJ331V	330 1/16W	[M]
R2937	ERJ3GEYJ393V	39K 1/16W	[M]
R2938	ERJ3GEYJ153V	15K 1/16W	[M]
R2939	ERJ3GEYJ1R0V	1 1/16W	[M]
R2941	ERJ3GEYJ223V	22K 1/16W	[M]
R2942	ERJ3GEYJ222V	2.2K 1/16W	[M]
R2943	ERJ3GEYJ272V	2.7K 1/16W	[M]
R2946	ERJ3GEYJ330V	33 1/16W	[M]
R2947	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2948	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2951	ERDS1FVJ3R9T	3.9 1/2W	[M]
R2952	ERJ3GEYJ392V	3.9K 1/16W	[M]
R2953	ERJ3GEYJ561V	560 1/16W	[M]
R2954	ERG2SJ220E	22 1/32W	[M]
R2971	ERJ3GEYJ222V	2.2K 1/16W	[M]
R2972	ERJ3GEYJ220V	22 1/16W	[M]
R2974	ERG2SJ910E	91 1/32W	[M]
R2975	ERJ3GEYJ153V	15K 1/16W	[M]
R2976	ERJ3GEYJ103V	10K 1/16W	[M]
R2982	ERJ3GEYJ471V	470 1/16W	[M]
R2984	ERJ3GEYJ471V	470 1/16W	[M]
R2985	ERJ6GEY0R00V	0 1/10W	[M]
R2989	ERX2SJ1R5E	1.5 1/32W	[M]
R2990	ERJ3GEY0R00V	0 1/16W	[M]
R2991	ERJ3GEY0R00V	0 1/16W	[M]
R2992	ERJ3GEY0R00V	0 1/16W	[M]
R2993	ERJ3GEY0R00V	0 1/16W	[M]
R2994	ERJ3GEY0R00V	0 1/16W	[M]
R2995	ERJ3GEY0R00V	0 1/16W	[M]
R2996	ERDS1FVJ4R7T	4.7 1/2W	[M]
R2997	ERX2SJ1R5E	1.5 1/32W	[M]
R2999	ERJ3GEY0R00V	0 1/16W	[M]
R3901	ERJ2GEJ511X	510 1/32W	[M]
R3902	ERJ2GEJ103X	10K 1/32W	[M]
R3903	ERJ2GEJ103X	10K 1/32W	[M]
R3904	ERJ2GEJ472X	4.7K 1/32W	[M]
R3905	ERJ2GEJ202X	2K 1/32W	[M]
R3906	ERJ2GEJ472X	4.7K 1/32W	[M]
R3907	ERJ2GEJ222X	2.2K 1/32W	[M]
R3921	ERJ2GE0R00X	0 1/32W	[M]
R3924	ERJ2GE0R00X	0 1/32W	[M]
R3925	ERJ2GEJ103X	10K 1/32W	[M]
R3941	ERJ2GEJ273X	27K 1/32W	[M]
R3942	ERJ2GEJ224X	220K 1/32W	[M]
R3943	ERJ2GEJ104X	100K 1/32W	[M]
R3944	ERJ2GEJ221X	220 1/32W	[M]
R3945	ERJ2GEJ103X	10K 1/32W	[M]
R3946	ERJ2GEJ272X	2.7K 1/32W	[M]
R3947	ERJ2GEJ103X	10K 1/32W	[M]
R5000	ERJ3GEYJ562V	5.6K 1/16W	[M]
R5001	ERJ3GEYJ562V	5.6K 1/16W	[M]
R5002	ERJ3GEYJ562V	5.6K 1/16W	[M]
R5003	ERJ3GEYJ562V	5.6K 1/16W	[M]
R5004	ERJ8GEYJ100V	10 1/8W	[M]
R5005	ERJ8GEYJ100V	10 1/8W	[M]
R5006	ERJ1TYJ220U	22 1W	[M]
R5007	ERJ1TYJ220U	22 1W	[M]
R5008	ERJ3GEYJ101V	100 1/16W	[M]
R5010	ERJ8GEYJ100V	10 1/8W	[M]
R5011	ERJ8GEYJ100V	10 1/8W	[M]
R5019	ERJ3GEYJ683V	68K 1/16W	[M]
R5020	ERJ3GEYJ124V	120K 1/16W	[M]
R5021	ERJ3GEYJ122V	1.2K 1/16W	[M]
R5022	ERJ3GEYJ122V	1.2K 1/16W	[M]
R5023	ERJ3GEYJ122V	1.2K 1/16W	[M]
R5030	ERJ3GEYJ562V	5.6K 1/16W	[M]
R5031	ERJ3GEYJ562V	5.6K 1/16W	[M]
R5032	ERJ3GEYJ562V	5.6K 1/16W	[M]
R5033	ERJ3GEYJ562V	5.6K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R5034	ERJ3GEYJ562V	5.6K 1/16W	[M]
R5035	ERJ3GEYJ562V	5.6K 1/16W	[M]
R5036	ERJ3GEYJ562V	5.6K 1/16W	[M]
R5037	ERJ3GEYJ562V	5.6K 1/16W	[M]
R5103	ERJ3GEYJ562V	5.6K 1/16W	[M]
R5104	ERJ3GEYJ562V	5.6K 1/16W	[M]
R5110	ERJ3GEYJ223V	22K 1/16W	[M]
R5111	ERJ3GEYJ124V	120K 1/16W	[M]
R5113	ERJ3GEYJ683V	68K 1/16W	[M]
R5114	ERJ3GEYJ122V	1.2K 1/16W	[M]
R5115	ERJ3GEYJ122V	1.2K 1/16W	[M]
R5118	ERJ3GEYJ562V	5.6K 1/16W	[M]
R5119	ERJ3GEYJ562V	5.6K 1/16W	[M]
R5200	ERJ8GEYJ100V	10 1/8W	[M]
R5201	ERJ8GEYJ100V	10 1/8W	[M]
R5204	ERJ3GEYJ101V	100 1/16W	[M]
R5205	ERJ3GEYJ562V	5.6K 1/16W	[M]
R5206	ERJ3GEYJ562V	5.6K 1/16W	[M]
R5207	ERJ3GEYJ562V	5.6K 1/16W	[M]
R5208	ERJ3GEYJ562V	5.6K 1/16W	[M]
R5209	ERJ1TYJ220U	22 1W	[M]
R5210	ERJ8GEYJ100V	10 1/8W	[M]
R5211	ERJ8GEYJ100V	10 1/8W	[M]
R5217	ERJ1TYJ220U	22 1W	[M]
R5218	ERJ3GEYJ683V	68K 1/16W	[M]
R5228	ERJ3GEYJ124V	120K 1/16W	[M]
R5300	ERJ1TYJ220U	22 1W	[M]
R5302	ERJ8GEYJ100V	10 1/8W	[M]
R5304	ERJ3GEYJ101V	100 1/16W	[M]
R5305	ERJ8GEYJ100V	10 1/8W	[M]
R5306	ERJ3GEYJ562V	5.6K 1/16W	[M]
R5307	ERJ3GEYJ562V	5.6K 1/16W	[M]
R5308	ERJ3GEYJ562V	5.6K 1/16W	[M]
R5309	ERJ3GEYJ562V	5.6K 1/16W	[M]
R5310	ERJ8GEYJ100V	10 1/8W	[M]
R5311	ERJ8GEYJ100V	10 1/8W	[M]
R5317	ERJ3GEYJ122V	1.2K 1/16W	[M]
R5318	ERJ3GEYJ124V	120K 1/16W	[M]
R5319	ERJ1TYJ220U	22 1W	[M]
R5327	ERJ3GEYJ122V	1.2K 1/16W	[M]
R5328	ERJ3GEYJ683V	68K 1/16W	[M]
R5400	ERJ1TYJ220U	22 1W	[M]
R5402	ERJ8GEYJ100V	10 1/8W	[M]
R5404	ERJ3GEYJ101V	100 1/16W	[M]
R5405	ERJ8GEYJ100V	10 1/8W	[M]
R5410	ERJ8GEYJ100V	10 1/8W	[M]
R5411	ERJ8GEYJ100V	10 1/8W	[M]
R5419	ERJ1TYJ220U	22 1W	[M]
R5505	ERJ3GEYJ101V	100 1/16W	[M]
R5507	ERJ3GEYJ105V	1M 1/16W	[M]
R5508	ERJ3GEYJ105V	1M 1/16W	[M]
R5510	ERG2SJ271E	270 1/32W	[M]
R5511	ERJ3GEYJ220V	22 1/16W	[M]
R5602	ERJ3GEYJ103V	10K 1/16W	[M]
R5603	ERJ3GEYJ103V	10K 1/16W	[M]
R5604	ERJ3GEYJ122V	1.2K 1/16W	[M]
R5606	ERJ3GEYJ103V	10K 1/16W	[M]
R5607	ERJ3GEYJ122V	1.2K 1/16W	[M]
R5608	ERJ3GEYJ103V	10K 1/16W	[M]
R5609	ERJ3GEYJ103V	10K 1/16W	[M]
R5610	ERJ3GEYJ122V	1.2K 1/16W	[M]
R5611	ERJ3GEYJ122V	1.2K 1/16W	[M]
R5636	ERDS1FVJ392T	3.9K 1/2W	[M]
R5637	ERJ3GEYJ100V	10 1/16W	[M]
R5639	ERJ3GEYJ332V	3.3K 1/16W	[M]
R5640	ERJ3GEY0R00V	0 1/16W	[M]
R5654	ERJ3GEYJ563V	56K 1/16W	[M]
R5655	ERJ3GEYJ103V	10K 1/16W	[M]
R5656	ERJ3GEYJ103V	10K 1/16W	[M]
R5657	ERJ3GEYJ103V	10K 1/16W	[M]
R5658	ERJ3GEYJ185V	1.8M 1/16W	[M]
R5659	ERJ3GEYJ104V	100K 1/16W	[M]
R5660	ERJ3GEYJ103V	10K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R5670	ERJ3GEY0R00V	0 1/16W	[M]
R5701	ERDS1TJ474B	470K 1/2W	[M]
R5702	ERJ1TYJ683U	68K 1/8W	[M]
R5703	ERJ1TYJ683U	68K 1/8W	[M]
R5704	ERJ8GEYJ394V	390K 1/8W	[M]
R5705	ERJ8GEYJ394V	390K 1/8W	[M]
R5706	ERJ1TYJ683U	68K 1/8W	[M]
R5720	ERJ6GEYJ220V	22 1/10W	[M]
R5721	ERJ6GEYJ103V	10K 1/10W	[M]
R5722	ERJ6GEYJ102V	1K 1/10W	[M]
R5723	ERJ3GEYJ102V	1K 1/16W	[M]
R5724	ERJ6GEYJ121V	120 1/10W	[M]
R5725	ERJ3GEY0R00V	0 1/16W	[M]
R5726	ERX2LJ82MP	0.82 1/32W	[M]
R5728	ERJ3GEYJ104V	100K 1/16W	[M]
R5729	ERJ6GEYJ103V	10K 1/10W	[M]
R5730	ERJ6GEYJ102V	1K 1/10W	[M]
R5731	ERJ3GEY0R00V	0 1/16W	[M]
R5732	ERJ6GEYJ101V	100 1/10W	[M]
R5733	ERJ3GEYJ473V	47K 1/16W	[M]
R5751	ERJ3GEYJ223V	22K 1/16W	[M]
R5752	ERJ3GEYJ222V	2.2K 1/16W	[M]
R5786	ERG2SJ683E	68K 1/32W	[M]
R5787	ERJ3GEYJ753V	75K 1/16W	[M]
R5788	ERJ3GEYJ223V	22K 1/16W	[M]
R5789	ERJ3GEYJ223V	22K 1/16W	[M]
R5790	ERJ3RBD333V	33K 1/16W	[M]
R5791	ERJ3GEYF563V	56K 1/16W	[M]
R5792	ERJ8GEYJ394V	390K 1/8W	[M]
R5793	ERJ8GEYJ394V	390K 1/8W	[M]
R5794	ERJ8GEYJ394V	390K 1/8W	[M]
R5795	ERJ6GEYJ433V	43K 1/10W	[M]
R5796	ERJ6GEYJ222V	2.2K 1/10W	[M]
R5797	ERJ6GEYJ472V	4.7K 1/10W	[M]
R5798	ERJ6GEYJ100V	10 1/10W	[M]
R5799	ERJ6GEYJ100V	10 1/10W	[M]
R5800	ERJ6GEYJ103V	10K 1/10W	[M]
R5801	ERJ3GEYJ123V	12K 1/16W	[M]
R5802	ERJ3RBD272V	2.7K 1/16W	[M]
R5803	ERJ3GEYJ271V	270 1/16W	[M]
R5804	ERJ6RBD473V	47K 1/10W	[M]
R5805	ERJ3RBD222V	2.2K 1/16W	[M]
R5806	ERJ3GEYJ153V	15K 1/16W	[M]
R5807	ERJ6GEYJ331V	330 1/10W	[M]
R5808	ERJ6GEYJ222V	2.2K 1/10W	[M]
R5809	ERJ6GEYJ331V	330 1/10W	[M]
R5810	ERJ3GEYJ331V	330 1/16W	[M]
R5811	ERJ8GEYJ152V	1.5K 1/8W	[M]
R5812	ERJ3RBD822V	8.2K 1/16W	[M]
R5813	ERJ3RBD243V	24K 1/16W	[M]
R5814	ERJ3GEYJ822V	8.2K 1/16W	[M]
R5815	ERJ3GEYJ272V	2.7K 1/16W	[M]
R5816	ERJ8GEYJ152V	1.5K 1/8W	[M]
R5817	ERJ3GEYJ331V	330 1/16W	[M]
R5832	ERJ1TYJ222U	2.2K 1/8W	[M]
R5834	ERJ1TYJ222U	2.2K 1/8W	[M]
R5860	ERJ6GEYF103V	10K 1/10W	[M]
R5861	ERJ6GEYF302V	3K 1/10W	[M]
R5862	ERJ6GEYF103V	10K 1/10W	[M]
R5863	ERJ6GEYF103V	10K 1/10W	[M]
R5864	ERJ6GEYF103V	10K 1/10W	[M]
R5890	ERJ3GEYJ222V	2.2K 1/16W	[M]
R5891	ERJ3RBD472V	4.7K 1/16W	[M]
R5892	ERJ3RBD561V	560 1/16W	[M]
R5893	ERJ3RBD122V	1.2K 1/16W	[M]
R5894	ERJ3GEYJ331V	330 1/16W	[M]
R5895	ERJ3GEYJ681V	680 1/16W	[M]
R5896	ERJ3GEYJ104V	100K 1/16W	[M]
R5897	ERJ3GEYJ101V	100 1/16W	[M]
R6301	ERJ3GEY0R00V	0 1/16W	[M]
R6803	ERJ3GEYJ122V	1.2K 1/16W	[M]
R6804	ERJ3GEYJ102V	1K 1/16W	[M]
R6805	ERJ3GEYJ102V	1K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R6807	ERJ3GEYJ223V	22K 1/16W	[M]
R6809	ERJ3GEYJ223V	22K 1/16W	[M]
R6812	ERJ3GEYJ182V	1.8K 1/16W	[M]
R6914	ERJ3GEYJ563V	56K 1/16W	[M]
R6916	ERJ3GEYJ680V	68 1/16W	[M]
R6917	ERJ3GEYJ680V	68 1/16W	[M]
R6918	ERJ3GEYJ223V	22K 1/16W	[M]
R6919	ERJ3GEYJ472V	4.7K 1/16W	[M]
R6920	ERJ3GEYJ102V	1K 1/16W	[M]
R6923	ERJ3GEYJ102V	1K 1/16W	[M]
R6927	ERJ3GEYJ680V	68 1/16W	[M]
R6934	ERJ3GEYJ470V	47 1/16W	[M]
R6935	ERJ3GEYJ100V	10 1/16W	[M]
R6948	ERJ3GEYJ221V	220 1/16W	[M]
R6949	ERJ3GEYJ221V	220 1/16W	[M]
R6950	ERJ3GEYJ122V	1.2K 1/16W	[M]
R6951	ERJ3GEYJ122V	1.2K 1/16W	[M]
R6960	ERJ3GEYJ222V	2.2K 1/16W	[M]
R6961	ERJ3GEYJ102V	1K 1/16W	[M]
R6962	ERJ3GEYJ102V	1K 1/16W	[M]
R6965	ERJ3GEYJ473V	47K 1/16W	[M]
R6966	ERJ3GEYJ473V	47K 1/16W	[M]
R6967	ERJ3GEYJ103V	10K 1/16W	[M]
R6968	ERJ3GEYJ103V	10K 1/16W	[M]
R6970	ERJ3GEYJ473V	47K 1/16W	[M]
R6971	ERJ3GEYJ473V	47K 1/16W	[M]
R7001	ERJ3GEYJ681V	680 1/16W	[M]
R7002	ERJ3GEYJ561V	560 1/16W	[M]
R7003	ERJ3GEYJ102V	1K 1/16W	[M]
R7004	ERJ3GEYJ103V	10K 1/16W	[M]
R7005	ERJ3GEYJ102V	1K 1/16W	[M]
R7006	ERJ3GEYJ683V	68K 1/16W	[M]
R7007	ERJ3GEYJ102V	1K 1/16W	[M]
R7008	ERJ3GEYJ332V	3.3K 1/16W	[M]
R7009	ERJ3GEYJ823V	82K 1/16W	[M]
R7010	ERJ3GEYJ102V	1K 1/16W	[M]
R7011	ERJ3GEYJ222V	2.2K 1/16W	[M]
R7100	ERJ3GEYJ153V	15K 1/16W	[M]
R7101	ERJ3GEYJ153V	15K 1/16W	[M]
R7102	ERJ3GEYJ153V	15K 1/16W	[M]
R7103	ERJ3GEYJ153V	15K 1/16W	[M]
R7104	ERJ3GEYJ153V	15K 1/16W	[M]
R7105	ERJ3GEYJ153V	15K 1/16W	[M]
R7106	ERJ3GEYJ124V	120K 1/16W	[M]
R7107	ERJ3GEYJ680V	68 1/16W	[M]
R7109	ERJ3GEYJ472V	4.7K 1/16W	[M]
R7110	ERJ3GEYJ152V	1.5K 1/16W	[M]
R7112	ERJ3GEYJ272V	2.7K 1/16W	[M]
R7113	ERJ3GEYJ103V	10K 1/16W	[M]
R7114	ERJ3GEYJ562V	5.6K 1/16W	[M]
R7116	ERJ3GEYJ681V	680 1/16W	[M]
R7119	ERJ3GEYJ223V	22K 1/16W	[M]
R7120	ERJ3GEYJ103V	10K 1/16W	[M]
R7122	ERJ3GEYJ473V	47K 1/16W	[M]
R7123	ERJ3GEYJ123V	12K 1/16W	[M]
R8001	ERJ2GEJ103X	10K 1/32W	[M]
R8003	ERJ2GEJ103X	10K 1/32W	[M]
R8011	ERJ2GEJ220X	22 1/32W	[M]
R8012	ERJ2GEJ220X	22 1/32W	[M]
R8013	ERJ2GEJ220X	22 1/32W	[M]
R8025	ERJ3GEY0R00V	0 1/16W	[M]
R8041	ERJ2GEJ330X	33 1/32W	[M]
R8153	ERJ2RHD621X	620 1/32W	[M]
R8154	ERJ2RHD102X	1K 1/32W	[M]
R8211	ERJ2GEJ103X	10K 1/32W	[M]
R8221	ERJ2GEJ822X	8.2K 1/32W	[M]
R8225	ERJ2GEJ822X	8.2K 1/32W	[M]
R8230	ERJ2GEJ222X	2.2K 1/32W	[M]
R8231	ERJ2GEJ223X	22K 1/32W	[M]
R8232	ERJ2GEJ752X	7.5K 1/32W	[M]
R8251	ERJ6GEYJ6R8V	6.8 1/10W	[M]
R8261	ERJ2GEJ823X	82K 1/32W	[M]
R8262	ERJ2GEJ153X	15K 1/32W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R8263	ERJ2GEJ823X	82K 1/32W	[M]
R8264	ERJ2GEJ153X	15K 1/32W	[M]
R8311	ERJ2RHD242X	2.4K 1/32W	[M]
R8312	ERJ2RHD102X	1K 1/32W	[M]
R8313	ERJ2RHD153X	15K 1/32W	[M]
R8314	ERJ2RHD153X	15K 1/32W	[M]
R8315	ERJ2RKD240X	24 1/32W	[M]
R8316	ERJ2RKD240X	24 1/32W	[M]
R8317	ERJ2GEJ153X	15K 1/32W	[M]
R8318	ERJ2GEJ153X	15K 1/32W	[M]
R8321	ERJ3RBD201V	200 1/16W	[M]
R8322	ERJ3GEY0R00V	0 1/16W	[M]
R8323	ERJ2GEJ330X	33 1/32W	[M]
R8324	ERJ2GEJ102X	1K 1/32W	[M]
R8325	ERJ3RBD201V	200 1/16W	[M]
R8326	ERJ3GEY0R00V	0 1/16W	[M]
R8327	ERJ2GEJ330X	33 1/32W	[M]
R8328	ERJ2GEJ102X	1K 1/32W	[M]
R8331	ERJ3RBD201V	200 1/16W	[M]
R8332	ERJ3GEY0R00V	0 1/16W	[M]
R8333	ERJ2GEJ330X	33 1/32W	[M]
R8334	ERJ2GEJ102X	1K 1/32W	[M]
R8335	ERJ3RBD201V	200 1/16W	[M]
R8336	ERJ2GEJ330X	33 1/32W	[M]
R8337	ERJ2GEJ102X	1K 1/32W	[M]
R8341	ERJ3RBD201V	200 1/16W	[M]
R8342	ERJ2GEJ330X	33 1/32W	[M]
R8343	ERJ2GEJ102X	1K 1/32W	[M]
R8401	ERJ2GEJ101X	100 1/32W	[M]
R8402	ERJ2GEJ100X	10 1/32W	[M]
R8420	ERJ2GEJ222X	2.2K 1/32W	[M]
R8421	ERJ2GE0R00X	0 1/32W	[M]
R8531	ERJ2GEJ152X	1.5K 1/32W	[M]
R8532	ERJ2GEJ222X	2.2K 1/32W	[M]
R8533	ERJ2GE0R00X	0 1/32W	[M]
R8541	ERJ2GEJ153X	15K 1/32W	[M]
R8551	ERJ2GE0R00X	0 1/32W	[M]
R8552	ERJ2GEJ102X	1K 1/32W	[M]
R8553	ERJ2GEJ102X	1K 1/32W	[M]
R8554	ERJ2GEJ680X	68 1/32W	[M]
R8555	ERJ2GEJ2R2X	2.2 1/32W	[M]
R8556	ERJ3GEYJ560V	56 1/16W	[M]
R8557	ERJ3GEYJ510V	51 1/16W	[M]
R8558	ERJ2GEJ473X	47K 1/32W	[M]
R8559	ERJ2GEJ153X	15K 1/32W	[M]
R8561	ERJ2GE0R00X	0 1/32W	[M]
R8562	ERJ2GEJ102X	1K 1/32W	[M]
R8563	ERJ2GEJ102X	1K 1/32W	[M]
R8564	ERJ2GEJ220X	22 1/32W	[M]
R8565	ERJ2GEJ2R2X	2.2 1/32W	[M]
R8566	ERJ3GEYJ560V	56 1/16W	[M]
R8567	ERJ3GEYJ510V	51 1/16W	[M]
R8568	ERJ2GEJ473X	47K 1/32W	[M]
R8601	ERJ2GEJ104X	100K 1/32W	[M]
R8611	ERJ2GEJ101X	100 1/32W	[M]
R8613	ERJ2GEJ101X	100 1/32W	[M]
R8621	ERJ2GEJ105X	1M 1/32W	[M]
R8622	ERJ2RHD102X	1K 1/32W	[M]
R8901	ERJ2GEJ470X	47 1/32W	[M]
R9007	ERJ2GEJ103X	10K 1/32W	[M]
R9008	ERJ2GEJ105X	1M 1/32W	[M]
R9009	ERJ2GEJ102X	1K 1/32W	[M]
R9011	ERJ2GE0R00X	0 1/32W	[M]
R9012	ERJ2GE0R00X	0 1/32W	[M]
R9013	ERJ2GE0R00X	0 1/32W	[M]
R9014	ERJ2GE0R00X	0 1/32W	[M]
R9015	ERJ2GE0R00X	0 1/32W	[M]
R9016	ERJ2GE0R00X	0 1/32W	[M]
R9017	ERJ2GE0R00X	0 1/32W	[M]
R9022	ERJ2GE0R00X	0 1/32W	[M]
R9023	ERJ2GE0R00X	0 1/32W	[M]
R9024	ERJ2GEJ103X	10K 1/32W	[M]
R9025	ERJ2GEJ103X	10K 1/32W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R9026	ERJ2GEJ103X	10K 1/32W	[M]
R9027	ERJ2GEJ103X	10K 1/32W	[M]
R9028	ERJ2GEJ103X	10K 1/32W	[M]
R9029	ERJ2GEJ103X	10K 1/32W	[M]
R9035	ERJ2GE0R00X	0 1/32W	[M]
R9036	ERJ2GEJ103X	10K 1/32W	[M]
R9037	ERJ2GEJ103X	10K 1/32W	[M]
R9040	ERJ2GEJ103X	10K 1/32W	[M]
R9041	ERJ2GEJ103X	10K 1/32W	[M]
R9042	ERJ2GEJ103X	10K 1/32W	[M]
R9045	ERJ2GEJ103X	10K 1/32W	[M]
R9055	ERJ2GEJ103X	10K 1/32W	[M]
R9080	ERJ2GEJ103X	10K 1/32W	[M]
R9083	ERJ2GEJ470X	47 1/32W	[M]
R9084	ERJ2GEJ470X	47 1/32W	[M]
R9085	ERJ2GEJ470X	47 1/32W	[M]
R9086	ERJ2GEJ470X	47 1/32W	[M]
R9087	ERJ2GEJ470X	47 1/32W	[M]
R9088	ERJ2GEJ470X	47 1/32W	[M]
RX3707	D1H84714A024	CHIP RESISTOR	[M]
RX3708	D1H84714A024	CHIP RESISTOR	[M]
RX3901	D1H410120001	CHIP RESISTOR	[M]
RX8001	D1H410320002	CHIP RESISTOR	[M]
RX8011	D1H88204A024	CHIP RESISTOR	[M]
RX8012	D1H88204A024	CHIP RESISTOR	[M]
RX8013	D1H88204A024	CHIP RESISTOR	[M]
RX8014	D1H88204A024	CHIP RESISTOR	[M]
RX8015	D1H88204A024	CHIP RESISTOR	[M]
RX8016	D1H88204A024	CHIP RESISTOR	[M]
RX8017	D1H88204A024	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	D1H85604A024	CHIP RESISTOR	[M]
RX8533	D1H456020001	CHIP RESISTOR	[M]
RX8534	D1H456020001	CHIP RESISTOR	[M]
RX8611	D1H447220001	CHIP RESISTOR	[M]
RX8691	D1H410320002	CHIP RESISTOR	[M]
RX9014	D1H85604A024	CHIP RESISTOR	[M]
RX9015	D1H85604A024	CHIP RESISTOR	[M]
RX9016	D1H85604A024	CHIP RESISTOR	[M]
RX9017	D1H85604A024	CHIP RESISTOR	[M]
RX9018	D1H447220001	CHIP RESISTOR	[M]
RX9019	D1H8R0040009	CHIP RESISTOR	[M]
RX9020	D1H447220001	CHIP RESISTOR	[M]
K2311	ERJ3GEY0R00V	CHIP JUMPER	[M]
K2600	ERJ3GEY0R00V	CHIP JUMPER	[M]
K2811	ERJ6GEY0R00V	CHIP RESISTOR	[M]
K2812	ERJ3GEY0R00V	CHIP JUMPER	[M]
K3903	ERJ3GEY0R00V	CHIP JUMPER	[M]
K3905	ERJ2GE0R00X	CHIP JUMPER	[M]
K3908	ERJ3GEY0R00V	CHIP JUMPER	[M]
K5004	ERJ6GEY0R00V	CHIP RESISTOR	[M]
K5252	ERJ3GEY0R00V	CHIP JUMPER	[M]
K5253	ERJ3GEY0R00V	CHIP JUMPER	[M]
K5406	ERJ3GEY0R00V	CHIP JUMPER	[M]
K5500	ERJ3GEY0R00V	CHIP JUMPER	[M]
K8003	ERJ2GE0R00X	CHIP JUMPER	[M]GC/GS
K8004	ERJ2GE0R00X	CHIP JUMPER	[M]GCS/GCT
K8008	ERJ2GE0R00X	CHIP JUMPER	[M]GC/GS
K8009	ERJ2GE0R00X	CHIP JUMPER	[M]GCS/GCT
K8251	ERJ3GEY0R00V	CHIP JUMPER	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
W2265	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2303	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2415	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2501	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2511	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2519	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2523	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2524	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2526	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2527	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2531	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2532	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2533	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2534	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2536	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2539	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2540	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2542	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2557	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2558	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2571	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2572	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2573	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2574	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2576	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2577	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2578	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2579	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2593	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2599	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2606	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2609	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2610	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2611	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2612	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2613	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2614	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2615	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2616	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2617	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2618	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2619	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2620	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2621	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2622	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2623	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2625	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2626	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2629	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2630	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2631	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2632	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2633	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2634	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2637	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2640	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2641	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2642	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2643	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2647	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2648	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2649	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2650	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2651	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2652	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2653	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2654	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2655	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2656	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2658	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W2659	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2660	ERJ3GEY0R00V	CHIP JUMPER	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
W5000	ERJ3GEY0R00V	CHIP JUMPER	[M]
W5001	ERJ3GEY0R00V	CHIP JUMPER	[M]
W5002	ERJ3GEY0R00V	CHIP JUMPER	[M]
W5004	ERJ3GEY0R00V	CHIP JUMPER	[M]
W5006	ERJ3GEY0R00V	CHIP JUMPER	[M]
W5007	ERJ3GEY0R00V	CHIP JUMPER	[M]
W5009	ERJ3GEY0R00V	CHIP JUMPER	[M]
W5010	ERJ3GEY0R00V	CHIP JUMPER	[M]
W5011	ERJ3GEY0R00V	CHIP JUMPER	[M]
W5012	ERJ3GEY0R00V	CHIP JUMPER	[M]
W5032	ERJ8GEY0R00V	CHIP JUMPER	[M]
W5706	ERJ3GEY0R00V	CHIP JUMPER	[M]
W5707	ERJ3GEY0R00V	CHIP JUMPER	[M]
W5708	ERJ3GEY0R00V	CHIP JUMPER	[M]
W6101	ERJ3GEY0R00V	CHIP JUMPER	[M]
W6102	ERJ3GEY0R00V	CHIP JUMPER	[M]
W6103	ERJ3GEY0R00V	CHIP JUMPER	[M]
W6106	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W6110	ERJ3GEY0R00V	CHIP JUMPER	[M]
W6111	ERJ3GEY0R00V	CHIP JUMPER	[M]
W6113	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W6114	ERJ3GEY0R00V	CHIP JUMPER	[M]
W6115	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W6117	ERJ3GEY0R00V	CHIP JUMPER	[M]
W6118	ERJ3GEY0R00V	CHIP JUMPER	[M]
W6119	ERJ3GEY0R00V	CHIP JUMPER	[M]
W6122	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W6123	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W6124	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W6125	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W6126	ERJ3GEY0R00V	CHIP JUMPER	[M]
W6127	ERJ3GEY0R00V	CHIP JUMPER	[M]
W6128	ERJ3GEY0R00V	CHIP JUMPER	[M]
W6129	ERJ3GEY0R00V	CHIP JUMPER	[M]
W6130	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7006	ERJ6GEY0R00V	CHIP RESISTOR	[M]
W7007	ERJ3GEY0R00V	CHIP JUMPER	[M]
		CAPACITORS	
C984	ECA1EAK100XE	10 25V	[M]
C2000	ECJ1VB1H104K	0.1 50V	[M]
C2001	ECJ1VB1H104K	0.1 50V	[M]
C2003	ECEA1EKS220B	22 25V	[M]
C2006	ECEA1HKS2R2B	2.2 50V	[M]
C2007	ECJ1VB1C104K	0.1 16V	[M]
C2008	ECEA0JKS101B	100 6.3V	[M]
C2009	ECJ1VB1C104K	0.1 16V	[M]
C2010	ECJ1VB1H331K	330P 50V	[M]
C2011	ECJ1VB1H331K	330P 50V	[M]
C2012	ECJ1VB1H331K	330P 50V	[M]
C2013	ECJ1VB1H223K	0.022 50V	[M]
C2014	ECEA1HKA100B	10 50V	[M]
C2015	ECJ1VB1H221K	220P 50V	[M]
C2016	ECJ1VB1H221K	220P 50V	[M]
C2017	ECJ1VB1H103K	0.01 50V	[M]
C2018	ECEA1AKA470B	47 10V	[M]
C2019	ECEA1AKA470B	47 10V	[M]
C2020	ECJ1VB1H103K	0.01 50V	[M]
C2021	ECA1AM221B	220 10V	[M]
C2025	ECJ1VB1H221K	220P 50V	[M]
C2101	ECJ1VB1A105K	1 10V	[M]
C2102	ECJ1VB1C473K	0.047 16V	[M]
C2103	ECJ1VB1A105K	1 10V	[M]
C2104	ECJ1VB1C393K	0.039 16V	[M]
C2106	ECJ1VB1H681K	680P 50V	[M]
C2108	ECJ1VB1H222K	2200P 50V	[M]
C2111	ECJ1VB1A105K	1 10V	[M]
C2113	ECJ1VB1H681K	680P 50V	[M]
C2114	ECJ1VB1H562K	5600P 50V	[M]
C2115	ECJ1VB1H331K	330P 50V	[M]
C2117	ECJ1VB1C104K	0.1 16V	[M]
C2118	ECJ1VB1C104K	0.1 16V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C2121	ECJ1VB1C104K	0.1 16V	[M]
C2130	ECJ1VB1H333K	0.033 50V	[M]
C2140	ECEA1HKA4R7B	4.7 50V	[M]
C2161	ERJ3GEY0R00V	0 1/16W	[M]
C2162	ECJ1VB1H681K	680P 50V	[M]
C2164	ECJ1VB1H221K	220P 50V	[M]
C2169	ECJ1VB1H103K	0.01 50V	[M]
C2171	ECEA1EKS4R7B	4.7 25V	[M]
C2177	ECEA1HKS010B	1 50V	[M]
C2178	ECJ1VC1H101J	100P 50V	[M]
C2179	ECJ1VC1H151J	150P 50V	[M]
C2180	ECJ1VB1C104K	0.1 16V	[M]
C2181	ECJ1VB1H102K	1000P 50V	[M]
C2182	ECJ1VB1C105K	1 16V	[M]
C2183	ECJ1VB1H471K	470P 50V	[M]
C2191	ECJ1VB1C105K	1 16V	[M]
C2192	ERJ3GEY0R00V	0 1/16W	[M]
C2193	ECJ1VB1C105K	1 16V	[M]
C2194	ECJ1VB1C105K	1 16V	[M]
C2195	ECJ1VB1C105K	1 16V	[M]
C2196	ECEA1CKA101B	100 16V	[M]
C2197	ERJ3GEY0R00V	0 1/16W	[M]
C2198	ECJ1VB1C105K	1 16V	[M]
C2199	ECJ1VB1H102K	1000P 50V	[M]
C2201	ECJ1VB1A105K	1 10V	[M]
C2202	ECJ1VB1C473K	0.047 16V	[M]
C2203	ECJ1VB1A105K	1 10V	[M]
C2204	ECJ1VB1C393K	0.039 16V	[M]
C2206	ECJ1VB1H681K	680P 50V	[M]
C2208	ECJ1VB1H222K	2200P 50V	[M]
C2211	ECJ1VB1A105K	1 10V	[M]
C2213	ECJ1VB1H681K	680P 50V	[M]
C2214	ECJ1VB1H562K	5600P 50V	[M]
C2215	ECJ1VB1H331K	330P 50V	[M]
C2217	ECJ1VB1C104K	0.1 16V	[M]
C2218	ECJ1VB1C104K	0.1 16V	[M]
C2221	ECJ1VB1C104K	0.1 16V	[M]
C2230	ECJ1VB1H333K	0.033 50V	[M]
C2261	ERJ3GEY0R00V	0 1/16W	[M]
C2262	ECJ1VB1H681K	680P 50V	[M]
C2264	ECJ1VB1H221K	220P 50V	[M]
C2277	ECEA1HKS010B	1 50V	[M]
C2278	ECJ1VC1H101J	100P 50V	[M]
C2279	ECJ1VC1H151J	150P 50V	[M]
C2280	ECJ1VB1C104K	0.1 16V	[M]
C2281	ECJ1VB1H102K	1000P 50V	[M]
C2282	ECJ1VB1C105K	1 16V	[M]
C2283	ECJ1VB1H471K	470P 50V	[M]
C2291	ECJ1VB1C105K	1 16V	[M]
C2292	ERJ3GEY0R00V	0 1/16W	[M]
C2293	ECJ1VB1C105K	1 16V	[M]
C2294	ECJ1VB1C105K	1 16V	[M]
C2295	ECJ1VB1C105K	1 16V	[M]
C2296	ECEA1CKA101B	100 16V	[M]
C2297	ERJ3GEY0R00V	0 1/16W	[M]
C2300	ECJ1VB1A105K	1 10V	[M]
C2301	ECJ2YB0J475K	4.7 6.3V	[M]
C2302	ECJ1VB1C473K	0.047 16V	[M]
C2303	ECJ1VB1C683K	0.068 16V	[M]
C2304	ECJ3YB1C106K	10 16V	[M]
C2305	ECJ1VB1H332K	3300P 50V	[M]
C2306	ECJ1VB1A154K	0.15 10V	[M]
C2307	ECJ1VB1C105K	1 16V	[M]
C2308	ECJ1VB1H223K	0.022 50V	[M]
C2309	ECJ1VB1C823K	0.082 16V	[M]
C2310	ECJ1VB1H223K	0.022 50V	[M]
C2312	ECJ1VB1C105K	1 16V	[M]
C2313	ECJ1VB1H272K	2700P 50V	[M]
C2315	ECJ1VB1H681K	680P 50V	[M]
C2320	ERJ3GEY0R00V	0 1/16W	[M]
C2321	ECJ1VB1C105K	1 16V	[M]
C2325	ECJ1VB1H272K	2700P 50V	[M]
C2400	ECJ1VB1A105K	1 10V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C2401	ECJ2YB0J475K	4.7 6.3V	[M]
C2402	ECJ1VB1C473K	0.047 16V	[M]
C2403	ECJ1VB1C683K	0.068 16V	[M]
C2404	ECJ3YB1C106K	10 16V	[M]
C2405	ECJ1VB1H332K	3300P 50V	[M]
C2406	ECJ1VB1A154K	0.15 10V	[M]
C2407	ECJ1VB1C105K	1 16V	[M]
C2408	ECJ1VB1H223K	0.022 50V	[M]
C2412	ECJ1VB1C105K	1 16V	[M]
C2413	ECJ1VB1H272K	2700P 50V	[M]
C2415	ECJ1VB1H681K	680P 50V	[M]
C2420	ERJ3GEY0R00V	0 1/16W	[M]
C2421	ECJ1VB1C105K	1 16V	[M]
C2425	ECJ1VB1H272K	2700P 50V	[M]
C2500	ECJ1VB1A105K	1 10V	[M]
C2501	ECJ2YB0J475K	4.7 6.3V	[M]
C2502	ECJ1VB1C473K	0.047 16V	[M]
C2503	ECJ1VB1C473K	0.047 16V	[M]
C2504	ECJ1VB1H681K	680P 50V	[M]
C2506	ECJ1VB1C105K	1 16V	[M]
C2509	ECJ1VB1H103K	0.01 50V	[M]
C2515	ERJ3GEY0R00V	0 1/16W	[M]
C2520	ERJ3GEY0R00V	0 1/16W	[M]
C2600	ECJ1VB1A105K	1 10V	[M]
C2601	ECEA1HKA220B	22 50V	[M]
C2602	ECEA1EKS4R7B	4.7 25V	[M]
C2603	ECJ1VB1H223K	0.022 50V	[M]
C2604	ECEA1HKA100B	10 50V	[M]
C2605	ECJ1VB1H682K	6800P 50V	[M]
C2609	ECJ1VB1A334K	0.33 10V	[M]
C2610	ECJ1VB1A474K	0.47 10V	[M]
C2611	ECJ1VB1A224K	0.22 10V	[M]
C2612	ECJ1VB1H562K	5600P 50V	[M]
C2617	ECJ1VB1A184K	0.18 10V	[M]
C2619	ECEA1HKA100B	10 50V	[M]
C2640	ERJ3GEY0R00V	0 1/16W	[M]
C2751	ECJ1VB1A105K	1 10V	[M]
C2752	ECJ1VB1H103K	0.01 50V	[M]
C2753	ECJ1VB1H103K	0.01 50V	[M]
C2754	ECJ1VC1H101J	100P 50V	[M]
C2755	ECJ1VC1H101J	100P 50V	[M]
C2756	ECJ1VB1H104K	0.1 50V	[M]
C2757	ECJ1VB1H104K	0.1 50V	[M]
C2801	ECA0JM102B	1000 6.3V	[M]
C2802	ECEA0JKS101B	100 6.3V	[M]
C2805	ECEA0JKS101B	100 6.3V	[M]
C2806	ECEA0JKS101B	100 6.3V	[M]
C2807	ECJ1VB1H103K	0.01 50V	[M]
C2808	ECA1AM221B	220 10V	[M]
C2809	ECEA1EKS220B	22 25V	[M]
C2810	ECJ1VB1H103K	0.01 50V	[M]
C2811	ECJ1VB1C104K	0.1 16V	[M]
C2812	ECJ1VB1C104K	0.1 16V	[M]
C2814	ECEA1EKS220B	22 25V	[M]
C2817	ECJ1VB1A105K	1 10V	[M]
C2818	ECJ1VB1A105K	1 10V	[M]
C2823	ECJ1VC1H101J	100P 50V	[M]
C2825	ECJ1VC1H101J	100P 50V	[M]
C2826	ECJ1VC1H101J	100P 50V	[M]
C2827	ECJ1VC1H101J	100P 50V	[M]
C2833	ECJ1VB1H104K	0.1 50V	[M]
C2834	ECEA1EKS220B	22 25V	[M]
C2835	ECEA1EKS220B	22 25V	[M]
C2837	ECJ1VB1C104K	0.1 16V	[M]
C2838	ECJ1VB1C104K	0.1 16V	[M]
C2900	ECA1EM101B	100 25V	[M]
C2901	ECA1EM102B	1000 25V	[M]
C2903	ECQB1H392KF3	3900P 50V	[M]
C2904	F2A1V330A379	33 35V	[M]
C2906	ECJ1VB1H103K	0.01 50V	[M]
C2907	ECJ1VB1C104K	0.1 16V	[M]
C2908	ECEA1CKA101B	100 16V	[M]
C2909	ECA1CM470B	47 16V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C2910	ECJ1VB1H103K	0.01 50V	[M]
C2913	ECEA1CKA101B	100 16V	[M]
C2914	ECEA1AKA330B	33 10V	[M]
C2915	ECJ1VB1H103K	0.01 50V	[M]
C2916	ECA0JAK221XB	220 6.3V	[M]
C2918	ECEA1CKS101B	100 16V	[M]
C2920	ECJ1VB1H102K	1000P 50V	[M]
C2921	ECJ1VB1C104K	0.1 16V	[M]
C2922	EEUFC0J821B	820 6.3V	[M]
C2923	ECA1EM221B	220 25V	[M]
C2924	ECJ1VB1C104K	0.1 16V	[M]
C2925	ECA0JAK221XB	220 6.3V	[M]
C2926	ECJ1VB1C104K	0.1 16V	[M]
C2927	ECJ1VB1H103K	0.01 50V	[M]
C2929	ECJ1VB1H103K	0.01 50V	[M]
C2930	EEUFM1A681B	680 10V	[M]
C2932	ECEA1CKA101B	100 16V	[M]
C2933	ECA0JM101B	100 6.3V	[M]
C2937	ECJ1VB1H103K	0.01 50V	[M]
C2938	ECA1CM221B	220 16V	[M]
C2939	ECJ1VB1H103K	0.01 50V	[M]
C2940	ECJ1VB1H103K	0.01 50V	[M]
C2951	ECEA1CKA101B	100 16V	[M]
C2952	ECEA1CKA101B	100 16V	[M]
C2953	ECJ1VB1C104K	0.1 16V	[M]
C2955	ECA1EM221B	220 25V	[M]
C2958	ECJ1VB1H103K	0.01 50V	[M]
C2960	ECJ1VB1C105K	1 16V	[M]
C2961	ECJ1VB1H103K	0.01 50V	[M]
C2962	ECJ1VB1C104K	0.1 16V	[M]
C2963	ECEA1CKA101B	100 16V	[M]
C2968	ECJ1VB1C104K	0.1 16V	[M]
C2969	ECJ1VB1C104K	0.1 16V	[M]
C2970	ECJ1VB1C105K	1 16V	[M]
C2975	ECJ1VB1H104K	0.1 50V	[M]
C3901	EEE0GA331WP	330 4V	[M]
C3902	EEE0GA331WP	330 4V	[M]
C3904	EEE0GA331WP	330 4V	[M]
C3906	EEE0GA331WP	330 4V	[M]
C3907	ECJ0EB1A104K	0.1 10V	[M]
C3908	ECJ0EB1A104K	0.1 10V	[M]
C3909	ECJ1VB0J105K	1 6.3V	[M]
C3910	ECJ0EB1A104K	0.1 10V	[M]
C3911	ECJ1VB0J105K	1 6.3V	[M]
C3913	ECJ0EB1A104K	0.1 10V	[M]
C3914	ECJ0EB1A104K	0.1 10V	[M]
C3915	ECJ1VB0J105K	1 6.3V	[M]
C3916	ECJ0EB1A104K	0.1 10V	[M]
C3917	ECJ1VB0J105K	1 6.3V	[M]
C3918	ECJ0EB1A104K	0.1 10V	[M]
C3919	ECJ1VB0J105K	1 6.3V	[M]
C3920	ECJ1VB0J105K	1 6.3V	[M]
C3921	ECJ0EB1A104K	0.1 10V	[M]
C3922	ECJ0EB1A104K	0.1 10V	[M]
C3923	ECJ1VB0J105K	1 6.3V	[M]
C3924	ECJ1VB0J105K	1 6.3V	[M]
C3925	ECJ0EB1A104K	0.1 10V	[M]
C3926	ECJ0EB1A104K	0.1 10V	[M]
C3927	ECJ1VB0J105K	1 6.3V	[M]
C3928	ECJ0EB1A104K	0.1 10V	[M]
C3929	ECJ0EB1A104K	0.1 10V	[M]
C3930	ECJ1VB0J105K	1 6.3V	[M]
C3932	ECJ1VB0J105K	1 6.3V	[M]
C3940	ECJ0EB1A104K	0.1 10V	[M]
C3941	ECJ0EC1H221J	220P 50V	[M]
C3954	ECJ0EF1C104Z	0.1 16V	[M]
C3955	ECJ0EB1C103K	0.01 16V	[M]
C3956	ECJ1VB0J105K	1 6.3V	[M]
C3964	ECJ0EB1A104K	0.1 10V	[M]
C5000	ECJ1VB1H102K	1000P 50V	[M]
C5001	ECJ1VB1H102K	1000P 50V	[M]
C5002	ECJ1VB1A474K	0.47 10V	[M]
C5003	ECJ1VB1A474K	0.47 10V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C5004	ECJ1VB1A474K	0.47 10V	[M]
C5005	ECJ1VB1A474K	0.47 10V	[M]
C5006	ECJ1VB1H331K	330P 50V	[M]
C5007	ECJ1VB1H331K	330P 50V	[M]
C5008	ECJ1VB1H153K	0.015 50V	[M]
C5009	ECJ1VB1H153K	0.015 50V	[M]
C5010	ECJ2VC2A221J	220P 100V	[M]
C5011	ECJ2VC2A221J	220P 100V	[M]
C5012	ECJ2VC2A221J	220P 100V	[M]
C5013	ECJ2VC2A221J	220P 100V	[M]
C5014	ECQV1H684JL3	0.68 50V	[M]
C5015	ECQV1H684JL3	0.68 50V	[M]
C5016	ECJ1VB1H104K	0.1 50V	[M]
C5017	ECJ1VB1H104K	0.1 50V	[M]
C5018	ECJ3YB2A104K	0.1 100V	[M]
C5019	ECJ1VB1H104K	0.1 50V	[M]
C5020	ECJ1VB1H104K	0.1 50V	[M]
C5021	ECJ1VB1H104K	0.1 50V	[M]
C5022	ECJ1VB1H104K	0.1 50V	[M]
C5023	ECJ3YB2A104K	0.1 100V	[M]
C5024	ECJ1VB1H104K	0.1 50V	[M]
C5025	ECJ1VB1H104K	0.1 50V	[M]
C5027	ECJ1VB1H104K	0.1 50V	[M]
C5028	ECJ1VB1H104K	0.1 50V	[M]
C5030	ECJ1VC1H221J	220P 50V	[M]
C5031	ECJ1VB1C224K	0.22 16V	[M]
C5032	ECJ1VB1H102K	1000P 50V	[M]
C5033	ECJ1VB1H104K	0.1 50V	[M]
C5040	F2A1J470A050	47 63V	[M]
C5050	ECJ1VB1H104K	0.1 50V	[M]
C5051	ECJ1VB1H104K	0.1 50V	[M]
C5052	ECJ1VB1H104K	0.1 50V	[M]
C5053	ECJ1VB1H104K	0.1 50V	[M]
C5106	ECJ1VB1A474K	0.47 10V	[M]
C5107	ECJ1VB1A474K	0.47 10V	[M]
C5117	ECJ1VB1H102K	1000P 50V	[M]
C5119	ECJ1VB1H102K	1000P 50V	[M]
C5120	ECJ1VB1A474K	0.47 10V	[M]
C5121	ECJ1VB1A474K	0.47 10V	[M]
C5133	ECA0JAK101XB	100 6.3V	[M]
C5150	ECJ1VB1H102K	1000P 50V	[M]
C5151	ECJ1VB1H102K	1000P 50V	[M]
C5152	ECJ1VB1H102K	1000P 50V	[M]
C5153	ECJ1VB1H102K	1000P 50V	[M]
C5154	ECJ1VB1H102K	1000P 50V	[M]
C5155	ECJ1VB1H102K	1000P 50V	[M]
C5200	ECJ1VB1H104K	0.1 50V	[M]
C5201	ECJ1VB1H153K	0.015 50V	[M]
C5202	ECJ1VB1C224K	0.22 16V	[M]
C5203	ECJ2VC2A221J	220P 100V	[M]
C5204	ECJ1VB1H153K	0.015 50V	[M]
C5205	ECJ2VC2A221J	220P 100V	[M]
C5206	ECJ1VB1H104K	0.1 50V	[M]
C5207	ECJ3YB2A104K	0.1 100V	[M]
C5208	ECJ1VB1H104K	0.1 50V	[M]
C5209	ECJ1VB1H104K	0.1 50V	[M]
C5211	ECJ2VC2A221J	220P 100V	[M]
C5212	ECJ1VC1H221J	220P 50V	[M]
C5213	ECJ1VB1H104K	0.1 50V	[M]
C5214	ECJ1VB1H104K	0.1 50V	[M]
C5216	ECJ1VB1H331K	330P 50V	[M]
C5217	ECJ1VB1H104K	0.1 50V	[M]
C5218	ECJ2VC2A221J	220P 100V	[M]
C5219	ECJ3YB2A104K	0.1 100V	[M]
C5220	ECJ1VB1H104K	0.1 50V	[M]
C5221	ECJ1VB1H102K	1000P 50V	[M]
C5222	ECJ1VB1A474K	0.47 10V	[M]
C5223	ECJ1VB1A474K	0.47 10V	[M]
C5224	ECJ1VB1H331K	330P 50V	[M]
C5225	ECQV1H684JL3	0.68 50V	[M]
C5226	ECJ1VB1H104K	0.1 50V	[M]
C5227	ECJ1VB1H104K	0.1 50V	[M]
C5228	ECQV1H684JL3	0.68 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C5231	ECJ1VB1H102K	1000P 50V	[M]
C5232	ECJ1VB1A474K	0.47 10V	[M]
C5233	ECJ1VB1A474K	0.47 10V	[M]
C5234	ECJ1VB1H102K	1000P 50V	[M]
C5240	F2A1J470A050	47 63V	[M]
C5250	ECJ1VB1H104K	0.1 50V	[M]
C5251	ECJ1VB1H104K	0.1 50V	[M]
C5300	ECQV1H684JL3	0.68 50V	[M]
C5301	ECJ1VB1H104K	0.1 50V	[M]
C5302	ECJ1VB1H104K	0.1 50V	[M]
C5303	ECJ1VB1H104K	0.1 50V	[M]
C5304	ECJ1VB1H331K	330P 50V	[M]
C5305	ECJ1VB1H104K	0.1 50V	[M]
C5306	ECJ1VB1H104K	0.1 50V	[M]
C5307	ECJ2VC2A221J	220P 100V	[M]
C5309	ECJ1VB1H104K	0.1 50V	[M]
C5310	ECJ3YB2A104K	0.1 100V	[M]
C5311	ECJ2VC2A221J	220P 100V	[M]
C5312	ECJ1VB1H331K	330P 50V	[M]
C5313	ECJ1VB1H104K	0.1 50V	[M]
C5314	ECJ1VB1A474K	0.47 10V	[M]
C5315	ECJ1VB1H102K	1000P 50V	[M]
C5316	ECJ1VB1H104K	0.1 50V	[M]
C5317	ECJ1VB1A474K	0.47 10V	[M]
C5318	ECJ1VB1H104K	0.1 50V	[M]
C5319	ECJ3YB2A104K	0.1 100V	[M]
C5321	ECJ1VB1C224K	0.22 16V	[M]
C5322	ECJ1VB1H153K	0.015 50V	[M]
C5323	ECJ1VC1H221J	220P 50V	[M]
C5324	ECJ1VB1H153K	0.015 50V	[M]
C5325	ECJ2VC2A221J	220P 100V	[M]
C5326	ECJ2VC2A221J	220P 100V	[M]
C5327	ECJ1VB1H104K	0.1 50V	[M]
C5328	ECQV1H684JL3	0.68 50V	[M]
C5331	ECJ1VB1H102K	1000P 50V	[M]
C5332	ECJ1VB1A474K	0.47 10V	[M]
C5333	ECJ1VB1H102K	1000P 50V	[M]
C5334	ECJ1VB1A474K	0.47 10V	[M]
C5350	ECJ1VB1H104K	0.1 50V	[M]
C5351	ECJ1VB1H104K	0.1 50V	[M]
C5400	ECQV1H684JL3	0.68 50V	[M]
C5401	ECJ1VB1H104K	0.1 50V	[M]
C5402	ECJ1VB1H104K	0.1 50V	[M]
C5403	ECJ1VB1H104K	0.1 50V	[M]
C5404	ECJ1VB1H331K	330P 50V	[M]
C5405	ECJ1VB1H104K	0.1 50V	[M]
C5406	ECJ1VB1H104K	0.1 50V	[M]
C5407	ECJ2VC2A221J	220P 100V	[M]
C5409	ECJ1VB1H104K	0.1 50V	[M]
C5410	ECJ3YB2A104K	0.1 100V	[M]
C5411	ECJ2VC2A221J	220P 100V	[M]
C5412	ECJ1VB1H331K	330P 50V	[M]
C5413	ECJ1VB1H104K	0.1 50V	[M]
C5416	ECJ1VB1H104K	0.1 50V	[M]
C5418	ECJ1VB1H104K	0.1 50V	[M]
C5419	ECJ3YB2A104K	0.1 100V	[M]
C5421	ECJ1VB1C224K	0.22 16V	[M]
C5422	ECJ1VB1H153K	0.015 50V	[M]
C5423	ECJ1VC1H221J	220P 50V	[M]
C5424	ECJ1VB1H153K	0.015 50V	[M]
C5425	ECJ2VC2A221J	220P 100V	[M]
C5426	ECJ2VC2A221J	220P 100V	[M]
C5427	ECJ1VB1H104K	0.1 50V	[M]
C5428	ECQV1H684JL3	0.68 50V	[M]
C5431	ECJ1VB1H102K	1000P 50V	[M]
C5440	F2A1J470A050	47 63V	[M]
C5445	ECJ1VB1H104K	0.1 50V	[M]
C5450	ECJ1VB1H104K	0.1 50V	[M]
C5451	ECJ1VB1H104K	0.1 50V	[M]
C5452	ECJ1VB1H104K	0.1 50V	[M]
C5453	ECJ1VB1H104K	0.1 50V	[M]
C5454	ECJ1VB1H104K	0.1 50V	[M]
C5508	F2A1V4710036	470 35V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C5509	F2A1V4710036	470 35V	[M]
C5510	F2A1V4710036	470 35V	[M]
C5511	F2A1V4710036	470 35V	[M]
C5512	F2A1V1020084	1000 35V	[M]
C5513	F2A1V1020084	1000 35V	[M]
C5514	ECJ1VB1H104K	0.1 50V	[M]
C5515	ECJ1VB1H104K	0.1 50V	[M]
C5516	F2A1V4710036	470 35V	[M]
C5517	F2A1V4710036	470 35V	[M]
C5518	ECJ1VB1H104K	0.1 50V	[M]
C5519	ECJ1VB1H104K	0.1 50V	[M]
C5520	ECJ1VB1H104K	0.1 50V	[M]
C5521	ECJ1VB1H104K	0.1 50V	[M]
C5522	ECJ1VB1H104K	0.1 50V	[M]
C5523	ECJ1VB1H104K	0.1 50V	[M]
C5524	ECJ1VB1H104K	0.1 50V	[M]
C5525	ECJ1VB1H104K	0.1 50V	[M]
C5540	F2A1J470A050	47 63V	[M]
C5552	ECJ1VB1H391K	390P 50V	[M]
C5553	ECJ1VC1H101J	100P 50V	[M]
C5554	ECJ1VB1H104K	0.1 50V	[M]
C5555	ECJ3YB1C106K	10 16V	[M]
C5558	ECJ1VC1H470J	47P 50V	[M]
C5560	ECJ1VB1H104K	0.1 50V	[M]
C5561	ECJ1VC1H101J	100P 50V	[M]
C5562	ECA0JM102B	1000 6.3V	[M]
C5601	ECA1CAK100XB	10 16V	[M]
C5602	ECA1CAK100XB	10 16V	[M]
C5690	ECJ1VB1H102K	1000P 50V	[M]
C5691	ECA1EAK100XB	10 25V	[M]
C5692	ECA0JAK221XB	220 6.3V	[M]
C5693	ECJ1VB1H104K	0.1 50V	[M]
C5694	ECA1CAK330XB	33 16V	[M]
C5695	ECJ1VB1H104K	0.1 50V	[M]
C5696	ECEA1EKS220B	22 25V	[M]
C5697	ECA1HAK010XB	1 50V	[M]
C5700	F1BAF1020020	1000P	[M]
C5701	ECQU2A334MLA	0.33	[M]
C5703	ECQU2A104MLC	0.1	[M]
C5704	F1BAF1020020	1000P	[M]
C5705	F1BAF1020020	1000P	[M]
C5711	F2B2G331A073	330 400V	[M]
C5712	F2B2G331A073	330 400V	[M]
C5713	ECQP6103JUB	0.01 630V	[M]
C5720	ECJ1VB1H104K	0.1 50V	[M]
C5721	ECJ1VB1H221K	220P 50V	[M]
C5722	ECJ1VB1H102K	1000P 50V	[M]
C5723	ECJ1VB1H471K	470P 50V	[M]
C5724	F2A1H5600009	56 50V	[M]
C5725	ECJ1VB1H104K	0.1 50V	[M]
C5726	ECJ1VB1H104K	0.1 50V	[M]
C5727	F1A3A471A035	470P 1000V	[M]
C5728	ECJ1VB1H102K	1000P 50V	[M]
C5730	ECEA1HKS010B	1 50V	[M]
C5750	ECJ1VB1H104K	0.1 50V	[M]
C5788	ECJ1VB1H104K	0.1 50V	[M]
C5789	ECJ1VB1H104K	0.1 50V	[M]
C5790	ECJ3YB2J222K	2200P 250V	[M]
C5791	ECEA1HKA2R2B	2.2 50V	[M]
C5793	ECJ1VB1H104K	0.1 50V	[M]
C5794	ECJ1VC1H220J	22P 50V	[M]
C5795	ECJ2VC1H102J	1000P 50V	[M]
C5796	ECJ2FB1H104K	0.1 50V	[M]
C5797	ECCN3A470KGE	47P 1000V	[M]
C5798	F2A1H5600009	56 50V	[M]
C5799	F2A1H5600009	56 50V	[M]
C5800	F1J2E1030004	0.01 250V	[M]
C5805	F2A1V222A061	2200 35V	[M]
C5808	F2A1V222A061	2200 35V	[M]
C5810	ECJ1VB1H104K	0.1 50V	[M]
C5812	ECJ1VB1H104K	0.1 50V	[M]
C5813	F2A1V102B074	1000 35V	[M]
C5815	ECJ1VB1H104K	0.1 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C5816	F2A1V4710036	470 35V	[M]
C5817	F2A2AR22A358	0.22 100V	[M]
C5818	ECJ1VB1H104K	0.1 50V	[M]
C5819	F1J2E1030004	0.01 250V	[M]
C5820	F1J2E1030004	0.01 250V	[M]
C5821	F1J2E1030004	0.01 250V	[M]
C5822	F1J2E1030004	0.01 250V	[M]
C5823	ECJ1VB1H104K	0.1 50V	[M]
C5824	F2A1V4710036	470 35V	[M]
C5825	ECJ1VB1H104K	0.1 50V	[M]
C5826	F1J2E1030004	0.01 250V	[M]
C5831	ECJ1VB1H104K	0.1 50V	[M]
C5832	ECJ1VB1H104K	0.1 50V	[M]
C5869	ECJ1VB1H104K	0.1 50V	[M]
C5896	ECJ1VB1H104K	0.1 50V	[M]
C5897	ECJ1VB1H104K	0.1 50V	[M]
C5898	ECJ1VB1H104K	0.1 50V	[M]
C5899	F2A1C221A104	220 16V	[M]
C6101	ECJ1VB1H473K	0.047 50V	[M]
C6201	ECJ1VB1H473K	0.047 50V	[M]
C6801	ECJ1VB1H104K	0.1 50V	[M]
C6805	ECJ1VC1H101K	100P 50V	[M]
C6806	ECJ1VC1H101K	100P 50V	[M]
C6903	ECEA1HKA220B	22 50V	[M]
C6904	ECJ1VB1H102K	1000P 50V	[M]
C6905	ECEA1HKA220B	22 50V	[M]
C6906	ECJ1VC1H101K	100P 50V	[M]
C6909	ECJ1VB1H103K	0.01 50V	[M]
C6910	ECEA0JKS101B	100 6.3V	[M]
C6911	ECJ1VB1H103K	0.01 50V	[M]
C6913	ECEA1HKS3R3B	3.3 50V	[M]
C6916	ECJ1VC1H101K	100P 50V	[M]
C6917	ECJ1VC1H101K	100P 50V	[M]
C6918	ECEA1AKA470B	47 10V	[M]
C6919	ECJ1VC1H101K	100P 50V	[M]
C6920	ECJ1VB1H333K	0.033 50V	[M]
C6921	ECJ1VB1H333K	0.033 50V	[M]
C6923	ECJ1VB1H103K	0.01 50V	[M]
C6924	ECJ1VB1H103K	0.01 50V	[M]
C6925	ECJ1VB1H103K	0.01 50V	[M]
C6929	ECJ1VB1H103K	0.01 50V	[M]
C6930	ECJ1VB1H103K	0.01 50V	[M]
C6931	ECJ1VB1H104K	0.1 50V	[M]
C6933	ECJ1VB1C105K	1 16V	[M]
C6934	ECJ1VB1H104K	0.1 50V	[M]
C6935	ECJ1VB1H104K	0.1 50V	[M]
C6936	ECJ1VB1H331K	330P 50V	[M]
C6937	ECJ1VB1H331K	330P 50V	[M]
C6938	ECJ1VB1C105K	1 16V	[M]
C6940	ECJ1VB1H331K	330P 50V	[M]
C6941	ECJ1VB1H331K	330P 50V	[M]
C7002	ECJ1VB1H472K	4700P 50V	[M]
C7003	ECJ1VB1C105K	1 16V	[M]
C7004	ECJ1VB1H472K	4700P 50V	[M]
C7005	ECJ1VC1H470J	47P 50V	[M]
C7006	ECJ1VB1H221K	220P 50V	[M]
C7007	ECJ1VB1H104K	0.1 50V	[M]
C7008	ECJ1VB1A474K	0.47 10V	[M]
C7009	ECJ1VC1H101J	100P 50V	[M]
C7010	ECJ1VC1H470J	47P 50V	[M]
C7011	ECJ1VB1H104K	0.1 50V	[M]
C7012	ECJ1VB1C105K	1 16V	[M]
C7101	ECJ1VB1C105K	1 16V	[M]
C7102	ECJ1VB1H682K	6800P 50V	[M]
C7103	ECJ1VB1H152K	1500P 50V	[M]
C7104	ECJ1VB1C683K	0.068 16V	[M]
C7105	ECJ1VB1C224K	0.22 16V	[M]
C7106	ECJ1VB1C224K	0.22 16V	[M]
C7107	ECJ1VB1H682K	6800P 50V	[M]
C7108	ECJ1VB1H152K	1500P 50V	[M]
C7109	ECJ1VB1C683K	0.068 16V	[M]
C7110	ECEA1AKA470B	47 10V	[M]
C7111	ECJ3YB1C106K	10 16V	[M]
C7112	ECJ1VB1H104K	0.1 50V	[M]
C7113	ECEA1HKA010B	1 50V	[M]
C7115	ECJ3YB1C106K	10 16V	[M]
C7119	ECJ1VB1H221K	220P 50V	[M]
C7120	ECJ1VB1C105K	1 16V	[M]
C7121	ECJ1VB1H104K	0.1 50V	[M]
C7122	ECJ1VB1H104K	0.1 50V	[M]
C7123	ECJ1VB1H221K	220P 50V	[M]
C7124	ECJ1VB1H104K	0.1 50V	[M]
C8001	EEE0GA331WP	330 4V	[M]
C8002	F2G0J330A031	33 6.3V	[M]
C8003	ECJ0EF1C104Z	0.1 16V	[M]
C8004	ECJ0EF1C104Z	0.1 16V	[M]
C8005	ECJ0EF1C104Z	0.1 16V	[M]
C8006	ECJ0EF1C104Z	0.1 16V	[M]
C8007	ECJ0EF1C104Z	0.1 16V	[M]
C8011	F2G0J101A066	100 6.3V	[M]
C8012	ECJ0EF1C104Z	0.1 16V	[M]
C8013	ECJ0EF1C104Z	0.1 16V	[M]
C8014	ECJ0EF1C104Z	0.1 16V	[M]
C8015	ECJ0EF1C104Z	0.1 16V	[M]
C8016	ECJ0EF1C104Z	0.1 16V	[M]
C8018	ECJ0EF1C104Z	0.1 16V	[M]
C8020	ECJ0EF1C104Z	0.1 16V	[M]
C8021	ECJ0EF1C104Z	0.1 16V	[M]
C8022	ECJ0EF1C104Z	0.1 16V	[M]
C8023	ECJ0EF1C104Z	0.1 16V	[M]
C8026	ECJ0EF1C104Z	0.1 16V	[M]
C8051	ECJ1VB0J105K	1 6.3V	[M]
C8052	ECJ0EB1A104K	0.1 10V	[M]
C8053	ECJ0EF1C104Z	0.1 16V	[M]
C8054	ECJ0EC1H221J	220P 50V	[M]
C8055	ECJ1VB0J105K	1 6.3V	[M]
C8056	ECJ0EB1E222K	2200P 25V	[M]
C8057	ECJ1VB0J105K	1 6.3V	[M]
C8111	ECJ0EB1A104K	0.1 10V	[M]
C8112	ECJ1VB0J105K	1 6.3V	[M]
C8113	ECJ0EB1E471K	470P 25V	[M]
C8151	ECJ1VB0J475K	4.7 6.3V	[M]
C8152	ECJ1VB1C105K	1 16V	[M]
C8201	F2G0J101A066	100 6.3V	[M]
C8202	ECJ0EB1A104K	0.1 10V	[M]
C8203	ECJ0EB1A104K	0.1 10V	[M]
C8211	ECJ0EB1E122K	1200P 25V	[M]
C8221	ECJ0EB1E102K	1000P 25V	[M]
C8222	ECJ0EB1E821K	820P 25V	[M]
C8225	ECJ0EB1E102K	1000P 25V	[M]
C8226	ECJ0EB1E102K	1000P 25V	[M]
C8231	ECJ0EB1A104K	0.1 10V	[M]
C8232	ECJ0EB1A104K	0.1 10V	[M]
C8251	F2G0J221A065	220 6.3V	[M]
C8252	ECJ0EF1C104Z	0.1 16V	[M]
C8253	ECJ0EF1C104Z	0.1 16V	[M]
C8255	F2G1C220A037	22 16V	[M]
C8256	ECJ0EF1C104Z	0.1 16V	[M]
C8257	F2G1C470A076	47 16V	[M]
C8258	ECJ0EF1C104Z	0.1 16V	[M]
C8261	ECJ0EF1C104Z	0.1 16V	[M]
C8262	ECJ0EF1C104Z	0.1 16V	[M]
C8301	F2G0J221A031	220 6.3V	[M]
C8302	F2G0J330A031	33 6.3V	[M]
C8303	ECJ0EB1A104K	0.1 10V	[M]
C8304	ECJ0EB1A104K	0.1 10V	[M]
C8305	ECJ0EB1A104K	0.1 10V	[M]
C8306	ECJ0EB1A104K	0.1 10V	[M]
C8311	ECJ0EB1A104K	0.1 10V	[M]
C8312	ECJ1VB0J105K	1 6.3V	[M]
C8313	ECJ1VB0J105K	1 6.3V	[M]
C8320	ECJ0EF1C104Z	0.1 16V	[M]
C8321	ECJ0EB1A104K	0.1 10V	[M]
C8325	ECJ0EB1A104K	0.1 10V	[M]
C8330	F2G0J470A031	47 6.3V	[M]
C8331	ECJ0EB1A104K	0.1 10V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C8335	ECJ0EB1A104K	0.1 10V	[M]
C8340	ECJ0EF1C104Z	0.1 16V	[M]
C8341	ECJ0EB1A104K	0.1 10V	[M]
C8401	ECJ0EC1H150J	15P 50V	[M]
C8421	F2G0J101A083	100 6.3V	[M]
C8422	ECJ0EF1C104Z	0.1 16V	[M]
C8423	F2G0J330A083	33 6.3V	[M]
C8424	ECJ0EF1C104Z	0.1 16V	[M]
C8426	ECJ0EF1C104Z	0.1 16V	[M]
C8427	ECJ0EF1C104Z	0.1 16V	[M]
C8428	ECJ0EF1C104Z	0.1 16V	[M]
C8429	ECJ0EF1C104Z	0.1 16V	[M]
C8430	ECJ0EF1C104Z	0.1 16V	[M]
C8501	F2G0J101A031	100 6.3V	[M]
C8502	ECJ0EF1C104Z	0.1 16V	[M]
C8503	ECJ0EF1C104Z	0.1 16V	[M]
C8504	ECJ0EF1C104Z	0.1 16V	[M]
C8505	ECJ0EF1C104Z	0.1 16V	[M]
C8506	ECJ0EF1C104Z	0.1 16V	[M]
C8511	ECJ1VB0J105K	1 6.3V	[M]
C8512	ECJ1VB0J105K	1 6.3V	[M]
C8513	ECJ0EB1A104K	0.1 10V	[M]
C8514	ECJ0EB1A104K	0.1 10V	[M]
C8515	ECJ0EB1A104K	0.1 10V	[M]
C8516	ECJ0EB1A104K	0.1 10V	[M]
C8521	ECJ0EB1A104K	0.1 10V	[M]
C8522	ECJ0EB1A104K	0.1 10V	[M]
C8523	ECJ0EF1C104Z	0.1 16V	[M]
C8524	ECJ0EF1C104Z	0.1 16V	[M]
C8525	ECJ0EB1C562K	5600P 16V	[M]
C8526	ECJ0EB1C183K	0.018 16V	[M]
C8527	ECJ0EB1A333K	0.033 10V	[M]
C8528	ECJ1VB0J105K	1 6.3V	[M]
C8529	ECJ1VB0J105K	1 6.3V	[M]
C8530	ECJ0EF1C104Z	0.1 16V	[M]
C8531	ECJ0EC1H101J	100P 50V	[M]
C8532	ECJ0EC1H221J	220P 50V	[M]
C8533	ECJ0EF1C104Z	0.1 16V	[M]
C8537	ECJ0EF1C104Z	0.1 16V	[M]
C8538	ECJ0EF1C104Z	0.1 16V	[M]
C8541	ECJ0EB1E472K	4700P 25V	[M]
C8550	F2G0J330A031	33 6.3V	[M]
C8551	ECJ0EF1C104Z	0.1 16V	[M]
C8552	F2G1C100A072	10 16V	[M]
C8553	F2G0J470A031	47 6.3V	[M]
C8554	ECJ1VB0J105K	1 6.3V	[M]
C8561	ECJ0EF1C104Z	0.1 16V	[M]
C8562	F2G1C100A072	10 16V	[M]
C8563	F2G0J470A031	47 6.3V	[M]
C8564	ECJ1VB0J105K	1 6.3V	[M]
C8571	ECJ3YB1A106M	10 10V	[M]
C8572	ECJ0EF1C104Z	0.1 16V	[M]
C8601	ECJ0EF1C104Z	0.1 16V	[M]
C8602	ECJ0EB1C153K	0.015 16V	[M]
C8606	ECJ0EF1C104Z	0.1 16V	[M]
C8611	ECJ0EF1C104Z	0.1 16V	[M]
C8621	ECJ0EC1H070D	7P 50V	[M]
C8622	ECJ0EC1H080D	8P 50V	[M]
C8651	ECJ0EF1C104Z	0.1 16V	[M]
C8652	ECJ0EF1C104Z	0.1 16V	[M]
C8691	ECJ0EF1C104Z	0.1 16V	[M]
C8695	ECJ0EF1C104Z	0.1 16V	[M]
C8701	ECJ0EB1A104K	0.1 10V	[M]
C8901	ECJ0EF1C104Z	0.1 16V	[M]
C9002	ECJ0EF1C104Z	0.1 16V	[M]
C9003	ECJ0EF1C104Z	0.1 16V	[M]
C9004	ECJ0EC1H080D	8P 50V	[M]
C9005	ECJ0EC1H090D	9P 50V	[M]
C9006	ECJ0EB1A104K	0.1 10V	[M]
C9007	ECJ0EF1C104Z	0.1 16V	[M]
C9017	ECJ0EB1A104K	0.1 10V	[M]